

THE
UNIVERSITY
OF MINNESOTA,
ALMANAC *FOR* 1872.

COMPUTED SPECIALLY FOR THE STATE OF MINNESOTA.

FOR THE UNIVERSITY.
JOHNSON & SMITH, PRINTERS,
MINNEAPOLIS:

ASTRONOMICAL CALCULATIONS

For this Almanac for the Year of Our Lord 1872, (being bissextile,) and until July 4th, the 96th year of American Independence.
This is the only Almanac published for, and which is strictly adapted to Minnesota.

CHRONOLOGICAL CYCLES, &c.

Dominical Letters..... G F	Year of the World (Usher)..... 5876
Lunar Cycle or Golden Number.... 11	Year of the World (Jews)..... 5632
Epact (Moon's age, January 1st).... 20	Year of the World (Septuagint).... 7380
Solar Cycle..... 5	Year A. U. C. (Building of Rome).... 2625
Roman Indiction..... 15	Year of the Olympiads..... 2648
Julian Period..... 6585	Year of the Era of Nabonassar..... 2619

ECLIPSES FOR 1872.

There will be four Eclipses this year, as follows:

- I. A partial Eclipse of the Moon, May 22d, not visible in the United States.
- II. An annular Eclipse of the Sun, June 5th, not visible in the United States, except in Alaska and Washington Territory.
- III. A partial Eclipse of the Moon—one thirty-third of its diameter—on the evening of Nov. 14th, visible. It begins at St. Paul at 10 h. 47 m., middle at 11 h. 7 m., ends at 11 h. 27 m. The Eclipse lasts 40 minutes at all places.
- IV. An annular Eclipse of the Sun, Nov. 30th, invisible.

EQUINOXES AND SOLSTICES.

	D.	H.	M.	D.	H.	M.
Winter begins.....	1871—Dec.	2	11	59 ev. and lasts.....	89	0 58
Spring begins.....	1872—Mar.	20	0	57 mo. and lasts.....	92	20 34
Summer begins.....	1872—June	20	9	21 ev. and lasts.....	93	14 23
Autumn begins.....	1872—Sept.	2	11	54 ev. and lasts.....	89	17 59
Winter begins.....	1872—Dec.	21	5	53 mo. Tropical year 365	5	54

CUSTOMARY NOTES.

<p>MORNING STARS—Venus, until July 15th. Mars, after May 17th. Jupiter, after August 2d. Saturn, to April 10th.</p>	<p>EVENING STARS—Venus after July 15th. Mars, until May 17th. Jupiter, until August 2d. Saturn, after April 10th.</p>
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PLANETS BRIGHTEST.—Mercury January 27, May 25, Sept. 18, rising before the Sun; also April 2, July 31, November 24, setting after the Sun. Venus and Mars, not this year. Jupiter January 15, and Saturn July 9th, both rising at sunset.

NOTE.—The calculations of this Almanac have been made exclusively for it. The Sun's rising and setting are adapted to *mean time*, as are also the other tables.

The Sun's declination is made to the nearest second of arc for the longitude of Washington at apparent noon. To ascertain the declination at St. Paul to within (say) one-half minute of arc, apply to the declination of the given date one twenty-second part of the difference between the declination of that date and the day after. If the declination is increasing, add this correction; if decreasing, subtract it.

E. G.—The correction for August 1st will be 42 seconds, and the declination 17 deg. 49 min. 48 sec., at *apparent* noon.

The equation of time is also given for apparent noon on the meridian of Washington. To *correct* it for St. Paul apply the rule above. Thus, for August 1, the correction is 0.19 minus.

UNIVERSITY DAYS—1871 and 1872.

1871....	{ 5 Sept.—Tuesday..... { 5 Sept.—Tuesday..... { 21 Dec.—Thursday.....	FIRST TERM begins. ENTRANCE EXAMINATIONS. FIRST TERM ends.
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WINTER RECESS.

1872....	{ 9 Jan.—Tuesday..... { 13 Feb.—Tuesday..... { 18 Apr.—Thursday.....	SECOND TERM begins. INCORPORATION DAY. SECOND TERM ends.
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SPRING RECESS.

1872....	{ 30 Apr.—Tuesday..... { 26 June—Wednesday..... { 27 June—Thursday.....	THIRD TERM begins. ENTRANCE EXAMINATIONS. THIRD TERM ends.
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THE VACATION.

1872....	{ 3 Sept.—Tuesday..... { 3 Sept.—Tuesday..... { 19 Dec.—Thursday.....	FIRST TERM begins. ENTRANCE EXAMINATIONS. FIRST TERM ends.
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CHURCH DAYS.

JAN... { 6—EPIPHANY, Saturday. { 7—1st Sunday after Epiphany. { 14—2d Sunday after Epiphany. { 21—3d Sunday after Epiphany. { 28—Septuagesima Sunday.		JULY... { 7—6th Sunday after Trinity. { 14—7th Sunday after Trinity. { 21—8th Sunday after Trinity. { 28—9th Sunday after Trinity.
FEB... { 4—Sexagesima Sunday. { 11—Quinquagesima Sunday. { 14—Ash Wednesday. { 18—Quadragesima Sunday. { 25—2d Sunday in Lent.		AUG... { 4—10th Sunday after Trinity. { 11—11th Sunday after Trinity. { 18—12th Sunday after Trinity. { 25—13th Sunday after Trinity.
MAR... { 3—3d Sunday in Lent. { 10—Mid Lent Sunday. { 17—5th Sunday in Lent. { 24—Palm Sunday. { 29—Good Friday. { 31—EASTER DAY.		SEPT... { 1—14th Sunday after Trinity. { 8—15th Sunday after Trinity. { 15—16th Sunday after Trinity. { 22—17th Sunday after Trinity. { 29—18th Sunday after Trinity.
APR... { 7—Low Sunday. { 14—2d Sunday after Easter. { 21—3d Sunday after Easter. { 28—4th Sunday after Easter.		OCT... { 6—19th Sunday after Trinity. { 13—20th Sunday after Trinity. { 20—21st Sunday after Trinity. { 27—22d Sunday after Trinity.
MAY... { 5—Rogation Sunday. { 9—Ascension Day, Thursday. { 12—6th Sunday after Easter. { 19—Whitsun-Day. { 26—TRINITY SUNDAY.		NOV... { 3—23d Sunday after Trinity. { 10—24th Sunday after Trinity. { 17—25th Sunday after Trinity. { 24—26th Sunday after Trinity.
JUNE... { 2—1st Sunday after Trinity. { 9—2d Sunday after Trinity. { 16—3d Sunday after Trinity. { 23—4th Sunday after Trinity. { 30—5th Sunday after Trinity.		DEC... { 1—ADVENT SUNDAY. { 8—2d Sunday in Advent. { 15—3d Sunday in Advent. { 22—4th Sunday in Advent. { 25—CHRISTMAS, Wednesday. { 29—1st Sunday after Christmas.

NOTE TO SURVEYORS.—Inasmuch as it is necessary to correct at *each observation* for the interval before or after *mean noon*, as well as for refraction in altitude, it is not thought worth while to compute the Sun's declinations for the meridian of St. Paul, but to insert those of the meridian of Washington. The figures in the tables give the declination in every case for 64 minutes before *mean noon* at St. Paul.

1st Month.

JANUARY, 1872.

31 Days.

MOON'S PHASES.

	D.	H.	M.	
Last Quarter,	3	3	47	E.
New Moon,	10	8	46	M.
First Quarter,	17	5	50	M.
Full Moon,	25	11	2	M.

Day of Month.	Day of Week.	CHRONOLOGY, &c.	Sun		Sun's			Equation of		Moon		Moon	
			rises	sets	dec. S.	Time.	rises.	South.					
			H. M.	H. M.	Deg.	Min.	Sec.	[plus.]	H. M.	H. M.	H. M.	H. M.	
1	M	NEW YEAR'S DAY.	7 41	4 28	23	1	38	3 43.31	10 13	4 17			
2	T		7 41	4 28	22	56	30	4 11.58	11 20	5 1			
3	W		7 40	4 29	22	50	55	4 39.51	morn	5 46			
4	Th		7 40	4 30	22	44	53	5 7.08		6 31			
5	F		7 40	4 31	22	38	24	5 34.26	1 39	7 19			
6	S		7 40	4 32	22	31	27	6 1.02	2 54	8 10			
7	1		7 40	4 34	22	24	4	6 27.33	4 12	9 6			
8	M		7 39	4 35	22	16	15	6 53.15	5 30	10 7			
9	T	Second Term begins.	7 39	4 36	22	7	59	7 18.45	6 48	11 12			
10	W		7 39	4 37	21	59	17	7 43.22	sets	ev. 18			
11	Th		7 38	4 38	21	50	9	8 7.41	6 2	1 22			
12	F		7 38	4 39	21	40	36	8 31.01	7 23	2 22			
13	S		7 37	4 41	21	30	38	8 53.97	8 41	3 17			
14	2		7 37	4 42	21	20	5	9 16.29	9 53	4 7			
15	M		7 36	4 44	21	9	27	9 37.93	11 4	4 54			
16	T		7 35	4 45	20	58	15	9 58.88	morn	5 39			
17	W		7 34	4 46	20	46	38	9 19.11	11	6 23			
18	Th		7 34	4 47	20	34	38	10 38.61	1 16	7 7			
19	F		7 33	4 48	20	22	15	10 57.37	2 21	7 51			
20	S	Peace of 1783	7 33	4 49	20	9	29	11 15.37	3 23	8 38			
21	3		7 32	4 50	19	56	21	11 32.60	4 25	9 25			
22	M		7 31	4 52	19	42	50	11 49.06	5 24	10 15			
23	T		7 30	4 53	19	28	57	12 4.72	6 19	11 4			
24	W		7 29	4 54	19	14	42	12 19.58	rises	11 54			
25	Th		7 28	4 56	19	0	7	12 33.64	4 54	morn			
26	F		7 27	4 58	18	45	10	12 46.91	5 56	43			
27	S		7 26	4 59	18	29	54	12 59.39	7 2	1 30			
28	4	Land grant for College of	7 25	5 0	18	16	17	13 11.07	8 7	2 16			
29	M	Agriculture and Mechan-	7 24	5 1	17	58	21	13 21.93	9 11	3 0			
30	T	ical Arts, accepted 1863.	7 23	5 3	17	42	5	13 31.98	10 17	3 44			
31	W		7 22	5 5	17	25	30	13 41.25	11 26	4 28			

JANUARY, from *Fanus*, the double-faced Italian deity, God of the sun and the year, to whom this month was sacred. The most ancient Roman calendar, that of Romulus, gave but ten months to the year, numbered from March. Numa Pompilius added other two, placing this month before, and February after the old list. French, *Janvier*; Italian, *Gennajo*; Spanish, *Enero*; German, *Januar*.

A Protest Against Materialism in Education.

“OUR notion of human nature is, that it is fashioned and furnished for more excellent purposes than to turn the clod or handle machines, to transport the produce of the earth from place to place, or work in mines of gold and silver; or to eat, drink, and make merry over the indulgences which are by that means procured. And, therefore, those systems of education whose chief aim is to teach the nature of the physical productions of the earth, and the mechanical arts, by which they are to be transported from place to place, and the chemical arts, by which their forms and properties are changed, and the science of economy, or of turning our handiwork to the most account, are to me no systems of education whatever, unless I could persuade myself that man was merely king of the animals, head laborer and master workman of the earth. I can see a great use and value in these physical sciences, to enable a man to maintain himself with less brutal labor, to the end that he may have more leisure upon his hands for higher and nobler occupations; and in this respect I greatly admire them, as having bowed the stubborn neck of the elements to the spirit of man, and restored to him that power over creation with which he was endowed at first. But if he is to be taught in his youth no higher occupation than this, no godlike recreation of his soul, no spiritual sciences; and, if what he is taught of intellect be thus bound down, like Prometheus, to the barren earth, then have we an education which, however splendid in its apparatus, however imposing in its experiments, however fruitful in riches, and all which riches can command, is poor and meagre, low, mean, and earthly, altogether insufficient to satisfy man's estate; which doth but harness him for his work, which doth but enslave and enserf him to the soil, but giveth to him no tokens, no hint, no intimation of his reasonable being,—for I call not that reason which labors in the clay, it is but the instinct of the noble animal, and not the reason of a spiritual being. Such education will depress a people out of manliness, out of liberty, out of poetry, and religion, and whatever else hath been the crown of glory around the brows of mankind.”

EDWARD IRVING.

“A man is not educated until he has the ability to summon, on an emergency, his mental powers in vigorous exercise to effect his proposed object. It is not the man who has seen most, or has read most, who can do this.”

DANIEL WEBSTER.

MOON'S PHASES.

	D.	H.	M.	
Last Quarter,	2	3	58	M.
New Moon,	8	7	40	E.
First Quarter,	16	0	12	M.
Full Moon,	24	4	44	M.

Day of Month.	Day of Week.	CHRONOLOGY, &c.	Sun	Sun	Sun's			Equation of Time.	Moon rises.	Moon South.
			rises	sets.	dec. S.	Deg.	Min.				Sec.
			H. M.	H. M.	Deg.	Min.	Sec.	[plus.]	H. M.	H. M.
1	Th		7 21 5	7 17 8	37 13	49.71	morn	5 14		
2	F		7 20 5	8 16 51	26 13	57.36	37	6 2		
3	S		7 19 5	9 16 33	57 14	4.21	1 51	6 54		
4	S		7 18 5	10 16 10	10 14	10.25	3 7	7 50		
5	M		7 17 5	11 15 58	7 14	15.50	4 22	8 51		
6	T		7 15 5	13 15 39	47 14	19.95	5 33	9 55		
7	W		7 14 5	14 15 21	11 14	23.60	6 33	10 59		
8	Th		7 12 5	16 15 2	20 14	26.45	7 21	ev. 1		
9	F		7 10 5	18 14 43	13 14	28.51	sets	1 0		
10	S		7 9 5	19 14 23	51 14	29.77	7 28	1 53		
11	6		7 8 5	21 14 4	15 14	30.25	8 43	2 43		
12	M		7 6 5	22 13 44	26 14	29.94	9 52	3 30		
13	T	University incorporated 1851.	7 4 5	24 13 26	22 14	28.85	11 1	4 16		
14	W		7 2 5	26 13 4	6 14	26.99	morn	5 1		
15	Th		7 1 5	27 12 43	37 14	24.38	8	5 46		
16	F		7 0 5	28 12 22	56 14	21.03	1 12	6 33		
17	S		6 59 5	29 12 2	3 14	16.95	2 17	7 20		
18	S	University re-organized, 1868.	6 57 5	31 11 40	59 14	12.13	3 15	8 9		
19	M		6 55 5	32 11 19	44 14	6.59	4 12	8 59		
20	T		6 54 5	34 10 58	18 14	0.36	5 2	9 49		
21	W		6 53 5	35 10 36	42 13	53.47	5 47	10 38		
22	T	Washington's Birthday.	6 50 5	37 10 14	57 13	45.93	6 25	11 26		
23	F		6 49 5	38 9 53	2 13	37.75	rises	morn		
24	S		6 47 5	39 9 30	58 13	28.96	5 58	12		
25	S		6 45 5	41 9 8	46 13	19.57	7 3	58		
26	M	Land Grant 72 Sections for University, 1858.	6 43 5	43 8 46	26 13	9.60	8 11	1 42		
27	T		6 41 5	44 8 23	58 12	59.07	9 18	2 27		
28	W		6 40 5	46 8 1	22 12	48.02	10 28	3 12		
29	Th		6 40 5	46 7 38	39 12	36.45	11 42	3 59		
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**	*		** ** *	** ** *	** ** *	** ** *	** ** *	** ** *		

FEBRUARY, from Latin *februare*, to purify. On the 15th of this month the Roman *Februa*, or great feast of expiation and purification, was held. In the year 452 B. C. the Roman decemvirs transposed this month from before January to its present place in the calendar. French, *Fevrier*; Italian, *Febraro*; Spanish, *Febrero*; German, *Februar*. This year being bissextile, February has 29 days.

SCIENTIFIC EDUCATION.

THERE are other forms of culture besides physical science, and I should be profoundly sorry to see this fact forgotten, or even observe a *tendency* to starve or cripple literary or æsthetic culture for the sake of science. Such a narrow view of education has nothing to do with my firm conviction that a complete and thorough scientific culture ought to be introduced into all schools. * * What I mean is, that no boy or girl should leave school without possessing a grasp of the *general character* of science. .

* * To furnish a boy with such an education it is by no means necessary that he should devote his whole school existence to physical science; in fact, no one would lament so one-sided a proceeding more than I. * *

I conceive it would be one of the greatest boons which could be conferred upon England, if henceforward every child in the country were instructed in the elements of PHYSICS and BOTANY. But I should be still further pleased if there could be added somewhat of CHEMISTRY, and an elementary acquaintance with human PHYSIOLOGY.

* * If scientific education is to be dealt with as mere book-work, it will be better not to attempt it, but to stick to the Latin grammar, which makes no pretence to be anything but book-work.

The great peculiarity of scientific training, that in virtue of which it cannot be replaced by any other discipline whatsoever, is the bringing the mind directly into contact with fact, and practicing the intellect in the completest form of induction; that is to say, in drawing conclusions directly from particular facts made known by immediate observation of nature. The other studies which enter into an ordinary education do not discipline the mind in this way. Mathematical training is almost purely deductive. The mathematician starts with a few simple propositions, the proof of which is so obvious that they are called self-evident; and the rest of his work consists of subtle deductions from these. The teaching of languages, *at any rate as ordinarily practiced*, is of the same general nature. Authority and tradition furnish the data, and the mental operations of the scholar are deductive. * * * In all these respects, science differs from other educational discipline, and prepares the scholar for common life. What have we to do in every day life? Most of the business which demands our attention is matter of fact, which needs in the first place to be accurately observed or apprehended; in the second, to be interpreted by inductive or deductive reasonings, which are altogether similar in their nature to those employed in science. In the one case, as in the other, whatever is taken for granted is so taken at one's own peril. Fact and reason are the ultimate arbiters, and patience and honesty are the great helpers out of difficulty.

PROFESSOR HUXLEY.

MOON'S PHASES.

	D.	H.	M.	
Last Quarter,	2	1	17	E.
New Moon,	9	6	41	M.
First Quarter,	16	8	13	E.
Full Moon,	24	7	31	E.
Last Quarter,	31	8	20	E.

Day of Month.	Day of Week.	CHRONOLOGY, &c.	Sun		Sun's			Equation of Time.		Moon	
			rises	sets	deg.	Min.	Sec.	[plus.]	rises.	South.	
			H. M.	H. M.	Deg.	Min.	Sec.	MIN. SEC.	H. M.	H. M.	
1	F	Ter. Minn. created 1849. Board of 3 Regents, created 1864.	6 39	5 47	7 15	50	12 24.38	morn	4 50		
2	S		6 37	5 48	6 52	55	12 11.84	56	5 44		
3	9		6 35	5 49	6 29	53	11 58.84	2 10	6 41		
4	M		6 33	5 51	6 6	46	11 45.40	3 19	7 42		
5	T		6 32	5 53	5 43	34	11 31.54	4 21	8 44		
6	W		6 30	5 53	5 20	17	11 17.28	5 14	9 45		
7	Th		6 28	5 54	4 56	56	11 2.63	5 55	10 44		
8	F		6 27	5 55	4 33	31	10 47.60	6 27	11 39		
9	S		6 25	5 57	4 10	3	10 32.21	sets	ev. 30		
10	10		6 23	5 58	3 46	31	10 16.49	7 31	1 19		
11	M		6 20	6 00	3 22	56	10 0.44	8 41	2 6		
12	T		6 19	6 1	2 59	20	9 44.08	9 51	2 52		
13	W		6 17	6 3	2 35	41	9 27.43	10 57	3 38		
14	Th		6 15	6 4	2 12	1	9 10.51	morn	4 25		
15	F		6 13	6 5	1 48	20	8 53.33	3	5 13		
16	S		6 11	6 7	1 24	38	8 35.91	1 6	6 2		
17	11		6 9	6 8	1 0	55	8 18.28	2 5	6 51		
18	M		6 7	6 9	0 37	13	8 0.47	2 58	7 41		
19	T		6 5	6 10	0 13	31	7 42.48	3 45	8 31		
20	W		6 3	6 12	N. 10	11	7 24.33	4 24	9 19		
21	Th		6 1	6 13	0 33	51	7 6.05	4 57	10 6		
22	F		6 0	6 14	0 57	30	6 47.68	5 26	10 52		
23	S		5 58	6 16	1 21	7	6 29.22	5 51	11 37		
24	12		5 56	6 17	1 44	42	6 10.70	rises	morn		
25	M		5 54	6 18	2 8	14	5 52.16	7 6	22		
26	T		5 53	6 19	2 31	44	5 33.62	8 18	1 8		
27	W		5 51	6 20	2 55	11	5 15.08	9 31	1 56		
28	Th		5 49	6 22	3 18	34	4 56.57	10 46	2 46		
29	F		5 47	6 23	3 41	54	4 38.13	morn	3 39		
30	S		5 45	6 24	4 5	10	4 19.77	2	4 36		
31	13		5 43	6 25	4 28	21	4 1.51	1 13	5 36		

MARCH, from *Mars*, the god of war and reputed father of the Roman people. In the Roman calendar March was the first month, and it was so reckoned among the Latin Christians till the 18th century. The legal year of England began on the 25th of March till 1752, when the change of style took place. French, *Mars*; Italian and Spanish, *Marzo*; German, *Maerz*.

THE UNIVERSITY OF MICHIGAN.

The following items are extracted from the late annual report of PRESIDENT FRIEZE, (1870):

If a genuine University is ever to exist, either here or anywhere else in America, it is to be built on a much higher scholarship in the preparatory schools and academies. They must be advanced to the character of gymnasiums and must do a *large part of the work* of our present colleges before a University shall be possible. * * * One public high school of this State, at the close of the present year, has sent into our academic department a class of thirty-five students, well prepared. The high schools of the State in general are yearly coming into more intimate relations to the University, and sending increasing numbers to its halls. If the University and local school authorities shall co-operate in elevating and multiplying their courses of study, and in arranging them as parts and grades of a connected and progressive system, it will manifestly be but the work of time to bring up the best and most enterprising of these seminaries to the position of gymnasiums, and to the level of attainment which we so desire to realize, and thus in the end it will be possible for the University to *drop its elementary teaching*, and to do its proper work.

Some of our best educators have proposed that a *commission from the Academic Faculty* should visit annually such schools as may desire it, and *give certificates* to those pupils who may be successful in their examinations, entitling them to admission, without further examination, to the University.

It is the unanimous opinion, so far as I know, of all who have had the opportunity of comparing the state of things in different institutions, that while the University is exempt from the evils that, all must agree, are inseparable from the *dormitory system*, our undergraduates do not lack in their habits and morals any of the advantages which that system is supposed to confer.

The generous system of education to which our State is committed necessarily pledges to its daughters, as well as to its sons, the highest as well as the most elementary education, free of charge. *We have already ceased to fear* the dangers which were apprehended from this action, and which constituted their chief argument against it; the loss of reputation and caste among Universities, the decline of scholarships, and the corruption of morals.

The estimated receipts for the year ending June 30, 1871, were:

Balance.....	\$4,798.27
Interest on University Fund.....	37,000.00
Annual State Aid.....	15,000.00
Students' Fees.....	18,000.00
Rent, Interest, &c.....	1,500.00

\$86,298.27

Estimated disbursements for same time:

Salaries.....	\$57,618.75
Catalogues.....	1,200.00
Regent Expenses.....	700.00
Libraries.....	2,500.00
Repairs, Insurance, Fuel, &c.....	9,900.00

\$71,918.75

MOON'S PHASES.

	D.	H.	M.	
New Moon,	7	6	20	E.
First Quarter,	15	3	59	E.
Full Moon,	23	7	25	M.
Last Quarter,	30	2	19	M.

Day of Month.	Day of Week.	CHRONOLOGY, &C.	Sun	Sun	Sun's	Equation	Moon	Moon	
			rises	sets	dec. S.	of Time.	rises.	South.	
			H. M.	H. M.	Deg. Min. Sec.	[plus.] MIN. SEC.	H. M.	H. M.	
1	M		5 40	6 28	4 51	27	3 43.37	2 18	6 37
2	T		5 39	6 29	5 14	29	3 25.38	3 12	7 38
3	W		5 37	6 30	5 37	25	3 7.54	3 52	8 35
4	Th		5 35	6 31	6 0	15	2 49.87	4 28	9 30
5	F		5 33	6 32	6 22	59	2 32.40	4 57	10 21
6	S		5 31	6 33	6 45	37	2 15.13	5 20	11 9
7	14	Minnesota admitted, 1858.	5 30	6 34	7 8	8	1 58.08	sets	11 56
8	M		5 29	6 35	7 30	32	1 42.26	7 31	ev. 42
9	T		5 27	6 37	7 52	48	1 24.69	8 40	1 29
10	W		5 24	6 39	8 14	56	1 8.39	9 46	2 16
11	Th		5 23	6 40	8 36	55	0 52.37	10 51	3 4
12	F		5 21	6 41	8 58	47	0 36.63	11 53	3 53
13	S		5 19	6 42	9 20	29	0 21.19	morn	4 43
14	15		5 16	6 44	9 42	2	0 6.07	50	5 33
15	M		5 15	6 45	10 3	25	— 8.71	1 39	6 23
16	T		5 14	6 46	10 24	38	0 23.15	2 21	7 12
17	W		5 12	6 47	10 45	40	0 37.33	2 57	7 59
18	Th	SECOND TERM Ends.	5 10	6 48	11 6	32	0 50.92	3 28	8 45
19	F		5 8	6 50	11 27	13	1 4.22	4 52	9 30
20	S		5 7	6 51	11 47	42	1 17.12	5 18	10 15
21	16		5 5	6 52	12 8	0	1 29.58	6 38	11 0
22	M		5 3	6 53	12 28	6	1 41.59	rises	11 47
23	T		5 1	6 55	12 47	59	1 53.16	7 13	morn
24	W		5 0	6 56	13 7	41	2 4.26	8 31	37
25	Th		4 59	6 57	13 27	9	2 14.86	9 48	1 31
26	F		4 57	6 59	13 46	26	2 24.96	11 3	2 28
27	S		4 55	7 0	14 5	25	2 34.55	morn	3 30
28	17		4 53	7 1	14 24	13	2 43.61	13	4 31
29	M		3 51	7 2	14 42	46	2 52.14	1 10	5 32
30	T	THIRD TERM begins.	4 50	7 3	15 1	5	3 0.12	1 55	6 31
*	*		*	*	*	*	*	*	*

APRIL, Latin *Aperilis*, from *aperire*, to open, as being the *opening* month. With the Romans it was the second month of the year. The custom of *fooling*, which is common to all European races, on the first day of this month, is derived by some from a Hindoo custom, by others from the sending of Christ to and fro between Herod, Pilate, and Caiaphas. French, *Avril*; Spanish, *Abril*; Italian, *Aprile*; German, *April*.

OF LAW AND LAW STUDY.

I might safely affirm that nothing (how *unusual* soever) is, under our regulations, improper to be *taught* in this place which is proper for a gentleman to *learn*. But ascience which distinguishes the criterions of right and wrong; which reaches to establish the one, and prevent, punish, to redress the other; which employs in its theory the noblest faculties of the soul, and exerts in its practice the cardinal virtues of the heart, a science, which is universal in use and extent, accommodated to each individual yet comprehending the whole community; that a science like this should ever have been deemed unnecessary to be taught in a University is a matter of astonishment and concern.

BLACKSTONE.

Indeed, it is perfectly amazing that there should be no other state of life, no other occupation, art, or science in which some method of instruction is not looked upon as requisite, except only the science of legislation, the noblest and most difficult of any. Apprenticeships are held necessary to almost every art, commercial or mechanical; a long course of reading and study must form the divine, the physician, and the practical professor of the laws; but every man of superior fortune thinks himself born a legislator. Yet Tully was of a different opinion: It is necessary (says he) for a senator to be thoroughly acquainted with the constitution; and this (he declares) is a knowledge of the most extensive nature; a matter of science, of diligence, of reflection: without which no senator can possibly be fit for his office.

BLACKSTONE.

There have been lawyers that were orators, philosophers, historians; there have been Bacons and Clarendons. There will be none such any more, till, in some better age, true ambition or the love of fame prevails over avarice; and till men find leisure and encouragement to prepare themselves for the exercise of their profession, by climbing up to the vantage ground—so my Lord Bacon calls it—of *science*, instead of groveling all their lives below in a mean but gainful application to the arts of chicane. Till this happens, the law will scarce deserve to be ranked among the learned professions; and whenever it happens, one of the vantage-grounds to which men must climb is *metaphysical*, and the other *historical* knowledge.

BOLINGBROKE.

The science of jurisprudence is the pride of the human intellect, which, with all its defects, redundancies, and errors, is the collected reason of ages, combining the principles of original justice with the infinite variety of human concerns. One of the first and noblest of human sciences, a science which does more to quicken and invigorate the human understanding than all other kinds of human learning put together; but it is not apt, except in persons very happily born, to open and liberalize the mind in exactly the same proportions.

BURKE.

MOON'S PHASES.

	D.	H.	M.
New Moon,	7	7	7 M.
First Quarter.	15	9	53 M.
Full Moon,	22	4	56 E.
Last Quarter,	29	8	1 M.

Day of Month. Day of Week.	CHRONOLOGY, &c.	Sun		Sun's			Equation		Moon	
		rises	sets	dec. S.		of Time.		rises.	South.	
		H. M.	H. M.	Deg.	Min.	Sec.	[minus]	MIN.	SEC.	H. M.	H. M.
1 W		4 48	7 5	15	19	10	3	7.54	2 31	7 26
2 Th		4 47	7 6	15	36	59	3	14.40	3 0	8 17
3 F		4 46	7 8	15	54	33	3	20.70	3 24	9 5
4 S		4 45	7 9	16	11	52	3	26.43	3 47	9 52
5 18		4 43	7 10	16	28	54	3	31.59	4 10	10 37
6 M		4 41	7 11	16	45	40	3	36.17	4 31	11 22
7 T	Minnesota East annexed to	4 40	7 12	17	2	10	3	40.18	sets	ev. 8
8 W	Indiana, 1800.	4 38	7 13	17	18	22	3	43.62	8 37	56
9 Th		4 37	7 14	17	34	17	3	46.49	9 41	1 45
10 F	Steamer Virginia arrived	4 36	7 16	17	49	54	3	48.80	10 40	2 35
11 S	Ft. Snelling, 1823.	4 34	7 17	18	5	14	3	50.54	11 33	3 25
12 19		4 33	7 18	18	20	15	3	51.71	morn	4 15
13 M		4 32	7 19	18	34	58	3	52.33	17	5 4
14 T		4 31	7 20	18	49	22	3	52.39	56	5 51
15 W		4 30	7 21	19	3	27	3	51.89	1 29	6 38
16 Th		4 29	7 23	19	17	12	3	50.84	1 56	7 22
17 F		4 28	7 24	19	30	38	3	49.25	2 20	8 6
18 S		4 27	7 25	19	43	43	3	47.13	2 41	8 51
19 20		4 26	7 26	19	56	29	3	44.47	3 4	9 36
20 M		4 24	7 27	20	8	54	3	41.27	3 25	10 25
21 T		4 23	7 28	20	20	59	3	37.54	3 49	11 17
22 W		4 22	7 29	20	32	43	3	33.28	rises	morn
23 Th		4 21	7 30	20	44	5	3	28.50	8 45	14
24 F		4 21	7 32	20	55	7	3	23.19	9 59	1 15
25 S		4 20	7 33	21	5	47	3	17.38	11 4	2 19
26 21		4 19	7 35	21	16	5	3	11.07	11 55	3 23
27 M		4 18	7 36	21	26	1	3	4.27	morn	4 24
28 T		4 18	7 36	21	35	35	2	56.98	35	5 22
29 W		4 17	7 37	21	44	47	2	49.23	1 5	6 15
30 Th		4 16	7 38	21	53	36	2	41.02	1 31	7 4
31 F		4 15	7 39	22	2	2	2	32.36	1 53	7 50

MAY, so named by the Romans in honor of *Maia*, daughter of Atlas and mother of Mercury. The word properly means *mother*. Some, however, claim for it a Teutonic origin. The keeping of May-day is generally referred for its origin to the ancient Roman celebration in honor of the goddess Flora. French and German, *Mai*; Spanish, *Mayo*; Italian, *Maggio*.

DENOMINATIONAL COLLEGES.

The following extracts are from that able and attractive work, "The American Colleges, and the American People,"* by PRESIDENT PORTER, of Yale College:

"But the foundation or the conducting of a College in the interests of a single denomination has not generally been successful, for the reason that the culture which colleges impart is, in its nature, liberalizing; and that to Christian earnestness, when instructed by Christian learning, the exclusiveness of any Protestant sect becomes almost invariably distasteful. Just in proportion as the college becomes eminent in its culture, just in that proportion does it lose sight of any single sect and denomination, and takes into its larger view the common relations of all to culture and to Christ. A truly religious college cannot, in our opinion, be eminently sectarian, and yet be true to its appropriate function, by yielding to the influence of the science, art, and culture which it is appointed to promote. However strictly it may be held by its charter to the name of the organization of any single denomination, it will outgrow all narrowing relations to it, or make its denomination outgrow them just as fast as it grows at all."

"ARE THERE TOO MANY COLLEGES? * * They hinder, rather than aid, one another by their jealous rivalries; and their sustenance involves an inevitable waste of the most precious resources of the country—its endowments consecrated to education, and its accumulated knowledge and intellectual power.

It is not in vain to hope that the American public may be educated to greater wisdom by the lessons that are taught by so many instances of disappointed expectations. Perhaps it is too much to expect that any institution which bears the ambitious title of College or University, should be content to fill an humbler but more useful sphere. The need is pressing, however, of superior secondary schools, devoted to classical and higher education. Some of these Colleges * * might become serviceable as scientific and technological institutes. Their buildings, endowments and names—whatsoever these last might be worth—would in many cases be far more worthily employed by being used in the service of a superior classical or scientific school, than by being wasted on an inferior or contemptible College."

We would distinguish here between the College and the University. The College is a *training place* for minds that are yet immature in the elements of knowledge and culture. The University is a *teaching place* for those who are supposed to have been trained to the capacities and responsibilities of incipient manhood. Whatever freedom may be claimed for the University in teaching and learning, does not sanction a similar freedom in the College."

* New Haven: Chatfield & Co., 1870.

MOON'S PHASES.

	D.	H.	M.
New Moon,	5	9	11 E.
First Quarter,	14	1	7 M.
Full Moon,	21	0	46 M.
Last Quarter,	27	3	15 E.

Day of Month.	Day of Week.	CHRONOLOGY, &c.	Sun		Sun's			Equation of		Moon		Moon South.
			rises	sets	dec. N.	Deg.		Time.		rises	South.	
			H. M.	H. M.	Deg.	Min.	Sec.	[minus.]		H. M.	H. M.	
								MIN.	SEC.			
1	S	Ramsey, Governor, 1849.	4 15	7 40	22 10	6	2 23	28	2 15	8 35		
2	22		4 15	7 41	22 17	46	2 13	79	2 37	9 20		
3	M		4 14	7 42	22 25	3	2 3	93	2 59	10 5		
4	T		4 14	7 42	22 31	57	1 53	70	3 27	10 51		
5	W		4 14	7 42	22 38	27	1 43	11	sets	11 39		
6	Th		4 13	7 43	22 44	33	1 32	19	8 31	ev. 29		
7	F		4 13	7 44	22 50	15	1 20	99	9 27	1 19		
8	S		4 13	7 45	22 55	34	1 9	53	10 15	2 10		
9	9		4 12	7 45	23 0	28	0 57	82	10 56	2 59		
10	M		4 12	7 46	23 4	57	0 45	87	11 30	3 47		
11	T		4 12	7 46	23 9	3	0 33	72	11 58	4 33		
12	W		4 11	7 47	23 12	43	0 21	41	morn	5 17		
13	Th		4 11	7 48	23 16	0	0 8	95	23	6 0		
14	F		4 11	7 49	23 18	51	plus 3	64	44	6 43		
15	S		4 11	7 49	23 21	18	0 16	34	1 5	7 27		
16	24		4 11	7 49	23 20	0	0 29	11	1 27	8 13		
17	M	Marquette discovered the	4 12	7 50	23 24	58	0 41	96	1 49	9 2		
18	T	Mississippi, 1672.	4 12	7 50	23 26	10	0 54	86	2 13	9 56		
19	W		4 12	7 50	23 26	58	1 7	76	2 45	10 55		
20	Th		4 12	7 50	23 27	21	1 20	67	rises	11 59		
21	F		4 12	7 50	23 27	19	1 33	56	8 41	morn		
22	S		4 13	7 51	23 26	53	1 46	43	9 41	1 4		
23	25		4 13	7 51	23 26	1	1 59	22	10 32	2 10		
24	M		4 13	7 51	23 24	45	2 11	94	11 6	3 11		
25	T		4 13	7 51	23 23	4	2 24	56	11 36	4 8		
26	W	Entrance Examinations.	4 14	7 51	23 20	59	2 37	07	11 58	5 0		
27	Th	THIRD TERM ENDS.	4 14	7 51	23 18	29	2 49	44	morn	5 48		
28	F		4 14	7 51	23 15	35	3 1	66	21	6 34		
29	S		4 15	7 51	23 12	16	3 13	69	45	7 19		
30	26		4 15	7 51	23 8	32	3 25	51	1 5	8 4		
*	*		*	*	*	*	*	*	*	*	*	

JUNE, from *Junius* for *Junonius*, from Juno, to which goddess this month was sacred with the Romans. But other derivations are given. This month is often called by the Germans the rose month. Charlemagne named it the fallow month. It is the fourth month of the old Roman calendar. French, *Juin*; German, *Juni*; Spanish, *Junio*; Italian, *Giugno*.

The University and the Secondary Schools.

"If now we are to lift the grade of University work, we must lift the grade of preparatory work, and receive our students only at a more advanced stage of learning than they at present reach, before entering the Freshman class. I learn from the interesting report of President Frieze that the average age of the students who are admitted here is very nearly that of the University students of Germany.

Could they thoroughly accomplish the collegiate work of the first two years before commencing here, we might make their course compare favorably with that of the German Universities.

Now the addition of the first two years to the preparatory course would be no greater advance upon the present work of the schools than has actually been achieved since the beginning of the century. Already there are not a few schools in the country which can give, and would gladly give, the instruction of the Freshman year. The time is not distant when the better and stronger institutions can safely push up their requirements for admission to the standard now reached at the beginning of the Sophomore year, and I am confident that the day is not very remote when they can secure yet higher attainments. The teachers of academies and high schools are generally more than willing to do their part in accomplishing the result since the character of their work and the tone of their schools is thereby necessarily raised."

"It needs still, however, to be remembered in this country that, calling an institution a University does not make it so. Neither do buildings, however imposing, nor endowments, however splendid, constitute a University. Nor does it convert a College into a University to abolish recitations and give all the instruction by lectures. I fear that the public do not sufficiently understand that the essential thing in a University is *men*, both in the students' seats and in the Professors' chairs. Students who possess sufficient maturity of body, of mind, and of character, and sufficient intellectual training and furniture, to carry on with earnestness and persistence a high order of work till they can reap.

* A harvest of wise purposes
Sown in the fruitful furrows of the mind,

and instructors who are competent to guide and inspire such students, *these* make a University.

The ideal teacher is a rare man, on whose coming, when he is found, the University and the State should give thanks. It seems to have dawned but recently on men's minds that teaching in the College or University is a special profession, in which a man can no more attain high usefulness without natural aptitude and appropriate training than he can in any of the other learned professions."—*Inaugural address of President Angell, at the University of Michigan, Sept. 10, 1871.*

MOON'S PHASES.

	D.	H.	M.	
New Moon,	5	0	13	E.
First Quarter,	13	1	36	E.
Full Moon,	20	7	41	M.
Last Quarter,	27	1	7	M.

Day of Month.	Day of Week.	CHRONOLOGY, &c.	Sun		Sun's			Equation of		Moon		Moon	
			rises	sets	dec. N.			Time.		rises.	South.		
			H. M.	H. M.	Degr.	Min.	Sec.	[plus.]	MIN. SEC.	H. M.	H. M.	H. M.	H. M.
1	M		4 16	7 50	23	4	25	3	37.10	1	28	8	49
2	T	Long's expedition, 1823,	4 17	7 50	22	59	53	3	48.45	1	57	9	36
3	W		4 17	7 50	22	54	57	3	59.52	2	30	10	25
4	Th	Am. independence, 1776.	4 18	7 50	22	49	37	4	10.30	3	10	11	15
5	F		4 18	7 49	22	43	53	4	20.73	sets	ev.	5	
6	S	Wis. enabling act, 1846.	4 19	7 49	22	37	46	4	30.82	8	55		55
7	27		4 20	7 49	22	31	15	4	40.54	9	30	1	43
8	M		4 21	7 49	22	24	20	4	49.88	10	1	2	30
9	T		4 21	7 48	22	17	2	4	58.79	10	28	3	15
10	W		4 22	7 48	22	9	22	5	7.27	10	49	3	58
11	Th		4 23	7 47	22	1	18	5	15.29	11	11	4	40
12	F		4 23	7 46	21	52	52	5	22.85	11	31	5	22
13	S		4 24	7 46	21	44	3	5	29.90	11	52	6	8
14	28		4 26	7 46	21	34	52	5	36.46	morn	6	52	
15	M		4 27	7 45	21	25	19	5	42.51		14	7	42
16	T		4 28	7 44	21	15	24	5	48.05		42	8	37
17	W		4 29	7 43	21	5	8	5	53.04	1	17	9	37
18	Th		4 29	7 43	20	54	30	5	57.49	2	0	10	42
19	F		4 30	7 42	20	43	31	6	1.38	rises	11	48	
20	S		4 31	7 41	20	32	11	6	4.71	8	22	morn	
21	29		4 32	7 39	20	20	30	6	7.50	9	3		53
22	M		4 33	7 38	20	8	29	6	9.74	9	34	1	53
23	T	Treaty Trav. d'Sioux, 1851.	4 34	7 37	19	56	8	6	11.40	10	1	2	49
24	W		4 36	7 36	19	43	27	6	12.47	10	23	3	41
25	Th		4 37	7 35	19	30	26	6	12.97	10	46	4	29
26	F	Nicollet arrived, 1836.	4 38	7 34	19	17	6	6	12.92	11	9	5	15
27	S		4 39	7 33	19	3	26	6	12.29	11	22	6	1
28	30		4 40	7 32	18	59	28	6	11.06	12	0	6	47
29	M		4 41	7 31	18	35	11	6	9.26	morn	7	34	
30	T		4 42	7 30	18	20	35	6	6.88		32	8	22
31	W		4 43	7 29	18	5	42	6	3.90	1	9	9	11

JULY, from Latin *Julius*, the surname of Caesar. The month was originally called *Quintilis*, as being the 5th of the ancient Roman calendar. At Antony's suggestion the new name was given in honor of Caesar's efforts to reform the calendar. The first Julian year began January 1, 46 B. C., 708 A. U. C. French, *Juillet*; German, *Juli*; Spanish, *Julio*; Italian, *Luglio*.

Some Notes on Industrial Education in Europe.

GERMANY.—Prussia alone has 361 purely technical Schools, and 265 industrial Schools, besides those for weaving. There are also a large number of drawing Schools. The Grand Duchy of Baden boasts of not less than fifty special technical Schools, with 5,772 pupils. The Carlsruhe Polytechnic School is regarded as a model of its class. It includes divisions for Engineers, Architects, Builders, Foresters, Chemists, Machinists, Merchants and Postmasters. Wurtemberg, with a population of 1,700,000, has one technical University, 10 superior technical schools, 11 building and trades schools, and 128 industrial schools.

SWITZERLAND has a complete system of technical and special industrial schools, honored by the best, though the youngest, purely technical institution in existence, that of Zurich. There are 20 industrial schools for girls, in different Cantons, besides 7 agricultural schools for boys.

ITALY justifies her renewed unity by a renewal of industrial enterprise which is surprising. There were in 1868, 964 secondary technical schools, with 42,800 pupils; 132 free technical schools, with 16,955 pupils. Italy has 29 Art schools.

FRANCE.—At Paris there are central schools of Art and Manufactures, and the famous Conservatory of Arts and Sciences. There is a thorough System of Mining, Engineering and Naval Schools. The Ecole Polytechnique at Paris is known everywhere. There are in the departments, 250 special technical schools, 35 Farm schools, 21 of Drawing, 12 of Arts and Trades, 5 of hydrography, 5 of technical Science, 4 of Design, 4 of clock and watchmaking, 3 of weaving and many others.

GREAT BRITAIN is making progress. In 1860, there were 9 technical schools, with 500 pupils; in 1869, there were 514 schools, with 1,448 classes, and 21,000 scholars. Mr. Whitworth has founded thirty scholarships, worth \$500 annually, open to competitive examinations, 5 of which have been gained by working mechanics. 588 schools instruct 79,441 children in drawing.

During the Paris Exposition of 1867, the London Society of Arts defrayed the expenses of 52 English workmen to visit and report. The volume containing their reports teems with tributes to the admirable results of technical and scientific education. Mr. Lucroft, chair maker, says of the wood carvers of Paris that "the mere mechanical workman stands not the slightest chance with the workmen of cultivated taste." Thomas Connolly, stone mason, says "it is impossible to estimate the loss entailed upon England through the neglect of Art cultivation." Mr. M'Connell, engineer, declares that "England must adopt a system of technical education or be driven from the markets."—*See Report of Commissioner of Education for 1870, p. 439.*

MOON'S PHASES.

	D.	H.	M.	
New Moon,	4	3	33	M.
First Quarter,	11	11	40	E.
Full Moon,	18	2	41	E.
Last Quarter,	25	2	23	E.

Day of Month. Day of Week.	CHRONOLOGY, &c.	Sun		Sun's			Equation		Moon		Moon	
		rises	sets	deg.	Min.	Sec.	of Time.		rises.	South.		
		H. M.	H. M.	Deg.	Min.	Sec.	MIN.	SEC.	H. M.	H. M.	H. M.	H. M.
1 Th		4 44	7 28	17	50	30	6	0.33	1 54	10	2	
2 F		4 45	7 26	17	35	21	5	56.16	2 45	10	52	
3 S		4 47	7 25	17	19	15	5	51.41	3 40	11	41	
4 31		4 48	7 24	17	3	12	5	46.05	sets	ev	28	
5 M	Treaty, Fond du Lac, 1826.	4 48	7 23	16	46	53	5	40.09	8 31	1	13	
6 T		4 50	7 22	16	30	17	5	43.53	8 55	1	57	
7 W		4 51	7 20	16	13	25	5	26.38	9 16	2	39	
8 Th		4 52	7 18	15	56	17	5	18.62	9 36	3	21	
9 F		4 54	7 16	15	38	55	5	10.28	9 55	4	4	
10 S		4 55	7 15	15	21	17	5	1.34	10 13	4	48	
11 32		4 56	7 13	15	3	24	4	51.83	10 42	5	35	
12 M		4 57	7 12	14	45	17	4	41.73	11 12	6	26	
13 T	First Court in Minnesota, at	4 58	7 11	14	26	56	4	31.06	11 51	7	22	
14 W	Stillwater, 1849.	4 59	7 10	14	8	21	4	19.83	morn	8	23	
15 Th		5 00	7 8	13	49	33	4	8.07	42	9	27	
16 F		5 2	7 6	13	30	32	3	55.76	1 49	10	31	
17 S		5 4	7 4	13	11	18	3	42.94	3 2	11	34	
18 33		5 5	7 3	12	51	51	3	29.61	rises	morn		
19 M		5 6	7 1	12	32	12	3	15.80	7 55		33	
20 T		5 7	6 59	12	12	22	3	1.51	8 25	1	27	
21 W		5 8	6 57	11	52	20	2	46.76	8 49	2	18	
22 Th		5 9	6 56	11	32	6	2	31.56	9 10	3	7	
23 F	First University Faculty	5 10	6 54	11	11	42	2	15.95	9 34	3	54	
24 S	elected, 1869.	5 11	6 52	10	51	6	1	59.92	10 1	4	41	
25 34		5 13	6 51	10	30	21	1	43.50	10 31	5	29	
26 M	Stillwater Convention, 1848	5 14	6 49	10	9	25	1	26.71	11 8	6	17	
27 T		5 15	6 47	9	48	19	1	9.57	11 49	7	7	
28 W		5 16	6 45	9	27	4	0	52.06	morn	7	57	
29 Th		5 18	6 44	9	5	40	0	34.21	39	8	47	
30 F		5 19	6 42	8	44	7	0	16.06	1 35	9	37	
31 S		5 20	6 40	8	22	25	—	2.42	2 35	10	25	

AUGUST, Latin, *Augustus*. This month, previously called *Sextilis*, as being the sixth of the ancient calendar, was re-named by the Emperor Augustus Caesar, in his own honor. It chanced that in this month he was made consul, celebrated three triumphs at Rome, subdued Egypt, and put an end to the civil wars. French, *Aout*; Italian and Spanish, *Augusto*.

PHILOLOGICAL NOTES.

A well educated person in England, who has been at a public school and at the University, who reads his Bible, his Shakspeare, the "Times," and all the books of Mudie's Library, seldom uses more than about 3,000 or 4,000 words in conversation. Accurate thinkers and close reasoners, who avoid vague and general expressions and wait till they find the word which exactly fits their meaning, employ a larger stock: and eloquent speakers may rise to a command of 10,000. Shakspeare, who displays a greater variety of expression than probably any writer in any language, produces all his plays with about 15,000 words. Milton's works are built up with 8,000, and the Old Testament says all it has to say with 5,642 words.

MAX MUELLER.

Now the first real Greek Grammar was that of Dionysius Thrax. * * But who was Dionysius Thrax? His father, as we learn from his name, was a Thracian; but Dionysius himself lived at Alexandria, and was a pupil of the famous critic and editor of Homer, Aristarchus. Dionysius afterward went to Rome, where he taught about the time of Pompey. And here we see a new feature in the history of mankind. A Greek, a pupil of Aristarchus, settles at Rome, and writes a practical Grammar of the Greek language—of course, for the benefit of his young Roman pupils. * * * His work became one of the principal channels through which the grammatical terminology, which had been carried from Athens to Alexandria, flowed back to Rome, to spread thence over the whole civilized world.—*Id.*

We ourselves have been taught grammar according to the plan which was followed by Dionysius at Rome, by Priscianus at Constantinople, by Alcuin, at York; and whatever may be said of the improvements introduced into our system of education, the Greek and Latin Grammars used in our (i.e. the English, Ed.) public Schools, are mainly founded on the first empirical analysis of language, prepared by the philosophers of Athens, applied by the scholars of Alexandria, and transferred to the practical purpose of teaching a foreign tongue by the Greek professors at Rome.—*Id.*

A language is spoken and poetry written many years before either a grammar or prosody is thought of. Men did not wait till Aristotle had constructed his logic, to reason. In short, as grammar was made after language, so it ought to be taught after language.

HERBERT SPENCER.

MOON'S PHASES.

	D.	H.	M.	
New Moon,	2	6	41	E.
First Quarter,	10	7	51	M.
Full Moon,	16	10	52	E.
Last Quarter,	24	7	9	M.

Day of Month.	Day of Week.	CHRONOLOGY, &c.	Sun		Sun's			Equation of		Moon	
			rises	sets	dec. N.	Time.		rises.	South.		
			H. M.	H. M.	Degs.	Min.	Sec.	[minus.]	H. M.	H. M.	
1	35		5 22	6 37	8 0	35 0	21.18	3 37	11 11		
2	M		5 23	6 36	7 38	38 0	40.21	sets	11 55		
3	T	FIRST TERM, UNIVERSITY	5 24	6 34	7 16	33 0	59.52	7 18	ev 38		
4	W	YEAR 1872-73, begins.	5 25	6 33	6 54	20 1	19.08	7 40	1 20		
5	Th		5 26	6 31	6 32	2 1	38.88	8 2	2 3		
6	F		5 27	6 29	6 9	36 1	58.90	8 22	2 47		
7	S		5 28	6 27	5 47	5 2	19.13	8 45	3 32		
8	36		5 30	6 26	5 24	28 2	39.54	9 14	4 22		
9	M		5 31	6 24	5 1	45 3	0.13	9 48	5 15		
10	T	Corner stone, Ft. Snelling	5 32	6 21	4 38	57 3	20.88	10 33	6 12		
11	W	laid, 1820.	5 34	6 19	4 16	5 3	41.77	11 29	7 13		
12	Th		5 35	6 18	3 53	8 4	2.77	morn 8	15		
13	F		5 35	6 16	3 30	8 4	23.86	39	9 17		
14	S		5 37	6 14	3 7	3 4	45.02	1 57	10 16		
15	37	Third State Normal School	5 38	6 12	2 43	55 5	6.25	3 18	11 12		
16	M	organized, 1869.	5 40	6 10	2 20	44 5	27.49	rises	morn		
17	T		5 41	6 8	1 57	31 5	48.74	6 46	4		
18	W		5 42	6 6	1 34	15 6	9.96	7 11	54		
19	Th		5 43	6 4	1 10	56 6	31.15	7 35	1 43		
20	F		5 45	6 2	0 47	36 6	52.27	7 59	2 31		
21	S	Pike reaches Kaposia, 1805.	5 46	6 0	0 24	14 7	13.28	8 29	3 19		
22	38		5 47	5 58	0 0	51 7	34.19	9 2	4 9		
23	M		5 48	5 57	S. 22	33 7	54.96	9 44	4 59		
24	T		5 49	5 55	0 45	57 8	15.57	10 31	5 50		
25	W		5 50	5 53	1 9	22 8	36.02	11 25	6 41		
26	Th		5 52	5 51	1 32	46 8	56.26	morn 7	31		
27	F		5 53	5 49	1 56	10 9	16.28	23	8 20		
28	S		5 55	5 46	2 19	34 9	36.06	1 24	9 6		
29	39		5 56	5 45	2 42	56 9	55.58	2 28	9 51		
30	M		5 57	5 43	3 6	17 10	14.83	3 33	10 35		
*	*		*	*	*	*	*	*	*	*	

SEPTEMBER, from Latin *Septem*, seven; this month being the seventh of the ancient calendar, in which March began the year. The remaining months were designated upon the same principle. Query: Was there not a still more ancient division of the year into three or four months, (i. e. — *measures*,) named from divinities, Mars, Juno, &c.? When a later division into ten months took place, the new ones would be simply numbered.

DRAWING IN SCHOOLS.

1. Skill in mechanical labor is always associated with a nice sense of form and proportion. This sense is to be trained by Drawing.

2. The ability in the foreman of a shop to give accurate sketches of machines, or parts of machines, to a workman, is of great value. This can be gained only by the practice of Drawing.

3. A boy who spends two hours a week in Drawing, and the rest of the time in working at machines or at the bench, learns his business faster, and becomes more skillful in it, than one who works all the time.

4. The great bane of foremen in machine shops is the inability of nine-tenths of their workmen to read a working drawing so as to work from it. The productive efficiency of every machine shop would be increased *thirty-three per cent.* if every journeyman could read any common working drawing and work by it. Their present inability to do this leads to working by "rule of thumb,"—that is, to poor work.

PROF. C. O. THOMPSON, *Worcester, Mass.*

"In London more than a thousand girls earn a handsome living by making designs for illustrated books, prints, &c. If every girl at school and out of school were properly taught Drawing, some, at least, here as in England, would become proficient enough to retire from the frightful list of 'unemployed women.'"—*Id.*

There is no form, however complex, that cannot be indicated by drawing in such a manner that an intelligent workman who is competent to read or understand drawings, can execute the object represented with absolute certainty. The simple ability to read plans and drawings fits a man for a good position. In fact, the foreman of a shop is often the only man who is able to do this. * *

PROF. BAIL, *Tale.*

Why is it that American boys are growing too proud to "learn a trade?" Is not the cause found in the fact that our whole system of education has quite ignored an industrial life? The only legitimate result of our educational system will be the production of lawyers and doctors, or at least, clerks and school teachers. In consequence of this defect, children receive the impression that education has no bearing upon mechanics; that a trade is only manual drudgery. The result is, that our boys select the most effeminate employments in preference to manly mechanical work.—*Id.*

[Laws of Massachusetts, 1870, Chap. 248.]

AN ACT relating to Free Instruction in Drawing. Be it enacted, &c., as follows:

SEC. 1. (Amends previous law.)

SEC. 2. Any city or town may, and any city and town having more than ten thousand inhabitants shall, annually make provision for giving free instruction in industrial or mechanical drawing to persons over fifteen years of age, either in day or evening schools, under the direction of the school committee.

SEC. 3. This act shall take effect, &c. Approved May 16, 1870.

MOON'S PHASES.

	D.	H.	M.	
New Moon,	2	9	18	M.
First Quarter,	9	2	52	E.
Full Moon,	16	9	22	M.
Last Quarter,	24	2	41	M.
New Moon,	31	11	16	E.

Day of Month.	Day of Week.	CHRONOLOGY, &c.	Sun		Sun's			Equation of		Moon	
			rises	sets.	dec. S.			Time.		rises.	South.
			H. M.	H. M.	Deg.	Min.	Sec.	[minus.]		H. M.	H. M.
1	T	Le Sueur on Blue Earth River, 1700.	5 58	5 41	3 29	36 10	33.80	4 38	11 18		
2	W		5 59	5 40	3 52	52 10	52.45	sets	ev.	1	
3	Th		6 00	5 38	4 16	6 11	10.78	6 26			44
4	F		6 02	5 35	4 39	16 11	28.77	6 49			1 30
5	S		6 04	5 33	5 2	24 11	46.40	7 16			2 19
6	40 S	Second State Nor. School organized, 1868.	6 05	5 32	5 25	27 12	3.66	7 48			3 11
7	M		6 06	5 30	5 48	26 12	20.53	8 29			4 7
8	T		6 07	5 28	6 11	21 12	36.98	9 21			5 6
9	W		6 09	5 26	6 34	11 12	53.01	10 25			6 7
10	Th		6 10	5 25	6 56	56 13	8.60	11 39			7 8
11	F	State Constitution adopted, 1857.	6 11	5 23	7 19	33 13	23.71	morn			8 6
12	S		6 12	5 21	7 42	6 13	38.33	58			9 1
13	41 M		6 13	5 19	8 4	31 13	52.46	2 16			9 53
14	T		6 14	5 18	8 26	50 14	6.07	3 33			10 43
15	Th		6 16	5 16	8 49	2 14	19.12	4 14			11 31
16	W	6 18	5 14	9 11	6 14	31.59	rises			morn	
17	Th	6 19	5 12	9 33	3 14	43.48	5 59			19	
18	F	6 20	5 10	9 54	51 14	54.77	6 27			1 8	
19	S	6 22	5 09	10 16	30 15	5.42	7 4			1 58	
20	42 S	6 23	5 07	10 38	0 15	15.43	7 36			2 48	
21	M	6 24	5 05	10 39	21 15	24.76	8 21			3 40	
22	T	6 26	5 03	11 20	33 15	33.41	9 12			4 32	
23	W	6 27	5 01	11 41	34 15	41.35	10 11			5 23	
24	Th	6 28	5 00	12 2	24 15	48.54	11 10			6 13	
25	F	6 30	4 58	12 23	4 15	55.06	morn			7 0	
26	S	6 31	4 57	12 43	32 16	0.81	14			7 46	
27	43 S	6 32	4 56	13 3	49 16	5.79	1 18			8 29	
28	M	6 33	4 54	13 23	53 16	10.00	2 23			9 12	
29	T	6 35	4 53	13 43	45 16	13.44	3 21			9 55	
30	W	6 36	4 51	14 3	23 16	16.10	4 33			10 38	
31	Th	6 38	4 49	14 22	49 16	17.96	5 44			11 24	

OCTOBER, from Latin, *Octo*, eight; (see note under September.) The Roman Senate once voted to call this month *Faustinus*, in honor of Faustina, wife of the Emperor Antoninus. Commodus desired to have it *Invictus*; Domitian, *Domitianus*: but neither decrees of senates nor imperial edicts could in those days change the ancient name.

A New System of Taxation.

A Commission appointed by the Governor of the State of New York, by virtue of a joint resolution of the Legislature, consisting of David A. Wells, Edwin Dodge and George W. Cuyler, to revise the laws for the assessment and collection of taxes, have submitted for consideration the following:

"*First*, Provide for the taxation of all corporations created by the State which are in the nature of a monopoly."

Of such corporations, the Gas Company is the type, having practically no competition.

"*Second*, * * tax land exclusive of buildings at a uniform valuation of fifty per centum of its true marketable or fair value."

"*Third*, (1.) Tax the house or building as real estate separately, at the same rate of valuation as the land, that is fifty per cent. And then, assuming that the value of the house or building, irrespective of its contents, be such contents furniture, machinery or any other chattels whatsoever, is the sign or index which the owner or occupier puts out of his personal property, tax the house or building on a valuation of fifty per cent. *additional* to its real estate valuation, as the *representative valuation of such personal property*: or, in other words, tax the land separately on fifty per cent. of its fair marketable valuation, and tax the buildings apart from the land, as representing the owner's personal property, on a *full* valuation, as indicated by the rent actually paid for it, or its estimated rental value.

Or, as a substitute for the above third provision, the following;

(2.) Tax buildings conjointly with land as real estate at a uniform valuation; and then as the equivalent for all taxation on personal property, tax the occupier, be he owner or tenant of any building or portion of any building used as a dwelling, or for any other purpose, on a valuation of three times the rental or rental value of the premises occupied. Tenement houses occupied by more than one family, or tenement houses having a rental value not in excess of a fixed sum, to be taxed to the owner as occupier."

"*All property not embraced under one of these provisions as above stated, to be entirely exempt from taxation.*"

The Editor would remark that the above is not inserted as having his unconditional approval, but as being the expression after an exhaustive review of the whole matter, of a committee of experts, upon a subject which is always of high and will often assume the highest importance in free states. It is a remark of Burke—"The Revenue to the State." The power of the State to demand a share of each man's wages cannot be too carefully defined, nor too cautiously exercised. So far as possible, all inquisitorial proceedings should be disused, and all temptation to subterfuge avoided. The above system proposes this by "listing" merely such property as is *visible*. Taxation of personal property has been abandoned in Great Britain, France, Holland and Belgium. It is a mere farce in our own country, as any one who will examine the subject will see.

MOON'S PHASES.

	D.	H.	M.	
First Quarter,	7	9	39	E.
Full Moon,	14	10	56	E.
Last Quarter,	23	11	33	M.
New Moon,	30	0	22	E.

Day of Month.	Day of Week.	CHRONOLOGY, &c.	Sun		Sun's dec. S.	Equation of Time.		Moon							
			rises	sets		[minus.]	rises	South.							
			H.	M.	Min.	Sec.	MIN.	SEC.	H.	M.	H.	M.			
1	F	Chapel of St. Paul consecrated, 1840.	6	39	4	28	14	42	0	16	19.02	sets	ev. 12		
2	S		6	41	4	46	15	0	57	16	19.27	5	47	1	4
3	4		6	42	4	45	15	19	40	16	18.71	6	26	2	0
4	M		6	44	4	43	15	38	7	16	17.35	7	15	3	0
5	T		6	45	4	42	15	56	18	16	15.18	8	17	4	2
6	W		6	46	4	41	16	14	14	16	12.19	9	29	5	3
7	Th		6	48	4	40	16	31	53	16	8.38	10	45	6	1
8	F		6	49	4	39	16	49	15	16	3.74	morn	6	56	
9	S		6	51	4	37	17	6	29	15	58.26		2	7	48
10	4		6	52	4	36	17	23	8	15	51.95	1	20	8	37
11	M		6	53	4	34	17	39	37	15	44.82	2	33	9	24
12	T		6	54	4	34	17	55	48	15	36.86	3	44	10	11
13	W		6	56	4	33	18	11	40	15	28.05	4	58	10	59
14	Th		6	58	4	31	18	27	13	15	18.41	rises	11	47	
15	F		7	00	4	30	18	42	26	15	7.92	4	55	morn	
16	S		7	01	4	29	18	57	20	14	56.60	5	31	38	
17	4	Carver at St. Anthony's Falls, 1776.	7	03	4	29	19	11	53	14	44.44	6	13	1	29
18	M		7	04	4	28	19	26	6	14	31	43	7	3	2	22
19	T		7	05	4	27	19	39	57	14	17.60	7	58	3	14
20	W		7	07	4	26	19	53	28	14	2.95	8	58	4	5
21	Th		7	08	4	25	20	6	36	13	47.47	10	0	4	53
22	F		7	09	4	25	20	19	23	13	31.17	11	3	5	39
23	S		7	10	4	24	20	31	47	13	14.07	morn	6	23	
24	4		7	11	4	23	20	43	48	12	56.18		6	7	6
25	M		7	12	4	22	20	53	26	12	37.52	1	11	7	48
26	T		7	13	4	21	21	6	41	12	18.10	2	15	8	30
27	W		7	14	4	21	21	17	32	11	57.94	3	21	9	14
28	Th		7	15	4	21	21	27	59	11	37.06	4	33	10	1
29	F		7	16	4	20	21	38	1	11	15.47	5	47	10	51
30	S		7	18	4	20	21	47	39	10	53.23	7	4	11	47
*	*		*	*	*	*	*	*	*	*	plus.	*	*	*	*

NOVEMBER, from Latin, *Novem*, nine; see September, foot-note.

Cæsar, in reforming the calendar, had given all the odd months 31 days, and all the even ones, except February, 30. Augustus Cæsar, not willing that his month should have fewer days than that of Julius Cæsar, changed that convenient order. To such a whim do we owe the present capricious arrangement.

Suggestions as to Medical Education.

There should be required by every Medical College of every *Candidate for Matriculation*, that he should have studied some definite length of time, and should pass an examination in the following subjects: (1) The common school branches; (2) the elements of Inorganic Chemistry, Natural Philosophy, Natural History, Logic and General History. The College should also see that he possesses the ability to translate and construe some author in Latin, French or German, and that he has a *fair knowledge of the principles of drawing*. All this should be preliminary to the study of Medicine proper.

Three courses of lectures, of at least twenty weeks each, should be a qualification for graduation. The first course should be devoted to Anatomy, Physiology, Chemistry, *Materia Medica* and Hygiene; upon all of which rigorous examinations should be held. The second course should include Physic, Surgery, Obstetrics, with a selection of illustrative clinical cases. During the third course, special attention should be given to clinical instruction in Medicine, Surgery and Obstetrics; Medical Jurisprudence should be thoroughly taught. There should be lectures and clinics on diseases of the eye and ear. There should be a very thorough examination on the studies of the previous year.

Having completed this study and passed the examinations, the candidate should be graduated with the degree of Bachelor of Medicine, and the degree of Doctor of Medicine should not be conferred till after at least three years honorable practice.

The State should have interest enough in this matter to insure the proper action; and this is not to discriminate between the different systems in existence, but to insist that every person, regular, eclectic or homeopathic, who practices medicine or surgery shall have studied a specified time in a specified way, and passed specified examinations. * * * The degree of M. B. would then mean something more than M. D. does now. The public would feel assured that the practitioner of Medicine was an educated man, whatever his theory might be.

There has been a steady and *totally ineffectual* pressure brought to bear on the Medical Colleges by the better part of the profession for over thirty years, in order to obtain better preliminary training, a lengthening of the lecture terms, or an increase of their number, and an enlargement and improvement in the subjects of instruction. The Medical Colleges are mostly joint-stock corporations, which furnish as little medical education as they can sell at the highest rates. Their number is excessive, and the competition keen. They are disinclined to introduce new features which may scare students of low acquirements away, or which may add to the expenses of the institution.—[Condensed from an article on *Medical Education* by Dr. Chas. Warner, in the Report of the U. S. Commissioner of Education, for 1870, p. 384.]

MOON'S PHASES.

	D.	H.	M.
First Quarter,	7	5	24 M.
Full Moon,	14	3	32 E.
Last Quarter,	22	8	0 E.
New Moon,	30	0	24 M.

Day of Month.	Day of Week.	CHRONOLOGY, &c.	Sun	Sun	Sun's			Equation of	Moon	Moon
			rises	sets	dec.	S.	Time.	rises.	South.	
			H. M.	H. M.	Deg.	Min.	Sec.	[minus]	H. M.	H. M.
1	48		7 20	4 19	21 56	51	10 30.34	5 5	ev. 47	
2	M		7 21	4 18	22 5	38	10 6.83	6 5	1 50	
3	T	ANNUAL MEETING OF THE	7 22	4 18	22 14	0	9 42.71	7 16	2 54	
4	W	Board of Regents.	7 24	4 18	22 21	55	9 18.03	8 33	3 55	
5	Th		7 25	4 18	22 29	24	8 52.82	9 51	4 52	
6	F		7 25	4 18	22 36	27	8 27.10	11 9	5 46	
7	S		7 25	4 18	22 43	3	8 0.89	morn	6 35	
8	49		7 26	4 18	22 49	13	7 34.23	24	7 22	
9	M		7 27	4 17	22 54	55	7 7.15	1 36	8 8	
10	T		7 28	4 17	23 0	10	6 39.67	2 46	8 54	
11	W		7 30	4 17	23 4	58	6 11.82	3 56	9 42	
12	T		7 31	4 17	23 9	18	5 43.65	5 6	10 30	
13	F		7 32	4 17	23 13	11	5 15.16	6 14	11 21	
14	S		7 32	4 17	23 16	35	4 46.37	rises	morn	
15	50		7 33	4 18	23 19	32	4 17.33	4 54	13	
16	M		7 33	4 18	23 22	1	3 48.06	5 48	1 5	
17	T		7 34	4 19	23 24	2	3 18.59	6 46	1 57	
18	W		7 35	4 19	23 25	35	2 48.96	7 48	2 46	
19	Th	FIRST TERM, '72-'73 ENDS.	7 36	4 19	23 26	39	2 19.19	8 50	3 33	
20	F	Louisiana purchase, 1803.	7 36	4 19	23 27	15	1 49.31	9 53	4 18	
21	S		7 37	4 20	23 27	23	1 19.35	10 55	5 1	
22	51		7 37	4 20	23 27	3	0 49.36	12 0	5 42	
23	M		7 38	4 21	23 26	15	0 19.35	morn	6 23	
24	T		7 38	4 22	23 24	58	* 10.63	1 2	7 5	
25	W	CHRISTMAS.	7 38	4 23	23 23	13	0 40.55	2 10	7 49	
26	Th		7 38	4 23	23 20	59	1 10.37	3 22	8 37	
27	F		7 39	4 24	23 18	18	1 40.06	4 36	9 29	
28	S		7 39	4 25	23 15	8	2 9.57	5.56	10 27	
29	52		7 39	4 26	23 11	31	2 38.88	7 12	11 30	
30	M		7 39	4 27	23 7	25	3 7.93	sets	ev. 35	
31	T		7 40	4 27	23 2	52	3 36.70	6 9	1 40	

* plus.

DECEMBER, from Latin, *Decem*, ten; see September.

To ascertain the length of the day,—add 12 hours to the time of the sun's setting, and subtract the time of the sun's rising. To find the length of the night,—subtract the time of setting from 12 hours, and add to the remainder the time of rising *next* morning.

THE UNIVERSITY OF THE FUTURE.

So much is already beyond question, namely, that the University of the future is to be not the mere College of America, nor even the College supplemented by one or more poorly organized and more poorly equipped professional schools; not that loose aggregation of grammar schools, supplemented by a few poorly attended courses of University lectures, that wear the title by courtesy, in England; not the French grouping of academical faculties, limited—especially in the departments of letters and science—to a quite too narrow field of study; * * nor yet the Germanic University, * * —everywhere too limited in scope and generally too lax in its regulations—not any of these; but rather an institution more ample in its endowment, broader in its scope, more complete in its organization, more philosophical and practical in its internal regulations, and certainly not less high than the highest in all its educational standards; an institution above and beyond the best of the gymnasia, Latin schools, high schools, academies, and colleges, and, on its own higher plane, existing for the extension and diffusion of all branches of knowledge; a broad and noble institution, where the love of all knowledge, and of knowledge as knowledge, shall be fostered and developed; where all departments of learning shall be equally honored, and the relations of each to every other shall be understood and taught; where the students devoted to each and all branches of learning, whether science, language, literature, or philosophy, or to any combination of these constituting the numerous professional courses of instruction, shall intermingle and enjoy friendly intercourse—as peers of the same value; where the professors—chosen, as in France and Germany, after trial, from among the ablest and best scholars of the world,—possessed of absolute freedom of conscience and of speech, and honored and rewarded more nearly in proportion to merit, shall be, not teachers of the known merely, but also earnest searchers after the unknown,—and capable, by their own genius, enthusiasm, and moral power, of infusing their own lofty ambition into the minds of all who may wait upon their instruction; a University not barely complying with the demands of the age, but one that shall create, develop, and satisfy new and unheard-of demands and aspirations; that shall have power to fashion the nation and mould the age into its own grander ideal; and which, through every change and every real advance of the world, shall still be at the front, driving back from their fastnesses the powers of darkness,—opening up new continents of truth to the grand army of progress, and so leading the nation forward, and helping to elevate the whole human race. Such an institution would be to the world its first realization of the true idea of a University.—*From Dr. F. W. Hoyt's Report on Education.*

METEOROLOGICAL STATISTICS FOR 1871.

Below are given some of the results of observations for the last two months of 1870 and ten months of 1871, and comparisons of these results with the average for the last six and seven years. It will be seen that the winter of 1870-71 was somewhat warmer, and the summer of 1871 was a little cooler than the average, while both the winter and summer deposits of water were less than the average.

The average mean temperature of the year in this locality is 42.58°; in Central Indiana, 51.80°; in Marietta, Ohio, 52.46°; in Rochester, N. Y., 47.00°.

WINTER TEMPERATURES.

Mean temperature of winter.....	1869-70,	14.29°
" "	1870-71,	15.50°
Average winter temperature for the last 7 years.....		13.27°

SUMMER TEMPERATURES.

Mean temperature of summer, 1871.....		68.58°
Average summer temperature for the last 7 years.....		69.29°

YEARLY TEMPERATURES.

Mean temperature of the year 1865.....		44.82°
" "	1866.....	42.12°
" "	1867.....	40.56°
" "	1868.....	41.64°
" "	1869.....	41.53°
" "	1870.....	44.79°
Average yearly temperature for the last 6 years.....		42.58°
Minimum temperature, 1870.....	Jan. 18th,	*-30°
Maximum " " 1871.....	July 12th,	93°

* -- before a figure indicates below zero.

WATER DEPOSIT.

Total amount of water from rain and snow, in the year 1866.....		24	inches.
" "	1867.....	33	"
" "	1868.....	33.293	"
" "	1869.....	37.515	"
" "	1870.....	30.330	"
" "	for 10 months of 1871.....	27.806	"
Average yearly deposit of water for the last 5 years.....		31.628	"
Amount of water deposited in the summer of 1870.....		11.450	"
" "	1871.....	10.430	"
Average summer deposit for 6 years.....		13.199	"
Amount of water deposited in the winter of 1870-71.....		2.500	"
Average winter deposit for the last 5 years.....		3.467	"

A comparison of these results with those given last year, shows that the additional observations have raised the average winter temperature nearly three-fourths of a degree, and lowered the average summer temperature one-tenth of a degree. In general, these observations tend to confirm the conclusions arrived at last year, and may lead us, as residents of Minnesota, to a thankful consideration of the fact that "the lines are fallen unto us in pleasant places."

W. C.

REPORT OF A COMMITTEE

On Presbyterian Collegiate Education, of which Rev. F. T. Brown, D. D., of St. Paul, was Chairman, to the Synod of Minnesota, September 29, 1871:

Your Committee feel that their duty is much simplified, and indeed made quite plain, because of the existing state of things in the matter of education in this State.

Were it an open question between a Presbyterian or a State College,—neither having an existence,—and the power being with us to establish one or the other, of a character suited to the wants of our people, probably none of us would hesitate to demand a thoroughly Presbyterian institution. But this is not the case. Not only are we as a denomination too poor to establish and endow a College suited to our demands as a Church; but we have a State University with a land grant even now of great value. * * This University is open, is rapidly developing and is officered by able, good men. The Christian air surrounding it is clear and sweet. It is an institution of great power even now, and when it enters on full possession of its inheritance must have a tremendous power for good or evil. Its wealth will enable it to command the best men to fill its chairs in all its departments of study; to found a large and valuable library; to purchase scientific instruments, and provide laboratories, observatories, gymnasia, museums, &c., &c. With such an institution, it were vain to hope for successful competition with a denominational College. What then? As it seems to your committee, this: To unite with the other Christian Churches of the State in giving a warm and enthusiastic support to the State University. Your committee believe that if this is done, such a Christian influence can be secured to the young men congregated there as shall effectually guard them against what is called the evils of a “godless education.” They also believe that this is the way to prevent the possible danger of a University of such power and influence using its power and influence against evangelical religion. No board of Regents, on political grounds, in the judgment of your committee, would dare to disregard the wishes of the mass of Christians in the State, who were the most earnest friends and patrons of the University.

We therefore recommend no denominational action looking to the establishment of a distinctive Presbyterian College; but that on the contrary, as a Church, we stand by the State University, giving to her our prayers, our interest, our encouragement; and, as we can, our children, doing for her what we can, *as if she were an institution of our own.*

As to Presbyterian *Academies*, your committee are of the opinion that somewhere in each Presbytery of the Synod, (but outside of the cities and large towns, where high schools are or will be established,) one such Academy should, if possible, be planted and endowed.

All of which is respectfully submitted.

NECROLOGY OF MINNESOTA, 1871.

- Jan. 1.—Charles A. Sweetzer, formerly a Minnesota journalist.
- “ 9.—Wm. Beaumette, a pioneer who settled in St. Paul, 1838.
- “ 11.—Maj. Hiram A. Kimball, a Minn. journalist and public officer.
- “ 14.—Col. Luther Butts, an old resident of Owatonna.
- “ 21.—P. P. Furber, an old settler and public officer of St. Paul.
- “ 22.—Maj. Lawrence Taliaferro, Indian Agt. at Ft. Snelling, 1819-1840.
- Feb. 19.—Dr. E. Herman Smith, Secretary of State Medical Society.
- Mar. 3.—Wm. R. Wood, Chief Clerk, Surveyor General's office, 1856-65.
- “ 20.—Col. Saml. L. Hayes, once Receiver of Sauk Rapids Land office.
- Apr. 11.—Nathaniel McLean, a pioneer journalist and Indian Agent, 1849.
- May 6.—George Hezlep, one of the founders of St. Peter, 1855.
- “ 8.—Col. Henry C. Rogers, Lt. Colonel 8th Minn. Regt., Ex-Sec. of State, and Pension Agent.
- “ 16.—Jos. Rolette, several times Mem. of Legislature, from Pembina.
- “ 27.—Charles B. Mathews, an old settler of Freeborn County.
- “ 30.—Rev. John W. Shatzell, late Rector of Epis. Church, St. Charles.
- June 13.—John Curtis, hotel keeper and merchant in St. Paul since 1856.
- July 30.—Rev. J. P. Bardwell, Assistant Indian Agent at Leech Lake, and Missionary.
- Aug. 4.—Amos W. Pearson, a manufacturer of St. Paul.
- “ 5.—Emanuel Case, a well known citizen of Minneapolis.
- “ 10.—Gilbert Graham, railroad contractor and Ex-Mem. Legislature.
- “ 26.—C. G. Wyckoff, Sec. and Gen. Manager South. Minn. R. R.
- Sept. 3.—Christopher McManus, of Pine Island, Soldier of War of 1812.
- “ 16.—James M. Culver, a prominent grain merchant of Lake City.
- “ 21.—L. G. Proctor, of Superior, Wis., formerly of St. Paul.
- “ 22.—George Lowry, an old resident and manufacturer of St. Paul.
- “ 23.—Samuel M. Carpenter, a Minnesota Journalist.
- “ 29.—Wm. C. McMaster, an old settler of Read's Landing, 1855.
- Oct. 2.—John C. Raguett, a prominent merchant of St. Paul.
- “ 2.—Prof. Wm. O. Hiskey, Supt. Public Schools of Minneapolis.
- “ 5.—Hon. Cyrus Aldrich, the most widely known public man of the State, at Minneapolis.
- Nov. 2.—Danl Baldwin, one of the early settlers of St. Anthony.

J. F. W.

From a Letter of Hon. Ezra Cornell, to President Read,
of the University of Missouri, October, 1869.

The law giving you the 330,000 acres of College lands will not be adequate in itself to provide the funds necessary to build, equip and sustain a great University. You should therefore see to it that provision is made for turning this land grant to the best advantage, and not allow it to be frittered away at fifty to seventy-five cents per acre, as some other States have done. If you could make your 330,000 acres produce a net sum of \$10 per acre, you would find abundant use for the income of so large a sum in carrying forward the noble work you have undertaken.

Here allow me to state an incident in my own experience touching upon this point. When the friends of the People's College at Havana, and those of the State Agricultural College at Ovid, were each striving to secure a grant of the New York "College Land Strip" for their respective Colleges, I advised a compromise of the question by a division of the fund between them, by which means I supposed, each College could secure an endowment of a half million dollars, a sum that I regarded *at that time* as ample for all purposes connected with a fully equipped College. My views, however, were wisely combatted by other friends of education,—(among whom President White was conspicuous,)—and the policy of concentration of resources was adopted by the Legislature. The entire proceeds of the 990,000 acres allotted to New York were bestowed upon a single institution, conditioned upon the bestowal of half a million of dollars from other sources upon the same institution; and, with even these large resources, *more still is required* to enable the trustees to place the faculty of the institution in the possession of such facilities and appointments as the best interest of the students demands. * * * *

The experience of the past five years has proved the error of the views I then entertained, and nobly vindicated the wisdom of those who said, 'let us concentrate our resources and unite our efforts and build up a University that shall be worthy of the name of UNIVERSITY, and worthy of the noble gift that Congress has bestowed upon the State in the aid of practical education.'

I now say to you, my noble friend, as my friends said to me, CONCENTRATE, CONCENTRATE, CONCENTRATE;—bring together all the resources the State can spare, for higher education. Administer these resources wisely, so as to produce the best results; and then what you lack, *call on your rich men to give*; and go forward and build up such a University as the growing wants of your State demand.

If your plans are wisely laid, and comprehensive enough to embrace the wants of the entire State for a higher practical education, and honestly,

faithfully, and energetically executed, you will have nothing to fear. The good sense of the people of Missouri will sustain you, and your rich and generous men will come forward in season to carry your noble institution forward to a position of high honor to the State, and of usefulness to the present and future generations.

In no other way can your wealthy men so certainly erect an enduring monument to their own names, and at the same time benefit their fellow men, as by identifying themselves with such an institution. One gentleman will build you a library; another an observatory; and so the good work will go on, each edifice bearing the name of the generous donor, and transmitting it to posterity covered with the blessings of the millions who will witness the generous deed, and profit by such munificence. Make your work worthy of noble bequests, and noble bequests will flow in upon your work. Let the University of Missouri become the most noble and enduring monument of the State—dispensing its blessings on all with an impartial and liberal hand. Let its organization be such that the faithfully applied labor of the most humble boy or girl in the State will be adequate to secure a thorough education; and let its doors be open alike to persons of all sects in religion, to all shades of politics, and to all nationalities.—Such an institution will vindicate the wisdom of Congress in making the generous donations of land in the interest of education, and will justify the Legislature of Missouri in concentrating its resources for a higher practical education upon a State University.

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HOW TO LIVE?—That is the essential question. Not how to live in the mere material sense only, but in the wider sense. The general problem which comprehends every special problem is—the right ruling of conduct in all directions, under all circumstances. In what way to treat the body; in what way to treat the mind; in what way to manage our affairs; in what way to bring up a family; in what way to behave as a citizen; in what way to utilize all those sources of happiness which nature supplies—how to use all our faculties to the greatest advantage of ourselves and others—how to live completely. And this being the great thing needful for us to learn, is, by consequence, the great thing which education has to teach.

The first requisite to success in life is to be a *good animal*.

ONE secret in education is “to learn how wisely to lose time.”

No rational plea can be put forward for leaving the ART OF EDUCATION out of our curriculum.

THE SUBJECT WHICH INVOLVES ALL OTHER SUBJECTS AND THE SUBJECT IN WHICH THE EDUCATION OF EVERY ONE SHOULD CULMINATE, IS THE THEORY AND PRACTICE OF EDUCATION.—*Herbert Spencer*.

[Advertisement.]

THE UNIVERSITY OF MINNESOTA.

THE UNIVERSITY OF MINNESOTA was originally incorporated by an Act of the Territorial Legislature, dated February 13th, 1851, which authorized and directed the erection of suitable buildings on a proper site, to be selected at, or near the Falls of St. Anthony.—*See The Revised Statutes of the Territory of Minnesota, 1851, Chapter 28, Sections 1 and 13.*

The State Constitution, adopted October 13, 1857, confirmed the above action; the people thereby accepting the offer of the General Government of 72 sections of land, made in the Enabling act approved February 26th of that year, as follows:

“THE LOCATION OF THE UNIVERSITY OF MINNESOTA AS ESTABLISHED BY EXISTING LAWS, IS HEREBY CONFIRMED, AND SAID INSTITUTION IS HEREBY DECLARED TO BE THE UNIVERSITY OF THE STATE OF MINNESOTA. ALL THE RIGHTS, IMMUNITIES, FRANCHISES AND ENDOWMENTS HERETOFORE GRANTED OR CONFERRED, ARE HEREBY PERPETUATED UNTO THE SAID UNIVERSITY, AND ALL LANDS WHICH MAY BE GRANTED HEREAFTER BY CONGRESS, OR OTHER DONATIONS FOR SAID UNIVERSITY PURPOSES, SHALL VEST IN THE INSTITUTION REFERRED TO IN THIS SECTION.”—*Article VIII, Sec. 4, p. 37, of The General Statutes of Minnesota.*

The institution thus established derives its present organization from an act of the Legislature, approved February 18th, 1868, entitled “An act to Re-organize and Provide for the Government and Regulation of the University of Minnesota, and to Establish an Agricultural College therein.”

This important act not only prescribed in general terms the organization of the University, but confirmed to it the income to be derived from the sale of all the lands granted and to be granted to the State of Minnesota by virtue of the act of Congress approved July 2d, A. D. 1862, “donating lands to the several States and Territories, which might provide Colleges for the benefit of Agriculture and the Mechanic Arts.”

The financial basis of the University consists of lands granted by the Congress of the United States, which are to be sold at such times as the Board of Regents may direct. These lands are sold and the proceeds invested not by the Board itself, but by the Auditor of State, upon the same terms and under the same conditions as the State School lands.—*See the General Laws of Minnesota, Chapter XXXVII, Title I, p. 317, and Title II, p. 325.*

The following is a statement of the amount, value and sales of the University lands as nearly as can be ascertained in advance of the official announcements:

Whole number of acres granted.....	202,083
Acres located at double minimum value.....	25,926
Estimated minimum value.....	\$920,000
Acres sold to pay old debt (about).....	14,000
Acres sold for permanent fund.....	22,394
Total purchase money.....	\$128,265.74
Paid for Experimental Farm.....	\$8,500.00
Permanent fund at interest.....	119,765.74

A considerable proportion of the lands are covered with pine timber, and are therefore already worth much more than their estimated minimum value. By judicious management in disposing of them, a fund may be created sufficient to provide for the support of the University for the present generation. Public assistance will be needed in the erection of buildings, their outfit and preservation. The Regents are prohibited by law from using the funds to accrue from a large portion of the lands, for the erection of buildings, under any pretence whatever. They are, however, allowed to invest a sum not exceeding ten per cent. of the permanent fund in an Experimental Farm. The amount above mentioned is much less than that sum. It appears to have been the intention of Congress to provide a fund which should furnish instruction, leaving the States, who are the beneficiaries of it, to provide buildings.

THE OFFICERS OF THE UNIVERSITY.

THE BOARD OF REGENTS.

His Excellency the Governor, Hon. HORACE AUSTIN—*ex-officio*.

The Superintendent of Public Instruction, Hon. H. B. WILSON—*ex-officio*.

Hon. J. S. PILLSBURY, St. Anthony, President.

Hon. A. A. HARWOOD, Austin, Secretary.

Hon. JOHN NICOLS, St. Paul, Treasurer.

Col. R. S. DONALDSON, Farmington.

Gen. H. H. SIBLEY, St. Paul.

Hon. CHAS. S. BRYANT, St. Peter.

Hon. PARIS GIBSON, Minneapolis.

THE PRESIDENT OF THE UNIVERSITY.

WILLIAM W. FOLWELL, M. A.

THE UNIVERSITY FACULTY.

WILLIAM W. FOLWELL, M. A.,	PRESIDENT and Librarian.
GABRIEL CAMPBELL, M. A., B. D.,	PROFESSOR of Mental and Moral Philosophy, and Instructor in German.
EDWARD H. TWINING, M. A.,	PROFESSOR of Chemistry, and Instructor in Natural Sciences and in French.
VERSAL J. WALKER, M. A.,	PROFESSOR of the Latin Lan- guage and Literature.
JABEZ BROOKS, M. A., D. D.,	PROFESSOR of the Greek Lan- guage and Literature.
ARIS B. DONALDSON, B. A.,	PROFESSOR of Rhetoric and English Literature.
EDWIN J. THOMPSON, M. A.,	PROFESSOR of Mathematics.
ARTHUR BEARDSLEY, C. E.,	PROFESSOR of Civil Engineering and Industrial Mechanics.
HELEN SUTHERLAND, M. A.,	ASSISTANT PROFESSOR of Latin and Preceptress.
_____	PROFESSOR of Military Science.
_____	PROFESSOR of Agriculture.
WALTER E. FIELD,	SUPERINTENDENT of the Farm and Instructor in Practical Agriculture.

THE ORGANIZATION.

The act of the Legislature of Minnesota, approved February 18, 1868, reorganizing the University, requires the Board of Regents to establish "five or more Colleges or Departments, that is to say:

- "A Department of Elementary Instruction;
- "A College of Science, Literature and the Arts;
- "A College of Agriculture and the Mechanic Arts;
- "A College or Department of Medicine;
- "A College or Department of Law."

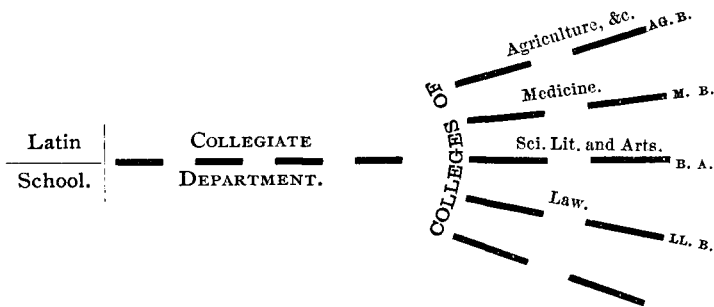
Of these the first three have been organized, and the first two are in operation.

The COLLEGE OF AGRICULTURE and the MECHANIC ARTS is organized in two divisions, (1) that of Agriculture, (2) that of the Mechanic Arts. The latter will be in operation from the beginning of the next Academic year, Sept. 3, 1872; the former so soon as the vacant professorship of Agriculture can be filled and a class of students desiring to enter the department assembled.

The Department of Elementary Instruction is represented by the COLLEGIATE DEPARTMENT and the so-called LATIN SCHOOL, introductory to it.

The Departments of Law and Medicine will be put in operation so soon as the means of the University will permit.

The following diagram will suggest, though inadequately,* the relations of the Departments:



* It must by no means be understood that students going into Agriculture, Engineering, Law, Medicine, &c., are expected, as of course, to enter upon their professional studies immediately upon leaving the Collegiate Department. A "University course in Arts" is urgently recommended to all who can, by any reasonable means and sacrifices, attain to it.

REMARKS.—1. The COLLEGIATE DEPARTMENT, receiving the student from the Latin School or from the Public High School, brings him, in the course of four years, to the end of the Second (commonly called the Sophomore) year of the ordinary College course. At this point he has his *option*, whether, equipped with the *fair preparation* for special studies acquired in the Collegiate Department, to enter at once some one of the professional schools as they may hereafter be established, or to proceed with higher academic studies, scientific, literary or classical, in the "COLLEGE OF SCIENCE, LITERATURE AND THE ARTS," with a view to securing the *best and fullest preparation* for professional or technical studies." The courses of study offered in this College cover, at present, a period of two years (Junior and Senior), and lead to Baccalaureate degrees.

2. It is a *part of the plan* of organization that the studies, not only of the LATIN SCHOOL, but also of the COLLEGIATE DEPARTMENT, shall be dropped off as fast as the High and other Secondary Schools can take the work. *The University Begins Wherever They Leave Off.* It is hoped that not many years may pass before the whole work of the Collegiate Department will have been assumed by those schools.

THE LATIN SCHOOL.

Candidates for admission must be at least 13 years of age: and must pass satisfactory examinations in Reading, Writing, Spelling, Practical Arithmetic, Introductory Grammar and Local Geography.

The principal studies of this school are: Higher Arithmetic, Elementary Algebra, United States History, English and Latin.

Students of this School do not wear the uniform of the Military Corps, nor are they required to drill, except that during the first term of the year they are instructed in the "School of the Soldier, without arms."

Students who pass all the examinations are, thereupon, admitted to the Collegiate Department.

THE COLLEGIATE DEPARTMENT.

I. THE FACULTY.

THE PRESIDENT,
 Professor CAMPBELL,
 " TWINING,
 " WALKER,
 " BROOKS,
 " DONALDSON,
 " BEARDSLEY,
 " THOMPSON,
 Miss SUTHERLAND.

THE COURSES OF STUDY ARE:

1. CLASSICAL; of which the leading studies are, Greek, Mathematics and Latin:

2. SCIENTIFIC: of which the leading studies are, the Natural Sciences and Mathematics, with ONE at a time (as prescribed,) of the following Languages, viz: English, Latin, French, German.

LITERARY; of which the leading studies are, English or Latin, Mathematics and the Modern Languages.

In addition to the principal studies, there are exercises in Military Tactics, Drawing, Elocution and Composition, common to and required in all the courses.

Lectures are given upon Agriculture and the Mechanic Arts and other subjects.

The following studies and exercises are common to all the courses:

1. All the Mathematics, except that Descriptive Geometry is not given in the Classical course. 2. English Composition and Rhetoric. 3. The Outlines of General History. 4. The Elements of General Chemistry. 5. Elementary Physics. 7. Zoology. 8. Descriptive Astronomy. 9. Drawing. 10. Composition and Declamation throughout.

To the above may be added the Military Exercises, which are obligatory upon all the male students of the COLLEGIATE DEPARTMENT, unless specially excused by the Faculty.

ADMISSION.

CANDIDATES FOR ADMISSION TO THE COLLEGIATE DEPARTMENT must be at least 14 years of age. They are examined in Reading, Writing and Spelling, Arithmetic and Elementary Algebra, U. S. History, Geography English *or* Latin Grammar.

The examinations in Reading, Writing and Spelling are rigorous.

Candidates for advanced standing are further examined in the studies already passed by their respective classes or sections. Only *real equivalents* are accepted.

Candidates for advanced standing will observe that the Second Class (3d Year) of the Collegiate Department corresponds with the so-called Freshman Class of the older Colleges.

Candidates for admission are furnished with a blank form of application, which must be properly filled up, signed and filed in the President's office before the student can be registered.

THE COURSE OF STUDY to be followed is selected for the student at the time of his entrance, by his parent or guardian, who should notify the President of his choice.

SYNOPSIS OF THE STUDIES OF THE COLLEGIATE DEPARTMENT.

CLASS.	COURSE.	FIRST TERM.			SECOND TERM.			THIRD TERM.			
IV.	Classical.	Greek, begun.	Rhetoric.	Cæsar.*	Greek Grammar.	Algebra.	Cæsar.	Greek Reader.	Algebra.	Cicero.	
	Scientific.	Nat. Philosophy.	do.	{ Hist. Eng. Cæsar, or German.	Nat. Philosophy.	do.	{ Eng. Comp. Cæsar, or German.	Uranog.	do.	{ Eng. Words. Cicero, or German.	
	Literary.	Hist. Eng., or Cæsar. }	do.	German. (begun)	Eng. Comp. or Cæsar. }	do.	German.	Eng. Words, or Cicero. }	do.	German.	
III.	Classical.	Anabasis.*	Plane Geometry.	Cicero.	Anabasis, Gen. History.	Virgil.	Drawing; use of Instruments.	Herodotus.	Hr. Algebra.	Virgil.	
	Scientific.	Phys. Geog.	do.	{ Anc. Hist. Cicero, or German.	Phys. Geog. and Botany.	do.		{ Latham, Virgil, or German.	Botany.	do.	{ Latham, Virgil, or German.
	Literary.	Anc. Hist. or Cicero. }	do.	German.	Latham, H'd B'k. or Virgil. }	do.		German.	Latham, or Virgil. }	do.	German.
II.	Classical.	Herodotus.	Hr. Alg.	Chemistry.	Homer.	Solid and Sph. Geom.	Livy.	Homer.	Trig. and Surv'g.	Livy.	
	Scientific.	Chemistry.	do.	{ Civ. Gov't. or French.	Chem. and Physiology.	do.	{ Anglo-Saxon, Livy, or French.	Physiology.	do.	{ Anglo-Saxon, Livy, or French.	
	Literary.	Civ. Gov't. or Chem. }	do.	French.	Anglo-Saxon, or Livy. }	do.	French.	Anglo-Saxon, or Livy. }	do.	French.	
I.	Classical.	Physics.	Analyt. Geom.	Horace.	Demosth.	Logic.	Horace.	Prom. Vinc.	Desc. Astr.	Zoology.	
	Scientific.	do.	do.	Guizot.	Physics.	Desc. Geom.	Logic.	Rhetoric.	do.	do.	
	Literary.	do.	do.	do.	do.	do.	do.	do.	do.	do.	

* Collaterals, History, Geography, Antiquities, &c., throughout.

EXAMINATIONS.

The regular examination of candidates for admission to this Department is held on the first day of the First Term of each year. The candidates meet in the Assembly Hall at 9 o'clock A. M.

Examinations are held upon the studies of each term, and certificates are given to students who pass. Upon presentation of certificates for all the studies of his course, the student receives a "Final Certificate" which admits him to any appropriate College of the University without further examination.

The merits of students are ascertained from recitations *and* examinations, the relative weight of the latter increasing from year to year.

 CHARGES.

THE CHARGES FOR INCIDENTAL EXPENSES ARE:

For the 1st Term.....	\$2.00
For the 2d Term.....	3.00
For the 3d Term.....	1.00

These sums are paid at the beginning of the respective Terms, before the student is admitted to recitations. No deductions are made for absence or late entrance.

 THE COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS.

 THE FACULTY.

THE PRESIDENT,
 Professor CAMPBELL,
 " TWINING,
 " WALKER,
 " BROOKS,
 " DONALDSON,
 " THOMPSON.

 THE COURSES OF INSTRUCTION.

Agreeably to the legal style of this College, there are three courses of instruction, designated respectively:

- "THE COURSE IN SCIENCE;"
- "THE COURSE IN LITERATURE;"
- "THE COURSE IN ARTS."

These courses extend, at present, over a period of two years. The terms and recesses are the same as those of the Collegiate Department.

THE COURSE IN ARTS—(Classical).

JUNIOR YEAR.

Greek,—Plato—Apology and Crito, with their Literature, History and Geography;—Lectures on Greek Antiquities and Art. *Latin*,—Tacitus—Satires,—Roman Literature, (Lectures). *English*,—History of English Literature. *Philosophy*,—Psychology and the History of Philosophy. *Philology*,—Linguistics. ELECTIVE STUDIES.—*Mathematics*,—The General Theory of Equations, the Modern Geometry, the Differential and Integral Calculus. *Science*,—Analytical Chemistry, Geology and Mineralogy. *Literature*,—Late English and American Authors. *Modern Languages*,—French, German, &c. *Æsthetics*—Lectures on the Fine Arts.

SENIOR YEAR.

Greek,—Aristophanes—with Collaterals; Lectures on Greek Literature. *Latin*,—Comedy—Terence and Plautus. *Philosophy*,—Ethics and Ontology. *Political Science*. *The American Constitution*. ELECTIVE STUDIES.—*Science*—Analytical Chemistry, Dynamical Physics, Botany. *Literature*,—Elements of Criticism. *Modern Languages*—French, German, &c. *Mathematics*,—Practical Astronomy.

THE COURSE IN SCIENCE—(Scientific).

JUNIOR YEAR.

Science,—Analytical Chemistry, Geology and Mineralogy. *Mathematics*,—The General Theory of Equations, the Modern Geometry, the Differential and Integral Calculus. ELECTIVE STUDIES.—*Literature*,—History of English Literature. *Philosophy*,—Psychology and the History of Philosophy. *Latin*,—Tacitus and Collaterals. *Philology*,—Linguistics. *Æsthetics*,—Lectures on the Fine Arts. *Modern Languages*,—French, German, &c.

SENIOR YEAR.

Science,—Analytical Chemistry, Dynamical Physics, Botany. *Mathematics*—Practical Astronomy. *Political Science*. *The American Constitution*. ELECTIVE STUDIES,—*Philosophy*—Ethics and Ontology. *Literature*, Elements of Criticism. *Latin*,—Terence and Plautus. *Modern Languages*—French, German, &c.

THE COURSE IN LITERATURE—(Literary.)

JUNIOR YEAR.

Literature,—History of English Literature. *Mathematics*,—The General Theory of Equations and the Modern Geometry. *Philosophy*,—Psychology and the History of Philosophy. *Philology*,—Linguistics. *Æsthetics*,—Lectures on the Fine Arts. ELECTIVE STUDIES.—*Science*,—Analytical Chemistry, Geology and Mineralogy. *Mathematics*—Differential and Integral Calculus. *Modern Languages*,—French, German, &c. *Latin*,—Tacitus and Collaterals,—Satires. *Literature*,—History of Greek and Roman Literature.

SENIOR YEAR.

Literature,—Elements of Criticism. *Philosophy*,—Ethics and Ontology. *History*,—History of Free Institutions. *Political Science*. *The American Constitution*. ELECTIVE STUDIES.—Analytical Chemistry, Dynamical Physics, Botany. *Mathematics*,—Practical Astronomy. *Latin*,—Terence and Plautus. *Modern Languages*,—French, German, &c.

ADMISSION, &c.

Applicants for admission who bring final certificates from the COLLEGIATE DEPARTMENT are admitted without further examination.

Other applicants must be at least 17 years of age, and must pass examinations in all the studies of those courses of the Collegiate Department, corresponding to those they propose entering upon, respectively, in this College. *Real Equivalents* only are accepted.

In each course there are two required studies. The third is selected by the student from the respective range of elections. No student may have fewer than three studies unless by permission of the Faculty. Exercises in Writing and Speaking are required throughout, in all the courses.

Admitted applicants must declare in writing their choice of courses of study within three days after the beginning of the First Term.

DEGREES AND EXAMINATIONS.

The following degrees appropriate to the respective courses of study are conferred by the Board of Regents upon recommendation of the Faculty of this College:

1. THE DEGREE OF BACHELOR OF ARTS;
2. THE DEGREE OF BACHELOR OF SCIENCE;
3. THE DEGREE OF BACHELOR OF LITERATURE.

The merit of students is ascertained from Examinations only.

SYNOPSIS OF THE STUDIES IN THE COLLEGE OF SCIENCE, LITERATURE AND THE ARTS.

	COURSES IN	FIRST TERM.	SECOND TERM.	THIRD TERM.
JUNIOR YEAR.	Arts.	1. Greek. 2. English Literature. 3. { Mathematics, Science, Mod. Languages.	1. Latin. 2. Psychology. { Mathematics, 3. { Science, Eng. Literature, Mod. Languages.	1. Greek and Latin. 2. Linguistics. 3. { Mathematics, Science, Æsthetics.
	Science.	1. Science. 2. Mathematics. 3. { Eng. Literature, Mod. Languages.	1. Science. 2. Mathematics. { Psychology, 3. { Eng. Literature, Mod. Languages, Latin.	1. Science. 2. Mathematics. 3. { Linguistics, Æsthetics.
	Literature.	1. English Literature. 2. Mathematics. 3. { Science, Mod. Languages.	1. English Literature. 2. Psychology. { Mathematics. 3. { Science, Mod. Languages, Latin.	1. Linguistics. 2. Æsthetics. 3. { Mathematics, Science, { Greek and Latin (lectures).
SENIOR YEAR.	Arts.	1. Latin. 2. Ethics. { Science, 3. { Pract. Astronomy, Mod. Languages, Criticism.	1. Greek. 2. Political Science. 3. American Constitution.	No stated Exercises; Candidates for degrees prepare Orations and Theses.
	Science.	1. Science. 2. Practical Astronomy. 3. { Ethics, Criticism, Mod. Languages, Criticism.	1. Science. 2. Political Science. American Constitution.	
	Literature.	1. Elements of Criticism. 2. Ethics. { Science, 3. { Pract. Astronomy, Mod. Languages, Latin.	1. History of Free Institutions. 2. Political Science. 3. American Constitution.	

THE COLLEGE OF AGRICULTURE AND THE
MECHANIC ARTS.

THE FACULTY.

THE PRESIDENT.

Professor BEARDSLEY,

“ ————

“ TWINING.

“ THOMPSON,

“ ————

Mr. FIELD.

I. DIVISION OF AGRICULTURE.

The instruction in Agriculture is conducted upon the following general plan:

<i>Departments.</i>	<i>Associated Subjects.</i>	<i>Practical Applications.</i>
CHEMISTRY,	{ GEOLOGY, MINERALOGY,	Nature and origin of soils and their Analysis—Chemistry of Animals and Vegetables — Fertilizers — Food — Processes of Dairy, Sugar Factory, &c., &c.
BOTANY, . . . . .	. . . . .	Horticulture and Pomology, Arboriculture—Improvement of Varieties—Cereals—Textile Plants—Weeds, &c.
ZOOLOGY,	{ ANATOMY, ENTOMOLOGY, ORNITHOLOGY,	Stock-Breeding—Veterinary Science —Insects Injurious to Vegetation—Poultry—Pisciculture, &c.
PHYSICS,	{ METEOROLOGY, CLIMATOLOGY,	Effects of Light, Heat and Electricity Theory of Winds and Storms, Acclimation of Plants, Animals, &c.
MECHANICS,	{ ENGINEERING, ARCHITECTURE,	Construction and Tests of Farm Implements and Machinery—Roads—Ditching—Fencing—Farm Buildings and Grounds, &c.
ECONOMICS, . . . . .	. . . . .	General Theory and Practice of Agriculture — Rent — Wages — Accounts — Market — Transportation, &c.
JURISPRUDENCE	{ HISTORY AND LIT- ERATURE OF AGRICULTURE, &c.	Tenures of Lands—Laws of Highways — Taxation — Estrays — Contracts, &c.

The course of study extends over a period of two years. The Terms and Recesses are the same as those of the Collegiate Department.

Applicants for admission who bring a Final Certificate for the Scientific Course of the COLLEGIATE DEPARTMENT, are admitted without further examination.

Other applicants must pass examinations in all the studies of the Scientific Course.

GRADUATION.

Students who complete a course of study to the satisfaction of the Faculty, will, upon their recommendation, receive the degree of BACHELOR OF AGRICULTURE, *but ANY PERSON not a candidate for this degree, who may appear to be competent to receive the instruction, may attend the classes and undergo examination in any subject, and if successful, will receive a certificate to that effect.*

The merit of students in this College is ascertained from examinations only.

2. DIVISION OF THE MECHANIC ARTS.

THE COURSES OF INSTRUCTION

At present offered, are those in

1. CIVIL ENGINEERING;
2. MECHANICAL ENGINEERING.

THE COURSE IN CIVIL ENGINEERING.

JUNIOR YEAR.

FIRST TERM.—*Geodesy*.—Theory, Adjustment and Use of Instruments. Farm Surveying; Levelling; Topographical Surveying. *Drawing*; Elements of Topographical Drawing; Maps of Farm Surveys; Structure Drawing. *Mathematics*.—General Theory of Equations; Differential Calculus. *Chemistry*.—Qualitative Analysis. *Elective Studies*.—English Literature; Modern Languages.

SECOND TERM.—*Stereotomy*.—Shades, Shadows, and Perspective with Drawing. *Drawing*.—Maps of Topographical Surveys; Machine Drawing. *Cinematics*.—Elements of Machine Construction. *Mathematics*.—Integral Calculus. *Astronomy*.—Determination of Time, Latitude and Longitude. *Chemistry*, Determinative Mineralogy; Blowpipe Analysis. *Elective Studies*.—Psychology; English Literature; and Modern Languages.

THIRD TERM.—*Geodesy*.—Triangular Surveying; Hydrographical Surveying. *Drawing*.—Maps of Hydrographical Surveys. Visits to and Sketches of Machinery and Structures. *Analytical Mechanics*.—Solids, and Fluids. *Natural Science*.—Geology and Mineralogy. *Elective Studies*.—Linguistics; Lectures on the Fine Arts.

SENIOR YEAR.

FIRST TERM.—*Engineering*.—Theory of Roads and Railroads; Preliminary Survey and Final Location of a Railroad. *Drawing*.—Structures. *Stereotomy*.—Constructions in Stone Cutting, &c. *Analytical Mechanics*.—Solids and Fluids. *Applied Mechanics*.—Friction and other Resistances, Stress and Strength of Materials. *Machines*.—General Theory of Machines. *Elective Studies*.—Ethics; Criticism; Modern Languages.

SECOND TERM.—*Applied Mechanics*.—Fluids; Practical Hydraulics; Water Engineering, Canals, Water Supply and Distribution, Irrigation, Drainage, Sewerage; Practical Pneumatics, Compressed Air. *Constructions*.—Stability of Structures; Building Materials; Foundations, Superstructures of wood, of stone, and of iron; Bridge Engineering. *Machines*.—Theory of Prime Movers. *Drawing*.—Plans, Profiles and Sections of Railroad Surveys; Structures; Bridges and other Engineering Structures. —Specifications, Estimates, Contracts, &c. *Elective Studies*.—Political Science; The American Constitution.

THIRD TERM.—*Engineering*.—Staking out for Construction; Railway Management; Designs for, and Reviews of Special Engineering and Architectural Works. Theses. Final Examination.

 THE COURSE IN MECHANICAL ENGINEERING.

JUNIOR YEAR.

The studies of this year are the same as those of the Junior Year of the Civil Engineering Course, without the Astronomy, with less Geodesy and Topographical Drawing and with a more extended course in Structural and Machine Drawing.

SENIOR YEAR.

FIRST TERM.—*Machines*. General Theory of Machines; their Location, Construction, Efficiency; *Mechanics*.—Statics and Dynamics of Solids and Fluids; *Physics*.—Thermodynamics; Electrodynamics. —*Applied Mechanics*. —Friction and other Resistances; Stress and Strength of Materials. —*Drawing*.—Machines and Structures; Pattern Making. *Elective Studies*. —Ethics; Criticism; Modern Languages.

SECOND TERM.—*Machines*.—Theory of Prime Movers, Steam Engines, Water Wheels, Windmills. *Applied Mechanics*.—Practical Hydraulics: Pumping Engines; Practical Pneumatics; Use of Compressed Air. *Drawing*.—Plans, Elevations, Sections and Working Drawings of Machinery and Structures; Specifications. *Constructions*.—Stability of Structures; Building materials; Foundations, Superstructures of wood, of stone, of iron. *Elective Studies*.—Political Science; The American Constitution.

THIRD TERM.—Designs for, and Reviews of Machines for special purposes.—Theses.—Final Examination.

ADMISSION.

Applicants who bring Final Certificates for the Scientific Course of the Collegiate Department are admitted without further examination. Other applicants must pass examinations in all the studies of the Scientific Course. Real equivalents are accepted.

DEGREES AND EXAMINATIONS.

The following degrees appropriate to the respective courses of study are conferred by the Board of Regents upon recommendation of the Faculty of this College:

1. THE DEGREE OF CIVIL ENGINEER.
2. THE DEGREE OF MECHANICAL ENGINEER.

The merit of students is ascertained from examinations only.

The location of the University, in the near neighborhood of the great and rapidly extending Manufacturing Industries of the cities of St. Paul, Minneapolis and St. Anthony, renders it a desirable resort for students of Mechanical Science.

GENERAL INFORMATION.

THE LIBRARY.—During the last year large and valuable additions have been made. The number of volumes now on the shelves is about 5,200. The books purchased in Europe by Prof. Campbell—about 2,800 volumes—will be ready for use early this year. An alphabetical catalogue will probably appear in the forthcoming Annual Report of the Board of Regents.

THE MUSEUM.—A small but valuable collection of Minerals and Fossils forms a nucleus of this portion of the University apparatus. Contributions are solicited.

SOCIETIES.—The following Societies recognized and authorized by the General Faculty, are in successful operation:

1. The Delta Sigma Society.
2. The Hermean Society.
3. The Zenobian Society.
4. The Students Christian Association of the University of Minnesota.

TUITION—is FREE in all Departments.

BOARDING—is obtained in families, at prices varying with the seasons. Table Board in the best families is now \$4.00 a week. A limited number of young men are accommodated with rooms in the University build-

ing, furnished with bedstead and mattress, wash-stand, table and stove, at \$3.00 per term. A Boarding Club formed by them is allowed the use of a dining-room, a kitchen and some furniture. The cost to each member has not exceeded \$2.00 per week.

A well-known friend of the University has just erected at his own cost the first of a "set" of buildings designed for the boarding and lodging of students.

The plan contemplates two dormitories each 28x38 feet and two stories high with four rooms 12x15 each on a floor, flanking a third building of somewhat larger dimensions, containing a kitchen and dining-room, large enough to accommodate all the lodgers of the three structures.

The rooms will be let at a moderate rent, and arrangements will be made under which boarding will be furnished economically.

ATTENDANCE during the year ending December 1st, 1871:

DEPARTMENTS.	GENTLEMEN.	LADIES.	TOTAL.
Collegiate Department.	126	45	171
Latin School.	114	49	163
	240	94	334

HOW TO ENTER THE UNIVERSITY.

1. Candidates procure personally or by mail, from the President's office a blank form of APPLICATION and have it properly filled and signed.

2. On the appointed day and hour they present themselves with their applications in the Assembly Hall for examination. Each receives a number, by which alone he is known to the Examining Professors.

3. After the examinations, the numbers of the successful candidates are announced.

4. At an appointed hour these assemble at the President's office for Registry. On payment of the charge for incidental expenses for one term each candidate whose papers are satisfactory, is registered as a member of the University, and receives a STUDENT'S CARD.

Persons so desiring can be furnished instruction in the following extra studies: Sanscrit, Arabic and Hebrew, Spanish and Italian, Swedish and Norwegian, and the Modern Greek.

THE UNITED STATES GOVERNMENT.

ULYSSES S. GRANT, of Illinois.....President.
SCHUYLER COLFAX, of Indiana.....Vice President.

THE CABINET.

HAMILTON FISH, of New York.....Secretary of State.
GEORGE S. BOUTWELL, of Massachusetts.....Secretary of the Treasury.
WILLIAM W. BELKNAP, of Iowa.....Secretary of War.
GEORGE M. ROBESON, of New Jersey.....Secretary of the Navy.
COLUMBUS DELANO, of Ohio.....Secretary of the Interior.
GEORGE H. WILLIAMS, of Oregon.....Attorney General.
JOHN A. J. CRESSWELL, of Maryland.....Postmaster General.

HEADS OF DEPARTMENT-BUREAUS.

J. W. DOUGLASS, of Pennsylvania, ...Commissioner of Internal Revenue.
MORTIMER D. LEGGETT, of Ohio.....Commissioner of Patents.
HENRY VAN AERNAN, of New York.....Commissioner of Pensions.
FELIX R. BRUNOT, of Pennsylvania.....Commissioner of Indian Affairs.
WILLIS DRUMMOND of Iowa.....Commissioner of Public Lands.
FREDERICK WATTS, of Pennsylvania.....Commissioner of Agriculture.
JOHN EATON, Jr., of Tennessee.....Commissioner of Education.
FRANCIS A. WALKER, of Massachusetts....Superintendent of the Census.
FRANCIS E. SPINNER, of New York.....Treasurer of the United States.
HILAND R. HULBURD, of New York.....Comptroller of the Currency.
WILLIAM A. BRISTOW, of Kentucky.....Solicitor-General.

THE SUPREME COURT.

SALMON P. CHASE, of Ohio.....Chief Justice.
SAMUEL NELSON, of New York.....Associate Justice.
NATHAN CLIFFORD, of Maine....." "
NOAH H. SWAYNE, of Ohio....." "
SAMUEL F. MILLER, of Iowa....." "
DAVID DAVIS, of Illinois....." "
STEPHEN J. FIELD, of California....." "
WILLIAM STRONG, of Pennsylvania....." "
JOSEPH P. BRADLEY, of New Jersey....." "
JOHN WILLIAM WARREN, of Pennsylvania.....Reporter.

THE ARMY AND NAVY.

WILLIAM T. SHERMAN.....General of the Army.
DAVID C. PORTER.....Admiral of the Navy.
Brev. Maj. Gen. E. D. TOWNSEND.....Adjutant-General.
Brev. Maj. Gen. M. E. MEIGS.....Quartermaster-General.
Brig. Gen. A. A. HUMPHREYS.....Chief of Engineers.
Brig. Gen. ALBERT J. MEYER.....Chief Signal Officer.
Commodore B. F. SANDS.....Superintendent of the Naval Observatory.
Professor J. H. C. COFFIN.....Superintendent of the Nautical Almanac.
Brev. Brig. Gen. T. H. RUGER.....Superintendent of the Military Academy.
Commodore JOHN L. WORDEN.....Superintendent of the Naval Academy.

Professor BENJAMIN PIERCE.....Superintendent of the Coast Survey.
" J. E. HILGARD.....Assistant in charge of Office.
" JOSEPH HENRY.....Director of the Smithsonian Institution.
" A. R. SPOFFORD.....Librarian of Congress.

THE FORTY-SECOND CONGRESS.

March 4th, 1871, to March 4th, 1873.

SCHUYLER COLFAX, of Indiana, *ex-officio*.....President of the Senate.
 JAMES G. BLAINE, of Augusta, Maine.....Speaker of the House.

MINNESOTA DELEGATION.

ALEXANDER RAMSEY, WILLIAM WINDOM.....Senators.
 JOHN T. AVERILL, MARK H. DUNNELL.....Representatives.

UNITED STATES COURTS FOR THE DISTRICT OF MINNESOTA.

DISTRICT COURT.

RENSELAER R. NELSON.....Judge.
Terms Begin—First Monday of June, at.....Winona.
 First Monday of October, at.....St. Paul.

U. S. CIRCUIT COURT.

SAMUEL F. MILLER.....Associate Justice of the Supreme Court.
 JOHN F. DILLON.....Judge of the 8th Judicial Circuit.
 RENSELAER R. NELSON.....Judge of the U. S. District Court.
Terms Begin—On the third Mondays of June and October, at...St. Paul.
 C. K. DAVIS, St. Paul.....U. S. District Attorney.
 AUGUSTUS ARMSTRONG, Albert Lea.....U. S. Marshal.

CHIEF U. S. REVENUE OFFICERS IN MINNESOTA.

DANA E. KING, Minneapolis.....Supervisor of Internal Revenue.
 MONS GRINAGER, Albert Lea.....Assessor, 1st District.
 ROBERT N. McLAREN, St. Paul.....Assessor, 2d District.
 ANDREW C. SMITH, Rochester.....Collector, 1st District.
 JARED BENSON, St. Paul.....Collector, 2d District.

U. S. LAND OFFICES AND OFFICERS IN MINNESOTA.

CHAS. T. BROWN, St. Paul.....Surveyor General.

NO. DIST.	REGISTER.	RECEIVER.	OFFICES.
1	J. B. Wakefield.....	E. P. Freeman.....	Jackson.
2	Abner Tibbets.....	J. C. Rudolph.....	New Ulm.
3	J. M. Waldron.....	J. C. Braden.....	Litchfield.
4	H. L. Gordon.....	T. C. McClure.....	St. Cloud.
5	L. K. Acker.....	J. H. Van Dyke.....	Alexandria.
6	J. P. Owens.....	Oscar Roos.....	Taylor's Falls.
7	Ansel Smith.....	W. H. Feller.....	Duluth.

DESCRIPTION OF THE LAND DISTRICTS.

- 1st. For a district 30 miles wide, and extending from east to west through the State, along the south line.
- 2d. For a district 60 miles wide, extending east and west immediately north of the last named.
- 3d. For a district 30 miles wide, north of the above.
- 4th. For a district 24 miles wide, extending to the west line of the State, north of the 3d, and also extending through the centre of the State northward, to the north boundary line.
- 5th. For a district embracing the northwest portion of the State, along the Red River and the north boundary line.
- 6th. For a district lying between district last named and the St. Croix River.
- 7th. For the remainder of the State, comprising the territory bounded by Lake Superior, by British America, and by districts 5 and 6.

CLASSES OF PUBLIC LANDS.

There are three classes of public lands—

1st. All even-numbered sections outside the 10-mile limits of the lines of the several land-grant railroads in the State. These are held at \$1.25 per acre.

2d. All public lands comprising the even-numbered sections within the 10-mile limits of railroad grants, which are \$2.50 per acre.

3d. The lands formerly reserved for the Sioux Indians, which, until offered for sale, are subject to pre-emption by actual settlers at their appraised value.

The two first may be had at all the land offices, and the third at the New Ulm and Litchfield offices only.

DEPARTMENT OF DAKOTA,

Major General Winfield S. Hancock, Commanding.

HEADQUARTERS.....ST. PAUL.

TROOPS.

CAVALRY. INFANTRY.
Co's F, G, H, and L, 2d Regiment, | 7th, 17th, 20th and 22d Regiment.

PERSONAL STAFF.

Captain G. W. Mitchell, 5th Infantry, Aide-de-Camp.

Captain John S. Wharton, 19th Infantry, Aide-de-Camp.

2d Lieutenant G. S. Luttrell Ward, 22d Infantry, Aide-de-Camp.

DEPARTMENT STAFF.

Major O. D. Greene, Adj. General's Dep't, Assistant Adjutant General.

Major W. H. Lewis, 7th Infantry, Acting Assistant Inspector General.

Major G. Norman Lieber, Judge Advocate, U. S. A., Judge Advocate.

Lieut. Col. S. B. Holabird, Chief Quartermaster.

Captain J. H. Gilman, Chief Commissary of Subsistence.

Surgeon J. F. Head, U. S. A., Medical Director and Attending Surgeon.

Major A. H. Seward, Paymaster U. S. A., Chief Paymaster.

ON SPECIAL DUTY.

Captain D. P. Heap, corps of Engineers, U. S. A., engaged on map of Department and surveys of Post Reservations.

DISTRICT OF MINNESOTA.

STATION.	COMMANDING OFFICER.	TROOPS.
Fort Snelling, Minn.....	Colonel George Sykes, 20th Infantry and Commanding District.	Headquarters, and Company "E," 20th Infantry.
Fort Ripley, Minn.....	Captain W. S. McCaskey, 20th Infantry.	Company "G," 20th Infantry.
Fort Abercrombie, D. T.....	Lieutenant Colonel L. C. Hunt, 20th Infantry.	Company "D," 20th Infantry, and fifteen Indian scouts.
Fort Wadsworth, D. T.....	Captain J. C. Bates, 20th Infantry.	Companies "B" and "F," 20th Infantry, and 18 Indian scouts.
Fort Ransom, D. T.....	Captain H. G. Thomas, 20th Infantry.	Company "C" 20th Infantry, and fourteen Indian scouts.
Fort Totten, D. T.....	Major J. E. Yard, 20th Infantry.	Companies "A" and "H," 20th Infantry, and 15 Indian scouts.
Fort Pembina, D. T.....	Captain Lloyd Wheaton, 20th Infantry.	Companies "I" and "K," 20th Infantry.
Fort Ridgely, Minn.....	In charge of an Ordnance Sergeant.	No Garrison.

THE STATE GOVERNMENT.

THE EXECUTIVE.

HORACE AUSTIN, of Nicollet County..... GOVERNOR.
 WM. H. YALE, of Winona County..... Lieut. Governor.
 S. P. JENNISON, of Goodhue County..... Secretary of State.
 W. M. SEEGER, of Ramsey County..... Treasurer.
 F. R. E. CORNELL, of Hennepin County..... Attorney-General.
 CHARLES McILRATH, of Ramsey County..... Auditor.
 HORACE B. WILSON, of Goodhue County..... Sup't of Public Instruction.
 A. R. MCGILL, of Nicollet County..... Private Secretary to Governor.
 M. D. FLOWER, of Blue Earth County..... Adjutant General.
 M. R. SMITH, (Mrs.) of Hennepin County..... State Librarian.

THE JUDICIARY.

CHRISTOPHER G. RIPLEY, of Fillmore County..... Chief Justice.
 S. J. R. McMILLAN, of Washington County..... Associate Justice.
 JOHN M. BERRY, of Rice County..... " "

Terms begin on the 1st Tuesdays of January and July, at St. Paul.

SHERWOOD HOUGH, of St. Paul..... Clerk.
 WM. A. SPENCER, of St. Paul..... Reporter.

THE LEGISLATURE OF 1872.

DIST.	SENATORS.	REPRESENTATIVES.
1	D. L. Buell.	W. F. Weber, J. H. Smith, P. N. Rosendahl, L. R. Hall.
2	T. H. Everts.	John Larsen, A. H. Dayton, L. Bothum.
3	J. Q. Farmer.	A. H. Trow, M. Eggleston, P. McCracken.
4	Sherman Page.	J. T. Williams, J. M. Wyckoff.
5	H. D. Brown.	E. D. Rodgers, William Wilson.
6	E. H. Hutchins.	S. P. Child, M. H. Huntington.
7	S. S. Beman.	J. L. Blair, D. Hemmingway.
8	W. H. Stevens.	H. M. Burchard, H. A. Corey, William J. Whipple.
9	Milo White.	A. H. Gaskill, Peter Fenton.
10	O. S. Porter.	Richard A. Jones, T. B. Lindsay.
11	J. H. Clark.	G. B. Cooley, A. L. Wellman.
12	Amos Coggswell.	W. W. Wilkins, W. H. Twiford.
13	J. E. Child.	Kelsey Curtis, John Thompson.
14	J. F. Meagher.	J. A. Wiswell, C. H. Shelby, Clark Kayser, H. C. Capwell, H. Foster.
15	H. P. Wilson.	J. A. Thompson, John Van Dyke, George Bryant, Andrew Boss.
16	L. F. Hubbard.	J. C. Pierce, J. C. Bennewitz.
17	Giles Slocum.	S. P. Kellett, G. K. Norsving, John Stanton. [H. M. Matteson.
18	G. W. Batchelder.	O. Osmandson, Ara Barton, J. H. Hutchinson, Henry Platt,
19	L. Z. Rogers.	Geo. Millard, Perry Allison, Asa Waite.
20	R. J. Chowning.	D. F. Langley, H. Durham, W. A. Gray, D. E. Eyro, G. A. Wells.
21	R. H. Rose.	Joseph Chadderdon, Martin Quinn.
22	D. M. Sabin.	E. Ayres, H. R. Murdock, J. R. M. Gaskill.
23	I. V. D. Heard.	J. B. Sanborn, Peter Berkey.
24	John Nicols.	J. C. Burbank, H. M. Smythe, Edmund Rice.
25	A. C. Morrill.	F. Whitney, J. H. Strong.
26	Levi Butler.	A. J. Underwood, C. H. Clarke, Chas. F. Adams, Loren Fletcher.
27	W. P. Ankeny.	A. R. Hall, Z. Demeules, F. L. Morso.
28	J. Lindall.	Adolph Munch.
29	W. W. Billson.	Edgar Nash.
30	John O. Haven.	N. Richardson.
31	E. M. Wright.	J. M. Rosenberger, Rudolph Holding, Martin Greeley, A. Barto.
32	G. A. Buckoldt.	F. X. Lafond, C. B. Jackson.
33	L. A. Baxter.	F. E. Du Toit, Chas. Johnson, C. H. Lienau.
34	M. B. Stone.	J. M. Wadsworth, Hans C. Hansen, J. H. Dunham.
35	C. A. Cutts.	W. H. Greenleaf.
36	Henry Poehler.	Adam Buck, M. S. Gallick,* David C. Adams.
37	Wm. Pfander.	A. M. Cook, Henry Weyhe.
38	W. D. Rice.	Edwin Perry, W. W. Murphy, G. C. Chamberlain.
39	Ole Peterson.	F. B. Van Hoesen, G. E. Rockwell.
40	Andrew Railson.	J. L. Ketchell.
41	J. O. Milne.	E. E. Corlies, L. S. Cravath.

* Contested.

SENATORIAL DISTRICTS.

1. Houston county, four, (districts).
2. East part of Fillmore, four, (at large).
3. West part of Fillmore, three, (districts).
4. Mower, two, (at large).
5. Freeborn, two (at large).
6. Faribault, two (at large).
7. Part of Winona, two (at large).
8. Part of Winona, including city of Winona, three, (at large).
9. Part of Olmsted, two, (at large).
10. Part of Olmsted, including Rochester, two (at large).
11. Dodge, two (districts).
12. Steele, two (districts).
13. Waseca, two (at large).
14. Blue Earth five, (at large).
15. Wabasha, four, (districts.)
16. East part of Goodhue, two, (districts).
17. West part of Goodhue, three, (districts).
18. Rice, five, (at large).
19. LeSueur, three, (at large).
20. Dakota, five, (at large).
21. Scott, two (districts).
22. Washington, three (districts).
23. 1st, 2d and 3d wards of St. Paul, two, (districts).
24. 4th and 5th wards of St. Paul and towns of Ramsey county, three, (districts).
25. Hennepin East, Anoka, and Isanti, two, (at large).
26. 3d and 4th wards of Minneapolis and several towns, four, (at large).
27. 1st and 2d wards of Minneapolis and several towns of Hennepin West, three, (at large).
28. Chisago, Pine, Kanabec, and Aitkin, one.
29. Lake, Itaska, Carlton, Cass and St. Louis, one.
30. Sherburne, Benton, Morrison, Crow Wing and Mille Lacs, one.
31. Stearns, four, (districts).
32. Wright, two, (at large).
33. Carver, three, (districts).
34. Nicollet and Renville, three, (districts).
35. Meeker, one.
36. Sibley and McLeod, three (districts).
37. Redwood, Brown and Lyon, two (districts).
38. Martin, Jackson, Nobles, Rock, Watonwan, Cottonwood, Murray and Pipestone, three (districts).
39. Douglas, Pope, Stevens, Grant and Big Stone Lake, two (districts).
40. Kandiyohi, Swift and Chippewa, one.
41. Ottertail, Wilkin, Wadena, Todd, Beltrami, Polk, Clay, Traverse and Pembina, two, (at large).

THE DISTRICT COURTS OF MINNESOTA.

Names of the Judges—Times and Places of Holding Courts.

1ST JUDICIAL DISTRICT.

- JUDGE—F. M. CROSBY, of Hastings.
 Dakota county, 2d Tuesday in January and 3d Tuesday in June, at Hastings.
 Chisago county, 1st Monday in May, at Chisago City.
 Pine county, third Tuesday in May, at Chengwatana.
 Washington county, 1st Tuesday in June and 2d Tuesday in Nov., at Stillwater.
 Goodhue county, 3d Tuesday in May, and 3d Tuesday in December, at Red Wing.
 Kanabec county, attached to Pine county.

2D JUDICIAL DISTRICT.

- JUDGE—WESTCOTT WILKIN, of St. Paul.
 Ramsey county, 1st Tuesday in May, and 1st Tuesday in December, at St. Paul.
 SPECIAL TERMS.—2d and 4th Saturdays in each month, except July and August.

3D JUDICIAL DISTRICT.

- JUDGE—C. M. WATERMAN, of Winona.
 Olmsted county, 2d Monday of March and 1st Monday of October, at Rochester.
 Winona county, 4th Monday of March, and 2d Monday of September, at Winona.
 Houston county, 1st Tuesday after 1st Monday in May, and 1st Tuesday after 3d Monday in October, at Caledonia.
 Fillmore county, 1st Tuesday after 3d Monday in May, and 1st Tuesday after 2d Monday in November, at Preston.
 Wabasha county, 1st Tuesday after 1st Monday in June, and 1st Tuesday in December, at Wabashaw.

4TH JUDICIAL DISTRICT.

- JUDGE—CHAS. E. VANDERBURGH, of Minneapolis.
 Hennepin county, 1st Tuesday of May and 3d Tuesday of Nov., at Minneapolis.
 Anoka county, 3d Tuesday of December, at Anoka.
 Wright county, 1st Tuesday of June, at Buffalo.
 Meeker county, 2d Tuesday of September, at Litchfield.
 Kandiyohi county, 3d Tuesday in September, at Kandiyohi.
 Isanti county, 1st Tuesday in October, at Cambridge.

5TH JUDICIAL DISTRICT.

JUDGE--SAMUEL LORD, of Mantorville.

Dodge county, 1st Mondays in March and September, at Wasioja.
 Mower county, 3d Mondays of March and September, at Austin.
 Steele county, 1st Mondays of April and December, at Owatonna.
 Rice county, 1st Mondays of May and October, at Faribault.
 Freeborn county, 3d Mondays of June and November, at Albert Lea.
 Waseca county, 2d Monday of February and 3d Monday of October, at Waseca.

6TH JUDICIAL DISTRICT.

JUDGE--FRANKLIN H. WAITE, of Mankato.

Blue Earth county, 1st Tuesday of December, and 3d Tuesday of May, at Mankato.
 Faribault county, 1st Tuesday of Jan. and 1st Tuesday of June, at Blue Earth City.
 Martin county, 4th Tuesday in January, at Fairmount.
 Jackson county, 4th Tuesday in June, at Jackson.
 Watanwan county, 2d Tuesday of February, at Madelia.
 Rock county, } Attached to Jackson county.
 Nobles county, }
 Cottonwood county, } Attached to Watanwan county.
 Murray county, }
 Pipestone county, }

7TH JUDICIAL DISTRICT.

JUDGE--JAMES E. McKELVEY, of St. Cloud.

Stearns county, 2d Tuesday of June and 1st Tuesday in December, at St. Cloud.
 Morrison county, 3d Tuesday in October, at Little Falls.
 Sherburne county, 2d Tuesday in June, at Elk River.
 Benton county, 4th Tuesday in November, at Sauk Rapids.
 Douglass county, 1st Tuesday in October, at Alexandria.
 Pope county, 2d Tuesday in October, at Glenwood.
 St. Louis county, 3d Tuesday in February and 2d Tuesday in August, at Duluth.
 Mille Lacs county, last Tuesday in September, at Princeton.
 Carlton county, 1st Tuesday of August and 2d Tuesday of February, at Thompson.
 Crow Wing county, 4th Tuesday in October, at Crow Wing.
 Becker county, 2d Tuesday of November, at Detroit.
 Otter Tail county, 1st Tuesday of November, at Otter Tail.
 Itasca county, } Attached to St. Louis county.
 Lake county, }
 Aiken county, } Attached to Morrison county.
 Cass county, }
 Wadena county, }
 Todd county, } Attached to Douglas county.
 Pembina county, }
 Polk county, }
 Clay county, }
 Grant county, }
 Wilkin county, } Attached to Pope county.
 Stevens county, }
 Traverse county, }

8TH JUDICIAL DISTRICT.

JUDGE--A. G. CHATFIELD, of Belle Plaine.

LeSueur county, 1st Monday in March and 1st Monday in September, at LeSueur.
 Sibley county, 3d Monday in March and 3d Monday in September, at Henderson.
 Carver county, 3d Monday in May and 3d Monday in November, at Chaska.
 Scott county, 1st Monday in June and 1st Monday in December, at Shakopee.
 McLeod county, 1st Monday in April and 2d Monday in November, at Glencoe.
 SPECIAL TERMS.--LeSueur Co., 4th Tues. in Jan. and 4th Tues. in July, at LeSueur.
 Carver Co., 3d Tues. in April and 1st Tues. in October, at Chaska.
 Scott Co., 1st Tues. in May and 4th Tues. in October, at Shakopee.

9TH JUDICIAL DISTRICT.

JUDGE--M. G. HANSCOME, of St. Peter.

Nicollet county, 3d Tuesdays in May and November, at St. Peter.
 Brown county, 3d Tuesday in June and 2d Tuesday in December, at New Ulm.
 Renville county, 1st Tuesday in September, at Beaver Falls.
 Redwood county, 2d Tuesday in September, at Redwood Falls.
 Lyon county, } Attached to Redwood county.
 Lincoln county, }
 Lac qui Parle county, }
 Chippewa county, } Attached to Renville county.
 Yellow Medicine county, }

STATE INSTITUTIONS.

I. EDUCATIONAL.

1. THE UNIVERSITY OF MINNESOTA. See p. 33.
2. THE NORMAL SCHOOLS.

THE STATE NORMAL BOARD.

REV. S. Y. McMASTERS, D. D., President, St. Paul...2d Judicial District.
 HON. THOMAS SIMPSON, Winona.....3d Judicial District.
 HON. S. R. THAYER, Minncapolis.....4th Judicial District.
 REV. H. I. PARKER, Austin.....5th Judicial District.
 HON. JAMES BROWN, Mankato.....6th Judicial District.
 HON. E. O. HAMLIN, St. Cloud.....7th Judicial District.
 HON. H. B. WILSON, State Supt. Pub. Instruction, Ex-Officio,
 Member and Secretary,.....St. Paul.
 L. C. PORTER, ESQ., Treasurer,.....Winona.
 JOHN N. HALL, ESQ., ".....Mankato.
 J. G. SMITH, ESQ., ".....St. Cloud.
 1st, 8th and 9th Judicial Districts, vacant.

THE FIRST STATE NORMAL SCHOOL, AT WINONA.

PRINCIPAL—PROFESSOR WM. F. PHELPS, M. A.

CALENDAR.—Fall Term ends December 21, 1871. Spring Term begins second Monday in January, 1872, and ends May 17th, 1872. Fall Term begins first Monday in September, 1872.

THE SECOND STATE NORMAL SCHOOL, AT MANKATO.

PRINCIPAL—PROFESSOR GEORGE M. GAGE.

THE THIRD STATE NORMAL SCHOOL, AT ST. CLOUD.

PRINCIPAL—PROFESSOR IRA MOORE.

CALENDAR.—The second Term begins January 10th and ends May 20th, 1872. Fall Term, 1872-1873, begins August —th, 1872.

The First General State Teachers' Normal Institute meets at Winona, May 21, 1872, and continues two weeks. The Faculties of the three Normal Schools are the instructors.

The following Lists are corrected up to December 23d, 1871.

SUPERINTENDENTS OF CITY SCHOOLS.

Rev. John Mattocks.....	St. Paul.	R. B. Carville.....	Anoka.
O. V. Tousley.....	Minneapolis.	Horace L. Strong.....	Austin.
F. M. Dodge.....	Winona.	L. Wright.....	Chatfield.
E. W. B. Harvey.....	St. Anthony.	B. F. Jenness.....	Mantorville.
F. M. Dodge.....	Winona.	James McNaughton.....	Northfield.
Ozias Whitman.....	Red Wing.	O. H. Parker.....	Plainview.
H. P. Tukey.....	Mankato.	James Palmer.....	Preston.
H. W. Metcalf.....	St. Peter.	Walter H. Chase.....	Faribault.
J. M. Knight.....	Stillwater.	J. Beckley.....	Rushford.
D. W. Sprague.....	St. Cloud.	J. R. Richards.....	St. Charles.
Rev. J. W. Ray.....	Hastings.	S. L. Sayles.....	Wabashaw.
G. R. Merriman.....	Lake City.	D. R. Haynes.....	Duluth.
C. H. Roberts.....	Rochester.	S. W. Bennett.....	Henderson.
Wm. Butts.....	Owatonna.	W. W. Pendergast.....	Hutchinson.

PRINCIPALS OF HIGH AND GRADED SCHOOLS.

B. F. Wright.....	St. Paul.	William Hoy.....	Kasson.
C. W. Hyde.....	Shakopee.	Joseph A. Ross.....	Princeton.
E. P. Bartlett.....	Blue Earth City.	J. C. Carpenter.....	Farmington.
Wm. Benson.....	Carver.	C. S. Campbell.....	Hastings.
Geo. Mix.....	Chaska.	Marvin Edgerton.....	Reed's Landing.
Wesley M. Lawrence.....	Dundas.	Miss M. M. Reynolds.....	Cannon Falls.
W. O. Wild.....	Saratoga.	J. S. Chase.....	Monticello.
F. Kittridge.....	Waseca.	Benj. Darby.....	Zumbrota.
Miss Jennie Smedley.....	Le Sueur.		

PUBLIC SCHOOL STATISTICS FOR THE YEAR ENDING SEPT. 30, 1871.

SCHOOL LANDS. —Whole number of acres set apart (estimated).....	2,951,111.
Value of same at \$6 per acre.....	\$17,209,888.86
Interest on that sum at 7 per cent.....	1,209,888.86
Whole number of acres appraised.....	567,386.64
Whole number of acres sold.....	383,858.30
Whole number of acres unsold.....	173,528.34
SCHOOL FUNDS. —Total productive fund.....	\$2,544,076.14
Income from productive fund.....	172,436.01
Income from taxes on districts.....	669,333.73
Total income.....	974,365.41
Paid for building and furnishing houses and for lots.....	300,283.15
Paid for Teachers' wages.....	542,883.48
Paid for other purposes.....	173,139.63
Total expenditure.....	1,016,306.26
Unexpended in District Treasuries.....	37,747.40
March apportionment (per person, 24 cents).....	37,984.08
October apportionment (per person, 81 cents).....	126,171.27
SCHOOL DISTRICTS. —Whole number.....	2,781
Whole number reporting.....	2,682
SCHOOL HOUSES. —Whole number.....	2,331
Value of same.....	\$1,764,338.03
Number built during year.....	228.
Value of same.....	\$170,186.05
SCHOLARS. —Whole number enrolled—Males, 86,443; females, 82,399.....	168,742
Number attending schools—Males, 60,983; females, 53,649.....	114,632
Per cent. of attendance.....	68
TEACHERS. —Whole number employed—Males, 1,487; females, 2,926.....	4,413
Average wages of males.....	\$36.58
Average wages of females.....	\$25.51

COUNTY SUPERINTENDENTS.

Anoka,
 Benton,
 Blue Earth,
 Brown,
 Carleton,
 Carver,
 Chippewa,
 Chisago,
 Cottonwood,
 Crow Wing,
 Dakota,
 Dodge,
 Douglas,
 Faribault,
 Fillmore,
 Freeborn,
 Goodhue,
 Hennepin,
 Houston,
 Isanti,
 Jackson,
 Kanabec,
 Kandiyohi,
 Lake,
 Le Sueur,
 Lyon,
 Martin,
 McLeod,
 Meeker,
 Mille Lacs,
 Morrison,
 Mower,
 Nicollet,
 Olmsted,
 Otter Tail,
 Pine,
 Pope,
 Ramsey,
 Redwood,
 Renville,
 Rice,
 St. Louis,
 Scott,
 Sherburne,
 Sibley,
 Stearns,
 Steele,
 Swift,
 Todd,
 Wabashaw,
 Waseca,
 Washington,
 Watonwan,
 Winona,
 Wright,

Rev. Moses Goodrich,
 Rev. Sherman Hall,
 Henry S. Goff,
 August Westphal,
 William Shaw,
 J. H. Kerker,
 Joseph D. Baker,
 Geo. H. Mays,
 H. M. Mc Gaughey,
 C. H. Beaulieu,
 Phillip Crowley,
 S. T. Jones,
 John S. Mower,
 R. W. Richards,
 Rev. D. L. Kiehle,
 Henry Thurston,
 J. F. Pingrey,
 Charles Hoag,
 J. B. Le Blond,
 Rev. Richard Walker,
 William King,
 Samuel Hicks,
 Burroughs Abbott,
 C. Wieland,
 M. R. Everett,
 G. Whitney,
 Rev. F. W. Morse,
 Liberty Hall,
 L. Y. Bailey,
 H. M. Atkins,
 Robert K. Whiteley,
 John T. Williams,
 Rev. A. H. Kerr,
 Sanford Niles,
 E. E. Corliss,
 Randall K. Burrows,
 E. Lathrop,
 D. A. J. Baker,
 E. A. Chandler,
 William Emerick,
 A. O. Whipple,
 Albert N. Seip,
 Patrick O'Flynn,
 John O. Haven,
 Thomas Boland,
 Henry Krebs,
 O. A. Tiffaney,
 A. W. Lathrop,
 John Jones,
 T. A. Thompson,
 R. O. Craig, M. D.,
 Alexander Oldham,
 Thomas Rutledge,
 Rev. D. Burt,
 E. B. McCord,

Anoka.
 Sauk Rapids.
 Mankato.
 New Ulm.
 Thompson.
 Waconia.
 Montevideo.
 Sunrise City.
 Big Bend.
 Crow Wing.
 West St. Paul.
 Kasson.
 Alexandria.
 Minnesota Lake.
 Preston.
 Shell Rock City.
 Red Wing.
 Minneapolis.
 Brownsville.
 Spencer Brook.
 Jackson.
 Brunswick.
 Kandiyohi Station.
 Beaver Bay.
 Le Sueur.
 Lynd.
 Tenhassen.
 Glencoe.
 Litchfield.
 Princeton.
 Little Falls.
 Le Roy.
 St. Peter.
 Rochester.
 Clitherall.
 Pine City.
 Glenwood.
 St. Paul.
 Redwood Falls.
 Fort Ridgely.
 Faribault.
 Duluth.
 Cedar Lake.
 Elk River.
 Henderson.
 St. Augusta.
 Owatonna.
 Benson.
 Sauk Center.
 Plainview.
 Janesville.
 Cottage Grove.
 Madelia.
 Winona.
 Monticello.

II. ELEEMOSYNARY, &c.

1. THE HOSPITAL FOR THE INSANE, AT ST. PETER.

Superintendent.....Cyrus K. Bartlett, M. D.
 Assistant Physician.....Jacob E. Bowers, M. D.
 Steward and Treasurer.....George W. Dyer.
 Trustees—C. T. Brown, President; Rev. A. H. Kerr, Secretary; Luke
 Miller, M. D.; L. Fletcher, Reuben Butters, H. B. Strait, Wm.
 Schimmel.

2. INSTITUTION FOR THE DEAF AND DUMB AND THE BLIND, AT FARIBAULT.

Superintendent.....J. L. Noyes, A. M.
 Directors—Horace Thompson, H. E. Barron, Geo. M. Gilmore, R. A.
 Mott, Hudson Wilson, the Governor and the Superintendent of
 Public Instruction, *ex-officio*.

The Institution is *free* to the Deaf and Dumb and Blind children of
 Minnesota between the ages of 10 and 25. Pupils received only in Sep-
 tember of each year. Applications to be made to the Superintendent.

3. THE STATE REFORM SCHOOL, AT ST. PAUL.

Superintendent.....Rev. J. G. Reiheldaffer.
 Managers—D. W. Ingersoll, President; S. R. J. McMillan, Geo. L. Otis,
 C. H. Pettit.

4. THE STATE PRISON, AT STILLWATER.

Warden.....Henry A. Jackman
 Inspectors.....J. R. McGaskill, E. G. Butts, D. W. Armstrong
 Physician.....J. K. Reiner, M. D.
 Chaplain.....Rev. William Weld

III. PROFESSIONAL, &c.

1. THE STATE TEACHERS' ASSOCIATION.

President—Sandford Niles.....Rochester.
 First Vice President—W. L. Butts.....Owatonna.
 Secretary—C. H. Carson.....Minneapolis.
 Treasurer—Ozias Whitman.....Red Wing.
 Meets 1872, at

2. THE MINNESOTA STATE MEDICAL SOCIETY.

President—Franklin Staples, M. D.....Winona.
 First Vice President—F. H. Milligan, M. D.....Wabasha.
 Corresponding Secretary—A. E. Senkler, M. D.....St. Cloud.
 Recording Secretary—C. E. Smith, M. D.....St. Paul.
 Treasurer—S. B. Sheardown, M. D.....Stockton.
 Annual meeting, first Tuesday in February, in St. Paul.

3. THE STATE AGRICULTURAL SOCIETY.

President—O. P. Whitcomb..... Rochester.
 Secretary—Charles H. Clarke..... Minneapolis.
 Treasurer—C. A. Wheaton..... Northfield.
 Winter meeting in St. Paul, first Wednesday in February.

4. THE STATE HORTICULTURAL SOCIETY.

President—R. J. Mendenhall..... Minneapolis.
 First Vice President—E. H. L. Dart..... Owatonna.
 Second Vice President—M. W. Leland..... Rochester.
 Corresponding Secretary—J. W. Harkness*..... Faribault.
 Recording Secretary—A. W. McKinstry..... Faribault.
 Treasurer—Wyman Elliott..... Minneapolis.
 The above officers constitute the Executive Committee.

5. THE MINNESOTA NATURAL HISTORY SOCIETY.

President—Rev. S. Y. McMasters, D. D..... St. Paul.
 Vice President—Rev. John Mattocks..... St. Paul.
 Secretary—Professor E. H. Twining..... St. Anthony.
 Treasurer—P. L. Hatch, M. D..... Minneapolis.
 Annual meeting, 2d Tuesday in April, at the University, St. Anthony.

6. THE STATE MUSICAL ASSOCIATION.

President—A. C. Gutterson..... Owatonna.
 Vice President—H. M. Chase..... Minneapolis.
 Secretary—R. C. Munger..... St. Paul.
 Treasurer—Dr. T. Williamson..... Red Wing.

7. THE MINNESOTA HISTORICAL SOCIETY.

President—Captain R. Blakeley..... St. Paul.
 First Vice President—Judge A. Goodrich..... St. Paul.
 Secretary and Librarian—J. F. Williams..... St. Paul.
 Treasurer—A. J. Hill..... St. Paul.
 Annual meeting, 2d Monday in January, at St. Paul.

The Minnesota Historical Society, located at St. Paul, was instituted in the year 1846. Its object is to collect materials illustrative of the history of Minnesota; to rescue from oblivion the memory of its early pioneers, and to obtain and preserve narratives of their exploits, perils and hardy adventures, with their portraits, &c.; memorials of its Indian tribes, and their history and customs, and to accumulate a Library chiefly illustrating American history, particularly that of the Northwest.

It has commodious rooms in the the State Capitol, open daily, and has collected a fine Library of 4,000 bound volumes, and 7,500 pamphlets, besides 375 volumes of Minnesota newspapers, a number of portraits, maps, MSS., &c., all relating to the State.

The society respectfully solicits contributions of books and pamphlets printed in or relating to Minnesota; a history of every town and county in the State; names of their first settlers; biographies of prominent pioneers, with their portraits; incidents of the early history of Minnesota; Indian curiosities; war relics; aboriginal remains, such as stone axes, arrow-heads, etc.; maps, pictures, &c., &c. They can be directed to the Secretary at St. Paul.

* Deceased.

POPULATION OF THE UNITED STATES.

	1870.	1880.	1880.
Alabama.....	996,992	964,201	771,623
Arkansas.....	481,471	435,450	209,897
California.....	569,247	379,994	92,597
Connecticut.....	537,534	460,147	370,792
Delaware.....	125,015	112,216	91,532
Florida.....	187,748	140,424	87,445
Georgia.....	1,184,109	1,057,286	906,185
Illinois.....	2,539,891	1,711,051	851,470
Indiana.....	1,680,637	1,350,428	988,416
Iowa.....	1,191,792	674,923	192,214
Kansas.....	364,399	107,206	.....
Kentucky.....	1,321,011	1,155,684	982,405
Louisiana.....	726,915	708,002	517,762
Maine.....	626,915	628,279	583,169
Maryland.....	780,894	687,049	583,034
Massachusetts.....	1,457,351	1,231,066	994,514
Michigan.....	1,184,059	749,113	397,654
Minnesota.....	439,706	172,023	6,077
Mississippi.....	827,922	791,305	606,526
Missouri.....	1,721,295	1,182,012	682,044
Nebraska.....	122,993	28,841	.....
Nevada.....	42,491	6,857	.....
New Hampshire.....	318,300	326,073	317,976
New Jersey.....	906,096	672,035	489,555
New York.....	4,282,759	3,880,735	3,097,394
North Carolina.....	1,071,361	992,622	869,039
Ohio.....	2,665,260	2,339,511	1,980,329
Oregon.....	90,923	52,465	13,294
Pennsylvania.....	3,521,791	2,906,215	2,311,786
Rhode Island.....	217,353	174,620	147,545
South Carolina.....	705,606	703,708	668,507
Tennessee.....	1,258,520	1,109,801	1,002,717
Texas.....	818,579	604,215	212,592
Vermont.....	330,551	315,098	314,120
Virginia.....	1,225,163	1,219,630	1,421,661
West Virginia.....	442,014	376,688	.....
Wisconsin.....	1,054,670	775,881	305,391
Total States.....	38,113,253	31,183,744	23,067,262

POPULATION OF THE TERRITORIES.

Arizona.....	9,658	.....	.....
Colorado.....	39,864	34,277	.....
Dakota.....	14,181	4,837	.....
District of Columbia.....	131,700	75,080	51,687
Idaho.....	14,999	.....	.....
Montana.....	20,595	.....	.....
New Mexico.....	91,874	93,516	61,547
Utah.....	86,786	40,273	11,380
Washington.....	23,955	11,594	.....
Wyoming.....	9,118	.....	.....
Total Territories.....	442,730	259,577	124,614
Total States and Territories.....	38,555,983	31,443,321	23,191,876

1870.....	38,555,983	1840.....	17,009,453	1810.....	7,230,881
1860.....	31,443,321	1830.....	12,866,020	1800.....	5,308,433
1850.....	23,191,876	1820.....	9,633,822	1790.....	3,929,214

	1870.	1880.	1880.
Native.....	32,989,437	27,304,624	20,912,612
Foreign.....	5,566,546	4,138,697	2,244,602
Unknown.....	.....	.....	34,662

1870.

White.....	33,586,989
Colored.....	4,880,009
Chinese.....	63,254
Indian.....	25,731

POPULATION OF MINNESOTA.

	1870.	1880.	1850.		1870.	1880.	1850.
Aiken	178	2	.....	Meeker.....	6,090	928	.....
Anoka.....	3,940	2,106	.....	Mill Lacs.....	1,109	73	.....
Becker.....	308	386	.....	Monongalia.....	3,161	350	.....
Beltrami.....	80	.....	.....	Morrison.....	1,681	618	.....
Benton.....	1,558	627	418	Mower.....	10,447	3,217	.....
Big Stone.....	21	.....	.....	Murray.....	209	29	.....
Blue Earth.....	17,302	4,803	.....	Nicollet.....	8,362	3,773	.....
<i>Breckenridge</i>.....	.....	79	.....	Nobles.....	117	35	.....
Brown.....	6,396	2,339	.....	Olmsted.....	19,793	9,524	.....
<i>Buchanan</i>.....	.....	26	.....	Otter Tail.....	1,968	240	.....
Carlton.....	286	51	.....	Pembina.....	64	1,612	1,134
Carver.....	11,586	5,106	.....	<i>Pierce</i>.....	.....	11	.....
Cass.....	380	150	.....	Pine.....	648	92	.....
Chippewa.....	1,467	.....	.....	<i>Pipe Stone</i>.....	.....	23	.....
Chisago.....	4,358	1,743	.....	<i>Polk</i>.....	.....	240	.....
Clay.....	92	.....	.....	Pope.....	2,691	.....	.....
Cottonwood.....	534	12	.....	Ramsey.....	23,085	12,150	2,227
Crow Wing.....	200	269	.....	Redwood.....	1,829	.....	.....
Dakota.....	16,312	9,093	584	Renville.....	3,219	245	.....
Dodge.....	8,598	3,797	.....	Rice.....	16,083	7,543	.....
Douglas.....	4,239	195	.....	Rock.....	138	.....	.....
Faribault.....	9,940	1,335	.....	Scott.....	11,042	4,595	.....
Fillmore.....	24,887	13,542	.....	Sherburne.....	2,050	728	.....
Freeborn.....	10,578	3,367	.....	Sibley.....	6,725	3,609	.....
Goodhue.....	22,618	8,977	.....	Stearns.....	14,206	4,505	.....
Grant.....	340	.....	.....	Steele.....	8,271	2,863	.....
Hennepin.....	31,566	12,849	.....	Stevens.....	174	.....	.....
Houston.....	14,936	6,645	.....	St. Louis.....	4,561	406	.....
Isanti.....	2,035	284	.....	Todd.....	2,036	430	.....
Itasca.....	96	51	97	Traverse.....	13	.....	.....
Jackson.....	1,225	181	.....	Wabashaw.....	15,859	7,228	243
Kanabec.....	93	30	.....	Wadena.....	6	.....	.....
Kandiyohi.....	1,760	76	.....	<i>Wabata</i>.....	.....	.....	160
Lac qui Parle.....	145	.....	.....	Waseca.....	7,854	2,601	.....
Lake.....	135	248	.....	Washington.....	11,809	6,123	1,056
LeSueur.....	11,607	5,315	.....	Watsonwan.....	2,426	.....	.....
<i>Mankata</i>.....	.....	.....	158	Wilkin.....	295	40	.....
Manomin.....	.....	136	.....	Winona.....	22,319	9,208	.....
Martin.....	3,667	151	.....	Wright.....	9,457	3,729	.....
McLeod.....	5,643	1,286	.....			
Totals.....	.....	.....	.....		439,706	172,023	6,077

	1870.	1880.	1850.
White.....	438,257	169,395	6,038
Colored.....	759	259	39
Indian.....	690	2,369	.....
Totals.....	439,706	172,023	6,077

POPULATION OF THE PRINCIPAL CITIES.

St. Paul.....	20,030	Rochester.....	3,953	Owatonna.....	2,070
Minneapolis.....	13,066	Mankato.....	3,482	St. Cloud.....	2,161
Winona.....	7,192	Hastings.....	3,458	Anstin.....	2,039
St. Anthony.....	5,013	Duluth.....	3,131	Shakopee.....	1,349
Red Wing.....	4,260	Faribault.....	3,045	Rushford.....	1,245
Stillwater.....	4,124	St. Peter.....	2,124	St. Charles.....	1,151

Minnesota contains 83,531 square miles, or 53,459,840 acres. At the rate of increase of the last decade her population in 1880 would be 1,121,250.

POPULATION OF THE PRINCIPAL CITIES OF THE UNITED STATES.

The following table, compiled from the last census, shows that there are in the United States sixty-seven cities with a population of over 20,000 inhabitants. Washington, which in 1860 stood number fourteen on the list now stands number twelve. Louisville, Albany and Newark have been outnumbered, while San Francisco has outstripped the four and takes its position tenth in the list. St. Louis and Chicago have passed Baltimore, Boston, New Orleans and Cincinnati, and stand fourth and fifth on the list, while New Bedford in the North and Savannah in the South, are the only cities which show an actual decrease. In 1860 the aggregate population of the ten leading cities was 2,708,987. In 1870 the same cities show a population of 3,646,876, a gain of 940,070, or an average of 34.7 per cent., a corresponding increase, which seems more than probable, for the next decade, would give in these cities a population of nearly 5,000,000.

	1870.	1860.		1870.	1860.
New York.....	926,341	805,658	Scranton.....	36,093	9,223
Philadelphia.....	674,022	565,629	Reading.....	33,932	24,162
Brooklyn.....	399,600	276,661	Columbus.....	33,745	18,564
St. Louis.....	310,864	160,778	Paterson.....	32,581	19,587
Chicago.....	298,983	109,260	Dayton.....	32,579	20,081
Baltimore.....	267,354	212,418	Kansas City.....	32,260	4,418
Boston.....	250,526	177,840	Mobile.....	32,084	32,258
Cincinnati.....	216,239	161,044	Portland.....	31,314	21,258
New Orleans.....	195,322	168,675	Wilmington.....	30,841	17,637
San Francisco.....	149,482	56,802	Lawrence.....	28,921	17,637
Buffalo.....	117,715	81,129	Toledo.....	28,546	13,768
Washington.....	109,204	61,122	Charlestown.....	28,322	25,065
Newark.....	105,078	68,233	Lynn.....	28,233	19,083
Louisville.....	100,754	68,233	Fall River.....	26,786	14,029
Cleveland.....	92,856	43,417	Springfield.....	26,703	15,196
Pittsburg.....	86,235	49,217	Nashville.....	25,873	17,988
Jersey City.....	81,744	29,226	Utica.....	25,798	22,520
Detroit.....	79,580	45,619	Peoria.....	25,787	14,085
Milwaukee.....	71,499	45,246	Covington.....	24,595	16,471
Albany.....	69,422	62,309	Salem.....	24,117	22,252
Providence.....	68,906	50,666	Quincy.....	24,053	13,718
Rochester.....	62,885	58,204	Manchester.....	22,536	20,160
Allegheny City.....	53,181	28,792	Harrisburg.....	23,109	13,106
Richmond.....	51,087	37,910	Trenton.....	22,847	18,228
New Haven.....	50,830	29,267	Evansville.....	22,831	11,484
Charleston.....	48,956	40,525	New Bedford.....	21,320	32,320
Troy.....	46,714	39,232	Oswego.....	20,910	16,816
Syracuse.....	43,051	28,191	Elizabeth.....	20,838	11,567
Worcester.....	41,105	24,960	Lancaster.....	20,233	22,292
Lowell.....	40,928	36,827	Savannah.....	20,233	22,292
Memphis.....	40,216	22,628	Camden.....	20,245	14,357
Cambridge.....	39,634	26,060	Davenport.....	30,042	10,268
Hartford.....	37,180	29,151	St. Paul.....	20,030	10,401
Indianapolis.....	36,565	18,611			

A DIGEST OF THE MORE IMPORTANT GENERAL LAWS OF 1871.

Chapter I. requires school District Clerks to file their reports to county Superintendents on or before October 10th.

Chapter II. requires County Superintendents to file returns from District Clerks with the County Auditor on or before December 1st.

Chapter III. requires Clerks to furnish County Auditors attested copies of records, stating amounts of money voted by the districts for school purposes on or before October 10th.

Chapter V. requires District school officers to be elected on the 1st Saturday in October, and their term of office to begin on the 12th instant.

Chapter VI.—If school officers fail to report, notice to be given by officers to whom reports are due to the County Attorney, and he to sue the delinquents.

Chapter VII. forbids teachers and school officers under penalty of a fine of \$50 to \$200, to have any interest in the sale of books, apparatus or furniture to be used in schools with which they may be connected.

Chapter VIII. requires the State Superintendent to apportion the State School Funds on 1st Monday in March and 1st Monday in October.

Chapter XXII. authorizes the appointment of a Railroad Commissioner and prescribes his duties.

Chapter XXV. forbids, under penalty of a fine of \$100 to \$500 and imprisonment from 30 days to one year, warehousemen from mixing inferior grades of grain with better and delivering the mixture for the better grain.

Chapter XXVI. attempts to prevent fools from being gulled by patent right agents.

Chapter XXIX. requires the State and County Agricultural Societies to account for public money under pain of forfeiture.

Chapter XXX. offers bounty to persons planting forest trees—\$2 per acre and \$2 per half mile along the public highways, after three years.

Chapter XXXIV.—A law in 16 sections, for the prevention of cruelty to animals. Penalties from \$10 to \$100 and imprisonment not over three months.

Chap. XXXI.—AN ACT FOR THE PRESERVATION OF GAME.—Woodcock may be killed only between July 4th and December 1st. Prairie-hen or chicken or white-breasted or white-tailed grouse between August 1st and December 1st. Quail, partridge or ruffed grouse between September 1st and December 1st. Penalty for killing the above at any other time, \$5.00 for each and every bird, and costs. Deer may be hunted between August 1st and January 1st,—penalty \$10 a head and costs. The eggs or nests of game fowl may not be wantonly destroyed nor disturbed under penalty of \$5.00 and costs. Game birds may not be killed but by shooting with a gun,—penalty \$25 for each offense. *Harmless* birds other than game birds may not be killed at all under penalty of \$5 each bird. Sportsmen must not trespass on growing crops—(nor their dogs),—penalty \$10. Brook trout may be taken between April 1st and October 1st. Except on the greater lakes and rivers, fish may be taken only by gun, spear or hook and line,—penalty \$5.

Chapter XLVI. makes business paper falling due on any SUNDAY, THANKSGIVING DAY, GOOD FRIDAY, CHRISTMAS DAY, NEW YEAR'S DAY, the 22d of FEBRUARY, or the 4th of JULY, or on the day following, when any of the last four days may fall on Sunday, payable the business day next preceding. Notice of dishonor need not be given till the day after.

Chap. LIII. authorizes Township Clerks to take acknowledgments of chattel mortgages.

Chapter LIX. requires Grand Juries to appoint a clerk.

Chapter LXX. provides that when any judgment of a Justice of the Peace has "remained undisturbed" for not less than two years, the law will presume the Justice to have had jurisdiction.

Chapter XCI. permits Attorneys and County Auditors to administer oaths, but not their deputies.

Joint Resolution No. 1 forbids the Governor to receive any railway map that shall not be on the same scale as the plats of the United States land surveys, viz: that of two inches to one mile.

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CLASS SECOND—(1) *Newspapers*.—Dailies, per quarter, 35 cents; tri-weeklies, 15 cents; semi-weeklies, 10 cents; weeklies, 5 cents; to subscribers within the county *free*. (2) *Periodicals*.—Monthlies, 3 cents per rate of 4 oz.; quarterlies, 1 cent per rate of 4 oz.; newspaper exchanges *free*. All newspaper postages must be paid *in advance*, quarterly or yearly.

CLASS THIRD—*Miscellaneous Matter*.—Embracing books, pamphlets, occasional publications, transient newspapers, handbills, book-manuscripts, corrected (marked for correction) or not, maps, prints, engravings, sheet-music, blanks, flexible patterns, samples, photographic paper, envelopes, wrappers, cards, photographs, seeds, cuttings, bulbs, roots, and scions—Books, 4 cents per rate of 4 oz.; circulars, 2 cents for three or less. Other matter, 2 cents per ounce or fraction thereof. Packages for the mail are limited to four pounds, except books circulated by order of congress. No matter of this class forwarded unless prepaid.

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