

# ANNUAL REPORT

OF

## THE BOARD OF REGENTS

52612

OF THE

52612

# University of Minnesota

TO THE GOVERNOR



FOR THE

FISCAL YEAR ENDING DECEMBER 29th, 1877.

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TRANSMITTED TO THE LEGISLATURE OF THE TWENTIETH ANNUAL  
SESSION, 1878.

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MINNEAPOLIS:  
JOHNSON, SMITH & HARRISON.  
1878.

★ UNIV. OF MIN.

D '03  
(Doc. 7)

UNIVERSITY OF MINNESOTA. }  
OFFICE OF THE BOARD OF REGENTS, }  
December 29, 1877.

*To His Excellency, J. S. Pillsbury,*  
*Governor of Minnesota:*

SIR.—In compliance with the law I have the honor to forward herewith the annual report of the Board of Regents of the University of Minnesota, for the fiscal year ending this day.

Very respectfully,

Your obedient servant,

HENRY H. SIBLEY,  
President.

THE BOARD OF REGENTS.

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	Term Expires.
The Hon. WILLIAM R. MARSHALL, St. Paul.....	1878.
The Hon. A. A. HARWOOD, Austin.....	1878.
The Hon. HENRY H. SIBLEY, St. Paul.....	1879.
The Hon. THOS. S. BUCKHAM, M. A., Faribault.....	1879.
The Hon. PARIS GIBSON, M. A., Minneapolis.....	1880.
The Hon. MORRIS LAMPREY, M. A., St. Paul.....	1880.
The Hon. RICHARD CHUTE, Minneapolis.....	1880.

*and ex officio,*

The Governor of the State,

The Hon. JOHN S. PILLSBURY, Minneapolis.

The State Superintendent of Public Instruction,

The Hon. D. BURT, M. A., St. Paul.

The President of the University.

WILLIAM W. FOLWELL, Minneapolis.

OFFICERS OF THE BOARD.

Hon. HENRY H. SIBLEY, President.

Hon. PARIS GIBSON, Recording Secretary and Treasurer.

WILLIAM W. FOLWELL, Corresponding Secretary.

# OFFICERS AND EMPLOYEES

FOR THE UNIVERSITY YEAR. 1876-77.

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WILLIAM W. FOLWELL, PRESIDENT,  
*Instructor, in Political Economy and Librarian.*

G. CAMPBELL, M. A., B. D., VICE PRESIDENT,  
*Professor of Mental and Moral Philosophy.*

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*Professor of the Latin Language and Literature.*

JABEZ BROOKS, M. A., D. D.,  
*Professor of the Greek Language and Literature,  
and in charge of the Dept. of Latin.*

EDWIN J. THOMPSON, M. A.,  
*Professor of Mathematics and Astronomy.*

NEWTON H. WINCHELL, M. A., STATE GEOLOGIST,  
*Professor of Geology and Mineralogy.*

CHARLES N. HEWITT, M. D.,  
*Non-Resident Professor of Public Health.*

MITCHELL D. RHAME, M. A.,  
*Professor of Civil and Mechanical Engineering*

STEPHEN F. PECKHAM, M. A.,  
*Professor of Chemistry and Physics.*

JOHN G. MOORE, B. A.,  
*Professor of North European Languages.*

MOSES MARSTON, M. A.,  
*Professor of the English Language and Literature.*

RICHARD W. LAING, LL. D.,  
*Professor of History, and in charge of French.*

JOHN A. LUNDEEN, U. S. A.,  
*Professor of Military Science.*

CHARLES Y. LACY, B. Agr.,  
*Assistant Professor in charge of Theory and Practice of Agriculture.*

LOUIS W. PECK,  
*Instructor in Physics and Drawing.*

MRS. AUGUSTA NORWOOD SMITH, PRECEPTRESS,  
*Instructor in English and History.*

JOHN C. HUTCHINSON, B. A.,  
*Instructor in Latin and Greek.*

JOHN S. CLARKE, B. A.,  
*Assistant Librarian and Instructor in Mathematics.*

During the first two terms Professor JOHN B. CLARK, now of Carleton College, gave instruction in Latin, under a temporary engagement, to the entire satisfaction of the professor in charge.

In the spring term Mr. HENRY C. LEONARD taught Botany acceptably under the direction of Professor WINCHELL.

EMPLOYES, 1876-77.

W. T. SCOTT, *until April 1st*, Farmer.

JOHN BRADLEY EUSTIS, *after April 1st*, Farmer.

G. C. CAMPBELL, Assistant in Library.

CLARENCE C. HERRICK, Assistant in Museum.

CHAS. W. SAVIDGE, Assistant in Chemical Laboratory.

J. CLARENCE BRYANT, Janitor of Main Building.

GEO. A. WOOD, Janitor of Agricultural Building, and Assistant in Plant House.

STEPHEN MAHONEY, Fireman.

FRED. C. BOWMAN, Carpenter.

EVAN R. PRITCHARD, Leader of Choir.

All of these employes except the first two named were students, who depended upon the compensation received for these and other labors for their support.

#### OFFICIAL CHANGES.

During the session of the Legislature, Regents Gibson, Lamprey, and Chute were reappointed by the Governor, with the consent of the Senate, for the term of three years, and Hon. D. Burt having been reappointed to the office of Superintendent of Public Instruction, continued to be regent *ex officio*.

First Lieutenant John A. Lundeen, of the Fourth U. S. Artillery, whose appointment to the position of professor of Military Science and Tactics was referred to in the last report, entered upon the duties soon after the beginning of the year. Professor Lundeen has given valuable assistance in the departments of mathematics and astronomy.

The Board are gratified to state that at the date of filing this report the total enrollment of students for the new college year has risen to above three hundred and sixty. The Board attribute this increase to the improved financial condition of the State, the result of the late bounteous harvest, and to the system of examinations for admission held under authority of the Board during the past summer in several of the cities and larger villages of the state.

#### COURSES OF STUDY.

At the spring meeting of the Board, revised courses of study in the several departments of the University carefully prepared by the General Faculty, were, after suitable deliberation and scrutiny, adopted. The greater number of changes from the previous schedules were merely transpositions of subjects from term to term in order to distribute the work of the several professors and instructors more equally.

The Board are of the opinion that under the new arrangement a large increase of students can be instructed without material increase of the teaching force.

## GRADUATES.

At the Fifth Annual Commencement, held in June last, sixteen degrees were, upon recommendation of the Faculties, conferred upon the same number of persons; thirteen gentlemen and three ladies. This is the largest class that has yet been graduated. There is every reason to believe that this number will be equalled if not exceeded by succeeding classes. The whole number of graduates up to date is thirty seven; thirty-two gentlemen and five ladies.

Upon the occasion referred to the Board were again placed under obligations to Major Gen. Sykes, U. S. A., for the use of his headquarters band, that of the 20th U. S. Infantry. The attendance upon the occasion was very large and the performances of the candidates were highly creditable to themselves and gratifying to the Board.

## ATTENDANCE.

The attendance of students for the year (1876-7) ending in June last, is shown in the following tables:

## SUMMARY—1876-7.

COLLEGE OR DEPARTMENT.	CLASS.	Gentlemen.	Ladies.	Totals.
Science, Literature and the Arts.....	{ Graduates ..	1	1	2
	{ Senior .....	14	4	18
	{ Junior.....	11	3	14— 34
Mechanic Arts.....	{ Senior .....	1	.....	1
	{ Junior.....	2	.....	2—3
Agriculture, { Advanced Course.....	{ Junior.....	1	.....	1
	{ Elementary Course.....	1	.....	1— 2
Collegiate Department.....	{ First.....	23	14	37
	{ Second.....	18	12	30—106
	{ Third.....	47	18	65
	{ Fourth.....	51	22	73—138
	{ Special.....	40	19	59— 59
Totals.....		210	93	*303

\*In the calendar for 1876-7, one name was counted twice by mistake, making this total 304.

## OR BY CLASSES ONLY,

Graduates.....	2
Seniors—of all Departments.....	19
Juniors—of all Departments.....	17
Sophomores—First Class, Collegiate Department.....	37
Freshmen—Second Class, Collegiate Department.....	31—106
Preparatory, { Third Class, Collegiate Department.....	65
	{ Fourth Class, Collegiate Department.....
Special.....	59— 59
Total.....	303

## BUILDINGS.

The buildings of the University, although seemingly spacious, are at the present time completely occupied, and in several instances the class rooms are inadequate to the suitable accommodation of the classes. It can not be long before the space now occupied by the Assembly Hall, the Library and the Museum in the main building, must be given over to instruction, and those establishments transferred to other quarters.

We respectfully and earnestly renew the recommendation of last year in regard to a drill hall and gymnasium, the need of which is more and more apparent and pressing.

In the Agricultural College building a new class room has been fitted up for the departments of Physics, Chemistry, etc., the room formerly in use being too small to admit the classes. A small room for the storage of apparatus has also been partitioned off in the corridor of the upper story.

The two buildings have been connected by a line of telegraph, and the Instructor in Physics, Mr. L. W. Peck, has lately constructed an experimental telephone.

The plant house, first opened late last season, has been successfully managed, at a moderate expense, and has proved valuable as an aid to scientific instruction.

## LIBRARY.

Including the books and pamphlets turned over by legislative authority from the State Library, the accessions of the year have been considerable. Unfortunately so many of the works of the lot referred to were damaged by loss of volumes belonging to sets, that its value was greatly diminished.

Upon the urgent recommendation of the General Faculty, the Board ventured last year to raise the appropriation for the increase of the library to one thousand (\$1,000) dollars, which sum has been judiciously expended. There is still a great need of books for some departments, especially the scientific and mechanical, and the Board sincerely regret that they have no present means for supplying this need. The report of the Librarian is referred to for details.

## GENERAL MUSEUM.

In order to display the collections of the Geological Survey, and render them available for purposes of instruction and investigation, the sum of one thousand (\$1,000) dollars was set apart some months



ago to construct cases and fit up an additional room to contain them. This work will soon be completed and the specimens properly classified and displayed.

The Board regret that, owing to delays incident to the mounting of the large *Megatherium*, it has been thought necessary to keep the present room closed for some months past.

For a detailed statement of accessions in amount and value, reference is made to the report of the Curator, Prof. Winchell.

#### UNIVERSITY CAMPUS.

The liberality of the last Legislature in appropriating the sum of eighteen thousand (\$18,000) dollars for the enlargement of these grounds, has enabled the Board to purchase upon equitable terms the following property:

1. The land of Mr. G. D. Perkins, lying south of University avenue and Twelfth avenue southeast, for the sum of nine thousand (\$9,000) dollars.
2. The equivalent of six lots in Thatcher's Addition of Mr. A. R. Camp, for the sum of two thousand (\$2,000) dollars.
3. Sixteen lots in Thatcher's Addition, of various parties, for the sum of \$——

Proceedings for the condemnation of the remainder of the property necessary to complete the proposed enlargement, as shown on map in last report, page eleven (11.) are still pending but are held in abeyance for lack of ready funds to deposit in court, and thus to obtain indisputable title. It would be manifestly unfair to the owners of this property to exclude it from market in this manner indefinitely, and the Board sincerely trust that means will soon be afforded them of carrying out the policy fixed and inaugurated by the State of securing for this institution a campus commensurate with its needs, and isolated from unsuitable surroundings. It is highly important that this indispensable enlargement be consummated before the adjacent property shall have risen in value, and while the owners are willing to dispose of it upon reasonable terms. For the Campus, Drill Hall and Gymnasium and other objects hereafter mentioned, we would respectfully ask for an appropriation of twenty-five thousand dollars.

#### GEOLOGICAL SURVEY.

The operations of the survey have been confined in the main to the counties of Ramsey, Rice, Rock, and Pipestone. For detailed accounts of this work reference is made to the report of Professor Winchell.

Upon invitation of the State Board of Health, Professors Winchell and Peckham were authorized, in June last, to accompany Dr. C. N. Hewitt, representing the Board of Health, to investigate the water supply of the Red River Valley. The views and conclusions of these officers upon this subject will be found in their respective reports.

A number of minor investigations and reconnoissances conducted by Professor Winchell and his assistants, will be found in their proper connection.

#### AGRICULTURAL COLLEGE AND FARM.

The detailed report of Professor Lacy herewith transmitted, shows the nature and extent of the various changes and improvements as well as the experiments which have been prosecuted. The number of farmers sons in attendance seeking instruction in general science and letters, is as heretofore very large, while the number of students of scientific agriculture does not increase, and probably cannot materially be augmented until our agriculturists learn to diversify their products and cease to raise for market a single staple.

The Board feel themselves indebted to Mr. Lacy for his energy and intelligence in exhibiting the productions of the experimental farm and the plant house, at the late State Fair. The exhibition appears to have been very generally appreciated by the public as in a high degree interesting and instructive.

#### FINANCES.

The resources of the University consist of lands granted by Congress for the endowment of the University and of those granted to the state under the law of July 2, 1862, donating lands for the benefit of agriculture and the mechanic arts.

The State Auditor reports the following sales of land during the fiscal year, with other statistics, as follows :

Balance in State Treasury Dec. 1, 1876... .. \$ 1,182 34

Received during the year on account of—

Appropriation from State Institutions Fund.....	\$12,000 00	
Sales of Agricultural College Lands for former years.....	1,275 08	
Sales of Agricultural College Lands, 1877.....	\$8,154 03	
Less Unpaid Draft Faribault Co.....	978 00	
	7,176 03	
Sales of Pine Timber on University Lands.....	2,139 96	
	<u>\$22,591 07</u>	
		\$23,773 41

The total amount of accumulations of permanent University fund at the close of the fiscal year appears from the auditors report to be \$353,989.81.

As the Board have no immediate control over this fund, but merely draw and expend the income according to law, reference is made to the Auditor's annual report for full information in regard to it.

Herewith I have the honor to transmit the financial statement to the Treasurer for the fiscal year, showing in detail all the receipts and expenditures, accompanied with proper vouchers.

All the items and footings have been fully inspected and verified by the auditing committee of the Board, and the report has thereupon been approved and accepted by the Board.

#### GENERAL OUTLOOK.

On the seventh of October last, the University of Minnesota completed its tenth birthday. The Board feel that they have reason, with the people of the state, to take pride in the growth and progress of the institution. Beginning ten years ago with 40 young preparatory students, the attendance in the last college year rose to (303) three hundred and three. There is at the present time a larger number of students in actual attendance than was ever before enrolled in the whole course of any academic year.

Notwithstanding this large increase the Board have not felt able or authorized to increase the teaching force which remains as to numbers the same as during the previous year. Miss M. J. Campbell, a graduate of the University, and an experienced teacher, has performed the duty previously devolved upon Mr. J. B. Clark. The professorship of Latin vacated by the lamented death of Professor V. J. Walker, still remains unfilled, the chair having been placed in charge of Professor Brooks, and the duties performed by him together with that of the department of Greek, with the assistance of instructors, Hutchinson and J. S. Clark. The year has been one of peaceful and decided progress. The faculty, composed of capable and earnest men, having at heart the highest interests of the institution and of their pupils, have labored with great diligence and in entire harmony. The conduct and deportment of the young people committed to their care cannot, we believe, be surpassed in good order and diligent application by any similar body in our country. And this, we are of opinion, is in a great measure due to the salutary influence of the joint attendance and instruction of the young men and young women, as well as to the judicious policy

of the faculty in avoiding the use of unnecessarily strict and arbitrary rules and regulations.

The report of the President of the University is referred to for numerous details, recommendations and professional suggestions, and which are generally accepted by the Board as judicious and wise.

All of which is respectfully submitted,

# TREASURER'S REPORT.

PARIS GIBSON, *Treasurer, in Account with the Board of Regents.*

## CURRENT EXPENSE.

### DR.

1877.			
Jan.	19,	To Cash drawn from State Treasurer.....	\$3,000 00
Feb.	5,	To Cash drawn from State Treasurer.....	2,000 00
"	19,	To Cash drawn from State Treasurer.....	2,000 00
"	27,	To Cash drawn from State Treasurer.....	2,500 00
April	7,	To Cash drawn from State Treasurer.....	3,000 00
"	25,	To Cash drawn from State Treasurer.....	3,000 00
May	2,	To Cash drawn from State Treasurer.....	1,500 00
"	26,	To Cash drawn from State Treasurer.....	3,500 00
June	6,	To Cash drawn from State Treasurer.....	3,500 00
July		To Cash drawn from State Treasurer.....	1,000 00
"		To Cash drawn from State Treasurer.....	1,000 00
Aug.	28,	To Cash drawn from State Treasurer.....	2,000 00
Sept.	27,	To Cash drawn from State Treasurer.....	3,500 00
Oct.	26,	To Cash drawn from State Treasurer.....	3,000 00
Nov.	6,	To Cash drawn from State Treasurer.....	500 00
"	16,	To Cash drawn from State Treasurer.....	1,000 00

### CR.

By Balance at last Statement.....	\$5,638 84
By Balance Incidentals.....	2,358 17
By Balance Salaries.....	23,443 33
By Balance Employes and Workmen.....	1,279 44
By Balance Advertising.....	645 03
By Balance Plant House.....	270 14
By Balance Fuel.....	1,859 27
By Balance Chemical Laboratory.....	38 03
By Balance Repairs.....	953 13
By Balance Experimental Farm.....	1,430 17
By Balance Library and Reading Room.....	3,708 50
By Balance Museum.....	603 03
To Balance.....	6,227 08
	\$42,227 08
	\$42,227 08

## INCIDENTALS.

## DR.

Feb.	28,	To Cash, Students' Fees.....	\$45 00
"		To Cash, Students' Fees.....	90 00
"		To Cash, Stamped Envelopes.....	3 30
"		To Cash.....	3 00
"		To Cash, 2 Lights of Glass.....	35
"		To Cash, Stamps.....	2 00
"		To Cash, Postal Order.....	3 00
"		To Cash, Students' Fees.....	15 00
Sept.	27,	To Cash, Students' Fees.....	1,550 00
"		To Cash.....	6 32

## CR.

1876.	Dec.	20,	By Cash, Organ Rent.....	Voucher No. 1.	\$12 00
"	"	20,	By Cash, Freight.....	" 2.	6 30
"	"	22,	By Cash, Welles.....	" 3.	10 10
"	"	22,	By Cash, Express.....	" 5.	12 75
"	"	23,	By Cash, Grate bars.....	" 6.	10 00
"	"	27,	By Cash, Freight.....	" 4.	2 45
"	"	23,	By Cash, Sundries.....	" 7.	3 80
"	"	30,	By Cash, Regent Harwood's Ex.....	" 10.	14 25
1877.	Jan.	6,	By Cash, Printing.....	" 12.	37 50
"	"	6,	By Cash, Printing.....	" 13.	1 75
1876.	Dec.	20,	By Cash, Herrick.....	" 18.	20 75
1877.	Jan.	15,	By Cash, Dr. Hewitt.....	" 26.	25 00
"	"	26,	By Cash, Stetson & Nelson.....	" 33.	17 00
"	"	31,	By Cash, Bryant.....	" 48.	7 80
Feb.	10,	By Cash, Stationery.....	" 53.	19 78	
"	"	10,	By Cash, Printing.....	" 54.	40 75
"	"	13,	By Cash, Hawes & Smith.....	" 55.	8 20
"	"	13,	By Cash, Printing.....	" 56.	18 50
"	"	14,	By Cash, Williams.....	" 57.	8 19
"	"	16,	By Cash, Stationery.....	" 58.	11 00
1876.	Dec.	9,	By Cash, Mrs. Bayliss.....	" 63.	5 00
1877.	Jan.	3,	By Cash, Freight.....	" 64.	2 70
"	"	4,	By Cash, Express.....	" 65.	90
"	"	4,	By Cash, Hawes & Smith.....	" 66.	6 60
Feb.	6,	By Cash, Freight.....	" 67.	4 80	
"	"	15,	By Cash, Savidge.....	" 68.	3 00
"	"	16,	By Cash, Band.....	" 69.	6 00
"	"	23,	By Cash, Sanford & Washburn.....	" 70.	3 34
"	"	26,	By Cash, Davidson & Co.....	" 71.	2 50
"	"	26,	By Cash, Repairs.....	" 74.	3 21
Mar.	1,	By Cash, Stationery.....	" 86.	10 52	
"	"	6,	By Cash, Cauvet.....	" 87.	4 01
"	"	7,	By Cash, Tribune Co.....	" 89.	14 90
"	"	10,	By Cash, Organ Rent.....	" 92.	27 40
"	"	20,	By Cash, Herrick.....	" 96.	20 50
"	"	26,	By Cash, Alcohol.....	" 100.	3 00
April	14,	By Cash, Hildreth.....	" 109.	8 85	
"	"	25,	By Cash, Swett.....	" 112.	14 12
"	"	27,	By Cash, Engraving Seal.....	" 118.	12 00
May	1,	By Cash, Clarke.....	" 127.	25 00	

May.	2,	By Cash, Currie.....	Voucher No. 129.	7 90
"	5,	By Cash, Oil.....	" 133.	4 75
"	5,	By Cash, Brooms.....	" 135.	4 95
"	7,	By Cash, Fire Extinguishers.....	" 136.	175 00
"	12,	By Cash, Harmon.....	" 139.	15 95
"	12,	By Cash, Printing.....	" 140.	14 50
Mar.	22,	By Cash.....	" 98.	15 69
"	1,	By Cash, Express.....	" 154.	75
"	5,	By Cash, Perkins.....	" 155.	3 00
April	9,	By Cash, Express.....	" 156.	2 95
"	10,	By Cash, Bryant.....	" 157.	1 80
"	12,	By Cash, Mahoney.....	" 158.	75
"	30,	By Cash, Stationery.....	" 163.	20 50
May	3,	By Cash, Express.....	" 166.	1 90
"	19,	By Cash, Telegrams.....	" 168.	1 00
"	22,	By Cash, Freight.....	" 169.	5 25
"	28,	By Cash, Telegrams.....	" 172.	2 00
"	28,	By Cash, Diploma and Plate.....	" 173.	149 50
"	31,	By Cash, Department of Chemistry.....	" 183.	1 25
"	31,	By Cash, Department of Physics.....	" 184.	4 90
June	2,	By Cash, Telegram.....	" 186.	25
"	4,	By Cash, Gas Lights.....	" 189.	2 00
"	4,	By Cash, Dr. Brooks's Room.....	" 190.	37 92
"	4,	By Cash, Stationery.....	" 192.	16 31
"	6,	By Cash, Organ Rent.....	" 195.	5 00
"	6,	By Cash, Printing.....	" 196.	12 00
"	7,	By Cash, Livery.....	" 197.	5 00
"	7,	By Cash, Dinner for Band.....	" 198.	13 50
"	11,	By Cash, Express.....	" 208.	25
"	12,	By Cash, Express.....	" 209.	25
"	13,	By Cash, Stationery.....	" 212.	7 50
"	18,	By Cash, Stationery.....	" 213.	16 61
"	16,	By Cash, Prescott.....	" 215.	2 00
"	22,	By Cash.....	" 220.	12 23
"	22,	By Cash, Express.....	" 221.	1 00
"	15,	By Cash, Astronomical Slides.....	" 222.	35 00
"	27,	By Cash, Dr. Hewitt's Ex.....	" 225.	20 00
July	6,	By Cash, Thompson's Dept.....	" 226.	6 50
"	6,	By Cash, Thompson.....	" 227.	301 00
"	10,	By Cash, Tribune Co.....	" 228.	13 50
"	21,	By Cash, Printing.....	" 236.	418 60
"	21,	By Cash, Printing.....	" 237.	24 50
"	22,	By Cash, Rhame.....	" 240.	7 31
"	28,	By Cash, Newton.....	" 252.	17 60
"	30,	By Cash, Lacy.....	" 255.	8 32
"	30,	By Cash, Work on Campus.....	" 256.	51 91
1876.				
July	1,	By Cash, Picture Main Building.....	" 266.	50 00
"	4,	By Cash, Gilt Frames.....	" 267.	7 80
1877.				
July	12,	By Cash, Freight.....	" 272.	6 24
"	30,	By Cash, Printing.....	" 274.	7 30
Aug.	1,	By Cash.....	" 276.	15 73
"	1,	By Cash, Postage.....	" 277.	51 60
"	29,	By Cash, Hardware.....	" 285.	31 65
"	29,	By Cash, Hardware.....	" 286.	154 41
"	29,	By Cash, Pens.....	" 302.	1 25
Sept.	7,	By Cash, Postage.....	" 303.	16 50
"	4,	By Cash, Rockwood.....	" 307.	9 70
"	12,	By Cash, Bryant.....	" 308.	94 62
Oct.	1,	By Cash, Feather Dusters.....	" 320.	18 50
"	2,	By Cash, Geo. A. Wood.....	" 324.	5 60
"	4,	By Cash, Express.....	" 332.	5 95

Sept.	19,	By Cash.....	Voucher No. 339,	4	90
"	24,	By Cash, Printing.....	" 343.	49	50
July	1,	By Cash.....	" 350.	43	50
Aug.	10,	By Cash, Printing.....	" 352.	2	00
Sept.	17,	By Cash, Printing.....	" 356.	1	00
"	25,	By Cash, Stechert.....	" 357.	71	90
Oct.	2,	By Cash, Tin.....	" 365.	2	50
"	2,	By Cash, Printing.....	" 366.	21	75
"	10,	By Cash, Regent Harwood's Ex.....	" 369.	14	50
"	13,	By Cash, Newton.....	" 370.	20	40
"	19,	By Cash, Freight.....	" 372.	4	85
"	19,	By Cash, Stationery.....	" 373.	9	45
"	21,	By Cash, Organ Rent.....	" 377.	4	00
"	24,	By Cash, Chemical Laboratory.....	" 378.	11	86
"	25,	By Cash, Telegraphic Apparatus.....	" 379.	5	10
"	26,	By Cash, Ammunition, Freight.....	" 380.	2	00
"	26,	By Cash, Insurance.....	" 381.	345	00
"	29,	By Cash, Laing.....	" 383.	12	39
"	29,	By Cash, Stationery.....	" 384.	10	08
"	29,	By Cash, Rent on Show-case for Fair.....	" 385.	7	00
"	31,	By Cash, Savidge.....	" 387.	33	74
"	31,	By Cash, Lumber.....	" 388.	26	06
Nov.	1,	By Cash.....	" 398.	4	55
"	12,	By Cash, Freight.....	" 405.	6	75
"	12,	By Cash.....	" 406.	5	25
"	16,	By Cash, Lacy.....	" 408.	9	25
"	16,	By Cash, Work on Campus.....	" 409.	14	83
"	26,	By Cash, Frames for Pictures.....	" 419.	8	00
Feb.	21,	By Cash, Exchange.....	" 420.	4	94
Sept.	1,	By Cash, Stamped Envelopes.....	" 421.	16	60
Dec.	3,	By Cash, Savidge.....	" 426.	24	25
"	5,	By Cash, Omnibus.....	" 428.	8	00
"	7,	By Cash, Prof. Thompson's Dept.....	" 431.	76	75
"	7,	By Cash, Sec. and Treas. salary.....	" 432.	400	00
"	8,	By Cash, Wheaton & Reynold's.....	" 434.	18	14
"	8,	By Cash, Printing.....	" 435.	14	30
"	14,	By Cash, Stationery.....	" 437.	25	00
"	5,	By Cash, Directory.....	" 448.	3	20
"	15,	By Cash, Table.....	" 449.	9	50
"	17,	By Cash, Thompson's Traveling Exp.....	" 462.	85	27
"	17,	By Cash, Thompson's Examinations.....	" 463.	204	73
"	17,	By Cash, Lumber.....	464	19	93
To balance to Current Expense.....			\$2,358 17		
			\$4,076 14	\$4,076 14	

SALARIES OF FACULTY AND ASSISTANTS.

1877.	Jan.	9,	By Cash, G. C. Campbell.....	Voucher No. 14.	\$ 20 00
"	"	31,	By Cash, Faculty.....	" 34.	2,215 00
"	"	31,	By Cash, Clarke.....	" 35.	75 00
"	"	31,	By Cash, Savidge.....	" 36.	15 00
"	"	31,	By Cash, Currie.....	" 44.	15 00
Feb.	10,	By Cash, Folwell.....	" 51.	250 00	
Jan.	31,	By Cash, Pritchard.....	" 61.	5 00	
Feb.	28,	By Cash, Faculty.....	" 77.	2,215 00	
"	28,	By Cash, Savidge.....	" 83.	15 00	
"	28,	By Cash, Pritchard.....	" 84.	5 00	
March	7,	By Cash, G. C. Campbell.....	" 90.	30 00	
"	9,	By Cash, Clarke.....	" 91.	100 00	
"	12,	By Cash, Lundeen.....	" 93.	133 33	
April	30,	By Cash, Faculty.....	" 120.	2,265 00	
"	30,	By Cash, Savidge.....	" 121.	15 00	
"	30,	By Cash, Pritchard.....	" 122.	5 00	



May	3,	By Cash, Leonard.....	Voucher No. 130.	60 00
Mar.	31,	By Cash, Faculty.....	" 146.	2,265 00
"	31,	By Cash, Savidge.....	" 147.	15 00
"	31,	By Cash, Pritchard.....	" 148.	5 00
May	31,	By Cash, Faculty.....	" 175.	2,265 00
"	31,	By Cash, Mrs. Smith.....	" 176.	200 00
"	31,	By Cash, Savidge.....	" 177.	15 00
"	31,	By Cash, Pritchard.....	" 178.	5 00
June	4,	By Cash, Leonard.....	" 191.	60 00
"	8,	By Cash, Faculty.....	" 199.	2,215 00
"	8,	By Cash, Brooks.....	" 200.	300 00
"	8,	By Cash, Pritchard.....	" 201.	5 00
"	8,	By Cash, Savidge.....	" 202.	15 00
"	8,	By Cash, Thompson.....	" 207.	350 00
"	19,	By Cash, Lundeen.....	" 218.	200 00
July	21,	By Cash, G. C. Campbell.....	" 239.	250 00
Aug.	28,	By Cash.....	" 283.	250 00
"	30,	By Cash, Savidge.....	" 287.	5 00
Sept.	30,	By Cash, Miss Campbell.....	" 318.	20 00
"	30,	By Cash, Faculty.....	" 319.	2,395 00
"	30,	By Cash, Pritchard.....	" 362.	10 00
"	30,	By Cash, Bowman.....	" 363.	15 00
Oct.	31,	By Cash, Faculty.....	" 392.	2,295 00
"	31,	By Cash, Miss Campbell.....	" 393.	90 00
"	31,	By Cash, Bowman.....	" 394.	15 00
"	31,	By Cash, Pritchard.....	" 395.	10 00
Nov.	30,	By Cash, Faculty.....	" 450.	2,295 00
"	30,	By Cash, Lundeen.....	" 451.	250 00
"	30,	By Cash, Smith.....	" 452.	50 00
"	30,	By Cash, Miss Campbell.....	" 453.	90 00
"	30,	By Cash, Pritchard.....	" 454.	10 00
"	30,	By Cash, Bowman.....	" 460.	15 00
Dec.	17,	By Cash, Prof. Thompson's Asst.....	" 467.	25 00
To balance to Current Expense.....				\$23,443 33
				<u>\$23,443 33</u> <u>\$23,443 33</u>

## EMPLOYES AND WORKMEN.

1877.	Jan.	31,	By Cash, Mahoney.....	Voucher No. 40	40 00
"	"	31,	By Cash, George A. Wood.....	" 41	14 00
"	"	31,	By Cash, Bryant.....	" 42	67 60
"	"	31,	By Cash, Welles.....	" 43	14 75
Feb.	27,	By Cash, Welles.....	" 73	12 50	
"	28,	By Cash, Geo. A. Wood.....	" 80	14 00	
"	28,	By Cash, Mahoney.....	" 81	40 00	
"	28,	By Cash, Bryant.....	" 82	67 60	
April,	14,	By Cash, Welles.....	" 107	14 80	
"	30,	By Cash, Bryant.....	" 124	67 60	
"	30,	By Cash, Mahoney.....	" 125	40 00	
"	30,	By Cash, Geo. A. Wood.....	" 126	14 00	
March	31,	By Cash, Bryant.....	" 150	67 60	
"	31,	By Cash, Mahoney.....	" 151	40 00	
"	31,	By Cash, Geo. A. Wood.....	" 152	14 00	
April	20,	By Cash, Rollit.....	" 159	9 40	
May	2,	By Cash, Welles.....	" 164	15 50	
"	3,	By Cash, Bryant.....	" 167	1 95	
"	31,	By Cash, Bryant.....	" 180	67 60	
"	31,	By Cash, Mahoney.....	" 181	40 00	
"	31,	By Cash, Geo. A. Wood.....	" 182	14 00	
June,	1,	By Cash, Welles.....	" 185	22 35	
"	8,	By Cash, Mahoney.....	" 204	40 00	

June 8,	By Cash, Geo. A. Wood.....	Voucher No. 205	14 00
" 8,	By Cash, Bryant.....	" 206	67 60
" 12,	By Cash, Bryant.....	" 210	5 25
August 1,	By Cash, Bryant.....	" 260	14 00
June 27,	By Cash, Welles.....	" 268	9 00
July 4,	By Cash, Newton.....	" 270	11 40
" 7,	By Cash, Geo. A. Wood.....	" 271	2 25
" 12,	By Cash, Currie.....	" 273	3 50
Sept. 30,	By Cash, Bryant.....	" 316	67 60
Oct. 1,	By Cash, Hildreth.....	" 323	13 62
Sept. 4,	By Cash, Geo. A. Wood.....	" 353	6 75
" 8,	By Cash, G. B. Thompson.....	" 354	3 60
Oct. 20,	By Cash, Smith.....	" 375	9 00
" 31,	By Cash, Newton.....	" 386	14 00
" 31,	By Cash, Bryant.....	" 390	67 60
" 31,	By Cash, Geo. A. Wood.....	" 391	18 00
Nov. 2,	By Cash, Rowley.....	" 400	11 32
" 2,	By Cash, Hildreth.....	" 401	27 00
" 26,	By Cash, Mahoney.....	" 418	50 00
Dec. 3,	By Cash, Newton.....	" 424	21 60
Nov. 30,	By Cash, Bryant.....	" 456	67 60
" 30,	By Cash, Geo. A. Wood.....	" 459	18 00
Sept. 30,	By Cash, Geo. A. Wood.....	" 360	18 00
	To balance to Current Expense.....		\$1,279 44
			<u>\$1,279 44</u>
			\$1,279 44

ADVERTISING ACCOUNT.

1877.			
Jan. 9,	By Cash, Anti-Monopolist.....	Voucher No. 21	\$ 65 00
" 31,	By Cash, Farmers Union.....	" 47	16 66
April 14,	By Cash, ".....	" 108	16 66
" 24,	By Cash, ".....	" 161	3 00
June 4,	By Cash, ".....	" 188	17 84
May 28,	By Cash, Pioneer Press Co.....	" 171	4 65
July 23,	By Cash, Country Papers, \$3.00 each....	" 241	158 10
Feb. 22,	By Cash, Anti-Monopolist.....	" 245	65 00
May 1,	By Cash, Anti-Monopolist.....	" 246	65 00
Aug. 9,	By Cash, Farmers Union.....	" 261	16 66
Sept. 1,	By Cash, Farmers Union.....	" 291	8 33
" 19,	By Cash, Tribune.....	" 341	4 80
" 26,	By Cash, St. Paul Newspaper Union....	" 344	80 00
" 26,	By Cash, Pioneer Press Co.....	" 345	45 00
" 26,	By Cash, Tourist.....	" 358	5 00
Oct. 16,	By Cash, Farmers Union.....	" 371	8 33
Nov. 19,	By Cash, Anti-Monopolist.....	" 412	65 00
	To balance to Current Expense.....		\$645 03
			<u>\$645 03</u>
			\$645 03

PLANT HOUSE.

1877.			
Feb.	To Cash, Sale of Plants.....		\$ 6 15
Aug.	To Cash, ".....		23 35
	To Cash, ".....		2 63
Mar. 22,	By Cash.....	Voucher No. 99	\$ 57 16
	By Cash.....	" 248	19 55
	By Cash.....	" 254	117 32
Oct. 2,	By Cash.....	" 325	35 22
Nov, 2,	By Cash.....	" 402	25 37
" 16,	By Cash.....	" 410	21 10
" 30,	By Cash.....	" 422	26 55
	To balance to Current Expense.....		270 14
			<u>\$302 27</u>
			\$302 27

## FUEL ACCOUNT.

1877.				
Feb.	10,	By Cash, Armstrong .....	Voucher No. 52	\$ 461 29
"	26,	By Cash.....	" 76	5 10
April	6,	By Cash, Truesdal.....	" 102	37 75
"	25,	By Cash, Armstrong .....	" 113	56 00
June	6,	By Cash, Armstrong .....	" 193	26 20
"	16,	By Cash, Grove & Rowe.....	" 214	50 00
July	12,	By Cash, Grove & Rowe.....	" 229	150 00
Sept.	20,	By Cash, Armstrong.....	" 342	372 03
Nov.	19,	By Cash, Merrian.....	" 414	637 40
"	20,	By Cash, Grove & Rowe .....	" 416	40 00
Dec.	14,	By Cash, Armstrong .....	" 436	23 50
		To balance to Current Expense.....		\$1,859 27
				<u>\$1,859 27</u> <u>\$1,859 27</u>

## CHEMICAL LABORATORY.

1877.				
Sept.	29,	To Cash, Students' Fees.....		\$157 94
"	29,	To Cash, Chemicals sold.....		1 63
"	29,	To Cash, Analyses.....		16 20
"	29,	To Cash, Analyses for Geol. Survey.....		197 00
June	9,	By Cash, Expense Aect.....	Voucher No. 311	\$372 77
Oct.	4,	By Cash, Dept. of Physics .....	" 333	1 25
Sept.	10,	By Cash.....	" 337	36 78
		To balance to Current Expense.....		38 03
				<u>\$410 80</u> <u>\$410 80</u>

## REPAIRS ACCOUNT.

1876.				
Dec.	30,	By Cash, Bowman.....	Voucher No. 8	27 40
1877.				
Jan.	6,	By Cash, Swett.....	" 11	5 57
1876.				
Dec.	21,	By Cash, Pomeroy & Co.....	" 19	55 20
"	22,	By Cash, Pickett.....	" 20	5 00
1877.				
Jan.	13,	By Cash, Cauvet.....	" 22	45 84
"	13,	By Cash, Cauvet.....	" 23	7 61
"	31,	By Cash, Bowman.....	" 46	23 60
Feb.	17,	By Cash, Chambers & Co.....	" 59	9 00
"	28,	By Cash, Bowman.....	" 85	23 45
1876.				
Dec.	21,	By Cash, Spink.....	" 94	60
1877.				
April	7,	By Cash, Wheaton & Reynolds.....	" 104	6 00
May	21,	By Cash, Bowman.....	" 145	18 20
March	31,	By Cash, Bowman.....	" 153	19 50
June	2,	By Cash, Paterson.....	" 187	5 00
"	21,	By Cash, Bowman.....	" 219	14 80
July	15,	By Cash, Bowman.....	" 231	37 71
"	15,	By Cash, Herzog.....	" 232	31 25
"	18,	By Cash, Herzog.....	" 234	15 50
June,		By Cash, Bowman.....	" 238	8 50
July	23,	By Cash, Paterson.....	" 242	4 00
"	25,	By Cash, St. Anthony Iron Works.....	" 243	83 11
"	30,	By Cash, Parker.....	" 257	43 70
August	9,	By Cash, Perkins.....	" 262	3 50
"	9,	By Cash, Perkins.....	" 263	10 21
"	23,	By Cash, Pickett.....	" 278	12 00
"	25,	By Cash, Bowman.....	" 279	26 60
"	28,	By Cash, Mahoney.....	" 282	16 50
"	30,	By Cash, Lumber.....	" 288	38 03

Sept.	3,	By Cash, Perkins.....	Voucher No. 298	11 58
"	5,	By Cash, Bowman.....	" 301	79 72
"	29,	By Cash, Perkins.....	" 312	51 00
"	29,	By Cash, Savidge.....	" 313	14 99
"	26,	By Cash, Savidge.....	" 314	25 61
Oct.	1,	By Cash, Savidge.....	" 321	38 00
"	1,	By Cash, Bowman.....	" 322	21 25
"	4,	By Cash, Cauvet.....	" 328	1 99
Sept.	27,	By Cash, Cauvet & Ried.....	" 346	20 53
Oct.	27,	By Cash.....	" 382	38 49
Nov.	17,	By Cash, Smith.....	" 411	16 74
"	19,	By Cash.....	" 413	3 00
Dec.	4,	By Cash, Columns.....	" 427	32 85
To Balance to Current Expenses.....				\$953 13
				<u>953 13</u>
				\$953 13

EXPERIMENTAL FARM.

Dr.

1876.				
Feb.	8,	To Cash, Farm Products.....		\$58 45
Aug.		To Cash, Farm Products.....		171 61
"		To Cash, Farm Products.....		131 97

Cr

Jan.	13,	By Cash, Hern.....	Voucher No. 24.	5 00
"	13,	By Cash, Horse-shoeing.....	" 25.	8 65
"		By Cash, Shatto & Christie.....	" 27.	5 05
"	15,	By Cash, Scott.....	" 28.	6 00
"	31,	By Cash, Scott.....	" 39.	50 00
"	31,	By Cash, Moore.....	" 45.	2 90
"	22,	By Cash, Brown & Greeley.....	" 60.	6 80
1876.				
April	8,	By Cash, Plow.....	" 62,	4 00
1877.				
Feb.	28,	By Cash, Scott.....	" 78.	50 00
Mar.	22,	By Cash, Expense Account.....	" 97.	212 28
April	5,	By Cash, Scott.....	" 101.	50 00
July	14,	By Cash, Eustis.....	" 230.	50 00
"	28,	By Cash, Campbell.....	" 251.	51 75
"	30,	By Cash, Expense Account.....	" 253.	568 37
Aug.	1,	By Cash, Bryant.....	" 258.	33 25
"	1,	By Cash, Barrett.....	" 259.	33 50
"	27,	By Cash, Campbell.....	" 280.	10 00
Sept.	3,	By Cash, Barrett.....	" 292.	14 83
"	3,	By Cash, Bryant.....	" 293.	17 50
"	3,	By Cash, Bryant.....	" 294.	17 50
"	3,	By Cash, Barrett.....	" 295.	26 70
"	3,	By Cash, Williams.....	" 296.	13 75
"	12,	By Cash, Eustis.....	" 310.	100 00
"	30,	By Cash, Eustis.....	" 315.	50 00
Oct.	4,	By Cash, Barrett.....	" 327.	13 13
Sept.	19,	By Cash, Richards & Cooley.....	" 340.	14 98
Oct.	31,	By Cash, Eustis.....	" 389.	50 00
Nov.		By Cash, Expense Account.....	" 407.	276 26
"	30,	By Cash, Eustis.....	" 457.	50 00
To Balance to Current Expense.....				1,430 17
				<u>1,430 17</u>
				\$1,792 20

\$1,792 20

## LIBRARY AND READING ROOM.

1877.	To Cash, 2 Vols. Cyclopedia.....	\$17 20	
	To Cash, 4th Vol. Cyclopedia.....	8 60	
	To Cash, Dictionary.....	3 00	
Jan. 9,	By Cash, Papers and Magazines..... Voucher No. 15		\$ 93 10
" 9,	By Cash, Papers.....	" 16	5 00
" 31,	By Cash, Campbell.....	" 37	20 00
April 14,	By Cash, Campbell.....	" 106	20 00
" 16,	By Cash, Guth & Breest.....	" 110	33 60
May 2,	By Cash, Currie.....	" 128	16 60
" 5,	By Cash, Campbell.....	" 134	15 00
" 14,	By Cash, Guth.....	" 141	44 80
April 23,	By Cash, Paper.....	" 160	1 60
May 3,	By Cash, Express.....	" 165	3 75
" 31,	By Cash, Campbell.....	" 179	15 00
June 6,	By Cash, Currie.....	" 194	10 35
" 12,	By Cash, Miss Rollit.....	" 211	14 25
" 16,	By Cash, Binding books.....	" 216	6 60
" 27,	By Cash, Campbell.....	" 269	11 10
Sept. 3,	By Cash, Campbell.....	" 305	5 10
" 4,	By Cash, Rockwood.....	" 306	5 77
" 17,	By Cash, Binding books.....	" 309	21 20
Feb. 10,	By Cash, Books.....	" 50	255 00
April 28,	By Cash, Books.....	" 116	220 90
July 27,	By Cash, Books.....	" 247	230 50
Sept. 30,	By Cash, Campbell.....	" 317	50 00
Oct. 3,	By Cash, Books.....	" 326	391 94
Aug. 5,	By Cash, Campbell.....	" 351	9 95
Sept. 10,	By Cash, Campbell.....	" 355	7 58
" 30,	By Cash, Miss Rollit.....	" 359	13 50
Oct. 31,	By Cash, Campbell.....	" 396	50 00
Nov. 1,	By Cash, Miss Rollit.....	" 399	19 42
" 3,	By Cash, Library Journal.....	" 403	5 00
Dec. 5,	By Cash, Tappan Library.....	" 423	1,775 25
" 7,	By Cash, Books.....	" 429	11 17
" 7,	By Cash, Books.....	" 433	23 00
May 2,	By Cash, Books.....	" 438	5 60
" 15,	By Cash, Books.....	" 439	5 00
June 4,	By Cash, Books.....	" 440	8 35
" 14,	By Cash, Books.....	" 441	11 20
" 18,	By Cash, Books.....	" 442	7 45
July 21,	By Cash, Books.....	" 443	10 00
Sept. 12,	By Cash, Books.....	" 444	5 00
" 10,	By Cash, Books.....	" 445	8 10
Nov. 8,	By Cash, Books.....	" 446	4 50
Dec. 15,	By Cash, Books.....	" 447	2 80
Nov. 30,	By Cash, Campbell.....	" 458	50 00
Dec. 7,	By Cash, Books.....	" 450	159 07
" 17,	By Cash, Books.....	" 461	54 20
	To balance to Current Expense.....	3,708 50	
		<u>\$3,737 30</u>	<u>\$3,737 30</u>

## MUSEUM.

Oct. 4,	By Cash..... Voucher No. 330		23 06
1876.			
Nov. 14,	By Cash.....	" 347	111 36
1877.			
May,	By Cash.....	" 348	324 33
Oct. 6,	By Cash.....	" 349	26 88
" 10,	By Cash, Minerals.....	" 367	100 00
Nov. 8,	By Cash, Herrick.....	" 404	17 40
	To Balance to Current Expense.....	\$603 03	
		<u>\$603 03</u>	<u>\$603 03</u>

UNIVERSITY OF MINNESOTA.

GEOLOGICAL SURVEY ACCOUNT.

1877.	To Cash.....		\$2,000 00	
July	By Balance at last statement.....			\$4,310 55
1876.	Dec. 19, By Cash, Whitman.....	Voucher No. 17		30 00
1877.	Jan. 12, By Cash, Whitman.....	"	29	150 00
	" 31, By Cash, Winchell.....	"	38	200 00
	Feb. 9, By Cash, Analyses.....	"	49	60 00
	" 28, By Cash, Winchell.....	"	79	200 00
	April 25, By Cash, Analyses.....	"	114	194 00
	March 31, By Cash, Winchell.....	"	149	200 00
	April 30, By Cash, Winchell.....	"	123	200 00
	May 31, By Cash, Winchell.....	"	174	200 00
	June 8, By Cash, Winchell.....	"	203	200 00
	" 19, By Cash, Expense account.....	"	217	100 00
	July 16, By Cash, Tribune Co.....	"	233	12 00
	" 19, By Cash, Herrick.....	"	235	50 00
	Aug. 14, By Cash, Analyses.....	"	264	75 00
	" 18, By Cash, Expense account.....	"	265	25 00
	July 31, By Cash, Winchell.....	"	275	200 00
	Aug. 31, By Cash, Winchell.....	"	289	200 00
	" 28, By Cash, Herrick.....	"	284	50 00
	Sept. 1, By Cash, Winchell.....	"	290	100 00
	" 3, By Cash, Rhame.....	"	299	16 50
	Oct. 4, By Cash.....	"	329	55 85
	" 4, By Cash.....	"	331	33 14
	" 5, By Cash, Herrick.....	"	334	50 00
	" 5, By Cash, Herrick.....	"	335	10 00
	Sept. 30, By Cash, Winchell.....	"	361	200 00
	Oct. 31, By Cash, Winchell.....	"	397	200 00
	Nov. 30, By Cash, Winchell.....	"	455	200 00
	To Balance.....		\$5,522 04	
			\$7,522 04	\$7,522 04

BUILDING ACCOUNT.

	To balance at last statement.....		\$7,807 54	
1876.	Dec. 30, By Cash, Prof. Campbell's room.....	Voucher No. 9		\$ 15 90
1877.	Jan. 26, By Cash, Bisbee & Moses.....	"	32	194 71
	Mar. 22, By Cash.....	"	98	15 69
	May 18, By Cash, Osborn.....	"	144	7 85
	July 27, By Cash, Lyons.....	"	249	20 75
	" 27, By Cash, Lyons.....	"	250	30 30
	Aug. 27, By Cash, Beckman.....	"	281	30 75
	Sept. 3, By Cash, Lyons.....	"	297	26 50
	" 1, By Cash, Brick.....	"	304	8 00
	Balance.....			7,457 09
			\$7,807 54	\$7,807 54

HEATING AND FURNISHING ACCOUNT.

	To balance at last Statement.....		\$2,027 65	
1877.	Jan. 15, By Cash, Gas Fixtures.....	Voucher No. 30		\$ 9 65
	" 15, By Cash, Drain.....	"	31	3 00
	Feb. 27, By Cash, Chairs.....	"	72	36 60
	" 26, By Cash, Work in Chemical Lab.....	"	75	42 65
	March 6, By Cash, Cauvet.....	"	88	22 91
	" 6, By Cash, Benjamin.....	"	95	31 83

April	7,	By Cash, Butler .....	Voucher No. 103	85 02
"	7,	By Cash, Wheaton & Reynolds.....	" 105	24 67
"	17,	By Cash, Museum .....	" 111	35 00
"	27,	By Cash, Museum .....	" 115	16 30
"	28,	By Cash, Museum .....	" 117	23 44
"	28,	By Cash, Museum .....	" 119	22 67
May	4,	By Cash, Museum .....	" 131	19 38
"	4,	By Cash, Museum .....	" 132	26 03
"	12,	By Cash, Moore .....	" 137	8 50
"	12,	By Cash, Moore .....	" 138	65 00
"	14,	By Cash, Museum .....	" 142	66 21
"	18,	By Cash, Museum .....	" 143	90 97
April	24,	By Cash, Museum .....	" 162	12 28
May	23,	By Cash, Pomeroy & Co.....	" 170	2 88
June	27,	By Cash, Museum .....	" 223	44 50
"	27,	By Cash, Museum .....	" 224	20 91
July	26,	By Cash, Museum .....	" 244	11 79
Sept.	3,	By Cash, Stetson & Nelson.....	" 300	14 63
Feb.	29,	By Cash, Parrott.....	" 336	350 00
Sept.	19,	By Cash, Gardiner.....	" 338	4 50
Oct.	1,	By Cash, Carpeting.....	" 364	3 82
"	10,	By Cash, Museum Locks.....	" 368	17 55
"	19,	By Cash, Museum Cases .....	" 374	100 00
"	20,	By Cash, Matting.....	" 376	229 36
Nov.	19,	By Cash, Talbert & White.....	" 415	42 38
"	21,	By Cash, Hardware .....	" 417	37 11
Dec.	3,	By Cash, Stoves .....	" 425	55 50
"	17,	By Cash, under Winchell.....	" 465	4 75
"	17,	By Cash, Museum Cases .....	" 466	200 00
		By balance.....		245 86
				<hr/>
				\$2,027 65
				\$2,027 65

## SUMMARY OF BALANCES.

Building Account—	
To Balance.....	\$7,457 09
Heating and Furnishing—	
To Balance.....	245 86
Experimental Farm Fund—	
To Balance.....	671 87
Land Sales Fund.....—	
To Balance.....	813 42
Geological Survey—	
By Balance.....	\$5,522 04
Current Expense—	
By Balance.....	6,227 08
By Balance.....	2,560 88
	<hr/>
	\$11,749 12
	\$11,749 12



ELEVENTH ANNUAL REPORT

OF THE

PRESIDENT

OF THE

UNIVERSITY OF MINNESOTA,

TO

THE BOARD OF REGENTS.

1877-8.



THE UNIVERSITY OF MINNESOTA, }  
MINNEAPOLIS, MINN., }  
December 1st, 1877. }

*Hon. H. H. Sibley, President of the Board of Regents:*

SIR: I have the honor herewith to transmit the eleventh Annual Report of the condition and progress of the University.

I have the honor to be, Sir,

Very respectfully,

Your obedient servant,

WILLIAM W. FOLWELL,

President.

# REPORT OF THE PRESIDENT OF THE UNIVERSITY.

*To the Honorable, the Board of Regents:*

The University year 1876-7, began on the 18th day of September, 1876, and ended June 22d, 1877. The dates of the recesses and legal holidays, together with the names and residences of the officers and students for the year, may be seen in the Annual Calendar for the year.

## CONDITION AND PROGRESS.

### ATTENDANCE.

The following tables show the enrollment and attendance of students for the year:

#### SUMMARY, 1876-7.

COLLEGE OR DEPARTMENT.	CLASS.	Gentlemen.	Ladies.	Totals.
Science. Literature and the Arts.....	{ Graduates ..	1	1	2
	{ Senior.....	14	4	18
	{ Junior.....	11	2	14-34
Mechanic Arts.....	{ Senior.....	1	.....	1
	{ Junior.....	2	.....	2-3
Agriculture. }	Advanced Course.....	{ Junior.....	1	1
	Elementary Course.....	{ III. and IV..	1	1-2
Collegiate Department.....	{ First.....	23	14	37
	{ Second.....	18	12	30-106
	{ Third.....	47	18	65
	{ Fourth.....	51	22	73-138
	{ Special.....	40	19	59-59
Totals.....		210	93	*303

\*In the Calendar for 1876-7. one name was counted twice, by mistake, making this total 304.

## OR, BY CLASSES ONLY.

Graduates.....	2
Seniors—of all Departments.....	19
Juniors—of all Departments.....	17
Sophomores—First Class, Collegiate Department.....	37
Freshmen—Second Class, Collegiate Department.....	31—106
Preparatory } Third Class, Collegiate Department.....	65
Preparatory } Fourth Class, Collegiate Department.....	73—138
Special.....	59—59
Total.....	303

## COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS.

CLASS.	COURSE.	Gentlemen	Ladies.	Total.
GRADUATES.....		1	1	2—2
SENIOR.....	{ Classical.....	9		9
	{ Scientific.....	4		4
	{ Modern.....	1	4	5—18
JUNIOR.....	{ Classical.....	6		6
	{ Scientific.....	4	2	6
	{ Modern.....	1	1	2—14
Totals.....		26	8	34

## COLLEGE OF THE MECHANIC ARTS.

CLASS.	COURSE.	Gentlemen	Ladies.	Total.
SENIOR.....	Architecture.....	1		1
JUNIOR.....	Civil Engineering.....	2		2
Totals.....		3		3

## COLLEGE OF AGRICULTURE.

Advanced Course, Junior Class, Gentlemen.....	1
Elementary Course, Gentlemen.....	1
Total.....	2

## COLLEGIATE DEPARTMENT.

CLASS.	COURSE.	Gentlemen	Ladies.	Total.
FIRST.....	{ Classical .....	9	1	10
	{ Scientific .....	12	7	19
	{ Modern .....	2	6	8
		23	14	37
SECOND.....	{ Classical .....	5	2	7
	{ Scientific .....	11	4	15
	{ Modern .....	2	6	8
		18	12	30
THIRD.....	{ Classical .....	18	1	19
	{ Scientific .....	22	2	24
	{ Modern .....	7	15	22
		47	18	65
FOURTH.....	{ Classical .....	12		12
	{ Scientific .....	31		31
	{ Modern .....	8	22	30
		51	22	73
SPECIAL STUDENTS.....		40	19	59
Totals.....		179	85	264

Two hundred and seventy-five (275) students were registered as residents of Minnesota, the following counties being represented:

Anoka, 1; Becker, 3; Blue Earth, 8; Brown, 5; Carver, 5; Crow Wing, 1; Dodge, 6; Douglas, 7; Fillmore, 19; Freeborn, 2; Goodhue, 9; Hennepin East, 47—city 42, county 5; Hennepin West, 78—city 51, county 28; Kanabec, 1; LeSueur, 4; Meeker, 2; Mower, 1; Nicollet, 6; Nobles, 1; Olmsted, 3; Ramsey, 16; Rice, 4; Saint Louis, 2; Scott, 1; Sibley, 1; Stearns, 6; Stevens, 1; Steele, 6; Wabasha, 17; Washington, 12; Waseca, 1; Winona, 8; Wright, 7. Thirty-three counties.

Eighteen (18) students were registered from other States and countries, as follows:

Illinois, 1; Iowa, 3; Maine, 3; Michigan, 1; New Hampshire, 1; New York, 1; Ohio, 2; Wisconsin, 4; Nova Scotia, 2.

One hundred and forty-four were engaged in some remunerative employment, and seventy are believed to have earned their whole support. Eighty-seven had been teachers.

## THE WORK OF THE YEAR.

The attention of this Board is respectfully called to the following exhibit of the kinds and amounts of work performed in the several departments of instruction, as reported by the respective officers in charge:

Subjects.	Instructor.	Class.	No. of Exercises	No. of Students	Term.
<b>MATHEMATICS.</b>					
Algebra, Elementary.....	Thompson.	Fourth.	40	34	I.
Algebra (advanced).....	Thompson } Lundeen. }	Fourth.	65	70	II.
Algebra ".....	Thompson } Lundeen. }	Third.	55	60	III.
Solid Geometry.....	Thompson.	Second.	13	42	I.
Plane Trigonometry.....	"	Second.	45	43	I.
Spherical Trigonometry.....	"	Second.	30	40	I.
Conic Sections.....	"	Second.	40	34	III.
Analytical Geometry.....	"	First.	20	30	II.
Surveying.....	Peck.	Second.	24	34	III.
Differential Calculus.....	Thompson.	Junior.	58	5	I.
Integral Calculus.....	"	Junior.	50	5	II.
Elementary Astronomy.....	Lundeen.	Fourth.	50	21	III.
Descriptive Astronomy.....	Thompson.	First.	40	31	III.
Plane Geometry.....	Clarke, J. S.	Third.	60	72	I.
Practical Astronomy.....	Thompson.	Senior.	41	4	III.
<b>CHEMISTRY.</b>					
Analytical Chemistry.....	Peckham.	First.	31 d.*	12	I.
" ".....	"	Junior.	33 d.	2	I.
" ".....	"	Senior.	32 d.	2	I.
" ".....	"	First.	22	10	III.
" ".....	"	Senior.	55	2	II.
" ".....	"	Junior.	60	2	} III.
" ".....	"	Senior.	60	1	
General Chemistry.....	"	Second.	48	34	II.
Applied Chemistry—Lectures	"	Second.	41	24	III.
" —Recitations.....	"	Second.	18	24	III.
Analytical Chemistry.....	"	Graduate.	60	2	III.
" ".....	"	Specials in	60	3	III.
" ".....	"	Med. Chem.			
" ".....	"	Specials in As- saying.		2	III.
<b>PHYSICS.</b>					
Mechanical Physics.....	Rhame.	First.	55	12	I.
Molecular Physics.....	Peck.	Second.	54	34	I.
Natural Philosophy.....	Peck.	Third.	54	24	I.
<b>GEOLOGY.</b>					
Dynamical Geology, 1st Sec...	Winchell.	Third.	53	25	II.
" " 2d Sec.....	"	Third.	53	38	II.
Mineralogy and Lithology....	"	Junior.	61	8	II. &c.
Historical Geology.....	"	Junior.	37	5	III.
" " —Lectures	"	Junior.	18	5	III.

\* Double hours.

Subjects.	Instructor.	Class.	No. of Exercises	No. of Students	Term.
<b>BOTANY.</b>					
1st Section.....	Leonard.	Third.	57	24	III.
2d Section.....	"	Third.	57	16	III.
ZOOLOGY.....	Lacy.	Second.	53	2	II.
		First.	57	13	III.
PHYSICAL GEOGRAPHY.....	Lacy.	Fourth.	54	39	I.
<b>ENGLISH, &amp;C.</b>					
Elements of Criticism.....	Marston.	Senior.	54	14	I.
English Literature.....	"	Junior.	54	15	I.
" ".....	"	Junior.	21	6	II.
" ".....	"	Junior.	31	5	III.
Logic.....	Folwell.	First.	52	28	I.
Rhetoric.....	Marston.	First.	55	32	III.
Anglo-Saxon.....	"	Second.	53	7	I.
English Composition.....	Mrs. Smith.	Fourth, 2 §§	108	75	I.
Study of Words.....	"	Fourth.	54	46	II.
Rhetorical Exercises (public)	Marston.	Senior & Jun.	145	32	I. II. III.
" " (class).....	"	Junior.	10	15	I. II. III.
" " (class).....	"	First and Sec.	37	63	II. III.
Rehearsals.....	"	Senior & Jun.	250	29	I. II. III.
" ".....	"	First.	60	31	II. III.
Essays and Orations criticised	"	Senior & Jun.	160	32	I. II. III.
Essays criticised.....	"	First.	95	31	II. III.
Lectures.....	"	Junior and I.	14	47	I. III.
Rhetorical Exercises.....	Laing.	First.	8	33	I.
Essays corrected.....	"	First.	60	32	I.
Elocution.....	"	Third.	10	62	I.
" ".....	"	Third, 3 §§.	30	60	II.
" -Lectures.....	"	Third.	4	60	II.
Rhetorical Exercises.....	"	Tourth.	21	67	III.
Essays corrected.....	Mrs. Smith.	Fourth.	268	67	III.
		Fourth.	650	80	I.
<b>GERMAN.</b>					
Minna von Barnhelm.....	Moore.	Second.	55	19	I.
Faust.....	"	Junior.	54	4	I.
German Grammar.....	"	Third.	55	27	I.
" ".....	"	Jun. and Third	53	26	I.
Hermann and Dorothea.....	"	Second.	50	20	II.
Grammar and Reader.....	"	Third.	50	22	II.
Wilhelm Tell and Germ. Lit.	"	Senior & Jun.	30	5	II.
Grammar and Reader.....	"	Jan. and Third	50	27	II.
Egmont and History.....	"	Junior.	36	5	III.
Wilhelm Tell.....	"	Second.	55	18	III.
Grammar and Reader.....	"	Third.	55	23	III.
" ".....	"	Jun. and Third	55	22	III.
<b>FRENCH.</b>					
French Drama.....	Campbell.	Junior.	60	5	II.
" Classical Prose.....	Campbell.	Junior.	60	4	III.
" Grammar, &c.....	Laing.	First.	50	33	I.
" Reader, &c.....	"	First.	54	20	II.
" Selections.....	"	First.	58	26	III.
<b>ITALIAN.</b>					
Grammar, &c.....	Laing.	Senior.	50	5	II.
Reading.....	"	Senior.	15	3	III.
<b>LATIN.</b>					
Plautus.....	Brooks.	Senior.	55	13	I.
" Papers.....	"	Senior.	26	13	I.
Horace.....	Hutchinson.	First.	60	20	I.
" Papers.....	"	First.	20	20	I.
Cicero.....	Clarke, J. B.	Third.	41	29	I.
Cæsar.....	Clarke, J. S.	Third.	55	19	I.
" Papers.....	"	Third.	38	19	I.
Grammar and Reader.....	Clarke, J. B.	Fourth.	41	28	I.
Cæsar.....	Clarke, J. S.	"	60	21	I.
" Papers.....	"	"	42	21	I.
Tacitus.....	Brooks.	Junior.	57	9	II.

Subjects.	Instructor.	Class.	No. of Exercis's	No. of Students	Term.
<b>LATIN, (Continued.)</b>					
Hoface .....	Clarke, J. S.	First.	51	18	II.
Livy .....	"	Second.	53	27	II.
Virgil .....	"	Third.	52	34	II.
" Papers .....	"	"	34	34	II.
" Papers .....	"	"	52	12	II.
" Papers .....	"	"	12	12	II.
Cæsar .....	Clarke, J. B.	Fourth.	55	25	II.
Grammar and Reader .....	"	"	55	26	II.
Cicero, de Senectute & Plautus .....	Brooks.	Junior.	57	8	III.
Livy .....	Clarke, J. S.	Second.	53	20	III.
Cicero .....	Hutchinson.	Third.	54	12	III.
Virgil .....	Clarke, J. S.	"	53	26	III.
" Papers .....	"	"	26	26	III.
Cæsar .....	"	Fourth.	53	17	III.
Cicero .....	Hutchinson.	"	55	18	III.
<b>GREEK.</b>					
Plato .....	Brooks.	Junior.	57	6	I.
" Lectures .....	"	Junior.	4	6	I.
" Papers .....	"	Junior.	25	6	I.
Homer .....	Hutchinson.	Second.	56	4	I.
" Papers .....	"	"	4	4	I.
Xenophon .....	"	Third.	56	21	I.
Grammar and Reader .....	"	Fourth.	55	9	I.
Aristotle .....	Brooks.	Senior.	55	9	II.
" Lectures .....	"	Senior.	3	9	II.
Thucydides .....	Hutchinson.	First.	54	9	II.
" Papers .....	"	"	9	9	II.
Homer .....	"	Second.	53	4	II.
" Papers .....	"	"	4	4	II.
Xenophon .....	"	Third.	53	21	II.
" Papers .....	"	"	21	21	II.
Grammar and Reader .....	"	Fourth.	54	12	II.
Æschylus .....	Brooks.	First.	56	8	III.
" Lectures .....	"	"	2	8	III.
" Papers .....	"	"	32	8	III.
Thucydides .....	Hutchinson.	Second.	55	6	III.
Grammar and Reader .....	"	Fourth.	55	7	III.
PHILOLOGY (theoretical) .....	Campbell.	Junior.	24	13	II.
<b>MENT. &amp; MOR. PHILOSOPHY.</b>					
History of Philosophy .....	Campbell.	Senior.	40	16	I.
Ontology .....	"	Senior.	25	16	I.
Ethics .....	"	Senior.	40	16	II.
Evidences of Christianity .....	"	Senior.	20	16	II.
Natural Theology .....	"	Senior.	16	17	III.
Psychology .....	"	Junior.	60	13	III.
Psychology .....	"	Senior.	60	4	III.
Natural Theology .....	"	Graduate.	16	1	III.
<b>HISTORY.</b>					
English History .....	Laing.	Fourth.	50	32	I.
General History .....	"	Fourth.	58	67	III.
Civil Government .....	"	Senior.	54	10	II.
" Lectures .....	"	Senior.	5	10	II.
Mediæval History .....	Mrs. Smith.	First & Second	55	6	II.
Modern History .....	"	First & Second	57	4	III.
Historical Papers .....	"	First & Second	34	6	II. & III.
<b>HISTORY OF CIVILIZATION.</b>					
Guizot .....	Folwell.	Junior.	33	13	II.
<b>POLITICAL ECONOMY.</b>					
Lectures .....	Folwell.	Senior.	40	16	III.





a matter for consideration, the propriety of forming the professors concerned into an examining committee under the authority of the Board, and assigning definite compensation for the work. It may be assumed that the professor's duty as such begins when the student has gained his admission under the conditions established by the Board.

#### COURSES OF STUDY.

Agreeably to the desire of the Board, the General Faculty devoted during the University year a great deal of time and labor to the revision of the courses of study in the various departments and colleges. The new schedule may be seen in full in the calendar for the year 1876-7. The most of the changes consist in transpositions of work from term to term in such a way as to distribute the work of the teaching force more equally and conveniently with reference to class rooms and apparatus.

The sphere of History is considerably enlarged at the expense of Mathematics; that of English at the expense of Latin. The department of French has been somewhat restricted, in order to save the necessity of employing an additional professor.

In general the arrangement of the courses and the studies is such that a considerable increase in the number of students will not require any material addition to the teaching force, an expectation fully justified by the experience of the past three months. It is believed that the present courses of study now offered by you to the youth of Minnesota will compare favorably with those of similar institutions, and it is a fortunate circumstance that they have the cheerful approval of the officers charged by you with giving the instruction.

#### *"Summer Courses."*

At this point I desire to ask attention of the Board to an important project brought forward at the last annual convention of the State Teachers' Association: I cannot, perhaps, do better than to insert a brief extract from the annual address of the President, Professor Wm. Gorrie, of Stillwater:

"The earnest teacher never loses sight of opportunities for his own improvement. In the steady advancement of science and the progress of thought, it behooves him to keep even pace or be left ignominiously behind. A teacher behind the times in methods of instruction or in a knowledge of the sciences is fit only to be placed with the fossils of the past. The pioneers and explorers in the fields of thought are few, but the number who will accept the results of their toil are great. Some one has said that "our country especially needs to-day men and women of convictions." This is a fact. The times and the cause of education demand thinkers—men and women who reach out for facts, who delight by patient, persevering industry to reduce theories to laws and to comprehend and utilize the facts in nature and science. Realizing this, energetic enthusiastic teachers, in other states, have arranged for special courses of study during vacations, where instruction in the most modern phase of science can be obtained. Botanical or geological

expeditions are projected and enjoyed, and profitable recreations they are. Classes are formed to whom the latest chemical discoveries and methods of analysis are disclosed. Vacation tours are projected to visit places of practical interest to the teacher. Schools in drawing, mining and metallurgy are afforded. Now we in Minnesota can scarcely afford to go East to enjoy these advantages. What shall we do? sit still and let others surpass us, or go to work and from our own resources build up the best of the kind we can at home? I believe the time has come for the incipiency of such a movement, and that it devolves upon us to take measures leading to the establishment of such opportunities for further improvement as we all need and of which many would gladly avail themselves.

I would respectfully submit the suggestion herein made to the consideration of the Board. I have no doubt that special courses of instruction in Chemistry, Botany, Physics, Geology and other subjects could be carried on during the summer vacation without material expense to the University and to the great advantage of the teachers of the State.

#### ADMISSION.

The whole number of applicants for admission in 1876-7 was one hundred and thirty-four (134). The whole number fully examined was one hundred and twenty-four (124), of whom sixteen (16) failed to pass. Seven of these, however, afterwards obtained admission, by making up deficiencies.

At the beginning of the year fourteen (14) applicants were rejected under the operation of the resolution of the Board of Regents, passed May 10th, 1876, excluding residents of high school districts from the preparatory classes. Five (5) of these, however, having been examined for advanced standing were, upon recommendation of their superintendent, admitted in the second term.

The whole number of new students admitted to instruction was one hundred and six. They selected their courses of study as follows:

Classical Course—Gentlemen.....	18	Ladies.....	2—20
Scientific Course—Gentlemen.....	31	Ladies.....	0—31
Modern Course—Gentlemen.....	10	Ladies.....	34—43
Selected Studies—Gentlemen.....	13	Ladies.....	8—21

The average per cents of merits for the *elementary* branches, in which all applicants are examined were as follows:

Reading, 77; Writing, 71; Spelling, 77; English Grammar, 66; Arithmetic, 71; Elementary Algebra, 56; Geography, 74; United States History, 67; Average, 70.

The existing policy of the Board in regard to admission continues to give excellent results. There is no further interference with the work of the high schools and the liberality of the Board in continuing the fourth class reaches precisely the class of persons intended to be benefitted, namely the youth of those districts which have no high schools in which to obtain their preparation for the

University. It is obvious, however, that the University can not and ought not to carry on this preparatory work indefinitely. It is equally apparent that no part of it should at any time be so suddenly or prematurely discontinued as to leave an unbridged gulf between the University and the schools. As the matter now stands the University education with all advantages and incidents is actually within the reach of *all* the youth of the State who in any practical sense desire it. This seems to me a most noble privilege. Should the Board be forced to demolish those stepping stones which they have erected and so long maintained for reaching the offered advantages and honors, the University would cease to be accessible to all and remain open practically only to the few and the fortunate. Could there be a stronger argument invented to prove the necessity of thoroughly and completely organizing the education of a State?

Such then would be the effect of a premature curtailment of preparatory work by the University, upon the present generation of youth in our State. The effect on the University itself would be injurious in the following ways: (1) the attendance would be cut down excessively; (2) the standard of scholarship would inevitably sink below a reputable limit; and (3) more probably both of these results would supervene.

What the opinions and practice of college boards and faculties in neighboring states, dealing with the same problem, under conditions more favorable than ours, are and have been, may be seen by a reference to the statistics given in the annual report for 1875,\* page 48.

As already remarked, the University cannot carry this load of preparatory instruction indefinitely; the mischief of a premature discontinuance of it has been pointed out. The practical question then is how to secure the giving of preparatory instruction elsewhere. It ought here to be remarked that so long as the University continues without warning and announcement of intention to cease from giving preparatory instruction, there are those who, able and competent to carry on such work, will refrain from doing so. There are probably actual instances in which a part or a whole of the work of a high school has been actually abolished, because the few scholars intending to pursue a college course could in that case get their preparation at the University.

It is therefore essential that the Board fix upon definite times in the future for dropping the remaining grades of preparatory work.

It is equally essential that provision be made for preparatory instruction elsewhere. These two things must go together or loss and damage will be the result. As managers of one of the constituent elements of a system of public education this Board will

\*"Only 8 of the 118 colleges and universities \* \* of the nine states [of the Mississippi Valley north of the Ohio River] report no preparatory students. The colleges of Illinois, Indiana, Nebraska and Wisconsin, without exception, report preparatory students. Four only, out of the 32 colleges of Ohio do not; of the remaining states, Iowa, Kansas, Michigan and Missouri, but one college in each reports no preparatory students. Of all the state universities, that of Michigan alone has rid herself of the burden of fitting her own candidates for admission."

naturally recur in the first instance to the high schools of the State to assume the work of preparing students for the University. But the high schools are municipal establishments supported in the main by local taxation. They may instruct the youth of their own districts, but are under no obligation to receive students from the country. Undoubtedly they would receive and instruct outside students if they were paid for it. The first step then to be taken is to secure from the legislature a permanent appropriation of sufficient amount to pay the tuition of country and village youth in the high schools. Two years ago a bill to effect this object failed, at the close of the session, in the lower house. Pending the consideration of the bill a memorandum of reasons for its passage was laid upon the desks of the members. I would respectfully offer that document to be printed as a part of this report, because I think it clearly summarizes the considerations which should influence the Board and the legislature.

## MEMORANDUM.

*Reasons for Encouraging Higher Education in the State, as Proposed by Senate File No. 305.*

I. In all civilized countries, higher education is encouraged and provided for by statesmen, not only as essential to the well-being of the state, but because of the stimulus it gives to other educational work.

Universities, colleges and polytechnic schools call into being and activity numerous "secondary schools," variously called high schools, academies, gymnasia, etc. These schools draw from a multitude of primary schools. The common schools are best where they are supplemented by prosperous middle schools, and these, in turn, are quickened and elevated by the vitalizing influences of the universities and other institutions of superior education.

Instance: The German Empire, population 41,060,695; square miles, 212,091. Universities and polytechnic schools, 21; having 2,159 teachers and 23,351 students.  
 Secondary schools..... 1,041; " 120,000 "  
 Primary schools .....60,000; " 109,000 " 6,000,000 "

These institutions form substantially the system of public instruction, organized and encouraged by the States of the Empire.

II. In America this natural and necessary gradation of schools has always been recognized.

In the older States are found, (1) the common schools, (2) the academies, (and latterly, high schools,) (3) the colleges. In the newer States, the system is composed of, (1) the public schools, (2) the high schools, (3) the State universities.

III. In common with the newer States of the Union, Minnesota stands committed to the encouragement of higher education:

1. By having accepted from the general government three separate grants of public lands.
2. By having provided in the Constitution for a state university;
3. By a series of legislative acts and liberal appropriations;
4. By having authorized the establishment of municipal high schools, to be supported by taxation;
5. By virtue of custom and public sentiment. It will be impossible for Minnesota to depart from a policy which she has adopted in common with her neighbors, and to which the people are generally attached.

IV. The question then is, "How can Minnesota best encourage higher education?"

Answer.—By organizing and stimulating preparatory schools.

There is a wide gap between the extreme members of our system of public instruction, namely, the common school and the University.

This gap the high schools have not filled, and cannot, without beneficial legislation, fill. Why not?

1. Because, being city or village schools, supported by local taxes, they do not admit and cannot be expected to admit, students residing outside their districts, except on payment of tuition. The result is that there are *no free schools in the State to which a country boy or girl has a right to go to prepare for College*; and this in the face of the indisputable fact that it is from the country districts and the smaller villages that colleges are steadily recruited. Out of 237 students attending the University of Minnesota in 1874, 105 were sons and daughters of farmers.

2. Because the high schools, although in many cases teaching all the branches needed for entering college, *do not arrange their courses* in such a manner as to accommodate students desiring to fit for college. There are instances in which boards and principals take the ground that the high school is the crowning member of the system of public instruction, and thus actually discourage students from going to college or the university.

3. The high schools are few, and are confined to the cities and large villages. There are 100 villages in the State, which for lack of wealth and population cannot have high schools at all; such communities, if aided by the State, can support undenominational academies. This is the New York State plan; \$47,861.98 were appropriated for the support of academies in the year 1874.

There ought to be within ten years one hundred free high schools and academies in the State, accessible directly from the *homes* of the people.

V. What is the consequence of the weak and undeveloped condition of Secondary education?

1. Take the ten States of the Mississippi Valley north of the Ohio River. Out of some 23,000 students attending the colleges, 37 per cent. *only are reported as college students*; 63 per cent. are *preparatory students*, i. e. students who ought to be in preparatory schools and not in colleges. Eighty-three per cent. of the college students in the colleges of the northwest have been prepared by the colleges themselves; about ten per cent. in city high schools, the remaining seven per cent by academies, or by private study. See report of Bureau of Education, 1873 and 1874.

2. Take the State universities of the same States, only one, that of Michigan, has dropped preparatory work; and this has been made possible by an arrangement with the high schools. The Supreme Court of Michigan has decided that it is lawful and constitutional for the high schools to open courses preparatory to the university. The beneficial influence upon the high schools themselves is testified to by witnesses of the highest character. As to the remaining State universities, forty-six per cent. only of their students are *reported as college students*; fifty-four per cent. are preparatories. In the University of Minnesota at the present time, sixty per cent. of the students are preparatory, and forty per cent. proper college students.

VI. The question then is: Will Minnesota perpetuate this costly and extravagant policy of having her University and Colleges prepare their own students, or will she so legislate as to relieve them of this burden, and at the same time carry the secondary education to the doors of the people who pay for it?

The State University has already dropped off one preparatory class, and arrangements have been made to discontinue another. Should this bill become a law, within a short time all preparatory work could be dropped, and a great amount of money saved.

So soon, therefore, as the legislature shall have made suitable and sufficient provision for preparatory instruction in the high the Board should at once determine and announce a time for dropping (1) the fourth class, and (2) the third class. The discontinuance of additional secondary instruction (as contemplated by our general plan of organization) could naturally and wisely be left for future consideration.

The project of holding examinations for admission in different quarters of the State, heretofore authorized by the Board and put into operation in a tentative way the past summer, promises to re-

sult beneficially. The expense of the University is small when compared with the saving to the numerous candidates. The institution is favorably and effectually advertised, and the performances of the candidates are doubtless much better than they would be under the usual circumstances and distractions. There are many conclusive reasons for continuing these examinations. Should the Board so resolve it is important that they be carefully planned and distributed; the number should be restricted as much as possible, and timely notice of all appointments should be extended throughout the several districts.

## GRADUATIONS.

At the fifth annual commencement, held June 7, 1877, the following degrees were conferred :

## COLLEGE OF SCIENCE, LITERATURE AND THE ARTS.

*Bachelors in Arts.*

Graham Cox Campbell.....	Nova Scotia.
Joel Nathaniel Childs.....	Prescott, Wis.
Ebenezer Currie.....	St. Charles.
Frank Eustis.....	Minneapolis.
Fred Eustis.....	Minneapolis.
Stephen Mahoney.....	Belle Plaine.
John Waldo Perkins.....	Monticello.
Charles Wilbur Savidge.....	Cleveland.
Albert McClure Welles.....	White Bear Lake.

*Bachelors in Science.*

Albert Preston Hendrickson.....	St. Paul.
John Charles Kassube.....	Minneapolis.
Edward Burnham Pribble.....	Osseo.

*Bachelors in Literature.*

Matilda Jane Campbell.....	Machias, Me.
Viola Fuller.....	Austin.
Charlotte Adelaide Rollit.....	Minneapolis.

## COLLEGE OF MECHANIC ARTS.

*Bachelor in Architecture.*

Walter Stone Pardee.....	Minneapolis.
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A brief address delivered on this occasion is hereto appended, and offered as part of this report.

The following table shows the number and kinds of degrees which have been conferred by the University. Inasmuch as the degrees form the natural termination of the several undergraduate courses of study, and students are at perfect liberty to choose from the courses, the table may indicate the relative "popularity" of the courses.

	1873.	1874.	1875.	1876.	1877.	Total.
Bachelor of Arts.....	2	1	3	4	9	19
Bachelor of Science.....		1	2	5	3	11
Bachelor of Literature.....			1		3	4
Bachelor of Civil Eng.....			3	3		6
Bachelor of Mech. Eng.....						
Bachelor of Architecture.....					1	1
Bachelor of Agriculture.....						
	2	2	9	12	16	41

#### EQUIPMENT.

##### EXPERIMENTAL FARM.

The report of Assistant Professor Lacy, herewith transmitted, embraces detailed statements of all the operations carried on. While these statements are in themselves interesting and of some value, it ought to be borne in mind that their main worth rests in their relation to the series of which they form a part. In a climate so variable as that of Minnesota, and amid conditions so fluctuating, no one year's observations or experiments can furnish reliable precedents. It is a noticeable fact that one of the eastern agricultural colleges carrying on more extended and varied experiments than perhaps any other, refuses to make any discussion of any single year's observation. The resulting figures are merely published and left for future comparison. The plant house, also under the care of Mr. Lacy, has proved an excellent auxiliary to the horticultural and botanical instruction. As the improvised arrangements and equipment of this establishment give room to a permanent management its usefulness will become more marked and apparent. Credit must also be given to the department of agriculture for a considerable amount of labor in cleaning up the University grounds. The vigorous enforcement by the city authorities of the ordinance prohibiting the running at large of animals, has occasioned much appreciated relief from a chronic annoyance. The question is suggested whether the expense of building and maintaining a long line of boundary fences may not wholly be spared.

The partial extension of these grounds by the judicious liberality of the legislature is a cause of sincere congratulation.

## GENERAL MUSEUM.

The collections have been increased by the accessions from the geological survey and by limited purchases, as will be shown by the report of the curator, appended to the report of the geological survey. Meagre as is the display of objects in this establishment, it renders excellent assistance to instruction in more than one department and attracts and gratifies numerous visitors. I would respectfully ask attention to remarks in the last report touching the value of the museum and the means indispensable to its growth.

The special collections for illustration in the department of ancient languages, history, chemistry, and agriculture have been augmented by additions of much usefulness at inconsiderable expense to the Board. The acknowledgments of the Board are due for the following donations, made through Professor Peckham, to the

## MUSEUM OF TECHNOLOGY.

- 11 specimens of coal, 4 specimens of pig iron, Kanawha Valley, W. Va. Presented by J. D. Budd, Esq., Richmond, Va.
  - 12 specimens of blast furnace slags, iron ores and coal, from the Bellefont Nail Co., Ironton, O.
  - 3 specimens of iron ores and puddling furnace slags from the Covington Rolling mill, Covington, Ky.
  - 8 specimens of cullet and proofs of flint glass from Hemmingray's Glass Works, Covington, Ky.
  - 2 specimens of English and French plate glass from Messrs. Beck & Rank, St. Paul.
  - 24 specimens illustrating the manufacture of American Plate Glass, from the Star Glass Works, New Albany, Ind.
  - 1 large specimen of silver ore, amalgam and core from Diamond Drill, from A. C. Rand, Esq., Minneapolis.
  - 1 large specimen micaceous iron ore, from J. A. Armstrong, Minneapolis.
  - 1 large specimen Navassa phosphatic guano, from John Ott, Esq., Richmond, Virginia.
  - 2 specimens of Minnesota and Dakota coal, from Hon. Wm. R. Marshall, Saint Paul.
  - 4 specimens coal and coke from Gen. St. John, Richmond, Va.
  - 19 specimens Virginia iron ore from R. Peckham, Esq., Richmond, Va.
  - 1 specimen argentiferous galena, from Montana. T. M. Blossom, Esq.
  - 28 specimens Rhode Island coals, ores and slags, from S. F. Peckham.
  - 1 specimen of kaolin, from Greenwood Pottery Co., Trenton, N. J.
  - 18 specimens drystals and ores from gold mines near Georgetown, Col., from S. A. Rank, Esq.
  - 100 lbs. magnetic iron ore, Port Henry Iron Ore Co., Port Henry, N. Y.
  - 100 lbs. magnetic iron ore, Arnold Mine, Ferona, N. Y.
  - 1 glass pot, Whitall, Tatum & Co., New York city.
  - 1 bottle mould, Whitall, Tatum & Co., New York City.
  - 26 specimens illustrating the manufacture of bottle glass. Whitall Tatum & Co., New York City.
  - 15 specimens East India gums and spices from J. W. Rulon & Sons, Philadelphia, Pa.
  - 18 specimens of varnishes and gums used in their manufacture, from Chas. C. Phillips, Philadelphia, Pa.
  - 1 specimen mineral wool, from R. D. A. Parrott, Greenwood furnace, Orange Co., N. Y.
- A large collection of cotton warps and yarns, prints in process of manufacture, materials used in printing, dye woods, etc., collected by S. F. Peckham, and contributed for the most part by the Georgiaville Manufacturing Co., Allen's Paint works and Richmond Manufacturing Co. of Providence, R. I., through their superintendents.



3 specimens of blocks used in hand printing about 1835, from Richmond Manufacturing Co., Providence, R. I.

Specimens of pottery and materials used in its manufacture, from Mercer Pottery Co., Trenton, N. J.

1 specimen of rock salt from Louisiana. Hon. Richard Chute, Minneapolis.

Specimens of Cryolite and products manufactured from it, from Pennsylvania Salt Co., Natrona, Pa.

9 specimens of Stassfurth Salts from Stassfurth, Prussia, obtained through Herr Ernst Althans, Inspector of mines for Silisia, Besla, Silisia.

A collection of furnace products and ores with a diagram illustrating the metallurgical process employed at Freidrichutte near Tarnowitz, in Silisia; also obtained through Herr Althans. An exceedingly valuable collection.

A collection of more than 200 specimens of raw drugs, fixed and essential oils, glues, etc., from Messrs. Noyes, Bros. & Cutler, St. Paul.

A collection of ores and pig irons from Tennessee, Colorado and Lake Superior. Presented by Byron M. Smith, Esq., of Minneapolis.

A valuable collection of gold and silver ores from Colorado. Presented by E. S. Alling, of Ouray, Colorado.

Parties having ores or other technological products which they wish to donate to the Museum of Technology, will please address Prof. S. F. Peckham.

#### LIBRARY.

The number of bound volumes added to the library during the year was 900, of which 51 were donations from various individuals and officers; 461 were purchases; the remainder, 378 were received from the State Library.

Appendix B is a complete list of all these accessions.

The following donations have been duly acknowledged on behalf of the Board of Regents.

#### LIST OF DONATIONS

To the Library of the University of Minnesota during the University year, 1876-7.

Rev. Theo. M. Riley, Minneapolis:  
Some Elements of Religion.

Seneca G. Lapham:  
Biography of Increase A. Lapham.

Prof. R. W. Laing, LL. D., Minneapolis:  
Venable; History of the United States.  
Bryce; Second Greek Book.  
Norton; Elements of Scientific Agriculture.  
Johnson; Elements of Agriculture, Chemistry and Geology.  
Hooker; Natural Philosophy.  
Loomis; Elements of Natural Philosophy.  
Cooke; Cavalry Tactics.

Rev. C. E. Thayer, Minneapolis:  
Horae Solitariae.  
Knowles; Memoir of Mrs. Judson.  
Clement; Memoir of Adoniram Judson.  
Shirlock; Scripture Truths of the Divinity of Christ.  
Virgil; Opera.

Discourses delivered in Murray Street Church.  
 Allen; India, Ancient and Modern.  
 Brace; Hungary in 1851.  
 Smith; History of Wisconsin.  
 Report of Wisconsin State Historical Society for 1856.  
 Quarterly Observer.  
 Report of Minnesota Historical Society for 1856.  
 Agricultural Reports for 1865-66.  
 Brown, Thos.; Lectures on Philosophy.

Hon. Paris Gibson, Minneapolis:  
 Labor in Europe and America.

C. Evans, Librarian, Indianapolis:  
 Catalogue of Public Library of Indianapolis, 1873.

G. C. Campbell, University of Minnesota:  
 Dr. Alexander Forrester's Teachers' Text Book.

Robt. C. Winthrop:  
 Biography of Washington, Bowdoin and Franklin.

Hon. A. R. McGill:  
 Annual Report of the Insurance Department of New York.

W. H. Smith:  
 The Tailed Amphibians.

Col. W. C. Patterson:  
 Campaign of 1861.

W. E. Leonard, B. A., Minneapolis:  
 Elements of Agricultural Chemistry.

Prof. Ezra C. Seaman, Ann Arbor:  
 Views of Nature.  
 A Summary of a Paper "On Life."

Hon. John H. Stevens, Minneapolis:  
 Hedges and Evergreens.

Prof. S. F. Peckham, University of Minnesota:  
 Elementary Chemistry.

Rev. David R. Breed, D. D., St. Paul:  
 History of House of Hope Church.

U. S. Government, through Departments:  
 Hayden; Annual Report of the U. S. Geological Survey.  
 Report of Supervising Architects of Treasury Department.  
 Report of Commissioner of Indian Affairs.  
 Raymond; Statistics of Mines and Mining.  
 Finance Report, 1875.  
 Condition of Affairs in Alaska, 1874.  
 Report of the Chief of Engineers, 1875.  
 Exploring Expedition from Santa Fe to Green river, Geology.  
 Explorations Across Utah in 1859.  
 Report of U. S. Commission of Vienna Exposition, 1873.  
 Report of the U. S. Coast Survey, 1873.  
 Sketch of the U. S. Naval Academy.  
 Dodge; Centennial Album of Agricultural Statistics.

Hon. W. R. Marshall, Ex-Gov., St. Paul:  
 Report of Railroad Commissioner of Illinois for 1875.  
 Report of Railroad Commissioner of Wisconsin for 1874.  
 Report of Board of Railroad Commissioners for 1875.

## Dominion of Canada:

Geological Survey, Reports of Progress, 1874-5.

## U. S. Government:

Complete set of Executive, House and Senate Documents for 1 Session of 44th Congress, 1875-6.

By authority of the last legislature the State Library was authorized and directed to turn over to the University its miscellaneous books and pamphlets. The whole number of bound volumes received was 1473; pamphlets 156; total 1,629. Ninety-eight bound volumes of special value in completing the collections of the Minnesota Historical Society were left in custody of their librarian, Hon. J. F. Williams. There remained 1,375 bound volumes. After setting aside the State and United States documents, duplicates, broken sets and damaged volumes there remained but 378 works to be added to the library. It is unfortunate that a once large and valuable collection of books should have been so decimated and plundered.

## LIBRARIAN'S FUND.

The Librarian herewith presents, as required by resolution of the Board, a full account of the purchases made out of the fund of \$250 placed at his disposal. The whole number of volumes purchased is 226. The sum expended is \$207.72. The balance remaining on hand is \$42.28. It is believed that an inspection of these books will satisfy the Board that the funds have been used judiciously.

## READING ROOM.

The following is a list of periodicals supplied to the Reading room, those marked with a star having been furnished gratuitously by the publishers.

*Quarterlies.*—Journal of Speculative Philosophy, Edinburgh Review, Westminster Review, London Review, North British Review, Mind.

*Bi-Monthly.*—North American Review, International Review.

*Monthly.*—Blackwood's Magazine, Scribner's Magazine, Harper's Magazine, Eclectic Magazine, American Journal of Science, Atlantic Monthly, Popular Science Monthly, Van Nostrand's Engineering Magazine, Appleton's Art Journal, Contemporary Review.

*Semi-Monthly.*—American Bookseller.

*Weekly.*—Library Journal, Littell's Living Age, The Nation, Scientific American, Harper's Weekly, Nature (Eng.,) Uber Land und Meer (Ger.,) Patent Office Gazette,\* Hutchinson Enterprise,\* Glencoe Register,\* Anoka Sun and Republican,\* Minneapolis Freie Presse\* (Ger.,) Minnesota Staats Tidning\* (Swede.)

*Semi-Weekly.*—New York Evening Post.\*

*Daily.*—War Department Weather Map,\* St. Paul and Minneapolis Pioneer-Press,\* Minneapolis Tribune.\*

It is highly desirable that the appropriation for the purchase of periodicals be increased, the present sum barely sufficing for the purchase of a few representative magazines and reviews devoted to general literature and science. The more costly periodicals devoted to specialties, such as chemistry, philology, etc., indispensable to professors ambitious to keep abreast of the advance of their several departments, cannot be afforded. All such matter it must be remembered, is of permanent value when bound and shelved in the library.

The librarian respectfully calls attention to the importance of a printed catalogue of subjects, a matter discussed in full in the last report. I would respectfully ask serious consideration of this matter at the annual meeting.

The following appropriations are respectfully recommended: for the purchase of books \$1000; \$750 to be expended under the direction of the general faculty, \$250 by the librarian as heretofore; for the purchase of periodicals \$200.

## STATISTICS.

The library and reading-room were open seven to nine hours daily, except Sundays and legal holidays, from Sept. 26, 1876, to June 1, 1877, in all 206 days. During vacation the library was open two hours per week for the issue and return of books loaned.

The number of books loaned to students was 2,356; to faculty, 669. The number used in the reading-room by students was 3,200; by professors, no count, but a very large number. The whole number of bound volumes, exclusive of public documents, state and national is 9,217.

According to an actual count there are the following numbers of *works* pertaining to the several departments named:

Mathematics.....	105
Astronomy.....	54
Chemistry.....	61
Physics.....	74
Geology, &c.....	58
Botany.....	26
Zoology.....	50
Physical Geography.....	127
English.....	797
Northern European Languages.....	190
Southern European Languages.....	183
Greek.....	222
Latin.....	223
Comparative Philology.....	165
Metaphysics.....	310
History.....	399
Voyages and Travels.....	728
Biographies.....	450
Social Science.....	313
Elocution.....	21
Public Health, Medicine, &c.....	71
Industrial Drawing.....	20
Fine Arts.....	71
Agriculture.....	142
Civil and Mechanical Engineering.....	158
Military Science.....	76
Education.....	130
Business.....	16
[Divinity].....	458
[Bibliography].....	51

5,749

The loss of 16 volumes (temporarily, it is believed) has led to a strict enforcement of this rule of the Board, that "No person shall, *under any* pretense, remove a book from the library until it has been regularly charged and delivered by the librarian."

The following table shows the use made of the library by students and professors for the last five consecutive years.

Year ending in June.	'73	'74	'75	'76	'77
Biographies.....	121	83	134	147	170
Histories.....	94	139	219	300	489
Novels.....	163	96	176	446	513
Belles Letters, Prose.....	117	101	161	186	267
“ “ Poetry.....	140	107	167	143	156
Ancient Language and Literature	12	41	41	68	54
Modern “ “	53	92	104	64	120
Natural Science and History....	83	106	107	121	93
Mathematics.....	95	43	28	31	18
Travels.....	108	99	145	111	105
Political Science.....	32	23	55	45	84
Miscellaneous.....	191	103	165	169	144
	1,360	1,066	1,569	1,904	2,356
Loaned to Faculty.....	203	166	471	486	669
Used by Students in Reading-R.	370	500	720	1,650	3,200
	1,933	1,622	2,750	4,040	6,225

#### APPARATUS.

The accession of several pieces of electrical apparatus and a celestial globe, is all that is to be noted. There is hardly a single department which is not hindered and crippled for lack of sufficient means of illustration, the department of astronomy conspicuously so.

#### BUILDINGS.

The buildings continue in good condition and with the exception to be noted are sufficient for the accommodation of the departments now organized. Should the means of rapid development be placed within reach of the Board, it would at once become important to plan for the accommodation of increased numbers of students and new departments of instruction. The library cannot be confined to its present quarters for many years; the museum will soon outgrow the space allowed. The museum could be easily accommodated for many years if the space now devoted to the large assembly hall could be vacated. Provision should soon be made for the literary societies, on a permanent and liberal scale.

The immediate and pressing demand, however, is for a drill hall for the military exercises. I would respectfully request that this matter receive immediate and serious attention. The

## MILITARY DEPARTMENT

ought in my opinion to be suitably equipped or promptly abolished. In accepting the grant of public lands of 1862, the State assumed all the obligations incident to the trust. Among other branches to be taught in these national colleges, Military Tactics is expressly "included." A variety of questions present themselves at this point to confuse the discussion, as for example :

1. Shall military exercises be required of all the students ?
2. Shall they merely be *offered* to such as may fancy them, the same as ancient and modern languages, higher mathematics, analytical chemistry, etc., are offered ?
3. What shall be the extent of the military instruction ?
4. Shall students be required to wear a uniform dress ?

All these are after considerations ; the first consideration is that the Military Department be located and equipped in such a manner as to enable it to do *anything* worth naming.

Subtracting the long winter of our latitude from a scholastic year, beginning in September and ending in June, there remains but a very small space in which out-door manœuvres are possible. A drill hall is therefore simply essential to extended and thorough work.

In regard to the past the Board have fully discharged their duty by providing for such exercises and instruction as has been possible with the means and facilities under their control. Although the results have been meagre compared with those which might be expected under more favorable circumstances, still in the aggregate a good deal has been accomplished through the efficiency of the officers of the army stationed here by the War Department. The Board may therefore confidently refer the matter to the Legislature, either to provide the necessary equipment or assume all responsibility for diminished results.

Before leaving the topic I desire to record my opinion, formed after deliberate reflection upon our experience, that the Department of Military Science and Tactics should be liberally supported and encouraged in the national colleges. The present indications are that the time when civilized nations will learn war no more is very far away. It is therefore a wise policy, and one that should be strenuously insisted upon, that the young men who are trained under the national endowment should be so instructed that in case of need they may be competent to act in the nation's defense. I can think of no manner in which the nation can secure the diffusion of military skill and science so widely and efficiently as through these institutions. The number of officers available for giving the instruction ought probably to be greatly increased, not only for the purpose named, but for the reflex influence upon the army itself, through the experience thus acquired by the younger and more scholarly officers detailed as instructors.

There is still much to be done in the way of harmonizing the military work with the ordinary scholastic instruction. In some institutions the garrison discipline can be introduced with great advantage. Others, especially those having no dormitories and instructing both sexes cannot use this routine, but in these

the military exercises, both theoretical and practical, may have their appropriate times and places. The practical question of most immediate importance, in my opinion, is how to grade and classify these exercises, so as to present them in proper succession to the various classes of a school or college, and thus avoid the disgusting monotony of mere "drill." Professor Lundeen has, I believe, already made some excellent arrangements in this regard, and, I am happy to record, has made preparations hereafter to teach his students not merely how to hold and "carry" arms, but how to shoot with them.

I will only add that the military exercises, as a gymnastic, and as a means of cultivating orderly and gentlemanly demeanor, commend themselves at once to all.

#### MISCELLANEOUS.

##### GEOLOGICAL SURVEY.

A memorandum kindly furnished by the State Geologist, Professor N. H. Winchell, in advance of his annual report, enumerates the following contents:

"The Geological Report will consist of detailed reports on four counties (Ramsey, Rice, Rock and Pipestone); a discussion of the water supply in the Red River Valley; reports of Reconnoissances in Wright county; on a hunt for "coal" in Rice county, in Goodhue county and in Morrison county; and along the Northern Pacific and St. Paul & Duluth Railroads; further contribution to the Palaeontology of the Trenton; Report of Prof. Peckham giving analyses of water from Red River Valley, and of samples of limestone from Minneapolis, etc., etc.; Dr. P. L. Hatch's report on Ornithology; and Mr. A. Whitman's on the last year and disappearance of the grasshoppers. There will also be a report on operations in the Museum for the year, giving a list of identified fossils from the Trenton, and a list of minerals added to the Museum."

The recommendations made in the last report are respectfully repeated.

It seems to me of the highest importance that the operations of the survey, heretofore confined to the more accessible part of the State, should at once be extended to those quarters reported to abound in valuable mineral. No work of permanent value, however, can be done in those parts without much more money than has yet been at the disposal of the Board. This subject is most earnestly recommended for immediate consideration. It is probable that the earlier reports of the Survey will have to be reprinted so great is the demand for them by learned societies and citizens.

##### PROPERTY RETURNS.

Under the instruction of the executive committee a set of blanks have been prepared and printed for obtaining and continuing a complete and systematic account of the miscellaneous property of the University. The following are the headings of these blanks:

Return of Public Property appertaining to the [Chem. Lab., &c.,]  
of the University of Minnesota, in custody of Prof.  
for the ending 187

THE UNIVERSITY OF MINNESOTA—RETURN OF PUBLIC PROPERTY.

Class.	ITEMS		On hand at last Report.		Received since last Report.		Total to be Accounted for		Disposed of since last Report.		Remaining on hand.	
			No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.

In connection with this topic I deem it my duty to suggest that considerable improvements could be made by the Board in the manner of conducting its accounts. In particular the number of persons making expenses should be as small as possible, and saving in emergencies no expenses should be made except by vote of the Board or an authorized committee *in advance*; and further when outlays so authorized have been made there should be a single and definite channel through which the vouchers should reach the treasury.

WANTS.

It is proposed at this time merely to summarize the needs of the institution, many of which have been more fully stated and argued in previous reports.

1. A drill hall and gymnasium. Probable cost \$5,000.
2. An astronomical observatory. The sum of \$10,000 would be sufficient to procure and shelter an outfit of working instruments of moderate capacity.
3. A large supply of new books for the library. \$5,000 and upwards.
4. Apparatus and means of instruction in nearly all departments. \$3,000 and upwards. The department of mechanical engineering needs a complete outfit to enable it to do its appropriate work. The Agricultural and Mechanical College of Virginia expended last year in this department the sum\* of \$3,733.07.
5. An independent professorship of Physics. This department is so extensive and so rapidly growing that it cannot consistently nor profitably remain attached to the chair of Chemistry.
6. An independent professorship of Rhetoric. This item was fully discussed in the last report.
7. A professorship of Botany and Zoology; also referred to in the last report.

*For engines, planers, lathes, saws and other machines.....	\$3,234 83
For carpenter's tools.....	178 18
For blacksmith's tools.....	120 71
For miscellaneous tools.....	199 35

\$3,733 07



8. A paid board of examiners. Following the custom of our country we are conferring degrees upon the strength of examinations held by the individual teachers in the several departments of instruction. It needs but a moment's reflection to perceive that such an arrangement as this is essentially absurd. The time must come when American universities will adopt the better custom of those of older and wealthier countries, and separate the teaching and examining functions.

9. New departments, especially that of law, to be opened so soon as the state of the finances will warrant.

10. A ladies' Hall or Home, preferably to be provided by private liberality.

### *THE FUTURE.*

Since the close of the year covered by this report\* the University has entered upon the eleventh year of her practical existence. She has taken her place among the colleges and universities of the northwest, challenging competition and patronage. Considering the newness of the State, the long-continued financial depression of the country, and the repeated visitations of the locust plague within our borders, it must be acknowledged that Minnesota has dealt liberally with the University she has founded, and I trust that the results of the last nine years work will show themselves in the future prosperity and renown of the State. Not far from fifteen hundred young people have been under your care and instruction. But for the existence of this institution and the free gift of its advantages, the great majority of these youth must have been content with the bare rudiments of learning. It is a noble thing for this young commonwealth that it has for so many years kept open the doors of its highest school to the children of the humblest and poorest citizen. That this generous policy has been most gratefully appreciated I am able to testify. The condition of the institution is on the whole gratifying, a goodly number of professorships are ably filled, the buildings are well adapted to the work now carried on, the means and facilities of instruction are creditable to an institution of so short a history, the number of students has increased in a rapid but steady proportion, the higher classes are constantly growing in numbers and culture, while the qualifications of candidates for admission are rising and broadening.

With the present income and equipment the University can continue to exist and to carry on the work she is now doing.

But the question instantly arises, Shall the University of a state advancing in population, wealth and culture, remain in a stationary condition, or shall she keep pace in her appointments with the general progress? Should anyone desire it the stationary condition is not in these times possible. A state university is not exempt from the rule of the market. If the advantages she offers are inferior, students of enterprise will abandon or avoid her. If the state cannot and does not in her public University afford ampler

\*The first scholastic work of the University began Oct. 7, 1867.

and better instruction than private means can, then the state should quit the field. The State University *must* be stronger and greater and more beneficent than any other college or be ridiculous. If this University, therefore, is to live and to maintain a reputable competition with others of its name and rank, its revenues must be immediately and largely augmented.

What Burke said of the state, "The revenue is the state," might with equal truth almost be said of a university. In what manner to increase the annual income, whether by the sale of lands, by state appropriations, by increase of fees, or by all is a question for the Board which I have no occasion to anticipate. The University needs an income of \$50,000 a year for the remainder of the decade, and the sure prospect of a large and steady increase thereafter, if the people desire and are resolved to have a university worthy the title. A comparison of the work and the incomes of other institutions will render this apparent. As a single instance, reference may be made to our next neighbor, Wisconsin. The university of that state has one more department—that of Law—and a few more students than this institution. The present annual income fixed after severe legislative scrutiny, is, in round numbers, \$80,000. Large additional appropriations have been made for buildings, furniture and apparatus. The circumstance of the location of that university at the state capital, in close proximity to the great libraries of the state and the historical society, relieves the university of the enormous cost of collecting and preserving a large library. Happily our state has refrained from the establishment of duplicate libraries, so that doubtless corresponding provision will be made for the library which must here be collected.

If the University then is to compete honorably with her neighbors, if the state through her will afford to her youth educational advantages adequate to the demands of the times and her own honest pride, her income must be at once increased and assured for the future.

The liberal dealing of the past is an earnest that the just and reasonable demands and representations of this Board will be honored by the representatives of the people. It is my conviction that this Board have at all times been over modest and scrupulous in their requisitions on the public resources. In view of the great and precious trust held by you for the present and the coming generations of scholars in our State, I believe you may with confidence appeal to the people for that generous and permanent revenue, by which alone your great work can be successfully prosecuted.

All of which is respectfully submitted.

## APPENDIX A.

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*Short Address by President Folwell, upon conferring the Degrees at the 5th Annual Commencement, June 7, 1877.*

MR. PRESIDENT :—At this hour I waive my privilege of extended speech and only ask leave to say one word about these candidates, and one other word to them.

I could justly commend them to you and praise them as having been diligent in study, punctual and faithful in duty, modest and virtuous in life and conversation, and in many other ways. but I will only mention them to you now as conspicuous for loyalty and pride in their Alma Mater, and as having exerted a strong and steady influence for good during their residence here. In saying this I am sure I detract nothing from the high merit of former classes, and I wish my emphasis to lie upon the circumstance that it is this class as a body whose influence has been so marked and salutary.

Several things have conspired to occasion this. The class has been happily composed of persons who came here with definite aims and resolutions with regard to their education and the use to which they would put it. The majority of them had had or have had successful experience as teachers and were able from the outset to appreciate the relations of all composing the academic community. Something also is due to the circumstance of numbers. Compared with all our former classes this class is a numerous one, and I mention with great regret that since the opening of the spring term, one member, Mr. Harvey Jay Smith, disabled by severe illness, has been forced to drop from the ranks. Happily we have reason to hope for the restoration of his health and his graduation at no distant day.

But irrespective of numbers or other circumstances the individuals composing this body of candidates would at any time have distinguished themselves as I have mentioned. I speak what is well known and acknowledged here, that this class have at all times stood solid and firm for the right and have set a constant and conspicuous example of orderly and sober conduct.

I take pleasure in giving this testimony in a public manner in the presence and hearing of the remaining body of undergraduates, and I will use the occasion to remind them of the great responsibility which rests upon them in maintaining the good name and fame of the University.

There have been great changes in college administration within the past generation. The abolition or amelioration of the dormitory and tutorial system have extended to college students a larger freedom than is perhaps enjoyed by any other class of persons. Although held to strict account for attendance upon the appointed recitations and exercises, and stringently required to perform certain duties they are necessarily for the greater part of their time masters of themselves. At the close of each daily college session, the student body dissolves into the general mass of resident citizens. There is and can be no tutorial visitation nor surveillance. With the obliteration of the old quasi-monastic usages, there has come a corresponding change and betterment in the relations of the members of the University. The broad chasm which once separated lay students from ecclesiastical professors has perceptibly narrowed, and both now stand on common ground as joint seekers after truth and knowledge, and a happy day will it be when the last vestige of that patronizing distrust and grim surliness, which of old marked the intercourse of collegians and their masters, shall be wiped out.

But then, it must be remembered the responsibility for order and progress will no longer rest so much upon college instructors, but all the more upon college students, and upon them must fall no small share of the odium justly attaching to inferior scholarship and disorderly behavior.

More especially will this responsibility fall upon the experienced students of the upper classes who of necessity give the tone and color to the whole contemporary life of the institution.

Dr. Arnold of Rugby, once said to the members of his highest class, "If the sixth form do not support me I must resign this work."

Many a college faculty have felt their hands stayed up by the moral support of a senior class of strong, brave young christian men, or men and women.

I believe the example of the class now about to leave your care will endure, and will have set a wise and beneficent fashion in this University, which will be useful and precious to their successors.

And now one word to the candidates. We part with you to-day not merely as from pupils, but as from fellow laborers and co-partners in a noble work. We remain to carry forward this work. You pass to other duties amid other scenes. You are full of hope and courage, resolved to strike sure and strong for the right. For one I would not too readily disturb your dreams of a smooth and stormless voyage to that haven of prosperity where you would be. No, cherish your ideals, cultivate hope and cheerfulness, resolve to extort comfort out of disaster. "Rejoice O young man in thy youth, and let thy heart cheer thee in the days of thy youth." \* \* these as well as the words which next follow them, and which have often been read in your hearing, are the words of wisdom and inspiration.

Therefore I say be strong, be hopeful, but also be modest. Remember "there is a hand that guides," and which will often best use your plans by utterly thwarting them. Go then as to a post of

duty, remembering that duty dignifies and sanctifies the lowliest toil and that faithfulness in a few things is your surest title to the royal crown.

I have seen somewhere this heraldic device, which I commend to your reflection. On the one hand an altar, on the other a plow, and a motto "Ready for either."

## PROFESSOR LACY'S REPORT.

*Wm. W. Folwell, President of the University of Minnesota :*

SIR :—I respectfully beg leave to submit the following report of the College of Agriculture, for the year ending Oct. 31, 1877.

## INSTRUCTION.

Two students have received direct instruction in agriculture during the past year. One pursued the subject of "How Crops Grow," "How Crops Feed" and "Farm Drainage," during the 2d and 3d terms, 1876-7. And one student at the beginning of the present school year began the subject of "How Crops Grow," but has since withdrawn from the University.

Another year's observation has only confirmed what was written in last report concerning the demand for direct instruction in agriculture. Meanwhile some efforts have been put forth to measure and encourage this demand. In the month of July, 1877, 500 small posters were sent to as many different post-masters, railway agents and newspapers in this State, with the request to post in a conspicuous place. These mentioned with special prominence "two special courses for the years 1877-8, open to all without preliminary examination." How many of these posters ever reached the walls for which they were intended is, of course, unknown. This much only is known—They evoked not one single answer or inquiry.

NOTE.—Later, 500 postal cards, asking for the names and addresses of any young men who might wish to pursue studies in agriculture were sent to farmers of American birth and to editors of newspapers at over 300 different postoffices. To these a few direct answers have been received. To the addresses received circulars of information have been sent together with a postal card, calling particular attention to the special courses above mentioned and stating that if desired special classes would be formed in horticulture, arboriculture, practical agriculture, farm drainage, farm accounts or other similar subjects ; and in case classes were not formed in these subjects, persons could pursue them on their own account and receive all the assistance which the apparatus and teachers of the institution could afford.

This will result in the spread of information relating to the Agricultural College, if nothing more, which, according to the Hon. L. B. Hodges, is much needed. He says: "It is a lamentable fact that thousands of farmers and farmers' sons in Minnesota do not know that there is an agricultural department to the State University—men too who would make great effort to give their sons the advantages you offer, were they only aware of what is taken for granted that every one knows." Some of the cards sent to editors were printed and have led to a few inquiries. With the permission of your Board, this method of advertising will be continued in the future.

#### LIBRARY.

Several important and valuable works on agricultural subjects have been added. The "Farmers' Union," "Prairie Farmer," "Scientific Farmer," "Gardener's Monthly and Horticulturist," and "American Agriculturist," have been regularly received in the Reading Room.

#### MUSEUM.

A case has been constructed in the room to be occupied by the Museums of Agriculture and Technology in the Agricultural building, and the objects thus far stored in a basement room in the main building, will shortly be removed to this case. The College of Agriculture now possesses what is undoubtedly the best collection of grasses, cereals and seeds, to be found in this State; numerous additions having been made from the Experimental Farm, the past season.

#### ORCHARD AND FRUIT GARDEN.

Nothing needing mention has here occurred or been done.

#### NURSERY.

The Larches heretofore growing south of University Avenue near the barn, were transplanted to the sandy knoll north of the Avenue, with a loss of all except about 75 out of 920. The loss was undoubtedly due *both* to the conditions of growth and to faulty method in transplanting. They grew on sandy soil, and when dug, the roots were found to be short and the rootlets few. They were replanted in soil of the same kind, where the nourishment supplied by a limited quantity could not be large. The trees were dug as soon as the frost liberated their roots, and placed in a cold cellar, but even here the buds burst and the leaves started before they were set in the nursery. More than half the branches were cut away. More could not be taken without serious injury to the forms of the trees. But the roots could not obtain sufficient nourishment and moisture to continue the growth already started, and the trees per-

ished. Elms that were dug at the same time, and heeled in until the leaves had opened, then set in a very sandy soil, continued to grow until midsummer, when the drouth caused the leaves to dry and fall. Later, when the rains came, these trees revived and leafed out again.

## VEGETABLE GARDEN.

Experiments with different varieties of garden vegetables have been continued on the same plan, in about the same number, and with the same objects in view as in 1876. The more important results are detailed in the following pages.

## DWARF BEANS.

*Varieties planted.*—Early Six Weeks, Black Wax, White Wax, Early Mohawk, Golden Wax, Early China, Early Valentine, Early Refugee, Newington Wonder, (Busch, Hollists and Carter.)

Concord Bush, Early Fegee, Dun Cranberry, Yellow Eye, White Pea, (Gregory.) Early Round Yellow Six Weeks, (Bliss & Sons.) Early Rachel, (State Experimental Farm.)

The Black Wax, White Wax and Golden Wax far surpassed all others in table quality. These three were about equal in this respect, equal also in earliness and as early as any other variety tried. In other respects they were different. The Black Wax had a long season, but the pods, though numerous, were small and short. The season of the Golden Wax was shorter but the pods much larger and more numerous than those of Black or White Wax.

The Early Rachel was equally early and much more prolific, but wanting in length of season and table quality.

Early Refugee was latest of all and very prolific, being at least two weeks later than those above mentioned.

NOTE.—The names in parentheses are those of the growers of the seeds or of the parties from whom the seeds were procured.

## POLE BEANS.

*Varieties planted.*—London Horticultural, Concord, Boston Market, Pole Cranberry, Rhode Island Butter, Giant Wax, Marblehead Champion, Painted Lady, White Pole Cranberry, Yard Long, Mottled Cranberry, Australian Runner, Lamberson's White, Kentucky Wonder, (Gregory.) Case Knife, Sieva, Lima, Scarlet Runner, (Busch, Hollister & Carter.) Dreer's Improved Lima, Indian Chief, (Bliss & Sons.) Southern Prolific, (U. S. Department of Agriculture.)

The difference in season and productiveness between Lima and Dreer's Improved Lima was not very marked. Such difference as there was, however, was in favor of Dreer's Improved Lima.

The Southern Prolific was indeed very prolific in blossoms and finally in pods, but these set so late that only the exceptionally late



season permitted us to see that the pods were very long and very tender, turning yellow when fit for use. A snap bean. The vine was very vigorous.

## CAULIFLOWER.

*Varieties Planted*—Earliest Dwarf Erfurt, Early Paris, Carter's Dwarf, Veitch's Autumn Giant (Busch, Hollister and Carter,) Italian Early Giant (Gregory.)

Planted on soil which proved to be very ill-suited. The season was equally unfavorable. Under these circumstances, Earliest Dwarf Erfurt was the only variety that formed heads, and these were few and poor.

## EARLY CABBAGES.

*Varieties Planted*—Little Pixie, Early York, Early Jersey Wakefield, Early Winnigstadt, Early Drumhead (Busch, Hollister and Carter,) Wheeler's Imperial, Early Blood Red (James Vick), Sugar Loaf, Early Ulm Savoy (Gregory.)

Above remarks concerning soil and season apply equally to these cabbages. Of the early ones, Early Jersey Wakefield and Early Winnigstadt gave the largest number of fair sized heads. Early Ulm Savoy gave a fair number of small but solid heads. Of the Early Blood Red, but few plants were lost from any cause, and nearly every one produced a head small, but solid.

## LATE CABBAGES.

*Varieties Planted*—Premium Flat Dutch, Fottler's Improved Brunswick, Filderkraut, Large Late Drumhead, Marblehead Mammoth (Busch, Hollister and Carter) Bacalan Late, Large Late Flat Dutch. (U. S. Dept. Agr.)

The same remarks apply concerning season and soil. The heading qualities may be stated as follows:

Premium Flat Dutch, 13 plants produced one head.  
 Fottler's Improved Brunswick, 52 plants produced one head.  
 Filderkraut, 29 plants produced one head.  
 Large Late Drumhead, 4 plants produced one head.  
 Marblehead Mammoth, 8 plants produced one head.  
 Bacalan Late, 26 plants produced one head.  
 Large Late Flat Dutch, 6 plants produced one head.

## SWEET CORN.

The following notes may be of some value:

Early Narragansett. Planted May 16; fit for use August 8; ears of medium size but very short.

Early Minnesota. Planted May 16; fit for use August 8; ears small and short.

Very Early Dwarf. Planted May 16; fit for use August 13; ears small and short.

Early Selected Sweet. Planted May 16; fit for use August 10; ears large but very short.

Crosby's Early. Planted May 17; fit for use August 11; ears large but short.

Moore's Early Concord. Planted May 16; fit for use August 18; ears large but short.

Scott's No. 1. Planted May 17; fit for use August 14; ears large and long.

Marblehead Mammoth. Planted May 17; fit for use August 20; ears very large and very long.

Russell's Prolific. Planted May 17; fit for use August 10; ears small and very short.

Extra Early Maine. Planted May 17; fit for use August 9; ears small and short.

Pratt's Early. Planted May 17; fit for use August 3; ears small and short.

#### CARROTS.

*Varieties planted.*—Early Horn, (Busch, Hollister & Carter.) Danver's, Improved Long Orange, Long Orange, Large Altringham, (Gregory.) James' Intermediate, Half Long Carentan, (U. S. Dept. Agr.)

Soil, sandy loam with nearly pure sand at a depth of eight to ten inches. The yield per acre in bushels of 60 lbs. each, was as follows:

Early Horn.....	124.7 bushels.
Danvers.....	146 bushels.
Improved Long Orange.....	50.9 bushels.
Long Orange.....	52.2 bushels.
Large Altringham.....	90.6 bushels.
James' Intermediate.....	55.5 bushels.
Half Long Carentan.....	35.9 bushels.

The superior yield of Danver's and Early Horn is partly accounted for by the fact that they are varieties with short, thick roots.

#### PARSNEPS.

*Varieties planted.*—Hollow Crowned, Student, Long Sugar, (Busch, Hollister & Carter.) Round Early or Turnip, Maltese, (Gregory.) LaVaque's, Fine Sugar, (U. S. Dept. Agr.)

Soil same as for carrots above. A violent wind coming soon after the plants appeared, carried away the soil from around the stems and twisted the latter so badly that but few plants survived. Of these the Round Early or Turnip gave about the best roots, while the Maltese did nearly as well. The remainder were quite inferior to these.

## WINTER SQUASHES.

*Varieties planted.*—Cocoanut, Vegetable Marrow, (Gregory.) Winter Crookneck, Hubbard, Marblehead, Butman, American Turban, Boston Marrow, (Busch, Hollister & Carter.)

The Cocoanut was very small and of inferior table quality. Vegetable Marrow was very inferior in quality. Hubbard, Marblehead and Butman may be compared together. All were severely set back by the drouth. The Hubbard produced the largest size and greatest number of ripe squashes. The Butman stood next in size and number of ripe squashes produced and had more green ones remaining than either of the others. The Marblehead produced the fewest ripe squashes, and those of smaller size.

## GARDEN PEAS.

Name of Variety.	Planting to first Picking	Yield.	Table Quality.	Picking Season.	Size of Vine.
	Days.				
Early Caractacus.....	65	Fair.	Very good.	Short.	20 inch's
Keutish Invicta.....	68	Good.	Good.	Medium.	30-36 "
William I.....	65	Poor.	Fair.	Short.	18 "
Philadelphia Extra Early.....	65	Fair.	Good.	Short.	30-36 "
Extra Early Winship.....	62	Very poor.	Extra.	Short.	18 "
Dexter.....	64	Fair.	Very good.	Medium.	24 "
Alpha.....	65	Very poor.	Fair.	Medium.	6 "
Nutting's No. 1.....	68	Fair.	Extra.	Long.	20 "
Early Kent.....	74	Good.	Fair.	Medium.	40 "
Carter's First Crop.....	73	Very good.	Fair.	Medium.	36-40 "
Tom Thumb.....	68	Good.	Fair.	Medium.	12-18 "
McLean's Little Gem.....	66	Poor.	Poor.	Medium.	12-15 "
McLean's Blue Peter.....	65	Good.	Good.	Long.	36 "
Carter's Extra Early Prem. Gem	65	Poor.	Good.	Medium.	12 "
McLean's Advancer.....	74	Poor.	Extra.	Long.	15-18 "
Dwarf Waterloo Marrow.....	84	Good.	Good.	Long.	18-20 "
Eugenie.....	84	Good.	Very good.	Long.	36 "
Laxton's Prolific Early LongPod	84	Fair.	Good.	Medium.	40 "
Princess Royal.....	84	Very good.	Good.	Long.	36 "
Napoleon.....	84	Good.	Good.	Long.	40 "
Yorkshire Hero.....	84	Good.	Good.	Long.	24-30 "
McLean's Premier.....	84	.....	Extra.	Long.	.....
Champion of England.....	84	Fair.	Good.	Long.	40-48 inch's
Veitch's Perfection.....	86	Good.	Very good.	Long.	36 "
Dwarf Blue Imperial.....	86	Very good.	Very good.	Medium.	36-40 "
Carter's Surprise.....	88	Good.	Very good.	Medium.	24-30 "
Large Gem.....	84	Very good.	Good.	Medium.	24 "
Omega.....	86	Very good.	Good.	Medium.	24 "
Laxton's Superlative.....	82	Fair.	Good.	Medium.	40-48 "
Black Eyed Marrowfat.....	82	Very good.	Poor.	Medium.	40-48 "
Our Extra Early.....	65	Fair.	Good.	Short.	18-20 "
Extra Early Dan O'Rourke.....	74	Fair.	Fair.	Medium.	36 "
Drew's Dwarf.....	84	Fair.	Good.	Medium.	12 "
McLean's Best of All.....	82	Poor.	Fair.	Medium.	30 "
Fill Basket.....	84	Extra.	Fair.	Medium.	24 "

These varieties of peas were planted the same day and treated alike in every respect. The qualities stated in the table will enable any one to choose good varieties. The soil was sandy loam in fair condition.

## FARM EXPERIMENTS.

These have been conducted on the same plan as heretofore with the greatest care and attention to detail. Some of the results are very interesting and offer practical suggestions, if not specific lessons.

## FIELD CORN.

Several varieties of Dent corn were planted, concerning which nothing new was developed.

Canada Early Yellow Flint was the first variety to mature, ripening so much earlier than all others that it seems as if it could not fail in the shortest season. The ears are small (8 rowed) and of medium length, but the stalks are also small and the hills may stand closer together than with the larger varieties.

Compton's Early Field was planted for the first time. It was planted on soil which the drouth affected seriously. It did no better than any other variety would have done under the same circumstances.

One of those facts more curious, perhaps, than important, was observed in connection with the field corn this year. The Canada Early Yellow Flint is a well established variety with eight rows of kernels to each ear. But in the crop of 1876 one ear was found with 12 rows of kernels. This was saved and planted, but not one single kernel grew, although the eight rowed corn from the same crop, planted close by, showed no failure at all.

## TURNIPS FOR STOCK.

Planted on sandy soil in poor condition. The varieties were all obtained from Wm. Rennie, Toronto, Ca. The following figures show the yield per acre (in bushels of 60 lbs.) of each variety :

Carter's Imperial Purple Top Swede.....	444.6	Bushels.
Lang's Improved Purple Top Swede.....	327.6	"
Rennie's Prize Purple Top Swede.....	323.1	"
Skirving's Improved Purple Top Swede.....	294.3	"
Green Top Swede.....	284.3	"
Yellow Aberdeen Green Top.....	37.5	"
Yellow Aberdeen Purple Top.....	44.7	"
Green Globe.....	106.1	"
Norfolk Globe.....	111.3	"
Red Globe.....	152.6	"
Greystone.....	116.0	"

## TWENTY-THREE VARIETIES OF POTATOES.

Planted on sandy soil in poor condition May 8th. This late planting was caused by the fact that many of the varieties were shipped from the East after danger of freezing had passed. The seed was cut to a single eye and dropped in a furrow made by the plow, at intervals of ten to 12 inches one eye in a place. The seed

was then partially covered with the plow and the fertilizer dropped on this covering. The covering was then completed. All varieties received the same kind and quantity of fertilizer. The low yield per acre is explained by the conditions of the soil, the late planting and the unusual drouth.

Name of Variety.	Seed per acre.	Yield per acre.	Yield per acre.
	<i>Bushels.</i>	<i>Large Bush.</i>	<i>Small Bush.</i>
Peerless.....	8.7	84.4	8.7
Shaker Fancy.....	8.4	48.9	5.6
Eureka ..	8.0	77.6	10.2
Late Rose.....	7.9	70.1	9.4
Little Giant.....	7.5	69.2	8.0
Excelsior.....	7.2	48.5	16.0
Dunmore's Seedling.....	7.0	99.3	12.2
Calcutta Seedling ..	6.9	92.2	8.7
Paragon.....	6.6	45.4	18.2
Fluke.....	7.4	67.6	7.9
Burbank's Seedling..	7.4	80.5	15.4
Cayuga Chief.....	6.0	50.0	9.6
Victor.....	8.0	91.3	13.4
Brownell's Beauty.....	5.8	65.7	4.2
Snowflake.....	6.3	67.0	20.7
Extra Early Vermont.....	6.5	70.4	14.3
Ruby.....	5.3	65.4	10.9
Improved Peachblow.....	5.3	9.8	4.9
Superior.....	5.3	9.2	2.8
Centennial.....	5.3	28.3	3.5
Early Rose.....	5.3	36.0	17.3
Alpha.....	5.3	24.0	12.0
Early Ohio.....	5.3	55.9	13.8

#### VARIETIES OF WHEAT.

The following eight varieties were sown April 30th, on sandy loam, in very poor condition. The plats were 549 feet long and 20 feet wide, and contained a little more than one-quarter acre. The seed was sown with a seeder, and it was intended to sow equal quantities, but some kinds having smaller kernels than others ran through faster. Hence the difference in the quantities sown. There was no appreciable difference in the time of ripening. The seed of all except the last variety was grown on the State Experimental Farm in 1876. The Touzelle was received from the U. S. Department of Agriculture. The following table shows the seed sown and the yield of grain and straw per acre:

	Seed per acre.	Grain per acre.	Straw per acre.
	<i>Lbs.</i>	<i>Bushels.</i>	<i>Lbs.</i>
Golden Globe.....	95	11.7	1,440
Fife (seed from Canada, 1876).....	87	12.9	908
Dominion.....	87	9.9	1,123
Mediterranean.....	87	11.2	1,285
Rio Grande.....	87	12.7	1,349
Fife (Minnesota seed).....	87	13.5	1,436
White Fife.....	103	11.4	1,277
Touzelle.....	77	3.2	1,059

The following varieties were also sown but not in quantities to permit of accurate measurement. The Egyptian is a variety with a somewhat branching head. The grain was of fine appearance, but the yield apparently quite low.

The Arnotka is a variety with a square head and very long beards. The yield was not large and the grain was pronounced too hard for flouring purposes.

The Oran gave a very small quantity of poor shrunken grain. Two previous trials with this variety gave similar results.

The Lost Nation apparently gave a larger yield than any other variety sown.

China Spring, Canada Club and Golden Drop showed nothing requiring particular mention.

#### VARIETIES OF OATS.

The following varieties of oats were sown on similar soil, and in the same manner as the varieties of wheat in the above table, with the results stated in the table:

	Seed per acre.	Grain per acre.	Straw per acre.
	<i>Lbs.</i>	<i>Bushels.</i>	<i>Lbs.</i>
Silver White Queen.....	79	23.5	1,083
White Schonen.....	86	29.6	1,246
Canadian.....	99	33.4	1,190
Brunswick.....	83	29.6	1,408
Waterloo.....	99	24.1	1,194
Black Norway.....	71	32.5	1,408
Probsteir.....	79	32.5	1,380
Excelsior.....	91	25.4	1,142
Chinese Hulless.....	64	11.1	1,051
White Dutch.....	117	26.9	1,111

The seed of Probsteir and Chinese Hulless were obtained from B. K. Bliss & Sons; The White Dutch from U. S. Department of Agriculture, the seed of the other varieties was grown on the State Experimental farm in 1876.

## FERTILIZERS ON WHEAT.

Fertilizers were tested on wheat with data and results as given in the following table. The soil was similar to that described above for wheat, and the manner of sowing the wheat the same. The fertilizers were then sown broadcast by the hand and mixed with the soil by a double stroke of the harrow. The difference shown by the figures could be seen in the plats any time after heading out, and bundles were shown at the State Fair showing the same difference very distinctly, save that the guano appeared nearly as good as the Stockbridge manure:

Name of Fertilizer.	Quantity per acre.	Cost per acre.	Cost of Freight per acre.	Total cost per acre.	Grain per acre.		Increase per acre, Grain.		Difference per acre, Straw.
					Bus.	Lbs.	Bus.	Lbs.	
Rectified Guano.....	505.9 lbs	\$16.42	\$5.05	\$21.47	16.5	1,827	5.1	*607	
Stockbridge Manure for Wheat....	458.2 lbs	15.83	4.58	20.41	20.1	2,232	8.7	*1,012	
No Manure.....					11.4	1,220			
Superphosphate.....	892.2 lbs	14.76	8.57	23.33	16.1	1,571	4.7	*351	
Ashes.....	35.7 bus	5.35		5.35	11.9	1,113	0.5	†107	
Gypsum.....	595.2 lbs	4.46		4.46	11.4	1,136		†84	

\*Increase.  
†Decrease.

## FERTILIZERS ON POTATOES.

Fertilizers were tested on potatoes with data and results as given in the following table. For description of soil, manner of planting, manner of applying fertilizer, and causes of low yield per acre, see "Varieties of Potatoes" on a preceding page.

Name of Fertilizer.	Quantity per acre.	Cost per acre.	Cost of Freight per acre.	Total cost per acre.	Potatoes per acre.		Increase per acre.	Difference per acre.
					Bush. Large.	Bush. Small.		
Rectified Peruvian Guano....	381.9 lbs	\$12.75	\$3.81	\$16.56	47.5	21.2	9.5	*6.0
Stockbridge Man. for Potatoes	424.7 lbs	12.75	4.24	16.99	45.5	16.8	7.5	*1.6
No Manure.....					38.0	15.3		
Superphosphate.....	762.1 lbs	12.66	7.36	20.02	39.3	13.5	1.3	†1.7
Ashes.....	33 bus	5.09		5.09	42.4	18.4	4.4	*3.2
Gypsum.....	637.3 lbs	4.81		4.81	43.2	18.4	5.2	*3.2

\*Increase.  
†Decrease.

## FARM CROPS.

Eighty-six bushels of oats were harvested. The hay crop is estimated at 45 tons, about 20 of which have been sold (Dec. 1,) mostly in the stack at \$7 per ton. The season so favored the making that it was put up in perfect condition and the care taken in stacking has prevented subsequent injury. From the farm experiments were obtained in addition to above 30 bushels of wheat, 40 bushels of oats, 150 bushels of corn (ears), and 75 bushels of potatoes.

## IMPROVEMENTS.

Fifty-two elms have been set on either side of the University Avenue, where they were set and failed to grow two years since. Every reasonable precaution was this time taken to insure their life and growth. The method may be a guide to others under similar circumstances, and is therefore worthy of description. It was necessary to get rid of excessive moisture and to secure a suitable soil, the natural one being a stiff peat saturated with water, unfit to sustain the growth of anything but ferns and wild grasses. An elevated site was secured for each tree by digging a ditch 12 to 18 inches deep and 24 to 30 inches wide, around a circular plat ten feet in diameter, throwing the sods and dirt upon this plat, raising it high at the margin and leaving a deep depression in the center. In setting the trees a small load of sandy loam was hauled for each tree. A portion of this was placed in the depression mentioned above, as a sort of bed. On this the tree was set and the remaining soil was placed and packed about the roots. The trees were then thoroughly mulched with old hay the entire elevation being nearly covered to a depth of four or five inches. This mulch preserved the moisture so perfectly that moist soil could easily be reached with the toe of the boot when other trees were dying for want of water. After mulching, to prevent loosening of the roots by swaying of the tops in the wind, the trees were supported by driving stakes in the ground about two feet from the tree but inclining so that the top of the stake crossed the trunk of the tree four or five feet from the ground where the one was tied to the other. The trees themselves were obtained not from the forest, but from the nursery, where they were said to have been transplanted three times, by which the growth of roots had been kept close to the foot of the trunk where they could be easily retained with the tree, furnishing it with organs of support from the first. None were more than one and a half inches in diameter. In pruning, the tree was not cut off below the branches, but the latter were all cut back severely and a portion cut out entirely. The result of this pruning was, not a bean pole, but a tree as soon as growth commenced.

The success of this method must be its test, and it only remains to say that not more than five of these trees failed to live, and make a growth of four to ten inches. Forty four European Larches were set alternating with these elms, but owing to conditions already stated only three or four survived.



A shed, the parts of which were removed from the University Campus some two years ago, has been put together, and is now used for the protection of implements, all of which it enables us to house easily and perfectly.

Some breaking has been done. One piece lying on north side of Avenue, and in the angle made by Avenue and east line of farm, containing about one acre. Another piece lying on south side of Avenue and adjacent thereto, containing about eight acres.

#### PLANT HOUSE.

This presents a very satisfactory condition. The plants are as yet mostly of the common kinds of greenhouse plants, but a few of economic value in other climates are there also. More than forty natural orders and fifty genera are represented by 900 individuals. The health and vigor of the plants have always received favorable comment from visitors. Since the first of April, the work has been performed by Mr. Geo. A. Wood, a student, member of the senior class, and to his industry, faithfulness and intelligence the credit for this condition of the plant house is largely due.

As was believed it would, the plant house has been found a valuable assistance by the instructors in botany, the more so as the University is without the botanical models possessed by many institutions. Its value in this line will increase as its collections become more varied. The plant house has also contributed somewhat to the adornment of the University grounds and will contribute more largely when the latter are properly enclosed.

#### STATE FAIR.

As in former years the Agricultural Department of the University made such exhibit at the State Fair as its materials permitted, and aided by past experience the exhibit was made no less creditable. The following is a brief enumeration of the articles and description of their arrangement :

*From the State Experimental Farm, grown in the season of 1877.*

Ten varieties oats, fifteen varieties spring wheat, three varieties barley, one variety spring rye, one variety field peas, thirty-five varieties garden peas, twenty-two varieties beans, fourteen varieties grass, six specimens wheat showing effect of manures, ten varieties sweet and pop corn, and four varieties field corn. Also twenty-four varieties potatoes, six boxes potatoes showing effect of manures, eighteen varieties tomatoes, eleven varieties squash, two varieties egg plant, three varieties pumpkin, three boxes gourds, four varieties cucumbers, eighteen varieties garden and field beets, and seven varieties carrots.

*From the Museum of Agriculture.*

Thirty-three varieties grass and clover seeds, eight varieties winter wheat, five varieties oats, peas and corn, and twelve kinds of fertilizers.

*From the Agricultural Class Room.*

Map of State Experimental Farm, map of the Forest Area of the United States, colored lithographs of Walter Cole's flock of merino sheep and herd of Devon cattle, and lithograph of C. A. DeGraff's herd of Alderney cattle.

*From the University.*

Painting of University Building, a diagram showing the relation of the University courses of study to the State System of public schools, and a copy of the diploma issued to graduates of the University. Also in this line an oil painting of "Experience Oaks." from Hon. Wm. S. King.

*From the University Plant House.*

Sixty-five plants, embracing Coleus, Pelargoniums, Calla, Oxalis, Photinias, Pandanus, Begonias, Alternanthera, Cacti, Fuchsias, Agaves.

The corn was braided by means of the husks into strings and hung together with the pictures, on the walls above the tables on which the other articles were arranged. Each variety of wheat, oats, barley and rye was represented by two specimens. One, a small sheaf of grain in the straw; the other, a pailful of threshed and well cleaned grain.

Beginning at the left 26 bundles, varieties of wheat oats and rye, stood upright, in a row, at the back of the table, against the wall. In front of these, a row of 26 pails containing the corresponding varieties of threshed grain. In front of these, at the margin of the table stood a row of shallow boxes, containing tomatoes, cucumbers, squashes, etc. To the right of all these the fourteen varieties of grasses stood on a frame against the wall, while a group of vegetables occupied the front. Still farther to the right, a raised table held the articles from the museum and the beans and peas in jars. To the right of this table the rows of bundles, pails and boxes recommenced. At the back six bundles of wheat grown with different fertilizers, and three varieties of barley. In front of these the corresponding pails of grain, and at the margin of the table, six boxes containing the potatoes grown with different fertilizers on equal areas. Finally a raised table containing specimens from the plant house. The twenty-four boxes of potatoes containing the products of different varieties on equal areas occupied another table.

The exhibit was arranged with a view to making it instructive. Both the arrangement and the quality of the articles were subject of frequent and favorable comment. The judges on the flowers reported as follows :

*Division H—Supplementary Report.*

"The exhibit of greenhouse plants from the State University being entirely apart from the other exhibits in this class was overlooked by the committee until after the above main report was made out.

They have, however, examined it, and take pleasure in reporting that the collection though not wide in variety deserves honorable mention from the general fine and healthy condition of the plants. This like other exhibits of the University was not entered as competing for premiums. The committee would respectfully suggest that it would be well for the University to cultivate the best varieties of flowering plants peculiar to the State, as many of them may otherwise become extinct.

[Signed,]

"A. D. ROE,  
"MRS. G. W. CHOWEN,  
"MRS. JUDGE ATWATER."

This supplementary report was made without the knowledge of any one connected with the University.

Several requests for samples were received and complied with as follows:

Milo J. Smith, Smith's Ferry, Mass., complete set of the grains for exhibition at a county fair, and subsequently to place in the office of Secretary of Massachusetts Board of Agriculture.

W. H. Ritter, Inspector for the Millers' Association, complete set of wheat and oats.

Hon. Geo. A. Bracket, complete set of grains to send east for exhibition.

J. A. Christian & Company, Minneapolis, complete set of wheats.

Many others received small quantities for seed.

The week following the State Fair, the grain and potatoes were taken to Stillwater for exhibition at the Washington County Fair, the Washington Co. Agricultural Society paying freight and drayage. The attendance at this fair was not large, but the Agricultural College exhibit attracted its full share of attention, and much interest was shown in some of the articles.

At the State Fair of 1876 entries were made and diplomas representing the highest premiums of the Society were awarded for the "largest and best display of vegetables," and for "large and choice display of grain and seeds." These diplomas have been received, framed and hung on the walls of the agricultural class room.

#### CAMPUS.

In the autumn of 1876 the executive committee of the Board of Regents directed the undersigned to assist the President of the University as superintendent of the campus. Under his directions several small changes have been made that have contributed much to an improved appearance. A portion of the elevation immediately in front of the main building has been removed to fill depressions near the same. The shifting and barren sand immediately in front of the agricultural building has been covered with better soil. The path between the two buildings has been raised to a sort of turnpike where it passes through a hollow frequently filled with water. In July the mowing machine was passed over the entire campus, improving its appearance, and contributing to the thick-

ening of the grass. In September the weeds that afterwards sprung up were cut with a scythe. About the first of November the leaves on the campus were raked into large piles and burned. A gravel walk has been made from University Avenue to the front entrance of the main building. The appearance of the agricultural building was improved during the summer by spading and manuring the soil in the angles of the building and removing thereto a large portion of the plants from the plant house.

## LABOR.

The faithful assistance in the plant house of Mr. Geo. A. Wood has already been mentioned. On the first of April last Mr. W. T. Scott withdrew from the service of the University and the place of farmer was taken by Mr. J. B. Eustis, a former student of the University. Mr. Eustis has brought to bear upon his duties every quality that could render his services acceptable, and the only cause for regret is that he will not consent to continue them. The labor under my direction has been performed more largely by students this year than heretofore, and it gives me great pleasure to testify to their general faithfulness and efficiency. The whole sum paid for labor under my direction on the farm, the campus and in the plant house, from Dec. 1, 1876, to Nov. 30, 1877, was \$1716.93. Of this \$736.14 was paid to more than 32 different students in sums ranging from 75 cents or less to \$224.30.

CHAS. Y. LACY.

APPENDIX B.

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LIST OF BOOKS

ADDED TO

THE LIBRARY

OF THE

UNIVERSITY OF MINNESOTA,

COMPLETE TO APRIL, 1878.

## NOTES.

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1. Whenever a work is received at the Library, it is entered in the so-called "Accession Register," under these headings: Date, accession number, short title, published when and where, number of volumes, size, number of pages, condition, received from or through, value or cost, gift, shelf number. Gift books are also entered in a "Donation Register."

2. The volumes then receive their proper labels and numbers, and the catalogue slips having been written out, they are ready for delivery to readers.

3. Each work in this catalogue has accordingly two numbers; first, the accession number, and secondly, in heavy faced type, the shelf number. Readers in calling for books, must put down the latter number correctly pointed and designate *the volume*; and it is also desirable that the accession number be given.

4. The system of shelf marking will be readily inferred from examples. 364.13, indicates the thirteenth *work* on the fourth shelf, of case or press No. 36. To find the work "pressmarked" 76.8, go to to press number 7 and look on the 6th shelf—counting from the floor upwards—and for the 8th work, numbering from the left hand.

5. The abbreviations are those customary in similar lists, and are mostly self-explanatory.

LIST OF BOOKS ADDED TO LIBRARY---COMPLETE  
TO APRIL, 1878.

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- ABEL, F. A. and Bloxam Charles. L.** Hand-Book of Chemistry, Theoretical, Practical, and Technical, with a preface by Dr. Hoffman. \* \* \* London: John Churchill, . . . 1854. 8°, pp. xix.+724. (5377).....**462.11**
- ABERCROMBIE, John, . . .** Inquiries concerning the Intellectual Powers, and the Investigation of Truth . . . From the last Edinburgh edition. New York: Harper & Brothers. 12°. pp. 376. (H. F. L., No. 37.) (4868).**386.29**
- ABERCROMBIE, John. . . .** The Philosophy of the Moral Feelings. . . . From the last Edinburgh Edition, with questions for the examination of students. New York: Harper & Brothers . . . 1848. 12°, pp. 336. (H. F. L. No. 58.) (4880).....**387.12**
- ACHARD, Amédée et Deslys, Charles.** Le Clos-Pommier, Drame en cinq Actes \* \* \* Paris: Michael Levy Frères . . . 1865. 8° pp. 94. (4696).....**118.6**
- ACTS of Stephen, King of England and Ruler of Normandy.** 12°, 100 pp. See Henry of Huntingdon. Chronicle of —, p. 320. (5122).....**376.4**
- ADAM, Alexander. . . .** Roman Antiquities: or An Account of the Manners and Customs of the Romans; with numerous Notes and improved Indices. By James Boyd. . . . Illustrated by upwards of 100 Engravings on Wood and Steel. By Lorenzo L. Da Ponte. . . . Philadelphia: J. B. Lippincott & Co., 1872. 8°, pp. xii.+439. (5025).....**227.13**
- ADAMS, George. . . .** Lectures on Natural and Experimental Philosophy. The second edition, with considerable corrections and additions, by William Jones, . . . London: 1799. . . . W. and S. Jones. . . . 5v. 8°. (5293)..**464.5**
- Contents—Vol. I. Pneumatics, Acoustics, Heat, Gases, pp. 31 : 592.  
 “ II. Water, Optics, Catoptrics, Telescopes, Microscopes, pp. 8 ; 576.  
 “ III. Matter, Mechanics, Hydrostatics, Specific Gravity, Hydraulics, Astronomy, pp. 7 ; 583,  
 “ IV. Copernican System, Physical Astronomy, Electricity, Meteorology, pp. 8 ; 576.  
 “ V. General Index, References to plates, Plates, pp. 45 ; 42 plates.
- ADAMS, Samuel.** Extracts from Correspondence, Political Essays and State Papers. See Wells, W. V. Life and public services. (5479).....**395.19**
- ADDIS, Alfred. . . .** [Questions. 38 pp. 12°] See Combe, Andrew. Principles of Physiology, at p. 358. (4889).....**387.21**
- ADDISON, Joseph.** Criticism on Milton's Paradise Lost. . . . Carefully edited by Edward Arber. . . . London. . . . 152 pp. 16° (*English Reprint.*) (5107).....**384.7**

- ADDISON, Joseph. *See* Selections from the Spectator. (4961).....38X.9
- ÆSCHYLUS. The Prometheus Bound. Edited, with English notes, critical and explanatory, by the Rev. James Davies ... \* \* \* London: Lockwood & Co. . . . 1871. 12° pp. x.+91. (5131) ("From text of Dindorf's third edition.").....258.25
- ÆSCHYLUS. The Prometheus Vincetus, from the text of Dindorf, with notes by the Rev. John Selby Watson. . . . \* \* \* Williams and Norgate, . . . London . . . 1870. 8°, pp. viii.+132+8. (4622).....147.19
- AGASSIZ, Louis. [Jean Rudolph.] Contributions to the Natural History of the United States of America . . . Boston: Little, Brown & Company, 4v. 4°. 1857-'62. (5480).....\*
- Contents:—Vol. I. Essay on Classification, pp. 323. North American Testudinata, 130 pp. at p. 333.  
Vol. II. Embryology of the Turtle, 643 pp. & 34 plates.  
Vol. III. Acalalephs in general, 152 pp. Ctenopora, pp. 148, explanation of plates, 15 pp. & 19 plates.  
Vol. IV. Discophora, 180 pp. Hydroidæ, 191 pp. Homologies of the Radiata, 8 pp. Ex. of plates, 12 pp. 16 plates.
- Vols. I. & II. contain the first monograph; Vols. III. & IV. the second monograph.  
*Presented by Mrs. M. F. Pierce, of Cambridge, Mass.*
- AGASSIZ, Louis. [Jean Rudolph.] The Classification of Insects from Embryological data. 4°, pp. 28+1 plate. *See* Smithsonian Institution, Contributions to Knowledge, Vol. II. (1851) Art. 6. (5482).....441.1
- AINSLIE, Whitelaw . . . [Medical Observations.] *See* Murray, H. [and others.] Historical and Descriptive Account of British India, Vol. III. p. 258. (4873).....387.5
- AINSWORTH, William Francis. Travels in the Track of the Ten Thousand Greeks; Being a Geographical and Descriptive Account of the Expedition of Cyrus, and of the Retreat of the Ten Thousand Greeks, as related by Xenophon. London: John W. Parker, 1844. 8°, pp. xv.+248.+map. (4631).....258.33
- AIRY, George Biddle. . . . A Treatise on Magnetism. Designed for the use of Students in the University. London: Macmillan & Co. 1870. . . . 16°, pp. xv+220. (5429).....466.20
- AKERS, Peter. . . . Introduction to Biblical Chronology, . . . \* \* \* Cincinnati: . . . Methodist Book Concern, . . . 1856. 8°, pp. 411. (5285).....395.6
- ALFRED, King. [Translator] *See* Boethius de Consolatione Philosophiae. 16°, pp. 398. (5109).....376.12
- ALGER, Francis. [Additions] *See* Phillips, W., Mineralogy. (4797)....462.9
- ALISON, Archibald. . . . History of Europe from the Commencement of the French Revolution in 1789, to the Restoration of the Bourbons in 1815. New York, . . . Harper & Brothers. . . . 1847-8. 4v. 8°, pp. 583, 600, 612, 631. (4818) . . . . .372.3
- ALLAINVAL, Léonore Jean Christine de [L'Ecole des Bourgeoises, pp. 63. Memoir.] *See* Chefs-d'oeuvres des Auteurs Comiques, Vol. III. (5090).....118.13
- ALLAN, Robert. [Editor] *See* Phillips, W., Treatise on Mineralogy(4797) 462.9
- ALLEN, A. B. . . . [Editor.] *See* Stewart, Stable Economy,(5265)..516.16



- ALLEN, David O. . . . India Ancient and Modern. Geographical, Historical, Political, Social, and Religious; with a particular account of the State and Prospects of Christianity. Boston: John P. Jewett and Company, . . . 1856. 12°, pp. xii.+618. (4547) (*Missionary to India*, 1827-1853.) . . . . . 157.1
- ALLEN, H. . . . Monograph of the Bats of North America. 110 pp. 8°. See Smithsonian Institution, Miscellaneous Collections, Vol. VII. (1867) Art. 1. (5506). . . . . 443.1
- ALLEN, Paul. [Editor.] See Lewis, M. and Clarke, W., History of the Expedition under the command of. (4940). . . . . 389.19
- ALLEN, William. [Diary and Correspondence, Selections from.] See Life of. 2v. 8°. (4602). . . . . 147.3
- ALLOUARD, H. [Illustrations.] See Fournier, M. E., Le Theatre Francais. . .
- ALVORD, Benjamin. The Tangencies of Circles and of Spheres. 4°, 16 pp. +1 plate. See Smithsonian Institution, Contributions to Knowledge, Vol. VIII. (1856) Art. 4. (5488). . . . . 441.1
- AMERICAN Adventure by land and Sea; Being . . . Shipwrecks, Adventures at Home and Abroad, Indian Captivities, &c. . . . New York: Harper and Brothers, . . . 1847. 2v. 12° . . . (H. F. L. No. 174-5) (4956). . . . . 38X.4
- AMERICAN Journal of Science and Arts. See Silliman B. (4591) \*\*
- AMERICAN Quarterly Observer, the; Vols. I. and II. in one. Boston: 1833-34. (4545). . . . . 157.5
- AMES, Mary Clemmer. [Eirene; or a Woman's Right. 219 pp. 8°.] See Putnam's Magazine, new series, Vol. VI., Supplement, p. 569. (5235)
- ANDREAS, A. T. [Publisher.] An Illustrated Historical Atlas of the State of Minnesota. . . . Chicago: . . . 1874. f. pp. 395. (7 pp. Index, &c., pp. 8-190, maps and views; 181-206½, portraits of public men; 207-end. history and statistics.) (5279). . . . . Cabinet B.
- ANTIETAM National Cemetery, History of, including a Descriptive List of all the Loyal Soldiers buried therein: together with the Ceremonies and Address on the Occasion of the Dedication of the Grounds, September 17th, 1867. Baltimore, . . . John W. Woods, . . . 1869. 8°. pp. 202+2 photographs +map. (4836). . . . . 381.13
- ANTONINUS, Marcus Aurelius. The Thoughts of . . . translated by George Long. \*\*\* Boston: Ticknor & Fields, 1864. 12°, pp. 310 (5223). . 377.4  
Memoir of author at p. 7. Account of his philosophy, p. 36. "This little book of Antoninus has been the companion of some great men." *Translator.*
- ARBER, Edward. [Editor.] See Ascham, Roger. Toxophilus. . . (5108). . 384.5  
——— [Editor.] See Pultenham, G. The Arts of English Poesie. (5106). . . . . 384.6  
——— [Editor.] See Addison, Joseph. Criticism on Milton's Paradise Lost. (5107). . . . . 384.7
- ARISTOTELES, The Ethics of. Edited by William Edward Jelf, . . . Oxford, and London: John Henry and James Parker. 1856. 8°, pp. 240. (4615) 147.18
- ARMSTRONG, H. E. . . . [Phenols, p. 900; Sulphur and Chlorides, p. 1129.] See Watts, H. Dictionary of Chemistry, Second Supplement (4551.)

- ARMSTRONG, John. . . . Lectures on the Morbid Anatomy, Nature, and Treatment of Acute and Chronic Diseases. Edited by Joseph Rix. . . . Philadelphia: Haswell & Barrington, . . . 1837. 8°, pp. 687+20. (4786) . . . 371.18
- ARMSTRONG, John. Life of Richard Montgomery. 45 pp. 12°.+facsimile. See Sparks, J. Lib. Am. Biog., Vol. I., at p. 181. (4814) . . . 385.1
- ARMSTRONG, John. Life of Anthony Wayne. 12°, pp. 84.+facsimile. See Sparks, J. Lib. Am. Biog., Vol. IV. at p. 1. (4814) . . . 385.1
- ARNOLD, Thomas Kerchever. . . . [Editor.] See Madvig, J. N., Syntax of the Greek Language. (4624) . . . 258.35
- ASCHAM, Roger. Toxophilus, 1545. Carefully edited by Edward Arber. . . . London: Alex. Murray & Son. . . . 1868. . . . 16°, pp. 168. (*English Reprints.*) (5108) . . . 384.5
- ASSER of St. Davids. Annals of the reign of Alfred the Great, from A. D. 849 to A. D. 887. 43, pp. 12°. See Giles, J. A. [Editor.] Six Old English Chronicles, at p. 43. (5117) . . . 376.9
- AUBIGNE, Jean Henri Merle de. . . . History of the Great Reformation of the Sixteenth Century, in Germany, Switzerland, etc. New York: William H. Colyer. . . . Boston: Phillips & Sampson, 1846. 8°, pp. xiv.+499. (4970) . . . 381.17
- AUDRIEUX, François Guillaume Jean Stanislas. [Les Etourdis, ou le Mort supposi. pp. 57,— Le Reve du Mari, ou le Manteau, p. 59—Thoughts of Anaxamandre, ou le sacrifice au Graces, p. 99. (Memoir.)] See Chefs-d'Oeuvres des Auteurs Comiques. Vol. VII. (5090) . . . 118.13
- AURELIUS, Marcus [Antoninus.] See Antoninus, M. A. (5223) . . . 377.4
- AUSTEN, Jane. . . . Mansfield Park. A Novel. Boston: James R. Osgood & Company, . . . 1876. 12°, pp. 431. (5064) . . . 456.20
- AUSTEN, Jane. . . . Pride and Prejudice and Northanger Abbey. Philadelphia: Porter & Coates, . . . 12°, pp. 528. (5222) (Northanger Abbey begins at p. 321.) . . . 377.7  
 " . . . There are in this world no compositions which approach nearer to perfection." *Macaulay.*
- AXON, William E. A. . . . The Mechanic's Friend; a Collection of Receipts and Practical Suggestions relating to Aquaria, . . . Waterproofing, and Miscellaneous Tools, Instruments, Machines, and Processes connected with the Chemical and Mechanical Arts. With numerous diagrams and wood Cuts. New York: D. Van Nostrand. 1875. 16°, pp. xii.+339. (5037) . . . 148.14
- BACHE, Alexander Dallas. Discussion of Magnetic and Meteorological Observations made at the Girard College Observatory, Philadelphia, in 1840, 1841, 1842, 1843, 1844 and 1845. Part 1. Investigations of the eleven year period in the amplitude of the solar diurnal variation and the disturbances of the magnetic declinations. 4°, pp. 22 . . . See Smithsonian Institution, Contributions to Knowledge, Vol. XI. (1859) Art. a. 4. (5491) . . . 441.1

- BACHE**, Alexander. Discussions of the Magnetic Meteorological Observations made at the Girard College Observatory, Philadelphia, in 1840, 1841, 1842, 1843, 1844, and 1845. Part II. Investigations of the solar diurnal variation of the magnetic declination and its annual inequality. 28 pp. Part III. Investigation of the lunar effects of the magnetic declination. 16 pp. Parts IV., V., VI., Horizontal Force. Investigation of the Ten or Eleven Year Period, and of the disturbances of the Horizontal Component of the Magnetic Force; Investigation of the solar diurnal variation and of the annual inequality of the Horizontal Force, and of the lunar effects on the same. 78 pp. Records and results of a Magnetic Survey of Pennsylvania and parts of adjacent States, in 1840 and 1841, with some additional records and results, of 1834, 1835, 1843, and 1862, and a map. 88 pp.+1 map. See Smithsonian Institution, Contributions to Knowledge, Vol. XIII. (1863) Arts. 5, 6, 7, 8. (5493) **441.1**
- BACHE**, Alexander Dallas. Discussion of the Magnetic and Meteorological Observations made at the Girard College Observatory, Philadelphia, in 1840, 1841, 1842, 1843, 1844, and 1845. Third Section, comprising Parts VII., VIII., and IX. Vertical Force. Investigation of the Eleven (or Ten) Year Period, and of the annual inequality of the Vertical Force; and of the lunar effect of the Vertical Force, the Inclination, and Total Force. 72 pp. Fourth Section, comprising Parts X., XI. and XII. Dip and Total Force; Discussion of the solar diurnal variation and annual inequality of the Dip and Total Force; and discussion of the Absolute Dip, with the final values for Declination, Dip and Force between 1841 and 1845. 44 pp. 4°. See Smithsonian Institution, Contributions to Knowledge, Vol. XIV. (1865) Arts 3&4(5494) **441.1**
- BACK**, *Captain* [George.] Narrative of the Arctic Land Expedition to the mouth of the Great Fish River, and along the shores of the Arctic Ocean, in the years 1833, 1834, and 1835. Illustrated by a map. Second Edition. Philadelphia: E. L. Carey & A. Hart. . . . 1837. 8°, pp. 456.+map. (5204).....**391.11**
- BACON**, Francis, . . . Essays, Moral, Economical, and Political, . . . with an Introductory Essay on Bacon and Locke, by A. Potter, D. D. . . . New York: Harper & Brothers, . . . 1847. 12°, pp. 299. (H. F. L. No. 171) (4953).....**38X.1**  
Locke on the Understanding in same vol. p. 209.
- БЭСКЕР**, Louis *de*. Grammaire Comparée des Langues de la France. \*\*\* Paris: Ch. Blériot, . . . 1860. 8° pp. 267. (5091).....**108.2**
- BAILEY**, Jacob Whitman . . . Microscopical Examinations of Soundings made by U. S. Coast Survey of the Atlantic Coast of the U. S. pp. 16+1 plate. See Smithsonian Institution, Contributions to Knowledge, Vol. II. (1851) Art. 3. (5482).....**441.1**
- . . . Microscopical Observations made in South Carolina, Georgia and Florida. 4°, pp. 48+3 plates. See Smithsonian Institution, Contributions to Knowledge, Vol. II. (1854) Art. 8. (5482).....**441.1**
- . . . Notes of New Species and Localities of Microscopical Organisms. 4°, pp. 16+1 plate. See Smithsonian Institution, Contributions to Knowledge, Vol. VII. (1855) Art. 3. (5487).....**441.1**
- BAIRD**, James Skerrett . . . The Homeric Dialect; Its Leading Forms and Peculiarities. London: George Bell, . . . 1853. 8°, pp. 28. (4614)..**258.37**

- BAIRD, Spencer Fullerton. Catalogue of American Birds, chiefly in the Museum of the Smithsonian Institution. 1859. 8°, 24 pp. *See* Smithsonian Institution, Contributions to Knowledge, Vol. II. (1872) Art. 4. (5501).....443.1
- Directions for collecting, preserving, and transporting specimens of Natural History. . . . 8°, 40 pp.. *See* Smithsonian Institution, Miscellaneous Collections, Vol. II. (1862) Art. 7. (5501).....443.1
- Questions relative to the Food Fishes of the United States. 7 pp. Memoranda of Inquiry relative to Food Fishes of the United States. 5 pp. *See* Smithsonian Institution, Miscellaneous Collections, Vol. X. (1873) Art. 8. (5509).....443.1
- Review of American Birds, in the Museum of the Smithsonian Institution. Part I. 1864-1872. 8°, pp. 484. *See* Smithsonian Institution, Miscellaneous Collections, Vol. XII. (1874) Art. 1. (5511).....443.1
- BAIRD, Spencer Fullerton, and Girard C. Catalogue of North American Reptiles in the Museum of the Smithsonian Institution. Part I. Serpents. 1853. 8°, 172 pp. *See* Smithsonian Institution, Miscellaneous Collections, Vol. II. (1862) Art. 4. (5501).....443.1
- BAMBER, Edward Fisher. [Revisions.] *See* Rankin, W. J. M., Mechanical Text Book—Manuals of Machinery, Steam Engine, and Applied Mechanics.
- BARDSLEY, Charles Wareing . . . English Surnames: their Sources and Significations. \* \* \* Second Edition, revised and enlarged. London: Chatto and Winders . . . 1875. 16°, pp. xvi.+612. (5457).....377.12
- BARNARD, John G. Problems of Rotary Motion presented by the Gyroscope, the Precession of the Equinoxes, and the Pendulum. . . . 74 pp. 4° *See* Smithsonian Institution, Contributions to Knowledge, Vol. XIX. (1874.) Art. 2. (5499).....441.1
- BARNARD, Henry. . . . School Architecture; or Contributions to the Improvement of School-Houses in the United States. Second Edition. New York: . . . A. S. Barnes & Co. 8°, pp. 383+frontispiece. (4817)....394.6
- BARNABAS, Saint, Catholic Epistle of. 33 pp. 8°. [Translated.] *See* Wake Wm., Genuine Epistles of the Apostolical Fathers, p. 289. (4799).371.11
- BARON. *See* Boyron, M.
- BAROT. *See* Odysse-Barot.
- BARROW, John. . . . Voyages of Discovery and Research within the Arctic Regions, from the year 1818. . . . Abridged and arranged from the Official Narratives, with occasional Remarks. New York: Harper & Brothers, . . . 1846. 12°, pp. 359+maps. (Harper's New Miscellany, XIII. (5321).....375.10
- Contents:—Ross, p. 25; Buchan, p. 49; Parry (first voyage), p. 62; Clavering & Sabrin, p. 94; Parry (2nd voyage), p. 107; Lyon, p. 153; Parry (3d voyage), p. 166; Parry (4th voyage), p. 197; Franklin & Richardson, p. 229; same, p. 279; Bach, p. 330; Miscellaneous, p. 344. (inc. Thomas Simpson's and Ross's 2d voyage.)
- BARROW, John. . . . A Memoir of the Life of Peter the Great. New-York: Harper & Brothers. . . . 1848. 12°, pp. 320+portrait of Peter. (H. F. L. No. 65.) (4886).....387.18
- BARRY, Herbert. Russian Metallurgical Works. 16°, p 1. *See* Half Hour Recreations in Popular Science, at p. 406. (5026).....148.17

- BARTHE, Nicolas Thomas. [Les fausses Infidélités. 31 pp. 12° (Memoir.)] *See* Chefs-d'Oeuvres des Auteurs Comiques. Vol. VI. (5090).....118.13
- BARTLETT, William H. C. . . . Elements of Analytical Mechanics, Eighth Edition, revised, corrected, and enlarged. A. S. Barnes & Company, New York and Chicago. 1873. 8°, pp. 510. (5039).....227.9
- BARTLETT, William H. C. . . . Elements of Synthetic Mechanics. Sixth Edition, revised and corrected. A. S. Barnes & Co., New York . . . 1871. 8°, pp. 632. (5040).....227.8
- BARTSCH, Karl. Chrestomathie Provençale accompagnée d'une Grammaire et d'une Glossaire—Troisième édition, revue et corrigée. Elberfeld. R. L. Friderichs. . . . 1875. r 8°, pp. 590. (4625).....157.8
- BASTIAT, Frédéric. Harmonies of Political Economy, Translated from the French of,—with a notice of the Life and Writings of the Author, by Patrick James Sterling . . . London: John Murray . . . 1860. 8°, pp. xl.+298. (5297).....395.3
- BEALE, Lionel S. . . . How to work with the Microscope. Fourth Edition, containing upwards of 400 illustrations, many of which have been drawn on wood by the author. London: Harrison . . . 1868. 8° pp. xx.+383+69 plates. (5305).....462.7
- BEAUMARCHAIS, [Pierre Augustin Baron de] Théâtre de—Accompagné d'une notice par F. de Marescot. Illustrations de M. Adrien Maree. Paris: A la librairie illustrée n. d. [notice sur B. 1875.] 8°, pp. xxviii.+333+portrait. (5087).....478.3
- BEECHER, Henry Ward. [Introduction.] *See* Murray, W. H. H. The Perfect Horse. (5471).....514.9
- BEKKER, Immanuel. [Text.] *See* Plato, Apology of Socrates, Crito, and Phaedo. (5133).....473.9
- BELKNAP, Jeremy, . . . American Biography. With Additions and Notes by F. M. Hubbard. . . . New York: . . . Harper & Brothers. 1844. 3v. 12°, pp. 370, 333, 315. (4946).....389.25
- Contents:—Vol. I. Life of Author; Preliminary Dissertation, p. 27; Chronological Detail, p. 59; Biron, p. 77; Madoc, p. 129; Zeno, p. 138; Columbus, p. 156; Cartier, p. 230; De Soto, p. 258; Humphrey Gilbert, p. 272; Raleigh and Somerville, p. 289.
- Vol. II. John De Fuca, De Morts, Poutreincourt and Champlain, p. 15; Gorges and Mason, p. 47; The Virginia Colony, p. 96; Sir Thomas Smith, p. 100; Lord Delaware and others, p. 115; Argol & Yeardley, p. 148; Wygat, p. 174; Gosnold and others, p. 206; Robinson, p. 254; Carver, p. 295.
- Vol. III. Bradford; Brewster, p. 53; Cushman, p. 70; Winslow, p. 85; Standish, p. 116; Winthrop, p. 148; Winthrop, Jr., p. 185; Calverts and others, p. 206; Penn, 225; Appendix, p. 293; INDEX, p. 305.
- BELL, Sir Charles . . . [Editor.] *See* Paley, Wm., Natural Theology, (H. F. L. Nos. 96, 97.) (4902).....388.5
- BELL, Henry Glassford . . . Life of Mary Queen of Scots. . . . \* \* \* New York: Harper and Brothers . . . n. d. 2v. 12°, pp. 276, 275+portrait of Mary. (H. F. L. Nos. 21, 22.) (4855).....386.16
- BELL, Robert . . . The Life of the Rt. Hon. George Canning. New York: Harper and Brothers . . . 1846. 12°. pp. 363. (Harper's New Miscellany, XVI.) (5323).....375.13

- BELOE, William. [Translator and Annotator.] *See* Herodotus. (3032) \*\*\*
- BEMENT, C. N. *The American Poulterer's Companion; A Practical Treatise on . . . Domestic Poultry, with Illustrations and Portraits of Fowls taken from life. Fifth Edition. New York: Harper & Brothers, . . . 1847. 12°, pp. iv.+379+frontispiece. (4761).....516.19*
- BENET, S. V. (Brig. Gen. Chief of Ordnance) *See* UNITED STATES War Department. Regulations for . . . Ordnance and Ordnance Stores.(5444)63.26
- BENJAMIN, Asher, . . . *The Architect, or Practical House Carpenter; Illustrated by sixty-four Engravings, . . . Boston: Benjamin B. Mussey & Co., . . . 1850. 4°, pp. 119+64 plates, (4793)..... 523.1*
- BENLOEW, Louis. *La Grèce avant les Grecs. Etude Linguistique et Ethnographique. PClasges, LÉlèges, Sémites & Ioniens. Paris: Maisonneuve & Cie . . . 1877. 8°, pp. xii.+260+[2.] (5211).....108.1*
- BENTHAM, George . . . [Joint author with Sir. J. D. Hooker, of Flora Nigritana.] *See* Hooker, Sir W. T. Niger Flora, at p. 200. (5241).....462.3
- BENTON, Thomas Hart. *Thirty Years' View; or, a History of the working of of the American Government for thirty years, from 1820 to 1850. . . . New New York: D. Appleton & Company. . . . 2v. 8°, pp. 739, 788, portrait and frontispiece. (5205).....391.9*
- BERKELEY, J. M. [Translator of Memoir of Dr. Vogel.] *See* Hooker Sir W. T. Niger Flora . . . (5241).....462.3
- BIBLES and TESTAMENTS. *Novum Testamentum Græce, Post Johang. Henr. Tittmannum Olim Prof. Lips ad Fidem Optimorum Librorum Secundis curis recognovit Lectionumque varietatem notavit Augustus Hahn in acad. Vratisl, Prof. Editio Americana, Stereotypa curante Edvardo Robinson, S. T. D., Neo-Eboraci [New York] . . . Leavitt et Trow. . . . 1842. 12°, pp. xxviii.+508. (4738).....374.17*
- BIBLES and TESTAMENTS. *The Gothic and Anglo-Saxon Gospels in Parallel Columns, with Versions of Wyckliffe and Tyndall; Arranged with Preface and Notes, by the Rev. Joseph Bosworth, . . . Assisted by George Waring, Esq., . . . Second Edition, London: John Russell Smith, . . . 1875. 8v. pp. xxxvi.+583+23+frontispiece. (4552).....147.14*
- BIDDLE, Charles J. *The case of Major André, with a Review of the Statement of it in Lord Mahon's History of England. 100 pp. 8°. See Historical Society of Pennsylvania, Memoirs of. Vol. VI., at p. 317. (5203).391.10*
- BINNEY, William G. *Bibliography of North American Conchology previous to the year 1860 . . . Part I. American authors. 658 pp. 8°. See Smithsonian Institution, Miscellaneous Collections, Vol. V. (1864) Art. 1. (5504).443.1*
- *Land and Fresh Water Shells of North America, Part II. Pulmonata Linnnophila and Thalassophila. 1865. 172 pp. Part III. Ampullariidae . . . 8°, pp. 128+232 wood cuts. See Smithsonian Institution, Miscellaneous Collections, Vol. VII. (1867) Arts. 2 & 3. (5506).....443.1*
- and Blank T. *Land and Fresh Water Shells of North America. Part I. Pulmonata Geophila. 1869. 328 pp. 8°. See Smithsonian Institution, Miscellaneous Collections, Vol. VIII. (1869) Art. 3. (5507).....443.1*
- *Bibliography of North American Conchology previous to the year 1860. . . . Part II. Foreign authors. 302 pp. 8°. See Smithsonian Institution, Miscellaneous Collections, Vol. IX. (1869) Art. 1. (5508).....443.1*
- [Joint Author] *See* Lea I. and others. Check List of the Shells of N. A.

- BISCHOP, Gustav. . . . Elements of Chemical and Physical Geology. Translated from the Manuscripts of the author, by Benjamin H. Paul . . . and J. Drummond . . . London: . . . for the Cavendish Society, . . . 1854-9. 3v. 8°, pp. xxiii.+455; xxiv.+523; xvii.+566. (5384)...4941
- BLACKIE, John Stuart. . . . Four Phases of Morals: Socrates, Aristotle, Christianity, Utilitarianism. \*\*\* New York: Scribner, Armstrong & Co., 1875. 12°, pp. vii.+354. (5011).....148.18
- BLACKIE, John Stuart. . . . Greek and English Dialogues for use in Schools and Colleges. Second Edition. London and New York: Macmillan & Co., 1875. 16°, pp. xxvi.+109. (4566).....268.29
- BLACKIE, John Stuart. . . . *Horæ Hellenicæ: Essays and discussions on some important points of Greek Philology and antiquity.* London: Macmillan & Co., 1874. 8°, pp. xii.+394. (5047).....152.20
- BLACKIE, John Stuart, . . . The Pronunciation of Greek: Accent and quantity. A Philological Inquiry. Edinburgh: Sutherland & Knox. . . . 1852. 8°, pp. 84. (4554).....267.10
- BLACKIE, John Stuart . . . [Prefatory notice.] See Clyde, James, Greek Syntax. (4640).....258.34
- BLACK'S Guide to Warwickshire. Third edition illustrated by maps, plans, and illustrations. \*\*\* Edinburgh: Adam and Charles Black. 1874. 16°, pp. vi.+218+frontispiece+3 maps. (5449).....38X.18
- BLAIR, Walter, . . . Latin Pronunciation: An inquiry into the Proper Sounds of the Latin Language during the Classical Period. A. S. Barnes & Co., New York and Chicago. 1844. 12°, pp. 136. (5029).....258.9
- BLAKE, John F. Astronomical Myths, based on Flammarion's "History of the Heavens." \*\*\* London: Macmillan & Co. 1877. 8°, pp. xvi.+431+one chart. (5046).....465.2
- BLAKELOCK, R. . . . [Translator.] See Francoeur, L. B. Complete Course of Pure Mathematics. 2v. 8°. (5105).....462.1
- BLANC, Louis. *Histoire de la Révolution de 1848.* . . . Paris: . . . A. Lacroix, Verboeckhoven et Co. . . . 1871 . . . 2v. 12°, 321, 360. (4616)....118.3
- BLANQUI, Adolphe Jerome . . . *Histoire de L'Economie Politique en Europe depuis les anciens jusqu'à nos jours suivie d'une bibliographie raisonnée des principaux ouvrages, d' Economie Politique.* Quatrième Edition, revue et annotée . . . Paris: Guillaumin et Cie . . . 1860. 2v. 12°, 384, 412. (4699).....118.8  
Bibliography of Pol. Econ. at p. 308, Vol. II.
- BLANK, T. [Joint Editor.] See Binney, W. G. Land and Fresh Water Shells of North America.
- BLISS, George, Jr. [Joint Editor.] See Wells, D. A. and . . . Annual of Scientific Discovery for the years 1850-51. (5232).....467.1
- BLOXAM, Charles L. [Joint Author.] See Abel, F. A. Handbook of Chemistry. (5377).....462.11
- BLOXAM, Charles L. . . . [Editor.] See Bowman, J. E. Introduction to practical Chemistry. (5365): .....466.5
- BOOTH, James C. and Morfit Campbell. On Recent Improvements in the Chemical Arts. 1852. 216 pp. 8°. See Smithsonian Institution, Miscellaneous Collections, Vol. II. (1862) Art. 1. (5501).....443.1

- BOND, John Wesley. Minnesota and its Resources, to which are appended Camp-Fire Sketches, or Notes of a Trip from St. Paul to Pembina and Selkirk Settlement . . . \* \* \* Redfield, . . . New York, 1853. 12°, pp. 364  
+frontispiece, eng. t-p.+map. (4829).....383.1
- BONI, Baldelli. [Amendments and Enlargements.] See Polo, Marco, Travels of. (H. F. L. No. 93.) (4955).....38X.3
- BOETHIUS. King Alfred's Anglo-Saxon version of Boethius De Consolatione Philosophiæ: with a literal English Translation, Notes and Glossary. By the Rev. Samuel Fox . . . London: H. G. Bohn, . . . 1864. 16°, pp. 398. (5109).....376.12
- BØTTIGER, C. W. [Lefnadsteckning, pp. xlii.16°.] See Tegner, E. Samlade Skrifter. 2v. 16°. (5196).....476.1
- BOISSEY, Louis, de [Les Dehors Trompeurs, ou l'Homme du jour. pp. 82. (Memoir)] See Chefs-d'Oeuvres des Auteurs Comiques. 8v. 12°, Vol. IV. (5090).....118.13
- BOOK of English Songs. From the Sixteenth to the Nineteenth Century. London: . . . National Illustrated Library. . . . [1851.] 16°, pp. 312. Illustrations. (5259).....374.21\*\*
- BOSSUET. [Jacques Bénigne.] Oeuvres Oratoires. Oraisons Funèbres—Panegeriques—Sermons. Nouvelle Edition suivant le texte de l'Édition de Versailles amélioré et enriché al'Aide des Travaux les plus récents sur Bossuet et ses Ouvrages. Paris: Garnier Frères, . . . 1872. sm 8°, pp. xvi.+772.(4638) [Vol I. only, containing Oraisons Funebres and Panegeriques.].....118.1
- BOSWORTH, Rev. Joseph. [Arrangement, Preface and Notes.] See Bibles and Testaments. The Gothic and Anglo-Saxon Gospels. (4552).....147.14
- BOTTA, Vincenzo. . . . [An Appendix on Italian Philosophy.] See Ueberweg, Friederich. History of Philosophy, Vol. II. (4572).....348.2
- BOURRIENNE, [Louis Antoine Fauvelet de.] Memoirs of Napoleon Bonaparte: from the French of . . . A new edition, . . . New York: Turner, Hughes & Hayden, . . . 1843. 1v. in 2. 24°, pp. xii.+312, 313-588. (4805).....228.1
- BOURSAULT, Edme. [Le Mercure galant. pp. 68. (Memoir.)] See Chefs d'Oeuvres des Auteurs Comiques. 8v. 12°. Vol. I. (5090).....118.13
- BOUSSINGAULT, [Jean Baptiste Joseph Dieudonne.] Rural Economy, in its Relations with Chemistry, Physics and Meteorology; or, Chemistry applied to Agriculture. Translated, with an Introduction and Notes. by George Law, Agriculturist. New York: D. Appleton & Co., . . . 1845. 16°, pp. 507. (4740).....516.23
- BOWKER, R. R. [General Editor.] See Dewey, M. and others. Library Journal, 1867. . . . (5386).....L. R.
- BOWEN, Francis. Life of Baron Steuben. See Sparks J., Lib. of Am. Biog. at p. I. (4814).....385.1
- BOWEN, Francis. Life of Sir William Phips, 102 pp. 12°, See Sparks, J. Lib. of Am. Biog., Vol. VII., at p. I. (4814).....385.1
- BOWEN, Francis. Life of James Otis, 199 pp. 12°.+portrait. See Sparks, J., Lib. of Am. Biog., 2d Series, Vol II. (4810).....384.1



- BOWEN, T. J., *Rev.* A Grammar and Dictionary of the Yoruba Language, with an introductory description of the country and people of Yoruba. 4°, 232 pp. +1 map. See Smithsonian Institution, Contributions to Knowledge, Vol. X. (1858) Art. 4. (5490).....441.1
- BOWMAN, John E. . . . An Introduction to Practical Chemistry, including Analysis. Edited by Charles L. Bloxam. . . . With one hundred and seven Illustrations. Fifth American, from the fifth revised London edition. \* \* \* Philadelphia: Henry C. Lea. 1870. 12°, pp. 351. (5365)...466.5
- BOXBERGER, Robert. [Editor. Introductory essays to each vol.] See Lessing, G. E. Werke. 8v. sq. 16° (4643).....168.1
- BOYD, James, . . . [Notes and improved indices.] See Adam, Alex., Roman Antiquities. (5025).....227.13
- BOYRON, Michel *dit* Baron. [L'homme à Bonnes Footune. 86. pp. Memoir.] See Chefs-d'Oeuvres des Auteurs Comiques. 8v. 12°, Vol. I. (5090)...118.13
- BRACE, Charles Loring. Hungary in 1851; with an Experience of the Austrian Police. New York: Charles Scribner. . . . 1852. 12°, pp. xiv.+319 +6 colored plates+map. (4653).....218.21\*
- BRADFORD, T. G. [Revision, &c.] See Murray, Hugh. . . . The Encyclopedia of Geography. (4765).....372.2
- BRAND, John. . . . Observations on the popular Antiquities of Great Britain: chiefly illustrating the origin of our vulgar and provincial customs, ceremonies and superstitions. Arranged, revised, and greatly enlarged, by Sir Henry Ellis. . . . A new Edition, with further additions. . . . London: Bell & Daldy. . . . 1873. 3v. 12°, pp.+frontispiece. (5115)...576.3
- BRATHWAITE, W. The Retrospect of Practical Medicine and Surgery, . . . edited by— Uniform American Edition, New York: . . . Daniel Aden, . . . 1840-1848. 8°. 18 parts in 7v. (4774) Ea. vol. has contents and an index.
- BRAYBROOKE, Lord Richard, [Editor.] See Pepys, S., Memoirs of. (4989) 248.26
- BRAYLEY, E. W., [Annotator.] See Dayes, E. Works of. (5253).....391.2
- BREWER, E. Cobham Dictionary of Phrase and Fable, giving the Derivation, Source, or Origin of common phrases, allusions, and words that have a tale to tell. Fourth edition. Philadelphia: Claxton, Remsen & Haffelfinger. n. d. 16°, pp. xii.+983. (5456).....396.5
- BREWER, Thomas M. . . . North American Ornithology, Part I. Raptores and Fissirostres. 4°, 140 pp.+5 plates. See Smithsonian Institution, Contributions to Knowledge, Vol. XI. (1859) Art. 2. (5491).....441.1
- BREWSTER, David . . . [Notes and Life of Euler.] See Euler, L. Letters of Euler on Natural Philosophy, at p. 14. (4878).....387.8
- BREWSTER, Sir David. . . . Letters on Natural Magic, addressed to Sir Walter Scott, . . . New York: Harper & Brothers. . . . 12°, pp. 314. (H. F. L. No. 50.) (4874).....387.6
- BREWSTER, Sir David.. . . The Life of Sir Isaac Newton. A new edition. Revised and edited by W. T. Lynn, . . . London: William Tegg & Co.; New York: . . . 1875. 16°, pp. xii.+346+portrait of Newton. (5226).....377.3
- BREWSTER, Sir David. . . . The Life of Sir Isaac Newton. \* \* \* . . . New York: Harper & Brothers . . . 1848. 12°, pp. 323+portrait of Newton (H. F. L. No. 26.) (4859).....386.20

- BREWSTER, *Sir* David. . . . The Martyrs of Science; or the Lives of Galileo, Tycho Brahe, and Kepler. . . . New York: Harper & Brothers. . . . 1847. 12°, pp. 240. (H. F. L. No. 130.) (4923).....389.2
- BRISTOW, Henry William. . . . A Glossary of Mineralogy. \* \* \* London: Longman, . . . 1861. 16°, pp. xlvi.+420. (5390).....466.9
- BUCKLEY, Theodore Alois . . . [Notes] See Homerus. The Odyssey, tr. by Pope. (5466).....378.23
- (Notes) See Homerus. Iliad tr. by Pope. (5465).....378.22
- BRODHEAD, John Romeyn. History of the State of New York. First Period, 1609—1664. New York: Harper & Brothers, . . . 1853. 8°, pp. xv.+801+10+map. (4840).....381.11
- BRODIE, *Sir* Benjamin Collins. . . . Physiological Inquiries. The Second Part—being a series of Essays intended to illustrate some points in the Physical and Natural History of Man. London: Longman . . . 1862. 16°, pp. xi.+227. (5186).....384.13
- BRODRICK, W. J. [Editor.] See Tacitus, Agricola and Germania. (5043)258.10
- BROOKE, *Sir* James, . . . [Journal of.] See Keppel, Henry, Expedition to Borneo. (5325).....375.15
- BROOKE, Stopford A. . . . Life and Letters of Frederick W. Robertson . . . Boston: Fields, Osgood & Co. . . . 1869. 2v. 12°, pp. xv.+352+portrait; viii.+359. (5469).....377.11
- BROUGHAM, Henry . . . [and others.] Discourses on the Objects and Uses of Science and Literature. By Henry Lord Brougham, Prof. Sedgwick . . . and the Hon. G. C. Verplanck. With preliminary observations, &c., on Reading. By A. Potter, D. D. . . . New York: Harper & Brothers . . . 1848. 12°, pp. 332. (H. F. L. No. 79.) (4959).....38X.7
- Contents:—Objects . . . of Science, by H. Brougham, 96 pp., at p. 35; Pleasures . . . Literature and Moral Science, by A. Potter, 8 pp., at p. 131; Discourse on Classical, Metaphysical, Moral and Natural Studies, by A. Sedgwick, 120 pp., at p. 141; Importance of Scientific Knowledge, by G. C. Verplanck, 34 pp., at p. 261; Influence of Moral Causes upon Opinion Science and Literature, 38 pp., at p. 295.
- BROUGHAM, Henry. [Illustrations, Notes, &c.] See Paley, Wm., Natural Theology. (H. F. L. No. 96, 9i) (4902).....388.5
- BROWNE, Henry. [Translation from German, and Appendix on Greek Particles.] See Madvig, J. N. Syntax of the Greek Language. (4624).....268.35
- BROWNE, R. W. . . . A History of Roman Classical Literature. \* \* \* London: Richard Bentley. . . . n. d. 8°, pp. xx.+591. (4558)..147.17
- BROWN, Simon . . . [Index and Preface.] See Johnston, J. F. W. . . . Elements of Agricultural Chemistry and Geology. (4597).....218.20
- BRYANT, William Cullen. A Discourse on the Life, Character and Genius of Washington Irving, delivered before the New York Historical Society. . . . New York: G. P. Putnam . . . 1861. 46 pp. 12°. See Irving, W., Works, XVI., Wolfert's Roost. (4692).....208.14
- BRUCE, Archibald Hamilton . . . \* \* \* Second Greek: consisting of extracts from Lucian, Xenophon's Anabasis, New Testament and Homer, with Notes, a synopsis of Syntax, a copious Vocabulary, and imitative exercises. London: T. Nelson and Sons . . . 1866. 16°, pp. 432. (4595).....258.30
- [Notes.] See Virgilius, P. M., Works of . . . (5144)..258.14

- BRUCE, *Rev. John*. . . . [Funeral Sermon on Thomas Chalmers.] 7 pp. 8°. See Chalmers, T., *Select Works of*, at p. xxv. of Vol. I. (4770). . . . 372.7
- BRUEYS, David Auguste *de* Palaprat Jean. [Le Grondeur, pp. 68. L'Avocat Patelin. p. 69. (Memoir.)] See *Chefs d'Ouvres des Auteurs Comiques*. 8v. 12°. Vol. III. (5090). . . . 118.13
- BRUSH, George Jarvis. . . . Manual of Determinative Mineralogy, with an Introduction on Blow-pipe Analysis. Second Edition, with corrections. New York: John Wiley & Sons . . . 1877. 8°, pp. vii.+104. (5394). . . . 463.1
- BUCKE, Charles . . . On the Beauties, Harmonies and Sublimities of Nature; with notes, commentaries and illustrations. \* \* \* . . . Selected and revised by the Rev. William P. Page. New York: Harper & Brothers . . . 1846. 12°, pp. 329. (H. F. L. No. 445.) (4934). . . . 389.13
- BUCKE, Charles. Ruins of Ancient Cities: . . . \* \* \* New York: Harper & Brothers . . . [H. F. L. No. 134, 135] 1848. 2v. 12°, pp. 360+frontispiece, ea. vol. (4927). . . . 389.6
- BUEL, Jesse. . . . The Farmer's Companion, or Essays on the Principles and Practice of American Husbandry; with the Addresses prepared to be delivered before the Agricultural and Horticultural Societies of New Haven county, Connecticut. And an Appendix, containing Tables and other matters useful to the Farmer. Third Edition, revised and enlarged. To which is prefixed a Eulogy on the Life and character of Judge Buel. By Amos Dean, Esq. Boston: Marsh, Capen, Lyon & Webb. 1842. 16°, pp. xxiv.+336. (4749). . . . 516.22
- BUNBURY, Edward Herbert. [Reviser] See Gell, *Sir W.* Topography of Rome. (5473). . . . 473.13
- BUEL, Jesse . . . The Farmer's Instructor; \* \* \* . . . New York: Harper & Brothers, . . . 1847. 2v. 12°, pp. 247, 276. (H. F. L. No. 11.) (4732). . . . 386.1
- BULLOCK, J. [Editor] See Fresenius, C. B., *System of Quantative Chemical Analysis*. (5399). . . . Chem. Lab.
- BULWER. See Lytton.
- BUNNER, E. History of Louisiana . . . New York: Harper & Brothers, . . . 1861. 12°, pp. 267. (H. F. L. No. 177.) (4957). . . . 38X.5
- BUNSEN, Robert. . . . Gasometry; comprising the leading Physical and Chemical Properties of Gases. Translated by Henry E. Roscoe, . . . with sixty illustrations. London: . . . Walton & Maberly. 1857. 8°, pp. xii.+298+16. (1930). . . . 311.7
- BUERGER, Gottfried August. *Vermischte Schriften*. Goettingen: 1829. . . . Dieterich . . . sq. 16°. 4 parts in 2v. (4677). . . . 189.1  
Contents:—Vol. I. Homer's *Ilias*, pp. 226 & 262; Vol. II. Ossian's *Gedichten*, pp. 351; Fragments, pp. 234.
- BURN, Robert Scott. Model Designs for Mansions, Villas, Dwelling Houses, Cottages, Gates and Stables, being Plans, Elevations, Sections, Detailed Drawings and Descriptive Specifications; with Hints on Sanitary Construction, and an Essay on Dwellings for the Working Classes, their Construction and Arrangement. Edited and arranged by Robert Scott Burn . . . assisted by various professional gentlemen. London: George Herbert. 4°. pp. iv.+46+18+24+191 plates. n. d. [1853?] (5048). . . . 526.2

- BURNAP, George W. Life of Leonard Calvert, first Governor of Maryland. 229 pp. 16°. See Sparks, J., Lib. of Am. Biog., 2d Series, Vol. IX., p. 1. (4810).....384.1
- BURNET, Gilbert: . . . *Bp. of Salisbury*. The History of the Reformation of the Church of England, with a copious Index. Revised and Corrected, with additional Notes, and a Preface. By Rev. E. Nares, D. D., . . . with two engravings. New York: D. Appleton & Company, . . . 1843. 3v. 8°, pp. xlviii.+592+portrait of Burnet; xxxv.+652; xlviii.+543, *inc. Index to whole*. (4811).....394.5
- BUSH, George. The Life of Mohammed, . . . New York: Harper & Brothers, . . . 1847. 18°, pp. 461+1 plate. (H. F. L. No. 10.) (4847)....386.8
- BUTLER, Charles . . . *Horæ Juridicæ Subsecivæ*; being a connected series of Notes respecting the Geography, Chronology, and Literary History of the principal Codes and original Documents of the Grecian, Roman, Feudal and Canon Law. \* \* \* The second edition. London: . . . J. White . . . 1807. 8°, pp. xvi.+238. (5309).....381.16
- BUTLER, Charles. . . . Sketch of the Professional Character of the Earl of Mansfield. 38 pp. 8°. (Bound with *Horæ Juridicæ Subsecivæ*—by same. See p. 201.) (5309).....381.16
- BUTLER, [Joseph.] Hobart's Analysis of Bishop Butler's Analogy of Religion, . . . with Notes. Also Crawford's Questions for Examination. Revised. by Charles E. West. . . . New York: Harper & Brothers, . . . 1859 16°, pp. 228. (5283).....364.14
- BYWATER, I. [Collation of Bodleian MSS. 14 pp. 12°. See Plato, ed. of Wagner, p. 179. (5130).....258.28
- BARRY, Patrick. The Horticulturist and Journal of Rural Art and Rural Taste. . . . Edited by —. Rochester: James Vick, Jr. . . . 1853. 8°, pp. 576. Vol. III. (5243)
- BARKER, George F. [Editor.] See Franklin Institute, Journal of.
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- BROOKS, David. [Honorary Commissioner.] Report on Telegraphs and Apparatus. 44 pp. 8°. See UNITED STATES, Dept. of State. Reports, International Exhibition, Vienna, 1873, Vol. II. J. (5440).....157.13
- BROWN, Authur H. [Honorary Commissioner.] Report on Governmental Printing Institutions in Europe. 18 pp. 8°. See UNITED STATES, Department of State. Reports, International Exhibition, Vienna, 1873, Vol. II. P. (5440).....157.13
- BRIDGES, Lyman . . . [Artisan Commissioner.] Report on the Buildings of the Exhibition, and on Railroad Structures. 8°, pp. 34+16+eng. See UNITED STATES Dept. of State. Reports, International Exhibition, Vienna, 1873. Vol. IV. A.a. (5440).....157.13
- BLAKE, William Phipps. Report on Iron and Steel. 8°, pp. ix.+320+6 eng. + 2 plates. See UNITED STATES Dept. of State. Reports, International Exhibition, Vienna, 1873. Vol. IV. E. (5440).....157.13
- BUNSEN, Robert. Memoir on the Intimate Connection existing between the Pseudo-Volcanic Phenomena of Iceland. 57 pp. 8°. See Graham, Thomas, Chemical Reports and Memoirs, p. 323. (5463).....493.3

- BOUTELL, Rev. Charles. . . . The Monumental Brasses of England: A Series of Engravings . . . with brief descriptive notices. \* \* \* London: George Bell, . . . 1849. f. pp. xii.+53+45 plates (Ecclesiastics, Cross-Brasses and Bracket-Brasses),+69 plates (Brasses of Knights and others in armor, and of ladies),+30 plates (Brasses of civilians and ladies),+2 plates (Miscellaneous Brasses),+1 plate (part of a canopy),+Indexes of heraldry, names and places. 8 pp. (4710).....Cabinet C
- BRAINERD, Cephas. [The Libraries of Young Men's Christian Associations, 3 p. 8°.] See UNITED STATES, Bureau of Education, Public Libraries in U. S. Vol. I., p. 386. (5074).....L. R.
- BILLINGS, J. S. . . . [Medical Libraries in the United States. 20 pp. 8vo.] See UNITED STATES, Bureau of Education, Public Libraries in U. S., Vol. I. p. 183. (5074).....L. R.
- BROWN, Thomas. . . . Lectures on the Philosophy of the Human Mind . . . Corrected from the last London Edition. . . . Hallowell: Glazier, Masters & Co. 1834. 2v. 8vo. pp. 538, 514. (5420).....348.14
- BRIGGS, Roberts. [Editor.] See Franklin Institute, Journal of.
- CALDERWOOD, Henry. . . . Handbook of Moral Philosophy. Third Edition. London: Macmillan & Co. 1874. 12°, pp. vii.+277. (5009)....148.23
- CALDWELL, George C. . . . [Editor.] Agricultural Qualitative and Quantitative Chemical Analysis. After E. Wolff, Fresenius, Krockner, and others. New York: Orange Judd & Company, . . . 1869. 12°, pp. 304. (5019).....148.25
- CALVERT, James. Mission History. See Williams, Thomas. Fiji and the Fijians. 8°, pp. x+551. (5242).....391.4
- CAMPBELL, Duncan. . . . History of Prince Edward Island, \* \* \* Charlotte-town: Bremer Brothers, 1875. 16°. pp. vii.+224. (4747).....374.1
- CAMPBELL, George. . . . Lectures on Systematic Theology. Pulpit Eloquence, and the Pastoral Character. A new edition. London: . . . Thomas Tegg, 1840. 8°, pp. xii.+372. (5421).....364.10
- CAMPBELL, Lord John. Lives of the Lord Chancellors and Keepers of the Great Seal of England, from the earliest times to the reign of Queen Victoria. New Edition, edited by John Allan Mallory . . . Illustrated. New York: James Cockcroft & Co. 1876. 10v. 8°. (5228).....395.1
- Contents:—Vol. I. Chancellors and Lord Keepers, to death of Cardinal Woolsey, pp. xv.; 473; portraits of author and William Wickham, view of Chancery Lane, and 16 colored plates of great seals.  
 Vol. II. Sir Thomas More to Bacon (begun) pp. vi.; 445, and portrait of Sir Thomas More, and 4 colored plates of seals.  
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*London Quar. Rev., 1847.*

- CAMP, George Sidney. Democracy. \*\*\* New York: Harper & Brothers 1845. 12°, pp. 249. (H. F. L. No. 138.) (4929).....389.8
- CANNIFF, William . . . A Manual of the Principles of Surgery, based on Pathology, for students. Philadelphia: Lindsay & Blakiston. 1866. 8°, pp. 402. (4773).....371.8
- CARLYLE, Thomas. Past and Present. \*\*\* New York: Wiley & Putnam. 1847. 12°, pp. vi.+386. [Library of Choice Reading.] (4973) .....382.4  
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- CARPENTER, Philip P. . . . The Mollusks of Western North America, embracing the second report made to the British Association on this subject, with other papers, . . . with a General Index. 8°, 446. pp. See Smithsonian Institution, Miscellaneous Collections, Vol. X. (1873) Art. 1. (5509).443.1  
 ——— [Joint Author] See Lea, I. and others. Check List Shells of N. A.
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- CARPANI, G. P. [Notes and Observations.] See Cellini, Benvenuto. Memoirs. New York. 2v. in 12°. (4734).....383.18
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 ——— Unconscious Action of the Brain. 29 pp. 16°. See Half Hour Recreations in Popular Science, at p. 191. (5026).....148.17
- CASSAGNAC, Adolph de Granier. Histoire de la Langue Française \*\*\* Paris: . . . Firmin Didot, Frères . . . 1862. 8°, pp. xvi+554. (5083).108.3
- CASWELL, Alexis . . . Meteorological Observations made at Providence, R. I., extending over a period of twenty-eight years and a half, from December, 1831 to May, 1860. 188 pp. 4°. See Smithsonian Institution, Contributions to Knowledge, Vol. XII. (1860) Art. 4. (5492).....441.1
- CATHCART, George R. The Literary Reader. \*\*\* New York: Ivison, Blakeman, Taylor & Company. 1876. 16°, pp. xiv+426. American Educational Series. (5075).....383.6
- CAVENDISH Society (Founded 1846.) Works of.  
 Hand-book of Chemistry, by Leopold Gmelin, translated by H. Watts. 12v. 8°. (5434).....493.1  
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 Chemical Reports and Memoirs, edited by Thomas Graham. (5436).493.3  
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 Chemical Method, by August Laurent, translated by Wm. Odling. 1v. 8° (5437).....494.2  
 Memoirs of John Dalton, by W. C. Henry. 1v. 8vo. (5438).....494.3

- CHALMERS, Thomas. . . . The Select Works of. New York: Robert Carter, 1848. 4v. 8°. (4770).....372.7  
 Contents :—Vol. I. Memoir, pp. 20. Funeral Sermon by Rev. John Bruce, pp. 7. Miscellanies, pp. 54. Vol. II. Lectures on Romans, pp. 521. Vol. III. Sermons, pp. 382. Vol. IV. Sermons and Discourses, pp. 414.  
 [Each volume has a separate title page.]
- CHAMISSE, Adelbert von. Werke. Leipzig, Weichmann'sche Buchhandlung, 1836. 4v. 12°. (4673)..... 168.2  
 Contents :—Vol. I. Reise um die Welt, erster Theil. Z. Vol. II. Reise um die Welt, zweiter Theil. Vol. III. Gedichte. Vol. IV. Gedichte. Adelbert's Fabel. Peter Schlemihl. [Portraits and Illustrations.]
- CHANNING, Edward Tyrrel. Life of William Ellery. 12°, pp. 76+facsimile. See Sparks, J., Lib. of Am. Biog., Vol. VI., at p. 85. (4814).....385.1
- CHANNING, William Henry. [Translation and Preface.] See Jouffroy Introduction to Ethics. (4584).....281.22
- CHAPMAN, John Ratcliffe . . . Instructions to young Workmen, \* \* \* New York: D. Appleton & Company, . . . 1848. 12°, pp. 160+7 plates. (4815).....383.14
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- CHAUCER, Geoffrey, Selections from the Poetical Works of, with a concise Life of that Poet, and Remarks illustrative of his Genius. By Charles D. Deshler. \* \* \* New Edition, complete in one volume. New York: George P. Putnam. 1850. 16°, pp. xiii+296. (4777) .....374.5
- La CHAUSSEE, Pierre Claude Nivelles de. [Le Préjugé à la mode, pp. 83; L'Ecole des Mères. pp. 84. (Memoir)] See Chefs d'Oeuvres des Auteurs Comiques. 8v. 12°, Vol. III. —
- CHAUVENET, William. . . . A Manual of Special and Practical Astronomy: Embracing the general problems of Spherical Astronomy, the special applications to Nautical Astronomy, and the theory and use of fixed and portable astronomical instruments. With an appendix on the method of least squares. Fifth Edition, revised and corrected. Philadelphia: J. B. Lippincott & Co. . . . 1874. 2v. 8°. [University Edition.] (4564).....147.5  
 Contents :—Vol I. pp. 708, Spherical Astronomy. Vol. II. pp. 632, Theory and Use of Astronomical Instruments. Method of Least Squares [begins] p. 469. [rv. plates].
- CHEFS-D'OEUVRE DES AUTEURS COMIQUES . . . Paris . . . Firmin Didot Frères . . . 1866. 8v. 12°. (5090) [Short memoir of each author.] 118.13  
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 MONTFLEURY—La Femme juge et partie. La Fille Capitaine.  
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DESFORGES—Le Sourd, ou l'Auberger pleine.  
LEMERCIER—Plante—Pinto.
- CHEMIST, *The*. . . \* \* \* London: Knight & Lacey . . . 1824-5. 2v. 8°, pp. viii. +448+[7 index]; 480+[7 index](5367).....464.12  
A weekly publication begun March 13, 1824, and closed April 16, 1825.
- CHEERNIER, André. Poesies de—Précédés d'une notice par M. H. de Latouche, Paris: G. Charpentier . . . 1877. 12°, pp. 283. (5088)....118.14
- CHERON, Louis Claude. [Le Tartuffe de Moeurs. pp. 97. (*Memoir.*] See Chefs-d'Oeuvres des Auteurs Comiques, 8v. 12°. Vol. VII. (5090).....118.13
- CHEVREUL. [and others] Annale de Chimie et de Physique . . . Quatrieme Série. Paris, 1864. 3v. 8°.
- CHEVREUL, [Michel Eugene.] Physical Investigations on Dyeing: On the Influence that two Colours may exercise upon each other when seen simultaneously. 75 pp. 8°. See Graham Thomas. Chemical Reports and Memoirs, p. 165. (5436).....493.3
- CHITTENDEN, Lucius E. The Captain of Ticonderoga. Annual Address . . . at Montpelier, Vt., October 8, 1872. 89, pp. 8°. See Vermont Historical Society, Proceedings of, . . . at p. 1. (4820).....381.8
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- CHURCH, Alfred J. . . . [Joint Editor.] See Tacitus, Agricola and Germania. (5043).....258.10
- CICERO. The Orations of Cicero against Catilina, with notes and an Introduction, translated from the German of Karl Halm, with many additions, by A. S. Wilkins . . . London: MacMillan & Co. 1871. . . . 16°, pp. 160. (5034).....258.12



CLARKE, Adam, *D. D.* Bibliographical Dictionary; containing a chronological Account, alphabetically arranged, of the most curious, scarce, useful and important books, in all departments of literature which have been published in Æthiopic, Arabic, Armenian, Chaldee, Coptic, Greek, Hebrew, Latin, Persian, Samaritan, Syriac, &c. . . . including the whole of the fourth Edition of Dr. Harwood's View of the Classics, with innumerable additions and amendments. To which are added an essay on Bibliography . . . and an account of the best English translation of each Greek and Latin Classic . . . \* \* \* Manchester . . . W. Baynes, 1804. . . . 6v. 12° (4603)

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[CLARKE, Adam] The Bibliographical Miscellany. \* \* \* London . . . W. Baynes . . . 1806. 2v. 12°, pp. vii. + 324; xi. + 323. (4604) L. R.

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NOTE—These volumes are in continuation of the Bibliographical Dictionary by the same.

CLARK, E. C. . . . Early Roman Law. The Regal Period. London: Macmillan & Co. 1872. 12°, pp. vii. + 151. (5142) . . . . . 258.16

CLARKE, Frank Wigglesworth. The Constants of Nature, Part I. Specific Gravities; Boiling and Melting Points; and Chemical Formulae. 8°, pp. 272. See Smithsonian Institution, Miscellaneous Collections, Vol. XII. (1874) Art. 2. (7511) . . . . . 443.1

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CLASSICAL Manual; or a mythological, historical and geographical Commentary on Pope's Homer and Dryden's *Vigil*: with a copious index. London: . . . for Longman [and Co.] 1827. 8°, pp. 697. (5129) . . . . . 473.10

CLAY, Cassius Marcellus. The Writings of—including Speeches and Addresses. Edited, with a Preface and Memoir, by Horace Greeley. New York: Harper & Brothers, . . . 1848. 8°, pp. x. + 535 + portrait. (4764) . . . . . 372.6

CLEMENT, J. . . . Memoir of Adoniram Judson: being a sketch of his Life and Missionary Labors. \* \* \* Auburn: Derby & Miller. 1851. 12°, pp. 336, portrait (4651) . . . . . 218.25

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- CLEMENT, *Saint*. The Second Epistle of [translated] 10, pp. 8°. See Wake W. • Genuine Epistles of the Apostolical Fathers, at p. 463. (4799).....371.11
- CLEVELAND, Henry R. Life of Henry Hudson. 78, pp. 12°. See Sparks, J., Lib. of Am. Biog., Vol. X, at page 185. (4814).....385.1
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- COBB, H. . . . [Joint Editor and Proprietor, Vols. 7—15.] See Traver, M. Western Journal, 15v. 8°. (5238).....393.1
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- COFFIN, William F. . . . 1812: The War and its Moral: A Canadian Chronicle. Montreal: . . . 1864. 8°, pp. 296. (4767).....372.9
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- COLLIER, Peter . . . [Scientific Commissioner.] Report on Commercial Fertilizers. 67 pp. 8°. See UNITED STATES, Department of State. Reports, International Exhibition, Vienna, 1873. Vol. II. C. (5440).....157.13
- COMBE, Andrew. . . . The principles of Physiology applied to the preservation of health, and to the improvement of physical and mental education. With six wood cuts. From the seventh Edinburgh edition. New York: . . . Harper & Brothers . . . 1848. 12°, pp. 408. (Questions on, by Alfred Addis, p. 358.) (4889).....387.21

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- CONANT, Mrs. Hannah Chaplin . . . The English Bible. History of the translation of the Holy Scriptures into the English tongue. With specimens of the old English versions. \* \* \* New York: Sheldon, Blakeman & Co. . . . 1856. 12°, pp. 461+portrait of Wycliffe & Tyndale. (5286).....375.28  
 "The 'History of the English Bible,' which is the most elaborate and important of her works, presents a richer variety of historical materials, more philosophically digested than Anderson's ponderous octavos on the same subject."  
*American Cyclopaedia.*
- CONRAD, Timothy Abbott. Check List of the Invertebrate Fossils of North America, Eocene and Pliocene. 8°, 46 pp. See Smithsonian Institution, Miscellaneous Collections, Vol. VII. (1867) Art. 6. (5506).....443.1
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- COOKE, Josiah Parsons jr. Chemical Problems and Reactions, to accompany Stockhardt's Elements of Chemistry. Philadelphia: Published by E. H. Butler & Co. 1865. 8°, pp. 128. (4713) Chem. Lab.
- COOKE, Josiah Parsons jr. . . . Religion and Chemistry; or, Proof of God's plan in the Atmosphere and its Elements. Ten Lectures delivered at the Brooklyn Institute, Brooklyn, N. Y. On the Graham Foundation. \* \* \* Second Edition. New York: Charles Scribner & Co. 1867. 16°, pp. 348. (5374).....465.8
- COOKE, Philip St. George *Brig. Gen. U. S. A.* Cavalry Tactics: or, regulations for the instruction, formations, and movements of the cavalry of army and volunteers of the United States, . . . with sixty additional illustrations. By Lieut. Colonel George Patten, . . . New York: . . . J. W. Fortune, . . . 1864. 12°, pp. xiii.+294. (4600).....238.14
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- COTTA, Bernhard von. Rocks classified and described. A treatise on lithology. An English edition. By Philip Henry Lawrence. With English, German, and French synonyms. Revised by the author. London: Longmans, Green & Co. 1866. 8°, pp. xii.+425. (5191).....465.1

- COUES, Elliott . . . Field Ornithology. Comprising a Manual of Instruction for procuring and preserving birds, and Check List of North American birds, \* \* \* Salem: Naturalists' Agency. 1874. 8°, pp. iv.+116+137. (5458).....**463.6**
- COULANGES, Fustel *de*. . . Histoire des Institutions Politiques de l'Ancienne France. Première Partie—L'Empire Romain, Les Germains—La Royauté Mérovingienne. Paris: . . . Hachette et Cie . . . 1875. 8°, pp. 543. (4613).....**157.7**
- COURT and Camp of Bonaparte. New York: Harper & Brothers. . . . 1846. 12°, pp. 389. [portrait of Talleyrand and genealogical chart of Bonaparte Family.] (H. F. L. No. 29.) (4862).....**386.23**
- [COUSIN, Victor.] An Epitome of the History of Philosophy. Being the works adopted by the University of France for instruction in the colleges and high schools. Translated from the French, with additions, and a continuation of the history from the time of Reid to the present day . . . New York: Harper & Brothers . . . 1845. 2v. 12°, pp. 311; 276 (H. F. L. Nos. 143-4.) (4933).....**398.12**
- COXE, William, . . . Memoirs of the Duke of Marlborough, with his original correspondence: collected from the family records at Blenheim, and other authentic sources. . . . A new edition, revised by John Wade. . . . London: George Bell & Sons, 1876. 3v. 16°, pp. 506, 493, 483, portraits. (5124).....**376.13**
- COX, Samuel Hansorn. [Semon.] *See* Murray St. Church, New York, Discourses . . . (4546).....**157.6**
- CRACE-CALVERT F. . . . Dyeing and calico printing: including an account of the most recent improvements in the manufacture and use of aniline colours. Illustrated with wood engravings and numerous specimens of printed and dyed fabrics. . . . Edited by John Stenhouse, . . . and Charles Edward Groves . . . Manchester: Palmer & Howe . . . 1876 . . . 8°, pp. xxix.+510, [chart at p. 480] (4569).....**462.6**
- CRAUFURD [Sir G. W.] [Questions for Examination.] *See* Butler J. Hobart's Analysis of Bishop Butler's Analogy of Religion. (5283).....**384.14**
- CRICHTON, Andrew. . . . The History of Arabia, Ancient and Modern. With a map and engravings. . . . New York: Harper & Brothers, . . . 1845. 2v. 12°, pp. 418+map; 422. (H. F. L. Nos. 68, 69.) (4887).....**387.19**
- CRICHTON, Andrew . . . and Wheaton, Henry . . . Scandinavia, Ancient and Modern; being a history of Denmark, Sweden, and Norway: . . . with illustrations of their natural history. With a map and twelve engravings. . . . New York: Harper & Brothers . . . 1846. 2v. 12°, pp. 373+map; 403. (4928).....**389.7**
- CROFFUT, W. A., and John M. Morris. The Military and Civil History of Connecticut during the War of 1861-'65, comprising a detailed account of the various Regiments and Batteries, . . . Illustrated. New York: . . . Ledyard Bill. 1868. 8°, pp. 891, numerous portraits. (4835)....**381.10**
- CROKER, John Wilson . . . [Editor.] *See* Hervey, Lord John, Memoirs of the Reign of George the Second. 2v. 12°. (4753).....**374.14**
- CROOKES, William. . . . Roehrig, Ernst. . . . A practical Treatise on Metallurgy, adapted from the last German edition of Professor Kerl's Metallurgy. London: Longmans, Green & Co. 1868-'70. 3v. 8°. (3248—5397)..**352.12**

- Contents:—Vol. I. Lead and other metals. pp. xxviii.; 724r 204 eng.  
 Vol. II. Copper and Iron. pp. xxiv.; 876: xvi.; 1 plate (273 eng.)  
 Vol. III. Steel, Fuel and Supplement. pp. xxxii.; 820; xiv. (145 eng.)  
 Vol. II. bears imprint of John Wiley & Sons . . . New York.
- CROOKES, William** . . . [Editor.] See Mitchell, John. Manual of Practical Assaying.
- CROOKES, William** . . . [Translator and Editor, with extensive additions.] See Wagner R. A Handbook of Chemical Technology. (5368)..Chem. Lab.
- CROOKES, William.** [Editor and Reviser.] See Reimann, M. On Aniline and its Derivations. (5426).....462.20
- CROLL, James.** Climate and Time in their Geological relations: A theory of secular changes of the earth's climate. . . . New York: D. Appleton & Company, . . . 1875. 12°, pp. xvi.+577+frontispiece+7 colored plates. (5148).....382.8
- CROLY, George.** Life and Times of His late Majesty George the Fourth. With anecdotes of distinguished persons of the last fifty years. . . . New and improved edition. New York: Harper & Brothers . . . 1846. 12°, pp. 414, portrait of George IV. (H. F. L. No. 15.) (4851).....386.12
- CROSS, C. R.** . . . [Joint Editor.] See Wells, D. A. and others. Annual of Scientific Discovery . . . 1871. (5232).....467.1
- CRUSE, C. F.** . . . [Translator.] See Eusebius Pamphilus. Ecclesiastical History. (4704).....348.7
- CRUTWELL, Clement.** . . . Life of . . . Thomas Wilson . . . Bishop of Sodor and Mau. 84 pp. f. See Wilson, Thomas, Works of. (5337)491.10
- CUDMORE, P.** . . . The Irish Republic. A Historical Memoir on Ireland and her Oppressors. Saint Paul: Pioneer Printing Company. 1871. 8°, pp. 331. (4748).....372.11
- CUDMORE, P.** . . . The Civil Government of the States, and the Constitutional History of the United States. Second Edition. New York: . . . P. J. Kennedy . . . 1875. 8°, pp. 259. (4540).....381.18
- [**CUMMING, Sir A. R. Gordon.**] Toads in the Hole. See Half Hour Recreations of Popular Science, at p. 274. (5026).....148.17
- CUNNINGHAM, Allan.** The Lives of the most eminent British Painters and Sculptors. . . . New York: Harper & Brothers. 1846. 5v. 12°. [Portraits.] (H. F. L. Nos. 17, 18, 19, 66, 67.) (4853) 386.14
- Contents:—Vol. I. Early Painters. Hogarth, p. 14. (*portrait*); Richard Wilson, p. 171; Reynolds, p. 186; Gainsborough, p. 282.  
 Vol. II. West (*portrait*); James Barry, p. 54; Wm. Blake, p. 124; Opie, p. 156; Geo. Morland, p. 184; Edward Bird, p. 208; H. Fuseli, p. 223.  
 Vol. III. Gibbons, p. 5; C. G. Cibber, p. 19; L. F. Bonbrillac, p. 31; Jos. Wilton, p. 62; Thos. Banks, p. 74; Jos. Nollekins, p. 108; Jno. Bacon, p. 174; Anne Darner, p. 214; Jno. Flaxman, p. 237, (*portrait*).  
 Vol. IV. Jameson; Ramsay, p. 33; Romney, p. 43; Runciman, p. 125; Copley, p. 138, (*portrait*); Mortimer, p. 158; Raeburn, p. 172; Hoppner, p. 203; Owen, p. 214; Harlow, p. 229; Borrington, p. 245.  
 Vol. V. Conway; David Allan, p. 25; Northcote, p. 40; Beaumont, p. 117; Lawrence, p. 134, (*portrait*); Jackson, p. 229; Liversedge, p. 249; Burnet, p. 261.
- CURRIER, Amos N.** . . . Tables of Latin Suffixes and a list of Prefixes. With illustrative examples. \* \* \* Philadelphia: Eldredge & Brothier, . . . 1873. 12°, pp. iv.+35. (4557).....258.4

- CURRY, Daniel. . . . [Editor, notes.] See Southey, R. Life of Wesley. 2v. 12°. (4746).....374.13
- CURWEN, Henry. A History of Booksellers, the old and the new, \* \* \* . . . London: Chatto and Winders . . . (1873) 16°, pp. 483+frontispiece+18, pl. of portraits and engravings. (5460).....377.13
- CUTTER, Charles A. [Librarian of the Boston Athenæum.] Rules for a printed Dictionary Catalogue. 89 pp. 8°. See UNITED STATES, Bureau of Education, Public Libraries in the. Part II. in Vol. II. end. L. R.
- CUTTER, Charles A. . . . [Library Catalogues, 97 pp. 8vo.] See UNITED STATES, Bureau of Education, Public Libraries in the, Vol. I. p. 526. (5074).....L. R.
- CUTTS, Richard D. [Honorary Commissioner.] Report on Instruments of Precision. 13 pp. 8°. See UNITED STATES, Department of State. Reports, International Exhibition, Vienna, 1873. Vol. II. H. (5440).....157.13
- CUTLER, Jefferson Elbridge. War Poems \* \* \* Boston: Little, Brown & Company. 1867. sq. 12°, pp. 59. (5447).....38X.17
- DALRYMPLE, Clarence. [Navigation to and from.] See Murray H. [and others.] Historical and Descriptive Account of British India. 3v. 12°, Vol. III. p. 326. (4873).....387.5
- DANA, James Dwight . . . Corals and Coral Islands. \* \* \* New York: Dodd & Mead . . . 1874. 8°, pp. 406+frontispiece, +2 colored engravings+3 charts. (5392).....463.3
- DANA, James Dwight. Corals and Coral Islands, 17 pp. 16°. See Half Hour Recreations in Popular Science, p. 173. (5026).....148.17
- DANA, James Dwight. . . . A System of Mineralogy, comprising the most recent discoveries: with numerous wood cuts and four copper plates. \* \* \* Second edition. New York and London: Wiley & Putnam. 1844. 8°, pp. 633+4 plates. (5291).....462.16
- DANA, James Dwight. [Joint Editor 2d Series, Editor in Chief of 3d Series.] See Silliman B. Am. Journal of Sciences and Arts. (5396)
- DANA, James Dwight, [Co-operator] See Dana, E. S. A Text-Book of Mineralogy. (5395).....463.2
- DANA, Edward Salisbury . . . A Text-Book of Mineralogy. With an extended treatise on Crystallography and Physical Mineralogy. On the plan and with the co-operation of Professor James D. Dana. With upwards of eight hundred wood cuts and one colored plate. New York: John Wiley & Sons . . . 1877. 8°, pp. viii.+485. (5395).....463.2
- DANCOURT, Florent Carton. [Le Chevalier à la mode, 92 pp.; Le Mari retrouvé, p. 93; Les Trois Cousines, p. 133; Le Galant Jardinier, p. 210; Les Bourgeoises de qualité, p. 250. [Memoir.] See Chefs-d'Oeuvre des Auteurs Comiques. 8v. 12°, Vol. II. (5090).....118.13
- D'ANVERS, N. Elementary History of Art. An introduction to ancient and modern Architecture, Sculpture, Painting, Music. . . . With a preface by T. Roger Smith. . . . Illustrated with one hundred and twenty wood cuts. London: Asher & Co. . . . 1874. 8°, pp. xxiii+646. (5092)....308.25
- DARCEL, Alfred. Les Arts Industriels du moyen age et de la renaissance. Paris: . . . Victor Didron . . . 1858. 8°, pp. 75. ("Exposition du Manchester.") (5304).....391.16  
Extrait de la Revue Française Vol. XI.

- DARCEL, Alfred. *Excursion Artistique en Angleterre* \*\*\* Rouen: . . .  
D. Brière . . . 1858. 8°, 114 pp. Bound with *Les Arts Industriels*  
. . . by the same. (5304).....**391.16**
- DARWIN, Charles, . . . *Journal of Researches into the Natural History and  
Geology of the countries visited during the voyage of H. M. S. Beagle round  
the world, under the command of Capt. Fitz Roy, R. N.* New York: Har-  
per & Brothers, . . . 1846. 2v. 12°, pp. vii.+351; v.+312. [Harper's  
*New Miscellany*, X. & XI.] (5319).....**375.8**
- D'AUBIGNE. *See* Aubigné, J. H. M. *de*.
- DAVENPORT, R. A. *Perilous Adventures; or, Remarkable Instances of courage,  
perseverance and suffering.* \*\*\* New York: Harper & Brothers . . .  
1844. 12°, pp. 335. (H. F. L. No. 159.) (4944).....**389.23**  
Contents:—Prince Charles Edward; Cassanova, p. 62; Charles II. p. 121; Earl of  
Nithsdale, p. 203; Stanislaus Leczinski, p. 225; Cortez, p. 269.
- DAVIES, James. [Editor, with notes.] *See* Æschylus. *Prometheus Bound.*  
(5131).....**258.25**
- [Editor.] *See* Plato, the *Apology of Socrates, the Crito, and  
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- DAVIS, Charles . . . [Artisan Commissioner.] *Report on Hydraulic Engin-  
eering.* 8°, pp. 20+4 plates. *See* UNITED STATES, Dept. of State. *Reports,  
International Exhibition, Vienna, 1873.* Vol. III. D. (5440)....**157.13**
- DAVIS, John Francis . . . *The Chinese: A general description of the Empire  
of China and its inhabitants.* . . . Illustrated with wood cuts. New  
York: Harper & Brothers . . . 1848. 2v. 12°, 383+map; 440. (H. F.  
L. Nos. 80, 81) (4895).....**387.27**
- DAVIS, Charles Henry . . . *The Law of the Deposit of the Flood Tide; its  
Dynamical Action and Office.* 14 pp. 4°. *See* Smithsonian Institution,  
*Contributions to Knowledge, Vol. III.* (1852) Art. 6. (5483).....**441.1**
- DAVIS, Edwin Hamilton [Joint Author.] *See* Squiers, E. G. and . . . *Ancient  
Monuments of the Mississippi Valley, (Vol. I. of "Smithsonian Contribu-  
tions.")* (5481).....**441.1**
- DAVY, Sir Humphrey . . . *Elements of Agricultural Chemistry, in a course  
of lectures for the Board of Agriculture; delivered between 1802 and 1812.*  
The sixth edition. London: . . . Longman [and Co.] . . . 1839. 8°,  
pp. 422+10 plates. (5079).....**462.13**
- DAWSON, John William. *The Dawn of Life; being the history of the oldest known  
fossil remains, and their relation to geological time and the development of  
the animal kingdom.* Montreal: Dawson Brothers. 1875. 16°, pp. xii.+  
239+frontispiece+1 col'd map+6plates). (5210).....**375.24**
- DAWSON, John William, . . . *Hand-book of Zoology; with examples from  
Canadian species, recent and fossil. Part. I., Invertebrata.* . . . Mon-  
treal: Dawson Brothers, . . . 1870. 16°, pp. viii.+264. (4534)..**246.25**
- DAY, George E. . . . [Translator.] *See* Lehmann, C. G. *Physiological Chem-  
istry.* 3v. 8°. (5435).....**493.2**
- [Translator.] *See* Graham, Thomas. *Chemical Reports and  
Memoirs.* (5436).....**493.3**

- DAYES, Edward. The Works of the late —; Containing an excursion through the principal parts of Derbyshire and Yorkshire, with illustrative notes, by E. W. Brayley; Essays on painting; instructions for drawing and coloring landscapes; and professional sketches of modern artists. London: . . . Mrs. Dayes . . . 1805. 8°, pp. 359.+portrait, eng. t. p., 8 eng., 2 plates.) (5253).....391.2\*
- DEAN, Amos . . . A Eulogy on . . . Judge Buel. 21 pp. 12°. See Buel, J. Farmers' Companion. 12°. at p. v. (4749).....374.21
- DEAN, John . . . The Gray Substance of the Medulla Oblongata, Human and Mammalian. 4°, pp. 80+6 plates. See Smithsonian Institution, Contributions to Knowledge, Vol. XVI. (1870) Art. 2. (5496).....441.1
- DEFENCE, of the Graham System of living; or, Remarks on Diet and Regimen. . . . \* \* \* New York. . . . W. Applegate, . . . 1835. 8° pp. 198+ (5284).....395.5
- DE MORGAN, Augustus, . . . The Globes, Celestial and Terrestrial. \* \* \* London: . . . Malby & Co. . . . 1854. 16°, pp. xv.+147. (5271).464.2
- DENDY, Walter Cooper . . . The Philosophy of Mystery. New York: Harper & Brothers, publishers, . . . 1847. 12°, pp. 442+. [Harper's New Miscellany, III.] (5313).....375.2
- DENS, Petrus . . . Theologia moralis et dogmatica . . . Editio nova et absolutissima, quippe cui nunc primum accedunt epitome ex operibus Benedicti XIV. necnon et variæ summorum pontificum præsertim vero ejusdem pontificis constitutiones literæ encyclicæ, etc. Dublini: . . . Richardus Coyne . . . 1832. 12° 8v. in 4. (5273).....138.1
- Contents:—Vol. I. De Deo . . . de angelis, creatione mundi, actibus humanis, . . . pp. 426 & index.  
 Vol. II. De legibus gratia, justificatione merito; virtutibus in genere, de virtutibus theologicis de ecclesia. pp. 468 & [ix. index.]  
 Vol. III. De jure et justitia et de contractibus. pp. 418 & Index [6 pp.]  
 Vol. IV. De virtute religionis immunitate ecclesiastica, Simonia, beneficiis ecclesiasticis et virtutibus justitiæ annexis. pp. 433.  
 Vol. V. De incarnatione, de sacramentis in genere, de baptismo, confirmatione, eucharistia et sacrificio missæ. pp. 426.  
 Vol. VI. De sacramento pœnitentiæ, de casibus reservatis, de indulgentiis, de censuris et irregularitatibus. Accedunt extremata practica pro confessoris. pp. 453 & Index [30 pp.]  
 Vol. VII. De extrema unctione. Ordine matrimonio, et quatuor novissimis. pp. 372 & chart.  
 Vol. VIII. Supplementum. Epitomen ex operibus Benedicti XIV. Ordine alphabeticæ confectam, nec non et varias summorum pontificum constitutiones, literas encyclicas, item selecta quædam ex ejus opere vere aureo de synodo diocesana. pp. 481.
- DERBY, Nelson L. . . . [Honorary Commissioner.] Report on Architecture and the Materials of Construction. 31 pp. 8°. See UNITED STATES, Dept. of State. Reports, International Exhibition at Vienna, 1873. Vol. IV. B. (5440).....157.13
- DESCHANEL, Augustin Privat. Elementary Treatise on Natural Philosophy. Translated and edited, with extensive additions, by J. D. Everett, . . . Complete in one volume. Illustrated by seven hundred and sixty engravings on wood, and three colored plates. New York: D. Appleton & Company, . . . 1873. 8°, pp. xxvi+1050. (5059).....227.20
- DESCRIPTION of Pitcairn's Island and its inhabitants. With an authentic account of the mutiny of the ship *Bounty*, and of the subsequent fortunes of the mutineers. New York: Harper & Brothers . . . n. d. 12°, pp. 303 +2 eng. (H. F. L. No. 31.) (4864).....386.25



- DESFORGES, Pierre Jean Baptiste Choudard. [Le Sourd, ou l'Auberge pleine. pp. 55. (Memoir.)] *See* Chefs-d'Oeuvres des Auteurs Comiques. 8v. 12°, Vol. VIII. (5096).....118.13
- DESLER, Charles D. [Editor.] *See* Chaucer, Geoffrey, Selections from the poetical works of. (4777).....374.5
- DESLYS, Charles. [Joint Author.] *See* Achard A. and Deslys C. Le Clos-Pommier. (4696).....118.6
- DESMAIS, Joseph-François-Edouard de Corsemblue. [L'Impertinent, 30 pp. (Memoir.)] *See* Chefs-d'Oeuvres des Auteurs Comiques. 8v. 12°, Vol. VI. (5090).....118.13
- DESPRES, Ludovicus. [Interpretatione et Notis] *See* Horatius. Opera. (5044).....258.7
- DESTOUCHES, Philippe Nericault. [Le Philosophe marié, ou le mari honteux de l'ôtre. pp. 96; Le Glorieux, p. 97; Le Dissipateur, p. 197; La fausse Agnès, ou le poète campagnard, p. 293; Memoir.] *See* Chefs-d'Oeuvres des Auteurs Comiques. 8v. 12°, Vol. IV. (5090).....118.13
- DEWEY, Melvil and others. The Library Journal (Monthly) Journal of the American Library Association, Vol. I. (September, 1876—August, 1877.) New York: F. Leypoldt, . . . 1877. 4°, pp. xv +452+2 eng. (5386)  
L. R.
- Assistant Editors. Cutter, C. A., Bibliography, Whitney, J. L., Pseudonyms and Anonyms; Bowker, R. N., General Editor.
- DEWEY, Melvil. . . . [A Decimal Classification and Subject Index. 26 pp. 8°.] *See* UNITED STATES, Bureau of Education. Public Libraries in U. S., Vol. II. p. 623. (5074).....L. R.
- DE WITT, John. . . . [Sermon on Atonement.] *See* Murray St. Church, New York. Discourses. (4546).....157.6
- DEXTER, William P. [Editor, &c.] *See* Rose H. Chemical Tables for the calculation of quantitative analysis. (5404) .....Chem. Lab.
- DICK, Thomas, . . . The Complete Works of. First complete American Edition. Hartford: . . . Sumner & Goodman. 1848. 8°, 9v. in 3.(4819)372.1
- Contents:—Vol. I. On the Improvement of Society . . . pp. 191; Philosophy of a Future State, pp. 127; Philosophy of Religion, pp. 186.  
Vol. II. Christian Philosopher, pp. 162; Mental Illumination of Mankind, pp. 215; Essay on Covetousness, pp. 126.  
Vol. III. Celestial Scenery, pp. 181; Siderial Heavens, pp. 193; Practical Astronomer, pp. 196.
- [Each work has its separate title page and pagination.]
- DICK, Thomas. . . . Celestial Scenery; or, the wonders of the planetary system displayed, illustrating the perfections of deity, and a plurality of worlds . . . New York: Harper & Brothers, . . . 1844. 12°, pp. 422. (H. F. L. No. 83.) (4897).....387.29
- DICK, Thomas. . . . On the improvement of society by the diffusion of knowledge: or an illustration of the advantages that would result from a general dissemination of rational and scientific information among all ranks. \* \* \* Illustrated with engravings. New York: Harper & Brothers. . . . 1846. 12°, pp. 442. (H. F. L. No. 59) (4881).....387.13

- DICK, Thomas. The Siderial Heavens, and other subjects connected with Astronomy. As illustrative of the character of the deity and an infinity of worlds. \* \* \* . . . New York: Harper & Brothers . . . 12°, pp. 432+5 plates. (H. F. L. No. 99) (4904)..... 388.7
- DICK, Thomas. . . . The Practical Astronomer, comprising illustrations of light and colours, practical descriptions of all kinds of telescopes, the use of the equatorial transit, circular and other astronomical instruments; a particular account of the Earle of Rosse's large telescopes, . . . Illustrated with one hundred engravings. New York: Harper & Brothers, Publishers, 1846. 12°, pp. 437+frontispiece. [Harper's New Miscellany, Vol. V.] (5315)..... 375.4
- DENDORF, Ludwig. [Editor.] See *Æschylus, Prometheus Vincetus.* (4622) 147.19
- [Notes.] See *Xenophon. Expeditio Cyri.* (5012)..... 227.15
- DISRAELI, Isaac. Curiosities of Literature. Seventh edition, corrected . . . London: John Murray. . . . 1823. 5v. 16°, pp. 303, 293, 307; 336+ facsimile of Mr. Pope's handwriting; 321. (5359)..... 396.4
- DISTINGUISHED Men of Modern Times. . . . New York: Harper & Brothers, Brothers . . . 2v. 12°, pp. 324+portrait of Wiclif; 324+portrait of Edmund Burke. (H. F. L. Nos. 123-4) (4917)..... 388.21
- Contents:—Vol. I. Dante, Wiclif, Chaucer, Erasmus, Copernicus, Cortez, Loyola, Tasso, Cervantes, Shakspeare, Raleigh, Bacon, Kepler, Coke, Gustavus Adolphus, Galileo, Hampden, Grotius, Des Cartes, Harvey, Pascal, De Witt, Milton, Hale.
- Vol. II. Sobieski, Bousset, Locke, Fenelon, Penn, Newton, De Foe, Handel, Chatham, Linnaeus, Euler, Buffon, De l'Epee, Mozart, Sir W. Jones, Burke, Schwarz, Cowper, Pitt, Fox, Koskiusko, Jenner, Cuvier, Walter Scott, Wilberforce.
- DODGE, J. R. [Honorary Commissioner.] Report on Sheep and Wool. 8°, pp. 55+11 eng. See UNITED STATES, Dept. of State. Reports, International Exhibition, Vienna, 1873, Vol. I. E. (5440)..... 157.13
- DONALDSON, John William . . . A Complete Grammar for the use of students. Third edition, revised. Cambridge: Deighton, Bell & Co. . . . 1867. 8°, pp. xx.+540+16. (4620)..... 157.2
- DONALDSON, John William . . . Varronianus: A critical and historical introduction to the Ethnography of Ancient Italy, and to the philological study of the Latin Language. Third edition, revised and considerably enlarged. London: John W. Parker & Son. 1860. 8°, pp. xx.+564. (5137)..... 473.3
- DOREMU'S, Charles A. Photography at Vienna. 26 pp. 8°. See UNITED STATES, Dept. of State. Reports, International Exhibition at Vienna, 1873, Vol. II. D. (5440)..... 157.13
- DOVE, Heinrich Wilhelm. The Circulation of the Waters on the surface of the earth. 16°, 30 pp. See Half Hour Recreations in Popular Science, p. 447. (5026)..... 148.17
- DOWNES, John. Occultations visible in the United States during the year 1851. . . . Washington, 1850. 26 pp. 4°. See Smithsonian Institution, Contributions to Knowledge, Vol. II. (1851) Appendix 3. (5482)..... 441.1
- , Occultations of planets and stars by the Moon, during the year 1853 . . . 36 pp. See Smithsonian Institution, Contributions to Knowledge, Vol. VI. (1854) Appendix. (5486)..... 441.1

- DOWNES, John. Occultations visible in the United States and other parts of the World during the year 1852. pp. 36, 4°. See Smithsonian Institution, Contributions to Knowledge, Vol. III. (1852) Appendix 2. (5483).....441.1
- DOWNING, Andrew Jackson. [Editor.] See Loudon, Mrs. Gardening for Ladies. New York, 1848. (4742).....374.22
- DRAPER, Henry. On the Construction of a Silvered Glass Telescope, fifteen and a half inches in aperture, and its use in Celestial Photography. 60 pp. 4°. See Smithsonian Institution, Contributions to Knowledge, Vol. XIV. (1865) Art. 4. (5494).....441.1
- DRAPER, Henry . . . A Text-Book on Chemistry, For the use of schools and colleges. With more than three hundred illustrations. New York: Harper & Brothers, 1868. 12°, pp. viii.+507. (5363).....466.3
- DRAPER, John William. . . . A Treatise on the forces which produce the organization of plants, with an appendix, containing several memoirs on capillary attraction, electricity, and the chemical action of light. New York: . . . Harper & Brothers, . . . 1844. 4°, pp. xi.+108+216+frontispiece+3 plates. (4796).....511.3
- DREW, W. H. . . . A Geometrical Treatise on Conic Sections, with numerous examples. For the use of schools and students in the universities. Fifth edition; to which is added an appendix on Harmonic Ratio, Poles and Polars, and Reciprocation. London: Macmillan & Co. 1875. . . . 12°, pp. 169+32. (4999).....148.21
- . . . Solutions to Problems contained in a geometrical treatise on conic sections. Second edition. London: Macmillan & Co. 1868. . . . 12°, pp. iv.+59. (4998).....148.22
- DRUMMOND, J. [Translator.] See Bischof, G. Principles of Chemical and Physical Geology. (5384)
- DRUMMOND, J. . . . [Joint Translator.] See Bischof, G. Chemical and Physical Geology. (5384).....494.1
- DUER, William Alexander . . . A course of lectures on the Constitutional Jurisprudence of the United States, delivered annually in Columbia College, New York. \* \* \* New York: Harper & Brothers . . . 1843. 12°, pp. 419. (H. F. L. No. 160) (4945).....389.24
- DUFRESNY, Charles Rivière. [L'Esprit de Contradiction. 32 pp.; Le Double Veuvage, p. 33; La Coquette de Village, p. 90; Le Mariage fait et rompu, p. 132. (Memor.)] See Chefs-d'Oeuvres des Auteurs Comiques, 8v. 12°, Vol. II. (5090).....118.13
- DUNCAN, John M. Remarks on the rise, use, and unlawfulness of Creeds and Confessions of Faith, in the Church of God. In two parts \* \* \* Baltimore: Cushing & Jewett . . . 1825. 12°, pp. 287. (5335).....377.5
- DURBIN, John P. . . . Observations in Europe, principally in France and Great Britain. Ninth edition. New York: Harper & Brothers, . . . 1846. 2v. 16°, pp. 308+map of fortifications of Paris+4 eng.; 312+4 eng.+map. (4755).....374.24
- DUSSAUCE, H. . . . Treatise on the Coloring Matters derived from Coal Tar; their practical application in dyeing . . . the principles of the art of dyeing and the distillation of coal tar. With a description of the most important dyes now in use. Philadelphia: Henry Carey Baird . . . 1863. 12°, pp. 196 (-26 at beginning.) (5409).....466.12

- DUYCKINCK, Evert A. [Preface and Notes.] See Irving, Washington. *Salmagundi*. (4694).....208.16
- DWIGHT, Theodore, Jr. *The History of Connecticut*, . . . New York: Harper & Brothers, . . . n. d. [Copyright 1848] 12°, pp. xvii+450. (H. F. L. 133.) (4926).....389.5
- DYCE, Alexander. [Account of author, and Notes.] See Marlowe, Christopher. *Works of* . . . (4984).....137.12
- DYER, Thomas H. *Pompeii. Its History, Buildings and Antiquities. An account of the destruction of the city, with a full description of the remains, and of the recent excavations, and also an itinerary for visitors* . . . Illustrated . . . A new edition, revised and enlarged. London: George Bell & Sons . . . 1875. 16°, pp. xv.+587+frontispiece+7 plates+1 map. (5475).....377.14
- EARLE, John. . . . *The Philology of the English Tongue. Second edition, revised and enlarged.* Oxford, at the Clarendon Press. 1873 . . . 16°, pp. viii.+679. (4586).....248.13
- EARLE, John. . . . *Two of the Saxon Chronicles parallel with supplementary extracts from the others, edited with introduction, notes and a glossorial index by* . . . Oxford, at the Clarendon press. 1865. 8°, pp. lxxiv+457. (4995).....137.11
- EASTLAKE, Charles Locke. *Hints on household taste in Furniture and Upholstery, and other details. Edited, with notes, by Charles C. Perkins* . . . \* \* \* Fifth American, from the latest English Edition. Boston: James R. Osgood & Company . . . 1877. 16°, pp. xxxiv.+307+5 engravings, inc. frontispiece+10 col'd plates+7 inserts of paper hangings. (5229)..394.3
- EATON, John, Jr. See UNITED STATES, Bureau of Education.
- EDGORTH, Maria. *Tales and Novels, in ten volumes. With 38 eng. on steel.* . . . London: George Rutledge & Sons. 10v. sm16°. (5224)..385.6
- Contents:—Vol. I. *Moral Tales.* Forester at p. 1; The Prussian Vase, p. 111; The Good Aunt, p. 144; Angelina, p. 221; The Good French Governess, p. 283; Mademoiselle Panacle, p. 361; The Knapsack, p. 411.
- Vol. II. *Popular Tales.* Lame Jervas, p. 1; The Will, p. 55; The Limerick gloves, p. 101; Out of Debt out of Danger, p. 129; The Lottery, p. 161; Rosanna, p. 195; Murad, the Unlucky, p. 245; The Manufacturers, p. 281; The Contrast, p. 317; The Grateful Negro, p. 399; To-morrow, p. 421.
- Vol. III. *Belinda*, pp. 463 & 3 engravings.
- Vol. IV. *Castle Rackrent*, p. 1; *Essay on Irish Bulls*, p. 61; *The Science of Self Justification*, p. 193; *Ennui*, p. 209; *The Dun*, p. 409; pp. 434. & 4 eng.
- Vol. V. *Manœuvering*, p. 1; *Almeria*, p. 263; and *Vivian*, p. 329; pp. 442 & 4 eng.
- Vol. VI. *The Absentee*, . . . *Madame de Fleury*, p. 265; *Emilie de Coulauges*, p. 325; *The Modern Griselda*, p. 407; pp. 470 & 4 eng.
- Vol. VII. *Patronage*, pp. 504 & 4 eng.
- Vol. VIII. *Patronage, concluded*; *Comic Dramas*, p. 125; *Leonora*, 243; *Letters*, 425; pp. 486 & 4 eng.
- Vol. IX. *Harrington*; *Thoughts on Bores*, p. 209; *Ormond*, pp. 227; pp. 528 and 4 eng.
- Vol. X. *Helen*, pp. 455.
- "Some one has described the novels of Miss Edgeworth as a sort of essence of common sense; and the definition is not inappropriate."  
Sir Walter Scott.
- EDWARDS, Milne and Comte, Achille. See Ruschenberger, W. S. W. *First Books of Natural History.* 2v. 12°. (5163).....384.11

- EDWARDS, Ninian W. History of Illinois from 1778 to 1833; and Life and Times of Ninian Edwards, by his son. Springfield: . . . Illinois State Journal Company. 1870. 8°, pp. 549+iii. (5860)..... **395.8**
- EGLESTON, T. Catalogue of Minerals with their formulas, &c. . . . 1863, 8°, 60 pp. See Smithsonian Institution, Miscellaneous Collection, Vol. VII. (1867) Art. 9. (5506)..... **443.1**
- ELLET, Charles . . . Contributions to the Physical Geography of the United States. Part I. of the Physical Geography of the Mississippi Valley, with suggestions for the improvement of the navigation of the Ohio and other rivers. 4°. pp. 64+1 plate. See Smithsonian Institution, Contributions to Knowledge, Vol. II., Art. 4. (5482)..... **441.1**
- ELLIOT, Charles William and Storer, Frank H. A Compendious Manual of qualitative Chemical Analysis. Revised, with the co-operation of the authors, by Wm. Ripley Nichols. . . . Second revised edition. New York: D. Van Nostrand . . . 1873. 12°, pp. vi.+126+li. (appendix.) (5406) Chem. Lab. . . .
- ELLIS, Alexander J. . . . [Translator with notes and appendix.] See Helmholtz, H. L. F. The sensations of Tone as a physiological basis for the theory of Music. (5175)..... **392.13**
- ELLIS, George Edward. Life of John Mason of Connecticut. 16°, pp. 132. See Sparks, J., Lib. of Am. Biog., Second Series, Vol. III., at p. 307. (4810) **384.1**
- ELLIS, George Edward. Life of Anne Hutchinson; with a sketch of the Antinomian Controversy in Massachusetts. 16°, pp. 210. See Sparks J., Lib. of Am. Biog., Second Series, Vol. VI., at p. 167. (4810)..... **384.1**
- ELLIS, George Edward. Memoirs of Sir Benjamin Thompson, Count Rumford, with notices of his daughter. Published in connection with an edition of Rumford's Complete Works, by the American Academy of Arts and Sciences, Boston. Boston: Estes & Lauriat . . . 8°, pp. xvi.+680+3 portraits+7 eng.+facsimile. (5478)..... **463.9**
- ELLIS, George James Welbone Agar, *Lord Dover*. The Life of Frederick the Second, King of Prussia. . . . New York: Harper & Brothers . . . 1848. 2v. 12°, pp. 381, 362, portrait of Frederick. (H. F. L. Nos. 41, 42.) (4870) **387.2**
- ELLIS, Sir Henry. [Editor and Reviser.] See Brand John. Observations on the Popular Antiquities of Great Britain. (5115)..... **376.3**
- EMERSON, J. M. See Putnam's Monthly Magazine, Vol. X., p. 433. (5234)
- ENGELHARDT. Narrative of an expedition to the Polar Sea, in the years 1820, 1821 and 1823. Commanded by Lieutenant, now Admiral Ferdinand Wrangell, of the Russian Imperial Navy. New York: Harper & Brothers. . . . 1843. 12°, pp. 302+map. (H. F. L. No. 148.) (4037)..... **389.16**
- ETHELWED, Fabius. The Chronicle of, . . . from the beginning of the world to the year of Our Lord 975. In four books. 12°, pp. 40. See Giles, J. A. [Editor] Six Old English Chronicles, at p. 1. (5117)..... **376.9**
- EULER, Leonhard. Letters of—on different subjects in Natural Philosophy, addressed to a German princess. With notes and a Life of Euler by David Brewster . . . Containing a Glossary of Scientific terms. With additional notes, by John Griscom. . . . New York: Harper & Brothers . . . 1846. 2v. 12°, pp. 386, plate; 436. (H. F. L. Nos. 55, 56) (4878)..**387.10**

- EUSEBIUS, [Pamphilius] . . . An Ecclesiastical History to the twentieth year of the reign of Constantine, being the 324th of the Christian Era, by Eusebius surnamed Pamphilius, Bishop of Cæsarea. Translated by the Rev. C. F. Crusè . . . The third edition, carefully revised. To which is prefixed the Life of Eusebius, by Valesius; translated by S. E. Parker, of Philadelphia. \* \* \* London: Samuel Bagster and Sons. . . . \* \* \* 1842. 8°, pp. 479. (4704) *See* Greek Ecclesiastical Historians . . . . . 348.7
- EUSEBIUS, Pamphilius. The Life of the Blessed Emperor Constantine, in four books, from 306 to 337 A. D. \* \* \* London: Samuel Bagster & Sons, . . . 1845. 8°, pp. xx+380. (4703) . . . . . 348.7
- EVAGRIUS [Scholiasticus]. A history of the Church in six books, from A.D. 431 to A.D. 594. A new translation from the Greek: with an account of the author and his writings. \* \* \* London: Samuel Bagster & Sons; . . . 1846. 8°, pp. xvi.+318. *See* Greek ecclesiastical historians. (4708) . . . 348.11
- EVANS, Charles. [Librarian.] *See* Indianapolis, Catalogue of Public Library. (4709) . . . . . L. R.
- EVANS, W. J. . . . The Sugar-Planter's Manual. Being a treatise on the art of obtaining sugar from the sugar cane. Philadelphia: Lea & Blanchard. 1848. 8°, pp. 264+2 plates. (4744) . . . . . 517.2
- EVERETT, Alexander Hill. Life of Joseph Warren. 12°, pp. 94, vignette. *See* Sparks, J., Lib. of Am. Biog., Vol. X., at p. 91. (4814) . . . . . 385.1
- EVERETT, Edward. Life of John Stark. 12°, pp. 116, portrait. *See* Sparks, J., Lib. of Am. Biog., First Series, Vol. I., at p. 1. (4814) . . . . . 385.1
- EVERETT, J. D. . . . [Translator and Editor.] *See* Deschanel P., Elementary Treatise on Natural Philosophy. (5059) . . . . . 227.20
- EVERETT, Alexander Hill. Life of Patrick Henry. 16°, pp. 192. Portrait. *See* Sparks, J., Lib. of Am. Biog. Second Series, Vol. I., at p. 207. (4810) 384.1
- FAAS, Frederick. [Illustrations.] *See* Paul, J. L. Pennsylvania's Soldiers Orphans' Home. (5361) . . . . . 394.7
- FABRE, d'Eglantine, Phillippe François Nazaire [Le Philite de Mohère, ou la suite du Misanthrope. pp. 74—L'Intrigue Epistolaire, p. 75. (Memoir.)] *See* Chefs-d'Oeuvres des Auteurs Comiques. 8v. 12°, Vol. VIII. (5090) 118.13
- FAGAN, Christophe Barthéolomi. [La Pupille. 35 pp. Les Originaux, p. 36. (Memoir)] *See* Chefs-d'Oeuvres des Auteurs Comiques, 8v. 12°, Vol. IV. (5090) . . . . . 118.13
- FAIRFIELD, George A. Report on Sewing Machines, 36 pp. 8°. *See* UNITED STATES. Dept. of State. Reports, International Exhibition, Vienna, 1873, Vol. III. B. (5440) . . . . . 157.13
- FALKNER, Frederic . . . The Farmer's Manual; a practical treatise on the nature and value of Manures. . . . With a brief account of all the most recent discoveries in Agricultural Chemistry. \* \* \* New York: D. Appleton & Co. . . . 1848. 12°, pp. 153+20. (4825) . . . . . 516.21
- FARADAY, Michael. . . . Experimental Researches in Chemistry and Physics. Reprinted from the Philosophical Transactions of 1821-1857; The Journal of the Royal Institution; The Philosophical Magazine, and other publications. London: Richard Taylor and William Francis, . . . 1859. 8°, pp. viii+496. (4722) . . . . . 54.13

- FARNHAM, Eliza Woodson. *Life in Prairie Land.* \* \* \* New York: Harper & Brothers . . . 1846. 12°, pp. xii.+408. [Harper's New Miscellany, XII.] (5320).....375.9
- FAVART, Charles Simon. [Les trois Sultanes, ou Soliman II. pp. 70. La Chercheuse d'esprit, p. 71; Les Amours de Bastien et Bastienne, p. 113; Annette et Lubin, p. 135; Ninette à la cour, ou le caprice amoureux, p. 175. (Memoir)] See Chefs-d'Oeuvres des Auteurs Comiques, 8v. 12°, Vol. VI. (5090)118.13
- FELTON, Cornelius Conway. *Life of William Eaton.* 222 pp. 12°+facsimile. See Sparks, J. Lib. of Am. Biog., Vol. IX., at p. 163. (4814).....385.1
- FELTON, Henry. . . . A Dissertation on reading the Classics, and forming a just style. Written in the year 1709. . . . The fourth edition, with some alterations and additions. London: . . . B. Motte . . . 1730. 12°, pp. xxvi. +243+15 of contents inserted after p. xxvi. (5146).....258.18
- FENELON, François Salignac de la Motte. *Lives of the ancient philosophers; translated from the French of Fenelon, with notes, and a life of the author, by the Rev. John Cormack.* New York: Harper & Brothers . . . 1846. 12°, pp. 299. (H. F. L. No. 140.) (4931).....389.10
- FERGUSON, Adam. . . . The History of the Progress and Termination of the Roman Republic. A new edition, abridged. New York: Harper & Brothers. . . . 12°, pp. xx.+598. (H. F. L. No. 187.) (4966).....38X.14
- FERGUSON, James . . . History of the modern styles of architecture. \* \* \* Second edition, forming the fourth volume of the new edition of the "History of Architecture." With 332 engravings. London: John Murray, . . . 1873. . . . 8°, pp. xix.+584; frontispiece, Victoria Tower. (5172) 392.13
- FERREL, William. *Converging Series, expressing the ratio between the diameter and the circumference of a circle.* 6 pp. 8°. See Smithsonian Institution, Contributions to Knowledge, Vol. XVIII. (1873) Art. 5. (5498) 441.1
- FEUERBACH, Anselm Ritter von. *Narratives of remarkable criminal trials.* Translated from the German, by Lady Duff Gordon. New York: Harper & Brothers . . . 1846. 12°, pp. x+339. [Harper's New Miscellany IX.] (5318).....375.7
- FICINUS. [Latin version] 8°, pp. lxxvii. See Plato. *Apology of Socrates, Crito, and Phædo, after p. 307.* (5133).....473.9
- FILHOL, M. *Memoir. Studies on the connection existing between the atomic weight, crystalline form and density of bodies.* 22 pp. See Graham, Thomas. *Chemical Reports and Memoirs, p. 63.* (5436).....493.3
- FISHER, Redwood. *Fisher's National Magazine and Industrial Record.* \* \* \* New York: . . . Redwood Fisher. . . . 1846. 3v. 8°, pp. 578; 579-1180; xiv+592. (Index at end of Vol. II.; none to Vol. III. Contents of all at beg. of Vol. III. (4833).....381.15
- FISHER, Richard S. . . . [Editor.] See La Torre, J. M. de. *Cuba and . . .* (5264).....383.2
- FITZGERALD, Percy [Editor, with notes and illustrations.] See Lamb, Charles, *Life, Letters and Writings.* 6v. 12°. (5111).....376.2
- FLAMENG, Leopold. [Portrait of Leonardo da Vinci.] See Hamerton, P. G. *The Intellectual Life.* (4983).....248.23

- FLAMMARION, Camille "History of the Heavens." See Blake, John F. Astronomical myths. (5046).....158.19
- FLAMMAIRON, Camille. [Author] See Blake, J. F. Astronomical Myths, based on, &c. (5046).....465.2
- FLAXMAN, John. [Designs.] See Homer, Iliad tr. by Pope. (5465)..378.22  
 ——— [Designs.] See Homer, Odyssey tr. by Pope. (5466)..378.23
- FLETCHER, James . . . The History of Poland; . . . With a narrative of the recent events, obtained from a Polish patriot nobleman. New York: Harper & Brothers. . . . 1846. 12°, pp. 339+portrait of Thaddeus Kosciusko.] (H. F. L. No. 24.) (4857).....386.18
- FLETCHER, W. I. . . . [General Considerations respecting Historical Research. 7 pp. 8°; Public Libraries in Manufacturing Communities, 9 pp; Public Libraries and the Young. 7 pp.] See UNITED STATES. Bureau of Education, public libraries in the, Vol. I. p. 325; p. 403 and p. 412. (5074).....L. R.
- FLORENCE, of Worcester. The Chronicle of, with the two continuations; comprising Annals of English History, from the departure of the Romans to the reign of Edward I. Translated from the Latin, with notes and illustrations, by Thomas Forester. . . . London: Henry G. Bohn. . . . 1854. 16°, pp. xiii.+512. (5120).....376.5
- FORCE, Peter. Record of Auroral Phenomena observed in the higher northern latitudes. 4°, 122 pp. See Smithsonian Institution, Contributions to Knowledge, Vol. VIII. (1856) Appendix. (5488).....441.1
- FORD, Richard . . . The Spaniards and their country. New edition, complete in one volume. New York: George P. Putnam, 1848. 16°, pp viii+349. (4736).....374.6
- FOERSTER, Ernst. Fortsetzung der Biographie Jean Pauls. sq16°, pp. 210. See Richter, J. P. F. Ausgewählte Werke. sq16°, 16v. in 8, Vol. XVI. at p. 71. (4641).....189.3
- FORESTER, Thomas. [Translator, with notes and illustrations.] See Florence of Worcester's Chronicle. 12°, pp. xiii.+512. (5120).....376.5  
 ——— [Translator and Editor.] See Chronicle of Henry of Huntingdon. 12°, pp. 442. (5122).....376.4  
 ——— [Translator] See Giraldus Cambrensis, historical works. (5121) 376.11
- FORMAN, J. G. The Western Sanitary Commission; a sketch of its origin, history, labors . . . with incidents of hospital life. St. Louis: . . . for the Mississippi Valley Sanitary Fair. R. P. Studley & Co., 1864. 8°, pp. iii.+159. (4838).....372.12
- FORRESTER, Alexander . . . The Teacher's Text Book. \* \* \* Halifax, Nova Scotia: A. & W. Mackinlay, 1867. 8°, pp. xv.+621. (5052)....144.27
- FORSTER, John. [Memoir of Charles Lamb, p. 11, 12°.] See Lamb, Charles. Life, Letters and Writings, 6v. 12°, at p. 276 of Vol. 1. (5111)....376.2
- FORSYTH, William . . . Life of Marcus Tullius Cicero. Third edition. With 20 illustrations. London: John Murray . . . 1869. . . . 8°, pp. xv.+557, frontispiece. (5189).....473.12
- FORTHOMME, Pierre Guillaume Camille. [Translator to French from German.] See Mohr, F., Traité D'Analyse Chimique. (4632).....157.3



FOSTER, G. C. Article on "Classification" in Watts' Dict. of Chemistry. Vol. I., p. 1007.

——— [Electricity, Vol. II., p. 374; Vol. III., p. 15, heat.] See Watts, H. Dict. of Chemistry, First supplement, p. 550

——— [Magnetism.] See Watts H., Dict. of Chemistry, Second supplement. p. 760. (4724)

FOSTER, Michael, . . . [on Proteids.] See Watts H., Dict. of Chemistry. Supplement.

FOURNIER, Edouard . . . Le Théâtre Français au XVI. et au XVII. siècle ou choix des comédies les plus curieuses antérieures à Molière avec une introduction, des notes et une notice sur chaque auteur . . . Et illustré de portraits en pied coloriés dessinés par MM. Maurice Sand et H. Allouard. Deuxième édition. Paris: Laplace, Lanchez et Cie . . . n. d. [Introduction, 1871] r8°, pp. xi.+582. (5086).....478.4\*\*\*

FOX, Samuel . . . [Translator, etc.] See Boethius. (5109).....376.12

FRANCIS, Convers. Life of Sebastian Rale, Missionary to the Indians. 177 pp. 16°. See Sparks, J., Lib. of Am. Biog., second series, Vol. VII., at p. 157. (4810).....384.1

FRANCIS, George Henry . . . Orators of the age; comprising portraits, critical, biographical, and descriptive. New York: Harper & Brothers . . . 1847. 12°, pp. 314. [Harper's New Miscellany, XXI.V.] (5330).....375.20

Contents:—Sir Robert Peel, p. 7; Lord John Russell, p. 38; Wellington, p. 53; Macaulay, p. 64; Lord Stanly, p. 81; Palmerston, p. 98; Lyndhurst, p. 111; Earl Gray, p. 125; Sir James Graham, p. 142; Lord Morpeth, p. 159; Buckingham, p. 167; Earl of Radnor, p. 172; Duke of Richmond, p. 177; Mr. Bright, p. 182; Mr. Sheil, p. 187; Bentinck: p. 214; Villiers, p. 221; T. Milner Gibson, p. 224; Wakley, p. 229; Dr. Bowring, p. 245; T. S. Duncombe, p. 249; Wyse, p. 258; Hawes, p. 264; Ward, p. 268; Roebuck, p. 272; Sir Thomas Wyld, p. 298; Lord Landon, p. 303; Hugh M'Neil, p. 308.

FRANCOEUR, Louis Benjamin. A complete course of pure Mathematics. Translated from the French, by R. Blakelock. . . . Cambridge: W. P. Grant, . . . 1829. 2v. 8°. (5105).....462.1

Contents:—Vol. I. Arithmetic, p. 1; Elementary Algebra, p. 104; Geometry, p. 186; Analytical Geometry, p. 278. pp. iv. & 431 & [9, index to both vols.] & 6 plates.

Vol. II. Algebra, p. 1; Analysis of The Dimensions, p. 181; Diff. and Int. Calculus, p. 230; Calculus of Difference, p. 467; pp. v. & 480 & 2 plates.

FRANKLIN, Benjamin. Memoirs of; written by himself. With his most interesting essays, letters and miscellaneous writings; familiar, moral, political, economical and philosophical. Selected with care from all his published productions, and comprising whatever is most entertaining and valuable to the general reader. . . . New York: Harper & Brothers . . . 2v. 12°, pp. 287 + portrait; 288. (H. F. L. Nos. 92, 93.) (4900).....388.3

FRANKLIN INSTITUTE [of the State of Pennsylvania.] Journal of the; devoted to Science and the Mechanic Arts. . . . Philadelphia: . . . by the Institute . . . 1852-'76. 8°, 50v. in 45, (Vols. 23-72. Third Series.) (5439)

496 and 497\*

Vols. 23-53 edited by John W. Frazer: 53-59 by Henry Morton; 60-61 by Henry Morton and W. H. Wahl; 62-68 by W. H. Wahl; 69-70 by George F. Barker: 71-72 by Robert Briggs. Indexes at end of each volume. Numerous plates and illustrations in the text.

- FRASER, James Bailie . . . Mesopotamia and Assyria, from the earliest ages to the present time; with illustrations of their natural history. With a map and engravings. New York: Harper & Brothers . . . 1842. 12°, pp. 336. (H. F. L. No. 157.) (4942).....389.21
- FRASER, James Bailie . . . Historical and descriptive account of Persia, . . . including a description of Afghanistan and Beloochistan. Illustrated by a map and several engravings. New York: . . . Harper & Brothers . . . 1845. 12°, pp. 345. (H. F. L. No. 70.) (4888).....387.20
- FRAZER, John F. . . . [Editor Vols. 23-53.] See Franklin Institute, Journal of.
- FREEMAN, Edward Augustus. The History of the Norman Conquest of England; its causes and its results. \* \* \* Revised American edition. Oxford: Macmillan & Co. 1873-6. 5v. 8°. (4976).....153.25  
 Contents:—Vol. I. The preliminary History, to the election of Edward the Confessor pp. xxiv. & 523 & 3 maps.  
 Vol. II. The reign of Edward the Confessor, pp. 467.  
 Vol. III. The reign of Harold and the Interregnum, pp. 519.  
 Vol. IV. The reign of William the Conqueror, pp. 559.  
 Vol. V. The effects of the Norman Conquest, pp.
- FREMONT, John Charles . . . Report of the Exploring Expedition to the Rocky Mountains, in the year 1842, and to Oregon and North California, in the years 1843-'44. . . . Washington: Gales & Seaton . . . 1845. 8°, pp. 693+2 maps+8 plates+13 engravings+large map in pocket, back cover. (5459).....391.16\*
- FRESENIUS, Karl Remigius . . . A system of instruction in qualitative chemical analysis. Sixth edition. Edited by J. Lloyd Bullock . . . \* \* \* London: John Churchill & Sons . . . 1864. pp. xiii..355. (5399)....Chem. Lab.
- FRIEZE, Henry S. . . . [Art Museums, and their connection with public libraries. 11 pp. 8°.] See UNITED STATES, Bureau of Education; public libraries in the . . . Vol. I. p. 434. (5074).....L. R.
- FROST, Percival . . . [Commentary.] See Tacitus, the annals of. (5138) 473.5
- FROTHINGHAM, Ellen. [Translator.] See Lessing, G. E. Laocoon.(4981)177.28
- FULLER, Andrew S. . . . The Forest Tree Culturist: A treatise on the cultivation of forest trees, with notes on the most valuable foreign species. New York: Geo. E. Woodward, 191 Broadway. n. d. [Pref. 1866.] 12°, pp. 188. (4549).....516.11
- GAGE, William L. [Translator.] See Steffens, Heinrich. German University Life. (4674).....177.25
- GAISFORD, Thomas. . . . Etymologicon Magnum, sui verius Lexicon sæpissime vocabulorum origines indagans ex pluribus lexicis scholiasticis et grammaticis anonymi cuiusdam opera Cincinnatum, ad codd. mss. recensuit et notis variorum instruxit Thomas Gaisford . . . \* \* \* Oxonii e typographeo academico. 1848. 4°, pp. lv.+327+162+facsimile. (Indices paged with notes 2309-2470) (4701).....359.1
- GALLATIN, James. Memoir on the [Western] Insurrection [in Pennsylvania.] 8°, 17 pp. See Historical Society of Pennsylvania, memoirs of, Vol. VI. at p. 188. (5203).....391.10
- GALLAUDET, Edward Miner. Governmental patronage of Art. 16 pp. 8°. See UNITED STATES, Dept. of State. Reports, International Exhibition at Vienna, 1873, Vol. II. N. (5446).....157.13

- GALLAUDET, Edward Miner. Report on Deaf-Mute Instruction. 9 pp. 8°. See UNITED STATES, Dept. of State. Reports, International Exhibition at Vienna, 1873, Vol. II. M. (5440)... 157.13
- GALT, John. The Life of Lord Byron. New York: Harper & Brothers . . . 12°, pp. 334+portrait of Byron. (H. F. L. No. 9.) (4846)... 386.7
- GALTRUCHIUS, Petrus, Ameliensis, Societ. Jesv. Philosophiæ | ac Mathematicæ Totivs | clara, brevis, et accurata | Institutio. | Cum Introductione ad alias | Facultates | ad usum Studiosæ Iuuentutis. | Editio altera emendatio et auctior. | Physica Vniversalis. | \* \* \* Cadomi, apud Ioannem Cavellier Regis & Academ. Typograph. 1665. . . sm. 16°, 2v in 1. pp. [vi.] + 426+1 plate+[6] (4409) . . . 228.6  
Pars prima, p. 3-318; pars secunda, p. 319 to end.
- GAMGEE, John . . . Our Domestic Animals in health and disease. Sixth thousand, with numerous illustrations. Edinburgh: Maclachlan & Stewart . . . 1875. 2v. 8°. (4610)... 516.12
- GAMMELL, William. Life of Samuel Ward, Governor of Rhode Island, 128 pp. 16°. See Sparks, J., Lib. Am. Biog. Second Series, Vol. IX., at p. 231. (4910)... 384.1
- GAMMELL, William. Life of Roger Williams. 221 pp. 16°+portrait. See Sparks, J., Lib. of Am. Biog. Second Series, Vol. IV., at p. 1. (4810) 381.0
- GARRETSON, H. . . . [Chief Executive Commissioner] Report of, 12 p. 8°. See UNITED STATES, Dept. of State. Reports, International Exhibition at Vienna, 1873, Vol. I. C. (5440)... 157.13
- GAUTIER, Théophile. Théâtre. Mystère, comédies et ballets. Deuxième édition, revue, corrigée et augmentée d'une grand nombre de documents inédits. Paris: G. Charpentier . . . 1877. 12°, pp. 408. (5089) 118.15
- GELJER, Erik Gustaf. Skaldeslycken. \* \* \* Stockholm. 1869: . . . 24°, pp. 213. (5195)... 169.1
- GELDART, E. M. The Modern Greek Language in its relation to Ancient Greek. Oxford, at the Clarendon press. 1870. . . . 16°, pp. xii+216. (4565) 268.30
- GELLERT, Christian Fuerchtegott. Poetische und prasaischer Werke. Berlin. Gustav Hempel. n. d. 16°. (4678)... 189.2  
Erster Theil :—Fabel und Gezählungen, pp. 206.  
Zweiter Theil :—Moralische Gedichte, pp. 144; biographische skezze at p.129.
- GELL, Sir William . . . The Topography of Rome and its vicinity. A new edition, revised and enlarged, by Edward Herbert Bunbury . . . London: Henry G. Bohn . . . 1854. 2v. 8°. Vol. I. pp. vii+499+3 maps+2 plates; Vol. II., map of Rome and environs, mounted. (5473)... 473.13
- GENTH, Frederick Augustus. Preliminary Report on the Mineralogy of Pennsylvania, with an appendix on the hydrocarbon compounds, by Samuel P. Sadtler. Harrisburg: Published by the Board of Commissioners for the second geological survey. 1875. 8°, pp. 206+map. (5393)
- GENTH, Frederick Augustus. [Joint Author.] See Gibbs, W. and . . . Researches on the ammonia cobalt bases. Smithsonian Contributions, Vol. IX. (1857)... 441.1
- GOEFFREY, of Monmouth. British History, 104 pp. 12°. See Giles, J. A. [Editor.] Six Old English Chronicles, at p. 88. (5117)... 376.9

- GEORGIAN, Era, the. Memoirs of the most eminent persons who have flourished in Great Britain, from the accession of George the First to the demise of George the Fourth. London: Visetelly, Branston & Co. 1832-1834. 4v. 8°. portraits of the four Georges. (4812).....**382.2**
- Contents :—Vol. I. The Royal Family ; The Pretenders and their adherents ; churchmen ; dissenters, and statesmen.  
Vol. II. Military and naval commanders ; judges and barristers, physicians and surgeons.  
Vol. III. Voyagers and travellers ; philosophers and men of science ; authors.  
Vol. IV. Political and rural economists ; painters, sculptors, architects and engravers ; composers ; vocal, instrumental and dramatic performers.
- GESNER, Abraham. A practical treatise on coal, petroleum and other distilled oils. Second edition, revised and enlarged. By George Weltden Gesner . . . \* \* \* New York: Ballière Brothers . . . 1865. 8°, pp. 181+frontispiece. (5403) .....**463.4**
- GESNER, George Weltden. . . . [Editor.] See Gesner, A. A practical treatise on Coal Petroleum and other distilled oils. (5403).....**463.4**
- GESNER, Solomon. The works of; translated from the German. With notes, critical and explanatory. To which is prefixed a copious memoir of the life of the author. \* \* \* . . . [London:] . . . James Cundee. . . . 1805. 2v. 16°. (5263).....**377.1**
- Contents :—Vol. I. Memoir, pp. 1v. & portrait ; Death of Abel in five books, pp. 131 & 2 eng. ; the first navigator, at p. 133 ; Daphnis, at p. 167.  
Vol. II. Idyls, pp. 116 & 3 engr. ; dramas, Evander and Alcomina and Evaster, at p. 117 ; Miscellanies, p. 187 ; Letter on landscape painting p. 243.
- GIBBON, Edward . . . The History of the decline and fall of the Roman Empire. With notes by the Rev. H. H. Milman . . . with maps. . . . New York: Harper & Brothers, . . . 1847. 4v. 8°+frontispiece of Vol. I., portrait of Gibbon. (5154).....**392.1**
- GIBBES, George. A Dictionary of the Chinook Jargon, or Trach language of Oregon. . . . 60 pp. 8°. Instructions for research relative to the Ethnology and Philology of America . . . 54 pp. 8° See Smithsonian Miscellaneous Collections, Vol. VII., (1867.) Arts. 10 and 11. (5506)..... **443.1**
- GIBBS, Robert Wilson. . . . A Memoir on Mosasaurus and three allied new genera, Holcodus, Conosaurus, and Amphoroosteus. pp. 14+3 plates 4°. See Smithsonian Institution, Contribution to Knowledge, Vol. II. (1851) Art. 5. (5482).....**441.1**
- GIBBS, Wolcott and Genth Frederick Augustus. Researches on the ammonia cobalt bases, 72 pp. 4°. See Smithsonian Institution, Contributions to Knowledge, Vol. IX. (1857) Art. 5. (5489)..... **441.1**
- GIBBS, Wolcott. . . . Report on physical apparatus and chemical materials suitable for scientific research. 19 pp. 8°. See UNITED STATES, Dept. of State. Reports, International Exhibition at Vienna, 1873, Vol. II. F. (5440) **157.13**
- GIFFORD, William. [Memoirs.] See Jonson, Ben, works of, pp. 1, 72. 8°. (5110).....**391.14**
- GILDAS, surnamed "Sapiens," or the Wise, Works of. 37 pp. 12°. See Giles, J. A. [Editor.] Six Old English Chronicles, at p. 293. (5117).....**376.9**

- GILES, J. A. [Translator] See Matthew Paris's English History. 3v. 16° (5119)  
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- GILES, J. A. [Translator.] See Roger of Wendover's Flowers of History.  
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- GILES, J. A. . . . Six Old English Chronicles, of which two are now first translated from the monkish Latin originals. Ethelwerd's Chronicle; Asser's Life of Alfred; Geoffrey of Monmouth's British History; Gildas. Nenius and Richard of Cirencester. Edited, with illustrative notes, by— . . . London: George Bell & Sons. . . . 1875. 16°. pp. xx.+512. (5117)...376.9
- GILL, Theodore. . . . [Scientific Libraries in the U. S. 37 pp. 8°.] See UNITED STATES, Bureau of Education, Public Libraries in the, —Vol. I, p. 183. (5074)  
L. R.
- GILL, Theodore . . . Arrangement of the families of Mollusks. . . . 1871. 65 pp. 8°. See Smithsonian Institution, Miscellaneous Collections, Vol. X. (1873) Art. 2. (5509).....443.1
- GILL, Theodore . . . Arrangement of the families of Mammals; with analytical tables . . . 104 pp. 8°. Also, arrangement of the families of Fishes, or classes Pisces, Marsipobranchii, and Leptocardi. 96 pp. 8°. See Smithsonian Institution, Miscellaneous Collections, Vol. XI. (1874) Arts. 1 and 2. (5510).....443.1
- GILLESPIE, William Mitchell . . . A Manual of the principles and practice of road-making: comprising the location, construction and improvement of roads (common, Macadam, paved, plank, etc.) Ninth edition, with additions. \* \* \* New York: . . . A. S. Barnes & Co. . . . 1867. 16°, pp. 372. (4548).....248.15
- GILLISS, James Melvin. An Account of the total eclipse of the sun on September 7, 1858, as observed near Almos, Peru. 4°, 22 pp.+1 plate. See Smithsonian Institution, Contribution to Knowledge, Vol. XI. (1859) Art. 3. (5491)  
441.1
- GILROY, Clinton G. . . . The Art of Weaving, by hand and by power, with an introductory account of its rise and progress. . . . Illustrated by appropriate engravings. New York: George D. Baldwin . . . 1844. 8°, pp. 574 +—plates. (4788).....371.6
- GIRALDUS, Cambrensis. The Historical Works of. Containing the topography of Ireland and the History of the Conquest of Ireland, translated by Thomas Forester. The Itinerary through Wales, and the description of Wales, translated by Sir Richard Colt Hoare. . . . Revised and edited, with additional notes, by Thomas Wright. . . . London: H. G. Bohn, . . . 1863. 16°, pp. 534. (5121).....376.11
- GIRARD, Charles. Contributions to the Natural History of the fresh water fishes of North America. I. A monograph of the Cottoids. 4°, pp. 80+3 plates. See Smithsonian Institution, Contributions to Knowledge, Vol. III. (1852) Art. 3 (5483).....441.1
- [Joint Author.] See Baird, S. F., Catalogue of N. A. Reptiles.
- GLAZER, Christophe. . . . Traité de la Chimie, Enseignant par une brieveue et facile methode toutes ses plus necessaires preparaciones. A Paris, chez l'Auteur . . . 1663. 16°, pp. [xvi.]+378+[3]+3 plates.(5379).....228.9

- GLEIG, George Robert** . . . The History of the Bible, . . . New York: Harper & Brothers . . . n. d. 2v. 12° pp. x.+299, map; vi.+287, map. (H. F. L. Nos. 12, 13.) (4849).....**386.10**
- GLYNN, Joseph.** Rudimentary treatise on the power of water as applied to drive flour mills, and to give motion to turbines and other hydrostatic engines. Fifth edition, with additions and corrections. Numerous illustrations. \*\*\* London: Lockwood & Co. 1875. 12°, pp. x.+162+16+32. (4628) **248.5**
- GMELIN, Leopold** . . . Handbook of Chemistry . . . Translated by Henry Watts . . . London: The Cavendish Society. 1848. 12v. 8°. (5434) **493.1**  
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 Vol. II. Non-Metallic elements, pp. xv. & 504 & plate.  
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 Vol. XII. Organic compounds containing fourteen atoms of carbon. pp. xxiv. & 560.  
 Vols. 7-12 are Vols. 1-6 of Organic Chemistry in the original German.
- GOBRECHT, J. C.** History of the National Home for disabled volunteer soldiers; with a complete guide-book to the Central Home, at Dayton, Ohio. Written and compiled by a veteran of the Home. Dayton, Ohio: United Brethren printing establishment. 1875. 16°, pp. xiii.+248+frontispiece+11 eng. (5362).....**377.9**
- GÖTTE, Johann Wolfgang von.** Sæmmtliche Werke. Vollständige neu durchgesehene Ausgabe\*\*\* Stuttgart: . . . J. G. Cotta . . . 1869. 3v. 8°. (4658).....**178.7**  
 Contents :—Vol. I. pp. 1004, poems and dramas.  
 Vol. II. pp. 1104, novels and travels.  
 Vol. III. pp. 998, scientific writings, &c.
- GÖTTE, Johann Wolfgang von.** Faust: a tragedy. Translated in the original meters, by Bayard Taylor \* \* \* Boston: James R. Osgood & Co. . . . 1855. sm8°. (4570).....**177.24**  
 Vol. I. pp. xxii.+356. The First Part.  
 Vol. II, pp. xviii.+463. The Second Part.
- GOUIN, L. F.** A new system of French and English pronunciation, with or without a master. Three Rivers, C. E. 1859. 16°, pp. 213. (4735)....**384.3**
- GOODRICH, Chauncey A.** [Revision, &c.] See Webster, Noah. Dictionary of English Language. (4233).....**R. R.**
- GOODRICH, Samuel Griswold.** Parley's Cabinet Library in twenty volumes 16°. Frontispieces and eng. title-pages. . . . Including the Curiosities of Biography, History, Nature, Art, Science, and Philosophy. Philadelphia: Thomas Cowperthwaite & Co. 1846. (5339-58).....**378.1-20**

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- GORDON, *Lady* Lucie Duff. [Translator.] See Feuerbach, A. R. von. Narrative of remarkable criminal trials. (5318)..... **375.7**
- GOSSE, Philip Henry. . . . Popular British Ornithology, containing a familiar and technical description of the birds of the British Isles. Second edition. London: Reeve & Co., . . . 1853. 16°, pp. 320+19 colored plates. (5162) **385.5**
- GOSCHE, Richard [Life of Lessing, 115 pp. 16°.] See Lessing, S. E., Werke, Vol. VIII. p. 670. (4643)..... **168.1**
- GOSTWICK, Joseph and Harrison, Robert. Outlines of German Literature \* \* \* New York: Henry Holt & Co. . . . 1873. 8°, pp. xii.+588. (5036) **177.30**
- GOUGE, William M. A short history of paper money and banking in the United States, including an account of provincial and continental paper money. To which is prefixed an inquiry into the principles of the system, . . . Philadelphia: [Published by the author.] 12°, pp. xii.+140+240 (5176) **375.26**



- GOULD, Augustus Addison. The Naturalist's Library, containing scientific and popular descriptions of man, quadrupeds, birds, fishes, reptiles and insects, compiled from . . . writers on Natural History; \* \* \* arranged according to the classification of Stark. With 400 engravings. Boston: Phillips, Sampson & Co. 1859. 8°, pp. 875. (5245).....381.12
- GOULD, Benjamin Apthorp. On the Transatlantic Longitude, 102 pp. 4°. See Smithsonian Institution, Contributions to Knowledge, Vol. XVI. (1870) Art. 7. (549).....441.1
- GOWER, Sir Erasmus. . . . See Staunton, Sir George. [McCartney's Embassy,] (5254).....241.6
- GRAHAM, Thomas. Chemical Reports and Memoirs, . . . London: . . . Cavendish Society . . . 1848. pp. vi.+370+2 plates. (5436)..493.3  
 Contents:—I. Report on the relation of the volumes of bodies in the solid state to their equivalents or atomic weights: by Prof. Otto, at p. 1.  
 II. Memoir. Studies on the connection existing between the atomic weights, crystalline form and density of bodies: by M. Filhol, at p. 63.  
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 VII. Report on the artificial formation of alkaloids; by M. E. Kop, at p. 297.  
 VIII. On the intimate connection existing between the pseudo-volcanic phenomena of Iceland; by Prof. Bunsen, at p. 323.
- GRANT, Sir Alexander . . . The Ethics of Aristotle illustrated with essays and notes. Third Edition, revised and partly rewritten. London: Longmans, Green & Co., 1874. 2 vol., 8°. (4702).....348.5  
 Contents:—Vol. I. 7 Essays, and 3 Appendices and Books I. and II. of the Nicomachean Ethics with notes. pp. xv&512.  
 Vol. II. Books III—X of the Nichomachean Ethics with notes and Index Verborum; index of Greek words commented on and index of matters. pp. 351&lxxxviii.
- GRANT, E. B. Beet-root sugar and cultivation of the beet. Boston: Lee & Shephard. 1867. 12°. pp. 158. (5433).....228.13
- GRANT, Robert. . . . History of Physical Astronomy, from the earliest ages to the middle of the nineteenth century. Comprehending a detailed account of the establishment of the theory of gravitation by Newton, and its development by his successors; with an exposition of the progress of research on all the other subjects of Celestial Physics. London: Henry G. Bohn. . . . 1852. 8°, pp. xx+637. (5103).....462.14
- GRAVES, Mrs. A. J. Woman in America; being an examination into the moral and intellectual condition of American female society. \* \* \* New York: Harper & Brothers. . . . 1847. 12° pp. 262, (H. F. L. No. 166.) (4949).....389.20
- GRAY, Asa. . . . The Botanical Text-Book. . . . Part I. Principles of Systematic Botany; . . . Second edition. New York: Wiley & Putnam. 1845. 12°, pp. 509. (4760).....466.6

- GRAY, Asa.** . . . A manual of the Botany of the Northern United States, from New England to Wisconsin and south to Ohio and Pennsylvania inclusive, (The Mosses and Liverworts, by Wm. S. Sullivant,) arranged according to the natural system; with an introduction. . . . a glossary, etc. Boston and Cambridge: James Munroe & Co. . . . 1848. 12°, pp. lxxii+610. (4759).....**466.1**
- GRAY, Asa.** . . . The genera of the plants of the United States illustrated by figures and analyses from nature by Isaac Sprague. . . . Superintended and with descriptions by—New York: George P. Putnam. . . . 1849. 2v. 8°, pp. 230+plates 1-100; 229+plates 101-186. [Latin title also given.] (3336).....**514.4\***
- GRAY, Asa.** . . . Plantæ Wrightianæ Texano-Neo-Mexicanæ. 4°, pp. 146+10 plates. See Smithsonian Institution, Contributions to Knowledge. Vol. III. (1852) Art. 5. (5483).....**441.1**
- GRAY, Asa.** . . . Plantæ Wrightianæ Texano-Neo Mexicanæ. Part II. An account of a collection of plants made by Charles Wright. . . . In Western Texas, New Mexico, and Sonora. in the years 1851 and 1852. 4°, pp. 120+4 plates. See Smithsonian Institution, Contributions to Knowledge. Vol. V. (1853) Art 6. (5485).....**441.1**
- GREECE, Clair James.** See Mætzner, E. An English grammar. (4608) **147.16**
- GREEK Ecclesiastical Historians, the, of the first six centuries of the Christian era.** In six volumes. Containing—
- I. Eusebius's Life of Constantine, orations, etc.
  - II. Eusebius's Ecclesiastical History, to 324 A. D.
  - III. Socrates Scholasticus's History, from about 305 to 445 A. D.
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  - V. Theodoret's Ecclesiastical History, from 322 to 428 A. D.
  - VI. Evagrius's Ecclesiastical History. from 431 to 594 A. D.
- London: Samuel Bagster & Sons; . . . 1846. 6v. 8° (4703-4-5-6-7-8)  
**348.6 to 348.11**
- GREELEY, Horace.** Essays designed to elucidate the Science of Political Economy, while serving to explain and defend the Policy of Protection to Home Industry, as a System of National Co-operation for the Elevation of Labor. \*\*\* Boston: James R. Osgood & Co. . . . 1875. 16°, pp. 384. (5068).....**383.16**
- GREELEY, Horace.** [Preface and memoir.] See Clay, C. M. The writings of (4764).....**372.6**
- GREELEY, Horace.** [Introduction.] See Headley, P. C. Life of Louis Kossuth. (4655).....**218.15**
- GREEN, J. R.** A short history of the English people, with maps and tables. \*\*\* New York: Harper & Brothers, . . . 1077. 16°, pp. 823 +5 maps. (4728).....**158.2**
- Same. duplicate. (4727).....**158.3**
- GREENE, George Washington** . . . Life of Nathaniel Greene. . . . 16° pp. 403+portrait. See Sparks J., Lib. of Am. Biog. 2d series, vol. X. entire. (4810).....**384.1**
- GREENE, Nathaniel.** [Translator.] See Sforzosi, G. Compendious History of Italy. (4894).....**387.26**

- GREG, William Rathbone. *Rocks ahead; or, the Warnings of Cassandra.*  
 \* \* \* Boston: James R. Osgood & Co. . . . 1875. 12° pp. xli+233.  
 (5065).....383.10
- GREGORY, William, [Editor.] *See* Liebig Justus. *Chemistry in its applications to Agriculture and Physiology.* (4290).....Chem. Lab.
- GREGORY, William. *Revision, 4th Ed. See* Liebig, Justus. *Chemistry in its application to Agriculture* . . . (4290).....Chem. Lab.
- GRESSET, Jean-Baptiste Louis. [Le Méchant, pp. 92. (Memoir.)] *See* Chefs-d'Oeuvres des Auteurs Comiques. Vol. V. (5090).....118.13
- GREVILLE, Charles C. F. . . . *The Greville Memoirs. A journal of the reigns of King George IV. and King William IV. Edited by Henry Reeve.*  
 . . . Second Edition . . . London: Longmans, Greene & Co. 1874.  
 3v. 8°, pp. xvii+417; ix+384; x+432. (5308).....395.3  
 Vol. I., Geo. IV.; Vols. II. and III. William IV.
- GREVILLE, Robert Kaye. [Botany of.] *See* Murray [and others.] *Historical and Descriptive account of British India.* 3v. 12°, Vol. III. p. 116. (4873).....387.5
- GRIFFIN, Edward Dorr. . . . [The Effect of the Gospel, Sermon on.] *See* Murray-st. Church, New York. *Discourses* . . . (4546).....157.6
- GRIFFIN, John Joseph. . . . *Chemical Handicraft: A Classified and Descriptive Catalogue of Chemical Apparatus, Illustrated by upwards of sixteen hundred engravings on wood.* \* \* \* London: John Joseph Griffin & Sons. . . . 1877. 8°, pp. xvi+479. (5174).....392.16
- GRIFFIN, John Joseph. . . . *Chemical Recreations: A popular manual of Experimental Chemistry. The tenth edition.* London: Published by John Joseph Griffin. . . . 1860. 3v, 12°. (4717).....Chem. Lab.  
 Contents : 1st Div. pp. viii. & 120. *Elementary Experiments.* 2d Div. pp. xxiv, & 121 to 720. *Chemistry of Non Metallic Elements.* 3d Div. [wanting.  
 [There are separate title-pages to the several divisions.]
- GRISCOM, John Hoskins. *Animal Mechanism and Physiology; Being a plain and familiar exposition of the structure and functions of the human system.* \* \* \* Illustrated by numerous woodcuts by Butler. New York: Harper & Bros. . . . 1848. 12°, pp. 357. (H. F. L. No. 85) (4898).....388.1
- GRISCOM, John. . . . [Glossary and notes.] *See* Euler, L. *Letters of, on Natural Philosophy.* (4878).....387.10
- GRISWOLD, Stephen B. . . . [Law Libraries 10, pp. 8°] *See* UNITED STATES, Bureau of Education. *Public Libraries in the.* Vol I. p. 171, (5074)..L. R.
- GROVES, Charles Edward. . . . [Joint Editor.] *See* Crace-Calvert, F. *Dyeing and Calico Printing.* (4569).....462.6
- GWILT, Joseph. [Translator and Revisor.] *See* Vitruvius, W. P., *The Architecture of.* (5094).....334.4
- GUYOT, Arnold. *Directions for Meteorological Observations, and the Registry of Periodical Phenomena.* 70 pp. 8°. *Tables, Meteorological and Physical, prepared for the Smithsonian Institution, 634 pp. 8°. See* Smithsonian Institution, *Miscellaneous Collections, Vol. I. (1860) Arts. 1 and 3. (5500)*443.1
- HACKLEY, Charles W. . . . [Editor.] *See* Haslett, Charles. *The Mechanics, Machinists and Engineer's Practical book of Reference.* (5045)...148.34

- HAGEN, Herman.** Synopsis of the Described Neuroptera of North America, with a list of the South American Species. . . . 368 pp. 8°. See Smithsonian Institution, Miscellaneous Collections. Vol. IV. (1862) art. I (5503)  
443.1
- HAHN, K. A.** Mittlehochdeutsche Grammatik. Neu Ausgearbeitet von Friedrich Pfeiffer. Dritte Ausgabe. Frankfurt: Christian Winter. 1875. 1875. 8°, pp. xvii.+211. (4671).....178.19
- HAHNEMANN, Samuel.** Materia Medica Pura. Translated and edited by Charles Julius Hempel, M. D. New York: William Radde. 1846, 2 vols. 8°, xii+221; xi+194. (4772).....372.8
- HALE, Salma.** History of the United States, from their first settlement as colonies to the close of the administration of Mr. Madison, in 1817. . . . New York. . . . Harper & Brothers. . . . 2v, 12°, (H. F. L. Nos. 119, 120) (4915)  
388.19
- HALLIWELL-PHILLIPS, J. O.** [Introduction.] See Shakespeare, Works in reduced facsimile. (5467).....374.28
- HALES, J. W.** Longer English Poems: with notes, philological and explanatory, and an introduction on the teaching of English. . . . Fourth edition. London: Macmillan & Co. 1875. . . . 16°, pp. xxxvii+427. (4587)  
248.12
- HALF HOURS with Modern Scientists.** Lectures and Essays by Profs. Huxley, Barker, Stirling, Cope and Tyndall: with a general introduction. Noah Porter. First \* \* \* series. New Haven, Conn: Charles C. Chatfield & Co. 1872. 12°, pp. xi.+288. [First published as Nos. I-V. of the University Scientific Series.] (5017).....148.6
- HALF HOURS with Modern Scientists.** Lectures and Essays by Wallace, Roscoe Huggins, Lockyer, Young, Mayer and Rood. Being Nos. VI.-X. of the University Series. Second \* \* \* series. New Haven, Conn.: Charles C. Chatfield & Co. 1873. 12°, pp 325. (5018).....148.7
- HALF HOUR RECREATIONS in Popular Science.** First Series, by Richard A. Proctor. . . . Rudolph Virchow, H. Schellen, Prof. Roscoe, J. N. Lockyer, Prof. J. D. Dana, Dr. Carpenter, Pres. Winchell, Prof. Huxley, . . . J. H. Tice, E. B. Taylor, Dr. Richardson, Prof. T. Sterry Hunt, Prof. Clifford, Rob't Hunt, . . . Prof. H. W. Dove, and others. Selected and edited by Dana Estes. \* \* \* Boston: Estes & Lauriat, 1874. 16°, pp. xvi.+478. (5026).....148.17
- HALL, Baynard R.** . . . Teaching, a Science: the teacher an artist. New York: Baker & Scribner, 1848. 16°, pp. iv.+305. (4745)....374.10
- HALL, James.** Memoir of Thomas Posey, Major-General and Governor of Indiana. 45 pp. 16°. See Sparks, J., Lib. of Am. Biog., 2nd. series, Vol. II., p. 359. (4810).....384.1
- HALL, W.** The Principal Roots and Derivations of the Latin Language; with a display of their incorporation into English. Ninth edition revised and enlarged. London: Longman, . . . 1861. 12°, pp. xii.+192. (5193)  
258.17
- HALLECK, Fitz Greene.** Selections from the British poets . . . New York: Harper & Brothers . . . 2v. 12°, pp. 359; 360. (H. F. L. Nos. 112, 113.) (4913).....388.17

- HALM, Karl. [Notes and an introduction.] *See* Cicero, the orations of, against Catilina. (5084)..... 258.12
- HAMERTON, Philip Gilbert . . . The Intellectual Life. With a portrait of Leonardo da Vinci, etched by Leopold Flameng. \* \* \* Boston: Roberts Brothers. 1877. 16°, pp. xix.+455. (4983).....248.23
- HAMERTON, Philip Gilbert. . . Thoughts about art. New edition, revised, with notes and an introduction. . . Boston: Roberts Brothers. 1876. 8°, pp. xxiv.+383. (4982).....248.24
- HAMILTON, John Church. *See* Renwick J., Life of Alexander Hamilton. (H. F. L. No. 129.) (4922).....389.1
- HAMILTON, W. G. . . . Useful Information for railway men. . . . Sixth edition, . . . New York: D. VanNostrand, . . . 1874. ob24°, pp. 569. (4581)
- HAMILTON, Sir William. [Notes and illustrations.] *See* Reed, Thomas, Essays on the intellectual powers of man. (5165).....382.14
- HAMLIN, A. C. . . . The Tourmaline. Its relation as a gem; its complex nature; its wonderful physical properties, etc., etc.; with special reference to the beautiful and matchless crystals found in the State of Maine. With illustrations. \* \* \* Boston: James R. Osgood & Co. . . . 1873. 12°, pp. 107 +4 colored plates. (5388).....466.10
- HAMST, Olphar. (Anonym.) *See* Thomas, Ralph.
- HARDING, G. M. [Treatise on Gothic Architecture. 4°, pp. 6+4 plates.] *See* Shaw, Edward, Civil Architecture, at p. 136. (5050).....523.3
- HARE, Robert. . . . Memoir on the explosiveness of nitre, with a view to elucidate its agency in the tremendous explosion of July, 1845, in New York. 20 pp. 4°. *See* Smithsonian Institution, Contributions to Knowledge, Vol. II. (1851) Art. 7. (5482).....441.1
- HARKNESS, William . . . Observations on Terrestrial Magnetism and on the deviations of the compasses of the U. S. iron-clad *Monadnock*, during her cruise from Philadelphia to San Francisco, in 1865 and 1866 . . . 4°, pp. 225+2 diagrams. *See* Smithsonian Institution, Contributions to Knowledge, Vol. XVIII. (1873) Art. 4. (5498).....441.1
- HARLEVILLE, Jean François Collin *de*. [Les Chateaux en Espagne, 82 pp. 8°. Les vieux Celibataire, p. 83. (Memoir.)] *See* Chefs-d'Oeuvres des Auteurs Comiques, 8v. 12°, Vol. VIII. (5090).....118.13
- HARRINGTON, C. S. [Notes.] *See* Plantus, T. M. Captivi, Trinummus et Rudens. (5143).....258.29
- HARRISON, Robert. [Joint Author.] *See* Gostwick, Joseph, Outlines of German Literature. (5036).....177.30
- HARTT, Charles Frederick . . . Geology and Physical Geography of Brazil . . . \* \* \* Boston: Fields, Osgood & Co. 1870. 8°, pp. xxiii.+620+frontispiece +3 maps+6 engravings. (5472).....463.7  
 Note:—Title page is headed "Thayer Expedition. Scientific results of a journey in Brazil. By Louis Agassiz and his travelling companions."
- HART, James Morgan. German Universities: A narrative of personal experience, together with recent statistical information, practical suggestions, and a comparison of the German, English and American systems of higher education. New York: G. P. Putnam's Sons. 1874. 12°, pp. 398. (4675)  
 177.26

- HARTING, P. . . . Das Mikroskop. Theorie, Gebrauch, Geschichte und Gegenwärtiger Zustand Desselben. Deutsche Original-ausgabe, vom Verfasser revidirt und vervollständigt. Aus dem Holländischen Uebertragen von Dr. Fr. Wilh. Theile, . . . mit 410 in den Text eingedruckten Holzschnitten und einer Theile, . . . Braunschweig, . . . Friedrich Vieweg und Sohn. 1859. 8°, pp. 950+1 plate. (5256).....464.1
- HARVEY, William Henry. Nereis Boreali-Americana, or contributions to a history of the marine Algæ of North America. Part I. Melanospermæ. 4°, pp. 152+12 plates. See Smithsonian Institution, Contributions to Knowledge, Vol. III. (1852) Art. 4. (5483) .....441.1
- Nereis Boreali-Americana, or contributions to a history of the marine Algæ of North America . . . Part II. Rhodospermæ. pp. 262+24 plates. See Smithsonian Institution, Contributions to Knowledge, Vol. V. (1853) Art. 5. (5485).....441.1
- Nereis Boreali-Americana, or contributions to a history of the marine algæ of North America. Part III. Chlorospermæ. 4°, pp. 142+14 plates. See Smithsonian Institution, Contributions to Knowledge, Vol. X. (1858) Art. 2. (5490).....441.1
- HARWOOD, Edward. View of the Classics. See Clarke, A. Bibliographical Dictionary. 6v. 12°. (4603).....L. R.
- HASKEL, Daniel . . . and J. Calvin Smith, . . . A complete descriptive and statistical Gazetteer of the United States of America, containing a particular description of the states, territories, counties, districts, parishes, cities, towns, and villages, mountains, rivers, lakes, canals, and railroads; with an abstract of the census and statistics for 1840, exhibiting a complete view of the Agricultural, Commercial, manufacturing and literary condition and resources of the country. \*\*\* New York: Published by Sherman & Smith, . . . 1848. 8°, pp. 754. (4782).....371.17
- HASLETT, Charles. . . . The mechanic's, machinist's and engineer's practical book of reference; containing tables and formulæ, . . . and miscellaneous recipes; together with the engineer's field book, containing formulæ. . . . Tables of radii . . . versed sines and external secants, natural sines and tangents and logarithms of natural numbers from 1 to 10,000. Edited by Charles W. Hackley, . . . New York: F. J. Huntington & Co. . . . 1871. 24° pp. 517. [Tuck bound.] (5045).....148.34
- HASTED, Frederick. The writings of. Buffalo, New York, 1864. 8°. (4769)  
372.15
- ▲ a bunch of tracts, letters, hymns, &c., bound together, without title page or index.
- HATFIELD, R. G. . . . The American House Carpenter. A treatise upon architecture. . . . Second Edition. Illustrated by . . . engravings. New York and London: Wiley & Putnam. 1845. 8°, pp. xii+272+32. (4790)  
371.3
- HATFIELD, R. G. . . . The American House Carpenter: A treatise on the art of building, and the strength of materials. Seventh Edition, revised and enlarged, with additional illustrations. New York: John Wiley & Son, . . . 1874. 8°, pp. x+398+106. (4575).....147.10

- HAVEN, Samuel F. *Archæology of the United States, or sketches, historical and bibliographical, of the progress of information and opinion respecting vestiges of antiquity in the United States.* 122 pp. 4°. *See* Smithsonian Institution. *Contributions to Knowledge*; vol. III. (1856) art. 2 (5488. 441.1
- HAWKS, Francis Lister. *The monuments of Egypt; or Egypt a witness for the Bible, with notes of a voyage up the Nile by an American.* New York: Geo. P. Putnam, 1850. 8°, pp. 256+162+9 col. pl.+2 pl.(4771)371.1\*
- HAWTHORNE, Nathaniel. *Twice-Told Tales.* A new edition. Boston: Fields, Osgood & Co., . . . 1871. 2v. 16°, pp. 287, portrait; 288. (5063) 383.22
- HAWTHORNE, Nathaniel. [Editor.] *Journal of an American Cruiser; comprising sketches of the Canaries, the Cape de Verds, Liberia, Madeira, Sierra Leone, and other places of interest on the west coast of Africa.* By an officer of the U. S. navy. New York and London. Wiley & Putnam. 1845. 8°, pp. vi+160. (Library of American books.) (4739)...383.17
- HAYWARD, Charles, Jr. *Life of Sebastian Cabot.* 12°, pp. 721. Vignette. *See* Sparks, J., *Lib. of Am. Biog.*, Vol. IX. at p. 89. (4814).....385.1
- HAZARD, Samuel. *Pennsylvania archives.* Selected and arranged from original documents in the office of the Secretary of the Commonwealth, conformably to acts of the General Assembly, Feb. 15, 1851, and March 1, 1852. Philadelphia; . . . Joseph Severus & Co. 1852. 12v. 12°. [Index in each vol.] (5159).....Doc. Room.
- Vol. I. 1664—1747. pp. 783 & plate & map.  
 " II. 1748—Sept. 1756, pp. 792 & 2 maps.  
 " III. Oct. 1756—1760, pp. 772.  
 " IV. 1760—1776, pp. 809 & map.  
 " V. 1776—1777, pp. 791 & map.  
 " VI. 1777—1778, pp. 792.  
 " VII. 1778—1779, pp. 796.  
 " VIII. 1779—1781, pp. 791.  
 " IX. 1781—1783, pp. 792.  
 " X. 1783—1786, pp. 791.  
 " XI. 1786—1790, pp. 788 & 2 maps.  
 " XII. 1790, pp. 482 & 4 maps.
- HAZEN, Edward. . . . *Popular Technology; or, Professions and Trades, \* \* \** . . . Embellished with eighty-one engravings. . . . New York: Harper & Brothers. . . . 1846. 2v. 12°. 261+275+frontispieces. (4938.) 389.17
- HAYDEN, F. V. *See* Meek, F. B.
- HAYES, Isaac Israel. *Physical observations in the Arctic Seas; made on the west coast of North Greenland, the vicinity of Smith Strait and the west side of Kennedy Channel, during 1860 and 1861.* Reduced and discussed . . . by Charles A Schott. . . . pp. 286+80 plates+14 wood cuts. *See* Smithsonian Institution. *Contributions to Knowledge.* Vol. XV., [1867.] Art. 5. (5495).....441.1
- HEAD, Francis Bond. . . . *The Life and Adventures of Bruce the African traveler.* . . . \* \* \* From the last London edition. New York: Harper & Brothers. . . . 1846. 12°, pp. 382. [Portrait of Bruce.] (4920) 388.24
- HEADLEY, Joel Tyler. *Sacred Scenes and Characters.* New York. John S. Taylor, . . . 1850. 12°, pp. 193+portrait of author+4 eng. (4823) 228.3

- HEADLEY**, Phineas Camp. . . . The Life of Louis Kossuth, Governor of Hungary ; including notices of the men and scenes of the Hungarian Revolution ; to which is added an appendix containing his principal speeches, etc. ; with an introduction by Horace Greeley, Auburn : Derby & Miller, 1852. 12°, pp. 461+portrait. (4655).....218.15
- HEINE**, Heinrich. Sæmmtliche Werke. Hamburg : Hoffman und Campe, 1873-6. 18v. in 9. sm16°. (4644).....189.5  
 Contents :—Vols. I. and II. ; Reisebilder, pp. 320 ; 429.  
 Vol. III. English Fragments and Shakspeare's Madchen und Frauen, pp. 392.  
 Vol. IV. Novellistische Fragmente, pp. 292.  
 Vols. V., VI. and VII. Ueber Deutschland, pp. 270, 294, 320.  
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 Vol. XII. Franzoesische Zustænde, pp. 436 ; Ludwig Boerne, pp. 264.  
 Vols. XIII. and XIV. Vermischte Schriften, pp. 387, 331.  
 Vols XV-XVIII. Dichtungen, pp. 252, 436, 312, 271.
- HEINE**, Heinrich. Pictures of Travel. Translated from the German by Charles Godfrey Leland. . . . Eighth revised edition. Philadelphia : . . . Schæfer & Koradi, 1876. 12°, pp. 471, (5230).....477.1
- HELFENSTEIN**, James. . . . A Comparative Grammar of the Teutonic Languages. Being at the same time a Historical Grammar of the English Language, and comprising Gælic, Anglo-Saxon, early English, modern English, Icelandic (old Norse), Danish, Swedish, old High German, middle High German, modern German, old Saxon, old Frisian, Dutch. London : Macmillan & Co., 1870. . . . 8°, pp. xviii+ii+525+i. (4585).....147.13
- HELMHOLTZ**, Herman Ludwig Ferdinand. . . . On the sensations of tone as a physiological basis for the theory of music. Translated with the author's sanction from the third German edition, with additional notes and an additional appendix, by Alexander J. Ellis. . . . London : Longmans, Green & Co. 1875. . . . 8°, pp. xxiv.+824. (5175).....392.13
- HELPS**, Sir Arthur. Friends in Council. A series of readings and discourse thereon. First series. A new edition. London : Smith, Elder & Co. . . . 1876. 2 vols. 16°, pp. 298 ; 278. (5112).....383.23
- HELPS**, Sir Arthur. Friends in Council. A series of readings and discourse thereon. Second series. . . . A new edition. London : Smith, Elder & Co. . . . 1873. 2v. 16°, pp. iv.+240 ; 284. (5113).....383.24
- HELVETIUS**, Claude Adrien. Oeuvres Completes. Paris. 1793-'97. 10v., 12°. (4552).....38X.15  
 Contents :—Vol. I. Eloge, pp. 58. Essai sur la vie et les Ouvrages, 158 pp. Preface de l' Auteur at p. 217. De l' Esprit at p. 217.  
 Vol. II. Same, 400 pp ; Vol. III. Same, 449 pp ; Vol. IV. Same, 335 pp ; Vol. V. De l' Homme, 364 pp ; Vol. VI. Same, 292 pp ; Vol. VII. Same, 284 pp ; Vol. VIII. Same, 237 pp ; Vol. IX. Same, 258 pp.  
 Vol. X. Same, 128 pp. Le Bonheur, Poeme, 72 pp. Epitres sur les Arts p. 73. Epitre sur le Plaisir, at p. 84. Epitre de Voltaire a Helvetius, at p. 94. Fragments, at p. 101. Lettre, p. 110.
- HEMPEL**, Charles Julius. . . . [Translator and editor.] See Hahnemann, Materia Medica Pura. 2v. 8°. (4772).....372.8
- HENDERSON**, Peter. . . . Practical Floriculture : a guide to the successful cultivation of florists' plants, for the amateur and professional florist. Illustrated. New York : Orange Judd & Co. . . . n. d. [Copyright 1869] 12°, pp. vi.+249. (3156).....516.26



- HENNINGTON, Major-General.** See Shortrede, Robert. Logarithms of sines and tangents. (5199).....**461.1**
- HENRY, Caleb Sprague.** [Translation, with additions and a continuation.] See [Cousin Victor.] Epitome of the History of Philosophy. (H.F.L.) (4933)  
**389.12**
- HENRY, Joseph.** . . . Instructions for observations of thunder storms, 1 pp. Circular relative to heights, 2 pp. Directions for constructing lightning rods. 3 pp. Queries relative to tornadoes, 4 pp. See Smithsonian Institution, Miscellaneous Collections, Vol. X. (1873) Arts. 3, 4, 5, 6. (5509)  
**443.1**
- HENRY, Joseph.** Telegraphic announcements of astronomical discoveries. 1873. 8°, pp. 4. See Smithsonian Institution, Miscellaneous Collections. Vol. XII. Art. 3. (5511).....**44.31**
- HENRY, Joseph.** Tables and results of the precipitation, in rain and snow, in the United States; and at some stations in adjacent parts of North America, and in Central and South America. Collected by the Smithsonian Institution, and discussed under the direction of Joseph Henry, secretary. . . . 4°, 178 pp.+8 diagrams+5 plates+3 charts. See Smithsonian Institution, Contributions to Knowledge, Vol. XVIII. (1873) Art. 2. (5498)....**441.1**
- HENRY of Huntington,** The Chronicle of; comprising the History of England, from the invasion of Julius Cæsar to the accession of Henry II.; also, the acts of Stephen, King of England and Duke of Normandy. Translated and edited by Thomas Forester . . . London: Henry G. Bohn . . . 1858. 12°, pp. xxviii.+442+frontispiece. (5122).....**376.4**
- HENRY, William Charles** . . . Memoirs of the life and scientific researches of John Dalton . . . London: . . . The Cavendish Society . . . 1854. 8°, pp. xv.+249+portraits+3 plates. (5438).....**494.3**
- HERBERT, Henry William.** . . . Frank Forester's field sports of the United States and British Provinces of North America. \*\*\* New York: Stringer & Townsend. . . . 1849. 2v. 8°, pp. 360; 367+6 plates. (4776)..**372.14**
- HERDER, Johann Gottlieb von.** Sæmmtliche Werke, Zum schoenen Literatur und Kunst. Stuttgart und Tuebingen: J. G. Cotta. 1862. 13v. in 7. sq. 16°. (4642).....**189.4**
- Contents:—Vol. 1 and 2, Gedichte.  
Vol. 3, Legenden, Dramatische Stuecke und Dichtungen.  
Vol. 4, Stimmen der Voelker in Liedern.  
Vol. 5, Lyrische Gedichte, Keutaphium des Dichters, Jacob Balde.  
Vol. 6 and 7, Fragmente zur Deutschen Literatur.  
Vol. 9, Blumenlese aus Morgenlaendischen Dichtern.  
Vol. 8, Schriften zur griechischen Literatur.  
Vol. 10, Fruechte aus den . . . Achtzehnten Jahrhundert.  
Vol. 11, Kritische Waelder.  
Vol. 12, Abhandlungen und Briefe.  
Vol. 13, Antiquarische Aufsätze.
- HERMAN, Karl Freidrich.** [Text.] See Plato. The Apology of Socrates, the Crito, and the Phædo. (4629).....**258.31**
- HERMAS, Saint.** Shepherd (or Pastor) of. [Translated] 126. pp. 8°, See Wake, William. The genuine epistles of the Apostolical Fathers, at p. 337. [Book I., visions; Book II., commands; Book III., similitudes.] (4799)..**371.11**

- HERODOTUS**, translated from Greek, with notes, by the Rev. William Beloe. In four volumes. The first American, from the last corrected and enlarged London edition. Philadelphia: . . . Edward Earle . . . 1814. 4v. 8°. (3032)  
 Contents:—Vol. I. Intr. Life of Herod., Clio, Euterpe. pp. xiii. & 407 & map.  
 Vol. II. Euterpe, Thalia, Melpomene. pp. 400 & map of world.  
 Vol. III. Melpomene, Terpsichore, Erato, Polymnia. pp. 416.  
 Vol. IV. Polymnia, Urania, Calliope. pp. 448. Index at p. 363. \*\*\*
- HERVEY**, Lord John. *Memoirs of the reign of George the Second, from his accession to the death of Queen Caroline.* Edited from the original manuscript at Ickworth, by the Right Hon. John Wilson Croker. Philadelphia: Lea & Blanchard. 1848. 2v. 12°. pp. 428; 442. (4753).....**374.14**
- HEYNE**, Moritz. . . . See Stamm, F. L. *Ulflas.* (4668).....**178.16**
- HEYNE**, M. [Text.] See Virgilius, P. M. *Works of.* (5144).....**258.14**
- HEYSE**, Johann Christ. August. *Ausführliches Lehrbuch der Deutschen Sprache. Neu bearbeitet von Dr. K. W. L. Heyse . . . Hannover, 1838-'49. Hahnshe. Hofbuchhandlung.* 2v. 8°. pp. xxviii.+916; xii.+876. (5212).....**475.1**
- HEYSE**, K. W. L. [Reviser.] See Heyse, J. C. A. *Ausführliches Lehrbuch der Deutschen Sprache.* 2v. 8°. (5212).....**475.1**
- HIATT**, James M. *The Voter's Text-Book; comprising a collection of the most important documents and statistics connected with the political history of America, compiled from official records, with biographical and historical sketches.* Indianapolis, Ind.: Asher, Adams & Higgins. 1868. 12°, pp. 382+20 portraits. (5266).....**374.10**
- HIGGINS**, W. Mullinger . . . *The Earth: its physical condition and most remarkable phenomena.* \* \* \* New York: . . . Harper & Brothers. . . . 1846. 12°, pp. 463. (H. F. L. No. 78.) (4893).....**387.25**
- HILDRETH**, Richard . . . *Theory of Politics: An inquiry into the foundations of governments, and the causes and progress of political revolutions.* New York: Harper & Brothers, . . . 1853. 12°, pp. 274. (4978) . . . **148.33**
- HILDRETH**, Samuel Prescott. . . . *Results of Meteorological Observations made at Marietta, Ohio, between 1826 and 1859, inclusive. To which are added Results of Observations taken at Marietta, by Mr. Joseph Wood, between 1817 and 1823. Reduced and discussed by . . . Charles A. Schott, . . . pp. vi.+46. 4°. See Smithsonian Institution, Contributions to Knowledge, Vol. XVI. (1879) Art. 4. (5496) . . . . .***441.1**
- HILL**, Henry B. . . . *Lecture notes on Qualitative Analysis.* New York: G. P. Putnam's Sons. 1874. 12°, pp. xii+54. (5411).....**Chem. Lab.**
- HILL**, Rowland. . . . *Village Dialogues, between farmer Littleworth, Thomas Newman, Rev. Mr. Lovegood, and others, from the Eighteenth London Edition, with additional dialogues.* Philadelphia: Herman Hooker, . . . 1843. 2 vols., 12°, pp. 428, 431. (4830).....**383.20**
- HILLARD**, George Stillman. *Life of Capt. John Smith.* pp. 237, 12°. See Sparks, J., *Lib. of Am. Biog.* Vol. II., at p. 171. (4814).....**385.1**
- HINTON**, Louis J. . . . *Report on the working of stone; and on artificial stones.* 48 pp., 8°+2 eng. See UNITED STATES, Dept. of State. *Reports, International Exhibition, Vienna, 1873.* Vol. IV. D. (5440) . . . **157.13**

- HIRSCH**, [Meyer.] Collection of examples, formulæ and calculations, on the literal calculus and algebra. Translated from the German by the Rev. J. A. Ross. . . . London. . . . Black, Young & Young. . . . 1827. 8°, pp. xi3863 tables. (5180).....462.2
- HISTORICAL ACCOUNT** of the circumnavigation of the globe, and of the progress of discovery in the Pacific Ocean; from the voyage of Magellan to the death of Cook. Illustrated by numerous engravings. New York: Harper & Brothers. . . . 1845. 12°, pp. 366 (H. F. L. No. 82) (4896) ...387.28
- HISTORICAL and descriptive account** of Iceland, Greenland and the Faroe Islands. New York: Harper & Brothers. . . . 1866. 12°, pp. 360, map. (H. F. L. No. 131.) (4924).....389.3
- HISTORICAL SOCIETY** of Pennsylvania, Memoirs of. Philadelphia: J. B. Lippen-cott & Co., for the . . . Society. . . . 1858. Vol. VI. only. 8°. pp. 429+1 eng.+1 col'd plate. (5203).....391.10  
First four volumes not published in 1858. Vol. V., history of Braddock's expedition.
- HITCHCOCK**, Charles Henry. [Joint author.] See Hitchcock, Edward . . . and — Elementary Geology. (5164).....382.19
- HITCHCOCK**, Edward . . . and Hitchcock, Charles Henry. Elementary Geology. A new edition. New York: Ivison, Phinney & Company, . . . 1862. 12°, pp. 430. Frontispiece. (5164).....382.19
- HITCHCOCK**, Edward. . . . Illustrations of Surface Geology. 4°, 164 pp.+12 plates. See Smithsonian Institution, Contributions to Knowledge. Vol. IX. (1857) Art. 3. (5489).....441.1
- HOAR**, Sir Richard Colt. . . . [Translator.] See Giraldus Cambrensis. His-torical works of. (5121).....376.11
- HOBART**, [John Henry.] [Analysis.] See Butler, J. Hobart's Analysis of Bishop Butler's Analogy of Religion. (5283).....384.14
- HOEFER**, Ferdinand. Histoire de la Chimie. Deuxième édition revue et aug-mentée. . . . Paris. . . . Firmin Didot Frères, Fils et Cie. . . . 1869. 2v. 8°, pp. x+342; [viii]+615. (5007).....464.4
- HOFFMANN**, August Wilhelm. Introduction to modern chemistry experimental and theoretic, embodying twelve lectures delivered in the Royal College of Chemistry. London: . . . \* \* \* London: Walton & Maberly. 1866. 12°, pp. x.+233. (4715).
- HOFMANN**, August Wilhelm. . . . Einleitung in die moderne Chemie nach einer Reihe von Vortragen gehalten in dem Royal College of Chemistry zu London: Vierte Auflage \* \* \* Braunschweig: . . . Friedrich Vieweg und Sohn. 1869. 8°, pp. 339. (5372).....465.6
- HOFFMAN**, August Wilhelm . . . [and others.] The Report on the coloring matters derived from coal tar, shown at the French exhibition, 1867. 66 pp. 8°. See Reimann M. On Aniline and its derivatives, at p 99. (5426) 462.20
- HOFMANN**, August Wilhelm. Remarks on the importance of cultivating experi-mental science in a national point of view. . . . 42 pp. 8°. See Royal College of Chemistry, reports of, at p. 21. (5303).....464.8
- HOFFMAN**, Charles Fenno. . . . The administration of Jacob Leisler; a chapter in American history. pp. 60, 16°. See Sparks, J., Lib. of Am. Biog., 2d series, Vol. III, at p. 439. (4810).....584.1

- HOLMES, Edward . . . The Life of Mozart, including his correspondence. New York: Harper & Brothers, publishers. 1845. 12°, pp. 379; 2 plates of music. [Harper's New Miscellany, Vol. IV.] (Catalogue of Mozart's compositions at p. 367.) (5314).....375.3
- HOMES, Henry Augustus. . . . [State and Territorial Libraries. 20 pp. 8°. . . . Historical Societies in the U. S. 14 pp. 8°.] See UNITED STATES, Bureau of Education; public libraries in the, Vol. I., p. 292. (5074). .L.R.
- HOOKE, Joseph Dalton and Bentham, George. [Joint Authors of *Flora Nigritiana*.] See Hooker, Sir W. J., *Niger Flora*, at p. 200. (5241)....462.3
- HOOKE, Sir William Jackson . . . [Editor.] *Niger Flora*; or, an enumeration of the plants of Western tropical Africa, collected by the late Dr. Theodore Vogel . . . Including *Spicilegia Gorgonea*, by P. B. Webb . . . and *Flora Nigritiana*, by Dr. J. D. Hooker . . . and George Bentham . . . With a sketch of the life of Dr. Vogel. With two views, a map and fifty plates. London: Hippolyte Bailliere . . . 1849. 8°, pp. xv+487+50. (5241).....462.3
- HOOKE, Worthington . . . First Book in Chemistry, Illustrated . . . New York: Harper & Brothers . . . 1869. 16°, pp. 231+frontispiece. (5416).....228.11
- HOOKE, Worthington. . . . Science for the school and family. Part I. Natural Philosophy. . . . New York: Harper & Brothers. . . . 1868. 12°, pp. 346. (4598).....218.18
- HOOKE, Washington. . . . Science for the school and family. Part II. Chemistry. Illustrated. . . . Second edition, revised and corrected. New York: Harper & Brothers. . . . 1876. 12°, pp. 430+1 colored plate. (5413).....466.14
- HOPKINS, Ezekiel. *Bp. of Derry*. The whole works of; with a memoir . . . London: Henry G. Bohn, . . . 1846. 8°. (4784).....371.2  
Contents:—Memoir, pp. 5; Vanity of the World, pp. 20; On the Lord's Payer, pp. 91; On the Ten Commandments, pp. 180; Sermons, pp. 205, 157, 161.
- HORATIUS, Quintus Flaccus. . . . The complete works of; edited by the Rev. J. E. Yonge . . . \* \* \* London: Longmans, Green & Co. 1867. 8°, pp. xix.+260+256+frontispiece+map. (5190).....473.7
- HORATIUS. *Quinti Horatii Flacci opera omnia*. The works of Horace, with a commentary by E. C. Wickham . . . Clarendon Press series. Oxford . . . 1874. . . . 8°, pp. xxix.+408. (*Vol. I. only, odes, episodes, and Carmen seculæ.*) (5013).....227.14
- HORATIUS. *Quinti Horatii Flacci Opera*. Interpretatione et notis illustravit. Ludovicus Desprez, . . . in usum serenissimi Delphini. Editio quinta in America stereotypa impressa. Hunc editione accesserunt vita Horatii cum Dacceri notis, ejusdem chronologia Horatiana, index accuratissima et prefatio de satira Romana . . . Philadelphia: . . . Joseph Allen . . . n. d. 8°, pp. xvi.+559+61. (5044).....258.7
- HORNER, Joanna B., and Horner, Leonora. [Joint translators.] See Oersted, H. C. *Soul in Nature*. (5294).....378.21
- HOMERUS. The *Iliad* of. Translated by Alexander Pope, with notes by Rev. Theodore Alois Buckley . . . and Flaxman's designs. \* \* \* New York: Scribner, Welford & Armstrong. n. d. 16°, pp. xiv.+452+frontispiece. (5465).....378.22

- HOMERUS. The Odyssey of. Translated by Alexander Pope, with notes by the Rev. Theodore Alois Buckley . . . and Flaxman's designs. \* \* \* New York: Scribner, Welford & Armstrong. n. d. 16°, pp. xxx.+345+frontispiece. (5466).....378.23
- HORSFORD, Eben Norton. . . . [Scientific Commissioner] Report on Vienna bread. 122 pp.+1 plate. 8°. See UNITED STATES. Department of State. Reports, International Exhibition, Vienna, 1873, Vol. II. B. (5440)157.13
- HOSKINS, Chandos Wren. [Essay on Agriculture. 25 pp. 8°.] See Morton, J. C. Cyclopaedia of Agriculture, Vol. I., p. 1. (4609).....511.4
- HOUSE OF HOPE Presbyterian Church, Saint Paul, Minn., History of . . . 1855-1876. St. Paul: The Pioneer-Press Co. 1876. 8°, pp. 82+7 photographs. [Portraits of pastors, Revs. E. D. Neill, F. A. Noble, F. W. Flint, D. R. Breed; views of church edifice.] (5292).....157.14\*
- HOYT, John W. . . . Report on Education. 36 pp. 8°. See UNITED STATES. Dept. of State. Reports, International Exhibition, Vienna, 1873, Vol. II. L. (5440).....157.13
- HUBBARD, Fordyce M. [Additions and Notes.] See Belknap J. American Biography, 3v. 12°. (H. F. L.) (4946).....389.25
- HUGGENS, [William.] [Joint Author. See Schellen and others. Spectrum Analysis explained. (5026).....148.17
- HUGGINS, William . . . Spectrum Analysis in its application to the heavenly bodies. 32 pp. 12°. See Half Hours with modern scientists, Second Series. at p. 81. (5018).....148.7
- HUGHES, Samuel . . . A Treatise on Water Works for the supply of cities and towns, with a description of the principal geological formations of England, as influencing supplies of water. New edition, revised and considerably enlarged. \* \* \* London: Lockwood & Co. . . . 1875. 12°. pp. xiv.+413. "Weale's Rudimentary Series, 81." (4650).....248.6
- HUGHES, Thomas. [Editor, and preface.] See Maurice, F. D. The Friendship of Books. (4992).....276.14
- HUGO, Victor. Théâtre . . . Paris: Hachette et Cie . . . 1875. 4v. 8°. (4698).....118.7  
 Contents:—Vol. I. pp. 527. Cromwell.  
 Vol. II. pp. 541. Hermani, Marion de Lorme, at p. 175; S'Annise, at p. 382.  
 Vol. III. pp. 444. Lucrece Borgia, Maria Tudor Angelo, at p. 135.  
 Vol. IV. pp. 379 & 11. La Esmeralda. Ruy Blas, at p. 85. Les Burgraves, at p. 241.
- HUGO, Victor. The Rhine. . . . [Translated] New York: Wiley & Putnam . . . 1845. 8°, pp. x+174. (4752).....383.19
- HUMBOLDT, Alexander von. Travels and researches. . . . Condensed narrative of. See Macgillivray. (4876).....387.8
- HUMPHREYS, Andrew Atkinson and Abbott, Henry L. Report upon the physics and Hydraulics of the Mississippi river; upon the protection of the alluvial region against overflow; and upon the deepening of the mouths; based upon surveys and investigations. . . . Submitted to the Bureau of Topographical Engineers, War Dept. 1861. \* \* \* Philadelphia: J. B. Lippincott & Co., 1861. 4°, pp. xxiii+456+cxlvi+19 plates. (5338).....526.4

- HUMPHREYS, Henry Noel. The genera of British moths. Popularly described and arranged according to the system now adopted in the British Museum. Illustrated by a series of picturesque plates. Exhibiting the insects in their different stages, with the caterpillars, and the plants on which they are generally found. London: Paul Jerrard & Son, 2v. 8°. (5062).. Cabinet A.\*\*  
Vol I. pp. vi & 76 & 30 plates. Vol. II. pp. 77-206 & plates 31-62.
- HUMPHREYS, Henry Noel . . . The Coin Collector's Manual, or guide to the numismatic student in the formation of a cabinet of coins: comprising an historical and critical account of the origin and progress of coinage, from the earliest period to the fall of the Roman Empire; with some account of the coinage of modern Europe, more especially of Great Britain . . . London: George Bell & Sons . . . 1876. 1v. in 2. 16°. pp. xxiv.+725+frontispieces +9 plates [Bohn's IL. Lib.] (5476).....377.15
- HUNT, [Frederick Knight.] Merchants' Magazine Year Book. 1871. New York: William B. Dana & Co. [1871.] 8°, pp. 452+portrait of H. Walbridge. (4775).....381.6
- HUNT, [James Henry] Leigh. Imagination and Fancy; or selections from the English poets, illustrative of those first requisites of their art; with markings of the best passages, critical notices of the writers, and an essay in answer to the question, "What is poetry?" New edition, complete in one volume. New York: George P. Putnam, . . . 1850. 16°, pp. x.+255. (4756) 374.4
- HUNT, Robert. Coal as a Reservoir of Power. 10 pp. 16°. See Half Hour Recreations in Popular Science, at p. 407. (5026)..... 148.17
- HUNT, Robert. [Additions.] See Weale John. Dictionary of Terms in Architecture, &c. (4617).....248.7
- HUNT, Robert. . . . [Editor.] See Ure's Dictionary of Arts, Manufactures and Mines. (4723)
- HUNT, Thomas Sterry. Origin of Metalliferous Deposits. 15 pp. 16°. See Half Hour Recreations in Popular Science, at p. 375. (5026).....148.17
- HUTTON, Richard Holt. Essays in Literary Criticism. Gæthe . . . Hawthorne . . . Clough, Wordsworth . . . George Eliot, Matthew Arnold. Philadelphia: Jos. H. Coates & Co. . . . 1876. 16°, pp. xii.+355. (4590).208.19
- HUTTON, Charles. . . . A Course in Mathematics, composed for the use of the Royal Academy. A new and carefully corrected edition, entirely re-modelled, and adapted to the course of instruction now pursued in the Royal Military Academy. By William Rutherford . . . London: . . . Thomas Tegg. . . . 1843. 8°, pp. vii.+895. (5101).....462.15  
Contents:—Arithmetic, p. 3; Algebra, p. 84; Geometry and Conic Sections, p. 357; Plane Trigonometry, p. 493; Mensuration, p. 510; Analytical Plane Trigonometry, p. 560; Spherical Trigonometry, p. 621; Analytical Geometry, p. 643; Differential Calculus, p. 689; Integral Calculus, p. 759; Mechanics, p. 803; Miscellaneous, p. 868.
- HUXLEY, Thomas Henry . . . and Martin, H. N. . . . A course of practical instruction in elementary Biology. Second edition, revised. London and New York: Macmillan & Co. 1876. 16°, pp. xi.+279. (5060).383.15
- HUXLEY, Thomas Henry. On Yeast. 18 pp. 16°. See Half Hour Recreations in Popular Science, at p. 287. (5026).....148.17
- HUXLEY, Thomas Henry. On the Physical Basis of Life. 29 pp. 12°. See Half Hours with modern scientists, First Series; at p. 7. (5017).....148.6

- HUYOT, Père et Fils. [Engravings.] See Lacroix, Paul. *Viè Militaire et religieuse.*
- IGNATIUS, *Saint.* Genuine epistles of. [translated. 74 pp., 8°.] See Wake, William. *The Genuine Epistles of the Apostolical Fathers*, at p. 141. (4799)  
371.11
- INCIDENTS of Travel in Egypt, Arabia Petraea, and the Holy Land. By an American, with a map and engravings. Tenth edition, with additions. New York: Harper & Brothers, . . . 1849. 2v. 12°, pp. 240; 286. (4822)  
374.25
- INCIDENTS of Travel in Greece, Turkey, Russia, and Poland. By the author of "Incidents of Travel in Egypt, Arabia Petraea, and the Holy Land." With a map and engravings. Seventh edition. New York: Harper & Brothers, . . . 1844. 2v. 12°, pp. 268; 275. (4806).....374.26
- INDIANAPOLIS. Catalogue of the Public Library of Indianapolis. 1873. 8°, pp. x.+365. (4709).....L. R.
- INGRAM J. S. *The Centennial Exposition described and illustrated.* . . . profusely illustrated. . . \* \* \* . . . Hubbard Bros. Philadelphia: . . . 1876. pp. 770+eng.+map. (5167).....392.6
- INGULPH'S Chronicle of the Abbey of Croyland, with the continuations by Peter of Blois and anonymous writers. Translated from the Latin, with notes by Henry T. Riley . . . London: Henry G. Bohn. . . 1854. 16°, pp. xvi.+546. (5123).....376.10
- IRENÆUS. *A relation of the martyrdom of Saint Ignatius.* [Translated.] 8°, pp. 84. See Wake W. *Genuine Epistles of the Apostolical Fathers*, at p. 228. (4799).....371.11
- IRVING, Pierre M. *The Life and Letters of Washington Irving.* By his nephew. New York: G. P. Putnam. . . 1862. 2v. 12°, pp. 463+2 engraved portraits of W. Irving; 492+portrait of Irving. [National Edition.] (4679)  
208.1
- IRVING, Washington. *The works of.* New edition, revised. New York: G. P. Putnam [National Edition.] 1860-1. 21v. 12°. (4680-4693). 208.2-208.15
- Vol. I. Knickerbocker's History of New York. pp. 472 & portrait of author, & eng. t. p. (4680).....208.2
- Vol. II. Sketch-Book, pp. 465 & portrait and eng. t. p. (Residence of author.) (4681)  
208.3
- Vols. III., IV., V. Columbus and Companions. pp. 8 & 461 & [18 pp. illustrations inserted after t. p.] & frontispiece & eng. t. p. portrait of Columbus; (vol. 4) 526 & frontispiece. & eng. t. p. & 8 of illustrations, inserted after p. 8; (vol. 5) 494 & portrait of Vespucci & eng. t. p. (4682).....208.4
- Vol. VI. Bracebridge Hall. pp. 465 & 5 eng. & eng. t. p. (4683).....208.5
- Vol. VII. Tales of a Travelier. pp. 477 & frontispiece and eng. t. p. by Darley; 12 vignettes in text by Darley & Herrick. (4684).....208.6
- Vol. VIII. Astoria. pp. viii & 519 & frontispiece & eng. t. p. (4685).....208.7
- Vol. IX. Crayon Miscellany. pp. xiv. & 379 & frontispiece (Abbotsford) & eng. t. p. (Newstead Abbey) & 1 eng. (4686).....208.8
- Vol. X. Adventures of Captain Bonneville. pp. 428 & frontispiece & eng. t. p. (4687)  
208.9
- Vol. XI. Oliver Goldsmith. pp. 383 & frontispiece & eng. t. p. & 11 eng. (4688)....208.10
- Vol. XII and XIII. Mahomet and his successors, pp. 373 & frontispiece & eng. t. p. & 1 eng. 500 & frontispiece & eng. t. p. (4689).....208.11
- Vol. XIV. Conquest of Granada. pp. 548 & frontispiece & eng. t. p. (Portrait of Isabella of Castile.) (4690).....208.12
- Vol. XV. The Alhambra. pp. viii. & 425 & frontispiece & eng. t. p. & 5 eng. (4691)208.13

- Vol. XVI. Wolfert's Roost. pp. 382 & frontispiece & 2 eng. ; t.-p. & Life, Character and Genius of Washington Irving, by William Cullen Bryant, pp. 46.
- Vol. XVII. to XXI. The Life of George Washington. pp. xii, & 454 & portrait of Washington at p. 23, & 4 eng. ; vii. & 486 & portrait by C. W. Peale & 2 eng. ; xiv. & 483 & 3 eng. ; xi. & 479 & portraits of George and Martha Washington, after Stuart, & 1 eng. ; xii. & 434 & portrait of Washington by R. Peale, Hamilton, Jefferson, & eng. t.-p. (4693)..... **208.15**
- IRVING, Washington. The Life of Oliver Goldsmith, with selections from his writings. New York: Harper & Brothers. . . . 1855. 2v. 12°, pp. 323, portrait of Goldsmith; 313. (H. F. L. Nos. 121, 122) (4916)..... **388.20**
- IRVING, Washington; Paulding, James Kirke; and Irving, William. Salmagundi; or the whim-whams and opinions of Launcelot Longstaff, Esq., and others, \* \* \* Printed from the original edition, with a preface and notes by Evert Duycknick. New York: G. P. Putnam. [National Edition.] 1860. 12°, pp. xiv.+412+frontispiece and eng. t.-p. (4694)..... **208.16**
- IRVING, William. [Joint Author.] See Irving, Washington. Salmagundi. (4694)..... **208.16**
- JACKSON, Isaac W. . . . An elementary treatise on Optics. Second Edition. Schenectady: . . . G. Y. Van Debogert . . . 1852. 8°, pp. ix.+261+10 plates. (4827)..... **464.7**
- JAMES, George Payne Rainsford . . . The History of Charlemagne. New York: Harper & Brothers, . . . n. d. [Dedication, June 4, 1832.] 12°, pp. 408+portrait of Charlemagne. (H. F. L. No. 60.) (4882)..... **387.14**
- JAMES, George Payne Rainsford, . . . The History of Chivalry. New York: Harper & Brothers . . . 1845. 12°, pp. 342. (H. F. L. No. 20.) (4854) **386.15**
- JAMESON, Mrs. Anna. Memoirs of Celebrated Female Sovereigns. . . . Harper & Brothers . . . 1848. 2v. 12°, pp. 245, 248. (H. F. L. Nos. 33, 34.) (4856)..... **386.27**
- Contents:—Vol. I. Semiramis; Cleopatra, p. 31; Zenobia, p. 57; Joanna I., p. 65; Joanna II., p. 95; Isabella of Castile, p. 112; Mary, Queen of Scots, p. 171; Queen Elizabeth, p. 213.  
Vol. II. Christina; Anne, p. 82; Maria Theresa, p. 126; Catherine II., p. 198.
- JAMESON, Robert. . . . Manual of Mineralogy; containing an account of simple minerals, and also a description and arrangement of mountain rocks. Edinburgh: . . . Archibald Constable & Co. . . . 1821. 8°, pp. liv.+501. (5391)..... **465.11**
- JAMESON, Robert; Wilson, James; Murray, Hugh. Narrative of Discovery and Adventure in Africa . . . with illustrations of Geology, Mineralogy and Zoology. With a map, plans of the routes of Park, and of Denham and Clapperton; . . . New York: Harper & Brothers . . . 1846. 12°, pp. x.+399+map. [Geology by Jameson.] (H. F. L. No. 16.) (4852) **386.13**
- JAMESON, Robert. . . . [Geology.] See Leslie, Jameson, R., and Murray, H. Narrative of discovery and adventure in the polar seas and regions. (4850) **386.11**
- JAMESON, Robert. [Climate, Geology, &c.] See Murray, H. [and others] Historical and Descriptive Account of British India. 3v. 12°. Vol. III. p. 158. (4873)..... **387.5**
- JAY, William. See Renwick, H. B. Life of John Jay. (H. F. L. No. 129.) (4922) **389.1**



- JEANS, H. W. . . . Hand-book for the Stars; containing rules for finding the names and positions of all the stars of the first and second magnitude. Third Edition. London: Robson & Son, . . . 1868. 8°, pp. x.+48+15. (5178)  
391.15
- JEFFREY, George. Animal Life at great depths in the sea. 2 pp. 16°. See Half Hour Recreations in Popular Science, at p. 403. (5126). . . . 148.17
- JELF, William Edward. . . . [Editor.] See Aristotle. Ethics. (4615) 147.18
- JEVONS, Walter Stanley . . . Money and the Mechanism of Exchange. Third Edition. Henry S. King & Co. London: 1876. 8°, pp. xviii.+349. (5100). . . . 376.1
- JERVIS, W. H. A History of France from the earliest times to the establishment of the second empire in 1852. \* \* \* Illustrated by engravings on wood. New York: Harper & Brothers, . . . 1876. 12°, pp. xii.+730. ("The Student's France.") (Two copies, 4729, 4730). . . . 248.20 248.21
- JOHNSON, Benjamin P. [Agent, &c.] See New York, State of. Report . . . on Exhibition of the industry of all Nations, held in London, 1851.
- JOHNSON, Cuthbert W. . . . The Farmer's Encyclopædia, and Dictionary of Rural Affairs: . . . Illustrated by numerous engravings of animals, implements, and other subjects . . . Adapted to the United States, by Gouverneur Emerson. Philadelphia: Carey & Hart. 1848. 8°, pp. vii.+1165 +7 plates. (4834). . . . 514.7
- JOHNSON, George William. . . . A Dictionary of Modern Gardening, with one hundred and eighty wood cuts. Edited, with numerous additions, by David Landreth, of Philadelphia. Philadelphia: Lea & Blanchard. 1847. 16°, pp. 635. (4741). . . . 516.24
- JOHNSTON, Joseph E. . . . Narrative of Military Operations, directed during the late war between the States. . . . New York: D. Appleton & Co. . . . 1874. r8°, pp. 602.+15 full page portraits+3 maps. (5007). . . . 227.5
- JOHNSON, Samuel . . . The Life and Writings of . . . Selected and arranged by Rev. William P. Page. . . . New York: Harper & Brothers . . . 1847. 2v. 12°, pp. 322+portrait; 323. (H. F. L. Nos. 108-9.) (4911). . . . 388.15
- JOHNSTON, Alexander. Some account of the Society of the Cincinnati. pp. 39, 8°. See Historical Society of Pennsylvania, Memoirs of, Vol. VI. at p. 17. (5203). . . . 391.10
- JOHNSTON, James F. W. . . . Elements of Agricultural Chemistry and Geology. With a complete index, and American preface, by Simon Brown, . . . New York: C. M. Saxton, . . . 1855. 12°, pp. viii.+381. (4597). . . . 218.20
- JONES, C. H. [Condensation.] See Richardson, S., Clarissa [Harlowe.] (5463)  
38X.19
- JONES, Joseph . . . Researches, Chemical and Physiological, concerning certain North American Vertebrata. 4°, pp. 50+27 wood cuts. See Smithsonian Institution, Contributions to Knowledge. Vol. VIII. (1856) Art. 5. (5488). . . . 441.1

- JONES, William . . . [Editor,] *See* Adams, George, Lectures on Natural and Experimental Philosophy. Additions. 5v. 8°. (5283).....464.5
- JONSON, Ben. The works of. With a biographical memoir by William Gifford. A new edition. London: George Routledge & Sons. . . . 1873. 8°, pp. viii.+907+portrait of author and eng. t.-p., with vignette. (5110).391.14
- JOUFFROY, Théodore Simon. Introduction to Ethics, including a critical survey of moral systems, translated from the French of. By William Henry Channing. Boston and Cambridge: James Munroe & Co. 1863. 12°, 2v. in 1. (4584).....218.22
- JOWETT, Benjamin. . . . [Translation, analyses and introductions] *See* Plato. Dialogues of. (4571).....268.27
- KANT, Emanuel, . . . Essays and Treatises on moral, political, and various philosophical subjects. From the German, by the translator of the Principles of Critical Philosophy . . . London: . . . William Richardson . . . 1798. 2v. 8°, pp. xix.+432; xxiv.+444. (5450) .....348.15
- KANE, Elisha Kent. Magnetical Observations in the Arctic Seas made during the second Grinnell Expedition in search of Sir John Franklin, in 1853, 1854 and 1855, at Van Rensselaer Harbor, and other points on the west coast of Greenland. Reduced and discussed, by Charles A. Schott . . . 4°, pp. 72 +1 plate. *See* Smithsonian Institution, Contributions to Knowledge, Vol. X. (1858) Art. 3. (5490).....441.1
- . . . Meteorological Observations in the Arctic Seas, made during the second Grinnell Expedition. . . . Reduced and discussed by Charles A. Schott . . . 4°, 120 pp. *See* Smithsonian Institution, Contributions to Knowledge, Vol. XI. (1859) Art. 5. (5491).....441.1
- Astronomical Observations in the Arctic Seas, made during the second Grinnell Expedition. . . . Reduced and discussed by Charles A. Schott. 4°, pp. 56+1 plate. *See* Smithsonian Institution, Contributions to Knowledge, Vol XII. (1860) Art. 2. (5492).....441.1
- Tidal Observations in the Arctic Seas, made during the second Grinnell Expedition. . . . Reduced and discussed by Charles A. Schott . . . 4°, pp. 90+4 plates. *See* Smithsonian Institution, Contributions to Knowledge, Vol. XIII. (1863) Art. 2. (5493).....441.1
- KAY-Shuttleworth, U. J. First Principles of Modern Chemistry. . . . London: John Clendull & Sons, . . . 1868. 12°, pp. viii.+214. (5410)....466.13
- KNIGHT, Charles. [Publisher] Cyclopædia of the industry of all nations. London: Charles Knight. 1851. 8°, pp. xxiv.+1806+37 plates. (5514) 381.3
- KEIGHTLEY, Thomas . . . The History of England, from the earliest period to 1839. . . . From the second London edition. With notes, &c., by the American editor. . . . New York: Harper & Brothers. . . . 1845. 5v. 12°. (H. F. L. Nos. 114-118.) (4914).....388.18

- Vol. I. pp. 332. Anglo-Saxon Period ; Anglo-Norman Period, p. 97 ; Plantagenets, p. 149.  
 Vol. II. pp. 323. Plantagenets ; House of Tudor, p. 126.  
 Vol. III. pp. 328. House of Tudor ; Stuarts, p. 137.  
 Vol. IV. pp. 317. Stuarts.  
 Vol. V. pp. 344. Stuarts ; House of Brunswick, p. 144.
- KELLERHOVEN, F.** [Chromolithographs] *See* Lacroix, Paul. Moeurs, Usages et Costumes au Moyen Age. (5219).....Cab. A\*\*  
 ——— *See* Same, Vie Militaire et Religieuse. Cab. A\*\*
- KEMPIS, Thomas à** De Imitatione Christi libri quattuor ad fidem optimorum editionum et potissimum codicis de advocatis accurate editi. Accedunt preces missar, adjuncto precationum delectur in usum confitentium et communicantium. Editio stereotypa ornamentis illustrata. \* \* \* Geræ et Lipsiæ. . . . J. W. C. Armbruster, 1846. 16°, pp. xvi.+373. (5336).....**375.31**
- KENNEDY, Benjamin Hall.** [Commentary and appendix containing Virgillian Geography, Mythology, Prosody, Syntax, text and indices.] *See* Virgilius, P. M. . . . Works of . . . (5145).....**258.15**
- KEPPEL, Henry.** The Expedition to Borneo of H. M. S. Dido, for the suppression of piracy. With extracts from the journal of James Brooke, Esq. . . . New York: Harper & Brothers, . . . 1846. 12°, pp. 413+map. [Harper's New Miscellany, XVIII.] (5325).....**375.15**  
 Brooke's Journal begins at p. 4, continues to p. 213, and reappears pp. 240 to 328.
- KERL, Professor.** [Metallurgy of "adapted"] *See* Crookes W. and Roehrig, E. (3248).....**352.12**
- KERL, Simon.** . . . A comprehensive Grammar of the English Language . . . Eleventh Edition. New York: Ivison, Phinney, Blakeman & Co., . . . 1867. 12°, pp. vi.+374. (5169).....**382.16**
- KERL, Simon.** . . . Elements of composition and rhetoric. . . . \* \* \* New York: Ivison, Phinney, Blakeman & Co. . . . 1869. 12°, pp. 408. (5168) **382.17**
- KIDDLE, Henry** . . . and Schem, Alexander J. The Cyclopædia of Education: A dictionary of information for the use of teachers, school officers, parents, and others. Edited by . . . \* \* \* New York: E. Steiger, . . . 1877. r8°, pp. v+868+xi. (5076).....**271.18\***
- KIMBLAD, Karl Edward.** Ordbok öfver Svensk Spraket. Stockholm, Pa P. B. Eklunds. 1867-71. 3v. 8°. (5215).....**478.1**  
 Vol. I. Inledning, 25 pp. A to Blomsterkulle. pp. 480. (1867)  
 Vol. II. Blomsterkung to Fjerman. pp. 448. (1868)  
 Vol. III. Fjerran to Gradvis. pp. 440. (P. Palmquit, Stockholm, publisher.) (1871)
- KINGSLEY, James Luce.** . . . Life of Ezra Stiles, President of Yale College. 79 pp. 16°; portrait. *See* Sparks, J., Lib. of Am. Biog. Second Series, Vol. VI., at p. 1. (4810).....**384.1**
- KNAPP, F.** [Author of Vol. II., joint author of Vol. III., and of Knapp's Technology, incorporated into parts 1 and 2 of Vol. I.] *See* Ronalds, E. [and others] Chemical Technology. 3v. in 6. 8°. (5385).....**157.9**
- KNEELAND, Samuel** . . . [Editor.] *See* Wells, D. A. . . . Kneeland, S. . . . Annual of Scientific Discovery for the years 1866-69. (5232)....**467.1**
- KNOWLES, James Davis** . . . Memoir of Mrs. Ann H. Judson, late missionary to Burmah. Including a history of the American Baptist Mission in the Burman Empire. \* \* \* Boston: . . . Lincoln & Edmonds. 1829. 12°, pp. viii.+324+portrait. (4652).....**218.24**

- KNOX, Alexander. [Remarks.] See Southey, R. Life of Wesley. 2v. 12°, at p. 338, Vol II. (4746).....374.13
- KOP, E. Report on the artificial formation of Alkaloids. 36 pp. 8°. See Graham Thomas, Chemical Reports and Memoirs, p. 297. (5436).....493.3
- LA FONTAINE, Jean de. [Le Florentin, 24 pp.; Le Mercure galant, 68 pp. Memoir.] See Chefs-d'Oeuvre des Auteurs Comiques. 8v. 12°, Vol. I. (5090).....118.13
- LACROIX, Paul. . . . Moeurs, Usages et Costumes au Moyen Age et a l'époque de la Renaissance. Ouvrage Illustré de quinze planches chromolithographiques executées par F. Kellerhoven et de quatre cent quarante gravures. Quatrième édition. Paris: Firmin Dido Frères, . . . 1874. . . . r8°, pp. iv+603. (5219).....Cab. A\*\*
- LACROIX, Paul. . . . Vie Militaire et Religieuse au Moyen Age, et a l'époque de la Renaissance. Ouvrage illustré de 14 chromolithographies executées par F. Kellerhoven, Rêgarney et L. Alland et de 409 figures sur bois gravées par Huyot Père et Fils. Paris: . . . Firmin Didot Frères. . . . 1873. . . . r8° pp. 571. (5218).....Cab. A\*\*
- LAING, Samuel. . . . A tour in Sweden in 1838; comprising observations on the moral, political, and economical state of the Swedish nation. London: . . . Longman . . . 1839. 8°, pp. xii+431 (5207).....392.8
- LAING, Samuel. . . . Observations on the social and political state of Denmark, and the Duchies of Sleswick and Holstein, in 1851; being the third series of the notes of a traveller on the social and political state of the European people. London: Longman, . . . 1852. 8°, pp. xvi.+446. (5209) 392.10
- LAING, Samuel. . . . Observations on the social and political state of the European people in 1848 and 1849; being the second series of the notes of a traveler. London: . . . Longman, . . . 1850. 8°, pp. xvi.+534. (5208).....392.9
- LAMB, Charles. The Life, Letters and Writings of—edited, with notes and illustrations, by Percy Fitzgerald. \* \* \* London: E. Moxon & Co. . . . 1876. 6v. 12°. [Frontispiece, vol. I. portrait of Lamb.] (5111) 376.2  
 Vol. I., pp. XXII + 429, Life by Talford. Correspondence with Coleridge at p. 287.  
 Vol. II., pp. 438, Correspondence.  
 Vol. III., pp. 443, Correspondence. Elia at p. 129. Last Essays of Elia, p. 377. Notes, p. 417.  
 Vol. IV., pp. 444. Last essays of Elia continued. Miscellaneous essays, p. 170. Letters, p. 322; Tales, 375; Notes, p. 425.  
 Vol. V., pp. 432. Tales from Shakespeare; Stories contributed to Mrs. Leicester's School, p. 116; Dramatic works, p. 272; Sketches, &c., p. 396; Notes, p. 431.  
 Vol. VI., pp. 488, Sketches; Contributions to Horn's "Every Day Book," p. 95; Criticisms, p. 203; Reviews, p. 217; Letters to editor, p. 246; Poems, p. 250; Sonnets, p. 288; Blank verse, p. 301; Album verses, &c., p. 315; Commendatory verses, p. 335; Translations, p. 340; Miscellaneous poems, p. 357; Prologues, &c., p. 417; Satirical and Humorous poems, p. 425; Additional, p. 455; Notes, p. 459; Index, p. 470.
- LAMBERT, Miss. The Hand-Book of Needlework. \* \* \* . . . New York: Wiley & Putnam, 1846. 8°, pp. xv.+263. (4762).....372.10
- LAMON, Ward H. The life of Abraham Lincoln; from his birth to his inauguration as president, with illustrations. Boston: James R. Osgood & Co. . . . 1872. 8°, pp. xiv.+547+portrait. (5070).....227.18

- LANDER, Richard and John. Journal of an expedition to explore the course and termination of the Niger, with a narrative of a voyage down that river to its termination, . . . Illustrated with engravings and maps. . . . New York: Harper & Brothers. . . . 1846. 2 vols., 12°, pp. 384, 337+portraits of authors. (H. F. L. Nos. 35, 36.) (4867) . . . . . **386.23**
- LANDRETH, David. [Editor.] See Johnson, G. W. Dictionary of modern gardening. 16°, pp. 635. (4741) . . . . . **516.24**
- LANGE, Fredrich Albert. Geschichte des materialismus und kritik seiner Bedeutung in der Gegenwart. Zweite, Verbesserte und vermehrte Auflage. . . . Iserlohn, . . . J. Baediker, 1873. 2v., 8°. (5126) . . . . . **348.12**  
 Vol. I. Geschichte, . . . bis auf Kant, pp. xiv.&434.  
 Vol. II. Geschichte, . . . seit Kant, pp. xiii.&573.
- LANKESTER, E. . . . On food. Being Lectures delivered at the South Kensington Museum. Second course. London: Robert Hardwicke, . . . 1861. 16°, pp. viii.+207+diagram. (5453) . . . . . **466.24**
- LANMAN, James H. History of Michigan. . . . New York: Harper & Brothers, . . . 1843. 12°, pp. 269. (H. F. L. No. 139.) (4930) **389.9**
- LA NOUE, Jean Lauvé de. [La Coquette Corrigée. pp. 78. (Mémocr.)] See Chefs-d'Oeuvres des Auteurs Comiques. 8°, Vol. VI. (5090) . . . **112.13**
- LAPHAM, Increase Arthur. . . . The Antiquities of Wisconsin. . . . 4°, pp. 108+55 plates. See Smithsonian Institution, Contributions to Knowledge. Vol. VII. (1855.) Art. 4. (5437) . . . . . **441.1**
- LARDNER, Dionysius. . . . Popular lectures on science and art; delivered in the principal cities and towns of the United States. \* \* \* New York: Greeley & McElrath, . . . 1846. 2 vols., 8°, pp. 608, 568. (4787) **371.5**
- LASSAULX, M. F. de . . . [Notes written during an architectural tour in Picardy and Normandy.] 83 pp., 8°. See Whewell, W. Architectural notes on German Churches, pp. 144-226. (5515) . . . . . **381.4**
- LA TORRE, T. M. de. Cuba. . . . Geographical, political and industrial, . . . edited by Richard S. Fisher. . . . New York: J. H. Colton & Co. . . . 1858. 12° pp., 190+map. (5264) . . . . . **383.2**
- LATOUCHE, Henri de. [Life.] See Chenier, A. Poésies de. 12°. (5088) **118.14**
- LAURENT, Auguste. . . . Chemical method. notation, classification and nomenclature. Translated by William Odling. . . . London: The Cavendish Society. . . . 1855. 8°, pp. xxiii+382. (5437) . . . . . **494.2**
- LAVOISIER, Antoine Laurent . . . Traité Élémentaire de Chimie, présenté dans un ordre nouveau et d'après les découvertes modernes; avec figures. Seconde édition . . . \* \* \* Paris: . . . Cuchet . . . 1793. 2v. 16°, pp. xlv. +322+2 plates; viii.+327+10 plates (plate No. 8 missing.) (5373) **465.17**
- LAW, George, [Translation, Introduction and Notes.] See Boussingault, J. B. Rural Economy. . . . 12°, pp. 507. (4740) . . . . . **516.23**
- LAWRENCE, Philip Henry. [Translator.] See Cotta, B. von. Rocks classified and described. (5191) . . . . . **465.1**
- LAWSON, Henry. [Editor. Vols. 3-14.] See Popular Science Review. 14v. 8°. (5306) . . . . . **468.1**

- LAYCOCK, Thomas. . . . Mind and brain: or the correlations of consciousness and organization; systematically investigated and applied to philosophy, mental science and practice. With a preliminary dissertation on method and illustrations of the text. Second edition. . . . London: Simpkin, Marshall & Co. . . . 1869. . . . 2 vols. 8°, pp. xxxii+425; xvi+494. (5184).....375.23
- LEA, Isaac, Carpenter, P. P., Stimpson, W., Binney, W. G. and Prime, Temple. Check List of the shells of North America. . . . 1860. 44 pp, 8°. See Smithsonian Institution. Miscellaneous Collections. Vol. II. (1862.) Art. 6. (5501).....443.1
- LEE, Charles Alfred. The elements of Geology, for popular use; containing a description of the geological formations and mineral resources of the United States. New York: Harper & Brothers. . . . 12°, pp. 375+frontispiece +9 pp., glossary. (H. F. L. No. 178.) (4958).....38X.6
- LEE, Charles Alfred. [Editor.] See Paris, J. A. Pharmacologia. (4768) 372.4
- LE CONTE, John Lawrence. The Coleoptera of Kansas and Eastern New Mexico. 4°, 66 pp.+3 plates. See Smithsonian Institution, Contributions to Knowledge. Vol. XI. (1859.) Art. 6. (5491).....441.1
- . Classification of the Coleoptera of North America. . . . 302 pp. See 8°. Smithsonian Institution. Miscellaneous Collections. Vol. III. (2862.) Art. 4. (5502).....443.1
- . List of the Coleoptera of North America . . . 8°, 180 pp., and new species of N. A. Coleoptera, 180 pp. See Smithsonian Institution, Miscellaneous Collections. Vol. VI. (1867.) Arts. 3 & 4, (5505)....443.1
- . New species of North American Coleoptera. . . . 74 pp., 8°. Classification of the Coleoptera of North America. . . . Part II. . . . 1873. 72 pp., 8°. See Smithsonian Institution. Miscellaneous Collections. Vol. XI. (1874.) Art 6. (5570).....443.1
- LEHMANN, Charles Gotthelf. Physiological Chemistry. Translated from the second edition by George E. Day. . . . London: . . . The Cavendish Society. . . . 1851-4. 3v. 8°. (5435).....493.2
- Contents:—Vol. I. Organic Substrata of the Animal Organism. pp. xi. & 455.  
Vol. II. Animal Juices. pp. xi. & 465.  
Vol. III. Histo-Chemistry, pp. xii. & 579.
- LEIDY, Joseph. . . . A Flora and Fauna within living animals. 4°, pp. 68+10 plates. Memoir upon the extinct species of fossil ox. 4°, pp. 20+5 plates. See Smithsonian Institution, Contributions to Knowledge, Vol. V. (1853) Art. 2. (5485).....441.1
- LEIDY, Joseph. . . . The Ancient Fauna of Nebraska; or a description of remains of extinct mammalia and chelonina, from the Mauvais Terres of Nebraska. 4°, pp. 124+25 plates. See Smithsonian Institution, Contributions to Knowledge, Vol. VI. (1854) Art. 8. (5486).....441.1
- . Cretaceous Reptiles of the United States. 4°, pp.140+20 plates. See Smithsonian Institution, Contributions to Knowledge, Vol. XIV. (1865) Art. 6. (5494).....441.1
- LIEBER, Francis. On the vocal sounds of Laura Bridgeman, the blind deaf-mute, at Boston; compared with the elements of phonetic language. 4°, 32 pp.+facsimile. See Smithsonian Institution, Contributions to Knowledge, Vol. II. (1851) Art. 2. (5482).....441.1

- LELAND, Charles Godfrey. [Translator.] *See* Heine, H., *Pictures of Travel*. 12°. (5230).....477.1
- LEMAY, Leon Pamphile. *Essais Poétiques*. Quebec. G. E. Desbarats. 1865. 8°, pp. xi.+820. (4791).....372.16  
Contains a metrical translation of Longfellow's *Evangeline* into French.
- LEMERCIER, Népomucène Louis. [Plaute, ou la Comédie Latine. pp. 78.—Pinto, ou la Journée d'usage con spiration. p. 75. (Memoir)] *See* Chefs-d'Oeuvres des Auteurs Comiques. 8v. 12°, Vol. VIII. (5090)...118.13
- LEMERY, Nicolas. . . . Cours de Chymie, contenant la maniere de faire les Operations qui sont en usage dans la Medecine, par une Methode facile; Avec des Raisonnemens sur chaque Operation, pour l'instruction de ceux qui veulent s'appliquer à cette Science. Douzième edition. Revue, corrigée d'augmentée par l'auteur. \* \* \* Lyons, . . . Louis Declaustre . . . 1724. 8°, pp. [16]+836+1 plate. (5364).....466.4
- LE MOINE, J. M. *Ornithologie du Canada*. D'après la nomenclature de Baird. Seconde Edition. Quebec . . . J. T. Brousseau, . . . 1861. 2 parts in 1v. 24°, pp. 398. (4807).....385.4
- LEPAGE, Alain René. [Crispin rival de son maitre, pp. 44.—Turcaret, p. 45. (Memoir.)] *See* Chefs-d'Oeuvres des Auteurs Comiques. 8v. 12°. Vol. III. (5090).....118.13
- LESLIE, John, . . . Jameson, Robert, . . . and Murray Hugh. . . . Narrative of discovery and adventure in the polar seas and regions: with illustrations of their climate. geology and natural history; with an account of the whale fishery. New York: Harper & Brothers. . . . 1844. 12° pp. 373, map. (H. F. L. No. 14.) [Climate by Leslie.] (4850).....386.11
- LESSING, Gotthold Ephraim. *Lessing's Werke*. Herausgegeben von Richard Gosche. Erste illustrirte Ausgabe, . . . bearbeitet von Robert Boxberger. Berlin: G. Giöle . . . 1875. 8v. sq16°. (4643).....168.1  
Vol. I. Poems, Fables and Comedies, pp. 1. & 678 & portrait & 8 eng.  
Vol. II. Introduction. Dramas. pp. cviii. & 620 & 21 eng.  
Vol. III. Theological and Literary Recensions, misc. writings. pp. xix. & 664 & portrait of Pastor Lange, p. 404.  
Vol. IV. Laocoon. pp. xxxiii. & 758 & 9 portraits and eng.  
Vol. V. Misc. Writings & Letters. pp. xxxi. & 720 & portrait of Chr. A. Klotz.  
Vol. VI. Hamburg Dramaturgy (2v. in 1) pp. xxvi. & 470 & 2 portraits.  
Vol. VII. Misc. Writings. pp. xxxi. & 592 & 4 portraits & 1 eng.  
Vol. VIII. Misc. Writings and Letters (p. 73) Memoir by R. Gosche, p. 671. pp. xxx. & 791 & 1 eng. Introduction to ea. vol. by R. Boxberger.
- LESSING, Gotthold Ephraim. *Laocoon*. An essay upon the limits of painting and poetry. With remarks illustrative of various points in the history of ancient art. Translated by Ellen Frothingham. \* \* \* Boston: Roberts Brothers. 1874, 16°, pp. xi.+250. (4981).....177.28
- LEWES, George Henry . . . *Life and Works of Goethe with sketches of his age and contemporaries, from published and unpublished sources* . . . \* \* \* Boston: Ticknor & Fields. 1861. 2v. 12°, pp. xx.+435; xii.+478. (5296) 477.3
- LEWES, George Henry. *The Story of Goethe's Life*. [Abridged from his "Life and Works of Goethe."] \* \* \* Boston: James R. Osgood & Co. . . . 1873. 12°, pp. 406+portrait of Goethe. (5227).....177.3

- LEWIS, Charleton T. A History of Germany, from the earliest times. Founded on Dr. David Muller's "History of the German People." . . . \*\*\* New York: Harper & Brothers. . . . 1876. 16°. pp.+illustrations+frontispiece +portrait of Frederick the Great+two maps.] (4676). . . . .177.23
- LEWIS, Evan. [Abridgment.] See Clarkson, Thomas. The History . . . of the Abolition of the African Slave Trade by the British Parliament. (5282)  
375.30
- LEWIS, Merriwether, and Clarke, William. History of the expedition under the command of Captains Lewis and Clarke, to the sources of the Missouri; thence across the Rocky Mountains, and down the river Columbia to the Pacific Ocean: performed during the years 1804, 1805, 1806, by order of the government of the United States. Prepared for the press by Paul Allen. . . . Revised and abridged by the omission of unimportant details, with an introduction and notes, by Archibald McVickar. New York: Harper & Brothers. . . . 1844. 2v. 12°, pp. 371+3 plates; 395+2 plates. (H. F. L. Nos. 154-5.) (4940). . . . .389.10
- LIBRARIAN, A. [Public Theological Libraries in the U. S. . . . 11 pp.] See United States, Bureau of Education. Public libraries in the. — Vol. p. 127. (5074). . . . .L. R.
- LIBRARY Journal. See Dewey, M. and others. (5386). . . . .L. R.
- LIDDON, H. P. . . . Some Elements of Religion. Lent Lectures. 1870. New York: E. P. Dutton & Co. 1872. 12°, pp. x.+241. (4543). . . . .208.20
- LIDDELL, Henry George . . . and Scott, Robert . . . A Greek-English Lexicon compiled by . . . Sixth Edition, revised and augmented. Oxford: . . . Macmillan & Co. . . . 1869 . . . 4°, pp. xvi.+1865. (5058) \*
- LIEBER, Francis. Essays on property and labor, as connected with natural law and the constitution of society . . . New York: Harper & Brothers . . . 1847. 12°, pp. 225. (H. F. L. No. 146.) (4935). . . . .389.14
- LIEBER, Oscar, Montgomery. . . . The assayer's guide: or, practical directions to assayers, miners, and smelters, for the tests and assays, by heat and by wet processes, of the ores of all the principal metals, of gold and silver coins alloys, and of coal, &c. Philadelphia: Henry Carey Baird. . . . 1869. 12°, pp. 133+5 plates. (5407). . . . .Chem. Lab.
- LIEBER, Oscar Montgomery. [Translator, &c.] See Wœhler, F. Analytical Chemist's Assistant. (5414). . . . .466.15
- LIEBIG, Justus. . . . Chemistry in its applications to agriculture and physiology. Edited . . . by Lyon Playfair and William Gregory, . . . from the fourth London edition, revised and enlarged. New York. John Wiley. . . . 1849. 12°, pp. xiv+401. (4290). . . . .Chem. Lab.
- LIEBIG, Justus. . . . Chemistry in its applications to agriculture and physiology. Edited from the manuscript of the author, by Lyon Playfair, . . . and Gregory, William. . . . From the fourth London edition, revised and enlarged. New York. John Wiley & Son, . . . 1849. 12°, pp. xiv+401 (5290). . . . .Duplicate in Chem. Lab.
- LIEBIG, J. [Preface.] See Will, Henry. . . . Qualitative Analysis. (5412)  
Chem. Lab.
- LIFE of William Allen. With selections from his correspondence. Philadelphia. . . . 1847. 2v. 8°, pp. vii+492+portrait; v+551, (4602). . . . .147.3



- LINES, Robert B. . . . [Artisan Commissioner.] Reports on telegraphs and telegraphic administration. 88 pp.. 8° +1 plate. See UNITED STATES, Dep't of State, Reports International Exhibition, Vienna, 1873. Vol. II. I. (5440).....157.13
- LINDNER, Albert. Eine Biographische Skizze. 16°, pp. 14. See Gellert, Chr. F. . . . Werke at, p. 129. (4678).....189.2
- LITRE, Emile. . . . Histoire de la langue Française. Etudes sur les origines, l'étymologie, la grammaire, les dialectes, la versification et les lettres au moyen age. Sixième édition. \* \* \* Paris: . . . Didier et Cie. . . . 1873. 2v. 8°, pp. 436; 518. (5082).....118.12
- LIVES and voyages of Drake, Cavendish and Dampier: including an introductory view of the earlier discoveries in the South Sea, and the history of the Bucaniers. With portraits on steel. New York: Harper & Bros. . . . 1846. 12°, pp. 332. (H. F. L. No. 30.) (4863).....386.24
- LIVES of Vasco Nunez de Balboa, the discoverer of the Pacific Ocean, Hernando Cortes, the conqueror of Mexico, and Francisco Pizarro, the conqueror of Peru. New York: Harper & Brothers, publishers. . . . 1847. 12°, pp. 276+12. (4804).....228.2
- LIVUS, Books I.-X. With introduction, historical examination, and notes by J. R. Seeley. . . . Book I., second edition. Oxford: At the Clarendon Press. 1874. . . . 8°, pp. vi.+199. (5015).....227.12
- LOCKE, John. Conduct of the Understanding. 12°. 90 pp. With an introductory essay [on Bacon and Locke] by A. Potter, D. D. . . . See Bacon, F. Essays, (H. F. L. No. 171.) at p. 209. (4953).....38X.1
- LOCKE, John . . . Observations on Terrestrial Magnetism. 4°, 30 pp. See Smithsonian Institution, Contributions to Knowledge, Vol. III. (1852.) Art. 1. (5483).....441.1
- LOCKYER, Joseph Norman . . . The Spectroscope and its applications. With coloured plate and illustrations. London and New York: Macmillan & Co. 1873. 16°, pp. xii.+1177+col'd diagram as frontispiece. ["Nature Series."] (4567).....268.28
- LOCKYER, Joseph Norman . . . Spectrum Analysis, as applied to the sun. 12°, 38 pp. See Half Hours with Modern Scientists, second series, at p. 113. (5018).....148.7
- LOCKYER, [J. N.] [Joint Author.] See Schellen and others. Spectrum Analysis discoveries. (5026).....148.17
- LOEW, H. Monographs of the Diptera of North America . . . Part I. Edited, with additions, by R. Ostensacken. 8°, 246 pp.+2 plates; Part II. Edited by R. Ostensacken. 372 pp.+5 plates. See Smithsonian Institution, Miscellaneous Collections, Vol. VI. (1867) Arts. 1 and 2. (5505).....443.1
- Monographs of the Diptera of North America, Part III. . . . 8°. pp. 376+4 plates. See Smithsonian Institution, Miscellaneous Collections, Vol. XI. (1874) Art. 3. (5510).....443.1
- LOMMEL, Eugene . . . The Nature of Light, with a general account of physical optics. With one hundred and eighty-eight illustrations and a plate of spectra in chromolithography. New York: D. Appleton & Co. . . . 1876. 12°, pp. xiii.+356+col'd plate. ["International Scientific Series."] (5262)  
466.8

- LONG, George. [Translator.] *See* Antoninus, Marcus Aurelius. *Thoughts of*. . . . (5223).....377.4
- [Editor of *Bibliotheca Classica.*] *See* Tacitus, *Annals.* (5138) 473.5
- [Editor.] *Xenophon. Anabasis.* (5187).....258.27
- LONG, George, and Maclean, A. J. [Editors of *Bibliotheca Classica.*] *See* Terentius *Comœdiæ Sex.* (5740).....473.6
- LOOMIS, Elias . . . *On certain Storms in Europe and America, December, 1836.* 4°, 28 pp+13 plates. *See* Smithsonian Institution, *Contributions to Knowledge, Vol. XI. (1859) Art. 8. (5491)*.....441.1
- LOOMIS, Elias . . . *The Elements of Analytical Geometry. Revised Edition. \* \* \* New York: Harper & Brothers. . . . 1875. 12°, pp. 261. [Bound with Calculus, by the same.] (5005)*.....148.4
- LOOMIS, Elias . . . *Elements of the Differential and Integral Calculus. Revised Edition. \* \* \* New York: Harper & Brothers . . . 1875. 12°, pp. 309. [Bound with Elements of Analytical Geometry, by same.] (5005)*..148.4
- LOOMIS, Elias . . . *Elements of Natural Philosophy. . . . New York: Harper & Brothers. 1861. 12°, pp. 351+7. (4599)*.....218.17
- LOOMIS, Elias . . . *The Recent Progress of Astronomy; especially in the United States. Third Edition, mostly rewritten, and much enlarged. New York: Harper & Brothers, . . . 1856. 12°, pp. 396. (5004)*..148.32
- LORRIS, Guillaume *de* et Meung, Jean *de.* *Le Roman de la Rose. Nouvelle Edition revue et corrigée par Francisque Michel . . . Paris: . . . Firmin Didot Frères, Fils et Cie. . . . 1864. 2 v. 12°. (4695)*.....118.5
- LOSSING, Benson John. *Outline History of the Fine Arts . . . in five parts. I. Architecture; II. Sculpture; III. Painting; IV. Engraving; V. Miscellany . . . New York: Harper & Brothers . . . n. d. [Copyright, 1840.] 12°, pp. 330+frontispiece+portrait of Hogarth. (H. F. L. No. 103.) (4907)* 388.10
- LOUDON, Mrs. Jane Webb. *Gardening for Ladies; and companion to the Flower Garden. First American, from the third London edition. Edited by A. J. Downing, . . . New York: Wiley & Putnam. 1848. 12°, pp. iv.+430. (4742)*.....516.20
- LOUDON, John Claudius. *The Horticulturist; or the culture and management of the kitchen, fruit and forcing garden. Edited and revised by William Robinson. n.d. Illustrated with numerous engravings. \* \* \* London: Frederick Warne & Co. [Pref. July, 1871.] 8°, pp. xii.+707. (4634)*..516.14
- LORING, George Bailey, [A treatise on agriculture and the horse. 8°, pp.86+3 pl. *See* Murray, W. H. H. *The Perfect Horse. p. 343. (5471)*..514.9
- LOW, Sampson. *Index to the English Catalogue of Books, compiled by. Vol. II. 1856, to Jan., 1876. London: Sampson Low . . . 1876. r8°, pp. 408. (4553)*
- LOWE, N. M. . . . [Artisan Commissioner.] *Report on Wood Industries. 27 pp. 8°. See UNITED STATES, Department of State, Reports, International Exhibition, Vienna, 1873, Vol. IV. C. (5440)*.....157.13
- LOWELL, James Russell. . . . *Among my Books. [First Series.] Boston: James R. Osgood & Co. 1876. 12°, pp. 380. (4991)*.....248.27

- LOWELL, James Russell. . . . Among my books. Second series. Boston: James R. Osgood & Co. 1876. 12°, pp. 327. (5053).....248.28
- LOWELL, James Russell. . . . My study windows. \* \* \* Boston: James R. Osgood & Co. . . . 1875. 16°, pp. vi+433. (4589)..... 248.10  
 Contents: My garden acquaintance, pp. 23. A good word for winter, pp. 30. On a certain condescension in foreigners, pp. 29. A great public character, pp. 32. Carlyle, pp. 25. Abraham Lincoln, pp. 28. Thoreau, pp. 15. Swinburne's tragedies, pp. 23. Chauser, pp. 17. Library of old authors, pp. 63. Emerson, the lecturer, pp. 85. Pope, pp. 15.
- LYELL, Charles . . . Principles of Geology; or, the modern changes of the earth and its inhabitants, considered as illustrative of Geology. \* \* \* . . . Reprinted from the sixth English edition, from the original plates and wood cuts, under the direction of the author. Boston: Hilliard, Gray & Co. 1842. 3v. 12°. [Vol. I. frontispiece. Mottoes on title pages different.] pp. av. 465. (5078).....382.7
- LYNN, W. T. . . . [Editor and revisor.] See Brewster, Sir David. The life of Sir Isaac Newton. (5226).....377.3
- LYTH, J. E. Schwedische Grammatik nebst einen Auswahl prosaischer und poetischer Lesestücke mit erläuterndem Wörterbuche. Zweite verbesserte und vermehrte Auflage. Stockholm und Leipzig: A. Bonnier. n. d. [Printed 1862.] 16°, pp. viii+368. (5461).....477.5
- LYTTON, Sir Edward, George Bulwer. . . . England and the English, \* \* \* Second edition. . . . London: Richard Bentley, . . . 1833. 2v. 12°, av. pp. pp. xii.+399+xi.+255. (5257)..... 396.3
- MACADAM, Stevenson. [Revision.] See Wilson, G. Inorganic Chemistry. (5408).....466.19
- MACARTNEY, Earl of. [Macartney's Embassy.] See Stanton, Sir George. (5254) . . . . .241.6
- MCCLELLAN, George B. Report on the Organization and Campaigns of the Army of the Potomac: to which is added an account of the campaign in Western Virginia, with plans of battle-fields. New York: Sheldon & Co. 1864. 12°, pp. 465+map. (5272).....374.11
- MACFARLANE, James, . . . The Coal Regions of America: their Topography, Geology, and Development. With a colored geological map of Pennsylvania, a railroad map of all the Coal-Regions, and numerous other maps and illustrations. New York: D. Appleton & Co. . . . 1876. 8°, pp. xvi+679 +8 maps+2 tables+2 eng (4711).....227.2
- MACGILLIVRAY, William . . . The Travels and Researches of Alexander von Humboldt; being a condensed narrative of his journeys in Asiatic Russia; together with analyses of his more important investigations. . . . With a map of the Orinoco, and engravings. New York: Harper & Brothers. 12°, pp. 367. (H. F. L. No. 54.) (4877)..... 387.9
- MACK, Ebenezer. The Life of Gilbert Motier de Lafayette, a Marquis of France; . . . From numerous and authentic sources. . . . Third Edition. Ithaca, N. Y.: Mack, Andrus & Co. 1848. 12°, pp. 376. (4654).....218.14
- MACKAY, Andrew . . . The Theory and Practice of finding the Longitude at Sea or Land: to which are added various methods of determining the latitude of a place, and variation of the compass; with new tables . . . The third edition, improved and enlarged, \* \* \* London: . . . Longman, . . . 1810. 2v. 8°, pp. xvi.+360; viii.+294+8 plates.(5247)....462.4

- MACKENZIE, Alexander Slidell . . . The Life of Commodore Oliver Hazard Perry . . . New York: Harper & Brothers . . . 1845. 2v. 12°, pp. 322+portrait of Perry; 328. (H. F. L. No. 126.) (4919).....**388.23**  
Appendix to Vol. II. p. 271, is a "full reply to all Mr. [J. Fennimore] Cooper's allegations against the account of the battle of Lake Erie.
- MACKENZIE, Alexander Slidell. The Life of Paul Jones. New York: Harper & Brothers . . . 1845. 2v. 12°, pp. xiii.+260+portrait of Jones; ix.+208. (Harper's New Miscellany, VI, VII.) (5316).....**375.5**
- MACKIE, John Milton . . . Life of Samuel Gorton . . . 16°, pp. 97. See Sparks, J., Lib. of Am. Biog., second Series, Vol. 5, at p. 315. (4810)**384.1**
- MCCLEINTOCK, Sir Leopold . . . Meteorological Observations in the Arctic Seas, made on board the Arctic searching yacht, "Fox," in Baffin's Bay and Prince Regent Inlet, in 1857, 1858 and 1859. Reduced and discussed by Charles A. Schott . . . 4°, 160 pp.+1 map. See Smithsonian Institution, Contributions to Knowledge, Vol. XIII. (1863) Art. 3. (5493).....**441.1**
- MACREADY [William Charles.] Reminiscences and Selections from his Diaries and Letters. Edited by Sir Frederick Pollock, . . . one of his executors. New York: Macmillan & Co. 1875. 12°, pp. xvi.+750+portraits. (5066)  
**383.8**
- McVICKER Archibald. [Revision, Introduction and Notes.] See Lewis, Merriwether, and Clarke, William. History of the expedition under the command of. (4940).....**389.19**
- MADVIG, J. N. . . . Syntax of the Greek Language, especially of the Attic Dialect, for the use of schools: Translated from the German by the Rev. Henry Browne, M. A., and edited by the Rev. Thomas Kirchever Arnold, M. A. . . . Together with an appendix on the Greek Particles, by the translator. Second edition. Rivingtons, London, Oxford and Cambridge. 1873. 8°, pp. vii.+274. (4624).....**258.35**
- MÆTZNER, Professor Edward. An English Grammar: Methodical, Analytical and Historical. With a treatise on the Orthography, Prosody, Inflections and Syntax of the English Tongue; and numerous authorities cited in order of historical development. Translated from the German, with the sanction of the author, by Clair James Greece, . . . London: John Murray, . . . 1874. 3v. 8°. (4608).....**147.16**
- MAHAN, D. H. . . . A Treatise on Field Fortification . . . with the general outlines of . . . permanent fortifications. Second Edition, revised and enlarged. New York: John Wiley, . . . 1848. 16°, pp. xiv.+168+12 plates. (4967).....**228.4**
- MAINE, Sir Henry Sumner . . . Village Communities in the East and West. Six lectures delivered at Oxford, to which are added other lectures, addresses and essays. \* \* \* New York: Henry Holt & Co. 1876. 8°, pp. xii.+413. (5016).....**227.7**
- MALLORY, John Allan. [Editor.] See Campbell, Lord John. Lives of the Lord Chancellors. 10v. 8°. (5228).....**395.1**
- MALORY, Sir Thomas. Morte D'Arthur, book of King Arthur and of his noble Knights of the Round Table. The original edition of Caxton revised for modern use, with an introduction by Sir Edward Strachey, Bart. \* \* \* London and New York: Macmillan & Co. 1876. 8° pp. xxxvii.+509. (4977).....**148.13**

- MANNERS and Customs of the Japanese, in the nineteenth century, from the accounts of recent Dutch residents in Japan; and from the German work of Dr. Ph. Fr. von Siebold. New York: Harper & Bros. . . . 1848. 12°, pp. 298.+frontispiece. (H. F. L. No. 132.) (4925).....389.4
- MANTELL, Gideon Algermon. . . . The wonders of geology; or a familiar exposition of geological phenomena. \* \* \* Sixth edition. London: Henry G. Bohn, . . . 1848. 1v. in 2. 8°, pp. xv.+v+988+frontispiece and 6 plates. (4750).....383.4
- MANTZ, Paul. Exposition at Manchester. 8° pp. 18. Bound with *Les Artes Industriels*, by Alfred Darcel. (5304).....391.17
- MARCUS, Aurelius. *See* Autontinus, M. A.
- MARESCOT, F. *de*. Notice Sur Beaumarchais. r8°, pp. xxviii. *See* Beaumarchais. Theatre, pp. xxvii. (5087).....478.3
- MARIE, Adrian *de*. [Illustrations.] *See* Beaumarchais. Theatre. (5087) 478.3
- MARIVAUX, Pierre Charlet Chamblain *de*. [Le Legs., pp. 37; Les fausses confidences, p. 39; Le jeu de l'amour et du hazard, p. 115. (Memoir.)] *See* Chefs d'Oeuvres des Auteurs Comiques. 8v. 12°. Vol V. (5090) 118.13
- MARLOW Christopher. The works of. . . . With some account of the author, and notes, by the Rev. Alexander Dyce. A new edition, revised and corrected. London: George Routledge & Sons. . . . 1870. r8°, pp. liii+407. (4984).....137.12
- MARMONT, Auguste Frédéric Louis Viesse *de*. . . . The spirit of military institutions; or, essential principles of the art of war. Translated from the latest edition, revised and corrected by the author; with illustrative notes, by Henry Coppée. . . . Philadelphia: J. B. Lippencott & Co. 1862. 12°, pp. 272. (5001).....148.20
- MARMONTEL, Jean François. [L'Ami de la Maison, pp. 44. Memoir.] *See* Chefs d'Oeuvres des Auteurs Comiques. 8v. 12°. Vol VII. (5090) 118.13
- MARTIN, H. Newell. . . . [Digestion, p. 430; gastric juice, p. 557; glycogen, p. 567; muscular tissue, p. 830; proteids, p. 1022; respiration, p. 1044; urine, p. 1192. *See* Watts, H. Dictionary of Chemistry. Second supplement. (4724).....
- MARTIN, H. Newell . . . [Assisting Author.] *See* Huxley, T. H. A Course of Practical Instruction in Elementary Biology. (5060).....383.15
- MARTINEAU, Harriet. The History of England from the commencement of the XIX. Century to the Crimean War. Philadelphia: Porter & Coates n. d. . . . [Copyright, 1864.] 4v. 16°. Special preface by author to the American edition. (5225).....396.1
- MASSACHUSETTS, State of. Debates, Resolutions and other proceedings, of the Convention of the Commonwealth of Massachusetts, convened at Boston on the 9th of January, 1788, and continued until the 7th of February following, for the purpose of assenting to and ratifying the Constitution recommended by the Grand Federal Convention. Together with the yeas and nays on the decision of the grand question. To which the Federal Constitution is prefixed. Boston: . . . Adams & Nourse . . . 1788. 8°, pp. 219. (5474) 318.24\*

- MATHEMATICAL tables, consisting of logarithmic, nautical and other tables.  
New edition. \* \* \* W. & R. Chambers, London and Edinburgh, 1867.  
16°, pp. xxxix+404. (4538) [Chambers' educational course.]...**248.16**
- MATTHEW Paris. *See* Paris. M. (5119).....**376.7**
- MATTHEWS, William. [Professorship of books and Readings. 12 pp. 8°]  
*See* UNITED STATES, Bureau of Education, public libraries in the. Vol. I.  
p. 250. (5074).....**L. R.**
- MAUNDER, Samuel. . . . The Treasury of History: comprising a general  
introductory outline of universal history, ancient and modern; to which is  
added the history of the United States, by John Inman., Esq. \* \* \* New  
York: . . . Daniel Adee, . . . 1847. Vol. I. only, concluding with  
reign of Victoria. 8°, pp. 760+2 eng. (4832).....**392.5**
- MAURY, Jean Siffrein. *Abbe*. The principles of eloquence, with an introduction,  
etc., by A. Potter, D. D. . . . \* \* \* New York: Harper & Brothers,  
. . . 1843. 12°, pp. 308. (H. F. L. No. 184.) (4963).....**38X.11**
- MAXWELL, J. Clerk. . . . Theory of Heat. Fourth edition. London:  
Longmans, Green & Co. 1875. 16°, pp. xii.+333. (5028).....**148.27**
- MAYER, A. M. . . . The earth a great magnet. 12°, pp. 74: *See* Half Hours  
with Modern Scientists, second series, at p. 213. (5018).....**148.7**
- MAYER, Brantz. Observations on Mexican history and archæology, with a  
special notice of Zapotec remains, as delineated in Mr. J. G. Sawkins' draw-  
ings of Mlita, &c. 4°, 36 pp.+4 plates. *See* Smithsonian Institution,  
Contributions to Knowledge. Vol. IV. (1852), Art. 6. (5489).....**441.1**
- MEADE, H. Hot Springs in New Zealand, 16°, 2 pp. *See* Half Hour Recrea-  
tions in Popular Science, at p. 418. (5026).....**148.17**
- MEECH, L. W. On the relative intensity of the heat and light of the sun upon  
different latitudes of the earth. 4°, 58 pp.+6 plates. *See* Smithsonian  
Institution, Contributions to Knowledge. Vol. IX. (1857) Art. 2. (5489)  
**441.1**
- MEEK, Fielding Bradford. Check list of the invertebrate fossils of North  
America. Miocene. 34 pp. 8°. Cretaceous and Jurassic. 42 pp. 8°. *See* Smith-  
sonian Institution, Miscellaneous Collections. Vol. VII. (1867), Art. 7&8.  
(5506).....**443.1**
- MEEK, Fielding Bradford. . . . and Hayden, Ferdinand Vandever. Palæ-  
ontology of the Upper Missouri: A report upon collections made princi-  
pally by the expedition under command of Lieut. G. K. Warren, . . . in  
1855 and 1856. Invertebrates. 4°, 158 pp.+5 plates. *See* Smithsonian  
Institution, Contributions to Knowledge. Vol. XIV. (1865) Art. 6.  
(5494).....**441.1**
- MELLIN, G. H. Skildringer af den Skandinaviska Nordens Folklif och Natur.  
Andra Upplagan. Stockholm. Albert Bonnier. . . . 1876. 24°. (5216)  
**477.3**
- Contents:—Sveriges Nomader, 141 pp.  
Köfönnarna i Fjällskogen, 184 pp.  
Den gamle i Ostannor, 175 pp.  
Vid Billingen, 227 pp.
- MEMES, John S. Memoirs of the Empress Josephine. New York: Harper &  
Brothers. . . . 12°, pp. 396. [Portraits of Josephine and Napoleon.]  
(H. F. L. No. 28.) (4861).....**386.22**

- MENZEL, Wolfgang.** Geschichte der Deutschen bis auf die neuesten Tage. Sechste umgearbeitete Ausgabe. . . . Stuttgart. A. Kröner. 1872. 3v. 8°. (5214).....475.2  
 Vol. I. pp. viii&656, Alteste Geschichte; Vol. II. pp. viii&696, Zum Ende der reformation; Vol. III. pp. x&678, bis zur gegenwart.
- MERIMEE, Prosper.** Melanges Historiques et Litteraires. Troisième édition. \*\*\* Paris: Calmann Lévy, éditeur Ancienne Maison Michel Lévy Frères. 1876. . . . 8°, pp. 382. (4697).....118.9
- MERLE, d'Aubigné, J. H.** See Aubigné.
- MEUNG, Jean de.** [Joint Author.] See Lorris, G. de and Meung, J. de. Le Roman de la Rose. 2v. 12°. (4695).....118.5
- MICHAUD, Joseph.** History of the Crusades. Translated from the French by W. Robson. . . . London: George Routledge & Co. . . . 1852. 3v. 16°, pp. xxx.+508; vii.+493; vii.+547. Map in ea. v. (5114).....383.21
- MICHEL, Francisque.** [Editor.] See Lorris, G. de, and Meung, J. de. Le Roman de la Rose. (4695).....118.5
- MICHEL, Francisque.** [Joint Editor.] See Monmerque, L. J. N. et Michel, Francisque. Théâtre Français au moyen age. [5084].....478.5
- MICHELET, Jules.** Modern History, from the French. With an Introduction by A. Potter, D. D. New York: Harper & Brothers. . . . n. d. [Copyright, 1843.] 12°, pp. 433. (H. F. L. No. 170.) (4952).....389.31  
 "In Guizot's History of Civilization in Europe, we have philosophy without facts. In most abridgments . . . we have facts without philosophy. This work seems to have struck the golden mean. . . ." *Bp. Potter.*
- MILES, William.** . . . The Horse's Foot, and how to keep it sound: With illustrations. From the London edition. New York: D. Appleton & Co. . . . 1851. 12°, pp. 70. [Bound with Stable Economy, by John Stewart] (5265 b).....516.16
- MILL, John Stuart.** Dissertations and Discussions: political, philosophical, and historical. \* \* \* New York: Henry Holt & Co. 1874-1875. 5v. 16°. (5153).....382.12
- Contents: Vol. I. pp. viii & 293. The Contest in America, at p. 1: State Influence, with Corporation and Church Property, at p. 28; The Currency Juggle, at p. 68; Observations on French Revolution, at p. 82; Thoughts on Party, at p. 89; Prof. Sedgwick on Univ. of Cambridge, at p. 121; Civilization, at p. 186; Aphorisms, at p. 232; Armaud Carrel, at p. 237; A Prophecy, at p. 309; Alfred De Vignes, at p. 312; Bentham, at p. 355; Appendix, at p. 418.
- Vol. II. pp. 415. Coleridge, at p. 5; De Tocqueville, at p. 79; Bailey on Berkeley's Theory of Vision, at p. 162; Michelet's History of France, at p. 198; Claims of Labor, at p. 260; Guizot on History, at p. 197; Early Grecian History, at p. 363.
- Vol. III. pp. 391. Reply to Brougham on French Revolution, p. 5; Appendix, at p. 82; Enfranchisement of Women. at p. 93; Whewell on Moral Philosophy, at p. 132; Grote's History of Greece, at p. 193; Words on Non-Intervention, at p. 238; The Steam Power, at p. 264; Utilitarianism, at p. 301.
- Vol. IV. pp. 407. Parliamentary Reform, at p. 5; Recent writers on Reform, at p. 51; Bain's Psychology, at p. 101; Austin on Jurisprudence, at p. 151; Plato, at p. 227; Inaugural Address, at p. 332.
- Vol. V. pp. 294. Endowments, at p. 1; Thornton on Labor, at p. 28; Leslie on the Land Question, at p. 95; Taine—de l'intelligence, at p. 122; Treaty Obligations, at p. 131; Maine on Village Communities, at p. 143; Grote's Aristotle, at p. 160; L'avere e l'imposta, at p. 216; Papers on Land Tenure at p. 225.

- MILL, John Stuart. On Liberty. The Subjection of Women . . . \* \* \* New York: Henry Holt & Co. 1877. 12°, pp. 394. (Uniform with Dissertations and Discussions, 1875-5.) (5152).....382.11  
 Liberty, p. 204: Subjection, p. 205 to end.
- MILLER, S. A. The American Palæozoic Fossils: a catalogue of the genera and species, with names of authors, dates, places of publication, groups of rocks in which found, and the etymology and signification of the words, and an introduction devoted to the stratigraphical geology of the Palæozoic rocks. Cincinnati: . . . author . . . 1877. r8°, pp. xv+253. (5398)....461.6
- MILLER, J. R. The History of Great Britain, from the death of George II. to the coronation of George IV. Designed as a continuation of Hume and Smollett. Philadelphia: . . . Thomas Davis. . . . 1844. 8°, pp. 724+ portrait of George IV. (5157).....392.4
- MILLER, Samuel. Life of Jonathan Edwards. 12°, pp. 256. Vignette and facsimile. See Sparks, J. Lib. of Am. Biog., Vol. 8, at p. 1. (4814)...385.1
- MILLER, Samuel. Sermon on Enmity against God. . . . See Murray-st. Church, New York, Discourses, p. 161. (4546).....157.5
- MILLER, William Allen. . . . Elements of Chemistry: theoretical and practical. \* \* \* Second edition, with additions. London: Parker, Son & Bourn. 1862-3. 3 parts in 3v. 8°. (4726)  
 Contents: Part I. pp. xii. & 584 [1862.] Chemical Physics; Part II. Inorganic Chemistry; Part III. pp. xxxii. & 350. [1862.] Organic Chemistry.
- MILLINGTON, E. J. [Translator.] See Schlegel F. von. *Æsthetic and miscellaneous works.* (5422).....86.14
- MILMAN, Henry Hart . . . The History of the Jews, . . . With maps and engravings. . . . New York: Harper & Brothers. . . . 1843. 3v. 12°, pp. 264, 298, 367. (H. F. L. No. 3.) (4841).....386.2
- MILMAN, Henry Hart . . . [Notes.] See Gibbon, E. The History of the Decline and Fall of the Roman Empire. (5154).....392.1
- MINIFIE, William. . . . A text book of geometrical drawing, for the use of mechanics and schools. . . . With illustrations for drawing plans, sections and elevations of buildings and machinery. An introduction to Isometrical drawing; a course of linear perspective and shadows; an essay on the theory of color, and its application to architectural and mechanical drawings. Ninth thousand revised by the author. New York: D. Van Nostrand. . . . 1873. r8°, pp. 162+56 plates+eng. t.-p. (5049) 461.3
- MITCHELL, John. . . . A manual of practical assaying. Fourth edition. Edited by William Crookes. London: Longmans, Green & Co. 1873. 8°, pp. xxxvi+819+xlvii. (4645).....Chem. Lab.
- MITCHELL, S. Weir. . . . Researches upon the venom of the rattlesnake; with an investigation of the anatomy and physiology of the organs concerned. 4°, 156 pp.+12 woodcuts. See Smithsonian Institution, Contributions to knowledge. Vol. XII. (1860.) Art. 6. (5492).....441.1
- MITCHELL, S. Weir, and Morehouse, George R. Researches upon the Anatomy and Physiology of Respiration, in the Chelonia. 50 pp. 4°. See Smithsonian Institution, Contributions to Knowledge, Vol. XIII. (1863) Art. 9. (5493) 441.1
- MITCHELL, Thomas. The stepping stone to architecture. New edition. London: Longmans, Green & Co. n. d. 24°, pp. 83. (5173).....384.10



- M**——, J. H. *Memoirs of Dr. James Duport*. . . . 27 pp., 8°. *See*  
*Museum Criticum*. Vol. 2, p.520. (5134).....473.11
- M**—— J. H. *Memoir of Edward Valentine Blomfield* . . . 9 pp. 8°. *See*  
*Museum Criticum*. (5134).....473.11
- MOEBIUS**, Thomas. *Dænish Formenlehre*. Kiel . . . 1871. 8°, pp. vi.+136.  
 (4669).....178.17
- MOELLER**, P. L. [*The Life of H. C. Oersted*. 16 pp. 16°.] *See* Oersted, H. C.  
*Soul in Nature*, p. vii. (5294).....378.21
- MOHR**, Frédéric . . . *Traité D'analyse Chimique a l'Aide de Liqueurs Titrées*  
 . . . Deuxième édition Française traduite sur la quatrième édition Alle-  
 mande par C. Forthomme . . . avec 163 figures dans le texte. \* \* \* Paris:  
 . . . F. Savy . . . 1875. r8°, pp. xiii.+736+52. (4632).. . . .157.3
- MONETTE**, John W. . . . *History of the Discovery and Settlement of the Valley*  
*of the Mississippi, by the three great European powers, Spain, France and*  
*Great Britain, and the subsequent occupation, settlement and extension of*  
*civil government by the United States, until the year 1846.* \* \* \* Harper  
 & Brothers, . . . New York: 1846. 2v. 8°, pp. xxiii.+567+2 maps; xv.+  
 595+map+engravings. (4779).....371.9
- MONVEL**, Jacques Marie Boutet. [*L'Amant bourru*. pp. 64. (Memoir.)] *See*  
*Chefs-d'Oeuvres des Auteurs Comiques*. 8v. 12°, Vol. VII. (5090) 118.13
- MONTFLEURY**, Antoine Jacob. . . . [*La Femme judge et partie*. 65 pp. *La*  
*Fille Capitaine*. 142 pp. (Memoir.)] *See* *Chefs-d'Oeuvres Auteurs Comiques*.  
 8v. 12° Vol. I. (5090).....118.13
- MONTGOMERY**, James. *Lectures on General Literature, Poetry, &c.* Delivered  
 at the Royal Institution in 1830 and 1831. New York: Harper & Brothers.  
 . . . 1855. 12°, pp. 324. (H. F. L. No. 64.) (4885).....387.16
- MONMERQUE**, Louis Jean Nicolas et Michel, Francisque. *Théatre Français au*  
*moyen age publié d'après les manuscrits de la bibliothèque du roi* . . .  
 (xi—xiv siècles) \* \* \* Paris: Chez Firmin-Didot Frères, Fils et Cie. . . .  
 1874. r8°, pp.xvi.+672. (5084).....478.5
- MOORE**, Daniel. . . . *The Christian system vindicated* . . . Second Edition,  
 with additions. London: Henry G. Bohn, . . . 1844. 12°, pp. viii.+341.  
 [*Cambridge Prize Essays*.] (4808).....384.2
- MOORE**, George . . . *Man and his Motives*. \* \* \* New York: Harper & Bro-  
 thers, . . . 1848. 12°, pp. vii.+301. [*Harper's New Miscellany*. XXVI.]  
 (5332).....375.22
- MOORE**, George. . . . *The Power of the Soul over the Body, considered in*  
*relation to health and morals*. \* \* \* New York, Harper & Brothers, . . .  
 1845. 12°, pp. 270. [*Harper's New Miscellany*, XXV.] (5331)....375.21
- MOORE**, George. . . . *The Use of the Body in relation to the Mind*. \* \* °  
 New York: Harper & Brothers, . . . 1849. 12°, pp. 356. [*Harper's New*  
*Miscellany*, XX. (5327).....375.17
- MOREHOUSE**, George R. [*Joint Author*] *See* Mitchell, L. W. *Researches*. &c.  
*Smithsonian Contributions*, Vol. XIII. (1863).....441.1
- [**MORGAN**, Henry J.] *The Tour of H. R. H. the Prince of Wales through Brit-  
 ish America and the United States, by a British Canadian*. \* \* \* Montreal:  
 Printed for the compiler, by John Lovell, . . . 1860. 8°, pp. 271+portrait.  
 (4766).....372.13

- MORGAN, Lewis Henry. Circular in reference to the degrees of relationship among different nations. 8°, 34 pp. See Smithsonian Institution, Miscellaneous Collections, Vol. II. (1862) Art. 10. (5501).....443.1
- Systems of consanguinity and affinity of the human family. . . . 4°, 602 pp.+14 plates+6 diagrams. See Smithsonian Institution, Contributions to Knowledge, Vol. XVII. (1871) Art. 2. (5497).....441.1
- MORRELL, L. A. The American Shepherd: being a history of the sheep, with their breeds, management and diseases. Illustrated with portraits of different breeds, sheep-barns, sheds, &c. With an appendix, embracing upwards of twenty letters from eminent wool-growers and sheep fatteners of different States, detailing their respective modes of management. New York: Harper & Brothers, . . . 1846. 12°, pp. vii.+437. (4754) 516.25
- MORFIT, Campbell. [Joint Author.] See Booth, J. C. On Recent Improvements in the Chemical Arts.
- MORRIS, Geo. S. . . . [Translation and additions.] See Ueberweg, Friedrich. . . . History of Philosophy. (4572).....348.2
- MORRIS, John G. Catalogue of the described Lepidoptera of North America. . . . 1860. 8°, 76 pp. See Smithsonian Institution, Miscellaneous Collections, Vol. III. (1862) Art. 2. (5502).....443.1
- Synopsis of the described Lepidoptera of North America. Part I. Diurnal and Crepuscular Lepidoptera . . . 8°, 376 pp. See Smithsonian Institution, Miscellaneous Collections, Vol. IV. (1862) Art. 2.(5503).443.1
- MORRIS, John M. and Croffut, W. A. See Croffut, W. A. The military and civil history of Connecticut. 8° pp. 891. (4835).....381.10
- MORRIS, Richard. . . . Elementary lessons in historical English grammar, accidence and word-formation. London: Macmillan & Co. 1874. . . . 16° pp. xii+254[+83 pp. of advertisements.] (3214).....286.22
- MORRISON, A. J. W. [Translator.] See Schiller, Frederick. History of the thirty years' war. (5326).....375.16
- MORRISON, A. J. W. [Translator.] See Schiller, Frederic. History of the revolt of the Netherlands. (5328).....375.18
- MORTON, Henry. [Editor.] See Franklin Institute. Journal. (5439)...496.1
- MORTON, John C. [Editor.] A cyclopedia of agriculture, practical and scientific, in which the theory, the art, and the business of farming, are thoroughly and practically treated. By upwards of fifty of the most eminent, practical and scientific men of the day. London: Blackie & Son, Paternoster Row; Glasgow and Edinburgh. 1876. 2v. r8° pp xlv+1022+24 plates; 1172+ plates 25—51. (4609).....511.4
- MOSELY, Henry. . . . Illustrations of mechanics. Revised by James Renwick. . . . With numerous engravings. New York: Harper & Bros. . . . 1840. 12°, pp. 332. (H. F. L. No. 190.) (4960).....38X.8
- MOTTE, Andrew. [Translator.] See Newton, Isaac. The mathematical principles of natural philosophy. (4783).....371.16
- MOZART, Wolfgang Amédée. [Correspondence.] See Holmes, E. Life of Mozart. 12°. (5314).....375.3
- MUDIE, Robert. . . . A popular guide to the observation of nature; or, hints of inducement to the study of natural productions and appearances, in their connections and relations. . . . New York: Harper & Brothers. . . . 1847. 12°, pp. 342. (H. F. L. No. 57.) (4879).....387.11

- MUELLENHOFF**, Karl and Scherer, W. Denkmäler Deutscher Poesie und Prosa aus dem VIII.—XII. Jahrhundert herausgegeben von.— . . . Zweite vermehrte und verbesserte Ausgabe. Berlin. Weidmannsche Buchhandlung. 1873. 8°, pp. xxxix+649. [Text pp. 1-247. Notes, &c., pp. 249—end.] (5213).....475.3
- MULLER**, Carl Otfried. Dissertations on the Eumenides of Æschylus. From the German of. Second edition revised. London: John W. Parker & Son. . . . 1853. 12°, pp. xii.+224+1 plate. (5128).....258.24
- MULLER**, Dr. David. . . . Geschichte des deutschen Volkes in kurzgefasster uebersichtlicher Dartstellung zum Gebrauch hoeheren Unterrichtsanstalten und zur Selbstbelehrung. Sechste verbesserte aufgabe. \* \* \* Berlin. 1876. . . . Franz Vahlen. 8°, pp. xxxv+464. (4661).....178.11
- MUELLER**, Friedrich Max. . . . 5v., 12°. Chips from a German workshop. New York. Scribner, Armstrong & Co. 1871-6.  
 Vol. I., pp. xxxiii ; 374. Essays on the science of religion.  
 Vol. II., pp. 492. Essays on mythology, traditions and customs.  
 Vol. III., pp. vi ; 402. Essays on literature, biography and antiquities.  
 Vol. IV., pp. vii ; 56, Essays chiefly on the science of language. With index to Vols. sand 4. (970&5006).....Vols. 1, 2, 3. 45.12 Vol. 4, 148.5
- MULFORD**, E. The nation: The foundations of civil order and political life in the United States. New York: . . . Hurd & Houghton. . . . 1877. 12°, pp. xiv+418. (4560).....308.24
- MURPHY**, Arthur. Life of Dr. Samuel Johnson. 12°, pp. 86. See Johnson, S. Life and Writings. (H. F. L. No. 109.) (4911).....388.15
- MURRAY**, Alexander S. Manual of mythology: Greek and Roman, Norse and Old German, Hindoo and Egyptian mythology. Reprinted from the second revised London edition. With 45 plates on tinted paper, representing more than 90 mythological subjects. New York: Scribner, Armstrong & Co. 1876. 8°, pp. xi+368+45 plates. (5031).....148.16
- MURRAY**, Hugh. . . . [and others.] The encyclopædia of geography. Illustrated by . . . maps and . . . engravings, . . . together with a new map of the United States. Revised, with additions, by Thomas G. Bradford. Philadelphia: Lea & Blanchard. 1848. 3v. 8°, pp. 597, 592, 648. (4765) 372.2
- MURRAY**, Hugh. . . . Wilson, James. . . . Granville, R. K. . . . Jameson, Robert. Ainslie, Whitlaw. . . . Rhind, William. . . . Wallace; Dalrymple, Clarence. . . . Historical and descriptive account of British India; including a narrative of the early Portuguese and English voyages, the revolution in the Mogul Empire, and the origin, progress and establishment of the British power; with illustrations of the zoology, botany, climate, geology, and mineralogy. Also medical observations, an account of the Hindoo Astronomy, the trigonometrical surveys, and the navigation of the Indian Seas. . . . With map and engravings. New York: Harper & Brothers. . . . 3v. 12°, pp. 291+1 map: 379; 332. (H. F. L. Nos. 47, 48, 49.) (4873).....387.5
- Murray**, H. " Author of Historical and Descriptive Department."

- MURRAY, Hugh. . . . An historical and descriptive account of British America; comprehending Canada, Upper and Lower, Nova Scotia, New Brunswick, Newfoundland, Prince Edward Island, the Bermudas and the fur countries; . . . from the earliest settlement: . . . also an account of the manners and present state of the Aboriginal tribes. . . . New York: Harper & Brothers. . . . 1848. 2v. 12°, pp. 312, map; 290. (H. F. L. Nos. 101-2) (4906).....388.9
- MURRAY, Hugh. [Narrative.] See Leslie, J. . . . Jameson, R. . . . and Murray, H. . . . Narrative of discovery and adventure in the Polar seas and regions. (4850)..... 386.11
- MURRAY, Hugh. [Narrative.] See Jameson, R.; Wilson, J.; Murray, H. Narrative of discovery and adventure in Africa. 12°, pp. 359+map. (4852) 386.13
- MURRAY, Hugh. [Notes.] See Polo, Marco. Travels of. (H. F. L., 173.) (4955).....38X.3
- MURRAY Street Church [New York.] Discourses delivered in—on Sabbath evenings during the months of March, April and May, 1830, by Dr. Spring, Dr. Cox, Dr. Skinner, Dr. De Witt, Dr. Miller, Dr. Sprague, Dr. Carnahan, Dr. Woodbridge, Dr. Rice, Dr. Woods, Dr. Wayland, Dr. Snodgrass, Dr. Griffin. New York: Henry C. Sleight. . . . 1830. 8° pp. viii+501. (4546).....157.6
- MURRAY, William H. H. The perfect horse. . . . With an introduction by Henry Ward Beecher; and a treatise on agriculture and the horse, by Hon. Geo. B. Loring; containing illustrations of the best trotting horses in the United States. . . . \* \* \* Boston: James R. Osgood & Co. . . . 1873. 8°, pp. xi+480+14 eng. (5471).....514.9
- MUSEUM, Criticum; or, Cambridge classical researches. Cambridge: . . . University Press. . . . 1826. 2v. 8°, pp. viii+569: [x]+700. (5134) Publication ceased with 8th No. end vol. II. 473.11
- MUSPRATT, Sheridan. . . . Chemistry, theoretical, practical, and analytical, as applied and relating to the arts and manufactures. . . . \* \* \* London: Glasgow, Edinburgh: William Mackenzie, Vol. I. A.—Eth. imp8°, pp. 8 11 en.; pp. 9+836+eng., t. p.+12 full page portraits. (5423)....461.5\*\*  
The portraits are those of the author, Professor Dumas, Sir Robert Kane, Berzelius, John Dalton, Professor Branch, Tavoison Ure, Rose, Professor Graham, Gay-Lussac, Sir Humphrey Davy, Professor Horsford. Facsimile of autograph to each.
- NARES, Edward . . . See Burnet, Gilbert. The History of the Reformation. 3v. 8°. (4811).....381.1
- NARES, Edward. [Author of Vol. VI.] See Tytler, Alexander Fraser. Universal History. 6v. 12°. (4899).....388.2
- NATURAL History. The elephant as he exists in a wild state, and as he has been made subservient, in peace and in war, to the purposes of man. New York: Harper & Brothers . . . 1848. 12°, pp. 300. (H. F. L. No. 164.) (4947) [Originally published by the Brt. Soc. D. U. K.] .....389.26
- NATURAL History of Insects, the. Illustrated . . . First series. New York: Harper & Brothers. . . . 1843. 2v. 12°. (H. F. L. No. 8, &c.) (4845)386.6

- NEANDER, John Augustus William . . . History of the planting and training of the Christian Church by the Apostles. Translated from the third edition of the original German, by J. E. Ryland. . . . New York: Leavitt, Trow & Co., . . . 1847. 8°, pp. xx.+330. (4780).....371.7
- NEANDER, John Augustus William. The Life of St. Chrysostom. Translated from the German of—by the Rev. J. C. Stapleton, . . . \* \* \* London: R. B. Seeley and W. Burnside: . . . 1844. 8°, pp. viii.+438. (4798).371.13
- NEILL, Edward Duffield. The History of Minnesota: from the earliest French explorations to the present time. \* \* \* Philadelphia: J. B. Lippincott & Co. 1858. 8°. Large paper. [Only 100 copies printed.] pp. 628+7 portraits, (Gov. and Mrs. Ramsay, Senator and Mrs. H. M. Rice, Gov. and Mrs. Sibley, and Franklin Steele)+5 maps+36 engravings 4°. (2934).....Cabinet B\* Presented by the Rev. author.
- NENNIUS. History of the Britons. 12°, 36 pp. See Giles, J. A. [Editor.] Six old English chronicles, at p. 381. (5117).....376.9
- NEWBERRY, John Strong. The U. S. Sanitary Commission in the valley of the Mississippi, during the war of the rebellion, 1861-1866. Final report of J. S. Newberry, secretary of the western department. Cleveland: Fairbanks, Benedict & Co., 1871. 8°, pp. 543. (4795)....371.10
- NEWCOMB, Simon. . . . An investigation of the orbit of Uranus, with general tables of its motion. . . . pp. 296 4°. See Smithsonian Institution, Contributions to Knowledge. (1873.) Vol. XIX., Art 4. (5499)..441.1
- NEWCOMB, Simon. . . . An investigation of the orbit of Neptune, with general table of its motion. 116 pp. 4°. See Smithsonian Institution, Contributions to Knowledge. Vol. XV. 1867. Art. 2. (5495)..441.1
- NEWTON, Isaac. The mathematical principles of natural philosophy. Translated into English by Andrew Motte. To which is added Newton's system of the world, with a portrait taken from the bust in the Royal Observatory at Greenwich. First American edition, carefully revised and corrected, with a life of the author, by N. W. Chittenden, . . . New York: Published by Daniel Adee. . . . 1848. 8°, pp. 581. (4783).....371.16
- NEWTON, Thomas. . . . Dissertations on the prophecies, which have remarkably been fulfilled, and at this time are fulfilling in the world. . . . The tenth edition. London: . . . F. C. and J. Rivington. . . .1864. 2v. 8° pp. 416 and 417. (5255).....368.25
- NEW YORK. Militia laws of the State of, applicable to the First Division. \* \* \* Albany. . . . 1855. 8°. pp. 132. (4608).....157.4  
Contains also, militia law, . . . passed April 17, 1854.
- NEW YORK, State of. Report of Benj. P. Johnson, agent of the State of New York, appointed to attend the exhibition of the Industry of all Nations, held in London, 1851. Albany: . . . Public printer. 1852. 8°, pp. 193+3 plates.
- NICHOLS, William Ripley. [Revision.] See Eliot, C. W. and Storer, F. H. A compendium manual of qualitative chemical analysis. (5406)...Chem. Lab.
- NICHOLS, William Ripley. [Joint Editor.] See Wells, D. A. . . . Nichols, W. R. Annual of scientific discovery for the years 1870-1. (5232)..467.1

- NIEMEYER, Edward. . . . Lessing's Nathan der Weise durch eine historisch-kritische Einleitung und einen fortlaufenden Commentar besonders zum gebrauch auf hoheren Lehranstalten erlaütet von. \* \* \* Leipzig: . . . Gustav Meyer. 1855. 8°, pp. vi+218. (4664).....178.21
- NIERENSEE, John R. [Artisan Commissioner.] Report on the construction and embellishment of private dwellings in Vienna. 8°, pp. 26+1 plate. See UNITED STATES, Dept. of State. Reports, International Exhibition, Vienna. 1873. Vol. IV. A. (5440).....157.13
- NOEL, [Auguste.] [Life and Notes.] See Ronsard, P. *Choix de Poésies*. (4700).....118.5
- NORMANDY, A. [Translator, with notes and additions.] See Rose, H. *Practical treatise of chemical analysis*. (5424).....462.18
- NORTON, John Pitkin. . . . Elements of scientific agriculture, or the connection between science and the art of practical farming, prize essay of the New York State Agricultural Society. Adapted to the use of schools. New York: C. M. Saxton & Co. 1855. 12°, pp. x+208. (4596)....516.13
- NOUE, Jean Lauréde *de la* [La Coquette Corrigée. pp. 78. (Memoir.)] See *Chefs-d'Oeuvres des Auteurs Comiques*. 8v. 12°. Vol. II. (5090) 119.13
- NOYES, S. B. . . . [Plan of the new catalogue of the Brooklyn mercantile library. 9 pp. 8°.] See UNITED STATES, Bureau of Education. *Public Libraries in the*. Vol. II., pp. 648. (5074).....L. R.
- NUGENT, Thomas. . . . [Translator.] See *Port Royal Messieurs de*. A new method of learning, . . . the Latin tongue. 2v. 8°. (5135).....473.1
- NYSTROM, John W. C. E. *Pocket-book of mechanics and engineering*. Containing a memorandum of facts and connection of practice and theory. Thirteenth edition, revised and greatly enlarged with original matter. Philadelphia: J. B. Lippincott & Co. . . . London: Trubner & Co. 1875. sm 8° pp. 511. [In tuck binding.] (4580).....248.18
- ODLING, William. . . . A course of practical chemistry arranged for the use of medical students. Second edition. London: Longmans, Green & Co. 1865. 12°, pp. x+239. (5405).....Chem. Lab.
- ODLING, William. [Translator.] See Laurent, A. *Chemical method*. (5437) 494.2
- ODYSSE-BAROT. [François.] *Lettres sur la philosophie de l'histoire*. \* \* \* Paris: Baillière. . . . 1864 . . . 12° pp. 242. (4618).....118.2
- OERSTEAD, Hans Christian. *The soul in nature, with supplementary contributions*. Translated from the German, by Leonora and Joanna B. Horner. London: Henry G. Bohn, . . . 1852. 16° pp. lxx+465+portrait. (5294) 378.21
- OLIN, Stephen. . . . *Travels in Egypt, Arabia Petraea, and the Holy Land*, . . . Fourth edition. New York: Harper & Brothers. . 1844. 2 v. 16°, pp. xiv+458+map+7 plates; 478+10 plates and plan of Jerusalem. (4813).....374.23
- OLIPHANT, T. L. Kington. . . . *The sources of standard English*. London: Macmillan & Co. 1873. . . . 16° pp. xxiii+408. (4588).....248.11
- OLMSTEAD, DENISON. . . . *On the recent secular period of the Aurora Borealis*. 52 pp. 4°. See Smithsonian Institution, *Contributions to Knowledge*, Vol. VIII. (1856) Art. 3. (5488).....441.1

- O'NEIL, J. T., of St. John's. A memoir of the Island of Porto Rico. 12°, pp. 58. See La Torre, J. M. de. Cuba and . . . p. 133. (5264).....**383.2**
- ORTON, Hoy D. Lightning calculator and accountant's assistant, with improved interest tables. . . . Entirely new edition. . . . Baltimore: . . . W. H. Sadler, . . . 1875. 12°, pp. 211+portrait. (5445).....**156.5**
- ORFILA, Augustin Félix. . . . *Traité de Toxicologie*. Quatrième édition, revue, corrigée et augmentée. . . . Paris: Fortin, Masson et Cie. . . . 1843. 2v. 8°, pp. xxxii+720; xv+749+1 plate. (5295).....**462.10**  
For notice bibliographique des poisons en general, see p. xvii. Vol. I.
- ORFILA, Matthieu Joseph Bonaventure. *Eléments de chimie, appliquée à la médecine à aux artes*; Cinquième édition, revue, corrigée et augmentée. Paris: . . . Crochard. . . . 1831. 2v. 8°, pp. xvi+754+12 plates; xii+744+2 plates. (5371).....**465.5**
- [ORLEANS, Louis Philip] *Comte de Paris*. History of the civil war in America. Translated with the approval of the author, by Louis F. Tasistro. Edited by Henry Coppée. . . . Philadelphia: Jas. H. Coates & Co. 1876. 2v. 8°, pp. 640, 773. [3 maps]. (4980).....**227.3**
- OSTEN-SACKEN, R. Catalogues of the described diptera of North America. 8°, pp. 112. See Smithsonian Institution, Miscellaneous Collections, Vol. III. (1852) Art. 1. (5502).....**443.1**
- OSTEN-SACKEN, R. Monographs of the diptera of North America. Part IV. . . . 8°, 358 pp.+4 plates. See Smithsonian Institution, Miscellaneous Collections. Vol. VIII. (1869) Art. 1. (5507).....**443.1**
- OSTEN-SACKEN, R. [Editor, with additions.] See Loew, H. Monographs of the diptera of N. A., Part I. See Smithsonian Institution, Miscellaneous Collections, Vol. VII., Art. 1.....**442.1**
- OTTO, [Friedrich Julius.] Report on the relation of the volumes of bodies in the solid state to their equivalents or atomic weights. 62 pp. Also report on Isomorphism, 57 pp. See Graham, Thomas. Chemical reports and memoirs, p. 1, &c. p. 118. (5436).....**493.3**
- PACKARD, Alpheus Spring, Jr. . . . Directions for collecting and preserving insects . . . 1873. See Smithsonian Institution, Miscellaneous Collections, Vol. IX. (1874) Arts. 4 and 5. (5510).....**443.1**
- PAGE, Rev. William P. [Editor.] See Johnson, Samuel, Life and writings of. (H. F. L. Nos. 109, 110) (4911).....**388.15**
- PAGE, William P. [Revisor.] See Bucke, Charles. On the beauties, harmonies and sublimities of nature. (H. F. L. No. 145) (4934).....**389.13**
- PAINTER, Howard. [Honorary Commissioner.] Report on the metallurgy of lead, silver, copper and zinc. pp. xvi.+237+6 plates. See UNITED STATES, Dept. of State. Reports, International Exhibition, Vienna, 1873, Vol. IV. F. (5440).....**157.13**
- PALAIS des Tuilleries, Domaine de la couronne. 1837. . . . L. B. Thomassin . . . 4°, pp. 61+8 plates. (5275).....Cab. B.
- PALAIS-Royal, Domaine de la couronne. Seconde Edition. 1837. Paris, . . . L. B. Thomassin et Cie . . . 4°, pp. 40+61 plates. (5276)....Cab. B.
- PALAPRAT, Jean. [Joint Author.] See Brueys, D. A. de. See Chefs-d'Oeuvres des Auteurs Comiques, Vol. III. (5090).....**118.13**

- PALEY, William. *Natural Theology, with illustrations, notes, &c.* By Henry Lord Brougham . . . and Sir Charles Bell . . . With numerous woodcuts. To which are added preliminary observations and notes. By Alonzo Potter. New York: Harper & Brothers . . . 1847. 2v, 12°, pp. 266, 257. (H. F. L. Nos. 96, 97.) (4902).....388.5
- PALFREY, John Gorham . . . *Life of William Palfrey, Paymaster-General in the army of the Revolution.* 16°, pp. 114. See Sparks, J., *Lib. of Am. Biog.*, second series, Vol. 7, p. 335. (4810).....384.1
- PARDOE, Miss Julia. *Louis the Fourteenth, and the Court of France in the Seventeenth Century.* \* \* \* New York: Harper & Brothers, . . . 1874. 2v. 12°. [Frontispieces and vignettes.] (4979).....148.31
- PARIS, John Ayrton. *Pharmacologia,* . . . upon which are founded the theory and art of prescribing. From the ninth London edition. Rewritten . . . With notes, by Charles A. Lee, . . . New York: Harper & Brothers, . . . 1846. 8°, pp. xiii.+353. (4768).....372.4
- PARIS, Matthew. *English History.* From the year 1235 to 1273. Translated from the Latin, by the Rev. J. A. Giles . . . London: Henry G. Bohn. . . 1852. 3v. 16°, pp. 536, 539, 516.+portrait. (5119).....376.7
- PARIS, Matthew. See Roger of Wendover's *Flowers of History*, 2v. 12°. (5118) 376.6
- PARK, Mungo. *The Life and Travels of;* with the account of his death, from the journal of Isaaco, the substance of later discoveries relative to his lamented fate, and the termination of the Niger. \* \* \* New York: Harper & Brothers. . . 1847. 12°, pp. 248. (H. F. L. No. 105.) (4909)....388.12
- PARKER, John Henry. *An introduction to the study of Gothic Architecture.* . . . Fourth Edition, revised and enlarged. Oxford and London: James Parker & Co. 1874. 16°, pp. xx+329. (5095).....384.9
- PARKER, Richard Green, . . . *Aids to English Composition,* prepared for students of all grades, embracing specimens of examples of school and college exercises, and most of the higher departments of English composition, both in prose and verse. \* \* \* Twentieth Edition. New York: Harper & Brothers, . . . 1875. 12°, pp. 429. (4993).....275.21
- PARKER, S. E. [Translator of Valesius's *Life of Eusebius.* See Eusebius, Pamphilus. *Ecclesiastical History.* (4704).....348.7
- PARKES, Edmund A. . . . *A Manual of Practical Hygiene,* intended especially for medical officers of the army, and for civil medical officers of health. Fourth Edition \* \* \* London: J. & A. Churchill . . . 1873. 8°, pp. xxiv. +672+5 plates. (5491).....462.17
- PARKHURST, Charles H. *Analysis of the Latin verb, illustrated by the forms of the Sanskrit.* Boston: Ginn Brothers & Co. 1874. 8°, pp. 55. (5042) 258.8
- PARROT, Friedrich. . . . *Journey to Ararat.* With map and wood cuts. Translated by W. D. Cooley. New York: Harper & Brothers, . . . 1846. 12°, pp. 389. [Harper's Miscellany, VIII.] (5317).....375.8  
For Scientific papers, see p. 307.
- PARRY, Edward St. John. . . . [Commentary.] See Terentius. *Comœdiae Sex.* (5140).....473.6



- PARRY, *Sir* William Edward. . . . Three voyages for the discovery of a North West passage from the Atlantic to the Pacific, and narrative of an attempt to reach the North Pole. . . . Harper & Bros. 2v. 12°, pp. 321+portrait of Parry; 328+frontispiece, (Hutbuilding.) (H. F. L. No. 107-8.) (4910)..... 388.14
- PARTON, James. The life of Horace Greeley, editor of "The New York Tribune," from his birth to the present time. Boston: James R. Osgood & Co. . . . 1872. 12°, pp. xi+548+portrait+7 plates+facsimile. (5067).....383.5
- PARTON, James. Life of Thomas Jefferson, third President of the United States. Boston: James R. Osgood & Co. . . . 1874. 8° pp. vi+764+heliotype portrait. (5069).....382.5
- PARTON, James. [Editor.] See Washington, G. Words of. (5468) 238.16
- PATTEN, *Lieut. Col.* George. . . . [Illustrations.] See Cooke. P. St. Geo. Cavalry tactics. (4600).....238.14
- PATTERSON, Robert. . . . A narrative of the campaign in the valley of the Shenandoah in 1861. Third thousand. Philadelphia: John Campbell. 1865. 8°, pp. 128+maps+portraits+appendix of 194 pp. (Letters and editorials.) (5077) Presented by author.....157.15
- PAUL, Benjamin H. [Translator.] See Bishop G. Elements of Chemical and Physical Geology. (5384).....494.1
- PAUL, Benjamin H. on Beer; Iron, metallurgy of. See Watts, H. Dictionary of Chemistry. I. supplement.
- PAUL, James Laughery. . . . Pennsylvania's soldiers' orphan schools, giving a brief account of the origin of the late civil war, the rise and progress of the orphan system, and legislative enactments relating thereto; with brief sketches and engravings of the several institutions, with names of pupils subjoined. \* \* \* Illustrated by Frederick Faas. Third edition. Harrisburg: Lane S. Hart. . . . 1877. 16°, pp. xv+520+frontispiece+12 portraits+20 illustrations. (5361).....384.7
- PAULDING, James Kirke. A life of Washington. \* \* \* New York: . . . Harper & Bros. . . . 1835. 2v., 12° xii+267; 243+2 engravings. (H. F. L. Nos. 75, 76.) (4891).....387.23
- PAULDING, James Kirke. [Joint Author.] See Irving, Washington. *Salmagundi*. (4694).....208.16
- PAYEN, A. . . . Précis de Chime Industrielle a l'usage. 1. Des écoles d'arts et manufactures et d'arts et métiers. 2. Des écoles préparatoires aux professions industrielles. 3. Des fabricants et des agriculteurs. Sixième édition revue et mise au courant des dernières découvertes scientifiques par Camille Vincent. . . . Paris: Hachette et Cie. . . . 1877. Vol. I. 8° pp. 855+17 plates. (5099).....462.12
- PEABODY, Oliver William Brown. Life of Israel Putnam. 12° pp. 116+portrait. See Sparks, J., *Lib. of Am. Biog.* Vol. VII., at p. 103. (4814) ...385.1
- Life of John Sullivan. 16°. pp. 177. See Sparks, J., *Lib. of Am. Biog.*, second series, Vol. 3. (4810).....384.1
- Life of Alexander Wilson. 12°, pp. 169+facsimile. See Sparks, J., *Lib. of Am. Biog.*, Vol. 2, at p. 1. (4814).....385.1
- Life of Cotton Mather. 12°, pp. 199. See Sparks, J., *Lib. of Am. Biog.*, Vol. 6, at p. 161. (4814).....385.1

- Life of David Brainerd. 12°, pp. 116+facsimile. See Sparks, J. Lib. of Am. Biog., Vol. 8, at p. 257. (4814).....385.1
- PEABODY, William Brown Oliver. Life of James Oglethorpe. See Sparks, J., Lib. of Am. Biog., Second Series, Vol. 2, at p. 201. (4810).....384.1
- PECK, William G. . . . Practical treatise on the Differential and Integral Calculus, with some of its applications to Mechanics and Astronomy. A. S. Barnes & Co. New York and Chicago. 1875. 12°, pp. 208. (4544) 248.1
- PECKHAM, Stephen Farnham . . . Elementary Chemistry: a text-book for beginners, designed as an introduction to Barker's Chemistry. Louisville, Ky: John P. Morton & Co. . . . 1877. 12°, pp. 254+frontispiece. (5281).....466.1
- PENN, John Granville. [Address on presentation to the Historical Society of Pennsylvania, of the belt of Wampum delivered by the Indians to William Penn, at the great treaty under the elm tree in 1682. . . . ] 8°, pp. 14+colored plate of belt. See Historical Society of Pennsylvania, Memoirs of, Vol. VI., at p. 215. (5203).....391.10
- PENN, William. Letters to the Indians. Plan for the union of the English colonies, and plan for the confederation of the states of Europe. 8°, 31 pp. See Historical Society of Pennsylvania, Memoirs of, Vol. VI. at p. 251. (5203).....391.10
- PENNINGTON, G. J. . . . An essay on the pronunciation of the Greek language. London: John Murray. . . . 1844. r8°, pp. iv.+310. (4627).....147.20
- PENNSYLVANIA Archives, 12v. 12°. (5159) See Hazard, S.
- PENNSYLVANIA, State of. Minutes of the Provincial Council of, from the organization to the termination of the Proprietary Government. Published by the State. Containing the proceedings of Council from March 10, 1683, to November 27, 1700. Philadelphia: . . . Jo. Severns & Co., 1852. 16v. 12°. (5158).....Doc. Room.
- Contents: Vol. I. 1683-1700, pp. 624; Vol. II. 1700-1717, pp. 631; Vol. III. 1717-1735, pp. 620; Vol. IV. 1735-1745; pp. xiii. & 783; Vol. V. 1745-1754, pp. xv. & 777; Vol. VI. 1754-1756, pp. xv. & 784; Vol. VII. 1756-1758, pp. xvi. & 783; Vol. VIII. 1757-1762, pp. xv. & 781; Vol. IX. 1762-1771, pp. xi. & 782; Vol. X. 1771-1776, pp. xii. & 784; Vol. XI. 1776-1779, pp. xv. & 784; Vol. XII. 1779-1781, pp. xiii. & 784; Vol. XIII. 1781-1783, pp. xii. & 778; Vol. XIV. 1784-1786, pp. ix. & 672; Vol. XV. 1786-1789, pp. xiv. & 660; Vol. XVI. 1789-1790, pp. xi. & 548.
- PEPPER, John Henry. . . . The Play-book of Metals: including personal narratives of visits to coal, lead, copper and tin mines: with a large number of interesting experiments relating to alchemy and the chemistry of the fifty metallic elements. Illustrated with nearly 300 engravings. London: Routledge, Warne & Routledge . . . 1861 . . . 8°, pp. viii.+504+frontispiece. (5298).....466.2
- PEPYS, Samuel . . . Memoirs of . . . comprising his diary, from 1659 to 1669, and a selection from his private correspondence. Edited by Richard Lord Braybrooke. London: Frederick Warne & Co. n. d. [Pref. May 14, 1825.] 16°, pp. xvi.+815. [Frontispiece, Chandos Library.] (4989).....248.26
- PEREIRA, Jonathan . . . The Elements of Materia Medica and Therapeutics. Fourth Edition, enlarged and improved, including notices of most of the medicinal substances in use in the civilized world, and forming an Encyclopædia of Materia Medica. . . . London: Longmans, Brown, Green & Longmans . . . 1854. 3v. 8°, pp. xxii.+995; xxii.+702+1 plate; xxii.+880+1 plate. (5307).....464.6

- PERKINS, Charles Callahan. [Editor, with notes.] *See* Eastlake, Charles Locke. Hints on Household Taste. (5229).....394.3
- PERKINS, Frederick B. . . . [Professorship of Books and Reading. 10 pp. 8°; Young Men's Mercantile Libraries, 8 pp. How to make town libraries successful, 22 pp.; Book Indexes, 6 pp.] *See* United States. Bureau of Education, public libraries in the, Vol. I. p. 230, p. 378, p. 419, & Vol. II. p. 727. (5074).....L. R.
- PERRY, Arthur Latham, . . . An introduction to Political Economy. \* \* \* New York: Scribner, Armstrong & Co. 1877. 12°, pp. 348. (5054)383.7
- PETER of Blois. Continuation of Ingulph's History of Croyland, 16°, pp. 320. *See* Ingulph's Chronicle of, etc., at p. 224. (5123).....376.10
- PFEIFFER, Friedrich. *See* Hahn, K. A. *Mittelhochdeutsche Grammatik.* (4671)  
178.19
- PHILLIPS, John Arthur. . . . Gold-mining and assaying: a scientific guide for Australian emigrants. Second edition. \* \* \* London: John J. Griffin & Co. 1853. 8°, pp. xiv+159+16. (4712)
- PHILLIPS, William. . . . An elementary treatise on mineralogy; comprising an introduction to the science. Fifth edition, from the fourth London edition, by Robert Allan, containing the latest discoveries in American and foreign mineralogy; with numerous additions to the introduction by Francis Alger, . . . Boston: William D. Ticknor & Co. 1844. 8°, pp. cl+662. (4797)  
462.9
- PICKERING, Charles. . . . The Gliddon mummy-case in the Museum of the Smithsonian Institution. 4°, 6 pp.+1 plate. *See* Smithsonian Institution, Contributions to Knowledge. Vol. XVI. (1870) Art 5. (5496)....441.1
- PIERCE, Charles Henry. [Translator.] *See* Stockhardt, J. A. Principles of Chemistry. (4716)
- PIRON, Alexis. [La Métromaine, pp. 100. (Mémorial)] *See* Chefs-d'Oeuvres des Auteurs Comiques. 8v., 12°. Vol. V. (5090).....118.13
- PLATO. The apology of . . . with a revised text and English notes, and a digest of Platonic idioms, by the Rev. James Riddell. . . . Oxford: . . . Clarendon Press. 1867. 8°, pp. 244. (5014).....227.16
- PLATO. Apology of Socrates, Crito and Phædo, from the text of Bekker; with the Latin version of Ficinus; and notes by Charles Stuart Stanford. . . . Dublin: . . . William Curry, Jun. & Co; . . . 1834. 8°, pp. xxxiv+306+lxxvii. (5133).....473.9
- PLATO. Apology of Socrates and Crito, with notes critical and exegetical, introductory notices and a logical analysis of the apology by W. Wagner. . . . Second edition, revised and corrected. Cambridge: Deighton, Bell & Co. . . . 1876. 8° pp. viii+119. (4626).....258.36
- PLATO. The apology of Socrates, the Crito, and the Phædo. Three dialogues of Plato from the Text of C. F. Hermann, edited with English Notes, critical and explanatory, by the Rev. James Davies. \* \* \* London: Lockwood & Co. . . . 1875. 12°, pp. iv+259. (4629).....258.31
- PLATO. The dialogues of—translated into English with analysis and introductions by B. Jewett. . . . New York: Scribner, Armstrong & Co. . . . 1874. 4v. 8°. (4571).....268.27

- Vol. I., pp. xi + 681. Charnides, Lysis, Laches, Protagorus Euthydemus, Ion, Meno, Euthyphoro, Apology, Crito, Phædo, Symposium, Phædrus, Cratylus.
- Vol. II., pp. 607. The Republic, Timæus, Critias.
- Vol. III., pp. 599. Gorgias, Philebus, Parmenides, Theatetus, Sophist, Statesman.
- Vol. IV., pp. 618. Laws, Appendix, embracing Lesser Hippias, First Alcibiades, and Menexenus. Index.
- PLATO. Phædo, with notes critical and exegetical, and an analysis, by Wilhelm Wagner . . . Cambridge: Deighton, Bell & Co. . . . 1870. 12°, pp. vii+198 (5130) (Contain) ["Mr. Bywater's accurate collection of the Bodleian MS."] See p. 179. . . . 259.28
- PLAUTUS, Titus Maccus. Captivi, Trinummus, et Rudens. With English notes, critical and explanatory, by C. S. Harrington. . . . \*\*\* New York: Harper & Bros. . . . 1875. 12°, pp. 278. (5143) [Short life of author, at p. iii.] . . . 258.29
- PLAYFAIR, Lyon, . . . [Editor from MS.] See Liebig, Justus. Chemistry in its application to agriculture and physiology. (5290) . . . Chem. Lab.
- PLUTARCH. See Skeat, W. W. Shakespeare's Plutarch. (4987) . . . 148.1
- PLYMPTON, Geo. W. The Blowpipe; a guide to its use in the determination of salts and minerals. . . . New York: D. Van Nostrand . . . 1874. 12°, pp. 167. (5150) . . . 382.13
- POINSINET, Antoine Alexandre Henri. [Le Cercle ou la Soirée a la mode. pp. 40. (Mém.oir.)] See Chefs-d'Oeuvres des Auteurs Comiques, 8v. 12°, Vol. VI. (5090) . . . 118.13
- POITEVIN, Prosper. Petits Poetes Français depuis Malherbe jusqu'à nos jours avec les notices biographiques et littéraires sur chacun d'eux. . . . \* \* \* Paris. Didot Frères, Fils et Cie . . . 1870. 2v. 8°, pp. 678+1; 760. (5085) . . . 478.6
- POLLARD, Edward A: . . . The Lost Cause; a new Southern History of the War of the Confederates. . . . New and enlarged edition, with numerous steel portraits. . . . New York: E. B. Treat & Co. . . . 1867. 8°, pp. xxx,+762+5 plates, portraits+map. (5244) . . . 391.3
- POLLOCK, Sir Frederick . . . [Editor.] See Macready, W. C. Reminiscences. (5066) . . . 383.8
- POLO, Marco. The Travels of, greatly amended and enlarged from valuable early manuscripts recently published by the French Society of Geography, and in Italy by Count Baldelli Boni. With copious notes, illustrating the routes and observations of the author, and comparing them with those of more recent travellers. By Hugh Murray . . . Two maps and a vignette. New York: Harper & Brothers . . . 1845. 12°, pp. 326. (H. F. L. No. 173.) (4955) . . . 38X.3
- POLYCARP, Saint. Genuine Epistles of. [Translated.] 8°, pp. 9. See Wake, William, The Genuine Epistles of the Apostolical Fathers, at p. 131. (4799) 371.11
- POOLE, William, Frederic . . . [The Organization and Management of Public Libraries, 29 pp. 8°.] See UNITED STATES, Bureau of Education, Public Libraries in the, Vol. I., p. 476. (5074) . . . L. R.
- POPE, Alexander. [Translator.] See Homerus Odyssey. (5466) . . . 378.23

- POPE, Alexander. [Translator.] *See* Homer's Iliad. (5465).....378.22
- POPULAR Science Review. A quarterly miscellany of entertaining and instructive articles on scientific subjects. Edited by James Samuelson, [Vol. 1 & 2.] and Henry Lawson, [Vols. 3 & 14.] . . . London: Robert Hardwick, 1862—1875. 24v. 8°, pp. 500—700 ea. 1128 plates. (5306).....468.1
- PORT ROYAL, *Messieurs de*. A new method of learning with facility the Latin Tongue. . . . With a treatise on Latin poetry. Translated, and improved. From the French of the Messieurs de Port Royal; by T. Nugent. . . . A new edition, carefully revised and corrected. To which are added, an index of words and a table of matters. . . . London: . . . F. Wingrave & J. Collingwood. . . . 1816. 2v. 8° pp. lv+328; 407[+54] (5135) 473.1
- PORTER, Charles T. A treatise on the Richards' steam engine indicator, (manufactured by Elliott Bros., London,) and the development and application of force in the steam engine. Third edition, revised and enlarged. New York: D. Van Nostrand. 8°, pp. 258. (5038).....227.10
- PORTER, John Addison . . . Principles of Chemistry; its application to agriculture and the arts, with three hundred and thirty illustrations exhibiting . . . experiments. . . . Twentieth edition, improved. New York: . . . A. S. Barnes & Co. . . . 1869. 12°, pp. x.+699. (5418).....466.17
- PORTER, Noah . . . Books and Reading; or what books shall I read, and how shall I read them? Fourth Edition, with an index. \* \* \* New York: Scribner, Armstrong & Co. 1876. 16°, pp. viii,+394. (4988)....148.3
- PORTER, Noah. . . . [An Appendix on English and American Philosophy.] *See* Ueberweg, Friedrich. History of Philosophy, Vol. II. (4572)348.2
- PORTER, Noah. . . . [Additions.] *See* Ueberweg, Friedrich. History of Philosophy. (4572).....348.2
- PORTER, Noah. [General Introduction.] *See* Half Hours with Modern Scientists. First Series. (5017).....148.6
- PORTER, Noah . . . [Revision, &c.] *See* Webster, Noah, Dictionary of English Language. (5233)..... R. R.
- POTTER, Alonzo . . . Hand-book for readers and students, intended as a help to individuals, associations, school districts and seminaries of learning, in the selection of works for reading, investigation, or professional study. \* \* \* Fourth Edition. New York: Harper & Brothers. . . . 1847. 12°, pp. 330. (H. F. L. No. 165.) (4948).....389.27
- POTTER, Alonzo . . . Political Economy: its objects, uses and principles, considered with reference to the condition of the American people. With a summary for the use of students. New York: Harper & Brothers. . . . [n. d. cop. 1841.] 12°, pp. 318. (H. F. L. No. 183.) (4962).....38X.10  
 "Second part is substantially a reprint of the first ten chapters of Scrope's Political Economy . . . published in England in 1833 . . ." The remaining parts by Potter, A.
- POTTER, Alonzo. The Pleasures and Advantages of Literature and Moral Science. 10 pp. 12°. *See* Brougham, H. [and others.] Discourses on . . . Science and Literature. (4959).....38X.7
- POTTER, Alonzo. [Introductory essay on Bacon and Locke.] *See* Bacon, F. Essays. . . . (H. F. L.) (4953).....38X.1

- POTTER, Alonzo. Preliminary Observations on Reading. 23 pp. 12°. See Brougham, H. [and others.] Discourses on . . . Science and Literature. (H. F. L. No. 179.) at p. ix. (4959). . . . . 38X.7
- POTTER, Alonzo. [Introduction. 7 pp. 12°.] See Michelet, Jules. Modern History. (4952). . . . . 389.31
- POTTER, Alonzo . . . [Editor.] See Maury, J. S. *Abbe*. The Principles of Eloquence. (4963). . . . . 38X.11
- POTTER, Alonzo. [Preliminary Observations and notes.] See Paley, Wm. Natural Theology. (H. F. L.) (4902). . . . . 388.5
- POTTER, Alonzo. Introduction. xx. pp. 12°.] See Lieber, F. Essays on Property and Labour. (4935). . . . . 389.14
- PRACTICAL TREATISE ON Dyeing and Calico-Printing . . . with an appendix, comprising directions of chemical terms, with tables of weights, measures, thermometers, hydrometers, &c., by an experienced dyer, assisted by several scientific gentlemen, with engravings on steel and wood. New York: Harper & Brothers, . . . 1846. 8°, pp. xi + 704. (4763). . . 372.5
- PRANDI, Fortunato. [Translator.] Memoirs of Father Ripa during thirteen years' residence at the court of Peking . . . with an account of the foundation of the college for . . . young Chinese at Naples. Selected and translated from the Italian by—New York: Wiley & Putnam, . . . 1846. 12°, pp. 174. *Bound with Hugo V. The Rhine*. (4752b). . . . . 383.19  
 "As interesting a work as any that has appeared."—*London Spectator*.
- PREECE, W. H. . . . and Sivewright, J. . . . Telegraphy. D. Appleton & Co., New York. 1876. sm16°, pp. x. + 300. (5003). . . . . 148.26
- PRESCOTT, Albert B. . . . Chemical Examination of Alcoholic Liquors. A Manual of the constituents of the distilled spirits and fermented liquors of commerce, and their qualitative and quantitative determination. New York: D. Van Nostrand, . . . 1875. 12°, pp. 108. (5023). . . . . 148.9
- PRESCOTT, Albert B. . . . Outlines of proximate organic analysis. For the identification, separation, and quantitative determination, of the more commonly occurring organic compounds. New York: D. Van Nostrand. . . . 1875. 12°, pp. 192. (5022). . . . . 148.10
- PRESCOTT, George B. Electricity and the electric telegraph, with illustrations. . . . New York: D. Appleton & Co. 1877. 8°, pp. 978 + frontispiece. (5462). . . . . 465.12
- PRESCOTT, George B. History, Theory and practice of the electric telegraph. Sixth edition, revised and enlarged. Boston: James R. Osgood & Co. . . . 1875. 12°, pp. xiii + 508 + frontispiece. (5470). . . . . 466.23
- PRESCOTT, William Hickling. Life of Charles Brockden Brown, 12° pp. 64 + facsimile. See Sparks, J., Lib. of Am. Biog. Vol. I., at p. 117. (4814) 385.1
- PRICE, Bonamy. . . . Currency and Banking. New York: D. Appleton & Co. . . . 1876. 12°; pp. 176. (5231). . . . . 383.9
- PRIME, Samuel Irenæus. The Bible in the Levant; or the life and letters of the Rev. C. N. Righter, agent of the American Bible Society in the Levant. New York: Sheldon & Co. . . . 1859. 12° pp. 336 + portrait of Righter. (5289). . . . . 384.15

- PRIME, Temple. Monograph of American Corbiculidae. . . . 92 pp. 8°. See Smithsonian Institution, Miscellaneous Collections, Vol. VII. (1871) Art. 5. (5506). . . . .443.1
- PRIME, Temple. [Joint author.] See Lea, J. and others. Check list of the shells of N. A.
- PROCEEDINGS of the trustees of the Peabody Education Fund from their original organization on the 8th of February, 1867. Printed by order of the trustees. . . . Boston: John Wilson & Son. 1875. 8°, pp. viii.+442+portrait of Peabody. (4837). . . . .381.14
- PROCTOR, Richard A. . . . A star atlas for the library, the school, and the observatory. Showing 6,000 stars and 1,500 objects of interest, in 12 circular maps, on the equidistant projection; with two colored index plates, in their proper relative positions, including all the stars to the fifth magnitude, and the constellation figures. With a letter-press introduction. Third edition. \* \* \* London: Longmans, Green & Co. 1874. f. pp. 15+14 maps. (5201). . . . .Cabinet B.
- PROCTOR, Richard A. . . . Half hours with the stars: A plain and easy guide to the knowledge of the constellations, showing, in 12 maps, the position of the principal star groups night after night throughout the year, with introduction and a separate explanation of each map. True for every year. Eighth edition. \* \* \* London: Hardwicke & Bogue. . . . 1877. 4°, pp. 22+12 maps. (5104). . . . .391.6
- PROCTOR, Richard A. . . . Recent solar researches. 6 pp. 16°. See Half-hour researches on popular science, at p. 16. (5026). . . . .148.17
- PROCTOR, Richard A. . . . Strange discoveries respecting the Aurora. 16° pp. 15. See Half-hour researches in popular science, at p. 1. (5026) 148.17
- PRYDE James. . . . Treatise on practical mathematics, \* \* \* William and Robert Chambers. London and Edinburgh. n. d. 16° pp. xii+531. [Chamber's educational course.] (4537). . . . .228.16
- PUBLICATIONS of learned societies, and periodicals in the library of the Smithsonian Institution. Part I. and part II. See Smithsonian Institution, Contributions to Knowledge, Vols. VII. and VIII., appendix. (5487-8.) 441.1
- PUBLIC LIBRARIES of ten principal cities by several contributors. See UNITED STATES, Bureau of education. Public libraries in the. Vol. II., p. 837. (5074). . . . .L. R.
- PUMPELLY, Raphael. Geological researches in China, Mongolia, and Japan, during the years 1862 to 1865. 4°, pp. 170+9 plates+18 wood cuts. See Smithsonian Institution, Contributions to Knowledge. Vol. XV. (1867) Art. 4. (5495). . . . .441.1
- PURSUIT of knowledge under difficulties; its pleasures and rewards, illustrated by memoirs of eminent men. . . . New York: Harper & Brothers, . . . 1847. 2v. 12° pp. 287; 275. (H. F. L. Nos. 94, 95.) (4901) 388.4
- PUTNAM, G. P. & Co. (Publisher.) Putnam's monthly magazine of American literature, science, and art. . . . New York: 1853-1857. 10v. 8°. [Illustrated.] (5234). . . . .\*

- PUTNAM, G. P. & Sons. (Publishers.) Putnam's magazine. Original papers on literature, science, art, and national interests. New series. . . . New York. 1868-70. 6v. 8°. [Illustrated.] (5235).....\*
- Supplement to Vol. VI. contains, *Eirene*; or, *A woman's right*, by Mary Clemmer Ames. 219 pages, 8°.
- PUTTENHAM, George. *The arte of English poesie*. [June?] 1589. Carefully edited by Edward Arber. . . . London: . . . 10th April, 1869. . . . 16° pp. 320. ["English reprints."] (5106).....384.6
- PYNCHON, Thomas Ruggles. . . . Introduction to chemical physics, designed for the use of academies, high schools, and colleges. Illustrated with numerous engravings, and containing copious lists of experiments, with directions for preparing them. Second revised and enlarged edition. New York: D. Van Nostrand. . . . 1874. 12° pp. xxv+550. (5027) 148.12
- QUINCY, Josiah P. . . . [Free Libraries, 14 pp., 8°.] See UNITED STATES Bureau of Education. *Public libraries in the—*Vol. I., p. 389. (5074) L. R.
- RAFINESQUE, Constantine Smaltz. *The complete writings of, on recent and fossil conchology*. Edited by G. Binney and George W. Tryon, Jr. . . . New York: Bailliere Brothers . . . 1864. 8°, pp. 96+7 (index)+3 plates. (5428) 463.5
- RAMSAY, George G. [Editor.] See Ramsay, William, *The Mostellaria of Plautus*. (5220).....473.8
- RAMSAY, J. G. M. . . . *The Annals of Tennessee, to the end of the eighteenth century*: . . . Charleston: John Russell, . . . 1853. 8°, pp. xvi.+744 +map. (4781).....371.15
- RAMSAY, William . . . *The Mostellaria of Plautus, with notes critical and explanatory. Prolegomena and Excursus*. Edited by George G. Ramsay, London: Macmillan & Co. 1869. 8°, pp. cxvi.+295. (5220).....473.8
- RANKINE, William John Macquorn. . . . *A Manual of Applied Mechanics. With numerous diagrams. Eighth Edition, thoroughly revised, by Edward Fisher Bamber, C. E.* London: Charles Griffin & Co. . . . 1876. . . . 16°, pp. xvi.+652+36. (4635).....248.4
- RANKINE, William John Macquorn. . . . *A Manual of Machinery and Mill-work. With numerous diagrams. Second Edition, thoroughly revised, by Edward Fisher Bamber, C. E.* London: Charles Griffin & Co. . . . 1873. 16°, pp. xvi.+588+4. (4623).....248.3
- RANKINE, William John Macquorn. . . . *A Manual of the Steam Engine and other prime movers. With numerous engravings and a diagram of the mechanical properties of steam. Eighth Edition, revised by Edward Fisher Bamber, C. E.* London: Charles Griffin & Co. . . . 1876. 16°, pp. xxxii.+578+36. (4619).....248.2
- RANKINE, William John Macquorn. *A Mechanical Text-Book; or, introduction to the study of Mechanics. . . . and by Edward Fisher Bamber. . . . With numerous diagrams. Second Edition, revised.* London: Charles Griffin & Co. . . . 1875. 16°, pp. xii.+312. (5093).....383.26
- RAUMER, Rudolf von. *Geschichte der Germanischen Philologie vorzugsweise in Deutschland*. . . . \* \* \* Muenchen: 1870. R. Oldenbourg. 8°, pp. xi.+743. (4665).....178.13



- RAWLINSON, George.** . . . A Manual of Ancient History, from the earliest times to the fall of the Western Empire. \* \* \* New York: Harper & Brothers, . . . 1875. 12°, pp. 633. (5056).....383.11
- The same. 1875. (5057).....383.12
- REED, Henry.** Life of Joseph Reed . . . 16°, pp. 231+portrait. See Sparks, J., Lib. Am. Biog., Second Series, Vol. 8, at p. 209. (4810).....384.1
- REED, William Bradford.** The Acadian Exiles, or French Neutrals in Pennsylvania. To which is appended a relation of their misfortunes, by John Baptiste Galerm. 8°, pp. 34. See Historical Society of Pennsylvania, Memoirs of, Vol. VI. at p. 283. (5203).....391.10
- REEVE, Henry.** [Editor.] See Greville, C. C. F. The Greville Memoirs. 3v. 8°. (5308).....395.3
- REGAMEY.** [Chromolithographs.] See Lacroix Paul, Vie militaire et religieuse.
- REGNAULT, [Victor.]** On the latent heat of steam at different pressures. 57 pp. 8°. See Graham, Thomas. Chemical Reports and Memoirs, p. 240. (5436) 493.3
- REID, Thomas** . . . Essays on the intellectual powers of man. Abridged. With notes and illustrations from Sir William Hamilton and others. Edited by James Walker, . . . Fifth Edition. Boston: Phillips, Sampson & Co. 1854. 12°, pp. xv.+492. (5165).....382.14
- REIMANN, M.** . . . On Aniline and its derivatives. A treatise upon the manufacture of aniline and aniline colours. To which is added in an appendix, the report of the coloring matters derived from coal tar, shown at the French Exhibition, 1867. By Dr. A. W. Hofmann, . . . [and others] The whole revised and edited by William Crookes . . . New York: John Wiley & Son 1868. 8°, pp. xiii.+164. (5426).....462.20
- REINHARD, Hermann** . . . Album des classischen Alterthums zur Anschauung für die Jugend, besonders zum Gebrauch in Gelehrtschulen. Eine Gallerie von LXXII Tafeln in Farbendruck nach der Natur und nach antiken Vorbildern mit beschreibendem Text. . . . Stuttgart . . . Carl Hoffmann. 1870. Atlas 4°. (5202).....Cabinet A\*\*
- RENNELL, James** . . . Illustrations (chiefly geographical,) of the history of the expedition of Cyrus, from Sardis to Babylonia; and the retreat of the ten thousand Greeks from thence to Trebisonde and Lydia. With an appendix, containing an inquiry into the best method of improving the geography of the Anabasis, &c. Explained by three maps. \* \* \* London . . . G. and W. Nicol, . . . 1816. 4°, pp. xxx.+347+3 maps. (5200) 471.1
- RENNIE, James Rev.** Natural History of Quadrupeds, illustrated with numerous engravings. New York: Harper & Brothers . . . 1847. 12°, pp. 324. (H. F. L. No. 104.) (4908).....388.11
- RENNIE, James, Rev.** Natural History of Birds. Their architecture, habits, and faculties. With numerous engravings. New York: Harper & Brothers. . . . 1845. 12°, pp. 308. (H. F. L. No. 98.) (4903).....388.6
- RENWICK, Henry B.** Life of John Jay . . . edited by James Renwick . . . New York: Harper & Brothers . . . 1845. 12°, pp. 143. (H. F. L. No. 129) (4922) .....389.1
- A condensation of the "large and interesting memoir," by Hon. Wm. Jay.

- RENWICK, James. Life of Alexander Hamilton. 199 pp. 12°. [Bound with Life of John Jay, by Renwick, H. B.] (4922) (H. F. L. No. 129.) . . . . . 389.1  
 Memoir by John C. Hamilton, "freely used in the compilation of the present sketch."
- RENWICK, James. Life of Benjamin Thompson, Count of Rumford. 16°, pp. 216 + portrait. See Sparks, J., Lib. of Am. Biog., Second Series, Vol. 5, p. 1. (4810) . . . . . 384.1
- RENWICK, James. Life of David Rittenhouse. 12°, pp. 103 + facsimile. See Sparks, J., Lib. of Am. Biog., Vol. 7, at p. 294. (4814) . . . . . 385.1
- RENWICK, James. . . . Life of Dewitt Clinton . . . . New York: Harper & Brothers . . . . 12°, pp. 334 + portrait of Clinton. (H. F. L. No. 125.) (4918) . . . . . 388.22
- RENWICK, James. [Editor.] See Renwick, H. B. Life of John Jay. (H. F. L.) (4922) . . . . . 389.1
- RENWICK, James. Life of Robert Fulton, 12°, pp. 90. See Sparks, J. Lib. of Am. Biog. Vol. X., at p. 1. (4814) . . . . . 385.1
- RENWICK, James. . . . [Reviser.] See Mosely, Henry. . . . Illustrations of Mechanics. (4960) . . . . . 38X.8
- RHIND, William. . . . [Cholera in—] See Historical and descriptive account of British India, at p. 273. (4873) . . . . . 387.5
- RICE, John Holt. [Sermon on the Glory of the Gospel.] See Murray-st. Church, New York. Discourses. . . . (4546) . . . . . 157.6
- RICHARD, of Cirencester. On the ancient state of Britain. 12°, pp. 55. See Giles, J. A. [Editor.] Six old English Chronicles, at p. 417. (5117) . . . . . 376.9
- RICHARDSON, Dr. The phenomena of sleep. 10 pp. 16°. See Half Hour Recreations in Popular Science, at p. 392. (5026) . . . . . 148.17
- RICHARDSON, Dr. Theory of nervous ether. 2 pp. 16°. See Half Hour Recreations, in Popular Science, at p. 362. (5026) . . . . . 148.17
- RICHARDSON, G. F. Geology for beginners. Third edition, enlarged. London: Henry G. Bohn. 1846. Frontispiece. 12° pp. xx + 24. (4975) 382.6
- RICHARDSON, Samuel. Clarissa [Harlowe.] or the History of a Young Lady. Condensed by C. H. Jones. \* \* \* New York. Henry Holt & Co. [Leisure Hour Series.] 1874. 12° pp. 515. (5463) . . . . . 38X.19
- RICHARDSON, Thomas. [Joint author and editor.] See Ronalds, E. [and others.] Chemical Technology; 3v. in 6. 8°. . . . (5385) . . . . . 157.9
- RICHTER, Jean Paul Friedrich. Ausgewählte Werke. Zweite Ausgabe. Berlin. . . . G. Reimer, 1865. 16v. in 8. sq. 16°. (4641) . . . . . 189.3
- Contents :—Vol. I. die Unsichtbare Loge, pp. 31. Mumien, pp. 217.  
 Vol. II. Mumien, continued.  
 Vols. III, IV, V, and VI. Hesperus.  
 Vols. VII and VIII. Blumen-, Fruecht-, und Dornenstuecke.  
 Vols. IX and X, Titan.  
 Vol. XI. Konischer Anhang zum Titan. Des Luft-schiffers Gianozzo Seebuch. Das heimliche Klaglied.  
 Vol. XII. Quintus Fixlein.  
 Vols. XIII and XIV. Flegeljahre.  
 Vol. XV. Dr. Katzenberger's Badgeschichte.  
 Vol. XVI. Aus Jean Paul's Lebend, *Inhalts-Verzeichniss*, at p. 281.

- RICKETTS, Pierre *de* Peyster. Notes on assaying and assay schemes; \* \* \*  
New York: The Art Printing establishment. 1876. 8°, pp. 172. (5024)  
381.9
- RIDDELL, James. . . . [Editor, with revised text, English notes, and a digest  
of Platonic idioms.] See Plato. Apology of. (5014).....227.16
- RIGGS, Stephen Return. . . . Grammar and dictionary of the Dakota language.  
Collected by the members of the Dakota Mission. Edited by— 4°, pp. 64  
+338. See Smithsonian Institution, Contributions to Knowledge, Vol. IV.  
(1852) (5484).....441.1
- RIGHTER, Chester Newell. [Journal and Letters.] 12°, pp. 336. See Prime,  
Samuel Irenæus. The Bible in the Levant; or the life and letters of Rev.  
C. N. Righter. (5289).....384.15
- RILEY, H. T. [Translator.] See Ingulph's chronicle of the Abbey of Croyland.  
(5123).....376.10
- RILEY, H. T. [Translator.] See Roger de Hoveden. Annals of. 2v. 12°. (5116)  
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- RIPA, *Father*. History of the Chinese Collège. See Prandi, F. [Selection and  
translation.] (4752b).....383.19
- RISK, T. F. [Joint editor and proprietor, 1st 6v.] See Traver, M. Western  
Journal. . . . 15v. 8°. (5238).....393.1
- RITCHIE, James S. Wisconsin and its resources; with Lake Superior, its com-  
merce and navigation. Including a trip up the Mississippi, and a canoe  
voyage on the St. Croix and Brulé rivers to Lake Superior. To which are  
appended the constitution of the State, with the routes of the principal  
railroads, list of post offices, etc. With illustrations and authentic maps of  
Wisconsin and the region of Lake Superior. Third revised edition. Phila-  
delphia: Charles Desilver. . . . 1860. 12°, pp. 312. (5261). 374.20
- RIX, Joseph. [Editor.] See Armstrong, Jno. Morbid anatomy &c. (4786)  
371.18
- ROBERTSON, Frederick William. [Letters.] See Brooke, S. A. Life and letters  
of . . . Robertson. 2v. 12°. (5669).....377.11
- ROBERTSON, William. . . . Historical Works of. New York: Harper &  
Brothers . . . 1846-1848. 3v. 8°. [No general title page.] (5155) 392.2  
Contents:—Vol. I. History of America, with life of W. R. pp. xxvii&539&30 pp. of  
examination questions by John Frost.  
Vol. II. History of Charles V. pp. 510&31 pp. examination questions,  
Vol. III. History of Scotland, pp. 460&map, and an historical disquisition  
on India. pp. 146&map.  
“Dr. Robertson, the most elegant and picturesque narrator among modern histori-  
ans; industrious, sagacious and rational, though not often very profound or  
original!”—*Sir James Mackintosh*.
- ROBERTSON, William. . . . The history of the discovery and conquest of  
America. Abridged. With a memoir of the author, from that by Dugald  
Stewart . . . New York: Harper & Brothers . . . 1848. 12°, pp. xlviii  
+551. (H. F. L. No. 185.) (4964).....38X.12
- ROBERTSON, William. . . . The history of the Emperor Charles V., with a  
view of the progress of society in Europe, from the subversion of the Roman  
Empire to the beginning of the sixteenth century. Abridged edition. With  
questions for the examination of students. New York: Harper & Bros.  
. . . . 12°, pp. 615+[8 index.] (H. F. L. No. 186.) (4965)....38X.13

- ROBINSON, Edward. . . . Biblical researches in Palestine, Mount Sinai and Arabia Petræa. A journal of travels in the year 1838, by E. Robinson and E. Smith. Undertaken in reference to Biblical Geography. Drawn up from the original diaries, with historical illustrations. With new maps and plans in five sheets. Boston. . . . Crocker & Brewster. . . . 1841. 3v. 8°, pp. xxiii+571; xiv+679;xi+475+246. (4800).....**371.4**  
The first appendix, following p. 475 of vol. 3. contains Bibliography, memoir on maps and itinerary. The second appendix (at p. 89 first do.) contains an essay on pronunciation of Arabic by Eli Smith; lists of Arabic names of places by the same, and three indices.
- ROBINSON, E. [Editor.] *See* Bibles and Testaments. Novum Test. Græc. (4738).....**374.17**
- ROBINSON, Henry Crabb. . . . Diary, reminiscences and correspondence of, Selected and edited by Thomas Sadler, . . . Third Edition, with corrections and additions. London and New York: Macmillan & Co. 1872. . . . 2v. 12°. pp. xx.+415; viii.+449+portrait. (4985).....**276.13**
- ROBINSON, John: . . . The testimony and practice of the Presbyterian Church in reference to American Slavery: with an appendix, containing the position of the General Assembly (New School), Free Presbyterian Church, Reformed Presbyterian, Associate, Associate Reformed, Baptist, Protestant Episcopal, and Methodist Episcopal churches. Cincinnati: John D. Thorpe, . . . 1852. 8°, pp. 256. (4542).....**218.23**
- ROBINSON, J. R. . . . Explosions of steam boilers: how they are caused, and how they may be prevented. Boston: Little, Brown & Co. 1870. 8°, pp. 96. (5033).....**148.15**
- ROBINSON, Otis N. [College Library Administration. 21 pp. 8°; of indexing periodical and miscellaneous literature, 10 pp. . . . Titles of Books, 12 pp.] *See* UNITED STATES, Bureau of Education, Public Libraries in the; Vol. I. p. 505, and Vol. II. p. 663 and p. 715. (5074).....L. R.
- ROBINSON, William. . . . \* \* \* The parks, promenades and gardens of Paris, described, and considered in relation to the wants of our own cities and of public and private gardens. \* \* \* With upwards of four hundred illustrations. London: John Murray . . . 1869. 8°, pp. xxxii.+644+48 plates. (5221).....**514.6**
- ROBINSON, William. . . . [Editor and Reviser.] *See* Loudon, J. C. The Horticulturist. (4634).....**516.14**
- ROBSON, William. [Translator.] *See* Michaud. History of the Crusades. (5114).....**383.21**
- ROBY, Henry John. . . . A Grammar of the Latin Language, from Plautus to Suetonius. In two parts. [Second and third editions.] London: Macmillan & Co. 1875-6. 2v. 16. (4563).....**258.5**  
Contents: Part I. [Third Edition, 1876.] Book I., Sounds; Book II., Inflections; Book III., Word-formation; Appendices: pp. civ.&478.  
Part II, [Second Edition, 1875.] Book IV., Syntax; also Prepositions, &c. pp. cxi.&555.
- RODGERS, M. M. . . . Scientific Agriculture; or the Elements of Chemistry, Geology, Botany and Meteorology, applied to practical agriculture. Illustrated by numerous engravings and a copious glossary. \* \* \* Rochester: published by Erastus Darrow, . . . 1848. 12°, pp. vi.+279+frontispiece. (4824).....**516.18**

- ROHRIG, Ernst. [Joint Author.] See Crookes, William. Practical Treatise on Metallurgy, 3v. 8°. (3248) (5397).....**352.12**
- ROGER, *de Hoveden*, The Annals of. Comprising the History of England and of other countries of Europe, from A. D. 732 to A. D. 1201. Translated from the Latin, with notes and illustrations, by Henry T. Riley . . . London: H. G. Bohn. . . . 1853. 2v. 12°. (5116).....**376.8**  
Vol. I., A. D. 732 to A. D. 1180. Vol. II., A. D. 1181 to A. D. 1201.
- ROGER of *Wendover's* Flowers of History, comprising the History of England, from the descent of the Saxons, to A. D. 1235. Formerly ascribed to Matthew Paris. Translated from the Latin by J. A. Giles, . . . London: Henry G. Bohn. 1849. 2v. 12°, pp. 568, 614. [Chronological Table.] (5118).....**376.6**
- ROGERS, Henry Darwin. [Geology of the United States. 34 pp. 8°.] See Murray, Hugh, Encyclopaedia of Geography, at p. 373, Vol. 3. (4765)  
**372.2**
- ROGET, Peter Mark. . . . Outlines of Physiology: with an appendix on Phrenology. First American edition, revised, with numerous notes. Philadelphia: Lea & Blanchard, . . . 1839. 8°, pp. 516. (4971).....**464.13**
- ROLLESTON, George . . . Forms of Animal Life; being outlines of zoological classification based upon anatomical investigation, and illustrated by descriptions of specimens and of figures. Oxford, at the Clarendon press. 1870. . . . 8°, pp. clxviii.+268. (5061).....**227.21**
- RONALDS, Edmund, . . . Richardson, Thomas, . . . Watts, Henry, . . . Knapp, F. Chemical Technology; or Chemistry in its application to the arts and manufactures, with which is incorporated a revision of Dr. Knapp's "Technology." Illustrated . . . London: H. Bailliere. . . . Vol. I. (2d edition) 1855-1865; Vols. II. and III. (1st edition) 1848-51. 3v. in 6. (Vol. I. in 4 parts bound separately, parts 1 and 2 paged consecutively.) [Libr. of illus. standard sci. works.] (5385).....**157.9**  
Contents: Vol. I. Parts 1 and 2. Fuel and its applications, by Ronalds and Richardson, with Dr. Knapp's Technology "incorporated." pp. xvi. & 386 & 2 plates; 387-836 & 2 colored plates, & 1 plate. (Index to both parts at p. 833.) Parts 3 and 4, Acids, Alkalies and Salts, by Richardson & Watts. pp. xxvii. & 771; xxii. & 611 & 2 plates.  
Vol. II. Glass and Alum, Pottery and Porcelain, by Knapp; edited by Ronalds & Richardson. pp. vii. & 491 & 1 plate.  
Vol. III. Foods, by Knapp, Ronalds & Richardson. pp. x. & 458 & 7 colored plates & 1 plate.
- This work embodies contributions from many other persons, whose names are given in the prefaces.
- RONSARD, Pierre *de*. Choix de Poésies précédé de sa Vie et accompagné de Notes Explicatives par A. Noel . . . Paris . . . Firmin Didot Frères, Fils et Cie. 1862. 2v. 12°. (4700).....**118.4**
- ROOD, O. N. The mysteries of the Voice and Ear. 35 pp. 12°. See Half Hours with Modern Scientists. Second Series, at p. 287. (5018).....**148.7**
- ROSCHER, Wilhelm. Grundlagen der Nationalökonomie. Ein Hand- und Lesebuch für . . . Geschäftsmänner und Studierende. Zwölfte, vermehrte und verbesserte Auflage. Stuttgart. . . . J. G. Cotta. . . . 1875. 2v. 8°. pp. xii.+682; x.+650. (5194).....**178.22**

- ROSCOE, Henry E. [Joint Author.] *See* Schellen, [and others.] Spectrum analysis discoveries. (5026).....148.17
- ROSCOE, H. E. [Joint Author.] *See* Schellen, [and others.] Spectrum analysis explained. (5026).....148.17
- ROSCOE, H. E. Spectrum analysis. 20 pp. 12°. *See* Half Hours with Modern Scientists, Second Series, at p. 61. (5018).....148.7
- ROSCOE, H. E. . . . [Translator.] *See* Bunsen, Robert. Gasometry (1930).....311.7
- ROSCOE, H. E. . . . [On Light. Spectral Analysis.] *See* Watts, H. Dictionary of Chemistry; supplement, also second supplement. (4724)
- ROSCOE, Thomas. Life of M. J. C. L. Simonde de Sismondi. 14 pp. 8°. *See* Sismondi, J. C. L. S.d. Historical view of the literature of the south of Europe. 2v. 8°, at p. 7. (4974).....382.3
- ROSCOE, Thomas . . . [Translator.] *See* Cellini Benevenuto, Memoirs. New York: 1848. 2v. in 1. 12°. (4734).....383.18
- ROSCOE, Thomas. [Translator.] *See* Sismondi, J. C. L. S. d. Historical view of the literature of the south of Europe. 2v. 8°. (4974).....382.3
- ROSE, Henri. *Traité complet de Chimie Analytique*. . . . Edition Française originale . . . Paris: . . . Victor Masson et Fils . . . 1859-62. 2v. 8°, pp. xv.+1063; vi.+1251. [Index to ea. vol.] (5098).....391.1  
Contents: I. Vol. Analyse Qualitative; II. Vol. Analyse Quantitative.
- ROSE, Heinrich. A practical treatise of Chemical Analysis, including tables for calculations in analysis. Translated from the French and from the fourth German edition. With notes and additions, by A. Normandy . . . London: William Tegg & Co. 1849, 2v. 8°. [Vol. I. *wanting*; Vol. II. Quantitative.] pp. xxiv.+857. (5424).....462.18
- ROSE, Heinrich. The chemical tables for the calculation of quantitative analyses of— Recalculated for the more recent determinations of atomic weights, and with other alterations and additions. By William P. Dexter. Boston: Charles C. Little & James Brown. 1850. 12°, pp. xvii.+69. (5404)  
Chem. Lab.
- ROSS, J. A. [Translator.] *See* Hirsch's collection of examples, &c. (5180).....462.2
- ROTUNDITY of the Earth. *See* Half Hour Recreations in Popular Science, at p. 391. (5026).....148.17
- ROUSSEAU, Jean Jacques. [Le Devin du Village. pp. 15. (Mémorial.)] *See* Chefs-d'Oeuvres des Auteurs Comiques, 8v. 12°, Vol. V. (5090).....118.13
- ROWE, George Stringer. [Editor.] *See* Williams, T. and Calvert J. Fiji and the Fijians. 8°, pp. x.+551. (5242).....391.4
- ROYAL College of Chemistry, Reports of the— and researches conducted in the laboratories, in the years 1845-6-7. London: 1849. 8°, pp. lxxiii.+270. (5303).....464.8
- RUNKLE, John D. New Tables for determining the values of the co-efficients in the perturbative functions of planetary motion, which depend upon the ratio of the mean distances. 64 pp. 4°. *Also*  
—— Asteroid Supplements to new tables for determining the values of  $b_0^{(1)}$  and its derivatives . . . 72 pp. 4°. *See* Smithsonian Institution, Contributions to Knowledge, Vol. IX. (1857) Appendix. (5489).....441.1

RUMFORD, Count. See Thompson, Sir B.

RUPPANNER, Anthony . . . [Assistant Commissioner.] Report on Medicine and Surgery. 15 pp. 8°. See UNITED STATES, Dept. of State. Reports, International Exhibition, Vienna. 1873, Vol. II. E. (5440).....157.13

RUPERTUS, Ge. Alex., Commentarius perpetuus in T. Livii Patavini historiarum libros qui supersunt omnes eorumque epitomas conscriptus a— Londini: Sumptibus Ricardi Priestly. 1825. 8°, 2v. in 1; pp. vi.+712. [Vol. II. begins on p. 349.] (4556).....258.6

RUSCHENBERGER, William S. W. . . . First books of Natural History . . . prepared for the use of schools and colleges, from the text of Milne Edward<sup>s</sup> and Achille Compte, . . . With plates. Philadelphia: Grigg & Elliot . . . 1845. 2v. 12°, (5163.).....384.11

Contents:—VOL. I. Book I. Anatomy and Physiology, pp. 120; II. Mammalogy, pp. 151; III. Ornithology, pp. 125, 8 plates; IV. Herpetology, and Ichthyology, pp. 145. VOL. II. V. Conchology, pp. 114; VI. Entomology, pp. 121; VII. Botany, pp. 159; VIII. Geology, pp. 235.

RUSCHENBERGER, William S. W. . . . [Notes and a glossary.] See Somerville, Mary. Physical Geography. (5170).....382.15

RUSKIN, John, An Inquiry into some of the conditions at present affecting "The Study of Architecture" in our schools. . . . New York: John Wiley & Son. . . . 1875. 12°, pp. 29. [Bound with Lectures on Architecture and Painting, by the same.] (4577).....208.18

RUSKIN, John. The Ethics of the Dust. Ten Lectures to Little Housewives on the Elements of Crystallization. New York: John Wiley & Son. 1866. 12°, pp. xi.+250. (5376).....465.10

RUSKIN, John. Lectures on Architecture and Painting, delivered at Edinburgh in November, 1853. With illustrations drawn by the author. New York: John Wiley & Son. 1875. pp. 189+11plates. (4577)...208.18

RUSSELL, Michael. Polynesia; or, an historical account of the principal islands in the South Sea, including New Zealand; the introduction of Christianity: and the actual condition of the inhabitants in regard to civilization, commerce and the arts of social life. With a map and vignette. New York: Harper & Brothers. . . . 1848. 12°, pp. 362. [Map gone.] (H. F. L. No. 158.) (4943).....389.22

RUSSELL, Michael. History and present condition of the Barbary States, . . . With several engravings. New York: Harper & Brothers. . . . 1846. 12°, pp. 343.+map (4890).....387.22

RUSSELL, Michael. Life of Oliver Cromwell. . . . New York: Harper & per & Brothers. 1846. 2v., 12°, pp. 267+portrait of Cromwell; 273. (H. F. L. Nos. 62, 63) (4884).....387.16

RUSSELL, Michael. Nubia and Abyssinia: comprehending their civil history, antiquities, arts, religion, literature, and natural history. Illustrated by a map, and several engravings. New York: Harper & Brothers. . . . 1845. 12°, pp. 331. (H. F. L. No. 61.) (4883).....387.15

RUSSELL, Michael. Palestine, or the Holy Land. . . . With a map and nine engravings. New York: Harper & Brothers. . . . 1844 12°, pp. 330. (H. F. L. No. 27.) (4860).....386.21

- RUSSELL, Michael. View of ancient and modern Egypt; with an outline of its natural history. With a map and engravings. New York: Harper & Brothers. . . . 1846. 12°, pp. 348. (H. F. L. No. 3.) (4856) **386.17**
- RUTHERFORD, William. [Editor.] See Hutton, C. Course in mathematics. (5101). . . . . **462.15**
- SABINE, Maj. Gen. Edward. [Editor.] See Engelhardt, —. Narrative of an expedition to the polar sea. [Wrangell's] (4937). . . . . **389.16**
- SABINE, Mrs. Maj. Gen. [Translator.] See Engelhardt. Narrative of an expedition to the polar sea. [Wrangell's] (4737). . . . . **389.16**
- SABINE, Lorenzo. Biographical sketches of loyalists of the American Revolution, with an historical essay. . . . Boston: Little, Brown & Co. 1864. 2v. 8°, pp. xii.+608; 600. (5206). . . . . **392.7**  
 "One of the most valuable contributions to the literature of the country that has ever been made."—*Merchant's Mag.*
- SADLER, Thomas. [Editor.] See Robinson, H. C. Diary, reminiscence and correspondence of. (4985). . . . . **276.13**
- SADTLER, Samuel P. [Appendix.] See Genth, F. A. Preliminary report on the Mineralogy of Pennsylvania. (5393).
- ST. JOHN, James Augustus. The lives of celebrated travelers. . . . \* \* \* New York: Harper & Brothers. 1847. 3v. 12°, pp. 319, 338, 386. (H. F. L. Nos. 38, 39, 40). (4869). . . . . **387.1**
- SALMON, George. . . . A treatise on the analytic geometry of three dimensions. Third edition. Dublin: Hodges, Foster & Co. . . . 1874. 8°, pp. xvii.+583. (4630). . . . . **147.8**
- SALMON, George. . . . A treatise on conic sections; containing an account of some of the most important modern algebraic and geometric methods. Fifth edition. London: Longmans, Green, Reader & Dyer. 1869. r8°, pp. xv.+374+24. (4611). . . . . **147.6**
- SALVERTE, Eusebe. The philosophy of magic, prodigies and apparent miracles; from the French of —, with notes illustrative, explanatory, and critical, by Anthony Todd Thomson, . . . \* \* \* New York: Harper & Brothers. 847. 2v. 12°, pp. 332: 315. [Harper's New Miscellany, XXII & XXIII.] (5329). . . . . **375.19**
- SALTER, T. F. . . . The Angler's Guide; being a plain and complete practical treatise on the art of angling, for sea, river and pond fish; . . . to which is added a treatise on trolling; the whole illustrated with 88 fine cuts. The ninth edition: with the author's last corrections and additions. London: James Maynard, . . . 1841. 12°, pp. xii.+388. (4733). . . . . **374.2**
- SAMPSON, William. [Additions, 86 pp., 12°.] See Taylor, W. C. History of Ireland. 12°, p. 287. (4875). . . . . **387.7**
- SAMUELSON, James. [Editor. Vol. I. and II.] See Popular Science Review. (5306). . . . . **468.1**
- SAND, Maurice. [Illustrations.] See Fournier. Le Théâtre Française. Au. XVI, et Au. XVII. siècle. (5086). . . . . **478.4\*\*\***
- [SANDERS, J. M.] A system of instruction in the practical use of the Blowpipe. New York: H. Baillière. . . . 1858. 12°. pp. viii+269. (5417) **466.16**
- SANITARY Commission. See U. S. Sanitary Commission. See Newbury, J. S. (4795). . . . . **371.10**



- SARGENT, Winthrop, *Major*. . . . Journal of the general meeting of the Cincinnati in 1784, now first printed. 59 pp. 8°. See Historical Society of Pennsylvania. Memoirs of. Vol. VI. p. 57. (5203).....391.10
- SAURIN, Bernard Joseph. [Les Moeurs du temps, pp. 31. (Memoir.)] See Chefs-d'Oeuvres des Auteurs Comiques. 8v., 12°. Vol. VI. (5090).118.13
- SAXON Chronicles. Two of the. See Earle John. (4995).....137.11
- SCARRON, Paul. [Jodelet, 83 pp.; Don Japhet d'Arménie, 163 pp. (Memoir, 6 pp.)] See Chefs-d'Oeuvres des Auteurs Comiques. 8v. 12°. Vol. I. (5090) 118.13
- SCENES and thoughts in Europe. By an American. 8°, pp. vi+160. (4739) [Bound with Journal of an African cruise.].....383.17
- SCHURER, Theodore. The Blowpipe Manual. Translated by William S. Clark. Amherst, Mass: W. S. Clark. (n. d.) 16°, pp. viii+84. (5400) Ch. Lab.
- SHELLEN, Roscoe, Henry E. and Huggins. Spectrum analysis explained, and its uses to science illustrated. 39 pp, 16°. See Half Hour Recreations, in Popular Science, p. 55. (5026).....148.17
- SHELLEN, and others. Nebulae, Comets, Meteoric showers. 29 pp, 16°. See Half Hour Recreations in Popular Science, p. 143. (5026).....148.17
- SHELLEN, Young, Roscoe, Lockyer, Huggins, and others. Spectrum analysis discoveries. 47 pp, 16°. See Half Hour Recreations in Popular Science, p. 95. (5026).....148.17
- SHELLER, Immanuel Johann Gerhardt. A copious Latin grammar. Translated from the German with alterations, notes and additions, by George Walker. . . . Second edition, with an index of remarkable constructions. . . . London: John Murray. . . . 1838. 2v. 8°, pp. viii+510; 454. (5136) 473.2
- SCHEM, Alexander J. [Joint Editor.] See Cyclopaedia of Education. (5076) 271.18\*
- SCHERER, W. [Joint Editor.] See Denkmäler Deutscher Poesie und Prosa. (5213).....475.3
- SCHERR, Johannes. Allgemeine Geschichte der Literatur. Ein Handbuch in zwei Baendenn. Dritte, neu bearbeitete und stark vermehrte Auflage. Stuttgart: . . . Carl Conradi. 1869. 2v. 8°. (4660).....178.10
- SCHERR, Johannes. Deutsche Kultur und Sittengeschichte. \*\*\* Sechste neudurchgesehene und stark vermehrte Auflage. Leipzig: . . . Otto Wigand. 1876. 8° pp. vi+648. (4663).....178.20
- SCHILLER, Frederich von. Sämmtliche Werke. Vollständige neudurchgesehene Ausgabe in Einem Bande. . . . Stuttgart: J. G. Cotta. . . . 1869. 8°, pp. iv+1124. (4659).....178.9
- SCHILLER, Frederic. History of the Thirty Years' War. Translated from the German by A. J. W. Morrison, . . . New York: Harper & Brothers. . . . 1846. 12°, pp. 370. [Harper's New Miscellany, XIX.] (5326) 375.16
- SCHILLER, Frederic. History of the Revolt of the Netherlands; trial and execution of Counts Egmont and Horn; and the siege of Antwerp. Translated from the German by A. J. W. Morrison, . . . New York: [Harper & Brothers. . . . 1847. 12°, pp. 333. [Harper's New Miscellany, XXI.] (5328).....375.18

- SCHLEGEL, Frederick von. The æsthetic and miscellaneous works of; comprising letters on Christian art, an essay on Gothic architecture, remarks on the romance-poetry of the middle ages and on Shakspeare, on the limits of the beautiful, on the language and wisdom of the Indians. Translated from the German by E. J. Willington. London: Henry G. Bohn, . . . 1849. 12°, pp. xxiii.+533. (5422).....86.14
- SCHMIDT, Dr. Alexander. Shakespeare-Lexicon. A complete dictionary of all the English words, phrases and constructions in the works of the poet. . . . 1874. Berlin: George Reimer. London: Williams & Norgate. r8°. 1v. in 2. pp. 1450 consecutive. (4639).....391.12  
Contents:—Vol. I. A to Lysimachus. Vol. II. M to Zounds, and appendix.
- SCHMIDT, Henry I. . . . Education. Part I. History of Education, ancient and modern; Part II. A Plan of Culture and Instruction, based on Christian principles and designed to aid in the right education of youth, physically, intellectually and morally. \* \* \* New York: Harper & Brothers. . . . 12°, pp. 340. (H. F. L. No. 156.) (4941).....389.20  
[“The writer makes no pretensions to originality. . . . The history has been taken substantially from the work of Schwarz. . . . —Preface.
- SCHMITTENNERS, Frederick. See Weigand, F. L. K. Deutsches Wörterbuch. (5096).....178.23
- SCHOTT, Charles. [Reductions, etc.] See Parker, C., Hildreth, S. P., Hayes, I. I., McClintock, Sir L., Kane, E. K., Wood, J.
- SCHOULER, William. . . . A History of Massachusetts in the Civil War. Boston: E. P. Dutton & Co. . . . 1868. 8°, pp. xiv.+670+portrait of Gov. Andrews. (4839).....381.7
- SCHROER, Karl Julius. Die Deutsche Dichtung des 19 Jahrhunderts in ihren bedeutenderen Erscheinungen. Populare Vorlesungen. Leipzig: . . . F. C. W. Vogel, 1875. 8°, pp. vi.+496. (4666).....178.12
- SCHUBARTH, Ernest Ludwig. . . . Handbuch der Technischen Chemie, zum Gebrauche beim Unterricht im Koengl. Gewerbinstitut und den Provinzial-Gewerbschulen des Preuss. Staats. Dritte, sehr vermehrte Ausgabe. . . . Berlin: . . . Rucker und Puchle. 1839-40. 3v. 8°. (5370). 465.4  
Vol. I. Introduction 61 pp; Non-metallic substances, p. 64; metals, p. 253; pp. xvi.& 527&9 plates. Vol. II. Metals, pp. 504&7 plates. Vol. III. Organic Chemistry, pp. iv.&794&6 plates.
- SCHUCKERS, J. W. A brief account of the finances and paper money of the Revolutionary War. Philadelphia: John Campbell & Son. . . . 1874. 8°, pp. 128. (5334).....395.4
- SCHUCKERS, J. W. The Currency Conflict. Address before the Liberal Club of New York city. . . . 1876. 14 pp. 8°. [Bound with “Brief Account of the Finances and Paper Money of the Revolutionary War.”] (5334) 395.4
- SCHUCKERS, J. W. The Finances, Panics and Specie-payments. \* \* \* Philadelphia: John Campbell & Son. . . . 1874. 90 pp. 8°. [Bound with “Brief Account of the Finances and Paper Money of the Revolutionary War.”] (5334).....395.4
- SCHWARTZ, Jacob. . . . [New York Apprentices' Library catalogue, 6 pp. 8°.] See UNITED STATES, Bureau of Education. Public libraries in the, Vol. II. p. 657. (5074).....L. R.

- SCHWEGLER, Albert. A history of philosophy in epitome: translated from the original German, by Julius H. Seelye. Fifth Edition. New York: D. Appleton & Co. . . . 1869. 12°, pp. 365. (818).....55.1  
Introductory note by Henry B. Smith.
- SCHWENCK, Konrad. Etymologisches Wœrterbuch der lateinischen Sprache mit Vergleichung der Griechischen und Deutschen. Frankfurt am Main: . . . Heinrich Ludwig Bronner. 1827. 8°, pp. 948+8. (5198).....178.24
- SCOTT, Robert. . . . [Joint Compiler.] See Liddell, H. G., and Scott, R. A. Greek-English Lexicon. (5058.).....266.15
- SCROPE, George Poulett. . . . [On political economy.] See Porter, A. Political economy. (4962).....38X.10
- SCUDDER, Horace Elisha. [Public libraries a hundred years ago.] 37 pp., 8°. See UNITED STATES, Bureau of Education. Public libraries in the. Vol. I., p. 1. (5074).....L. R.
- SCUDDER, Samuel H. Catalogue of the Orthoptera of North America, described previous to 1867. . . . 110 pp. 8°. See Smithsonian Institution, Miscellaneous Collections. Vol. VIII. (1865) Art 2. (5507).....443.1
- SECCHI, A. . . . Researches on Electrical Rheometry. 4°, pp. 60+3 plates. See Smithsonian Institution, Contributions to Knowledge. Vol. III. (1852) Art. 2. (5483).....441.1
- SEDAINE, Michael Jean. [Le Philosophe sans le savoir, pp. 63—La Gageure imprévue, p. 65. (Mém.oir.)] See Chefs-d'Oeuvres des Auteurs Comiques. 8v. 12°, Vol. VII. (5090).....118.13
- SEEDGEWICK, Catherine Maria. Memoir of Lucretia Maria Davidson. 12°, pp. 75. See Sparks, J. Lib. of Am. Biog. Vol. VII. at p. 223. (4814) 385.1
- SEDEGWICK, Adam. A discourse on classical, metaphysical, moral and natural studies. 120 pp., 12°. See Brougham, H. [and others.] Discourses on . . . science and literature. [H. F. L. No. 179] p. 141. (4959)....38X.7
- SEELEY, John Robert. [Introduction, historical examination and notes.] See Livius—Books I—X. (5015).....227.12
- SEELYE, Julius H. [Translator.] See Schwegler, A. History of Philosophy. 12°. (818).....55.1
- SEQUIN, Edward. Report on Education. 37 pp., 8°. See UNITED STATES, Dept. of State. Reports, International Exhibition, Vienna, 1873. Vol. II. K. (5449).....157.13  
Part I. Infant Education. Part II. Education of the Deaf and Mute. Part III. Education of Idiots and feeble-minded children. Part IV. General Education.
- SELECTIONS from the Spectator. Embracing the most interesting papers, by Addison, Steele, and others. New York: Harper & Bros. 1840. 2v. 12°, pp. 326; 316. (H. F. L. Nos. 181 and 182.) (4961).....38X.9  
Vol. I. Contains short life of Addison. Vol. II. Life of Steele.
- SFORZOSI, G. [?] A compendious history of Italy. Translated from the original Italian by Nathaniel Greene. New York: Harper & Brothers. 1836. 12°, pp. 319. (H. F. L. No. 79.) (4894).....387.26  
A compilation from the histories of Bossi and Botta.
- SHAIRP, John Campbell. . . . Culture and religion in some of their relations. [Reprinted from the Edinburgh edition.] \* \* \* New York: Hurd & Houghton. 1872. 16°, pp. 197. (4582).....248.9

- SHAIRP, John Campbell. . . . Studies in poetry and philosophy. . . . New York Hurd & Houghton. 1874. 16°, pp. xvii+340. [Reprinted from the second Edinburgh edition.] (4583).....248.8
- SHAKESPEARE, William. The works of—in reduced facsimile from the famous first folio edition of 1623. With an introduction by J. A. Halliwell-Phillips. . . . London: Chatto & Windus. 1876. 8°, pp. xvi+303+232+78 to 84+[25 unp.]+76+79—399. (5467).....396.6
- SHAW, Edward. . . . Civil architecture; being a complete theoretical and practical system of building, containing the fundamental principles of the art. To which is added a treatise on Gothic architecture, etc., by Thomas W. Silloway and George W. Harding, architects. The whole illustrated by one hundred and two plates, finely engraved on copper. Eleventh edition. Philadelphia: Henry Carey Baird. . . . 1870. 4°, pp. 191+102 plates. (5050).....523.3
- SHAW, Edward. . . . Practical Masonry; or a theoretical and operative treatise on Building; containing a scientific account of stones, clays, bricks, mortar, cements, fire-places, furnaces, etc.; . . . the fundamental rules in geometry, on masonry and stone-cutting, with their application to practice. Illustrated with 44 copperplate engravings. Boston: Benjamin B. Mussey. 1846. 4°, pp. viii.+192+44 plates. (4792).....523.2
- SHERMAN, James. [Editor.] *See* Life of William Allen. 2v. 8°. (4602) cf. Allibone, Dict.....147.3
- SHERMAN, General William Tecumseh. Memoirs of, by himself. New York: D. Appleton & Co. . . . 1875. 2v. 8°, pp. 405, 409. (4996)....227.6
- SHERMAN, S. S. Increase Allen Lapham, LL.D. A biographical sketch read before the Old Settlers' Club, Milwaukee, Wisconsin, December 1, 1875. The Milwaukee News Company. 1876. 8°, pp. 88+portrait. (4539) 157.12
- SHEW, Joel. [Reviser.] *See* Shew, Mrs. M. L. Water-cure for ladies. 16°, pp. x.+156. (4751).....374.7
- SHEW, Mrs. M. L. Water-Cure for Ladies; . . . with a full account of the process of the water-cure. . . . Revised by Joel Shew, M. D. . . . New York: John Wiley, . . . 1847. 16°, pp. x+156+frontispiece. (4751) 374.7
- SHORTREDE, Robert. . . . Logarithms of sines and tangents for every second; with additional preface, and examples, by Major General Hannynghton. . . . Revised edition. London: Charles and Edwin Layton. . . . 1873. 8°, pp. x.+602. (5199).....461.1
- SHORTREDE, Robert. . . . Logarithmic Tables: containing logarithms to numbers from 1 to 120,000, numbers to logarithms from '0 to 1'00000, to seven places of decimals; together with several other tables of frequent use. Edinburgh; Adam and Charles Black, . . . 1849. 8°, pp. xxv.+208. (4633.).....461.2
- SEDGWICK, Henry. . . . The Methods of Ethics. \* \* \* London: Macmillan & Co. 1874. 8°, pp. xxiii.+473. . . . (4573).....348.1
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- SIEVERS, Dr. E. [Translator.] *See* Wimmer, L. F. A., *Altnordische Grammatik*. (4670).....117.18
- SILCOX, George W. . . . Report on the art of printing and on manufactures of paper. 30 pp. 8°. *See* UNITED STATES, Dept. of State. Reports, International Exhibition Vienna, 1873. Vol. II. O. (5440).....157.13
- SILLIMAN, Benjamin, and others. *The American Journal of Science and Arts*. New Haven: . . . for the editors; . . . 1818—1876. 8°, [plates and illustrations.]  
 First Series, 1818—1847, 50v. (49 & index). (4891). Second Series, 1846—1870, 50v. (vols. 19—46 lacking). (4892). Third Series, 1871—1876, 12v. (5396). Indices at end of ea. 10th vol. of 2d and 3d series. Joint Editors are: 1st series, B. Silliman, jr.; 2d series, B. Silliman, Dana, Gray, Gibbs, Newton, Johnson, Brush, Verrill; 3d series, same, with E. S. Dana and Pickering.
- SILLIMAN, Benjamin, Jr. [Joint editor 1st series; editor-in-chief 2d series.] *See* Silliman B. *Am. Journal of Sciences and Arts*. (4891—2).
- SILLIMAN, Benjamin, Jr. . . . *First Principles of Chemistry*, . . . with 423 illustrations. Fortieth edition, rewritten and enlarged. Philadelphia: H. C. Peck & Theo. Bliss. 1856. 8°, pp. 555. (5419).....466.18
- SILLOWAY, Thomas. [Treatise on Gothic Architecture. 4°, pp. 6+4 plates.] *See* Shaw, Edward, *Civil Architecture*, at p. 136. (5050).....523.3
- SIMMS, William Gilmore. *Views and reviews in American literature, history and fiction*. First series. New York: Wiley and Putnam. 1845. 16°, pp. 184. (4743).....374.27
- SIMOND, Louis. *Journal of a tour and residence in Great Britain, during the years 1810 and 1811*. . . . Second edition, corrected and enlarged; to which is added an appendix on France, written in December, 1815, and October, 1816. Edinburgh: Archibald Constable & Co. . . . 1817. 2v. 8°, pp. xiv+508+4 eng. and 2 inserts; 530. (5250).....394.4
- SIMONS, M. P. *Plain instructions for coloring photographs in water colors and india ink: with a palette of fresh tints, and notes of explanation*. Philadelphia: . . . P. K. & P. G. Collins. 1857. 12°, pp. 42+frontispiece. (5260).....374.22
- SIMPSON, James H. . . . *Journal of a military reconnoissance, from Santa Fe, New Mexico, to the Navajo country, made . . . in 1849*. Philadelphia: Lippincott, Grambo & Co. . . . 1852. 8°, pp. 140+75 plates, 26 colored. (4789).....371.12\*
- SIMROCK, Karl. *Handbuch der Deutschen Mythologie mit Einschluss der nordischen*. \* \* \* Dritte sehr vermehrte Auflage. Bonn: bei Adolf Marcus. 1869. 8°, pp. xi+625. (4662).....178.15
- SISMONDI, Jean Charles Léonard Simonde de. *Historical view of the literature of the South of Europe*. . . . Translated from the original, with notes and a life of the author, by Thomas Roscoe. From the last London edition, including all the notes from the last Paris edition. . . . New York: Harper & Brothers. . . . 1848. 12°, pp. 549. [Portraits of Sismondi and Dante.] (4974).....382.3
- SIVEWRIGHT, J. [Joint Author.] *See* Preece, W. H. *Telegraphy*. (5003) 148.26

- SKEAT, Walter William. Shakespeare's Plutarch, being a selection from the lives in North's Plutarch which illustrate Shakespeare's plays. Edited with a preface, notes, index of names, and glossarial index. London: Macmillan & Co. 1875. . . . sm8°, pp. xxi+332. (4987).....148.1
- SKEAT, Walter William. A Mæso-Gothic glossary, with an introduction. An outline of Mæso-Gothic grammar, and a list of Anglo-Saxon and old and modern English words, etymologically connected with Mæso-Gothic. \* \* \* London: Asher & Co. . . . Berlin . . . 1868. sq16°, pp. xxii+330. (4657).....178.6
- SKETCHES from Venetian History. . . . New York: Harper & Brothers, 1846. 2v. 12°, pp. 317+frontispiece and map; 321+1 plate, (Venice, A. D. 1765.) (4871).....387.3
- SKINNER, Thomas H. [Sermon.] See Murray-st. Church, New York. Discourses. . . . (4546).....157.6
- SMITH, Eli. List of Arabic names of places in Palestine and the adjacent regions . . . 8°, pp. 86, in 3 parts. See Robertson, E. and Smith, E. Biblical researches. . . . 3v. 8°, at p. 112 of first appendix, Vol. III. (4800).....371.2
- Essay on the pronunciation of the Arabic. . . . 23 pp. 8°. See Robinson, E. and Smith, E. Biblical researches, . . . at p. 89 of first appendix, Vol. III. (4800).....371.4
- [Joint Author.] See Robinson, Edward. Biblical researches. 3v 8°. (4800).....371.4
- SMITH, Fred. H. . . . The pocket geologist and book of minerals. . . . Baltimore: Kelly, Piet & Co. . . . 1877. pp. 128. (5389) ...466.11
- SMITH, Henry Boynton and Schaff, Philip. . . . Editors of the Philosophical and Theological Library. See Ueberweg, Friedrich. History of Philosophy, [Preface.] (4572).....348.2
- SMITH, Horace and Smith, James. Rejected addresses; or the New Theatrum Poetarum. \* \* \* New York, Henry Holt & Co. ["Leisure Hour Series."] 1876. 16° pp. xxx+191. (5464).....38X.20
- SMITH, Horatio. . . . Festivals, games and amusements, ancient and modern. \* \* \* With additions, by Samuel Woodworth. . . . New York: Harper & Brothers. 1847. 12° pp. 355. (H. F. L. No. 25) (4858)..386.19
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- SMITH, Robert Angus. . . . Air and rain. The beginning of a chemical climatology. London: Longmans, Green & Co. 1872. . . . 8°, pp. xiii +600+8 plates. (5425).....462.19
- SMITH, Nathan D. Meteorological observations made near Washington, Ark. extending over a period of twenty-five years, from 1840 to 1859 inclusive. 96 pp. 4°. See Smithsonian Institution, Contributions to Knowledge. Vol. XII. (1860) Art. 5. (5492).....441.1
- SMITH, T. Roger. . . . [Preface.] See D'Anvers, N. Elementary history of art. pp. xiv. (5092).....308 25

SMITH, William H. The tailed amphibians, including the Cæcilians. A thesis, presented to the Faculty of Michigan University. [Herald Publishing House . . . Detroit, Mich.] 1877. 12°, pp. 158+6 tables. (5071)

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- Vol. XI. pp. vii. & 782. Arrangement of the families of mammals, with analytical tables, T. Gill, 1872, 104 pp. Arrangement of the families of fishes, or classes pisces, Marsipobranchii, and Leptocardii, T. Gill, 1872, 96 pp. Monographs of the diptera of North America, part iii., H. Loew, 1873, 876 pp. & 4 plates. Directions for collecting and preserving insects, A. S. Packard, 1873, 60 pp. New species of N. American coleoptera, J. L. Le Conte, part ii, 1873, 74 pp. Classification of the coleoptera of N. A., J. L. Le Conte, part ii, 1873, 72 pp.
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- SOCIETY OF THE ARMY OF THE CUMBERLAND. Report of the first meeting of the—held at Cincinnati, February, 1868. . . . Cincinnati: Robert Clarke & Co. . . . 1868. 8°, pp. 162. [Portrait of Maj. Gen. Geo. H. Thomas.] (5151).....**371.19**
- SOCRATES, [Scholasticus], . . . A history of the Church in seven books, from the accession of Constantine to A. D. 305, the 38th year of Theodorus II., including a period of 140 years, by Socrates surnamed Scholiasticus, or the Advocate. Translated from the Greek, with some account of the life and writings of the author. \* \* \* London: Samuel Bagster & Sons; . . . 1844. 8°, pp. xxiv. + 556. See Greek Ecclesiastical Historians. (4705) **348.8**
- SOLEY, James Russell. . . . Historical sketch of the United States Naval Academy. Prepared by direction of Rear-Admiral C. R. P. Rodgers, U. S. N. . . . for the department of education at the International Exhibition, 1876. Washington: Government printing office. 1876. 8°, pp. 348. (4593).....**147.4**
- SOMERVILLE, Mary. On the connection of the physical sciences. From the seventh London edition. New York: Harper & Brothers. . . . 1846. 12°, pp. xi + 460. (Harper's New Miscellany xiv.) (5322).....**375.11**

- SOMERVILLE, Mary. . . . Physical Geography, a new American, from the third and revised London edition, with notes and a glossary, by W. S. Ruschenberger. . . . Philadelphia; Blanchard & Lea. 1859. 12°, pp. 570. (5170).....**382.15**
- SOPHOCLES, Evangelinus Apostolides. *Romæic or Modern Greek Grammar.* Boston: Hickling, Swan & Brewer. 1857. 12°, pp. xxviii.+196. (4637)  
**258.32**
- SOULE, Richard. *A Dictionary of English Synonyms and synonymous or parallel expressions, designed as a practical guide to aptness and variety of phraseology.* \* \* \* Boston: Little, Brown & Co. 1874. 16°, pp. vi.+456. (4986).....**148.2**
- SOUTHEY, Charles Cuthbert. . . . [Editor.] *See* Southey, R., the Life of Wesley. 2v. 12° (4746).....**374.13**
- SOUTHEY, Robert. . . . *The Life of Nelson.* New York: Harper & Brothers. . . . 1843. 12°, pp. xiv.+309+portrait of Nelson. (H. F. L. No. 6). (4843)..... **386.4**
- SOUTHEY, Robert. . . . *The Life of Wesley; and rise and progress of Methodism; with notes by the late Samuel Taylor Coleridge, Esq., and remarks on the life and character of John Wesley, by the late Alexander Knox, Esq.* Edited by the Rev. Charles Cuthbert Southey. . . . Second American edition, with notes, etc., by the Rev. Daniel Curry, A. M. New York: Harper & Brothers. . . . 1847. 2v. 12°, pp. xv.+476; 454. (4746). **374.13**
- SOWERBY, George Brettengham, jr. *A conchological manual, with nearly 700 engraved illustrations. Fourth edition, considerably enlarged and improved.* London: Henry G. Bohn. . . . 1852. 8°, pp. vii.+337+28 colored plates. (5192)..... **462.5\***
- SOZOMEN, [Hemnias]. *A History of the Church, in nine books, from A. D. 324 to A. D. 440; a new translation from the Greek; with a memoir of the author.* \* \* \* London: Samuel Bagster & Sons. . . . 1846. 8°, pp. xvi.+448. (4706) *See* Greek Ecclesiastical Historians.....**348.9**
- SPALDING, William. . . . *Italy and the Italian Islands; with engravings and illustrative maps and plans.* . . . New York: Harper & Brothers. . . . 1848. 3v. 12°, pp. 371+map; 380+map+plate; 371+map+3 plates. (H. F. L. Nos. 151-2-3) (4939).....**389.18**
- SMOLLETT, Tobias. *The History of England from the revolution in 1688 to the death of George the II. Designed as a continuation of Hume.* Philadelphia: . . . Thomas Davis. . . . 1846. 8°, pp. 967+portrait of Smollett. (5156)..... **392.3**
- SNODGRASS, William D. [Sermon on redemption.] . . . *See* Murray St. Church. New York, Discourses, . . . (4546)..... **157.6**
- SONNTAG, August. *Observations on terrestrial magnetism in Mexico, conducted under the direction of Baron von Mueller; with notes and illustrations of the volcano Popocatepetl and its vicinity.* 92 pp.+1 plate. *See* Smithsonian Institutions, Contributions to Knowledge, Vol. XI. (1859) Art. 7. (5491)  
**441.1**
- SPARKS, Jared. *The Library of American Biography conducted by—[First series.]* New York: Harper & Brothers . . . 1839—45. 10v. 12°. [Portraits and facsimiles.] (4814).....**385.1**

- Contents : Vol. I. Life of John Stark, pp. 116 ; portrait. Life of Charles Brockden Brown, pp. 64 ; facsimile at p. 117. Life of Richard Montgomery, pp. 46 ; facsimile at p. 181. Life of Ethan Allen, pp. 130 ; facsimile at p. 227.
- Vol. II. Life of Alexander Wilson, pp. 169 ; facsimile. Life and adventures of Captain John Smith, pp. 238, facsimile at p. 170.
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- Vol. V. Life of John Elliot, the Apostle to the Indians, pp. 357 ; facsimile.
- Vol. VI. Life of William Pinkney, pp. 84 ; facsimile. Life of William Ellery, pp. 75 ; facsimile at p. 85. Life of Cotton Mather, pp. 191 ; facsimile at p. 160.
- Vol. VII. Life of Sir William Phips, pp. 102. Life of Israel Putnam, pp. 116, at p. 105. Memoir of Lucretia Maria Davidson, pp. 76, at p. 219. Life of David Rittenhouse, pp. 194 ; facsimile, at p. 295.
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- Vol. X. Life of Robert Fulton, pp. 89. Life of Joseph Warner, pp. 94, at p. 90 ; portrait, frontispiece. Life of Henry Hudson, pp. 78, at p. 184. Life of Father Marquette, pp. 38 ; facsimile of map at p. 262. List of the lives contained in the first ten volumes, pp. 301-302. General Index to the first ten volumes, pp. 305-386.
- SPARKS, Jared. The Library of American Biography. Second Series. Boston : Charles C. Little and James Brown. 1844 to 1846. 10v. 16°. (4810) Portraits. [Numbered on backs as Vols. XI. to XX. inc. of old series, new [series I. to X. inclusive. . . . . 384.1
- Contents : Vol. I. Lives of Robert Cavalier de la Salle and Patrick Henry, pp. 398.
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- Vol. VII. Lives of John Ribault, Sebastian Rale, and William Palfrey, pp. 448.
- Vol. VIII. Lives of Charles Lee and Joseph Reed, pp. 439.
- Vol. IX. Lives of Leonard Calvert, Samuel Ward, and Thomas Posey, pp. 403.
- Vol. X. Life of Nathaniel Greene, Major-General in the army of the Revolution, pp. 403.
- SPARKS, Jared. The life and treason of Benedict Arnold. 12° pp. 335+portrait, map and 4 facsimiles. See Sparks, J., Lib. of Am. Biog. (1st series.) Vol. III. (4814). . . . . 385.1
- SPARKS, Jared. Life of John Ribault, comprising an account of the first attempts of the French to found a colony in America. 16°, pp. 156. See Sparks, J., Lib. Am. Biog., 2d series. Vol. VII. (4810). . . . . 384.1
- SPARKS, Jared. [Life] of Robert Cavalier de la Salle. . . . 16°, pp. 205. See Sparks, J., Lib. of Am. Biog., 2d series. Vol. I. (4810). . . . . 384.1
- SPARKS, Jared. Life of Charles Lee, Major General in the army of the Revolution. 16°, pp. 207. See Sparks, J., Lib. of Am. Biog. 2d series. Vol. VIII. (4810). . . . . 384.1
- SPARKS, Jared. Life of Count Pulaski. 16°, pp. 82. See Sparks, J., Lib. of Am. Biog. 2d series. Vol. IV. at p. 365. (4810). . . . . 384.1



- SPARKS, Jared. Life of Ethan Allen. 12°, pp. 129. Facsimile. Lib. of Am. Biog. (1st series.) Vol. I. at p. 227. (4814).....**385.1**
- SPARKS, Jared. Life of Father Marquette. 12°, pp. 123. Facsimile. See Lib. of Am. Biog. (2d series.) Vol. X., at p. 263. (4814).....**385.1**
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- SPOFFORD, Ainsworth R. . . . [Binding and preservation of books, 6 pp. 8°. Periodical literature and society publications, 7 pp.; Works of reference for libraries, 25 pp. . . . Library Bibliography, 12 pp. See UNITED STATES, Bureau of Education. Public Libraries in the. Vol. II., p. 673, p. 679, p. 686, p. 733. (5074).....L. R.
- SPRAGUE, Isaac. . . . [186 figures and analysis from nature.] See Gray, A. Genera of the plants of the U. S. 2v. 8°. (3336).....**314.4\***
- SPRAGUE, William B. Life of Timothy Dwight, 16°, pp. 146. See Sparks, J., Lib. of Am. Biog. 2nd series. Vol. IV. at p. 223. (4810).....**384.1**
- SPRAGUE, William B. [Sermon—] . . . See Murray-st. Church, New York. Discourses . . . (4546).....**157.6**
- SPRING, Gardiner. [Sermon—] See Murray-st. Church, New York. Discourses. . . . (4546).....**157.6**
- SQUIER, Ephraim George. . . . Aboriginal Monuments of the State of New York. Comprising the results of original surveys and explorations; with an illustrated appendix. 4°, pp. 188+14 plates. See Smithsonian Institution, Contributions to Knowledge, Vol. II. (1854) Art. 9. (5482).....**441.1**
- SQUIER, Ephraim George, and Davis, Edwin Hamilton. . . . Ancient Monuments of the Mississippi Valley: . . . 4°, pp. 306+48 plates+colored frontispiece. See Smithsonian Institution, Contributions to Knowledge, Vol. I. (1848) (5481).....**441.1**
- STAHR, Adolf. G. E. Lessing. Sein Leben und seine Werke. Siebente vermehrte und verbesserte Auflage. . . . Berlin, . . . J. Guttenberg. . . . 1873. 2v. 8°. (4672).....**177.27**
- STANFORD, Charles Stuart. . . . [Notes.] See Plato. Apology of Socrates, Crito and Phædo. (5133).....**473.9**
- STAMM, Friedrich Ludwig. Ulfilas oder die uns erhaltenen Denkmäler der Gothischen sprache. Text, Grammatik und Wörterbuch. Neu herausgegeben von Dr. Moritz Heyne, . . . Sechste Auflage. Paderborn. . . . Ferdinand Schonigh. 1874. 8°, pp. xii.+442. (4668).....**178.16**
- STANLEY, J. M. Catalogue of portraits of North American Indians, with sketches of scenery, &c., painted by — 8°, 76 pp. See Smithsonian Institution, Miscellaneous Collections, Vol. II. (1862) Art. 3. (5501).....**443.1**
- STANSBURY, Howard, . . . An expedition to the valley of the Great Salt Lake of Utah: including a description of its geography, natural history and minerals, and an analysis of its waters: with an authentic account of the Mormon settlement. Illustrated by numerous beautiful plates, from drawings taken on the spot. Also a reconnoissance of a new route through the Rocky Mountains, and two large and accurate maps of that region. Philadelphia: Lippincott, Grambo & Co. 1855. 8°, pp. 478+frontispiece and colored plate. (5248).....**391.5\***

- STAPLETON, J. C. . . . [Translator.] See Neander, A., *The Life of St. Chrysostom.* (4798).....371.13
- STAUNTON, *Sir* George . . . An authentic account of an embassy from the King of Great Britain to the Emperor of China; including cursory observations made, and information obtained in traveling through that ancient empire and a small part of Chinese Tartary. Together with a relation of the voyage undertaken on the occasion, by His Majesty's ship, *The Lion*, and the ship *Hindustan*, in the East India Company's service, to the Yellow Sea and the Gulf of Peking; as well as of their return to Europe; with notices of the several places where they stopped in their way out and home, being the islands of Maderia, Teneriffe, and St. Jago; the port of Rio de Janeiro, in South America; the islands of St. Helena, Tristan d'Achuna, and Amsterdam; the coasts of Java and Sumatra; the Nauka Isles, Pulo Condore, and Cochin China. Taken chiefly from the papers of His Excellency the Earl of Macartney, . . . *Sir* Erasmus Gower, commander of the expedition, and other gentlemen . . . of the embassy. The second edition, corrected . . . London: G. Nicol . . . 1798. 2v. 4°, pp. xxxiv.+518; xx.+626. (*Engravings*) (Portrait of Tchien Lung, the great Emperor, frontispiece to Vol. I; portrait of the Earl of Macartney, frontispiece to Vol. II.) One f. vol. 15 plates. (For list see Vol. I. p. xv.) (5254).....241.6\*
- STAUNTON, William, . . . A Dictionary of the Church, containing an exposition of terms, phrases, and subjects connected with the external order, sacraments, worship and usages of the Protestant Episcopal Church. With an especial reference to the Church in the United States. Second edition, revised, corrected and enlarged, by the author. \* \* \* New York: . . . Louis Sherman, . . . 1839. 12°, pp. 473. (5442).....363.9
- STEELE, *Sir* Richard. See *Selections from the Spectator.* (4961)....38X.9
- STEFFENS, Heinrich. *German University Life.* The story of my career as student and professor; with personal reminiscences of Goethe, Schiller, Schelling, Schleiermacher, Fichte, Novalis, Schlegel, Neander and others. Translated by William L. Gage. Philadelphia: J. B. Lippincott & Co. 1874. 12°, pp. 284. (4674).....177.25
- STENHOUSE, John . . . [Joint Editor.] See Crace-Calvert, F. de. *Dyeing and Calico Printing.* (4569).....462.6
- STEPHEN, *Sir* James. *Lectures on the history of France.* Third edition, with large additions. . . . London: Longman. . . . 1857. 2v. 8°, pp. xii +518; iv+527. (5179).....392.11
- STEPHENS, Henry. . . . *The book of the farm.* . . . \* \* \* Third edition, in great part rewritten, to bring up to the present time. William Blackwood & Sons, Edinburgh and London. 1871. 2v. 8°, pp. xvi+550+3 plates+frontispiece, portrait of author; xi+650+11 plates. (4612) 514.8
- STERLING, P. J. [Life, pp. 8°] See Bastiat, B. *Harmonies of political economy.* (5297).....395.3
- STEWART, Balfour. [Joint Author.] See Tait, P. G. *Unseen universe.* (5041) 148.8
- STEWART, Dugald. [Memoir of Robertson, 32 pp. 12°.] See Robertson, William. *The History of the discovery and conquest of America.* (4964)...38X.12

- STEWART, John. . . . Stable economy: A treatise on the management of horses. . . . From the third English edition, with notes and additions, adapting it to American food and climate, by A. B. Allen. . . . New York: D. Appleton & Co. . . . 1851. 12°, pp. 378. (5265)....**516.16**
- STIMPSON, William. Synopsis of the marine invertebrata of Grand Manan, or the region round the Bay of Fundy, New Brunswick. 4°, pp. 68+3 plates. See Smithsonian Institution, Contributions to Knowledge. Vol. VI. (1854) Art. 5. (5486).....**441.1**
- STIMPSON, William. Researches upon the Hydrobunæ and allied forms; from materials in the museum of the Smithsonian Institution. 1865. 8°, 64 pp. See Smithsonian Institution, Miscellaneous collections. Vol. VIII. (1867) Art 4. (5506).....**443.1**
- STIMPSON, W. [Joint Author.] See Lea, J. and others. Check list of the shells of N. A.
- STIRLING, James Hutchinson. The secret of Hegel; being the Hegelian system in origin, principle, form, and matter. \* \* \* . . . London: Longman. . . . 1865. 2v. 8°, pp. lxiv+465; viii+624. (5182).....**348.13**
- STIRLING, James Hutchinson. As regards protoplasm—Reply to Huxley. 12° pp. 71. See Half Hours with Modern Scientists, first series, p. 73. (5017) **148.6**
- STIRLING, Patrick James. [Translation, with life, 32 pp. 8°] See Bastiat, F. Harmonies of political economy. (5297).....**395.3**
- STOCKHARDT, Julius Adolph. . . . The principles of chemistry, illustrated by simple experiments. Translated by C. H. Pierce. . . . Sixteenth thousand. Philadelphia: . . . E. H. Butler & Co. 1861. 12°, pp. xix+681. See Cooke, J. P. *Jr.* Chemical problems and recitations to accompany Stockhardt's elements of chemistry. (4716) Chem. Lab.
- STOCKWELL, John N. Memoir on the secular variations of the elements of the orbits of the eight principal planets, Mercury, Venus, the Earth, Mars, Jupiter, Saturn, Uranus and Neptune; with tables of the same. Together with the obliquity of the ecliptic, and the precession of the equinoxes in both longitude and right ascension. 214 pp. 4°. See Smithsonian Institution, Contributions to Knowledge, Vol. XVIII. (1873) Art. 3. (5498)....**441.1**
- STONE, Livingston. Domesticated trout. . . . \* \* \* Boston: James R. Osgood & Co. 1872. 16°, pp. x.+347+frontispiece. (4550).....**576.15**
- STONE, William Leete. Border wars of the Revolution. New York: Harper & Brothers. 1854. 2v. 12°, 384; 381. (H. F. L. Nos. 167-8.) (4950) **389.29**
- STORER, Frank Humphreys. First outlines of a dictionary of solubilities of chemical substances. Cambridge: Sever & Francis. 1864. 8°, pp. xi+713+8. (4720) Chem. Lab.
- STORER, Frank Humphreys. [Joint Author.] See Eliot, C. W. and Storer, F. H. Manual of, &c. (5406).....Chem. Lab.
- STRACEY, Sir Edward. . . . [Introduction.] See Malory, Sir T. Morte D'Arthur. (4977).....**148.13**
- STRICKLAND, Agnes. Lives of the Queens of England, from the Norman conquest; with anecdotes of their courts. . . . New edition, with corrections and additions. \* \* \* . . . Philadelphia: Lea & Blanchard. 1849. 12°, 12v. in 6. (5160).....**394.1**

- Contents : Vol. I.—Matilda of Flanders, p. 17 ; Matilda of Scotland, p. 79 ; Adelia of Lorraine, p. 119 ; Matilda of Boulogne, p. 142 ; Eleanor of Aquitaine p. 188.
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- SULLIVANT, Wm. Starling. [On Mosses and Liverworts.] See Gray, Asa. Manual of Botany. (4759).....466.7
- SUMNER, John S. . . . [Catholic Libraries, 6 pp. 8°.] See UNITED STATES, Bureau of Education, Public Libraries in the, Vol. I., p. 137. (5474) L. R.
- SUMMERS, James, . . . The Rudiments of the Chinese Language, with dialogues, exercises, and a vocabulary. London: Bernard Quaritch . . . 1864. 16°, pp. 159+chart. (5267).....384.16
- SWAN, James G. The Indians of Cape Flattery, at the entrance to the Strait of Fuca, Washington Territory . . . 4°, 108 pp. See Smithsonian Institution, Contributions to Knowledge, Vol. XVI. (1870) Art 8. (5496)....441.1
- SWEET, Henry. . . . An Anglo-Saxon Reader, in prose and verse, with grammatical introduction, notes and glossary. Oxford: . . . 1876. 16°, pp. c. +302. (4994).....248.25
- SWIFT, Jonathan . . . A tale of a tub, the battle of the books, and a discourse concerning the mechanical operations of the Spirit. New York: Derby & Jackson, . . . n. d. 16°, pp. liv.+200+frontispiece. (5446)....238.15
- SYSTEM of Instruction in the practical use of the blowpipe. Being a graduated course of analysis for the use of students and all those engaged in the examination of metallic combinations. New York: H. Baillière, . . . 1858. 12°, pp. viii+269. (4714) [Preface by S. Cincinnati, June, 1857.] Chem. Lab.
- SZABAD, Emeric. . . . Modern War: its Theory and practice. Illustrated from celebrated campaigns and battles. With maps and diagrams. New York: Harper & Brothers, . . . 1863. 12°, pp. 284. (4990)....148.19
- TACITUS, Caius Cornelius; The annals of, with a commentary by the Rev. Percival Frost. . . . London: Whittaker & Co. . . . 1872. 8°, pp. xxxi+485. (In Bibliotheca Classica, edited by George Long) . . . (5138).....473.5
- TACITUS, Caius Cornelius. Agricola and Germania of, with a revised text, English notes, and maps. By Alfred J. Church, . . . and W. J. Brodriff . . . New edition. London: Macmillan & Co. 1875. 16°, pp. xxiv+102+viiii+92. (5043).....258.10

- TACITUS, Caius Cornelius. *The Germania and Agricola*, with notes by . . . Percival Frost, . . . London: Whittaker & Co. . . . 1861. 12°, pp. 165+map. (5139).....258.13
- TAIT, Peter Guthrie, and Stewart, Balfour. *The Unseen Universe; or physical speculations on a future state \* \* \** Fourth edition. New York: Macmillan & Co. 1876. 12°, pp. xvii+197. (5041).....148.8
- TAIT, Peter Guthrie. . . . Lectures on some recent advances in Physical Science with a special lecture on force. Second edition, revised. London: Macmillan & Co. 1876. . . . 8°, pp. xx+363. (5020).....148.11
- TAIT, Peter Guthrie. [Joint Author.] *See Thomson, Sir W., Elements of Natural Philosophy.* (5021).....227.11
- TALFOURD, Thomas Noon. . . . A sketch of the life of Charles Lamb; with final memorials. To which are added notes and illustrations, by Percy Fitzgerald. 12°, pp. 286. *See Lamb, Charles. Life, letters and writings.* . . . 6v. 12°, at p. xvii. of Vol. I. (5111).....376.2
- TASISTRO, Louis Fitzgerald. [Translator.] *See Orleans, L. P. Comte de Paris. History of the Civil War in America.* (4980).....227.3
- TAYLOR, [James] Bayard. [Translation in original meters.] *See Goethe, J. W. von, Faust:* (4570).....177.24
- TAYLOR, William Cooke . . . History of Ireland from the Anglo-Norman invasion till the union of the country with Great Britain. With additions by William Sampson, Esq. New York: Harper & Brothers, . . . 1854. 2v. 12°, pp. 285+frontispiece; 372+frontispiece. (H. F. L. Nos. 51, 52. (4875) 387.7
- TAYLOR, William Cooke. . . . The Modern British Plutarch; or lives of men distinguished in the recent history of England for their talents, virtues or achievements. New York: Harper & Brothers, . . . 1846. 12°, pp. iv+365. (Harper's New Miscellany, XVII.) (5324).....375.14
- Contents : Arkwright ; Burke, p. 8 ; Burns, p. 21 ; Byron, p. 28 ; Canning, p. 41 ; Chatham, p. 56 ; Adam Clarke, p. 71 ; Lord Clive, p. 76 ; Captain Cook, p. 88 ; Cowper, p. 100 ; George Crabbe, p. 107 ; Sir Humphrey Davy, p. 112 ; Lord Eldon, p. 118 ; Erskine, p. 128 ; Fox, p. 136 ; Franklin, p. 152 ; Goldsmith, p. 163 ; Grattan, p. 171 ; Earl Grey, p. 182 ; Hastings, p. 193 ; Bishop Heber, p. 205 ; Howard, p. 211 ; Jenner, p. 217 ; Sir William Jones, p. 222 ; Sir James Mackintosh, p. 229 ; Rev. Henry Martyn, p. 237 ; Sir John Moore, p. 242 ; Nelson, p. 255 ; Pitt, 269 ; Romilly, p. 279 ; Walter Scott, p. 287 ; Sheridan, p. 296 ; Smeaton, p. 309 ; Watt, p. 315 ; Marquis of Wellesly, p. 324 ; Wilberforce, p. 333 ; Wilkie, p. 338 ; Wellington, p. 347.
- TEGNER, Esaias. *Samlade skrifter. Nationalupplaga.* . . . \* \* \* P. A. Norstedt & Sonees, Forlag. 1876. 2v. 16°. Portrait. (5196)....476.1
- Vol. 1, Poetry, with memoir and portrait ; Vol. 2, Prose works.
- TEGNER, Esaias. *Efterlemnade skrifter. Ny Samling.* . . . Stockholm. 1873. F. & G. Beyers. . . . 3v. 16°. (5197).....477.2
- Vol. 1 and 2 Letters ; Vol. 3, Minor poems and miscellaneous prose.
- TERENTIUS. *Publii Terentii Comediæ Sex.* With a commentary by the Rev. Edward St. John Parry. . . . London: Whittaker & Co. . . . 1857. 8°, pp. lxxviii+642. (In *Bibliotheca Classica*, edited by George Long and A. J. Maclean.) (5140).....473.6

- THATCHER, Benjamin Bussey. Indian Biography; or an historical account of those individuals who have been distinguished among the North American nations as orators, warriors, statesmen, and other remarkable characters, . . . New York: Harper & Brothers. . . . 1848. 2v. 12°, pp. 324+frontispiece, portrait of Red Jacket; 320. (4872).....387.4
- THAUN, Phillippe de. *Li Livre des Creatures*, 53 pp. 8°; and *The Bestiary*, 57 pp. See Wright Thomas, *Popular treatises on science*, written during the middle ages, at p. 75. (5427).....462.21
- THEILE, Fr. Wilh. Dr. . . . [Translator from Dutch into German.] See Harting, P. *Das Mikroskop*. . . . (5256).....464.1
- THENARD, Louis Jacques, *le Baron*. . . . *Traité de Chimie Élémentaire, theorique et pratique*. Cinquième édition. . . . *Revue, corrigée et augmentée*. . . . Paris: Crochard. . . . 1827. 5v. 8°. [Plates in Vol. V.] (5369).....465.3
- Contents:—Vol. I. Books 1-7. Inorganic bodies, pp. xv. & 652 & 1 plate.  
Vol. II. Books 8-11. Same. pp. xvi&574 & 1 plate.  
Vol. III. Book 12. Same to p. 543. Second part, Organic bodies. (Book 1), pp. xv. & 745.  
Vol. IV. Organic, continued, pp. xiv. & 697,  
Vol. V. Third Part—Analytical chemistry, pp. viii. & 480 & 1 insert & 22 plates.
- THEODORET. . . . A history of the Church in five books, from A. D. 322 to the death of Theodore of Mopsuestia, A. D. 427. A new translation from the original; with a memoir of the author, an account of his writings, and the chronology of the events recorded. \* \* \* London: Samuel Bagster & Sons. . . . 1843. 8° pp. xxiv+360. (4707).....348.10
- THOMAS, Ralph. *Handbook for fictitious names: being a guide to authors, chiefly in the lighter literature of the XIXth century, who have written under assumed names; and to literary forgers, imposters, plagiarists and imitators, by Olphar Hamst, Esq.* \* \* \* London: John Russell Smith. 1868, 8° pp. xiv+235 (4555).....L. R.
- THOMPSON, Sir Benjamin, Count Rumford. *The complete works of*. Published by the American Academy of Arts and Sciences. Boston: Estes & Lauriat. . . . 4v. 8°. (5477).....463.8
- Contents: Vol. I. pp. iv. & 493 & 17 plates. Experiments on gunpowder, p. 1 & p. 98; Experiments with cannon, p. 173; Experiments on air and water, p. 191; Experiments on moisture of atmosphere, p. 232; Propagation of heat in fluids, p. 239; Propagation of heat in various substances, p. 401; Inquiry concerning heat excited by friction, p. 469.
- Vol. II. pp. v. & 570 & 13 plates. Papers on heat, p. 1, p. 23, p. 131, p. 166, p. 188; On cooling of liquids, p. 241; On Glaciers of Chamouny, with observations on propagation of heat in fluids, p. 251; Temperatures of water at maximum density, p. 258; Mode of propagation of heat in fluids, p. 274; Adhesion of particles of water, p. 290 and p. 300; Spontaneous mixture of liquids, p. 318; On use of steam, p. 324; Increasing heat from fuel, p. 345; New boiler to save fuel. p. 352; Use of steam in making soap, p. 359; On wood and charcoal, p. 362; Heat developed in vapours, p. 370; Calorific power of various liquids, p. 422; Structure of wood—yield of charcoal from it—yield of heat, p. 435; On chimney furnaces, p. 484.
- Vol. III. pp. 504 & 12 plates; Management of fire and the economy of fuel; On the construction of kitchen fire-places and kitchen utensils and cookery; Management of fire in closed fire-places.

- Vol. IV. pp. xi. & 843 & 17 plats; Relative intensities of light emitted by luminous bodies; Experiments on colored shadows; Conjecture respecting the principles of the harmony of colors; Chemical properties that have been attributed to light; Management of light in illumination; Source of the light in the combustion of inflammable bodies; An establishment for the poor at Munich; The fundamental principles for the establishments for the relief of the poor in all countries: Of food, particularly of feeding the poor; Several public institutions in Bavaria; Salubrity of warm rooms in cold weather; Salubrity of warm bathing; The excellent qualities of coffee, and the art of making it; Advantage of employing wheels with broad felloes for travelling and pleasure carriages; Miscellaneous papers.
- Vol. V. pp. xvi. & 680 & 7 plates & facsimile & 3 portraits—(2 portraits of Rumford, 1 of Countess Rumford); Memoir, with notices of his daughter.
- THOMPSON, Edward G. [Joint Author.] See Woodward, George E. Woodward's National Architect 4°. (5051).....526.3
- THOMPSON, Anthony Todd. . . . [Notes.] See Salverte, Eusebe. Philosophy of Magic. 2v. 12°. (5329).....375.19
- THOMSON, Thomas. . . . An attempt to establish the first principles of chemistry by experiment. . . . London: Baldwin, Cradock & Joy. 1825. 2v. 8°, pp. xxiii+478; vii+532. (5302).....464.10
- THOMSON, Thomas. . . . The history of chemistry. . . . London: Henry Colburn and Richard Bentley. 1830. 2v. sm16°, pp. vii+349+portrait of Jos. Black; 325. (5381).....228.7
- THOMSON, Thomas. . . . Outlines of mineralogy, geology, and mineral analysis: London: Baldwin & Cradock. 1836. 2v. 8°, p. viii+726; vii+566. (5301).....464.9
- THOMSON, Thomas. . . . Travels in Sweden during the autumn of 1812. Illustrated by maps and other plates. London: . . . Robert Baldwin. . . . 1813. 4° pp. xii+457+13 plates inc. maps. (5300).....461.4  
 "My objects were . . . to take a mineralogical survey of the country . . . to view . . . the state of chemistry in Sweden," . . .
- THOMSON, Sir William and Tait, P. C. . . . Elements of natural philosophy, part I. Oxford: At the Clarendon Press. 1873. 8°, pp. vi+279. (5021) 227.11
- THING, Edward. . . . A Latin gradual. A first Latin construing book for beginners. New edition. London: Macmillan & Co. 1871. . . . 16°, pp. vi+226. (5035).....258.11
- THURMAN, John. . . . Observations and essays on the statistics of insanity; including an inquiry into the causes influencing the results of treatment in establishments for the insane; to which are added the statistics of the Retreat, near York. London: Simpkins, Marshall & Co. . . . 1845. 8°, pp. xx+124+xxvi tables. (4785).....371.14
- THURSTON, Robert Henry. . . . [Scientific Commissioner.] Report on machinery and manufactures, with an account of European manufacturing district. 8° pp. xv+467+21 eng.+15 plates. [Numerous illustrations in the text.] See UNITED STATES, Dep't of State. Reports, International Exhibition, Vienna. 1873. Vol. III. A. (5440).....157.13
- THURSTON, Robert Henry. [Editor: also translations.] See UNITED STATES, Dept. of State. Reports, International Exhibition at Vienna, 1873. (5440).....157.13

- TICE, John H. The relations between matter and force. 21 pp. 16°. See Half Hour Recreations in Popular Science, at p. 305. (5026).....148.17
- TICKNOR, Caleb. Philosophy of living, or the way to enjoy life and its comforts. \* \* \* New York: Harper & Brothers. . . . 1846. 12°, pp. 336. (H. F. L. No. 77.) (4892).....387.24
- TILLOTSON, John. . . . The works of . . . containing fifty-four sermons and discourses, on several occasions, together with the rule of faith. Being all that were published by His Grace himself, and now collected into one volume. To which is added an alphabetical table of the principal matters. The third edition. London: . . . B. Aylmer, . . . 1701. imp8°, pp. 755, and portrait. (4794).....526.1
- TITFORD, William Jowit. . . . Sketches towards a Hortus Botanicus Americanus; or, colored plates (with a catalogue and concise and familiar descriptions of many species) of new and valuable plants of the West Indies and North and South America. Also of several others, natives of Africa and the East Indies: arranged after the Linnæan system, with glossary of terms prefixed, and a general index. London: . . . For the author. . . . 1811. 4°, pp. xvi+vi+(preface)+132+4+(index)+16 colored plates. (5274) Cab. B.
- TODD, William C. [Reading rooms, 5 pp. 8°] See UNITED STATES, Bureau of Education. Public Libraries, in the— Vol. I. p. 460. (5074).....L. R.
- TODHUNTER, Isaac. . . . Algebra for the use of colleges and schools. With numerous examples. Seventh edition. London: Macmillan & Co. 1875. 12°, pp. x+608. (5002).....148.28
- TODHUNTER, Isaac. . . . An elementary treatise on the theory of equations, with a collection of examples. Third edition. London: Macmillan & Co. 1875. . . . 12°, pp. vi+328. (5000).....148.30
- TODHUNTER, Isaac. Spherical Trigonometry. . . . Third edition, enlarged. London: . . . Macmillan & Co. 1871. 16°, pp. 158. (5102)..383.25
- "TOM BOWLING." (Pseud.) The Book of Knots, being a complete treatise on the art of cordage. Illustrated by 172 diagrams showing the manner of making every knot, tie and splice. London: Robert Hardwicke. . . . 1866. sq12° pp. vii+21+3 plates. (5448).....38X.16
- TORREY, John. Plantæ Fremontianæ, or descriptions of plants collected by Col. J. C. Fremont, in California. 4°, 24 pp.+10 plates. Observations on the Batis Maritima of Linnæus. 4°, pp. 8+1 plates. On the Darlingtonia Californica, a new pitcher plant, from northern California. 4° pp. 8+1 plate. See Smithsonian Institution, Contributions to Knowledge, Vol. VI. (1854) Arts. 2, 3, 4. (5486).....441.1
- TRAUTWINE, John C. . . . A new method of calculating the cubic contents of excavations and embankments, by the aid of diagrams. Together with directions for estimating the cost of earthwork. Sixth edition; completely revised and enlarged. Philadelphia: Claxton, Remsen & Haffelfinger. . . . 1875. 8°, pp. 60. (4597).....147.15
- TRAVER, M. and others. The Western Journal and Civilian . . . St. Louis, . . . M. Niedner & Co. . . . 1848—1855. 15v. 8°. (5238).....393.1  
Vol. XV. incomplete. Index in ea. vol., which see for numerous and valuable contributions to the agriculture, commerce, industries and arts of the Great West.



- TRENDELENBURG, Adolf. . . . Historische Beiträge zur Philosophie. Berlin: G. Bethge. 1846-1867. 3v. in 1. 8°, pp. xvi+384; viii+392; viii+444. (5414).....348.16
- Contents:—VOL. 1. Geschichte der Kategorienlehre. I. Aristoteles Kategorienlehre, pp. 195. II. Die Kategorienlehre in der Geschichte der Philosophie, pp. 189. VOL. 2. [10] Vermischte Abhandlungen. VOL. 3. [9] Vermischte Abhandlungen.
- TREVELYAN, George Otto. The life and letters of Lord Macaulay, by his nephew. \* \* \* New York: Harper & Brothers. . . . 1877. 2v. 16°, pp. 416; 416. (4997).....227.17
- TREVERANUS, Ludolf Christian. . . . Memoir of the Life of Dr. J. R. T. Vogel, 8°, pp. 21: translated from the German by Rev. W. T. Berkeley. See Hooker, Sir W. J. [Editor.] Niger Flora. . . . (5241)....462.3
- TROWBRIDGE, John. [Editor.] See Wells, D. A. . . . Trowbridge, J. . . . Annual of Scientific Discovery for the years 1870-1. (5232).....467.1
- TROWBRIDGE, William Petit. Heat as a source of power; with applications of general principles to the construction of steam generators. An introduction to the study of heat engines. New York: John Wiley & Son. . . . 1874. 8°, pp. vi+209. (4578).....147.9
- TRYON, George W., Jr. [Joint Editor.] See Rafinesque, C. S. Complete Writings of. (5428).....463.5
- TULLOCH, John. . . . Theism: the witness of reason and nature to an all-wise and beneficent Creator. \* \* \* William Blackwood & Sons; Edinburgh. . . . 1855. 8°, pp. xii+375. (5185).....394.2
- TURNBULL, William Peverell. . . . An introduction to Analytical Plane Geometry. Cambridge: Deighton, Bell & Co. . . . 1867. 8°, pp. viii.+264+104. (4621).....147.7
- TURNER, Edward . . . Elements of Chemistry . . . Fourth American from the third London edition, with notes and emendations, by Franklin Bache, M. D. . . . Philadelphia: Grigg & Elliott . . . 1831. 12°, pp. 622 (4541) 248.14
- TURNER, Sharon . . . The Sacred History of the World, attempted to be philosophically considered, in a series of letters to a son. . . . New York: Harper & Brothers. . . . 1846. 3v. 12°, pp. 428, 439, 444. (H. F. L. Nos. 32, 72, 84) (4865).....386.26
- TUTHILL, Mrs. Louisa Caroline. History of Architecture, from the earliest times; its present condition in Europe and the United States; with a biography of eminent architects, and a glossary of architectural terms. With numerous illustrations. \* \* \* Philadelphia: Lindsay & Blakiston. 1848. 8°, pp. 426 (5246).....391.7
- TUTTLE, Herbert. German Political Leaders. New York: Geo. P. Putnam's Sons. 1876. 12°, pp. viii+264. ["Brief Biographies."] (5030)....177.29
- TYLOR, Edward Burnett. Researches into the early history of mankind and the development of civilization. Second edition. London: John Murray. . . . 1870. 8°, pp. vi+386. (5181).....392.12
- TYLOR, Edward Burnett. The Stone Age, Past and Present. 34 pp. 16°. See Half Hour Recreations in Popular Science, at p. 327. (5026).....148.17

- TYNDALL, William. [Translator.] *See* Bibles and Testaments. The Gothic and Anglo-Saxon Gospels. (4552.).....147.14
- TYNDALL, John. Faraday as a discoverer. New York: D. Appleton & Co. 1868. 12° pp. vii+171.+2 portraits of Faraday. (5375).....465.9
- TYNDALL, John, Light and Electricity; notes of two courses of lectures before the Royal Institution of Great Britain. New York: D. Appleton & Co. . . . 1876. 12°, pp. 194. (4568).....208.17
- UEBERWEG, Friedrich. . . . History of Philosophy, from Thales to the present time. Translated from the fourth German edition, by Geo. S. Morris. . . . With additions by Noah Porter. With a preface by the editors of the Philosophical and Theological Library. New York: Scribner, Armstrong & Co., 1876. 2v. 8°, pp. xv+487; viii+561. (4572) 348.2  
 Contents:—Vol. I. History of the ancient and mediæval philosophy. pp. xv; 487.  
 Vol. II. History of modern philosophy; with additions by the translator, an appendix on English and American Philosophy, by Noah Porter, and an appendix on Italian Philosophy, by Vincenzo Botta. pp. viii; 561.
- UNITED STATES, Bureau of Education. Public libraries in the United States of America; their history, condition and management. Special Report. . . . Washington: Government Printing Office. 1876. 1v. bound in 2. 8° pp. 622; 623-1187 (part I.)+89 (Part II.) [18 illustrations in the text.] (5074).....L. R.  
 Part I. consists of statistics and numerous articles contributed by leading American librarians. Part II. of Mr. Charles A. Cutter's "Rules for a Printed Dictionary Catalogue." The editors are Samuel H. Warner and S. N. Clark, who are also authors of several articles.
- TYNDALL, John. Scientific addresses on the Methods and Tendencies of Physical Investigation, 15 pp. 12°; on Haze and Dust, 13 pp. 12°; on the Scientific use of the Imagination, 42 pp. 12°. *See* Half Hours with Modern Scientists, first series, p. 219. (5017).....148.6
- TYTLER, Alexander Frazer, and Nares, Edward. . . . Universal History, from the creation of the world to the decease of George III. 1820. . . . Edited by an American. . . . New York: Harper & Brothers. . . . 1843. 6v. 12°. (H. F. L. Nos. 86-91.) (4899).....388.2  
 Contents: Vol. I. pp. 335—Introduction: Assyria, p. 34; Egypt, p. 62; Phœnicia, p. 83; Greece, p. 88.  
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 Vol. VI. pp. 374—European States, from A. D. 1715; India, p. 251; Index, p. 311; Table of dynasties, p. 345; Eminent persons, p. 354; Chronological table, p. 357.
- TYTLER, Patrick Fraser. . . . Historical view of the progress of discovery on the more northern coasts of America, . . . With descriptive sketches of the natural history of the North American regions. By James Wilson. To which is added an appendix, containing remarks on a late memoir of Sebastian Cabot, with a vindication of Richard Hakluyt. Illustrated by a map and nine engravings. New York: Harper & Brothers . . . 1846. 12°, pp. 360. (H. F. L. No. 53.) (4876).....387.8

UNITED STATES, Department of State. Reports of the Commissioners of the United States to the International Exhibition held at Vienna, 1873. Published under the direction of the Secretary of State by authority of Congress. Edited by Robert H. Thurston, . . . member of the Scientific Commission of the United States. Washington: Government Printing Office. 1876. 4v., 8°. (5440.) . . . . . 157.3

Contents :—Vol. I. Introduction, pp. 508 ; 7 plates ; frontispiece. Part I. Antecedents, inception, organization and results of the exhibition, pp. 216 ; 7 plates. Part II., is composed of abstracts from official foreign reports referring chiefly to exhibits from the United States. The more extensive articles are those of

Anderson, J., relating to machine tools, textile and other machinery ; of Maw and Dredge on fuel, locomotives, steam engines, technical education, iron and steel ; of

Tisserand on Agriculture ; of Levasseur on Education ; of

Dr. A. W. Hoffman on piano fortes : by J. F. Rodinger on agricultural implements ; of E. Schwab, and others, on schools, pp. 269.

Garretson, H., Chief Executive Commissioner. Report 12 pp. 8°.

Warder, J. A., Forests and forestry, pp. 107 ; 55 ; 11 eng.

J. R. Dodge, sheep and wool, pp. 55 : 10 eng. ; 1 plate.

Vol. II. Science, Education, pp. 686 ; 3 plates. Smith, J. L., Report on chemicals, pp. 9. Horsford, E. N., Vienna bread, pp. 122 ; 1 plate. Collier, Peter, Commercial fertilizers, pp. 67. Doremus, C. A., Photography, pp. 26. Rupaner, A., Medicine and surgery, pp. 16. Watson, William, Civil engineering and Architecture, pp. 96 ; 9 eng. ; 20 plates. Davis, Charles, hydraulic engineering, pp. 20 ; 4 plates.

Vol. III. Engineering, pp. xvi. & 523 & frontispiece & 68 plates & 2 tables.

Thurston, R. H., Machinery and manufactures, pp. xvi. & 467 & frontispiece & 28 plates & 2 tables.

Fairfield, G. A., Sewing machines, pp. 36.

Watson, William, Civil engineering and Architecture, pp. 96 & 36 plates.

Davis, Charles, Hydraulic Engineering, pp. 20 & 4 plates.

Vol. IV. Architecture, metallurgy, general index, pp. 741 ; xvi ; 29 eng. ; 10 plates.

Bridges, L., Buildings of the exhibition, pp. 34 : 17 eng. Introduction, buildings of the exhibition, the pavilions, buildings in the city of Vienna construction of buildings, railroads and their structure.

Niernsee, J. R., Construction of dwellings in Vienna. pp. 26 ; 11 plates. Historical sketch, construction and embellishment of buildings, architectural features.

Lowe, N. M., Wood industries, pp. 27 American exhibits and methods, detail report.

Hinton, J. L., Working of stone, pp. 49, 3 eng ; stone-cutting machines, cut and carved stone work, paving sidewalks and halls, cement, stucco, and terra cotta, artificial stone.

Blake, W. P., Metallurgy of iron and steel, pp. iv ; 311 ; 6 eng ; 2 plates ; introduction, Austrian Empire, German Empire, France, Belgium, Sweden, Spain, Russia and Siberia, Britain, United States ; iron as an artist's material ; appendix.

Painter, H., Metallurgy of lead, silver, &c., pp. xvi ; 237 ; table ; introduction, United States, Spain, France, Italy, Belgium, Sweden, Norway, Germany, Austrian-Hungary, Russia, Turkey, Greece ; appendix. General index, 84 pp. at end Vol. IV.

UNITED STATES Sanitary Commission. The . . . commission in the Valley of the Mississippi. . . . See Newberry, J. L., [Secretary.] 8°. (4795)

371.10

- UNITED STATES, War Department. Cavalry tactics. . . . School of the trooper, of the platoon and of the squadron—dismounted. Printed by order of the War Department. Philadelphia: Lippincott, Grambo & Co. 1855. 2v. sm16°. (4802).....228.5  
 Vol. I. First Part—Trooper and platoon dismounted. pp. vii ; 298 ; 49 plates.  
 Vol. II. Second Part—Trooper, platoon and squadron, mounted. pp. v. ; 293 ; plates 50-100.
- UNITED STATES, War Department. Regulations for the army of the United States. 1857. New York: Harper & Brothers. . . . 1857. 12°, pp. xxv.+457+21. (4778)..... 374.18
- UNITED STATES, War Department. Regulations for the care, preservation and accountability of ordnance and ordnance stores, with instructions for making the returns, reports, etc., prescribed by the Chief of Ordnance, U. S. Army, under the provisions of section 1167, Revised Statutes of the United States. For the use of the troops in the military service of the United States. Washington: Government Printing Office. 1877. 8°, pp. 277+vii. (5444) 63.26
- UNIVERSAL HISTORY, from the earliest account of time. Compiled from original authors; and illustrated with maps, cuts, notes &c. With a general index to the whole. \* \* \* London: Printed for T. Osborne. 1847. 21v. only, 8°. (4821) [4th volume missing.].....373.1
- UPHAM, Charles Wentworth. Life of Sir Henry Vane. 12° pp. 419+vignette. See Sparks, J., Lib. of Am. Biog. Vol. IV. at p. 85. (4814).....385.1
- UPHAM, Thomas Cogswell. . . . Outlines of imperfect and disordered mental action. . . . New York: Harper & Brothers. . . . 1848. 12°, pp. 399 (H. F. L. No. 100.) (4905).....388.8
- URE, Andrew. . . . Ure's Dictionary of arts, manufactures, and mines, containing a clear exposition of their principles and practice. Edited by Robert Hunt, . . . assisted by numerous contributors eminent in science and familiar with manufactures. Illustrated with nearly two thousand engravings on wood. Fifth edition, chiefly, rewritten and greatly enlarged. London: Longmans, Green, Longman, Roberts & Green. 1863. 3v. 8°. (4723) 42.8  
 Vol. I. pp.x ; 909. Aba—Cymophane. Vol. II. pp.ii ; 740. Daguerreotype—Lynx. Vol. III. pp. i ; 1077. Macaroni—Zirconia.
- VALESIIUS, [Valois, Henry de.] Life of Eusebius, pp. xv. 8°.] See Eusebius, Pamphilus. Ecclesiastical History. . . . (4704).....348.7
- VAN HORNE, Thomas B. . . . History of the Army of the Cumberland; its organization, campaigns and battles, written at the request of Major-General George H. Thomas, chiefly from his private military journal and official and other documents furnished by him. Illustrated with campaign and battle maps compiled by Edward Ruger. . . . Cincinnati: Robert Clarke & Co. 1875. 2v. and atlas. r8°, pp. xiv+454; vi+478+22 maps. (5008) 227.4
- VEGETABLE substances used for the food of man. [by Lankester, Edward. ?] New York: Harper & Brothers . . . 1846. 12°, pp. 271+vi. (H. F. L. No. 161.) (4951) [Originally published by Brit. Soc. D. U. K.] .....389.30
- VENABLE, W. H. . . . A School History of the United States. Wilson, Hinkle & Co., Cincinnati: . . . New York n. d. [Pref. 1872.] 12°, pp. 247+xxx. (4594).....218.19

- VERMONT HISTORICAL SOCIETY. Proceedings of the— October 8, 1872. \* \* \*  
Montpelier: . . . for the Society. 1872. 8°, pp, xxi+127. (4820) **381.8**
- VERMONT, State of. Annual Directory . . . 1869. (4801).....**228.11**
- VERPLANCK, Gulian Crommelin. . . . The influence of moral causes upon  
opinion, science and literature. \* \* \* 37 pp. 12°. See Brougham, H. [and  
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- VERPLANCK, Gulian Crommelin. On the importance of scientific knowledge to  
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- VERRILL, A. E. See Dana, J. D.
- VILLEMAIN, Abel François. Cours de Littérature Française. Tableau de la  
littérature au moyen age en France, en Italie, en Espagne, en Angleterre,  
. . . Nouvelle édition \* \* \* Paris: . . . Didier et Cie . . . 1875. 2v. 8°,  
pp. 362; 346. (5080).....**118.10**
- VILLEMAIN, Abel François. Cours de Littérature Française. Tableau de la  
littérature au XVIII<sup>e</sup> siècle . . . Nouvelle édition \* \* \* Paris: Didier et  
Cie . . . 1873. 4v. 8°, pp. 396; 450; 431; 418. (5081).....**118.11**
- VINCENT, Camille. [Reviser.] See Payen, A. Précis de Chimie Industrielle.  
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- VIRCHOW, Rudolf. The cranial affinities of Man and the Ape. 31 pp. 16°,  
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- VIRGILIUS, Publius Maro. Bucolica, Georgica, Æneis. The works of Virgil,  
with commentary and appendix . . . by Benjamin Hale Kennedy . . .  
London: Longmans, Green & Co. 1876. 16°, pp. xl+643+2 maps. Short-  
memoir of Virgil, p. xv. [The form Vergilius, appears on title page.] (5145)  
**258.15**
- VIRGILIUS, Publius Maro. The works of— from the text of Heyne and Wagner,  
with English notes, original and selected, by Archibald Hamilton Bryce,  
. . . with numerous illustrations. London: Charles Griffin & Company,  
. . . n. d. sm16°, pp. [83]+161+[125]+152+132+155—266+[8] (5144)  
**258.14**
- VITRUVIUS, Marcus Pollio. The Architecture of— in ten books, translated from  
the Latin by Joseph Gwilt, . . . A new edition, carefully revised by the  
translator, and with additional plates. \* \* \* London: Lockwood & Co.  
. . . 1874. 12°, pp. xxxv+316+13 plates. ("Weale's Rudimentary Series,  
No. 128.") (5094).....**384.4**
- VOGEL, Julius. Report on the laws according to which the mixing of fluids and  
their penetration into permeable substances occur, with special reference to  
the processes in the human and animal organization. 33 pp. 8°. See Graham  
Thomas. Chemical Reports and memoirs, p. 85. (5436).....**493.3**
- VOGEL, Theodore. [Collector and author of Journal of Voyage. 8°, pp. 51+  
map+1 plate.] See Hooker, Sir W. J. Niger Flora. (5241)....**462.3**
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(Memoir.)] See Chefs-d'Oeuvres des Auteurs Comiques. 8v. 12°. Vol. V.  
(5090).....**118.13**

- VOSE, George L. . . . Manual for Railroad Engineers and engineering students. Containing the rules and tables needed for the location, construction and equipment of railroads, as built in the United States. With one hundred and sixty-five wood cuts and thirty-one large plates. Boston: Lee & Shepard, . . . 1875. 8°, pp. xviii+570. (5032).....248.29
- VOSSIUS, Gerardus Joannes. Aristarchus, sive De Arte Grammatica. Editit Carolus. Foertsch . . . Hale's Saxonum [Halle] in libraria Orphanotrophei. 1833. 8°, pp. 912. [Books VI. and VII. wanting.] (5217).....478.2
- VOYAGES round the world, from the death of Captain Cook to the present time; . . . New York: Harper & Brothers, . . . 1855. 12°, pp. 395. (H. F. L. No. 172.) (4954).....38X.2
- In continuation of No. 82, H. F. L., both originally published in the Edinburgh Cabinet Library.
- WACKERNAGEL, Wilhelm. Altdeutsches Handwörterbuch. Basel: . . . 1861. 8°, pp. 402. (4667).....178.14
- WADE, John. [Editor.] See Coxe, William. Memoirs of the Duke of Marlborough. 3v. 16°. (5124).....376.13
- WAGNER, Rudolph. . . . A handbook of chemical technology. Translated and edited from the eighth German edition, with extensive additions, by William Crookes. . . . With 336 illustrations. New York: D. Appleton & Co. 1872. 8°, pp. 745. [Index, pp. xvi.] (5368).....464.12
- WAGNER, Wilhelm. [Notes, introduction and analysis.] See Plato. Apology of Socrates and Crito. (4626).....258.36
- [Editor.] See Plato. Phædo. . . . (5130).....258.28
- WAGNER. [Text.] See Virgilius, P. M. Works of . . . (5144)..258.14
- WAHL, W. H. [Editor.] See Franklin Institute, Journal of.
- WAKE, William. [Archbishop of Canterbury, translator and publisher.] The genuine epistles of the Apostolical Fathers, St. Clement, St. Polycarp. St. Ignatius, St. Barnabas. The pastor of Hermas, and an account of the martyrdoms of St. Ignatius and St. Polycarp, written by those who were present at their sufferings; being, together with the Holy Scriptures of the New Testament, a complete collection of the most primitive antiquity, for about a hundred and fifty years after Christ. Translated and published with preliminary discourses, by . . . The seventh edition. London: Samuel Bagster. . . . 8°, pp. viii+478. (4799).....371.11
- WALKER, George. [Translator from German, with alterations, notes and additions.] See Scheller, I. J. G. Copious Latin grammar. (5136)..473.2
- WALKER, James. . . . Reason, faith and duty. Sermons preached chiefly in the Harvard college chapel. Boston: Roberts Brothers. 1877. 12°, pp. xiii.+454+portrait of author. [Introduction, contains a short life of Pres. Walker by W. O. W.] (5443).....377.10
- WALKER, James. [Editor.] See Reid, Thomas. Essays on the intellectual powers of man. (5165).....382.14
- WALKER, Sears Cook. Ephemeris of the planet Neptune for the year 1852. 4°, 10 pp. See Smithsonian Institution, Contributions to Knowledge, Vol. III. (1852) appendix I. (5483).....441.1

- WALKER, Sears Cook. Researches relative to the planet Neptune. 60 pp. 4°  
[Also three ephemerides of Neptune, pp. 32, 10, 10 as appendix.] See Smithsonian Institution, Contributions to Knowledge, Vol. II. 1855. p. 1 and appendix. (5482).....441.1
- WALLACE, Alfred Russel. The action of natural selection on man. 59 pp. 12°.  
See Half Hours with Modern Scientists. Second series, at p. 2. (5018)  
148.7
- WALLACE, Professor. [Astronomy of Hindoos.] See Historical and descriptive account of British India. 3v. 12°, Vol. III., p. 279. (4873).....387.5
- WALSH, Rev. Robert. An essay on ancient coins, medals and gems, as illustrating the progress of Christianity in the early ages. Second edition, greatly enlarged. London: Howell & Stewart. . . . 1828. 12°, pp. 140+ frontispiece and 12 plates. (5270).....374.16
- WALTON, Isaak. The lives of Dr. John Donne, Sir Henry Wotton, Mr. Richard Hooker, Mr. George Herbert, and Dr. Robert Sanderson, by— . . . with some account of the author and his writings, by Thomas Zouch. . . . A new edition, with illustrative notes, etc. \* \* \* New edition, complete in one volume. New York: George P. Putnam. . . . 1848. 16° pp. viii +386. (4758).....374.3
- WANKLYN, James Alfred, . . . and Chapman, Ernest Theophron. Water analysis: A practical treatise on the examination of potable water. Second edition, edited by Ernest Theophron Chapman. . . . London: Truebner & Co. . . . 1870. . . . 12°, pp. xv+112. (5441) Chem. Lab.
- WANKLYN, James Alfred. [Acetic ether—Butyl alcohols—Butyric acid, &c.] See Watts, H. Dictionary of chemistry. 2nd Supplement. (4724) [No initials are attached to these articles.]
- WARBURTON, Eliot, . . . [Editor.] Hochelaga; or England in the new world. New York: John Wiley, . . . London. 1848. 2 parts in 1v. 12°, pp. 174 +198. (4826).....388.3
- WARD, Townsend. The insurrection of the year 1794, in the western counties of Pennsylvania. To which are appended General Wilkin's account of the gathering at Braddock's field, and a memoir of the insurrection by James Gallatin. 8°, pp. 87+frontispiece, view of Pittsburgh in 1790, and an engraving of Braddock's field. See Historical Society of Pennsylvania. Memoirs of— Vol. VI. at p. 117. (5203).....391.10
- WARDER, JOHN A. Hedges and evergreens. A complete manual for the cultivation, pruning and management of all plants suitable for American hedging, especially the Maclura, or Osage Orange. Fully illustrated with engravings of plants, implements and processes. To which is added a treatise on evergreens; their different varieties—their propagation, transplanting and culture in the United States: New York: A. O. Moore. . . . 1858. 12°, pp. 291+12 plates. (5280).....516.17
- WARDER, John A. . . . [Commissioner.] Report on Forests and Forestry, 107 pp. 8°. See UNITED STATES, Dept. of State. Reports, International Exhibition, Vienna, 1873, Vol. I. D. (5440).....157.13
- WARE, William. A memoir of Nathaniel Bacon. 68 pp. 16°. See Sparks, J., Lib. of Am. Biog., 2d series, Vol. 3, at p. 239. (4810).....384.1

- WARING, Edward John . . . Pharmacopœia of India, prepared under the authority of her Majesty's Secretary of State for India in council. Assisted by a committee appointed for the purpose. \* \* \* India office. 1867. London: W. H. Allen & Co. . . . 8°, pp. xvi.+468. (5299).....462.8
- WARING, George, . . . [Assistant.] See Bibles and Testaments. The Gothic and Anglo-Saxon Gospels. (4532).....147.14
- WARREN, S. N. and Clark, S. N. [Editors.] See UNITED STATES, Bureau of Education. Public Libraries in the— The editors are also authors of the articles on School and Asylum Libraries, 22 pp. 8°; College Libraries, 67 pp.; Sketches of Theological Libraries, 19 pp.; Libraries in prisons and reformatories, 12 pp.; Library of the General Government, 27 pp.; Copyright, distribution, exchanges and duties, 13 pp.; sketches of historical societies, 45 pp.; Free Town libraries, 15 pp.; Library reports and statistics, 82 pp.; General statistics of all public libraries in the United States, 165 pp. (5074).....L. R.
- WARRINGTON, Robert. [Fodder, p. 524; Maize, p. 764; Malt, p. 765; Manure, p. 776; Millet, p. 813; Oats, p. 863; Root Crops, p. 1048. See Watts, H. Dictionary of Chemistry, 2d supplement. (4724)
- WASHINGTON, George. Words of— selected by James Parton. \* \* \* Boston: James R. Osgood & Co. . . . 1872. 16°, pp. vii.+196. (5468)..238.16
- WATSON, John Selby. . . . [Notes.] See Æschylus, Prometheus Vincetus. (4622).....147.19
- WATSON, Richard. Chemical Essays. Second edition. London: . . . J. Dodsley . . . 1782. sm16°, Vol. 2 only, pp. 368. [Title page mutilated.] (5380)  
228.10
- WATSON, Richard. The Life of the Rev. John Wesley, A. M. Sometime Fellow of Lincoln College, Oxford, and founder of the Methodist Societies \* \* \* With notes and translations by the author. Buffalo: . . . Phinney & Co. 1851. 12°, pp. viii.+328. (5288).....375.27
- WATSON, William . . . [Honorary Commissioner.] Civil Engineering. Public Works, and Architecture. 8°, pp. 96+9 eng.+xx plates. See UNITED STATES, Department of State. Reports, International Exhibition, Vienna, 1873, Vol. III. C. (5441).....157.13
- WATTS, Henry. . . . A Dictionary of Chemistry and the allied branches of other sciences. By Henry Watts, . . . assisted by eminent contributors. London: Longmans, Green & Co. 1863-1875. 7v. 8°. (Vols. 1, 2, 3, 4, 5, (967); (Vol. 6, (4551); (Vol. 7, (4724)
- Contents: Vol. I. 1863; pp. 1137, Abichite—Conglomerate. Vol. II. 1864; pp. 985. Conhydrine—Gytge; Vol. III. 1865; pp. 696, Hæmaphein—Mysorin. Vol. IV. 1866; pp. 836, Nacrite—Pyruvic acid; Vol. V. 1869; pp. vi. & 1120. Quadrantoxide to Zymurgy. Additions and corrections, pp. 1087-1095. Errata for Vols. I. II. and III. first edition, pp. 1119-20. Supplement, 1872, pp. xiii. & 1136, Abies-Zircon. Second Supplement, 1875, pp. ii. & 1215, Abietene—Zirlite. [Title page of first three volumes add "Founded on that of the late Dr. Ure."]
- WATTS, Henry. [Joint author of parts 2 and 3 of Vol. I.] See Ronalds, E. [and others.] Chemical Technology. 3v. in 6. 8°. (5385).....157.9
- . . . [Translator.] See Gmelin, L. Handbook of Chemistry. 12v. 8°. (5434).....493.1



- WATTS, W. Marshall . . . Organic Chemistry . . . \* \* \* New York: G. P. Putnam's Sons. ("Elementary Science Series.") . . . 1873. 16°, pp. 130. (5432).....228.12
- WAYLAND, Francis . . . The Elements of Intellectual Philosophy. . . Boston: Phillips, Sampson & Co. . . . 1855. 12°, pp. 426. (5166) 582.13
- WAYLAND, Francis. [Sermon on the triumph of the Redeemer.] See Murray-st. Church, New York. Discourses . . . (4546).....157.6
- WAYNE, Major Henry Constantine. The Sword Exercise, arranged for military instruction. Published by authority of the War Department. Washington: . . . 1850. 8°, pp. 43+11 plates. (4816)..... 374.19
- WAYNE, Major Henry Constantine. Exercise for the broadsword, sabre, cut and thrust, and stick. Published by authority of the War Department Washington: . . . 1849. 12°, pp. 43+11 plates. (4816) [Bound with above.] 374.19
- WEALE, John. A dictionary of terms used in architecture, building, engineering, mining, metallurgy, archæology, the fine arts, &c., with explanatory observations on various subjects connected with applied science and art. Edited, with numerous additions, by Robert Hunt, . . . Fifth edition, revised and corrected. \* \* \* London: Crosby, Lockwood & Co. . . . 1876. 8°, pp. xii.+570+ (4617)..... 248.7
- WEBB, Phillip Barker. Spicilegia Gorgonea; or a catalogue of all the plants as yet discovered in the Cape de Verde Islands. From the collections of J. D. Hooker . . . Dr. T. Vogel and other travellers. \* \* \* 8°, pp. 107. See Hooker, Sir W. J., Niger Flora, at p. 90. (5241).....462.3
- WEBSTER, Daniel. Speeches and forensic arguments. Boston: . . . Tappan and Dennett. 1843. 8°, pp. 563. Vol. III. (5387) 395.7 Vols. 2 and 3. (2116). . . . .395.7
- WEBSTER, Noah. An American Dictionary of the English Language. Thoroughly revised and greatly enlarged and improved, by Chauncey A. Goodrich . . . and Noah Porter, . . . Springfield: . . . G. & C. Merriman, . . . 1877. 4°, pp. lxxii.+1764+portrait and three colored plates. (4233) R. R.
- WEDGWOOD, Hensleigh . . . A dictionary of English Etymology. Second edition, thoroughly revised and enlarged; with an introduction on the origin of language. Truebner & Co., . . . 1872. 8°, pp. lxxi.+744. (5127).391.15
- WEIGAND, Friedrich Ludwig Karl. Deutsches Wörterbuch. Dritte, völlig umgearbeitete Auflage von Friedrich Schmitthenners Kurzem deutschen Wörterbuche. . . . Giessen. . . . 1857. T. Ricker. . . . 2v. 8°. (5096) 178.23
- Vol. I. pp. xvi. & 656, A—Kyrie Eleison. Vol. II. pp. ii & 76, L. to Zwuentsche. Nachtrage, pp. 4; Berichtigungen, pp. 4.
- WEISS, John. . . . The Hand-Book of Hydropathy; for professional and domestic use; with an appendix on the best mode of forming hydropathic establishments. Being the result of twelve years' experience at Grafenberg and Freywalden. From the second London edition. Philadelphia: J. W. Moore, . . . 1849. 16°, pp. x.+411. (4757).....374.8

- WELLS, David Ames. Bliss, George, . . . Kneeland, Samuel, . . . Trowbridge, John, . . . Nicholas, William Ripley, . . . Cross, C. R. . . . Annual of Scientific Discovery: or Year Book of Facts in Science and Art. . . . Exhibiting the most important discoveries and improvements in . . . together with notes in the progress of science, . . . a list of recent scientific publications; obituaries of eminent scientific men, etc., edited by —. New York: Albert Mason, . . . and Boston: Gould & Lincoln. 1850-1875. [Vol. I. 1868.] 22v. in 21. [1866 and 1867 in 1v.] 18 portraits. (5232) 467.1
- List of Portraits.—1850, Agassiz; 1851, Silliman; 1852, Henry; 1853, Bache; 1854, Hitchcock; 1855, R. M. Hoe; 1856, Wyman; 1857, H. D. Rogers; 1858, Mitchell; 1860, Isaac Lea; 1861, Gould; 1862, Dahlgren; 1863, Erickson; 1865, Gilmore; 1866-7, Wells; 1868, W. B. Rogers; 1869, Dana; 1870, Pierce.
- WELLS, William Vincent. The life and public services of Samuel Adams, being a narrative of his acts and opinions, and of his agency in producing and forwarding the American Revolution. With extracts from his correspondence, state papers, and political essays. . . . Boston: Little, Brown & Co., 1865. 4v. 8°, pp. xxi+512+portrait+facsimiles; pp. x+512+frontispiece; pp. vii+460+portrait. (5479).....395.19
- WEST, Charles E. . . . [Revision.] See Butler, J. Hobart's analysis of Bishop Butler's Analogy of Religion. (5283).....384.14
- WESTGARTH, William. . . . Victoria; late Australia Felix, or Port Philip District of New South Wales; being an historical and descriptive account of the colony and its gold mines, with an appendix containing the reports of the Melbourne Chamber of Commerce for the last two years upon the condition and progress of the colony. Edinburgh: Oliver & Boyd. . . . London: Simpkin, Marshal & Co. 1853, 8°. pp. xiv+390+96+map. (5249).....391.6
- WHAT is Actinism? 2 pp. 16°. See Half Hour Recreations in Popular Science, at p. 477. (5026).....148.17
- WHEATON, Henry. Life of William Pinkney. 12°, pp. 48+vignette. See Sparks, J., Lib. of Am. Biog. Vol. VI., at p. 1. (4814).....385.1
- WHITING, Henry. Life of Zebulon Montgomery Pike. 98 pp. 16°. See Sparks, J., Lib. Am. Biog., 2d series, Vol. V. at p. 217. (4810) ...384.1
- WHEATON, Henry. [Joint Author.] See Crichton, A. and Wheaton, H. Scandinavia, ancient and modern. (4928).....389.7
- WHEELER, Gervase. Rural Homes; or sketches of houses suited to American country life, with original plans, designs &c. Auburn and Rochester: Alden & Beardsley. 1855. 16°, pp. 298+frontispiece. (5268)....374.12
- WHEWELL, William. . . . Architectural notes on German churches; with notes written during an architectural tour in Picardy and Normandy. The third edition, to which is added notes on the churches of the Rhine, by M. F. DeLassaulx. . . . Cambridge: . . . J. & J. J. Deighton. 1842. 8°, pp. xv+333+4 plates. (5515).....381.4
- WHEWELL, William. The elements of morality, including polity. . . . \*\*\* New York: Harper & Brothers. . . . 1845. 2v. 12°, pp. 401, 424. (Harper's New Miscellany, I. & II.) (5312).....375.1
- [WHEWELL, William.] Of the plurality of worlds: An essay, also a dialogue on the same subject. \*\*\* The third edition. London: John W. Parker & Son. . . . 1854. 8°, pp. viii+404+frontispiece. (5431)....466.22

- WHITE, Andrew Dickson. *The Warfare of Science*. New York: D. Appleton & Co. . . . 1877. 12°, pp. 151. (5149).....382.9
- WHITE, Rev. Gilbert. *The natural history of Selbourne*. . . . \* \* \* New York: Harper & Brothers. . . . 1847. 12°, pp. 335. (H. F. L. No. 147.) (4936).....389.15
- WHITNEY, Josiah Dwight . . . *The metallic wealth of the United States, described, and compared with that of other countries*. Philadelphia: Lipincott, Grambo & Co. . . . 1854. 8°, pp. xxxii.+510. (4721)
- WHITNEY, Josiah Dwight. *The Yosemite Guide Book; a description of the Yosemite Valley and the adjacent region of the Sierra Nevada, and of the big trees of California*. New edition, revised and corrected. With four maps. Published by authority of the legislature [of California.] 1874. 16°, pp. vii.+186. (4561).....248.17
- WHITNEY, William Dwight. . . . *The life and growth of language: an outline of linguistic science*. New York: D. Appleton & Co. . . . 1877. 12°, pp. vii.+326. [Int. Nat. Series.] (5010).....148.24
- WHITTLESEY, Charles. *Ancient mining on the shores of Lake Superior*. 4°, 32. pp.+1 map. See Smithsonian Institution, *Contributions to Knowledge*, Vol. XIII. (1863) Art. 4. (5493).....441.1
- WHITTLESEY, Charles . . . *Description of ancient works in Ohio*. 4°, pp. 20+7 plates. See Smithsonian Institution, *Contributions to Knowledge*, Vol. III. (1852) Art. 7. (5483).....441.1
- WHITTLESEY, Charles. *On fluctuations of level in the North American Lakes*. 4°, 28 pp.+2 plates. See Smithsonian Institution, *Contributions to Knowledge*, Vol. XII. (1860) Art. 3. (5492).....441.1
- WHITTLESEY, Charles. *On the fresh-water glacial drift of the Northwestern States*. 32 pp. 4°. See Smithsonian Institution, *Contributions to Knowledge*, Vol. XV. (1867) Art. 3. (5495).....441.1
- WHITTLESEY, Charles. *Life of John Fitch*. 86 pp. 16°. See Sparks, J., *Lib. of Am. Biog*, 2d series, Vol. 6, at p. 81. (4810).....384.1
- WICKHAM, Edward C. . . . [Commentary.] See Horatius. *Opera omnia*, Vol. I. (5013).....227.14
- WILKINS, A. S. . . . [Translator of notes and introduction, with many additions.] See Cicero. *The orations against Catilina*. (5034).....258.12
- WILKINS, General John. *The gathering of the insurgents on Braddock's field*. [Letter to Wm. Irvine, Pittsburgh, Aug. 19, 1794.] 8°, pp. 5+engraving of the field. See Historical Society of Pennsylvania. *Memoirs of—* Vol. VI., at p. 183. (5203).....391.10
- WILL, Henry. . . . *Outlines of the course of qualitative analysis followed in the Giessen laboratory*. With a preface by Baron Liebig. Boston: James Munroe & Co. 1847. 12°, pp. xii.+139+5 tables. (5412)....Chem. Lab.
- WILLIAMS, John. *The life and actions of Alexander the Great*, \* \* \* New York: Harper & Brothers . . . 1843. 12°, pp. 351+map. (H. F. L. No. 7.) (4844).....386.5
- WILLIAMS, Thomas and Calvert, James. . . . *Fiji and the Fijians*. Edited by George Stringer Rowe. New York: D. Appleton & Co. 1859. 8°, pp. x.+551+map+4 eng.+3 colored plates. (5242).....391.4  
 Contents : Part I. The islands and their inhabitants, by Thomas Williams, pp. 509.  
 Part II. Mission History, by James Calvert, pp. 341, at p. 210.

- WILLIAMS, W. *Appleton's Railroad and Steamboat Companion; being a traveller's guide through the United States of America, Canada, New Brunswick and Nova Scotia, with maps of the country through which the routes pass, in the Northern, Middle and Eastern States. . . . Illustrated by 30 maps engraved on steel, including four plans of cities, and embellished with 26 engravings. New York: D. Appleton & Co. . . . 1848. sm8°, pp. 313. (4803).....385.3*
- WILLIAMSON, Alexander W. . . . *Chemistry for students. New edition. Oxford: Clarendon press. 1868. 16°, pp. xxii.+479. (5378).....228.8*
- WILLIS, Anson. *Our rulers and our rights: or outlines of the United States Government, its origin, branches, departments, institutions, officers and modes of operation. Illustrated. . . . Parmelee & Co. Philadelphia . . . 1869. 16°, pp. 504+4 engravings. (5258).....374.15*
- WILLIS, Robert. . . . *Principles of Mechanism. Designed for the use of students in the Universities, and for engineering students generally. Second edition. John Wiley & Son, New York. 1875. 8°, pp. xxiv.+463. (4576)..147.11*
- WILLSON, Marcuis, . . . *The Sixth Reader of the United States series . . . New York: Harper & Brothers. . . . 1872. 12°, pp. 370. (3146).356.12ex.*
- WINSOR, Justin. . . . [Reading in popular libraries, 3 pp. 8°; Library buildings, 11 pp.; Library memoranda, 4 pp. *See UNITED STATES, Bureau of Education. Public libraries in the— Vol. I. p. 431, p. 460, and Vol. II. p. 711.....L. R.*
- WILSON, George . . . *Inorganic Chemistry. Revised and enlarged by Stevenson Macadam . . . With new notation added. \* \* \* London & Edinburgh: W. & R. Chambers. ["Educational Course."] 1870. 16°, pp. x.+385 (5408).....466.19*
- WILSON, George, . . . *The Life of the Hon<sup>ble</sup> Henry Cavendish, including abstracts of his more important scientific papers, and a critical inquiry into the claims of all the alleged discoveries of the composition of water. London: . . . The Cavendish Society. 1851. 8°, pp. xiv.+478+portrait of Cavendish. (5383).....493.4*
- WILSON, James . . . *Descriptive sketches of the Natural History of the North American Regions. 123 pp. 12°. *See* Tytler, P. F. Historical view of the progress of discovery on the more northern coasts of America, at p. 210. (4876).....387.8*
- WILSON, James. . . . [Zoology of—] *See* Murray, H. [and others.] Historical and descriptive account of British India. 3v. 12°, Vol. III. p. 11. (4873).....387.5
- WILSON, James. . . . [Natural History of—] *See* Jameson, R., Wilson, J. and Murray H. Narrative of discovery and adventure in Africa. 12°. (4852).....386.13
- WILSON, John. . . . *Our farm crops, being a popular scientific description of the cultivation, chemistry, diseases, remedies, &c., of the various crops cultivated in Great Britain and Ireland. \* \* \* Blackie & Son: . . . London: n. d. [Pref. 1859.] 2v. 8°. (4636).....517.1*
- WILSON, John. *Our Israelitish origin. Lectures on ancient Israel, and the Israelitish origin of the modern nations of Europe. \* \* \* Second American, from the third London edition. Philadelphia: Daniels & Smith . . . 1850. 12°, pp. 237. (5287).....375.29*

- WILSON, Thomas. *Bishop of Sodor and Man*. The works of— . . .  
with his life . . . by the Rev. C. Curtwell. The second edition. \* \* \*  
Bath: printed by R. Curtwell, and sold by C. Dilly, Poultny, London. 1782.  
f. 2v. in 1. [Portraits.] (5337).....491.10
- Contents: Vol. I. Life, pp. 88. Instructions . . . Lord's Supper, p. 87; Instruction for  
India, p. 125; Private and Family Prayer, p. 209; Forms of Consecration,  
p. 227; Parochialia, p. 235: Maxims of Piety, &c., p. 271; Form of Prayer  
for the Herring Fishery; p. 325; Form of Excommunication, p. 329;  
Form of Receiving Penitents, p. 333; Instructions of an Academic Youth,  
p. 339; Catechetical Instructions, p. 343; Sacra Privata, and Meditations,  
p. 353; History of the Isle of Man, p. 447.  
Vol. II. pp. [v.] & 492, Sermons.
- WIMMER, Ludwig, F. A. *Altnordische Grammatik aus dem Dänischen ueber-*  
*setzt von Dr. E. Seivers.* Halle: . . . 1871. 8°, pp. viii.+160. (1670)  
178.18
- WINCHELL, Alexander. *Geology of the Stars.* 31 pp. 16°. See *Half Hour*  
*Recreations in Popular Science*, at p. 255. (5026).....148.17
- WINTER, Samuel H. . . . *Mathematical exercises: Comprising 4500 exam-*  
*ples, . . . with tables, formulæ, answers and references.* New edition.  
London: Longman, Green & Co. 1875. 12°, pp. viii.+444. (5177) 375.25
- WINTHROP, Robert Charles. *Washington, Bowdoin and Franklin, as portrayed*  
*in occasional addresses: With a few brief pieces on kindred topics, and*  
*with notes and illustrations.* Boston: Little, Brown & Co. 1876, 8° pp.  
186. (5073).....227.19
- WIRT, William. . . . *Sketches of the life and character of Patrick Henry.*  
. . . Revised edition. . . . Ithaca, N. Y.: . . . Andrus, Gauntlett  
& Co. n. d. [Copyright, 1839.] 8°, pp. 306.+portrait. (4656).....218.16
- WITHERING, William, M. D. . . . *A systematic, arrangement of British*  
*plants; with an easy introduction to the study of botany. Illustrated by*  
*copper-plates. The fourth edition. . . . corrected and enlarged, by*  
*William Withering, Esq. . . . \* \* \* . . . London. . . . T. Cadell,*  
*Jun. . . . 1801. 4v. 8°, pp. xiv+402+19 plates; 409+[1]+plates*  
*20-31; 443 to 900+plates, Nos. 29, 30 (Index to Vols. 2 & 3.); 444+plates*  
*Nos. 20-28. (5251).....464.3*
- WITHERING, William, *Esq.* . . . [Corrected and enlarged.] See Withering,  
William, M. D. *Systematic arrangement of British plants.* 4v. 8°.  
(5251).....464.3
- WÖHLER, Friederich. . . . *The analytical chemist's assistant: A manual of*  
*chemical analysis, both qualitative and quantitative of natural and artificial*  
*inorganic compounds, to which are appended the rules for detecting arsenic*  
*in a case of poisoning. Translated from the German, with an introduction,*  
*illustrations and copious additions, by Oscar M. Lieber, . . . Philadelphia:*  
*Henry Carey Baird, 1852. 12°, pp. xix+314. (5414).....466.15*
- WOOD, De Volson. . . . *A treatise on the resistance of materials, and an*  
*appendix on the preservation of timber. Second Edition. New York:*  
*John Wiley & Son. . . . 1875. 8°, pp. x.+313 [One Diagram.] (4559)*  
147.12
- WOOD, Horatio C. *A contribution to the history of the fresh water Algæ of*  
*North America. . . . 4°, 274 pp.+29 colored plates. See Smithsonian*  
*Institution, Contributions to Knowledge. Vol. XIX. (1874.) Art. 3.*  
*(5499).....441.1*

- WOOD, Joseph. Results of meteorological observations, at Marietta, Ohio, between 1817 and 1823. Reduced and discussed, . . . by Charles A. Schott, 4°, pp.52+14 wood cuts. See Smithsonian Institution, Contributions to Knowledge, Vol. XVI. (1870) Art. 4. (5496). . . . .441.1
- WOODS, Leonard. [Sermon on Reason in Religion.] See Murray-st. Church, New York. Discourses. (5546). . . . .157.6
- WOODBIDGE, John. [Sermon on Enmity against God.] See Murray-st. Church, New York. Discourses. . . . (4546). . . . .157.6
- WOODWARD, George E. and Thompson, Edward G. Woodward's national architecture; containing 1,000 original designs, plans and details, to working scale, for the practical construction of dwelling houses for the country, suburb and village, with full and complete sets of specifications and an estimate of the cost of each design, by— . . . New York: Geo. E. Woodward. . . . 4°, pp. x+48+100 plates, [text mixed with plates.] (5051) 526.3
- WOODWORTH, Samuel. [Additions.] See Smith, H. Festivals, games, and amusements, ancient and modern. 12°. (H. F. L. No. 25.) (4858). . . . .386.19
- WORDSWORTH, Christopher. . . . Athens and Attica: notes of a tour: Fourth edition, with maps and plans. London: John Murray. . . . 1869. 12° pp. xviii+251. (5188). . . . .258.23
- WORDSWORTH, John. . . . Fragments and specimens of early Latin with introductions and notes. Oxford at the Clarendon Press. 1874. 8° pp. xxx+679. (5141). . . . .473.4
- WRANGELL, Ferdinand. [Papers and Journals.] See Engelhardt. Narrative of an expedition to the Polar Sea. (4937). . . . .389.16
- WRIGHT, Thomas. . . . Popular treatises on science written during the middle ages, in Anglo-Saxon, Anglo-Norman, and English. Edited from the original manuscripts by —. London: . . . for the [Historical] Society [of Sciences.] . . . 1841. 8°, pp. xvi.+140. (5427). . . . .462.21
- Contents: 1. Anglo-Saxon Manual of Astronomy, author unknown, attributed to Aeltric. It is an abridgement of Bede's treatise, *De Natura Deorum*. 19 pp. 2. Li Livre des Creatures, by Philip, de Thaum, an Anglo-Norman poet. pp. 20—73. 3. The Bestiary, by the same. pp. 74—131. 4. Fragments on popular science, from the earliest English metrical Lives of the Saints. "It is curious as being the earliest piece of the kind which we find in the English language." pp. 132.
- WRIGHT, Thomas. [Editor, reviser and annotator.] See Giraldus Cambrensis, Historical works of— (5121). . . . .376.11
- WYCLIFFE, John. [Translator.] See Bibles and Testaments. The Gothic and Anglo-Saxon Gospels. (4552). . . . .147.14
- WYMAN, Jeffries . . . Anatomy of the nervous system of Rana Pipiens. 4°, pp. 52+2 plates. See Smithsonian Institution, Contributions to Knowledge, Vol. V. (1853) Art. 4. (5485). . . . .441.1
- XENOPHON. Anabasis; or Retreat of the Ten Thousand, with English notes, critical and explanatory, and a geographical register, by Henry Young. . . . Part I. Books I.—III. \* \* \* London: Lockwood & Co. . . . 1875. 12°, pp. xi.+107. (5132). . . . .258.26
- XENOPHON. Anabasis. [Edited by George Long, 3d edition.] \* \* \* London: Dulau & Co. . . . 1848. 12°, pp. xvi.+348. (5187) . . . . .258.27

- XENOPHON. *Xenophontis Expeditio Cyri, ex recensione et cum annotationibus Ludovici Dindorfii. Editio secunda auctior emendatio.* Oxonii: E Typographeo Academico. 1855. 8°, pp. xxxviii.+472. (5012).....227.15
- YOUMANS, Edward Livingston . . . . A Class-Book of Chemistry, . . . \* \* \*  
New York: D: Appleton & Co. . . . 1855. 12°, pp. 343. (5415) Chem. Lab.
- YOUMANS, Edward Livingston. A Class-Book of Chemistry, . . . applied to the arts, . . . and the most important phenomena of nature. . . . \* \* \*  
New York: D. Appleton & Co. . . . 1856. 12°, pp. 343. (5167).382.18
- YONGE, John Eyre. *See* Horatius. The complete works of. (5190)....473.7
- YOUNG, Charles Augustus. The Sun and the phenomena of its atmosphere. 12°, pp. 62. *See* Half Hours with Modern Scientists. Second series, at p. 151. (5018).....148.7
- YOUNG, Edward. . . . Labor in Europe and America: a special report on the rates of wages, the cost of subsistence, and the condition of the working classes in Great Britain, France, Belgium, Germany, and other countries of Europe, also in the United States and British America. \* \* \* Philadelphia: S. A. George & Co. . . . 1875. 8°, pp. 864. (4601).....147.2
- YOUNG, [Joint author.] *See* Schellen, Young, Roscoe, Lockyer, Huggins and others. Spectrum Analysis discoveries. (5026) .....148.17
- YOUNG, Henry. . . . [Editor, with notes.] *See* Xenophon. Anabasis. (5132)  
258.26
- ZIMMERMAN, Wilhelm, F. A. . . . Die Macht der Elemente und ihre Benutzung im täglichen Leben. Eine populäre Darstellung des industriellen Wissens unserer Zeit und der Geschichte der Technik . . . Leipzig: . . . Ambrosius Abel. 1858. 2v. 8°. (5366).....464.11
- Contents; Vol. I. Das Feuer, pp. viii. & 568 & frontispiece, colored lithograph of Vesuvius in eruption.  
Vol. III. Das Wasser; Die Luft, p. 259; Die Erde, p. 433. pp. viii. & 509.
- ZOUCH, Thomas. [Life, &c.] *See* Walton, Isaac. Lives of Donne, Wotton, etc. 12°, pp. viii+386. (4758)....374.3

## UNITED STATES DOCUMENTS.

- AMERICAN Archives, 1776. 3v. 4°.
- AGRICULTURAL Department. Annual reports, 1862-1875. 13v. 8°. [1869 missing.]
- CENSUS reports, 1850-1860, 3v; 1870, 4v.
- ANNALS of Congress, 1789-1824. 38v. 4°.
- AMERICAN State Papers.  
Public Lands, Vols. V—VIII.; Military papers, Vol. III—VII.; Naval affairs, Vol. II—IV.; Finance, Vols. IV. and V.; Foreign relations, Vol. V. and VII. 16v. 4°.
- CONGRESSIONAL Globe. 63v. 4°.
- EDUCATION Bureau.  
Special report. District of Columbia, 8°. Annual reports, 1866-1875. 7v. 8°.
- GEOLOGICAL Reconnaissance of the Northern counties of Arkansas. Report of D. D. Owen. 8°.
- INDIAN Bureau. History and prospects of the Indian tribes, by H. R. Schoolcraft. 5v. 4°. [Vol. II. *missing*; Vol. III. *duplicated*.]
- INTERIOR Department. Foster and Whitney's report, 1850. 8°.  
Geology of the Uinta mountains. 4° and f. atlas.  
Hayden's reports. Colorado and New Mexico, 1869, 8°; Colorado and adjacent territory, 1873, '74, '75. 3v. 8°.  
—— Wyoming and adjacent territory, 1870; N. W. Wyoming, 1873; Montana and adjacent territory, 1871; Montana, Idaho, Wyoming and Utah, 1872.  
—— Nebraska, 1872. 8°.  
—— Survey of the Territories, 1874-'77-'78, 6v. 4°.  
Maps to Stanbury's and to Lee's reports. 2v. 8°.  
Mineral resources of U. S. 1867, 1868. 2v. 8°.  
Owen's survey of Iowa, Wisconsin and Minnesota in 1852, and illustrations of the same. 2v. 4°.
- HOUSE of Representatives.  
Andrews report of Colonial and Lake trade and map. 2v. 8°.  
Credit Mobilier investigation—Wilson committee; Poland committee. 2v. 8°.  
Report on the conduct of the war. 3 parts; supplement 2 parts. 5v. 8°.
- NAVY Department.  
American ephemeris and nautical almanac, 1855-1880. 25v. 8°.  
Catalogue of zodiacal stars for the American ephemeris.  
Star tables of the American ephemeris.  
Astronomical and meteorological observations. 1864-1874, 11v. 4°.  
Meteorological report, 1845-1859. 2v. 4°.  
Wilkes' exploring expedition. 18v. 4°. Atlases. 8v. f.
- PATENT OFFICE. Reports, 1845-1871. 26v. 8°.



## WAR Department.

- Army meteorological register. 4°.  
Army of the Potomac. Report of McClellan. 8°.  
Engineer bureau. Reports, 1867-1877. 10v. 8°.  
Black Hills of Dakota, 1874. 4°.  
Report on the mechanical properties of steel. 8°.  
Explorations across the Great Basin of Utah in 1859. 4°.  
Exploring expedition from Santa Fe to the junction of the Grand and Green rivers, 1859. 4°.  
Geological survey in Nebraska and Arizona, 1871. 4°.  
Wheeler's reports. Survey west of 100th meridian. 6v. 4°. [Vol. I. n. r.]  
Geological survey of the Territories. Carroll.—Montana, to the Yellowstone National Park, 1875. 4°.  
Medical and surgical history of the War of the Rebellion. 3v. 4°.  
Report on the Mississippi river. 4°.  
Surgeon General's office, circulars. 4v. 4°.  
Mineral Resources west of Rocky Mountains. J. Ross Browne. 8°.  
Statistics of Mines and Mining west of Rocky Mountains. R. W. Raymond. 1873, '75. 2v. 8°.  
Reconnaissance of N. W. Wyoming. W. A. Jones. 1873. 8°.

## SENATE.

- Ku-Klux conspiracy investigation. 13v. 8°.  
Howard's report of the Hatch-San Domingo affair. 8°.

## TREASURY Department.

- Report of the Superintendent of the Coast Survey, 1851-1874. 24v. 4°.  
Sketches 1v.

## STATE DOCUMENTS.

## ARKANSAS.

Geological Reconnoissance. By D. D. Owen. 1858. 8°.

## CALIFORNIA.

Public Instruction. Report, 1868-1872. 2v. 8°.

## CONNECTICUT.

Colonial Records, 1678-79. 8°. New Haven Colonial Record, 1638-1649, 1658-1665. 2v. 8°.

## ILLINOIS.

Report of Adjutant General, 1861-1865. 8v. 8°. Geological Survey, Vols. III.-VI. 4v. 8°; Industrial University, Reports, 1868-1874. 7v. 8°; Public Instruction, 1869-1876. 3v. 8° (1871-72 n. r.)

## INDIANA.

Agricultural and Geological Report, 1869, 1872. 2v. 8°; Geological Survey, 1870-1875, Maps for 1872. 6v. 8°. (1871? n. r.); Adjutant General, 1861-1865. 8v. 8°.

## IOWA.

Geological Survey. White. 1870. 2v. 18°.

## KENTUCKY.

Geological Survey. By D. D. Owen. 1856. 18°.

## MAINE.

Agriculture of Maine, 1860-1875. 15v. 8°. (1869 n. r.) Agriculture and Geology. Second series. 1861. 8°.

## MASSACHUSETTS.

Board of Education, 1860-1871. 11v. 8°. (1870 n. r.); Report of Boston School Committee, 1857-1874. 13v. 8°. (1865, 1866 n. r.)

## MICHIGAN.

Agricultural Society, 1850-1857. 6v. 8°. (1856 n. r.); Board of Agriculture, 1865-1876. 11v. 8°; Geological Survey, Winchell, A. Report, 1860. 8°; Geological Survey, 1879-1876. 3v. 8°; Pomological Society, 1871-1876. 6v. 8°; School Reports, 1854-1876. 15v. 8°. ('54, '63, '64, '65, '66, '74 n. r.)

## NEW JERSEY.

Geological Survey, 1868. 8°. 1 vol. + maps.

## NEW YORK.

Colonial History, 10v. 8°. Documentary History, 4v. 4°. Regents of the University; Reports, 1857-1876. 20v. 8°.

## NORTH CAROLINA.

Geological Survey; Vol. I. 1875. 8°.

## OHIO.

Agricultural Reports, 2d Series, 1859-1873. 14v. 8°. (1862 n. r.); Geological Survey, 1869, 1870, 1873, (Geology 2v., Palæontology, 2v.) 6v. 8°. Maps, 2v.; Geological Survey, Maps of Grouped Sections, 1870, 1874; Cincinnati Education, 1860-1876. 11v. 8°. (1866 n. r.)

## PENNSYLVANIA.

Geological Survey, by H. D. Rogers. 2v. 8°. Second Survey, B. 8°. Railroad Reports. 1863-'72. 8v. 8°. Board of Public Charities. 1870-'74. 5v. 8°. Education. 1859-'75. 13v. 8°.

## RHODE ISLAND.

Bibliography, Bartlett. 8°; Board of Education; Reports, 1868-1875. 10v. 8°; Census, 1875. 8°; Colonial Records, Vols. II., IV., V., VI., VII., VIII. and X. 7v. 8°; Public Education—1636-1876. 8°; Registration Reports, 1853-1875; Records, 1776-1783. 2v. 8°.

## TENNESSEE.

Geological Survey. Safford. 8°.

## VERMONT.

Geological Survey. 1861. 2v. 8°. Registration. 1869-'73. 15v. 8°. Hist. Soc. Collections. 1870-'71. 2v. 8°.

## WISCONSIN.

Geological Survey, 1862. 8°, and 1873-1877. 8°, and atlas.

MAGAZINES AND REVIEWS.—*Bound.*

- BIBLICAL Repository, 1831-1847. 19v. 8°.
- BLACKWOOD'S Magazine, 1873-1876. 8v. 8°.
- BRITISH Review, 1844-1851, 1873. 16v. 8°.
- BRITISH Quarterly Review, 1874-1876. 3v. 8°.
- ECLECTIC Magazine, 1874-1876. 6v. 8°.
- EDINBURGH Review, 1803-1851. 94v. 8°. 1873-1876. 4v.
- HARPER'S Monthly Magazine, 1851-1873. 43v. 8°.
- INTERNATIONAL Review, 1874-1876. 3v. 8°.
- JOURNAL of Speculative Philosophy 1872-1876. 4v. 8°.
- LONDON Quarterly Review, 1873-1875. 4v. 8°.
- NEW ENGLANDER, 1873-1876. 4v. 8°.
- NORTH American Review, 1873-1875. 4v. 8°.
- POPULAR Science Monthly, 1875-1876. 3v. 8°.
- VAN NOSTRAND'S Eclectic Engineering Magazine, 1873-1876. 8v. 8°.
- PUTNAM'S Magazine, 1853-1857. 10v. 8°; 1868-1870. 6v. 8°.
- QUARTERLY Review. 1805-1851. 89v. 8°.
- SCRIBNER'S Magazine, 1872-1875. 6v. 8°.
- WESTMINSTER Review, 1873, '75, '76. 3v. 8°.
- SAINT PAUL Daily Press, 1867, 1868, 1869, 1871 and 1872 complete.
- SAINT PAUL Daily Pioneer, 1867, complete; 1868, August-December; 1870, January-May; 1871, complete; 1872, complete.
- MINNEAPOLIS Daily Tribune, 1869, June to December.
- BRITISH AND CANADIAN.**
- Journal of the Agricultural Society. 1840-1864. 25v. 8°; second serig. 1865-1874. 10v. 8°—in all, 35v. 8°.
- Canadian Naturalist and Geologist. 1857-'63. 8v. 8°
- Geological Survey. Report of Progress. 1863-'54-'55-'56. 2v. sm8°. (iv. maps); do. 1857; do. from commencement to 1863. 2v. 8°. (1 of maps) do. 1866-'69, 1870-'71, 1871-'72, 1872-'73, 1873-'74, 1874-'45, 1875-'76. 8v. 8°.
- Canadian Naturalist and Journal of Science. New series. 1864-'75. 7v. 8°. Figures and descriptions of organic remains; Decades I. II. III. IV. 1859. 4v. 8°; Fossil plants of Devonian and Upper Silurian. 1871. 8°; Palæozoic Fossils. 1874. 8°; Catalogue of Silurian Fossils. 1866. 8°; Laurentian Limestones. 1871. 8°; Geology, N. W. side of Lake Superior. 1870. 8°; Iron and Iron Ore Notes. 1870. 8°; Pictou Coal Field. 1870. 8°; Coals and Iron Ores. 1870. 8°; Gold Region of Canada. 1866. 8°. Summary Report. 1870. 8°; Gold of Eastern Canada. 1864. 12°.