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STORAGE

COOPER UNION

—FOR THE—

ADVANCEMENT OF SCIENCE AND ART.

SUMMARY REPORT.

MAY 29th, 1879.



New York :
A. S. WHITEHORNE, BOOK AND JOB PRINTER,
94 FULTON STREET.

1879

Officers and Trustees.

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PETER COOPER.

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Advisory Council of the School of Design for Women,

| | | |
|------------------------|-------------------------|------------------------|
| Mrs. JONATHAN STURGES, | Mrs. RICHARD TIGHE, | Mrs. W. H. OSBORN, |
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| Mrs. EDWARD COOPER, | Miss GEORGINA SCHUYLER. | |

Curator.

J. C. ZACHOS.

Clerk.

L. C. L. JORDAN.

INSTRUCTORS

IN THE

FREE SCHOOLS OF SCIENCE AND ART.

- FITZ GERALD TISDALL, PH. D., Director of the Night Schools.
CHAS. S. STONE, A. M., Professor of Chemistry.
GEORGE W. PLYMPTON, A. M., C. E., Professor of Philosophy, Mechanism and Astronomy.
J. C. ZACHOS, Professor of Oratory, English Language and Literature.
GEORGE W. COAKLEY, LL. D., Instructor in Diff. and Integral Calculus and Analytical Geometry.
WM. GOULD LEVISON, Director of Laboratory.
WM. G. MCGUCKIN, A. B., Instructor in Trigonometry, Geometry and Algebra.
WALLER HOLLADAY, JOHN B. SKINNER G. C. SEGUR, Instructors in Geometry and Algebra.
J. F. MAURER, Instructor in Descriptive Geometry and Mechanical Drawing.
J. A. SAXTON, A. M., EDWIN B. JENNINGS, A. B., Instructors in Geometrical and Mechanical Drawing.
JOHN BUCKINGHAM, JOHN F. SCHLOER, Instructors in Architectural Drawing.
BENJAMIN BRAMAN, Instructor in Perspective Drawing.
FRANZ VENINO, Instructor in Cast Drawing
W. W. SCOTT, Instructor in Form Drawing.
MAX EGLAU, J. A. McDOUGALL, JR., Instructors in Drawing from Copy.
R. WASSERSCHIED, Instructor in Industrial Drawing.
NICHOLAS ROSSIGNOLI, Instructor in Modeling in Clay.
-

- MRS. SUSAN N. CARTER, Principal of Woman's Art School.
B. SWAIN GIFFORD, Teacher of Painting.
S. A. DOUGLAS VOLK, Teacher of Life and Antique Drawing
CARL HECKER, Teacher of Photo-color and Photo-crayon.
MISS C. E. POWERS, Teacher of Normal Drawing.
MISS ELEANOR RICHARDSON, Asst. Teacher of Cast Drawing.
MISS LUCY A. PÖE, Asst. Teacher of Photo-color and Photo-crayon.
WM. H. GOODYEAR, Lecturer on Art.
MISS CHARLOTTE B. COGSWELL, Principal of Engraving School, and Teacher of Drawing on Wood.
MISS MARY S. DICKINSON, Teacher of School of Telegraphy for Women.
-

READING ROOM AND LIBRARY.

- PROF. J. C. ZACHOS, Curator.
MRS. CURTIS, MISS HENBY, MISS GAWTHORN, A. J. WHITE, WM. H. POWELL, JR., Custodians.

RECEIPTS AND EXPENDITURES

OF THE

Cooper Union for the Advancement of Science and Art.

FOR THE YEAR A. D, 1878.

REVENUE.

| | |
|---|--------------------|
| Rents from Stores, Rooms, Offices and Large Hall----- | \$34,962 69 |
| Sale of Old Paper Materials, &c----- | 355 45 |
| Interest on Bonds invested----- | 770 00 |
| Endowment Fund----- | 3,500 00 |
| Donations----- | 2,040 65 |
| Total Receipts----- | \$41,628 79 |

EXPENDITURES.

| | |
|--|--------------------|
| Free Night Classes in Science and Art----- | \$11,820 99 |
| Free Art School for Women----- | 7,525 67 |
| Free Reading Room----- | 1,791 47 |
| Free Library----- | 5,834 41 |
| Chemical Department----- | 231 54 |
| Philosophical Department----- | 150 80 |
| Lecture Expenses----- | 728 87 |
| Heat and Ventilation----- | 2,947 50 |
| Care of Building----- | 2,757 70 |
| Furnishing----- | 618 43 |
| Repairs and Improvements----- | 3,433 49 |
| Office Expenses----- | 834 19 |
| Gas----- | 4,342 49 |
| Stationery----- | 217 27 |
| Printing----- | 609 17 |
| Advertising----- | 513 56 |
| Postage----- | 98 25 |
| Sundries----- | 39 45 |
| Fund for Rewarding Employees----- | 370 00 |
| Womens' Centennial Union Fund----- | 100 00 |
| Total Expenditures----- | \$44,965 26 |

Dr. GENERAL CASH STATEMENT.

| | |
|--|-------------|
| Balance in Treasury January 1st, 1878----- | -\$2,136 29 |
| Receipts as per statement above----- | 41,628 79 |
| Money borrowed during the year----- | 6,477 40 |
| | \$50,242 48 |

Cr.

| | |
|--|--------------|
| Expenditures as per statement above----- | -\$44,965 26 |
| Loans paid off----- | 4,270 00 |
| Balance in Treasury January 1st, 1879----- | 1,007 22 |
| | \$50,242 48 |

FINANCIAL CONDITION.

CURRENT ASSETS.

| | |
|--|-------------|
| Balance in Treasury January 1st, 1879----- | \$1,007 22 |
| Rents due----- | 7,907 69 |
| Interest due from Township of Pompton in Litigation----- | 42,000 00 |
| | \$50,914 91 |

CURRENT INDEBTEDNESS.

| | |
|-----------------------|-------------|
| Loans----- | \$22,437 50 |
| Accounts audited----- | 4,258 08 |
| | \$26,695 58 |

SUMMARY REPORT.

DEPARTMENTS IN OPERATION.

1ST—THE FREE READING ROOM AND LIBRARY.

| | |
|--|---------|
| American Newspapers on file, Dailies, 64, Weeklies, 82, Total, | 146 |
| Foreign " " " 15, " 35, | 50 |
| American Magazines taken, | 51 |
| Foreign " " " " " " " " " " " " | 47 |
| Total number of Periodicals taken in Reading Room, | 294 |
| Number of Books in Library, about | 14,150 |
| Number of Books added to the Library in 1878, about | 400 |
| Number of readers in 1878, | 644,494 |
| Increase in number of readers in 1878, | 30,435 |
| Number of books used, | 288,658 |
| Patent Office Reports examined, | 2,714 |

The Reading Room is open from 8 A.M. to 10 P.M., free to all without ticket or introduction.

2ND—THE FREE ART SCHOOL FOR WOMEN.

| | |
|--|-----|
| Number of Students applied for admittance, | 600 |
| Number of Students admitted during the year, | 255 |
| Number at close of term, | 224 |
| Number receiving Certificates, | 145 |
| Students in pay class for Pottery Painting, | 150 |
| Students in pay class for Drawing, | 90 |

Open daily from 9 A.M. to 1 P.M.

MRS. SUSAN N. CARTER, *Principal*,

MISS ANNA CURTIS, *Clerk*.

3RD—FREE SCHOOL FOR WOMEN IN WOOD ENGRAVING

| | |
|---|------------|
| Number of Pupils received during the year, | 39 |
| Number at close of term, | 29 |
| Number receiving certificates, | 18 |
| Receipts of the Pupils for Drawing and Engraving, | \$1,820 59 |

MISS CHARLOTTE B. COGSWELL, *Principal*.

4TH—FREE SCHOOL OF TELEGRAPHY FOR WOMEN.

| | |
|---------------------------------------|-----|
| Number of Applicants during the year, | 101 |
| Number of Pupils during the year, | 85 |
| Remaining at close of term, | 34 |
| Number receiving certificates, | 18 |

Average wages earned by female operators per month, from \$30 to \$50.

MISS MARY S. DICKINSON, *Teacher*.

5TH—THE FREE NIGHT SCHOOL OF SCIENCE,

| CLASSES. | Admitted during the term. | Remaining at close of term. | Number that rec'd certificates |
|---|---------------------------|-----------------------------|--------------------------------|
| Algebra, - - - | 245 | 102 | 62 |
| Geometry, - - - | 240 | 89 | 73 |
| Trigonometry, - - - | 35 | 21 | 10 |
| Analytical Geometry, - - - | 41 | 21 | 18 |
| Descriptive Geometry, - - - | 38 | 23 | 15 |
| Differential and Integral Calculus, | 14 | 11 | 10 |
| Theoretical and Practical Mechanics, | 32 | 22 | 11 |
| Natural Philosophy, . | 146 | 55 | 36 |
| Mechanical Engineering - - - | 7 | 7 | 7 |
| Astronomy, - - - | 62 | 24 | 21 |
| Elementary Chemistry, - - - | 283 | 103 | 68 |
| Analytical Chemistry, - - - | 11 | 10 | 5 |
| Mineralogy and Geology, - - - | 33 | 16 | 12 |
| Mechanical Drawing, [School of Science] | 21 | 20 | 8 |
| Oratory and Debate, - - - | 173 | 150 | |
| | <hr/> | <hr/> | <hr/> |
| Total in School of Science, | 1381 | 674 | 356 |

6TH—THE FREE SCHOOL OF ART.

| | | | |
|------------------------------|-------|-------|-------|
| Perspective Drawing, - - - | 88 | 38 | 25 |
| Mechanical Drawing, - - - | 241 | 126 | 48 |
| Architectural Drawing, - - - | 216 | 100 | 18 |
| Drawing from Cast, - - - | 62 | 50 | 21 |
| Form Drawing, - - - | 67 | 35 | 26 |
| Industrial Drawing, - - - | 144 | 87 | 41 |
| Free Hand Drawing, - - - | 512 | 296 | 80 |
| Modeling in Clay, - - - | 109 | 60 | 19 |
| | <hr/> | <hr/> | <hr/> |
| Total in School of Art, | 1439 | 792 | 278 |
| | <hr/> | <hr/> | <hr/> |
| Grand Total, | 2820 | 1466 | 634 |

FITZ GERALD TISDALL, Ph. D., *Director.*

7TH—NUMBER OF PERSONS who have availed themselves of the privilege of free consultation with the Professors of Science on matters relating to industrial pursuits .

| | | |
|--|---------|------------|
| Prof Charles S. Stone, Industrial Chemistry, | [about] | 156 |
| Prof. Geo. W. Plympton, Mechanics and Physics, | “ | 140 |
| Total | - - - | <u>296</u> |

8TH—FREE SATURDAY NIGHT LECTURES FOR THE PEOPLE.

COURSE FOR 1868-69.

DR. BOYNTON, three lectures.
 Prof. WORCESTER, one lecture.
 Prof. T. STERRY HUNT, LL.D., on “Mountains and Valleys.”
 Dr. A. J. EBELL, three lectures on Zoölogy.
 FRANCIS BOWEN, Esq., on “The National Debt.”
 A. L. PERRY, Esq., on “Why do we make Exchanges?”
 SIMON STERNE, Esq., on “Representative Government.”
 CHAS. MORAN, Esq., on “The Relations of Capital and Labor.”
 VAN BUREN DENSLOW, Esq., one lecture.

COURSE FOR 1869-70.

Dr. A. J. EBELL, four lectures on Zoölogy.
 Prof. J. E. FROBISHER, readings and recitations.
 LEWIS SANDERS, Esq., on the “Dignity of Labor.”
 Dr. G. Q. COLTON, on “Nitrous Oxide Gas.”
 Dr. KNAPP, on “Light and Vision.”
 Prof. LOUIS ELSBERG, M.D., on “Hearing, Voice and Sound.”
 Prof. B. SILLIMAN, on “The Yosemite Valley.”
 Prof. C. F. CHANDLER, two lectures on “Petroleum” and “Water.”
 Dr. RAPHAEL, on “The Circulation of the Blood.”
 CHAS. C. PERKINS, Esq., on “Art Education in the U. S.”
 Prof. B. W. HAWKINS, on “The Age of Dragons.”
 Prof. PUMPELLY, on “The Chinese Question.”
 Prof. J. S. NEWBERRY, on “Coal.”

COURSE FOR 1870-71.

Prof. E. L. YOUNG, on “The Dynamics of Life.”
 Major POWELL, on “The Cañon of the Colorado.”
 N. P. LANGFORD, Esq., on “The Upper Waters of the Yellowstone.”
 ARTHUR GILMAN, Esq., on “Traits of Yankee Humor.”
 Dr. A. J. EBELL, two lectures on “The Microscope, and “The Anatomy and Natural History of Insectians.”
 Prof. W. D. GUNNING, on “The Last Glacial Epoch in America.”
 P. B. WRIGHT, Esq., on “Architecture.”
 Prof. J. E. FROBISHER, readings and recitations.

- R. W. RAYMOND, Ph. D., on "Darwin's Hypothesis of the Origin of Species."
 JAMES B HODGSKINS, Esq., on "Work, Weather and Wealth."
 Prof. THOMAS EGGLESTON, on "The Manufacture of Iron."
 Prof. J. C. ZACHOS, on "Shakespeare."
 Prof. C. F. CHANDLER, on "Illuminating Gas."
 Prof. B. SILLIMAN, two lectures on "The Atmosphere."
 Prof. CHARLES DAVIES, on "The Metric System."

COURSE FOR 1871-72.

- R. W. RAYMOND, Ph. D., on "The Great American Geysers."
 Dr. A. J. EBELL, three lectures on Natural History.
 SIDNEY WOOLLETT, Esq., readings and recitations.
 Dr. WILLARD PARKER, four lectures, on "Our Bodies," "Their Uses,"
 "How to Preserve Them," "How They are Injured."
 ELLIOTT C. COWDIN, Esq., on "France; the War—the Commune—the
 International."
 J. H. VAN AMRINGE, Esq., on "Life Insurance and Savings Banks"
 J. R. HAWLEY, Esq., on "The Rights and Duties of Citizens."
 Major J. M. BUNDY, on "Democracy."
 Prof. C. F. CHANDLER, on "Combustion."
 R. W. RAYMOND, Ph. D., on "Time."
 Prof. G. W. PLYMPTON, on "Molecular Forces."
 ALEX. L. HOLLEY, Esq., on "The Bessemer Process."
 Mrs. A. H. LEONOWENS, on "Siam, its Court and Customs."
 Rev. F. A. P. BARNARD, D.D., on "The Metric System."

COURSE FOR 1872-73.

- Prof. C. A. YOUNG, on "Comets and Shooting Stars."
 Prof. G. F. BARKER, four lectures, on "Spectrum Analysis," "Revelations
 of the Sun through the Spectroscope," "Revelations of the Stars through
 the Spectroscope," and "The Spectroscope applied to Terrestrial Objects."
 Prof. BENJAMIN SILLIMAN, on "Deep Placer Gold Mining."
 R. W. RAYMOND, Ph. D., on "The Seven Senses."
 Prof. LOUIS ELSBERG, M.D., three lectures, on "Sound and Hearing,"
 "Voice and Speech," and "The Explanation of Musical Harmony."
 W. GOOLD LEVISON, Esq., on "The Analogies of the Elements."
 Prof. CHARLES F. CHANDLER, on "Mordents and Dyeing."
 Prof. GEORGE W. PLYMPTON, on "Bridge Building."
 Prof. J. C. ZACHOS, Critical Reading of "The Merchant of Venice."

COURSE FOR 1873-74.

- Dr. DIO LEWIS, two lectures, on "Our Girls," and "Our Eyes."
 ALEX. WINCHELL, LL.D., four lectures on "Geology."
 Prof. J. W. DAWSON, on "The Dawn of Animal Life."
 Prof. EDWARD S. MORSE, four lectures, on "Radiates," "Mollusks,"
 "Articulates," and "Vertebrates."
 C. JEROME HOPKINS, Esq., on "The Music of the Emotions."
 Gen. JOHN A. GIBBON, on "The Wonders of the Yellowstone."
 Prof. RICHARD A. PROCTOR, on "The Stars."
 Prof. Chas. F. HARTT, on "Evolution in Ornament."
 R. W. RAYMOND, Ph. D., on "The Lesson of the Vienna Exposition."

- Prof. CHAS. F. CHANDLER, on "Health and Health Laws."
 SIMON STERNE, Esq., two lectures on "Municipal Government."
 SIDNEY WOOLLETT, Esq., "An Evening with the Poets."
 Major J. M. BUNDY, on "The Relations between the State and Federal Governments."

COURSE FOR 1874-75.

- Prof. EDWARD S. MORSE, two lectures, on "The Art of Illustration," and the "Ancient Glaciers of this Continent."
 J. A. JOHNSON, Esq., on "Southern California."
 Dr. A. B. CROSBY, four lectures, on "The Heart and the Circulation of the Blood," "The Lungs, Respiration and Ventilation," "The Skin and Bathing," and "The Anatomy of Expression."
 Prof. GEO. L. GOODALE, four lectures, on "The Seed and its Germination," "The Leaf and its Work," "Flowers and Fruit," and "Some Movements in the Vegetable Kingdom."
 GEORGE KENNAN, Esq., on "Life in Siberia and Kamschatka."
 Dr. H. CARRINGTON BOLTON, on "Alchemy the Cradle of Chemistry."
 Hon. ROBERT B. ROOSEVELT, on "Fish Culture."
 Prof. WM. H. GOODYEAR, two lectures, on "The Di Cesnola Collection," and "Cathedral Architecture."

COURSE FOR 1875-76.

- Dr. I. I. HAYES, two lectures, on "Iceland and the Northmen," and "Arctic Adventures and Discovery."
 P. B. DECHAILLU, Esq., on "Explorations in Equatorial Africa."
 Rev. JOSEPH T. DURYEA, D. D., four lectures, on "The Interest and Value of the Study of the Mind," "The Powers of the Mind," "The Memory," and "The Imagination."
 Prof. C. F. BRACKETT, four lectures, on "The Study of Musical Vibrations," "Harmony and its Graphical Representations," "Photographic Optics," and "Photographic Chemistry and Manipulations."
 Mrs. A. H. LEONOWENS, on "Royal and Domestic Life in Siam."
 Prof. WM. H. GOODYEAR, on "The Greek Temple."
 Dr. ISIDOR WALZ, on "The Atomic Theory."
 R. W. RAYMOND, Ph.D., on "The Territorial History of the United States."
 Prof. J. S. NEWBERRY, four lectures on "The Character and History of the Geological Record," "The History of Plant Life," "The Life History of Animals," and "The Geological History of Man."

COURSE FOR 1876-1877.

- Rev. H. M. FIELD, D.D., on "Going Round the World."
 H. STANSBURY NORSE, C. E., on "The Operations at Hell Gate."
 PHINEHAS BARNES, C. E., on "The Modern Locomotive."
 JAMES DOUGLAS, Jr., Esq., on "The Belief of the Ancient Egyptians in a Future Life."
 FREDERIC VORS, Esq., on "Bronzes and Enamels, applied to Art Decoration."
 Prof. W. H. GOODYEAR, on "Household Art."
 W. S. ANDREWS, Esq., on "Dialect Humor."
 Prof. EDWARD S. MORSE, four lectures on "Evolution."

Rev. E. C. WINES, on "Prison Reform."

A. B. CROSBY, M. D., four lectures, on "The Human Foot," "Anaesthesia," "The Human Hand," and "The Model Sick Room."

Prof. G. F. BARKER, two lectures, on "Magneto Electricity," and "The Gramme Machine."

R. W. RAYMOND, Ph. D., on "The Signal Service and the Law of Storms."

Prof. T. C. MENDENHALL, on "Capillarity."

COURSE FOR 1877-78

Prof. LOUIS ELSBERG, M. D., on "How we Talk and Sing."

Prof. T. STERRY HUNT, LL.D., on "The Geology of the Elements, Earth Air and Water."

SIMON STERNE, Esq., on "Suffrage in Cities."

JAMES DOUGLAS, Jr., Esq., on "Egyptian Architecture and Obelisks."

Prof. R. H. THURSTON, on "The Growth of the Steam Engine."

Prof. W. A. HAMMOND, M. D., on "The Nervous System, and how to use without abusing it."

Prof. E. S. MORSE, two lectures on "Glimpses of Life in Japan."

HORACE WHITE, Esq., on "Commercial Panics."

S. AUSTEN PEARCE, Mus. Doc., on "The Musical Instruments of all Nations."

Prof. DARWIN G. EATON, on "Meteoric Astronomy."

R. P. ROTHWELL, C. E., on "Anthracite Mining."

Prof. B. W. PUTNAM, on "The Potter's Wheel."

Prof. W. H. GOODYEAR, on "The Ruined Roman Cities East of the Jordan."

Prof. FRANCIS A. WALKER, on "The Labor Question."

COURSE FOR 1878-79.

Prof. PHILIP SCHAFF, D.D., on "The East in the Light of the Berlin Treaty."

Prof. B. SILLIMAN, on "The Paris Exposition."

Prof. R. R. RAYMOND, Humorous and Dramatic Readings.

WM. I. MARSHALL, Esq., two lectures, on "The Yellowstone National Park," and "American Gold Mining."

Prof. C. F. CHANDLER, on "Photography."

W. S. ANDREWS, Esq., on "Our Humorists."

Prof. J. W. S. ARNOLD, M. D., two lectures on "The Physiology of Animal Motion."

Prof. R. A. WITTHAUS, M. D., two lectures on "The Production of Animal Force."

Miss JULIET CORSON, two lectures, on "Domestic Economy," and "Every-day Cookery."

R. W. RAYMOND, Ph. D., on "Theism and Modern Science."

J. W. SIMONTON, Esq., on "The Associated Press."

Prof. ROBERT SPICE, two lectures, on "Sound," and "Heat."

HORACE WHITE, Esq., on "A Comparison of the American with the English Political System."

Prof. CHAS. O. THOMPSON, on "What Boys ought to Learn."

JAMES DOUGLAS, Jr., Esq., on "The Mines and Furnaces of Chili."

9TH—FINANCES.

| | | | | | |
|---|---|---|-----------------------|----------------|-----------|
| The original cost of the Cooper Union Building when conveyed to the trustees. | | - | - | \$530,000 00 | |
| Total Receipts from Rents, | | - | - | 666,384 18 | |
| " | " | " | Donations, | - | 45,225 39 |
| " | " | " | sundry other sources, | - | 48,392 65 |
| " aggregate receipts to Jan. 1, 1879, | | - | - | \$760,002 22 | |
| " expenditures for carrying on the above departments from 1859 to 1879 inclusive [20 years] | | - | - | 778,191 77 | |
| " expenditures on building and education to Jan. 1, 1879. | | - | - | \$1,408,191 77 | |

DONORS TO THE LIBRARY AND READING ROOM
IN 1878 OF BOOKS, PAMPHLETS AND
PERIODICALS.

| | | |
|------------------------------------|---------------------------------|-----|
| His Grace, the Duke of Richmond, 1 | D. Van Nostrand----- | 7 |
| Edmund Preston----- | Nicholson File Co ----- | 1 |
| Hon. Peter Cooper----- 236 | Cooper, Hewitt & Co.----- | 2 |
| Hon. A. S. Hewitt----- | N. Y. Produce Exchange----- | 1 |
| E. H. Swinney----- | Am. Inst. of Mining Engineers-- | 1 |
| G. W. Smith----- | Smithsonian Institution----- | 1 |
| Chas. H. Raymond----- | Board of Education, Providence | 1 |
| Fred. E. Leupp----- | Bureau of Education----- | 1 |
| L. C. L. Jordan----- | Hon. Allen C. Beach, Sec. State | 18 |
| John Jay----- | U. S. Pub. Docs., through Hon. | |
| Chas. H. Hill----- | A. S. Hewitt----- | 55 |
| O. S. Baldwin----- | Congressional Record----- | 14 |
| Dr. A. J. Ingersoll----- | U. S. Treasury Dep't----- | 2 |
| John Polhemus----- | Dep't of the Interior----- | 2 |
| Frederick Antholtz----- | Gen. A. A. Humphreys----- | 7 |
| G. P. Rowell----- | Am. Bible Society----- | 36 |
| Mrs. H. N. K. Goff----- | N. Y. City Mission----- | 1 |
| John W. Feeder----- | | |
| Moses King----- | | |
| | Total,..... | 476 |

THE FOLLOWING NEWSPAPERS AND PERIODICALS ARE SENT FREE BY THE
PUBLISHERS, VIZ :—

| | |
|---------------------------------|-----------------------------------|
| Daily Bulletin, N. Y. City. | Central City Register, |
| Daily Witness. " | Pittsburgh Commercial, |
| Cleveland Plaindealer. | Rochester Evening Express, |
| New Orleans Times, | Utica Herald, |
| Wilmington Commercial, | San Francisco Morning Call, |
| Am. Gas Light Journal, | Belletrisches Journal, |
| Boyd's Shipping Gazette, | Courier, |
| Insurance Monitor, | New Jerusalem Messenger, |
| Nat. Temperance Advocate, | Tablet, |
| U. S. Economist, | Wilkes' Spirit of the Times, |
| Nation, | Chimney Corner, |
| Frank Leslie's Ill. Weekly. | Boys' and Girls' Weekly, |
| Banner of Light, | Chicago Journal of Commerce. |
| Herald of Gospel Liberty, | Hebrew Leader, |
| Weekly Examiner, | Am. Journal of Medical Science, |
| Home Missionary, | Hall's Journal of Health, |
| Phrenological Journal, | Unitarian Review, |
| Van Nostrand's Magazine, | Frank Leslie's Sunday Magazine, |
| Frank Leslie's Popular Monthly, | American Queen. |
| Andrews' Bazaar, | Memphis Appeal, |
| American Machinist, | Manufacturers' Review, |
| Plumbing and Sanitary Eng'neer, | Crockery Journal, |
| Music Trade Review, | Coal Trade Review, |
| Homoeopathic Times, | Church Union, |
| Catholic Review, | Am. Manufacturer and Iron Review, |
| Eastchester Independent, | Chicago Railroad Gazette. |
| City Record, | Messenger Franco-American, |
| Albany Press, | Brooklyn Eagle, |
| Troy Standard, | Troy Press. |
| Philadelphia Ledger, | Elmira Advertiser, |
| Wilmington Herald, | Reading Times and Dispatch, |
| Columbia Register, | Indianapolis News, |
| San Francisco Chronicle, | Knoxville Whig and Chronicle. |

GRADUATES.

- 1864—Robert Scott, George Huitzen, William Forbes, Wm. L. Taylor, Eugene Corbett.
- 1865—Daniel H. Ives, Adam Bosch.
- 1866—Miss Rosalinda H. Palmer, Frank Curtis,* Gram Curtis,* Heyward Meyers,* David Ferguson.*
- 1867—Miss Elizabeth McHugh, August Doerflinger, M. H. Beers, Thomas Fitzsimmons, C. H. Meyers.*
- 1868—Miss Sarah W. Fuller, Miss Fanny E. Plumb, Henry J. Pape, John McCarthy.
- 1869—Joseph P. Smyth, M. J. Clarke, Robert Maynickie, J. A. McAvoy, A. A. Griffin.
- 1870—E. M. Kennedy, Thomas J. Rider, William J. Logan, Allan Stirling, Emile Eberlin, J. M. Bossong.
- 1871—Alonzo Chamberlin, W. H. Graham, Oscar Goerck, William Pickhardt, Daniel B. Preston, Julius Rettig.*
- 1872—Otto F. E. Muller, William Logan, Joseph Boyce, William Kent.
- 1873—Miss Sarah Collins, Patrick Doody, George Jungerman.
- 1874—George H. T. Doggett, John William George, Edward A. Miller, George K. Nevan.
- 1875—Henry J. Heidenis.
- 1876—George Ott, John F. O'Rourke, John F. Schloer, Lawrence Van Wyck, Ernest J. Kaltenbach.
- 1877—Henry Bittman, Hugh F. Dolan, John P. Leo, Albert Loebenstein, Thomas A. McBain, George W. Taylor.
- 1878—John Bardon, John Lyons, Samuel R. Scottron, James R. Smyth, Jacob Siebert, Walter W. Tinsley.
- 1879—John C. Bachmeyer, Charles F. Boleschka, Peter M. Cassidy,* Nicholas Gehrig,* Wm. Henry C. Isham.

Graduates marked thus (*) did not receive the Cooper Medal and Diploma.

REGULAR COURSE OF STUDY.

CLASS E—First year. Algebra, Geometry, Natural Philosophy and Elementary Chemistry.

CLASS D—Second year. Algebra, Geometry, Elementary Chemistry and Astronomy.

CLASS C—Third year. Trigonometry, Descriptive Geometry, Analytical Geometry and Mechanics.

CLASS B—Fourth Year. Analytical Geometry, Differential and Integral Calculus and Mechanical Drawing.

CLASS A—Fifth year. Mechanical Engineering and Analytical Chemistry.

FREE NIGHT SCHOOL OF SCIENCE.

PROGRAMME OF RECITATIONS.

| INSTRUCTORS. | MONDAY. | | TUESDAY. | | WEDNESDAY. | | THURSDAY. | | FRIDAY. | | ROOMS. |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------------------|
| | 7-20 8-25 | 8-30 9-30 | 7-20 8-25 | 8-30 9-30 | 7-20 8-25 | 8-30 9-30 | 7-20 8-25 | 8-30 9-30 | 7-20 8-25 | 8-30 9-30 | |
| Prof. STONE. | E | | E | | D | | D | | | | Chem. Lecture Room. |
| Prof. PLAMPTON. | A | C | A | C | E | A | A | D | E | A | Philos. Lecture Room and A. |
| Prof. COAKLEY. | B | B ₁ | B ₂ | B ₁ | B ₁ | C | B ₁ | C | | | |
| Prof. LEVISON. | | A | | A | A | | | A | A | A | Chem. Laboratory. |
| Mr. MCGUCKIN. | C | E ₁ | C | Dg ₁ | Dg ₁ | E ₁ | E ₁ | C | E ₁ | C | Office of School of Design. |
| Mr. HOLLADAY. | Da ₁ | E ₂ | Da ₁ | Eg ₁ | Dg ₂ | E ₂ | Eg ₁ | E ₂ | Da ₁ | Eg ₁ | P. |
| Mr. SKINNER. | Da ₂ | E ₃ | Da ₂ | Eg ₂ | | E ₃ | Eg ₂ | E ₃ | Da ₂ | Eg ₂ | R. |
| Mr. SEGER. | | Dg ₂ | | Eg ₃ | | | Eg ₃ | | | Eg ₃ | Philosophical Lecture Room. |
| Mr. MAURER. | | | | C | | | | B | B | C | O. |

Da₁ and Da₂—Second year class in Algebra.
Dg₁ and Dg₂—

E₁ and E₂—First year class in Algebra.
Eg₁, Eg₂ and Eg₃—

Geometry.

TRADES AND OCCUPATIONS OF THE PUPILS OF THE
COOPER UNION FREE NIGHT CLASSES.

| | Mathematics. | Chemistry and Nat. Philosophy. | Oratory and De- bate. | Mechanics Drawing. | Architectural Drawing. | Perspective Drawing | Cast and Form Drawing. | Industrial Drawing. | Free Hand Drawing. | Modeling in Clay. | Total. |
|---------------------------|--------------|-----------------------------------|--------------------------|-----------------------|---------------------------|------------------------|---------------------------|------------------------|-----------------------|-------------------|--------|
| Clerks and Bookkeepers | 105 | 122 | 76 | 39 | 24 | 8 | 9 | 15 | 45 | 9 | 452 |
| Machinists & Ironw'rk'rs | 98 | 40 | 2 | 91 | 33 | 4 | | 5 | 16 | 2 | 291 |
| Teachers and Students- | 53 | 65 | 41 | 9 | 13 | 13 | 15 | 10 | 12 | 5 | 236 |
| Carp'nt'rs & Cabin'tm'k's | 63 | 27 | 5 | 12 | 61 | 7 | 4 | 17 | 30 | 7 | 235 |
| Dr'gh'tm'n & Patt'nm'k's | 29 | 13 | 5 | 39 | 21 | 5 | 6 | 10 | 14 | 4 | 146 |
| Masons and Builders--- | 25 | 28 | 7 | 12 | 22 | 6 | 4 | 2 | 6 | 9 | 121 |
| Stone & Marble Cutters- | 24 | 27 | | 17 | 10 | 1 | 5 | 7 | 10 | 13 | 114 |
| Painters----- | 6 | 27 | 3 | 1 | | 4 | 13 | 10 | 32 | 3 | 99 |
| Pianoforte Makers----- | 9 | 5 | | 2 | 2 | 2 | 2 | | 18 | | 40 |
| Engineers----- | 43 | 27 | 9 | 10 | | 9 | 2 | 2 | 9 | | 111 |
| Carvers and Turners--- | 9 | 11 | | 5 | 4 | 8 | 15 | 12 | 106 | 18 | 188 |
| Engrav'rs & Lithog'ph's | 12 | 12 | | 1 | 3 | 6 | 12 | 15 | 104 | 14 | 179 |
| Artists.----- | 3 | 3 | | | | 1 | 14 | 12 | 8 | 6 | 47 |
| Jewelers & Watchmakers | 9 | 9 | | 1 | 6 | 2 | 9 | 13 | 52 | 3 | 104 |
| Printers----- | 22 | 25 | 10 | 5 | 4 | 3 | 3 | 4 | 12 | 4 | 92 |
| Plumbers and Gasfitters | 30 | 19 | 6 | 19 | 8 | | | 6 | 16 | 4 | 108 |
| Photographers----- | 22 | 39 | | | | | 9 | 3 | 8 | 2 | 83 |
| Sundry Occupations---- | 22 | 14 | 3 | 2 | 4 | 6 | 4 | | 7 | 1 | 63 |
| Not Specified----- | 30 | 22 | 6 | 35 | 1 | 3 | 3 | 1 | 7 | 5 | 113 |
| | 614 | 535 | 173 | 300 | 216 | 88 | 129 | 144 | 512 | 109 | 2820 |

FOR THE ADVANCEMENT OF SCIENCE AND ART.

NAMES OF PUPILS IN FREE NIGHT SCHOOLS OF SCIENCE AND ART TO WHOM CERTIFICATES HAVE BEEN AWARDED.

I.—SCHOOL OF SCIENCE.

CLASS A—FIFTH YEAR.

| NAMES. | MECHANICAL ENGINEERING. | | QUALITATIVE CHEM. ANALYSIS. | | QUANTITATIVE CHEM. ANALYSIS. | |
|----------------------|-------------------------|--------------|-----------------------------|--------------|------------------------------|--------------|
| | Class Grade. | Certificate. | Class Grade. | Certificate. | Class Grade. | Certificate. |
| W. L. C. Stevens.... | 1* | 1† | | | | |
| W. H. C. Isham.... | 2G | 1 | | | | |
| Dunham. | 3 | 1 | | | | |
| John C. Bachmeyer.. | 4G | 1 | | | | |
| Nicholas Gehrig.... | 5G | 1 | | | | |
| Chas. F. Boleschka.. | 6G | 1 | | | | |
| Peter M. Cassidy.... | 7G | 1 | | | | |
| Wm. B. Bower..... | | | | 1 | | |
| Christopher Gregory. | | | | | | 1 |
| R. J. Kroupa..... | | | | | | 1 |
| William Richardson. | | | | | | 1 |
| Jas. W. Phinney. | | | | | | 2 |

*Figure 1 (in "Class Grade,") denotes the best or more thoroughly educated member of the class; figure 2, the second best, &c.

†Figure 1 (in "Certificate,") denotes a Certificate of the first grade.

The letter "G," denotes a graduate of the present term.

CLASS B.—FOURTH YEAR.

| NAMES. | ANAL. GEOM. | | CALCULUS. | | MECH. DRAWING | |
|-------------------------|-------------|--------------|-------------|--------------|---------------|--------------|
| | Class Grade | Certificate. | Class Grade | Certificate. | Class Grade. | Certificate. |
| Edward A. Anderson..... | 1 | 1 | 1 | 1 | | |
| Emile F. Maurer..... | 1 | 1 | 4 | 1 | 1 | 1 |
| Robert McCann..... | 1 | 1 | 1 | 1 | | |
| Daniel A. Curtin..... | 4 | 1 | 4 | 1 | | |
| Patrick Cunniam | 4 | 1 | 4 | 1 | | |
| Bernard Rosenthal | 4 | 1 | 4 | 1 | | |
| John Staudt..... | 7 | 1 | 4 | 1 | | |
| John Loeber..... | 7 | 1 | 4 | 1 | 8 | 1 |
| Eugene Thumm..... | | | 1 | 1 | | |
| Peter M. Cassidy..... | | | 4 | 1 | | |
| Christian Bischoff..... | | | | | 2 | 1 |
| John F. O'Rourke.. .. | | | | | 3 | 1 |
| Henry Bittmann..... | | | | | 3 | 1 |
| Rob't L. McCready..... | | | | | 3 | 1 |
| Chas. F. Boleschka..... | | | | | 3 | 1 |
| Wm. H. C. Isham..... | | | | | 3 | 1 |

CLASS E.—FIRST YEAR.

| NAMES. | ALGEBRA. | | GEOMETRY. | | NATURAL PHILOSOPHY | | ELEMENT'RY CHEMISTRY. | |
|------------------------------|----------|--------|-----------------|-------|-----------------------|------------------|--------------------------|-------|
| | Class | Grade. | Certif- cate | Class | Grade. | Certif- cate. | Class | Grade |
| Alfred T. Richardson..... | 1 | | 1 | 1 | 1 | 1 | | 1 |
| George W. Young..... | 1 | | 11 | 1 | 23 | 1 | | 1 |
| John V. Doherty..... | 3 | | 17 | 1 | | | | |
| William Glass..... | 4 | | 3 | 1 | 15 | 1 | | 1 |
| Jas. M. Tully..... | 5 | | 9 | 1 | 4 | 1 | | 1 |
| Geo. W. Hawkins..... | 6 | | 10 | 1 | 29 | 1 | | |
| John P. Heimerle..... | 7 | | 8 | 1 | 2 | 1 | | 1 |
| John F. Shea..... | 8 | | | | | | | |
| Geo. W. Kunz..... | 9 | | 16 | 1 | 24 | 1 | | 1 |
| Henrietta F. Knaufft..... | 1 | | 1 | 1 | | | | |
| Jas. S. Erwin..... | 2 | | 1 | 1 | 8 | 1 | | 1 |
| James Guy..... | 3 | | 6 | 1 | | | | |
| A. C. G. Vosseler..... | 4 | | 12 | 1 | 7 | 1 | | 1 |
| Wm. J. Leslie..... | 5 | | 1 | 1 | 31 | 1 | | |
| Louis A. Hornum..... | 6 | | 5 | 1 | 19 | 1 | | |
| John W. Boleschka..... | 7 | | 10 | 1 | 10 | 1 | | 1 |
| Seward L. Babbitt..... | 8 | | 13 | 1 | 22 | 1 | | 1 |
| Gabriel F. Vought..... | 9 | | 18 | 1 | | | | |
| May Cushing..... | 10 | | | | | | | |
| Wm. I. Donshea..... | 11 | | 1 | 1 | 16 | 1 | | 1 |
| John F. Leslie..... | 12 | | 2 | 1 | 34 | 1 | | |
| Edward E. Farron..... | 1 | | 9 | 1 | 28 | 1 | | |
| John W. Neagle..... | 2 | | | | | | | 1 |
| John Toomey..... | 3 | | | | | | | |
| Albert F. J. Englehardt..... | 4 | | 4 | 1 | 25 | 1 | | 1 |
| Louis Bruns..... | 5 | | | | 20 | 1 | | 1 |
| Thos. E. Morris..... | 6 | | | | | | | |
| George A. Anderson..... | 7 | | 14 | 1 | 6 | 1 | | 1 |
| John J. Regan..... | 8 | | 1 | 1 | 27 | 1 | | 1 |
| Samuel Cummings..... | 9 | | | | | | | |
| Thos. P. McDermott..... | 10 | | 7 | 1 | 33 | 1 | | |
| John J. Murphy..... | 11 | | | | 26 | 1 | | 1 |
| John J. McCarthy..... | | | 1 | 1 | | | | |
| Samuel Oppenheim..... | | | 1 | 1 | 30 | 1 | | 1 |
| Katie Curtis..... | | | 1 | 1 | | | | |
| George D. Sinclair..... | | | 12 | 1 | | | | |
| Maximilian E. A. Linzbach.. | | | 12 | 1 | 14 | 1 | | |
| Delia M. Cullen..... | | | 15 | 1 | | | | |
| Annie C. Townley..... | | | 1 | 1 | | | | |
| Hannah C. McCabe..... | | | 2 | 1 | | | | |
| Geo. F. Seymour..... | | | 4 | 1 | 17 | 1 | | |
| John W. Lawlor..... | | | 6 | 1 | 3 | 1 | | 1 |
| J. J. Brown..... | | | 7 | 1 | | | | |
| W. T. Randel..... | | | 11 | 1 | | | | |
| John J. Tallon..... | | | 12 | 1 | 12 | 1 | | |
| D. S. Hays..... | | | 15 | 1 | | | | |
| Charles Enders..... | | | 3 | 1 | 35 | 1 | | 1 |
| George F. Neebel..... | | | 5 | 1 | | | | |
| Elijah J. Molloy..... | | | | | 5 | 1 | | 1 |

II. SCHOOL OF ART.

ALL HIGHER GRADE CERTIFICATES

DRAWING FROM CAST

| NAMES | Class Grade |
|-------------------------|-------------|
| Henry B. Wechsler..... | 1 |
| Richard Wesche..... | 2 |
| William Weismantel..... | 3 |
| Albert Hallin..... | 4 |
| August Kreutzberg..... | 5 |
| Charles Schledorn..... | 6 |
| Herman Engel..... | 7 |
| Albert Moores..... | 8 |
| George W. Young..... | 9 |
| George Hessler..... | 10 |
| John P. Voelker..... | 11 |
| Louis Stock..... | 12 |
| George Engell..... | 13 |
| Wm. M. Hannah..... | 14 |
| Rudolph Neilson..... | 15 |
| Louis Roeth..... | 16 |
| Theodore Uthoff..... | 17 |
| John S. Johnson..... | 18 |
| James W. Hays..... | 19 |
| Charles Walthers..... | 20 |
| Edward T. Brion..... | 21 |
| John F. Tresch, Jr..... | 22 |

FORM DRAWING.

| | |
|--------------------------|----|
| Charles J. McKenney..... | 1 |
| Charles Noll..... | 2 |
| Jacob Wenner..... | 3 |
| Edward A. Solly..... | 4 |
| Leon Kahn..... | 5 |
| Wm. A. Burnett..... | 6 |
| Ernst Sater..... | 7 |
| Wm. J. Braitsch..... | 8 |
| John S. Johnson..... | 9 |
| Edward Feek..... | 10 |
| Louis R. Sharp..... | 11 |
| Frederick H. Roth..... | 12 |
| Emil Willuhn..... | 13 |
| John H. Tarbell..... | 14 |
| Leon Maison..... | 15 |
| Emil Kungenschmitt..... | 16 |
| Louis Vogler..... | 17 |
| John H. Lockwood..... | 18 |

FORM DRAWING.

Continued.

| NAMES | Class Grade |
|------------------------|-------------|
| Arthur Johnson..... | 19 |
| Henry Bur..... | 20 |
| Henry Samuels..... | 21 |
| Louis J. Letherle..... | 22 |
| Stuart H. Dru..... | 23 |
| Gustavo J. Brenz..... | 24 |
| Henry Hansen..... | 25 |
| Fabian Johansen..... | 26 |

PERSPECTIVE DRAWING.

ADVANCED COURSE.

| | |
|---------------------------|---|
| August Kreutzberg..... | 1 |
| John A. Bank..... | 2 |
| Wm. C. Ostrander..... | 3 |
| Eugene F. Mills..... | 4 |
| Edward T. Brion..... | 5 |
| Alvin L. Schullinger..... | 6 |
| Wm. B. Ewer..... | 7 |

FIRST YEAR.

| | |
|--------------------------|----|
| George Renner..... | 1 |
| Frederick Heggi..... | 2 |
| George Hessler..... | 3 |
| John P. Voelker, Jr..... | 4 |
| Julius Beckell, Jr..... | 5 |
| George W. Young..... | 6 |
| Bernard B. Maybeck..... | 7 |
| Robert Fergus, Jr..... | 8 |
| George Dautscher..... | 9 |
| Frank Eckstein..... | 10 |
| Agnes C. Holloway..... | 11 |
| M. Frances Martin..... | 12 |
| Frank S. Bay..... | 13 |
| Charles Beck..... | 14 |
| Antony J. Smith..... | 15 |
| John Kirby..... | 16 |
| Rudolph Simon..... | 17 |
| William Deryx..... | 18 |
| John C. Weber..... | 19 |
| Frank Detlef..... | 20 |

MECHANICAL DRAWING

| NAMES. | Class Grade. |
|----------------------------|--------------|
| John A. Bank | 1 |
| George Zumstag | 2 |
| Lewis Romer | 3 |
| Frederick Hinkel | 4 |
| Benjamin F. Connor | 5 |
| Hiram Felver | 6 |
| Charles Schneider | 7 |
| George Schneider | 8 |
| Charles F. Kendrick | 9 |
| Wm. J. Stevens | 10 |
| Manfred J. Salinger | 11 |
| George A. Miller | 12 |
| John F. Wicklam | 13 |
| Dawson C. McGrayne | 14 |
| Benjamin Raphael | 15 |
| Arthur J. Smith | 16 |
| George Rheinbold | 17 |
| Ernst C. Frank | 18 |
| Charles Roos | 19 |
| Augustus Stubenrauch | 20 |
| Ferd. C. Hagan | 21 |
| Thos. J. Kennedy | 22 |
| Harry B. White | 23 |
| Victor H. Koehler | 24 |
| Fred'k Frambach | 25 |
| John D. Walton | 26 |
| Henry Theis | 27 |
| Wm. E. Volz | 28 |
| Geo. F. Higgins | 29 |
| Henry C. Fischer | 30 |
| Thomas Shipley | 31 |
| John Conlon | 32 |
| Emil Wirsching | 33 |
| Richard L. McHale | 34 |
| Michael N. Nagle | 35 |
| Frederick Schwenkel | 36 |
| Felix R. Riviera | 37 |
| George Dickson | 38 |
| Bernard Henrich | 39 |
| Lincoln Moss | 40 |
| Leo Lando | 41 |
| George Gifford | 42 |
| Peter Hartenstein | 43 |
| Wm. L. Hinds | 44 |
| John H. Rogers | 45 |
| Gottlieb Siebold | 46 |
| Wm. H. Isbister | 47 |
| John H. Schultz | 48 |

ARCHITECTURAL DRAWING.

FIRST YEAR.

| | |
|--------------------|---|
| Wm. E. Volz | 1 |
| Philip Brown | 2 |

ARCHITECTURAL DRAWING.

Continued.

NAMES.

| SECOND YEAR. | |
|-------------------------|---|
| Daniel W. Kennedy | 1 |
| Wm. Neubecker | 2 |
| Antony J. Smith | 3 |

THIRD YEAR.

| | |
|--------------------------|---|
| Rud. W. Sailer | 1 |
| George Boettcher | 2 |
| Rob't L. McCready | 3 |
| John Kerby | 4 |
| Edward F. Randolph | 5 |
| Alex. Trostler | 6 |
| John J. Kraft | 7 |

FOURTH YEAR.

| | |
|----------------------------|---|
| Ferd. Prochazka | 1 |
| Francis A. Winslow | 2 |
| Geo. D. S. Kohler | 3 |
| Adolph Sass | 4 |
| Wm. H. Wirth | 5 |
| George H. Young | 6 |
| Louis Ruthmann | 7 |
| Alvin L. Schellinger | 8 |
| William Kraiss | 9 |

INDUSTRIAL DRAWING.

| | |
|---------------------------|----|
| Wm. B. Ewer | 1 |
| Bernhard Otto | 2 |
| John S. Johnson | 3 |
| Charles H. Beck | 4 |
| George A. Turnbull | 5 |
| Louis Mazolla | 6 |
| George Schuck | 7 |
| Antony J. Smith | 8 |
| August Behrens | 9 |
| August Fischer | 10 |
| Alex. Hirschman | 11 |
| Ernest A. Costain | 12 |
| Louis Alexander | 13 |
| Charles Stecher | 14 |
| Henry Grothuser | 15 |
| Charles Rautenberg | 16 |
| Franz Koerner | 17 |
| Aaron Amerigan | 18 |
| Louis Schmidt | 19 |
| George Merker | 20 |
| George Schaefer, Jr | 21 |
| Frank Smith | 22 |
| Alex. Resenburger | 23 |
| Joseph Lang | 24 |

INDUSTRIAL DRAWING.

Continued.

| NAMES. | Class Grade |
|---------------------------|-------------|
| Frank Wolf | 25 |
| Constantine Schubert..... | 26 |
| Hiram P. Friar..... | 27 |
| Ferdinand Steck..... | 28 |
| William Symons..... | 29 |
| Anthony Griffin..... | 30 |
| Leopold Wallach..... | 31 |
| Fred. Hammerle..... | 32 |
| Seymour Many..... | 33 |
| Louis J. Letherle..... | 34 |
| Joseph Cloutier..... | 35 |
| Oscar Bruckheimer..... | 36 |
| Julius Schuberth..... | 37 |
| Andrew Stockinger..... | 38 |
| Carl Dahlhauser..... | 39 |
| John Braun..... | 40 |
| Julius Boekell, Jr..... | 41 |

FIGURE DRAWING.—Copy.

| | |
|-------------------------|----|
| John D. Felter, Jr..... | 1 |
| John Riflemacher..... | 2 |
| Arthur Froehlich..... | 3 |
| Robert Teller..... | 4 |
| Lewis A. Sharp..... | 5 |
| Herman Niemeier..... | 6 |
| John F. Sullivan..... | 7 |
| Walter Hornum..... | 8 |
| Edw. H. Corbusier..... | 9 |
| Herman H. Kreitz..... | 10 |
| Adolph Koehler..... | 11 |
| Julius Rivinius..... | 12 |
| Samuel Woltsheim..... | 13 |

ORNAMENTAL DRAWING—Copy

| | |
|-------------------------|----|
| Theodore Uthoff..... | 1 |
| John P. Feitner..... | 2 |
| Charles Kuhn..... | 3 |
| Charles Bouffier..... | 4 |
| L. W. Bail-y..... | 5 |
| William Weifenbach..... | 6 |
| Oscar Baumbach..... | 7 |
| Frank Schwörer..... | 8 |
| Richard Lomax..... | 9 |
| Anthony Kordula..... | 10 |
| Arthur Johnen..... | 11 |
| Richard Loth..... | 12 |
| Edward Linsenmeyer..... | 13 |
| Louis Nimschka..... | 14 |
| Charles Zeisser..... | 15 |
| Joseph McCulloch..... | 16 |
| William Blum..... | 17 |

ORNAMENTAL DRAWING—Copy.

Continued.

| NAMES. | Class Grade |
|-------------------------|-------------|
| Thomas Bohmer..... | 18 |
| Ignatz Dieckert..... | 19 |
| Herrmann Giese..... | 20 |
| Isidore Stern..... | 21 |
| William Rehbein..... | 22 |
| George Martensen..... | 23 |
| Thomas Schneider..... | 24 |
| Louis Krauth..... | 25 |
| Ferd Hammerle..... | 26 |
| Emil Muller..... | 27 |
| John Schaffer..... | 28 |
| Otto Lehmann..... | 29 |
| Ferd. Kallenburg..... | 30 |
| George Kirchof..... | 31 |
| Christian Widmann..... | 32 |
| Herman Rost..... | 33 |
| Henry Indlekofer..... | 34 |
| August Schreiber..... | 35 |
| Fredk. Friend..... | 36 |
| John Winter..... | 37 |
| Jacob Stern..... | 38 |
| Jacob Joel..... | 39 |
| Albert Heinemuller..... | 40 |
| Louis Contoit..... | 41 |
| Henry Gies..... | 42 |
| Charles Schreiber..... | 43 |
| Louis Kirck..... | 44 |
| Louis Blattmann..... | 45 |
| Frank Bantle..... | 46 |

RUDIMENTAL DRAWING—Copy.

| | |
|-------------------------|----|
| Robert Henrich..... | 1 |
| Ferd Hammerle..... | 2 |
| Charles Baier..... | 3 |
| Oswald Henrich..... | 4 |
| G. H. B. Studley..... | 5 |
| Frank Polaski..... | 6 |
| George Hoppert..... | 7 |
| Alois Wetter..... | 8 |
| Joseph Schmid..... | 9 |
| James A. Macauley..... | 10 |
| Henry Haecker..... | 11 |
| Louis Roeder..... | 12 |
| Edward Linsenmeyer..... | 2 |
| James W. McCormack..... | 3 |
| Charles Young..... | 4 |
| Theodore Tafel..... | 5 |
| Henry G. Pohlman..... | 5 |
| Philip Kramer..... | 6 |
| Ludwig H. Richter..... | 7 |
| Michael Wenz..... | 8 |
| Joseph H. Klein..... | 9 |

MODELING IN CLAY.

| NAMES. | Class Grade. |
|---------------------------|--------------|
| Adolphus G. Krieger | 1 |
| William Blum | 2 |
| Charles Blum | 3 |
| Emilio Piatti | 4 |
| John A. Heese | 5 |
| Howard Arms | 6 |
| Otto Ostendorf | 7 |
| Gustave Leber | 8 |
| Julius Topp | 9 |
| Chas. F. Hamann | 10 |

MODELING IN CLAY.

| <i>Continued.</i> | | Class Grade. |
|-------------------------|--|--------------|
| NAMES. | | |
| William Duesberg | | 11 |
| Henry Philipp | | 12 |
| Thomas Dolan | | 13 |
| Frank Bender | | 14 |
| Christian Widmann | | 15 |
| Albert Simmons | | 16 |
| Richard Lomax | | 17 |
| William Schuler | | 18 |
| Paul Cabaret | | 19 |

PRIZES.

The Prizes in the Evening School of Art were awarded upon the decision of Prof. Solomon Woolf, of the College of the City of New York, as follows :

The prize from Messrs. Mitchell, Vance & Co., for Ornamental Drawing from the fiat, to Charles Bouffier.

The prizes from Wilson G. Hunt, Esq., of \$15 in gold, to Emile F. Maurer, for Mechanical Drawing; Francis A. Winslow, Architectural Drawing; Henry B. Wechsler, Cast Drawing; Chas. J. McKenney, Form Drawing.

Honorable mention to Jacob L. Wenner, for Form Drawing; and Theodore Uthoff, for Ornamental Drawing.

WOMAN'S ART SCHOOL.

CERTIFICATES OF THE FIRST GRADE.

DRAWING.

Mrs. Clara F. Apollonio,

Miss Mary B. Atwater,

“ Emily Archer,

“ Leora Atkinson,

“ Myra L. Ayres,

“ Jeannie R. Artois,

“ Carrie Asuley,

“ Sophie V. Bendelari,

“ Lillian Bowman,

“ Emily E. Bogert,

“ Addie Bedell,

“ Ida Burgess.

“ Martha D. Bessey,

“ Emma D. Brooks,

“ Lucy M. Cozzens,

“ Theodora Chase,

“ Irene Chilton,

“ Maggie Corrigan,

“ C. A. Carlton,

Miss Bessie Corbett,

“ May Cushing,

“ Helen D. DeBevoise,

“ Mamie Duryee,

“ Maggie Edsall,

“ Mary Forbes,

“ Anna M. Falk,

“ Sarah D. Fink,

“ Lemoine Farwell,

“ Hattie Foss,

“ S. Meta Gibson,

“ Josie Hart,

“ Helen S. Hyde,

“ Louise Hopper,

“ Dora Hoett,

“ Marie Hall,

“ Margaret Harbaugh,

“ E. C. King,

Mrs. E. C. King,

DRAWING.—Continued.

Miss Eugenia Kunkeli,
 " Helen L. Kingsbury,
 " Margaret B. Johnson,
 Mrs. Elizabeth A. Ladd,
 " Ida Lacey,
 Miss Cary Lockett,
 " Margaret Marsh,
 " Stella Martin,
 " Abbie K. Monfort,
 " H. M. Miller,
 " Edith O. Matthews,
 " Mary B. McMaster,
 Mrs. L. F. Mason,
 Miss Ida Moseman,
 " Belle B. Morrison,
 " Maggie Nichols,
 " Marie A. Ney,
 " Emma Neil,
 " Sarah Nolan,
 " Fannie E. Palmer,
 " Nettie Palen,
 " Eleanor Phillips,
 " Florence A. Prince,
 " Nellie Pickering,
 " Harriet S. Peck,

Miss Mary Putnam,
 " L. G. Pithick,
 " Edith Penman,
 " M. Christine Reid,
 " Eleanor Richardson,
 " Clara Squires,
 " Emily Scudder,
 " Mary S. Scord,
 " Lizzie Smith,
 Mrs. Catharine Saltus.
 Miss Frances Sheldon,
 " Clara Terbune,
 " Florence I. Timpson,
 " Cora Taylor,
 " Nellie G. Van Rant,
 " Ella Ward,
 " Aseneth Wright,
 " Emma R. Wright,
 " A. R. Wright,
 " Clara Weaver,
 " Mary N. Wells,
 " Henrietta Winant,
 " Evelyn Wilson,
 " Annie A. Wood,
 " Rebecca Wohlfert.

OIL PAINTING.

Miss Helen Abbe,
 " Sophie V. Bendelari,
 " Mary Emma Cook,

Miss Fitch,
 " H. R. Johnson,
 " McEntee.

NORMAL DRAWING.

Miss Kathleen K. Allen,
 " Cora Barker,
 " Anna Baldwin,
 " L. Amanda Brewster,
 " Mary B. Church,
 " Maggie E. Duncan,
 " Helen M. De Veau,
 " Lizzie S. Gowdy,
 " Clara F. Huston,
 " Louise Hornig,
 " Alice L. Hunt,
 " Kate S. Hall,
 " Anna L. Jackson,
 " Ellen G. Johnston,
 " Adeline Kauenbley,
 " Belle B. Morrison,
 Mrs. Kate Millen,
 Miss Mary L. Owens,
 Mrs. Emma B. Perry,
 Miss Jennie L. Parker,
 " Lizzie S. Palmer,
 " Carrie H. Pillsbury,
 " Isabel G. Roome,
 " Amy M. Stocking,
 " Emma Seymour,
 " Grace B. Seymour,
 " Clara Sackett,
 " Cornelia D. Wilfong.

PHOTO-CRAYON.

Miss Anna S. Davis,
 " Charlotte E. Fowler,
 " Amanda G. Fleming,
 " Clara L. Goldney,
 " Henrietta Heyse,
 " Cecilia Louis,
 " Abbie Martin,
 " Marie A. Ney,
 " Fannie A. Risley,
 Mrs. Abbie E. Speeler,
 Miss Annie D. Stillman,
 " Amanda Sebile,
 " Kitt e K. Terry,
 " Maggie T. Tuthill,
 " Sarah C. Wells,
 " Ida A. Wendell.

PHOTO-COLOR.

Miss Amelia Armstrong,
 " Kate Howell,
 " Helen Knox,
 " Lillie Knowlton,
 " Florence Molt,
 " Nellie A. Ritch,
 " Ella Tallman.

WOOD ENGRAVING SCHOOL,

CERTIFICATES OF THE FIRST GRADE AWARDED TO

| | |
|---|--------------------|
| Mrs. Georgiana Hilgard, | Engraving on Wood. |
| Miss Olivia M. Naylor, | “ “ |
| “ Jessie A. Naylor, | “ “ |
| “ Juliette Underhill | “ “ |
| “ Alida Van Dycke, | “ “ |
| “ Daisy Woodward. | “ “ |
| “ Kittie Millen, | “ “ |
| “ Emma E. Garrabrant, | “ “ |
| “ Clara Adams, | “ “ |
| “ Grace R. Preble. | “ “ |
| “ Mary LeBoutillier, | “ “ |
| “ Belle Orvis, | “ “ |
| “ F. W. Richardson | “ “ |
| “ M. L. D. Watson, Drawing and Engraving on Wood. | |
| “ Maria E. Whittemore, Designing and Drawing on Wood. | |
| “ Margaret B. Johnson, | “ “ |
| “ Wilhelmina Grant, | “ “ |
| “ Jessie McDermott, | “ “ |

SCHOOL OF TELEGRAPHY.

CERTIFICATES OF THE FIRST GRADE AWARDED TO

| | |
|-----------------------|-----------------------|
| Miss Katie McNally, | Miss Bertha C. Meyer, |
| “ Jennie L. Thayer, | “ Kate C. Coleman, |
| “ Kitty F. Hulett, | “ Angeline L. Panlou, |
| “ Johanna L. Reiners. | “ Hattie C. Lawler, |
| “ Martha V. Kanski, | “ Agnes Fitzgerald, |
| “ Augusta Geiger, | “ Katie E. Lardner, |
| “ Etelinda Kiernan, | “ Mary C. Phipps, |
| “ Sarah A. Barrett, | “ Katie T. Walsh, |
| “ Agnes Cradley, | “ Katie G. Fagnon. |

PRIZES.

A Committee appointed by the Trustees of the Cooper Union to award the Prizes in the Female Art School, for the year 1879, made the following awards :

FOR PORTRAIT DRAWING.

- First Prize*, \$30 in Gold, to Miss MARY PUTNAM.
Second Prize, \$10 in Gold, to Miss ELLA WARD.
Third Prize, Silver Medal, to Miss IDA BURGESS.

FOR DRAWING FROM THE ANTIQUE.

- First Prize*, \$20 in Gold, to Miss CARY LOCKETT.
Second Prize, Silver Medal, to Miss ELEANOR PHILLIPS.
Third Prize, Bronze Medal, to Miss THEODORA CHASE.

FOR ORNAMENTAL SCROLL DRAWING.

- First Prize*, \$20 in Gold, to Miss MAMIE DURYEE.
Second Prize, \$10 in Gold, to Miss EVELYN WILSON.
Third Prize, Silver Medal, to Miss LEMOINE FARWELL.

1st Bronze Medal to Mrs. E. A. LADD, 2nd to Miss LUCY M. COZZENS, 3rd to Miss CLARA WEAVER, for Portrait Drawing. Bronze Medals to Miss C. A. CARLTON for Drawing from the Antique, and to Miss HATTIE FOSS for Drawing.

NORMAL DRAWING CLASS.

Having been appointed a committee to examine the drawings (in pencil and color) made during the present term by the pupils of the Normal Class of the Woman's Art School of the Cooper Union, with a view to awarding the prizes, we beg to say that after having duly considered the merits and demerits of each student's work, we have prepared the following report :

The *First Prize*, \$30 in Gold, is awarded to Miss GRACE B. SEYMOUR, for the best complete series of Drawings.

The *Second Prize*, Silver Medal, to Miss JENNIE L. PARKER, for the second best complete series of Drawings.

The *Third Prize*, Bronze Medal, to Miss LIZZIE S. GOWDY, for the third best complete series of Drawings.

Honorable Mention to Mrs. E. B. PERKY and Miss L. AMANDA BREWSTER.

In arriving at this conclusion some difficulty was experienced, the drawings in groups of several of the pupils having an unusual equality of merit; individual drawings in certain of the series were found to be superior to others of the same description in the sets ranking above them, this advantage, however, being neutralized by the shortcomings in other directions. Each set has been looked upon as a whole from every stand-point, and judged accordingly.

The drawings, taken collectively, are highly creditable to the institution, the pupils and the instructor; they exhibit a clearly defined purpose, that purpose pointing in the right direction. The execution is in many instances excellent, and the ability shown in the conventional treatment of flowers and leaves with a view to ornamental decoration, shows that the teacher understands what is practically desirable, and possesses the power of imparting it to others.

J. H. WHITEHOUSE, (Tiffany & Co.)

ARTHUR B. TURNURE, Editor *The Art Interchange*,

DOUGLAS VOLK, Instructor of Life Drawing at Cooper Institute.

ENGRAVING SCHOOL.

First Prize, \$20 in Gold, to Miss Jessie McDermott, for Original Designs.

Second Prize, \$10 in Gold, to Miss Evelyn Smith, for Original Drawing.

Silver medals to Miss M. L. D. Watson, for Original Drawing, and to Miss Alida Van Dycke, best student in Wood Engraving of the third year.

Bronze Medals to Miss Wilhelmina Grant, for Original Designs, and to Miss Kittie Millen and Miss Emma E. Garrabrant, best students respectively of the second and first year in Wood Engraving.

Honorable Mention to Miss Edith Penman for Object Drawing, and to Miss F. W. Richardson for Engraving.

