The Drexel Institute
of
Arts, Sciences, and Industry.

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Class of 1898.
Haverford College.

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The Drexel Institute.

From the latter part of the dark ages down to about the middle of this century, it was the custom for a father to apprentice his son with some artisan or tradesman that he might learn a trade. When a boy was put under the care of such a man in that manner, he became his slave to all practical purposes. The engagement generally lasted for several years. The boy was to be taught his trade and in return, all the fruits of his labours were to go to his master, who did nothing more than feed and
clothe his apprentice in the most ragged fashion.

By the beginning of the nineteenth century laws and customs had operated to make the lot of the apprentice much easier and at the same time more profitable. But still the only way for a boy to learn a business or become a skilled workman, was to be employed in shop or business house at very hard work and very low pay.

The same thing has gone on to some extent in regard to ordinary education. The young gentleman was sent to be squire or page to some
lord or lady to return he should render service, in return for which he would be taught Latin, the language of Europe, and the general Courtesies befitting a gentleman and knight. After the days of Chivalry, people began to realize that learning was profitable for others as well as for oneself, and so gradually the school and university have grown until they have reached the high development of today.

It is only comparatively recently that schools have been established where matters taught of practical industry were places where a boy might
learn how to make his daily bread. America takes the lead in institutions of this kind. Even in our strictly educational schools and the universities of the country, industrial departments such as mechanical and electrical engineering, and architecture have been introduced.

Besides these secondary departments in the ordinary schools and universities, there have been several large industrial schools founded within the last few decades. One of the finest about equipped of these is the Drexel Institute of Art,
Science and Industry of Philadelphia.

The Drexel Institute was founded in 1891 by Anthony J. Drexel of this city for the promotion of art, science, and industry. Its chief object is the extension and improvement of industrial education as a means for opening wider and better avenues of employment to young men and women, and especially those of Philadelphia. Its scope is however so broad that it provides a means of liberal education in many branches only slightly connected with the various industrial courses.
means of free lectures, concerts, reading rooms and museum, it affords a place of education to those not regularly enrolled upon its books.

The sum of three million dollars was given to the institution by its founder. One third of this sum was expended in the erection of the building, its furnishings, equipments and appliances. The other two millions were given as an endowment fund, the income of which is devoted to maintaining the instruction and the general running expenses. This large en-
document enables the Institute to offer the best instruction at extremely low rates. There are also a large number of free scholarships for students who are considered capable of making good use of them. These are mostly confined to Philadelphia, and are distributed as follows:

- Graduates of Grammar schools for boys and girls, 60 scholarships.
- Graduates of Central High School, 15.
- Graduates of Girls' Normal School, 25.
- Residents of Philadelphia not having been educated in public schools, 20.
- Residents of other States than Pennsylvania.
Both sexes are admitted to the Institute. Most of the courses are open for both men and women equally, but there are a few which are only undertaken by the men, such as blacksmith work, forging etc.; and some courses of the domestic department, for example dressmaking, and millinery, are for women only. Although the regular course in any department is always recommended, yet equal care and instruction is given to students taking special courses.

Evening classes, which are open for six months
of the year, offer all the
courses with the same
advantages of the superior
appliances and apparatus,
which the day classes can
give; everything being the
same, except the rates, which
are much lower for the
evening classes.

The Drexel Institute
Building was begun in
1890 and on December 10th,
1891 was formally dedicated
with appropriate ceremo-

ies. Two addresses were
given, one by Chancellor W. DePauw
and the other by Hayne MacVeagh.

Not long after the dedi-
cation, in February of the
next year, work was begun.
in a few of the departments, and in September of the same year, 1892, the courses of the institution were regular. The building is situated at the corner of Chestnut and Thirty-second streets. It is thus within easy reach of every part of Philadelphia; four squares away is Powelton Ave. Station; it is three squares from South Street Station; just across the Schuylkill is the Baltimore and Ohio R.R. station, and close by the Institute building run a number of trolley lines. It is built in the style
of the Classic Renaissance, or the modern interpretation and adaptation of the old Greek forms. The exterior is entirely of buff maimiled and terra-cotta brick. A wide frieze of terra-cotta runs around the entire building between the second and third story. In the middle of the front on Chestnut Street rises an attic story around which runs the terra-cotta frieze. Under this is the main portal which is twenty-six feet wide at its base and rises to an arch thirty-five feet in height. The decoration of the arch is elaborately worked out in buff and terra-cotta.
Around the arch are twelve medallions in high relief:
Bach, representing music;
Raphael, painting; Goethe,
poetry; Columbus, navigation;
Newton, mathematics; Fray
day, physics; Humboldt, natural
history; Jefferson, government;
Galileo, astronomy; Shakespeare,
drama; Michael Angelo,
sculpture, and William T.
Sims, architecture. Above
the keystone of the arch is
a large figure representing
the Genius of Knowledge;
and above her on a tablet in
the frieze are the words,
"Drexel Institute."

On entering the building
through this portal, you
To up a short flight of easy granite steps and passing a pair of corinthian pillars on each side, the doorway, you enter through folding doors into a sort of vestibule. The roof of the vestibule is supported by pillars of the same buff colored marble and in the same style as those which are on each side of the doorway. The ceiling is handsomely decorated in terracotta and very light buff. The floor is of tile in various shades of red.

It may as well be stated here, that the coloring of
the building is almost entirely of buff and reds and white. The ceilings are low, except in the main court, but all the rooms are well lighted by rows of large windows; indeed from the outside the walls seem to be made as much of glass as of brick.

So the height the vestibule opens into the museum. The museum is a large square room with a low ceiling supported by slender red pillars. The hard wood floor is covered with glass cases filled with curiosities and antiquities of all sorts. The decorative arts of Egypt, India, China,
Japan and all Europe are represented. Several fine
bronzes and reproductions in
bronze of old statues are about
the room, and in the centre
is a fine life-size statue of
Sappho, done in white marble.

Leaving the museum and
crossing to the opposite end
of the vestibule, you come into
the reading room and the
library back of it. This
room is one hundred and
twenty feet long by sixty
wide. It is light and
airy, and decorated in the
same style as the museum.
The library at present con-
tains over twenty thousand
volumes, and is being
continually added to. It is also supplied with all the leading periodicals on art, science and technology.

Beyond the vestibule is the great central court, sixty-five feet square and reaching to the top of the building. It is covered by a decorated ceiling, in the middle of which is an immense skylight of stained glass. The pavement is of tile, a continuation of that in the vestibule. The whole first floor is wainscoted with black-veneer marble, interrupted by buff marble pillars and white enameled brick arches.
Broad galleries surround the court on the second and third floors. These are enclosed by white enameled brick arches and supported by buff marble pillars, giving a cloister effect. Around the sides of the court on the ground floor are casts of some of the famous old Greek statues, also some bronze and marble pieces representing the skill of the modern sculptor.

Across the court from the vestibule is a fine double marble staircase leading up to the galleries above. Between the two flights is a marble arch and stair.
case leading down to the auditorium, and the workshops in the basement. Above this arch is an imposing cast of the "Winged Victory".

The opening into the auditorium from the court is a side entrance, the main one being on Thirty-second Street. The seats are all on the floor, which is an inclined plane giving a clear view of the stage; there is sitting accommodation for fifteen hundred persons. On the stage is one of the finest organs in the city, which with the screen is decorated in the style of the Italian Renaissance. On one end the
other side of the stage is
inscribed the name of Bach
and Handel, and in recessed
arches on the south side of
the room are the names of
Aristotle, Beethoven, Wash-
ington, Gutenberg, Galileo,
Franklin, Watt and Darwin.
The whole hall is finished
in a quiet buff.

In the basement are
the dynamos for lighting
the building, the forges,
lathes and workshops of
the Institute.

Upstairs opening in
from the arcades around
the central court are the
various class rooms and
studios. The physical labor-

atories are on the second
floor and the chemical
laboratories on the third.

The gymnasium on
the fourth story at the
front of the building, is
a large, airy and well
lighted room with a good
high ceiling and supplied
with all the necessary ap-
paratus for the development
of the human body. Next
to the gymnasium are
the dressing rooms and
bathrooms, fitted with
marble compartments
and hot and cold water.

Some idea of the size
of the Dr. Avel Institute may
be learned from the fact that the number of professors and instructors is seventy-three, and the number of students about fifteen hundred. The President, James Mac Allister, LL.D., was, before he was called to his present position, Superintendent of Education of Philadelphia, and the professors under him are in every way competent to fill their positions. The courses of instruction, although distinct in a sense, bear, however, close relations to each other and give a unity to the whole institution.

There are in all eleven departments into which the
Institute is organized, viz:—
I. Department of Fine and Applied Art.
   School of Illustration.
   " Drawing, Painting and Modelling.
   School of Design and Decoration.
II. " Architectural Drawing.
    Department of Mechanic Arts.
    Three years course in mathematics, mechanical drawing,
    Freehand Drawing, Science, English, History, Civics, Economics and shop work in wood
    and iron.
III. Department of Science and Technology.
     Advanced course in electrical engineering.
     Course in machine construction.
Course in mechanical Drawing
Special course in Mathematics, Physics and Chemistry.
Department of Commerce and Finance.
General course in Commerce and Finance.
Office course in Bookkeeping, Stenography, Secretaries work, and preparation for Civil Service.
Department of Domestic Science and Art.
Junior and advanced course in Domestic Science and Art.
Household Economy and Cookery.
Normal Course in Domestic Science.
Courses in Dressmaking.
Courses in millinery.
Normal Department for Train-
ing of Teachers.
Drawing, Manual Training,
Business, Domestic Science,
Domestic Arts.

VII  Department of Evening Classes
Courses in all the Depart-
ments of the Institute and
in Choral Music.

VIII  Department of Physical Training
Courses for young men and
women.

IX  Department of Free Public
Lectures and Entertainment.
Courses of Lectures in Art,
Science and Technology.
Organ recitals, and Concerts
during the winter months.

X  Library Department.
School for training libra-
rians in connection with
the Library.

XI Museum Department.

It will be seen by this large and diversified list of courses what an extensive education the Drexel Institute offers to the public. A closer description of each separate department might be both instructive and interesting, but as this paper is not designed to take the place of a catalogue, it will only be necessary to speak more fully of one department.

If there is any one thing more than another for which the Drexel Institute is famous, it is its Art Department. This department is divided into six sections. The first
is the School of Illustration of which Howard Pyle is director. The First Class is studying from the costumed living figure posed in some suggestive attitude, and the student draws the figure in such a way that it may be introduced into a picture.

The Second Class: In this class the student is taught to paint the draped and costumed figure with such changes of light and shade and surroundings as shall make the work a finished picture, fit for reproduction.

The Third Class includes lectures by Mr. Pyle on the grouping and arrangement of figures.
For a picture, on facial expression, and the various costumes of the different periods of history. Drawing of the human figure without a model is taught.

The School of Drawing, Painting, and modeling is under the direction of Clifford P. Grayson. The First Class includes free-hand drawing from cast, and clay modeling. In the second year, drawing and modeling from casts and nature is taught. During the third year, painting in oil and water colors is added to the former subjects. In the Fourth Class, Drawing, Painting, and clay modeling from life
is learned by the student.

The full course in design and decoration occupies three years. It comprises drawing and color from objects in the museum, problems in the various Eastern styles of decoration, problems in Tudor and Elizabethan ornamentation, and original design for brass, pottery, glass, leather, etc.

The Architectural Course is arranged for two years. It includes study of the orders of Architecture, working drawings, historic or
mamentation, building materials, and tests of their strength and durability; mathematics, general history, building laws, original design.

For all of these art courses there are courses of lectures arranged. The student is expected to be at work between the hours of nine in the morning and four in the afternoon, with the exception of one hour in the middle of the day for dinner. Five hours a week of physical training in the gymnasium is also required of each student.
The free organ recitals are some of the most enjoyable and instructive musical events of the winter months. Their purpose is to educate the popular musical taste to appreciate such great composers as Bach, Handel, Mozart and other famous musical writers whose works are not ordinarily heard. The managers of this department engage the very best organists in the city, and always secure the services of any other famous musicians who happen to be in Philadelphia.
The Drexel Institute plays a very prominent part in the industrial education of Philadelphia. It is really a small university on account of the large variety and number of its courses. Philadelphia is most fortunate in having such an institution and it may fairly be ranked with Girard College as one of Philadelphia's greatest philanthropic institutions.