

### The Pennsylvania Museum and School of Industrial Art.

A review of the objects and work of this institution, will, we feel assured, be of interest to all who are impressed with the importance of raising the artistic quality of the metal-working, textile, ceramic, and other manufactures in which so much of the value of the product is dependent upon the ingenuity, skill and talent of the designer and decorator.

The fact that manufacturers in these industrial branches, which of late have been very largely developed and extended, have been dependent almost entirely upon foreign skill and talent in relation to the matter of artistic design, is well known, and this fact, and the lack of means and facilities and opportunities of proper instruction in the cultivation of the arts of design in their application to the industries, were the immediate reasons that prompted the formation of the institution here referred to. Its purpose, as disclosed in its charter, is to establish in the city of Philadelphia a museum of art in all its branches and technical applications, and with a special view to the development of the art industries of the State, to provide instruction in drawing, painting, modeling, designing, etc., through practical schools, special libraries, lectures, and otherwise.

The object had in view by the founders, therefore, appears to be strictly industrial, and the collections in its museum, now of great value, have been selected with

the view of making them illustrative, as far as possible, of the application of art to industry, and the plan of instruction created for the school has constant reference to a similar purpose.

A fair impression of the character of the museum collections may be had from the following: The idea of forming the institution took shape during the Centennial Exhibition in 1876, and, pending its incorporation, a considerable fund was raised with which to make purchases at the exhibition. This fund, judiciously expended, and the gifts of exhibitors in a number of instances, formed a nucleus around which has grown an extremely valuable collection numbering more than 10,000 objects.

The major part of the collection of the products and manufactures of British India, shown at the Centennial Exhibition, was presented to the museum by the British government at the close of that exhibition. It occupies the whole of the west corridor at Memorial Hall.

The Moore memorial collection of objects of art, presented to the museum by Mrs. Bloomfield-Moore as a memorial of her late husband, occupies the entire east corridor. It contains exquisite examples of lace, embroidery, fans, jewelry, pottery and porcelain, metal-work, enamels, carved work in ivory and in wood, tapestries and pictures.

The museum also possesses several smaller collec-

tions, sufficiently complete in themselves to be regarded as fairly representative of the departments to which they belong. Of these, the Casper Clark collection of Persian metal-work, the Vaux collection of Etruscan pottery, and the Fulgence collection of textiles, are perhaps the most important.

In addition to its actual possessions, the museum is constantly receiving accessions in the form of loans of more or less permanent character, by which the element of freshness is secured and popular interest in the collections continually renewed.

The purpose of the school is to furnish such instruction in drawing, painting, modeling, carving and designing as is required by designers, superintendents and workmen.

The first successful attempt made to incorporate this feature, was the establishment of the department of weaving and textile design, which was accomplished

work and carpentry; shadows, perspective, modeling and casting; practice in the use of color, with special reference to the needs of designers—especially in textiles; historical ornament, study from the living model and original design. The instrumental drawing is taught by means of class lessons, or lectures; and lectures are also given on anatomy and historical ornament, upon which examinations for certificates are based.

In this school special courses are given in wood carving and stained glass work. The class instruction is supplemented by lectures on anatomy of the human and animal form as applied to decorative art, on harmony of color, water-color painting, etc.

The general course of instruction in the textile school embraces the theory of textile designing and its practical applications to the art of weaving and related branches—scouring, bleaching and dyeing

of yarns and materials. In addition, chemistry is taught with special reference to the needs of the different branches of the textile industries.

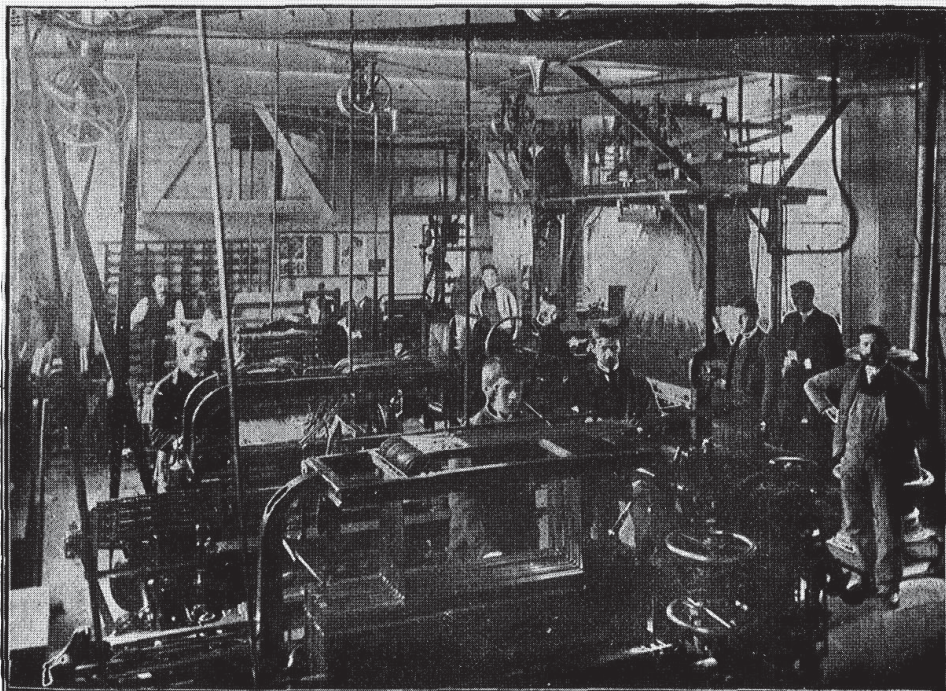
The course of instruction extends over a period of three years, and is especially adapted to meet the wants of those desiring to study cloth manufacturing, designing of textiles, weaving and dyeing. The course is intended to give the student a thorough scientific and practical knowledge of these subjects.

Lectures are given on the different materials used in the textile industries, such as wool, cotton, silk, mohair, jute, flax, etc., their source, chemical and physical

structure of the fiber, the action of chemicals on the different fibers, and their affinity for the various dyestuffs. Having studied the raw materials, the different processes by which they are converted into yarns, such as sorting, cleansing, carding and spinning of wools, mixing, opening, carding, drawing and spinning of cotton, etc., are taken up systematically.

In connection with the department of dyeing, there is a laboratory fitted up in the most complete manner with apparatus and chemicals for carrying on experimental work, as well as for the practical applications of scientific principles to the art of dyeing. The students work in a small dye house, and learn, in a practical way, not only the art of dyeing, but also how the yarns are scoured and bleached. From time to time, the class visits the large dye-houses to be found among the many large manufacturing establishments in and around Philadelphia, and views the methods of carrying out their student work on a large scale. For those who desire to take up the course of dyeing alone, a special course is arranged, the student spending the greater portion of his time in the laboratory at practical work.

Without giving in detail the curriculum of this branch of the school, which covers a period of three years, it may suffice to say that it combines thorough theoretical with practical training. Its graduates are well equipped on leaving the school to take hold



The Weaving Room of the Pennsylvania School of Industrial Art, Philadelphia.

with the help of liberal subscriptions from the members of the Philadelphia Association of Textile Manufacturers. This branch of the institution has proved more successful than was ever hoped for. It is thoroughly equipped with looms, machinery, laboratory, and other facilities for supplying technical information on all subjects connected with designing, weaving, dyeing, cleansing of raw materials, etc. The teachers are men of acknowledged skill, and the value of the school is now widely known and appreciated by the manufacturers of textiles over the entire country. The methods of instruction have been improved upon from time to time, until at present it is believed that the school in this feature is fully the equal, and in several important respects the superior, of any of its European rivals.

The success of this part of the school work has stimulated the manufacturers of pottery to the point of aiding the establishment, in connection with it, of a department for instruction in the higher grades of knowledge, having relation to the design, decoration, etc., of pottery—a branch of instruction which will shortly be placed in operation.

The general course of study in the art school embraces drawing and painting in water colors, from models, casts, draperies and still life; lettering; plane and descriptive geometry; projections, with their application to machine construction, and to cabinet

of the higher branches of the textile manufacture, and may be found to-day in leading positions in prominent textile works all over the country.

The success which has attended the career of this notable institution, is due to several causes. It has numbered among its directors and friends many of the leading manufacturers, who have taken a warm interest in its welfare; and its plan and scope have been placed upon a high plane, which has been steadily maintained from the start.

The schools of the institution are located at 1336 Spring Garden street, and the collections are preserved in the Memorial Hall of the Centennial Exhibition in Fairmount Park.

Students desiring admission, should address the principal, Prof. L. W. Miller at the school.



*Design for Brussels Carpet (Ground) (Committee's Prize, 1890) by Elizabeth F. Washington.*