

1466-01

The New York State School
Of Clay-Working and Ceramics



AT

Alfred University

Alfred, N. Y.



PRESIDENT BOOTHE COLWELL DAVIS, PH. D.

FACULTY

BOOTHE COLWELL DAVIS, Ph. D., President.

CHARLES F. BINNS.

Director and Professor of Ceramic Technology.

Supt. Royal Porcelain Works, Worcester, England - 1897; Principal Technical School, Trenton, N. J., 1897-1900; Superintendent Ceramic Art Co., Trenton, N. J., 1898-1899; Vice-President American Ceramic Society, 1900.

LILLIE W. TOURTELLOTT.

Instructor in Graphics and Decorative Art.

Graduate of Pratt Institute, Brooklyn; Special courses in Instrumental and Free-hand Drawing, Water Color, Applied Design and Clay Modeling.

DANIEL C. BABCOCK.

Assistant in Technical Laboratories.

Professors in Alfred University who Give Instruction in the New York State School of Clay Working and Ceramics:

ALPHEUS B. KENYON, S. M.,

Professor of Mathematics.

ALBERT R. CRANDALL, Ph. D.,

Professor of Geology and Microscopy.

OTHO P. FAIRFIELD, A. B.,

Professor of English.

GERTRUDE B. HARRIS, L. B.,

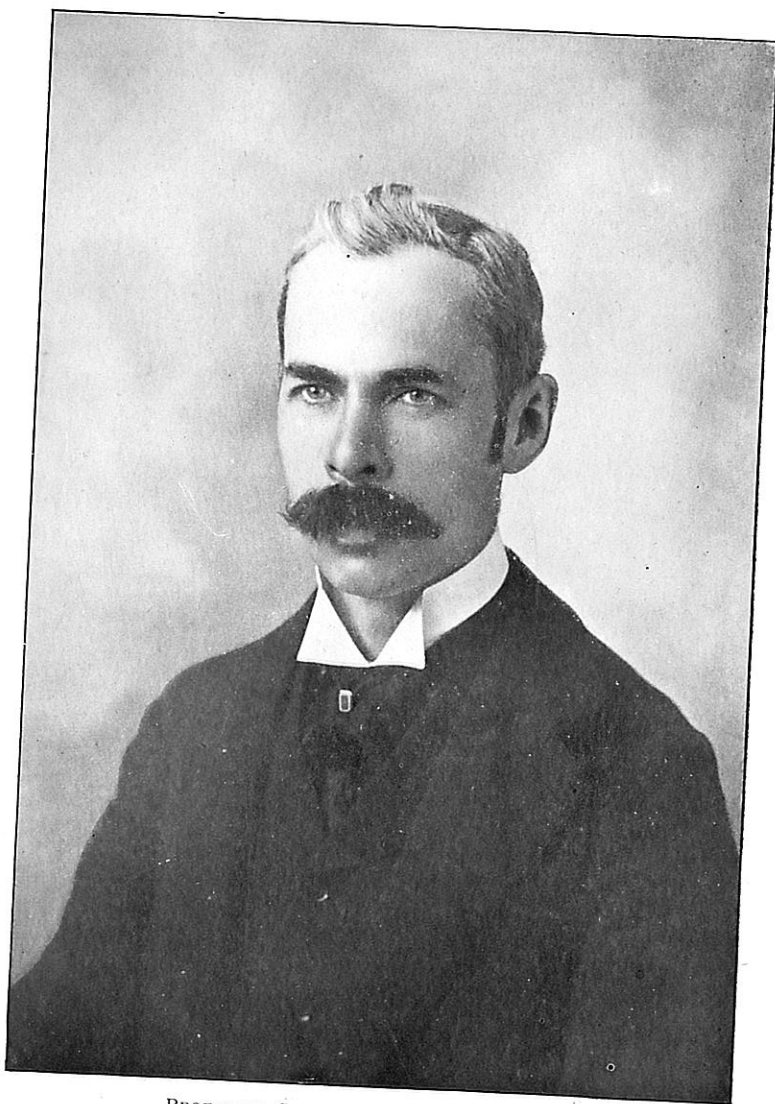
Professor of Modern Languages.

EDWARD S. BABCOCK, S. M.,

Professor of Chemistry and Physics.

GEORGE A. MAIN,

Assistant in Industrial Mechanics.



PROFESSOR CHARLES F. BINNS, DIRECTOR.

THE NEW YORK STATE SCHOOL OF CLAY-WORKING AND CERAMICS

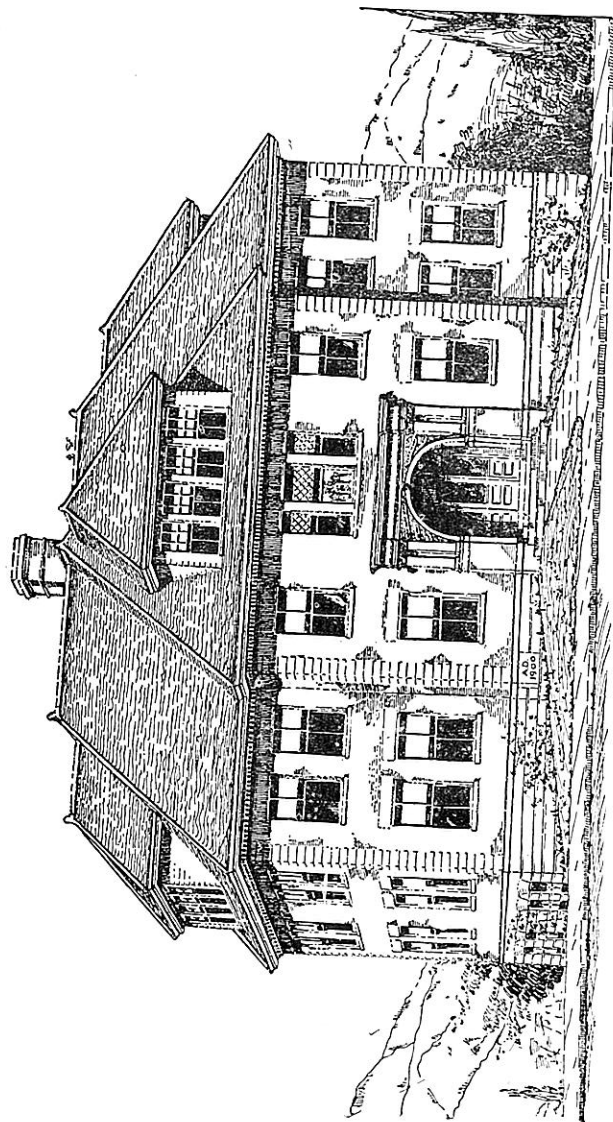
THIS SCHOOL was established by chapter 383, Laws of New York State, 1900, which provides for the construction and equipment of a suitable building and for the maintenance of the school.

The demand for the school arose from the fact that the great utilitarian field occupied by clay wares is attracting public notice on every side. Clay in one form or another constitutes the great mass of modern fire-proof building material, and the larger part of general constructive material is derived from the same source.

The wisdom of locating the school at an established seat of learning and in close proximity to clay-working industries must be apparent to all.

No branch of study can stand alone. The student of clay-working should be educated in collateral departments of science and art. For this work Alfred University offers splendid advantages. Laboratories of chemistry and physics, libraries, museums of geology and natural history, workshops for manual training, and all the departments of liberal culture are available so that the many and varied requirements of a complete education are fully met.

It is the purpose of the school to give a practical training in the technology of clay-working, neglecting neither the science nor the art. Attention will be given to the improvement of methods of manufacture and the reduction of cost to the end that the resources of the State may be fully developed, and that within its borders may be manufactured the clay-wares both coarse and fine now brought from other states or countries at an enormous annual cost.



NEW YORK STATE SCHOOL OF CERAMICS.

BUILDING AND EQUIPMENT

The building constructed for the State School of Clay-Working and Ceramics is located upon the campus of the University and is designed especially for this work. It is built of red brick and terra-cotta with grey trimmings and roofed with red tile. It has a floor space of about thirteen thousand square feet, and a frontage of seventy-five feet.

In the lower story are located the heavy machinery for the manufacture of brick, tile, hollow blocks, and roofing tile, the slip making plant, cylinders for glaze preparation, and a workshop fitted with modern appliances for pottery and porcelain manufacture. There are also rooms for mold making and drying, and the necessary damp cellar.

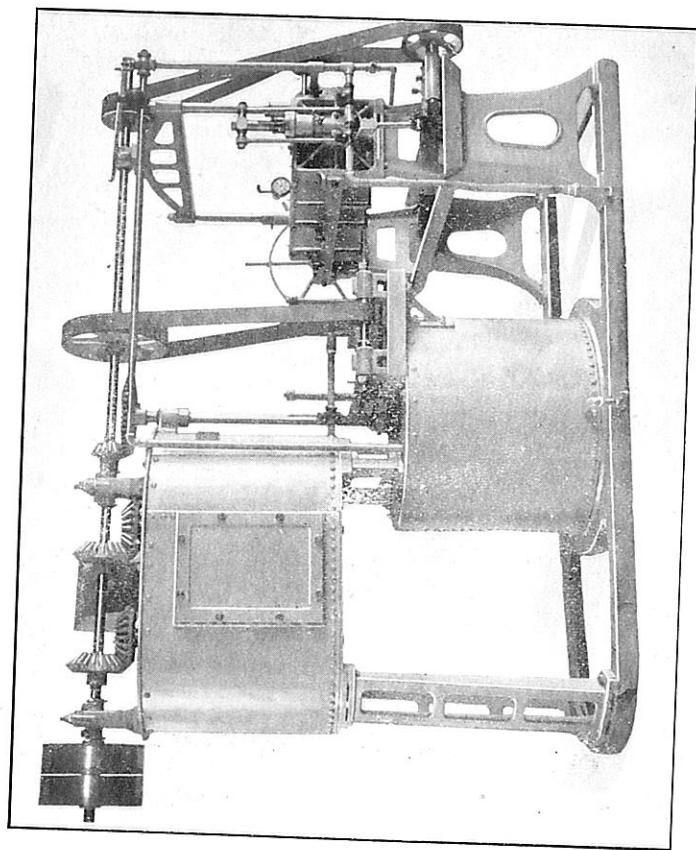
The motive power is a gas engine, natural gas being available.

On the principal floor are located the executive offices, rooms for the Director, laboratories, and a class room. Here the experimental work will be done.

The Technical laboratory is provided with small blungers and mills for working clay samples, small gas furnaces for fretting and fusing and all the necessary apparatus for the physical testing of clay.

Ample provision has been made for the chemical testing of materials.

The art department of the school is located on the second floor. A fine studio is arranged, provided with the facilities necessary for the practice of mechanical drawing and free-hand drawing and applied design. Adjoining this is the modeling room where, in addition to ornamental work in clay, the production of pure form will be studied. To facilitate this work horizontal and vertical lathes are provided so that the student may be enabled to realize the ideas laid down upon paper. A large space is provided on the upper floor of the building for a ceramic museum in which examples of clay work of every type may be studied.



SLIP-MAKING PLANT.—Crossley Mfg. Co.

In addition to this splendid equipment it is worthy of note that within a short distance of the school are located two plants in which are manufactured bricks by both the wet and dry processes, several styles of roofing tile, and quarries for floors and roofs. Here may be seen the actual working of manufacturing plants, and the use of at least three kinds of kilns, including a continuous kiln.

TUITION

Students who are residents of New York State are exempt from payment of tuition by the provisions of the act establishing the school.

To students from other states, a tuition fee of \$50 per annum will be charged.

Small laboratory fees to cover cost of materials and breakage are also required.

COURSES OFFERED

The course of study which leads to a degree extends over a period of four years, and embraces such subjects as are equivalent to the usual college course. A short course of two years is also offered, which is specially designed to assist those having some practical experience in clay-working and who desire to supplement their knowledge with scientific method and research.

BENEFITS TO BE DERIVED

The student who successfully pursues the course of instruction provided in this school will be able to take up the practical work of manufacturing clay wares. He will be able to lay out his plans, place his machinery, design his goods, shape his wares, and carry the whole matter to a successful conclusion.

It is difficult to conceive of any more attractive work than the solution of the problems in chemistry, physics, and art presented to the clay-worker. Furthermore, the field for skilled and educated men in this line is practically vacant. There is no calling in industrial work offering greater opportunities than are now presented to the educated ceramist.

CONDITIONS OF ADMISSION

Candidates for admission to the four years' course in the School of Clay Working and Ceramics will be subject to the conditions laid down for admission to the Scientific course in the College of Liberal Arts. (See Annual of Alfred University).

Students desiring admission to the short course must be at least 16 years of age and of good moral character. They must give evidence of proficiency in English Composition and reading, arithmetic and simple mathematics. Candidates of mature age may be admitted at the discretion of the Faculty, upon giving evidence of earnest purpose and of ability to assimilate the instruction.

COURSES OF STUDY

REQUIRED STUDIES IN FOUR YEARS' COURSE.

Arabic numeral indicate the number of exercises per week. Roman numerals indicate the semester in which the courses will be given. All courses extend through the year except where marked I or II.

FRESHMAN YEAR.

Rhetoric, 2
Geometry, 2
Chemistry, 3
German, 3
Mechanics, 2
Graphics, 2
Ethics, 1

SOPHOMORE YEAR.

English Literature, 2
I Mathematics, 3
Chemistry, 2
German, 2
Physics, 3
II Graphics, 2
Ceramics, 3 [theory]
Ceramics, 2 [laboratory]

JUNIOR YEAR.

Mathematics, 3
Graphics, 2
Mechanics, 2
Geology, 3
I Microscopy, 2
II Ceramics, 2 [theory]
Ceramics, 3 [laboratory]

SENIOR YEAR.

Graphics, 2
Geology, 2 [economic]
Ceramics, 12

REQUIRED STUDIES IN TWO YEARS' COURSE.

FIRST YEAR.

Geometry, 2
Mechanics, 2
Graphics, 2
Chemistry, 5
Ceramics, 4
Ethics, 1

SECOND YEAR.

Graphics, 2
Geology, 2
Chemistry, 5
Ceramics, 7

For detailed description of the courses required in English, Mathematics, Chemistry, Physics, Mechanics, Geology, German, Ethics, and Microscopy, reference may be had to the Annual of Alfred University, which will be sent on application.



CENTENNIAL BRICK MACHINE — American Clay Working Machinery Co.

DEPARTMENT OF TECHNOLOGY

PROFESSOR BINNS.

MR. D. C. BABCOCK.

1. A course of lectures, with recitations, on the nature and properties of clay, their origin and composition. The bearing of chemistry on the ceramic industries. Impurities of clays. The nature and requirements of glazes. History of Ceramics. Sophomore year, three hours.

2. A course of lectures, with recitations, on the requirements of clays and other substances for the production of fictile wares. Methods of manufacture of brick, tile and sewer pipe. Glazes and glazing. History of Ceramics. Junior year, two hours.

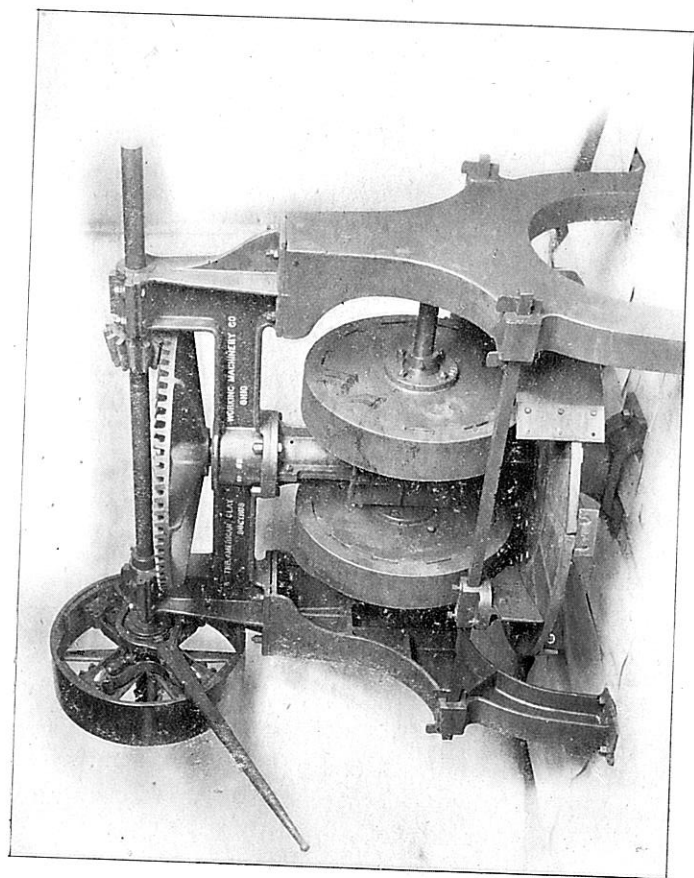
3. A course of lectures, with recitations, on the higher products of the potter's art. White wares and faience. Earthenware, Sanitary ware, Once-fired ware, Fire-proof and Refractory ware. Hard and Soft Porcelain. Ceramic colors. History of Ceramics. Senior year, two hours.

4. A course of laboratory demonstration and practice. The testing of clays, effect of impurities. Elementary kiln work. Sophomore year, two hours.

5. A course of laboratory demonstration and practice. The blending of clays. Effect of admixtures. Manufacture of brick, tile, sewer pipe, hollow ware and terra-cotta. Preparation and firing of glazes. Junior year, three hours.

6. Laboratory and workshop practice in continuation of course 5. The manufacture, glazing and decoration of finer wares. Kiln construction and pyrometry. Students will be encouraged to specialize. Senior year, ten hours.

Students who elect to enter the short course will omit courses 3 and 6 unless their work is to embrace white wares in which case they will omit courses 2 and 5.



DRY PAN — American Clay Working Machinery Co.

DEPARTMENT OF CLAY TESTING

PROFESSOR BINNS.

PROFESSOR E. S. BABCOCK.

The State School of Ceramics is specially fitted and the experts in charge are exceptionally well qualified for the professional examination and testing of clays for economic purposes. Such clays may be classified under the following heads:

- (a) Kaolin, white burning residual clay.
- (b) Kaolin, white burning, washed for market, used in the manufacture of pottery, porcelain and paper.
- (c) Ball clay, white or cream burning, sedimentary clay of high plasticity, used in pottery manufacture.
- (d) Stone ware clay, gray or cream burning, more or less sandy in character, used in stoneware manufacture.
- (e) Fire clay, buff or white burning, refractory, used for manufacture of fire brick.
- (f) Brick clay, including colored clays and shales used for the manufacture of brick and tile of various qualities and descriptions.

For each of the above classes special tests are necessary, and the charges made are proportionate to the work required.

A report upon each sample will be furnished and must be understood to refer only to the sample submitted unless the experts are instructed to examine the deposit and prepare their own samples, in which case special charges will be made. The report includes chemical and physical tests, rational analysis where necessary, fire and shrinkage tests, advice as to washing or other preparation of the clay, and an opinion as to the industry to which the material may be applied.

CHARGES.

For classes a, d, and e, per sample	\$50 00.
For classes b, c, and f, per sample	\$25 00.
All charges are payable in advance.	

The sample submitted should not be less than five pounds in weight and must be forwarded free of charge.

If the manipulation of bulk samples be desired the State School is prepared to undertake the experimental production of clay wares at reasonable rates.

Clays and shales indigenous to the State of New York will be tested without charge beyond the actual cost involved in the examination. Estimates can be obtained upon application.

DEPARTMENT OF GRAPHICS AND DECORATIVE ART

PROFESSOR BINNS.

MISS TOURTELLOTTE.

1. A course of lectures on the history and development of decorative art. The elements of beauty in form and decoration. The possibilities and limitations of clay in ornamental work. Application of clay to architectural adornment.

2. A course of instruction in mechanical drawing and drafting. General principles. Descriptive geometry and linear perspective. Intersection and development of geometrical surfaces, making of plans, elevations and details. Lettering.

3. A course of instruction in free-hand drawing. Outline drawing from models, charcoal drawing from plaster casts, pen drawing, water color, study from nature.

4. A course of instruction in decorative design. Elements of geometric ornament, applied design, original design.

5. A course of instruction in clay modeling and casting in plaster, creation and production of form, development of handles and embossments. Architectural modeling.

Attention will be given to the natural ability of each student, and specialization will be encouraged.

The school year begins Sept. 11th, 1900.

Letters of inquiry should be addressed to

Prof. Charles F. Binns, Director, Alfred, N. Y.

University Press, Alfred