

structive work in paper, envelopes, and boxes for seeds. Knife work in thin wood—labels, fences, dibbers, etc. for the garden.

SECOND GRADE: Clay modeling of fruit and vegetable forms. Paper constructive work, envelopes, etc. and articles of furniture for a doll's house. Knife work—boxes, tables, chairs, bedsteads, etc. for a doll's house.

THIRD GRADE: Knife work in thicker wood. Use of simple bench tools in the manual-training room during the second half of the year. School and garden apparatus.

FOURTH GRADE: Elementary bench work, including a modified course of sloyd. Repairing class-room furniture, making a miniature house for the lower grades.

FIFTH GRADE: Advanced bench work, including a modified course of sloyd. Class-room repairs, laboratory apparatus, etc.

In Hampton Institute.

The following are the requirements for the three years course in Manual Training in the Institute:—

FIRST YEAR.

BOYS:—*Course in Bench Work requiring 100 hours.* Exercises consist of the following.—Measuring on a plane surface with rule and knife, squaring with try-square, gauging with marking gauge, sawing to a line with rip, cross-cut, and back-saw, planing to true surface, testing with steel square and by sighting, planing to size with sides square and true, planing ends smooth and true with block plane, lining rough lumber with straight edge and pencil, making the half joint or box halving, making the dado or cross groove, nailing butt joints, mortising and tenoning, boring, making joints fastened with screws, glueing, making a smooth surface with plane, scraper and sand paper.

Grooved work, making mitre joints, making irregular bevels, making dovetails, laying out and sawing curved work.

In connection with the above course in bench work, each exercise is first worked in free hand or mechanical drawing from a model; the model is then set aside and reproduction made from the drawing.

The above principles are applied in the construction of finished models which may be used by the student, such as boxes, for collars, cuffs, neckties, etc., bookshelves, inkstands, printing frames, picture frames, drawing boards, Tee squares, etc.

GIRLS:—*Course in Sloyd.*—The Junior classes devote from two to three hours per week to sloyd. Their work includes the course as arranged for the first and a part of the second year for grammar schools. They are required to make working drawings for a part of the models; others they make from drawings placed upon the board