

WOODWORK.

(a.) *Day-classes for Boys.*—The Joint Committee—subject to their obtaining from the school-management committee of the School Board permission to use, for a period not less than one year, such class-rooms or premises as might be asked for by the Joint Committee, and might be suitable for their work—determined (in the first instance) to establish six centres at which classes should be conducted—three on the north side, and three on the south side, of the Thames.

The expense of establishing, equipping, and maintaining the classes during the first year was undertaken out of the original sum of £1,000 given by the Drapers' Company through the City and Guilds Institute. The Joint Committee did not expend the whole of the sum granted by the city guilds, but had, at the end of the first year, an unexpended balance of about £116. The satisfactory working of the scheme encouraged the Board, on the recommendation of the Joint Committee, to appeal to the city guilds and to the Drapers' Company to render further pecuniary aid for continuing the experiment for another year; and the appeals were generously responded to by the Drapers' Company and the City and Guilds Institute. The Joint Committee ultimately selected six centres, at each of which a class was to be held. The headmasters of the surrounding public elementary schools—both Board and non-Board—were invited to hold a conference with the Joint Committee as to the best methods of securing the attendance of boys from such schools, and also as to the number of scholars in proportion to the several school-rolls. The headmasters very cordially entered into the project, and have since manifested considerable interest in the progress of the work.

As to the details of the method of instruction, the Committee deemed it advisable, for a time, to abstain from giving specific directions to the instructors who should be appointed, and to leave the instructors to frame their own methods, subject to the broad lines laid down under a syllabus suitable for the first year's work. So successful was the experiment that at the end of the year it was thought desirable to enlarge the scope of the Committee's work by providing an extended syllabus, which included the original one worked by the boys in the first year, together with an advanced course for those who should continue their attendance during a second year. The following is the enlarged

SYLLABUS.

I. Principles.

1. The aim must be educational rather than industrial.
2. The scholars must be given an intelligent knowledge of the principles which underlie their work.
3. Working drawings to scale, of every exercise, should be made.
4. All bench-work should be done to exact measurement, and every piece of wood correctly lined before being cut or planed.

*II. Practice.**A. Object-lessons.*

1. Woods commonly used⁽¹⁾—(a) their structure and conditions of growth; (b) their seasoning; (c) their special properties and the uses dependent thereon; (d) their geographical distribution.
2. Nails and screws—some of the kinds in common use, and their particular uses.
3. Tools⁽²⁾—their form, structure, and manipulation.

B. Drawing.

Isometric projections and working drawings—plans and elevations—of the specified exercises.

C. Bench-work.

1. Measuring and lining on suitable wood.⁽³⁾ Tools: 2ft. rule, square rule, try square.
2. Sawing to line across the grain on suitable wood,⁽³⁾ not more than $\frac{1}{2}$ in. thick. Tools: In addition to the above, bevel and tenon saw. Models: Some such test of the exercise as glueing pieces to imitate parquet flooring (for instance, the herring-bone 3in. by $1\frac{1}{2}$ in. by $\frac{1}{4}$ in.).
3. Sawing to line in any direction on suitable wood,⁽³⁾ not more than $\frac{1}{2}$ in. thick. Tools: In addition, the marking-gauge and panel-saw. Joints and models: Open box, or soap-box, or small bracket—butt joints, glued.
4. Planing. Wood for "trueing up" generally should not exceed 2ft. by $1\frac{1}{2}$ in. by $1\frac{1}{2}$ in. Tools: In addition, jack-plane, smoothing-plane. Joints and models: Such as halving joint at end. Square and triangular frame halved joints.
5. Boring, nailing, and screwing. Tools: In addition, bradawl, gimlet, hammer, screwdriver. Joint and models: Such as nail-box, simple bracket, &c., butt joints.
6. Hand-chiselling and plain chamfering with chisel and plane. Tools: In addition, firmer chisels. Joints and models: Such as Oxford frame, half-lap joints.
7. Mortise-chiselling. Tools: In addition, mortising-chisels. Joints and models: Bridle joint, single mortise joint, dovetail-halving, common box dovetailing; any simple models involving above exercises.
8. Tool-sharpening. Instruction to be given in the sharpening of planes and chisels, but not saws.

The above syllabus is prepared for a year's work for the average boy of Standards V., VI., or VII. The boys who show greater aptitude will be allowed to proceed to more advanced exercises⁽⁴⁾

⁽¹⁾ Hard woods—oak, beech, elm, ash, walnut, teak, mahogany. Soft woods—Scotch pine, white-fir or spruce, yellow-pine, pitch-pine, cedar, bass wood.

⁽²⁾ Tenon-saw, panel-saw, jack-plane, smoothing-plane, chisels, bradawl, gimlet, two-foot rule, bevel, marking-gauge.

⁽³⁾ Yellow or white deal for practice, bass wood for specimen work.

⁽⁴⁾ Such as double mortise and tenon, oblique ditto, housing, haunched tenon, &c.