

working hard and soft woods; appearance, characteristic properties (including specific gravity), and defects of timbers. Candidates may be required to identify specimens of timbers in common use.

Bench-work.—Measuring and setting out work; dressing a piece of timber truly; principles to be observed in designing joints and fastenings; the construction of useful or ornamental articles providing opportunities for practice in the following processes, fastening-devices, and joints: Processes—sawing, planing, paring, grooving and trenching, slotting, gouging, cutting curves, shaping and filing, chamfering; fastening-devices—nails, screws, glue, dowels, pins, cleats, keys, and wedges; joints—the ordinary joints, including haunched mortise and tenon, bridle, mitre, common dovetail.

The examination in woodwork will consist of a written examination and a practical test.

(23.) *Metalwork*.—Drawing.—Use of T square and set-squares, compasses, dividers, and protractors. How to test accuracy of drawing-instruments, and how to rectify errors. The use of the foot rule, metric rule, and callipers; calculations based on measurements taken by these; candidates will be expected to measure with approximate accuracy to one-hundredth of an inch. Making approximately accurate hand sketches of simple geometrical solids and of objects such as tools, simple machine parts, &c.; the use of squared paper for hand sketching. Construction of plain scales; plans, elevations, sections, and oblique projections of geometrical solids the surfaces of which are bounded by straight lines, and of simple objects based thereon. Drawing to scale from actual parts, dimensioned photographs, or partially completed dimensioned sketches, such tools and simple machines or machine parts, instruments, &c., as pupils who have taken a two-years course in metalwork or in elementary mechanical engineering should be familiar with.

Instruments, Tools, Materials, &c.—The description, use, and care of the various measuring and testing instruments, hand tools, and simple machines used in metalwork or elementary engineering. The description of simple mechanical operations. Methods of setting out work from drawings, and the various operations involved in the completion of a simple piece of metalwork. Characteristic properties of the commoner metals used in metalwork, such as iron, steel, copper, brass, zinc, and sheet tin, and their preparation for workshop requirements.

Bench and Forge Work.—Exercises requiring the use of the hammer, chisel, file, and scraper; easy exercises involving the cutting, bending, and joining of cold sheet metal; various methods of fastening metals, such as riveting, screwing, soldering, and brazing; very elementary forge work, such as bending, drawing-down, upsetting (but not welding), hardening, and tempering a cutting-tool, such as chisel, cross-cut, flat, drill, or lathe tool.

The examination in Metalwork will consist of a written examination and a practical test.

As witness my hand this fifteenth day of March, one thousand nine hundred and eighteen.

D. ROBERTSON,  
Public Service Commissioner.

In pursuance of the provisions of the Public Service Act, 1912, His Excellency the Governor-General of the Dominion of New Zealand, with the advice and consent of the Executive Council of the said Dominion, approves of the foregoing amendments.

LIVERPOOL, Governor-General.

Approved in Council this twenty-fifth day of March, one thousand nine hundred and eighteen.

F. D. THOMSON,  
Acting Clerk of the Executive Council.