AN ROI N N O IDE A CHAIS.
(Department of Education.)

BRAINSE AN CHEARD-OIDEACHAIS.
(Technical Instruction Branch.)

SPECIAL EXAMINATIONS FOR TEACHERS' CERTIFICATES.
1933.

PERSPECTIVE.

Wednesday, May 17th—7 to 10 p.m.

Examiner—SAMUEL MACCANN, Esq., A.R.C.A. (Lond.).

Co-Examiner—P. O'SULLIVAN, Esq., A.R.C.A. (Lond.).

GENERAL INSTRUCTIONS.

You are carefully to enter on the Drawing Paper and Envelope supplied your Examination Number and the subject of examination, but you are not to write your name on either. No credit will be given for any Drawing Paper upon which your name is written, or upon which your Examination Number is not written.

You must not have with you any book, notes, or scribbling-paper.

You are not allowed to write or make any marks upon your paper of questions.

You must not, under any circumstances whatever, speak to or communicate with another candidate; and no explanation of the subject of the examination may be asked for or given.

You must remain seated until your drawing-paper has been taken up, and then leave the examination-room quietly. You will not be permitted to leave before the expiration of twenty minutes from the commencement of the examination, and will not be re-admitted after having once left the room.

If you break any of these rules, or use any unfair means, you are liable to be dismissed from the examination, and your examination may be cancelled by the Department.

Three hours are allowed for this paper. Answer-books, unless previously given up, will be collected at 10 p.m.
INSTRUCTIONS.

Read the General Instructions on page 1.

(a) All the questions may be attempted.

(b) The number of each question must be clearly shown on the drawing-paper.

(c) Diagrams to be drawn the same size as the originals may be pricked through or otherwise transferred.

(d) Lines parallel or perpendicular to others may be drawn without showing any construction. Protractors and set-squares may be used.

(e) All points and lines by means of which the perspective result is arrived at must be clearly shown. The explanatory letters which represent the terms applied to the various working points, lines, &c.; and, where necessary, angles marked in degrees, must also be given.

(f) Accuracy, distinctness, and neatness are essential. Careless work, or work done with soft or blunt pencils, will receive little credit.

1. What lines converge to the vanishing points?
   What is the difference between ground line and ground plane, and how far does the latter extend?
   Indicate how change in position of the spectator affects the representation of objects.
   How can receding lines be measured, and what points enable us to do so?
   To what extent do the distance points influence the representation of objects, and what lines converge towards them?

2. The accompanying diagram gives the front elevation and side elevation of a shop window with a sun-blind or awning, a door with a semi-circular head and in front of the window, a watering-trough. Put the whole into perspective standing on the ground-plane, with the vertical planes of its front receding towards the left and inclined to the picture-plane at an angle of 30°. The nearest corner of the step marked A is to be 1½ ft. within the picture and exactly opposite the spectator.

3. The eye is to be 4 ft. above the ground and 12 ft. from the picture.
   Scale, ½ inch to a foot.

   (The horizon must be drawn across the long way of the paper, 4 inches from the top and the centre of vision placed 5½ inches from the right-hand edge of the paper.)

3. Assuming that the window (Ques. 2) is a reflecting plane, like a mirror, show the reflection of the sun-blind or awning and the watering-trough.

4. Find in perspective a point in the ground-plane 2 ft. to the right of the spectator and 4 ft. within the picture. From this point erect a vertical line 8 ft. high. This line is to be the diameter of a circular slab 2 ft. in thickness, its vertical face receding towards the right and inclined to the picture-plane at an angle of 45°.

   The centre of the slab is to be pierced by a square opening, the diagonals of which are 4 ft. in length and lie on the horizontal and vertical diameters.

   The eye is to be 5 ft. above the ground and 14 ft. from the picture.
   Scale, ½ inch to a foot.
SIM ELEVATION WITH SECTION OF DOOR & WINDOW
FRONT ELEVATION
SIDE ELEVATION WITH SECTION OF DOOR & WINDOW

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