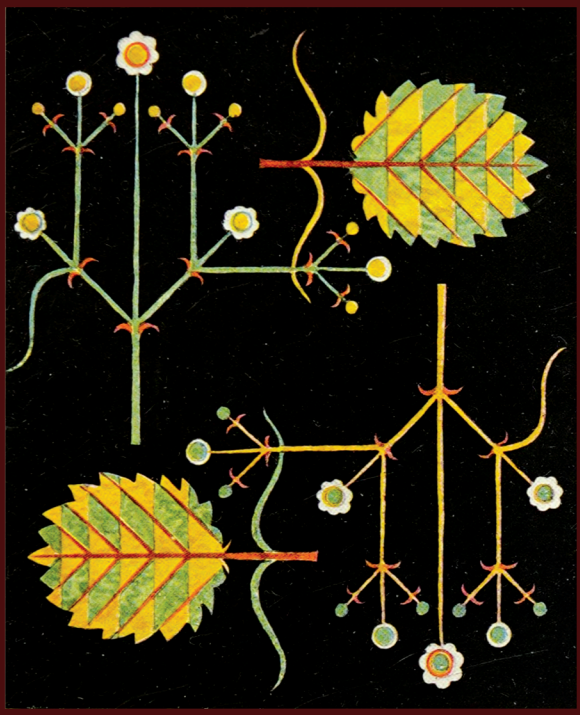
Drawing, Design & Craft-work



Frederick J. Glass

This edition published 2025
by Living Book Press

ISBN: 978-1-76153-815-5 (hardcover)
978-1-76153-795-0 (softcover)

First published in 1934.

A catalogue record for this
book is available from the
National Library of Australia

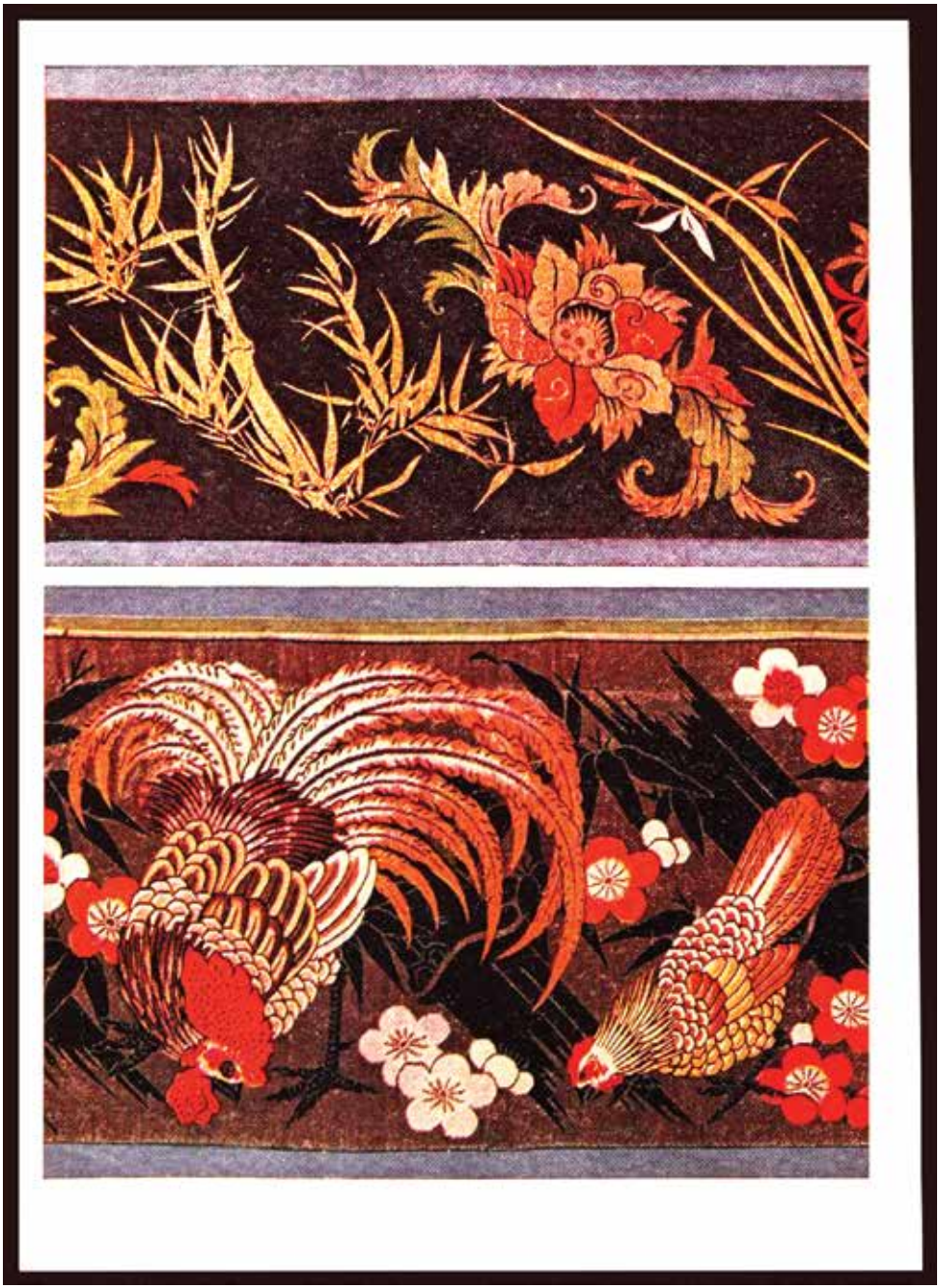
Drawing, Design and Craft-Work

by

Frederick J Glass

LIVING BOOK PRESS

Contents



BELTS OF WOMEN'S COSTUME, JAPANESE TEXTILES, 18TH CENTURY.

NOTE OF ACKNOWLEDGMENT

WE are indebted for illustrations to a number of sources. The provenance of the coloured plates is given in the Preface; the Board of Education has kindly sanctioned the inclusion of a number of subjects from the Victoria and Albert Museum, some new to this edition; to Mr. Victor Perard and his publisher, Mr. Solomon Delevie, New York, is due Plates 68 and 69, from Perard's *Anatomy and Drawing*; to Messrs. Charles Scribner's Sons, Plate 70, from Lutz's *Practical Art Anatomy*; Messrs. John Barker & Co., Ltd., Kensington, Fig. 4, from a Sports Catalogue; the Wallpaper Manufacturers, Ltd., Plate 89, from Sugden & Edmondson's *History of English Wallpaper*; Messrs. A. A. Knopf and the firms mentioned on Plate 107, from Sinel's *Trade Marks*; Prof. W. S. Rice and the Bruce Publishing Co., Milwaukee, Plates 112 and 113, from *Rice's Portfolio of Woodcuts and Block Printing*; the Bruce Publishing Co., Plate 118, from Allison's Papercutting; the Manual Arts Press, Peoria, Plate 114, from Polk's *Linoleum Printing*; Messieurs Levy et Cie, Paris, Plate 133, from *Séguy's Papillons*. The remaining subjects are from various drawings, historical works, etc., in the Publishers' collection.

PREFACE TO THE FIRST EDITION

This little book, which is the outcome of some fourteen years' teaching experience, was originally suggested by my work in connection with the training of teachers. I was often asked to recommend some book dealing concisely with the various subjects touched upon in the course of instruction. I was not acquainted with one which exactly met the need, and it was suggested to me that I should arrange my notes in book form. This I have done in the hope that they may be of some service to teachers and others, especially at this juncture when Art training seems likely to take its proper place in the scheme of Education. This book does not pretend to deal exhaustively with any of the subjects touched upon, but is intended more as a series of suggestions upon which teachers may build up their own schemes, and also as an introduction to the subjects for the benefit of amateurs. Nor has any attempt been made to arrange the work in exercises suitable for the pupils of various years, since the classes differ so much in separate schools that only the teacher in charge of the particular class can form any estimate of what is suitable or otherwise.

I can only hope that the suggestions given here may be of use to teachers, students, and others interested in the plastic and graphic Arts, for much work still remains to be done before these subjects can occupy their proper share in the life of the nation.

This book is also intended to meet the requirements of the syllabus recently issued by the Board of Education.

My thanks are due to Mr. W. A. Burton for the photographs which appear in this book, and for his kind permission to publish the illustration of filigree work executed by him.

FRED J. GLASS.

LONDONDERRY.

INTRODUCTION

IT is hardly necessary to-day to advance a plea for the teaching of drawing, design, and craft-work. Their importance is, or should be, recognised by all authorities on education. It is well, however, that the teacher should have a clear comprehension of the part played by these subjects in the development of the intellect and character of the scholar. This is essential, firstly, that he may have confidence in his teaching, with a corresponding strength of purpose and enthusiasm, and, secondly, that he may be in a position to defend effectively his belief in the work he is doing. Despite the fact that the majority of educational authorities recognise its value, critics still abound who would have us believe that such work merely panders to effeminate tastes and a love of luxury, whilst denying its practical utility. Such critics need to be confuted, and this can only be done by formulating definite reasons for the serious study of the subjects in hand. At the outset we must recognise that man is complex and many-sided, hence his needs are complex and multifarious. An unfortunate tendency exists in some quarters to regard human beings merely as productive machines with a capacity for executing so much work upon which the profit (usually accruing to those holding this view) will be so much, and that education should, therefore, be designed on this basis. Such an opinion is unworthy of consideration and may be dismissed at once. It must be granted that, as far as possible, all human capacities are worth developing, otherwise the curriculum will have a bias, tending to develop certain faculties, leaving others to become atrophied. It is in some such comprehensive scheme that art work, as here dealt with, plays its part. It develops certain powers for which no scope is permitted in other subjects. The faculty of observation is quickened by training the vision, whilst the memory is cultivated to retain the images thus correctly seen. Drawing is a method of expression older by far, and more natural than

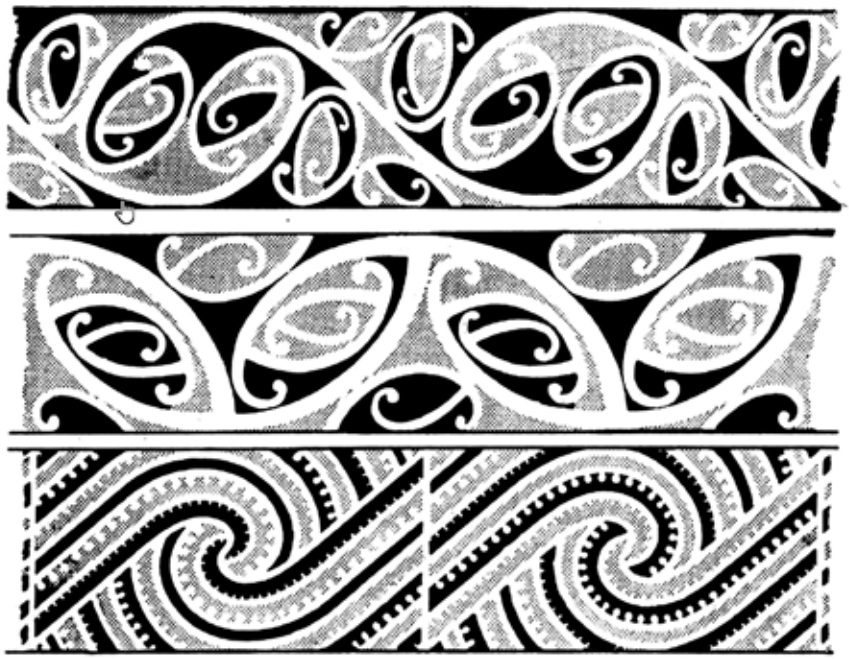
writing, for the alphabet in use to-day is a development of early picture writing. Again, the child, as soon as he can walk, endeavours to express graphically the beings and objects amongst which he lives, making no attempt to write.

It is interesting to note the gradual progression of these childish efforts even without guidance. The first productions are unintelligible to all but the child, who readily gives names to them. Then shapes begin to appear, almost invariably men and houses — the first things about which the child has definite thoughts. As the mental power grows, the house will develop chimneys, windows, and a door; the man will become possessed of arms, legs, a body, and a head with features, for which details there has previously been a sublime disregard. With the increase of ideas, the need for expression will expand, and boats, horses, engines, trees, and even sky and clouds are attempted, all regardless of such trifling things as proportion, perspective, or colour. They are statements of impressions made upon the consciousness, knowledge gained from feeling, smelling, tasting, and hearing, as well as seeing. The wise teacher bears this in mind and encourages the individuality. The first lesson for infants should be an opportunity for the expression of thought, and the things drawn will be those which are clearest in the mind — objects and people at home, toys and characters from nursery rhymes — things which have impressed him. The savage, too, unable to write, draws. Our prehistoric forefathers have left us able representations of animals drawn long before writing came into use. The creative faculties are also encouraged by this work, and the love of making things (common to all healthy children) is turned to educational advantage. At the same time, there is inculcated a sense of neatness and accuracy combined with skill in handling tools. This results in a perfect harmony between brain and muscle, unattainable by any other means. Finally, it develops an appreciation of the beautiful, thus adding a source of enjoyment capable of giving much pleasure. Taste grows also as the mind unfolds, and, if wisely directed, will lead to the choice of beautiful objects with which to surround themselves. This will have its effect in the home, in the buildings and streets of cities, towns, and villages, which sadly need beautifying; and the improvement of the environment will react on the minds and characters of the generations growing under its influence. The influence of environment is too widely recognised to need dilation.

Reasons enough, surely, for the inclusion of art work in our school curriculum!

Much harm has been done in the past by unintelligent methods of teaching. A copy was put before the pupil (beautiful enough perhaps to one capable of appreciation, but to the child meaningless) and the order issued "Copy that!" No explanation of its meaning or wherein lay its beauty, for too often the teacher would have been nonplussed if asked to explain it. And so the drawing lesson was usually a period of boredom. This can hardly be called drawing instruction, for unless the interest is aroused, and the mind fixed on the subject in hand, no impression is made, and as far as education is concerned, the time is wasted.

This difficulty still presents itself, and will continue to do so. The teacher's aim must be always to hold the interest of the class. Presuming that the lesson we have in hand is a first lesson to young children, it is easy to make it worrying or boring by insisting too much upon the correct method of holding chalk, crayon, or pencil, or by setting an uninteresting subject. Lead up to methods of handling by easy stages.



MAORI RAFTER PATTERNS

(Originals in red and black.)

DIVISION I. - DRAWING

CHAPTER I

OBJECT AND MEMORY DRAWING, ETC.

MATERIALS

THE materials at our command are chalk, charcoal, pencils (H, H.B., and B), india-rubber, pen, Indian ink, brush, water or body colour, clay, modelling paste or plasticine, and paper.

For **Chalk**, a specially prepared blackboard is best, but linoleum, American morocco cloth of dull surface, or even brown paper, make good substitutes.

For **Crayon** or **Charcoal**, brown paper or tinted crayon paper are used in addition to white. The best paper for charcoal is that which is specially prepared for the purpose, Michallet or Ingres. These can be obtained in buff, white, and grey, and drawings of practically any degree of finish can be executed upon them. A beautiful range of tone from a delicate grey to a velvety black is easily obtainable with charcoal, and it may be rubbed with the finger or stump to produce even tones, the lights being picked out with chamois leather, bread, or rubber.

Crayons bring in colour, and as colour has a strong appeal for the child, an early use is recommended. The soft type is preferable, being easy to handle; the only drawback is that they smudge easily and are very fragile. The wax crayons are stronger and do not rub so easily, but they are less sympathetic. Each pupil should be supplied with a box and taught the names of the colours, beginning with the primaries — red, yellow, and blue. Crayons are excellent for mass drawing on brown paper and may also be used for pattern, object, and nature drawing. The teacher should instruct the class in the use of the crayon and show them how to obtain the secondary colours by mixing two primaries: red and yellow = orange; red and blue = purple, and yellow and blue = green. The mixing may be done either by rubbing one colour over another or by placing

alternate strokes of the two colours side by side, the effect of which will be a blend of the primaries resulting in the desired secondary. Textures may also be suggested by varying the direction and quality of the stroke.

Tinted Paper should be selected with the desired result in mind; thus, china and glass on grey paper could be represented with chalk for the highlights and charcoal for the shade. White objects on white paper can be represented by toning the background. Again, the crayon is applied openly, with a space between each stroke; the colour of the paper helps to bind the tints together and so produce harmony. Light and shade of a simple nature should be attempted at an early stage, such as fruit with a spot of highlight and a passage of shade, leaves with light on one side and dark on the other, etc.

Pencil. - This is perhaps the most useful of all the implements in use. For freehand, a fairly soft pencil is best, as it requires but little pressure. B or H.B. is the most useful, while for geometrical work, an H is necessary. The pupil should be taught to sharpen the pencil correctly, as a poor point is difficult to draw with. The cut should taper smoothly and evenly to the point, with no unsightly jags. The chief danger to be guarded against in this work is holding the pencil too stiffly and using the fingers only instead of the whole arm, for wrist, elbow, and shoulder joints should be allowed free play. This the teacher must watch, the more so as the writing lesson tends to restrict the free play of joints. The most suitable position for the paper in free drawing is nearly vertical, with the pencil lightly held between the thumb and the first two fingers, and the little finger resting lightly on the paper. Easels, or a specially constructed stand for the board (with the paper pinned on it) to lean against whilst the lower edge rests on the knees, are the most suitable for free drawing.

For geometrical and more accurate types of drawing, a desk or table with a board rest is necessary. Heavy lines that plough into the paper should be discouraged, but at the same time, the pupil should be instructed to take advantage of the whole range of which the pencil is capable, from a delicate grey to a velvety black. The system of "lining in" with a thin wiry line is of no value. Let the aim be the representation of form; suitable methods of expression will follow, and at any time, a varied line is better than a thin, monotonous one.

The **Rubber** should be soft, or the surface of the paper will be

destroyed. Some teachers advocate the abolition of the rubber owing to its abuse, but it is very doubtful whether any useful purpose would be served. It might be withdrawn occasionally as a disciplinary measure if the teacher feels that the pupils are using it too much; the best corrective, though, is brush drawing.

The **Brush** is the most sympathetic of all the implements used in drawing. It should be of good quality, even for beginners. Sable is best, but fitch is a good substitute; camel hair is poor, and excepting a large one for laying washes, brushes of camel hair are not worthwhile, as the hair has a tendency to stay at an awkward angle to the shaft when in use. Sable and fitch have more spring and will return instantly to the straight when lifted from the paper.

Watercolour is useful for brushwork, exercises in colour, still life, etc. (See Colour Section, Chap. VI.)

Body Colour is the term used to distinguish between opaque colour and transparent watercolour. In watercolour, as generally understood, the light is supplied solely by the white paper upon which the work is executed. The colour is applied in transparent washes in such a way as to tint the surface to the required depth. The light parts would consequently receive a thinner wash (i.e., the paper would shine through more distinctly) than in the dark portions, where the light of the paper requires veiling. With body colour, the paper plays no part in the lighting. This is obtained by the use of an opaque white pigment, either Chinese white mixed with transparent colour to give it body and to render it opaque, or powder colour ground with gum and glycerine, or other suitable medium. The sketches of Barbizon show the use of Chinese white with watercolour, and the colour is very charming, the lights being of a beautiful pearl-tinted quality. For larger work of a coarser nature, such as scene painting, powder colour mixed with glue size is frequently used. Yolk of egg is another medium, and **Tempera Colour** in tubes can be purchased from fine art dealers. For poster work, Winsor and Newton Matt colours, or the Clifford Milburn colours, are useful. They dry flat and are even in texture. For designs and work intended for reproduction, when an even flat surface is desired, body colour is of great value.

For **Modelling, Clay** is the most sympathetic and most easily handled material. It works smoothly and freely, and a good surface is readily

obtainable. It is perhaps a trifle messy for very elementary pupils, and it needs some attention to keep it in a workable condition. **Plasticine** or modelling paste is therefore often used in preference, as it is cleaner and more easily kept, but for any work of importance or requiring a good finish, clay is decidedly the best.

FIRST LESSONS

Thought And Expression. - Drawing is a method of expression, but unless there is something to express, the acquisition of a method is useless. Hence, the primary aim of the drawing lesson should be the formulating of clear, definite thoughts, together with practice in expressing them. A thing must be seen intelligently before it can be drawn correctly, and the quality of thought behind the look determines the accuracy of the vision. "The eye sees only that which it brings the power to see." Bad drawing is the result of wrong thinking, and the mental effort made by the child is of greater importance than the actual drawing. Aim, then, at teaching the child to think; facility in expression will follow. If something really needs expressing, it will find a medium somehow. A certain amount of instruction in holding chalk, crayon, or pencil, and in controlling the muscles involved, is necessary at first. A few exercises in free-arm **Chalk Drawing**, similar to those illustrated on Plate I, will be useful. Oval and circular forms, swinging curves, and exercises based on letter forms (all easily and naturally obtained) afford fine practice in control and freedom. The interest and mental effort are enhanced by allowing the child to embellish and elaborate, producing animal, bird, flower, or any form that fancy may dictate. The teacher should demonstrate the swing of the arm, using shoulder, elbow, and wrist, just to indicate the method. The exercises based on simple letter forms (Plate I) are a useful adjunct to the writing lesson and help to counteract the cramping tendency of that lesson. This might be followed by vertical, horizontal, and oblique strokes, turned later into boxes, houses, frames, or anything else that encourages thought. See that the lines are free, bold, and decided, for self-reliance and decision are worth developing.

As soon as interest begins to flag, start something else, for nothing is achieved by keeping children at a lesson that has become boring. It is

PLATE 1.-SUGGESTIONS FOR FREE-ARM EXERCISES IN CHALK, CRAYON, OR SOFT PENCIL.

well to return to blackboard work from time to time, between the later exercises in pencil, colour, etc., for the sake of its freedom.

For **Pencil** work, a soft pencil (say a B.) is preferable, and here again, methods of handling might form the first lesson. Just show them how to hold it and tell them to draw anything they like. Generally, they will have no difficulty in deciding on a subject, but if they have, then a few vague suggestions may be offered. Remember that the object is to stimulate thought and to teach the child to decide for itself. Young children are usually quite confident and will tackle anything, from a cathedral to an express train. The timidity and diffidence that comes later are too often the results of unintelligent teaching and carping criticism on the part of the teacher.

These first drawings may be altogether unlike the objects as we understand them, but the child draws from imagination, building around some salient features that have impressed themselves upon him. For instance, the express will be a cloud of smoke with a few circles suggested for wheels, and the rest a meaningless lot of lines. Meaningless to us, perhaps, but the child will explain it all, and it is better to suggest improvement than to condemn because we do not understand. Better take it that we have lost the power of reading these shorthand notes than to try to impose our own conception. Try to enter into the child's thoughts and help to mould and direct. A useful variation is afforded by allowing the children to **Tear** simple **Shapes** from paper, an easy leaf or vegetable form, or anything else that may occur. Pricking around the outline and then tearing is another variation, both of which add interest and afford valuable training. If these torn shapes are mounted on a background of suitable colour, the effect will be improved.

OBJECT DRAWING

The aim in the object drawing lesson is primarily to teach the pupils to see correctly, to set down truthfully and freely the facts seen, and to store the mind with definite mental images for future reference. In the early stages, simple **Flat Shapes** such as envelopes, fans, kites, frames, or shapes cut from cardboard, e.g., shields, heart shapes, diamonds, crosses, etc., placed within full view of the class, are perhaps the best, the aim being to teach the pupils to see the relative proportions of the different

parts. The teacher should then discuss the width as compared with the height, the length of one line as compared with another, etc., taking care not to tire the children before allowing them to draw. The object might be drawn on the blackboard either before the class has attempted it or afterwards, as the teacher shall decide. If it is demonstrated before they make their attempt, they are apt to copy the teacher's drawing instead of trying to draw what they see of the object. If the demonstration takes place afterwards, they can compare what they have done with the drawing on the board. Whether the demonstration should be before or after the child has drawn is a matter for each teacher to decide according to individual taste and experience. A few lessons on flat shapes might be followed by simple **Cylindrical Shapes**, such as jars, tins, jam-pots, etc., placed on the eye level to avoid ellipses and drawn with **Straight Lines**. This is an easy approach to forms in the round. Here again, proportion and the relation of part to part form the basis of the instruction. Conical objects and objects of combined cylindrical and conical form will follow. Plate 2 illustrates a few objects for these lessons.

After a sense of proportion and some ability to draw has been acquired, the **Ellipse** might be attempted. This is always a difficulty with beginners. They know that the object is actually circular in plan, and usually, they draw it so. The teacher carefully explains the principles that underlie the foreshortening of the circle, making it appear as an ellipse. Some simple device for illustrating this should be exhibited so that the ellipse alone occupies the attention. In Plate 3, methods of dealing with this problem are illustrated. Fig. 6 shows a card from which a disc has been cut and afterwards arranged so as to revolve within the circular hole left in the card. By placing the card against a dark background, the alterations in the apparent width of the disc as it revolves can readily be observed. The dark gap, which retains the circular shape, will act as a gauge by which the varying widths of the ellipse may be estimated.

Placing the disc at about the pupil's eye level, the teacher points out the gradual narrowing of the ellipse as it approaches the horizontal, until, when perfectly horizontal, only the edge is visible, appearing as a simple straight line. A hoop is also useful for demonstrating and may be revolved as shown in Fig. 10 or placed flat as in Fig. 12. In the latter case, a rod with equal divisions plainly marked upon it is placed verti-

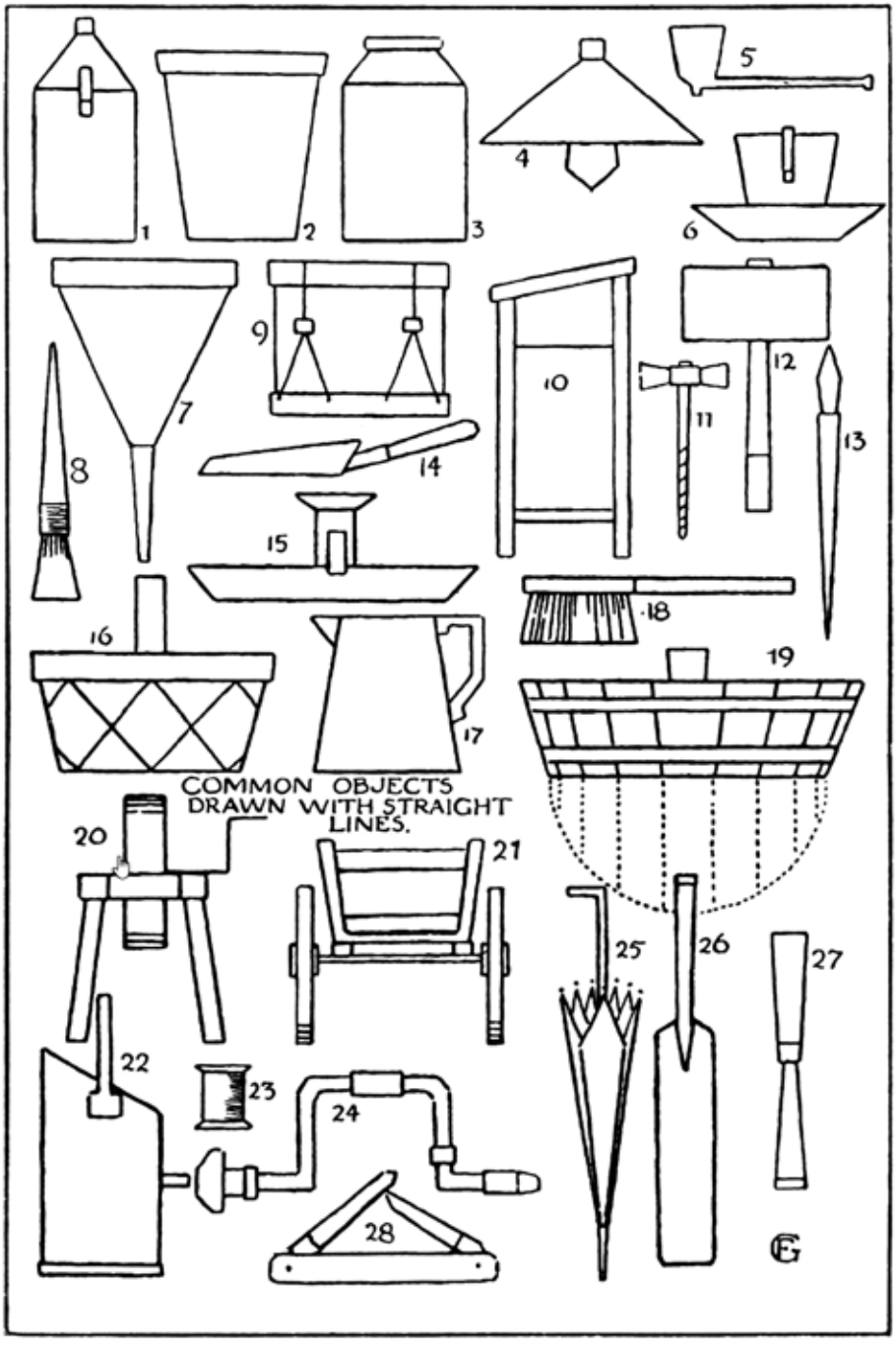


PLATE 2. - COMMON OBJECTS DRAWN WITH STRAIGHT LINES.

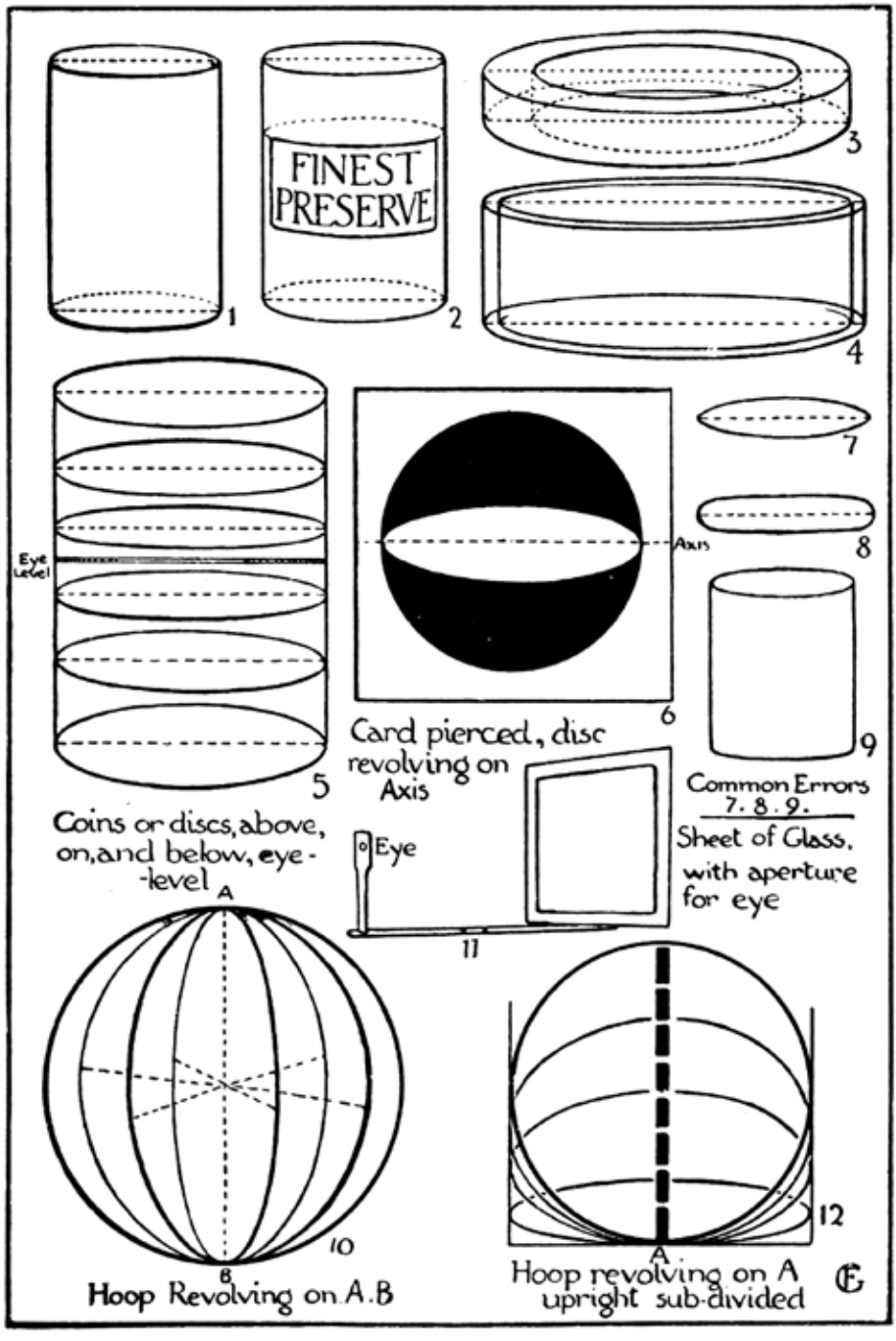


PLATE 3. - DIAGRAMS TO ILLUSTRATE THE ELLIPSE.

cally in front of the hoop. The rim part of the hoop farthest from the class is then gradually raised (or lowered), and the changes in height, as indicated on the rod, are pointed out to the class. The width from side to side remains unchanged; only the height varies. The teacher's object is to give the children an intelligent grasp of the principles, and any method that stimulates the necessary reasoning may be adopted. After a little explanation, the pupils might be allowed to draw the ellipse in a horizontal position. It should be pointed out that the long axis will be parallel to each pupil and, therefore, horizontal, with the short axis making angles of 90° with the long one. The teacher will find that the commonest errors in drawing are either to make the narrow end of the ellipse too square or too pointed (Figs. 7 and 8).

The next lesson might involve the drawing of a jar or other simple **Cylindrical Objects**. It will be necessary here to point out the alteration that occurs in the width of an ellipse according to its position with regard to the eye level. Fig. 5 illustrates a series of discs arranged at different levels, showing the apparent widening from back to front as the discs rise or fall below the eye level. At the eye level, a disc placed horizontally will exhibit only its edge and will, therefore, appear as a straight line. As it descends below the eye level (still horizontal), more of its surface is seen; it, therefore, becomes wider from back to front until, directly below the eye, we see its true shape—a plan, in fact. The same change takes place as it rises above the eye. A clear grasp of this will help in the drawing of cylindrical objects and will enable the pupil to get the upper and lower ellipses in correct relationship, together with any that may occur between. A common error is to make the base ellipse narrower than the upper when both are below the eye level (Fig. 9). When the ellipse has been fairly well understood, conical objects and objects that combine cylinder and cone will follow. Geometric models can be employed to demonstrate principles, but when possible, it is better to use common objects. Those common objects, which form part of everyday surroundings, possess greater interest on that account for the pupil than geometric models, which seem detached from ordinary experience. Suitable objects abound: cans, electric light shades, flowerpots, buckets, bottles, and many others form useful models.

Plates 4 and 5 illustrate a few of the more common ones. The teacher

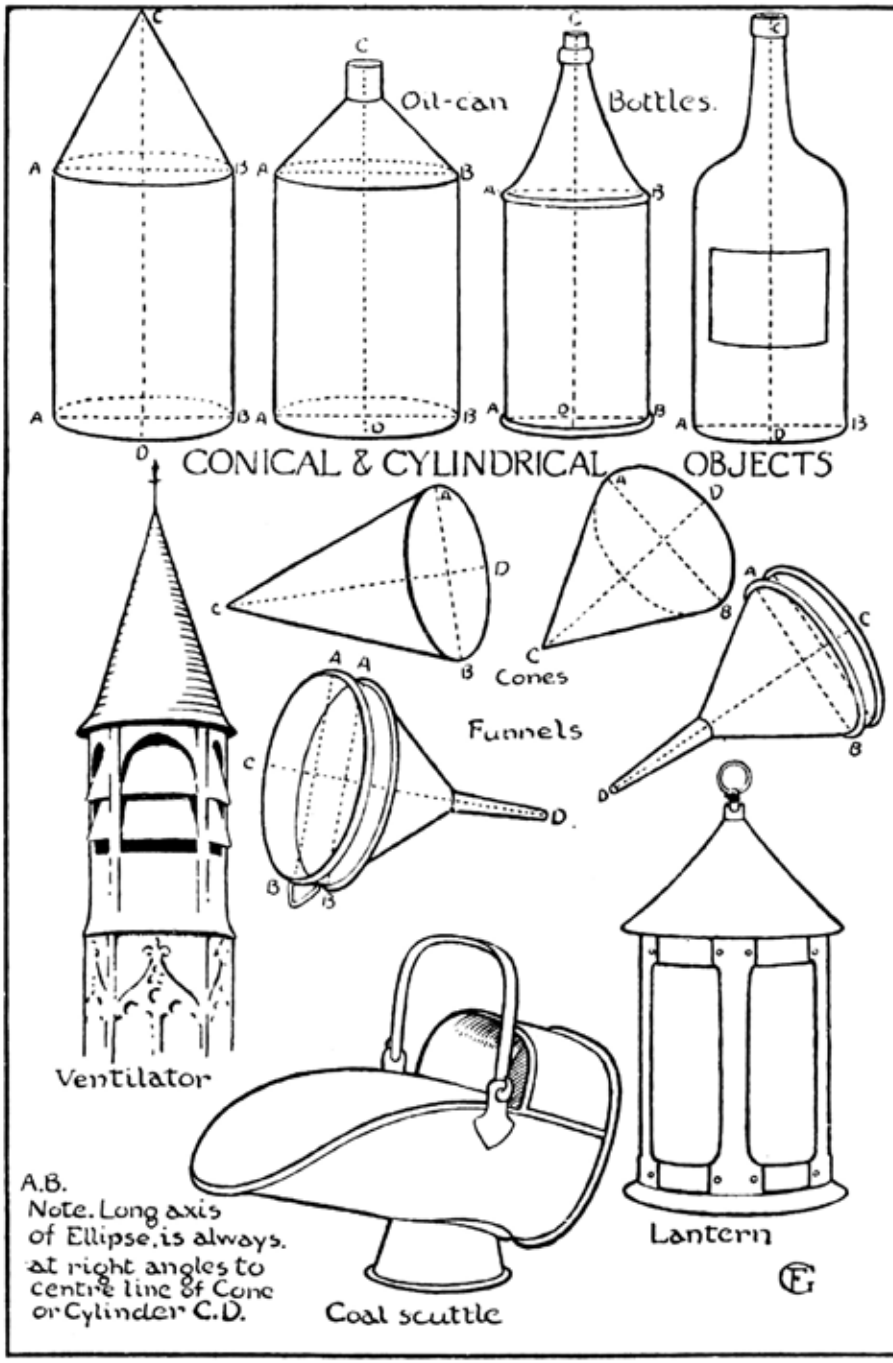


PLATE 4. - CYLINDRICAL AND CONICAL OBJECTS.