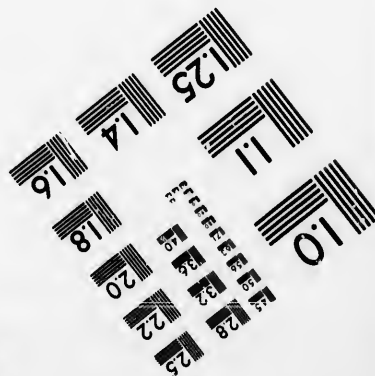
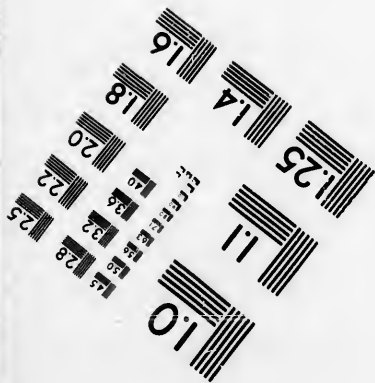
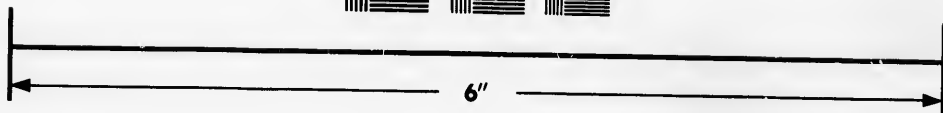
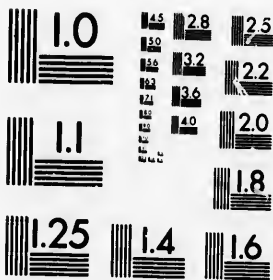


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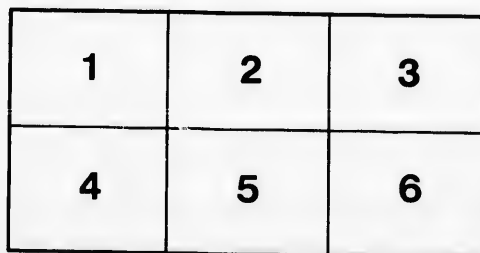
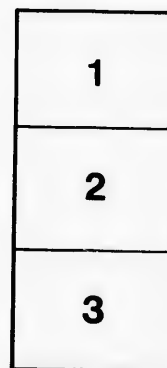
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# THE HIGH SCHOOL

# DRAWING · COURSE

BY  
Arthur J. Reading.

# FREEHAND

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## INTRODUCTORY REMARKS.

FREHAND DRAWING, as its name implies, is drawing executed by the *free* hand, that is, not only unassisted but also unimpeded, and in practising freehand drawing the first thing to be attended to is to have the body in a comfortable, unrestrained position with plenty of elbow room, so that the arm is at liberty to move freely in all directions.

At least a certain amount of proficiency in drawing can be acquired by all who will prosecute its study with diligence and perseverance, and who will submit to the directions of their teacher. The few hints given here will suggest a course of study which should be followed as nearly as circumstances will permit.

The eye is the director of nearly all our movements. Movements made in the dark are, as a rule, very weak and uncertain, especially in a strange place when we are guided by the senses of touch and hearing. In this fact lies the reason why first attempts at drawing are so awkward and unsatisfactory. Success in drawing means that the eye is trained to judge distances, to discern form and proportion, and that the muscles of the hand and arm are trained to obey the direction of the eye through the mind. Unless they are trained to work in unison, failure is certain.

The training of the eye must precede the training of the hand, else it will be a case of the blind leading the blind. How this can be best done is the next point to be considered.

The appreciation of form and proportion is actually included in the measurement of distances, for proportion is nothing but the relative sizes of objects, or portions of objects, as compared with one another. The judging of distances by the eye should be practised most persistently by the beginner, until he is able to set off with accuracy any required distance, whether equal to another distance or of as many inches or half inches.

In this connection we might refer to the extent to which the use of instruments in freehand drawing is admissible. Some teachers of drawing assert that rulers and compasses and other mechanical aid should on no account and under no circumstances be used. As an argument against this general prohibition might be stated the fact that even the best of us will, perhaps unknowingly, form bad habits, and until some kind friend informs us of our bad habits and suggests a proper line of conduct, no effort will be made to correct them. Just so in drawing: The mind and the eye not being trained form what may be called bad or incorrect habits, and unless we know of them and what they are the bad habits will continue to exist and become aggravated. It may be that we have no correct mental standard of comparison, and of course all attempts at judging distances, being made with reference to our incorrect standard, will be incorrect also. Some of us, if requested to draw a line 3 inches long, would make it  $3\frac{1}{2}$  or  $3\frac{3}{4}$  inches long, while others would make it only  $2\frac{1}{2}$  or  $2\frac{3}{4}$  inches long,

and would continue to do so until we corrected our mental standard, which should be done by applying a measure to the attempt of the unaided eye in order to ascertain the tendency of the mind to judge distances longer or shorter than they should be. If there is a tendency to make all distances too great, our common sense will tell us to make them shorter than the eye first judges them to be, and if this be kept up the eye will become sufficiently well trained to measure distances as correctly as could be done by the aid of a measure.

The writer is of opinion that instruments *should* be used, but only for the purpose of testing the correctness of what has been already done without them, and discarded as soon as they are no longer needed.

Practice in judging distances should consist of drawing lines of specified lengths and dividing given lines into two or more equal parts, but in no case should the ruler or compasses be applied to the work until an honest mental measurement has been made. When the test has been applied, the mental measurement, if incorrect, should be corrected.

The hand may be trained by drawing straight lines of different lengths in different positions, being careful not to use the right arm as a support for the body. The only rests that should be used are the tip of the little finger and the muscle of the fore arm, except in the case of long lines, when the only rest should be the tip of the finger. In drawing lines of moderate length the joints of the fingers and wrist as well as those of the elbow and shoulder may be moved; but in long lines the movement should be from the shoulder and elbow only, the fore-arm being kept rigid.

In whatever direction lines are drawn they should, as far as possible, be drawn with one continuous movement of the pencil.

It is often a good plan to select points carefully at the beginning and end of a line, and draw the line from one to the other.

All lines should at first be made as light as possible, and the rubber be used with gentle pressure so as not to destroy the surface of the paper. The left hand side of symmetrical ornaments should be drawn before the right side, finishing construction lines on both sides before filling in details.

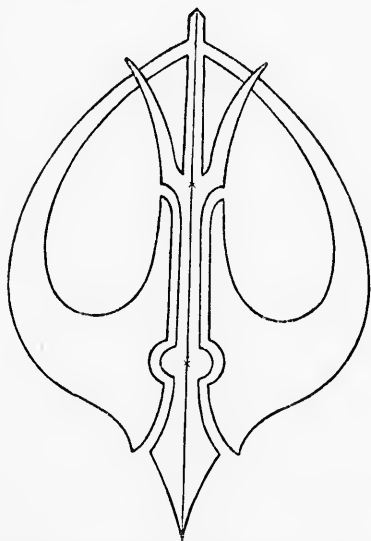
When the sketch is correct it may be rubbed until it is just visible, and then "lined in" with a moderately soft pencil sharpened to a fine point. This "lining in" if carefully done will prove a valuable help towards the training of the hand, and should never be omitted.

Drawings may be criticised by turning them around and viewing them from a new direction.

The most useful pencils are H for sketching, and H B or F for "lining in;" and these, with a piece of rubber, are the only materials required in freehand drawing.

# HIGH SCHOOL DRAWING COURSE.

## FREEHAND DRAWING.

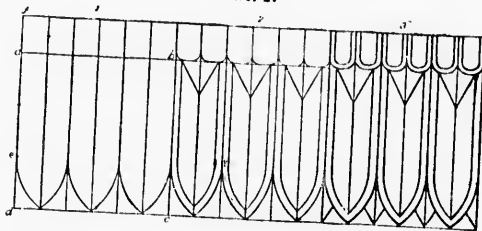


The symmetrical ornament on this page should be copied as large as possible in the space to the right. The proportions can be ascertained by dividing the central line into three equal parts. The widest part of the figure is a little below the centre.



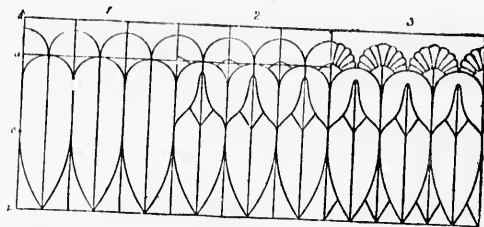
The examples for practice given on this page are outlines of sculptured ornaments on the bases of Assyrian columns at Persepolis. Commence by drawing three or more squares, dividing each of them by vertical lines into three equal parts. Extend the right and left hand vertical lines upward one-fourth of their length, draw a horizontal line joining them, and extend the remaining vertical lines to meet this horizontal line. The squares numbered 1, 2 and 3 show the different stages of the work. All the squares should be finished similarly to number 3.

No. 1.



The curves at the bottom of the squares join the vertical lines at one-third of the length of the sides of the squares from the bottom.

No. 2.



The curves at the bottom join the vertical lines at half the length of the sides of the squares from the bottom, and the radius of the small semicircles shown in squares numbers 1 and 2 is equal to one-third of the length of the sides of the squares.

Persepolis.

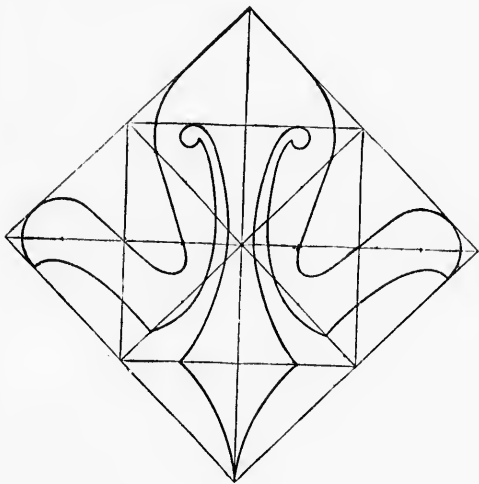
Extend the  
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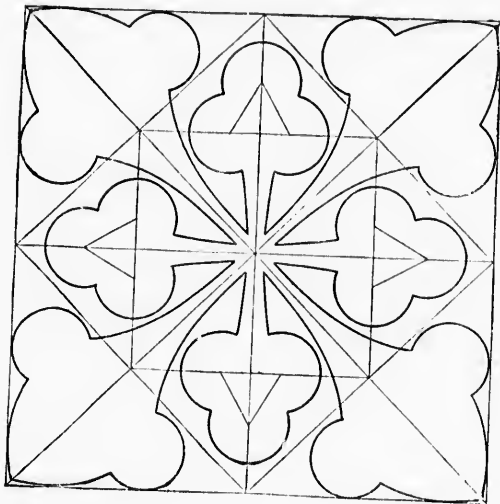
Half the  
the radius  
and 2 is  
res.

Draw the ornamental form given on this page, in the space to the right, as large as possible.

If the diameters and diagonals of the enclosing square be each divided into four equal parts, most of the principal points of intersection of the curves of the figure with the construction lines shown, will be obtained.



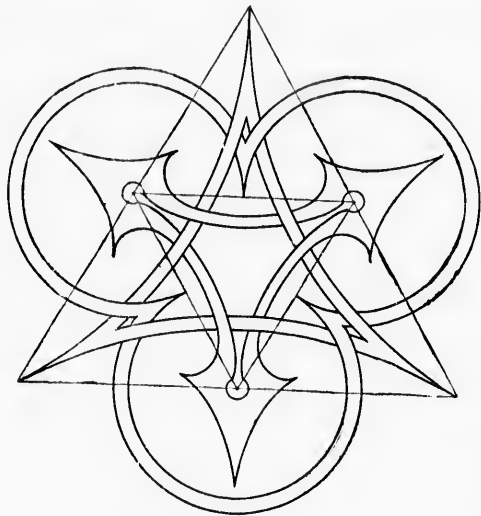
The exercise on this page will be more difficult than the preceding ones as it introduces circular curves.



First draw the large square with its diameters and diagonals, join the ends of the diameters and the centres of the semi-diagonals. The sides of the equilateral triangles are equal to one-quarter of the length of the sides of the central square. In drawing the circles, the centre of each should be selected and marked, as a guide to the curve of the circumference.

Make the drawing slightly larger than the copy.

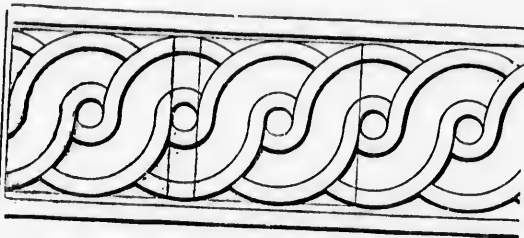
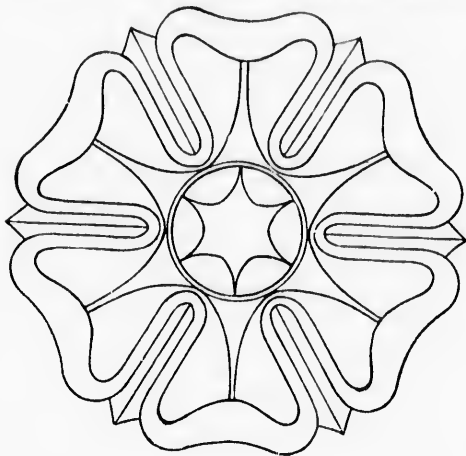
As a further exercise in the drawing of circles the figure on this page is given.



The equilateral triangle which is the basis of its construction should be drawn first, by drawing a horizontal line, bisecting it, erecting from its centre a vertical line equal to  $\frac{2}{3}$  of its length, and joining the extremities of the two lines. Find the centres of the sides of the triangle and join them. Draw the three forms making up the design without paying any attention to the interlacing until the outline is correct.

Make the sides of the larger equilateral triangle three inches long.

The outline of a carved rosette is given as an example of a radiate form based upon the hexagon. It is suggestive of a flower. Draw a hexagon the sides of which will touch the outer edges of the petal-like curves, join the opposite corners and find the centre of each side. The diameter of the inner circle is about one-fourth of the diagonal of the hexagon.



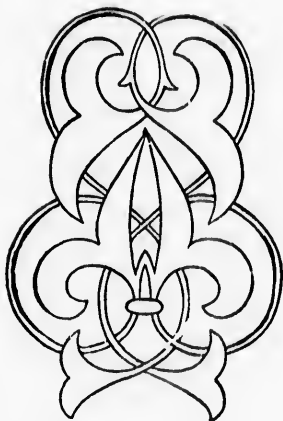
"Guillocho" (gil'oshe) is the name given to an ornament composed of interlacing bands. A simple form is given as an exercise in drawing circles. Do not yield to the temptation to draw them by means of compasses. Draw two horizontal lines  $1\frac{1}{2}$  inches apart as long as possible in the space below, and set off between these lines alternate squares and oblongs, the short sides of the oblongs being  $\frac{1}{2}$  of the sides of the squares. The sizes of the largest and smallest circles will thus be obtained. Draw all the concentric circles without paying attention to the interlacing until the sketch is correct. The heavy lines are called shade lines and answer the purpose of shading to suggest relief.

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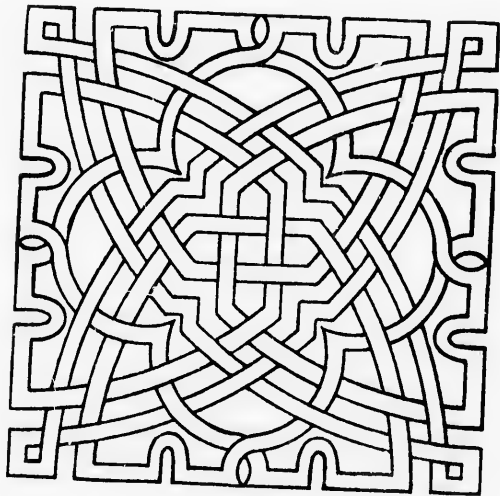


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The Moresque ornament given below should be enlarged as much as the space to the right will admit of. Draw the spiral curves first and it will be found easy to add the leaf forms.

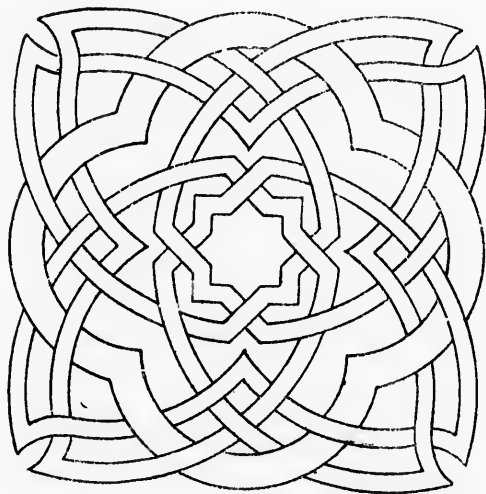


The Moresque ornament from the Alhambra, given on this page, although a little complicated is not very difficult. It will be seen that it is formed of one continuous interlacing band. The arcs drawn with the corners of the square as centres should not be broken in the centre as shown until they are all correct. The quatrefoil should be left till all the rest is sketched, and the interlacing shown when "lining in."



Make the drawing about 4 inches square.

This illustration is also a Moresque design from the Alhambra and is somewhat similar to that on page 10. It is formed of a continuous band interlaced with a quatrefoil.

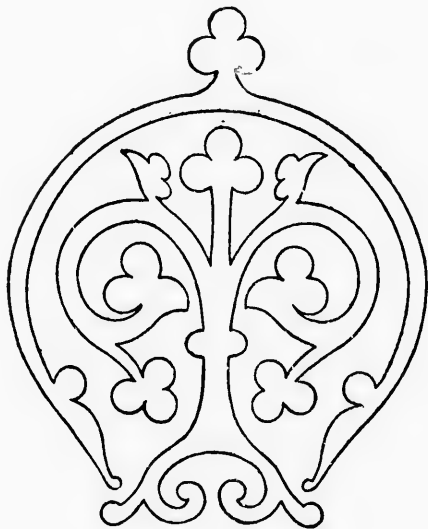


The remarks concerning the method of drawing the design on page 10 may be applied to this, only in this case the centres of the arcs are in the diameters a short distance from the outer extremities.

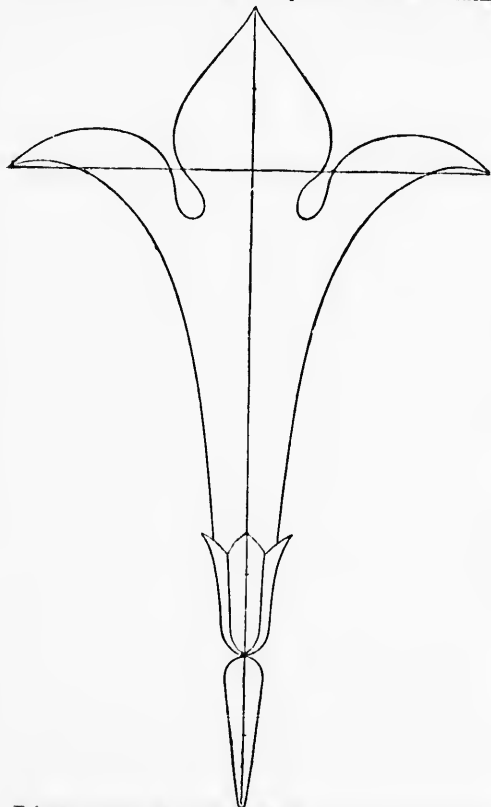
Ascertain their position before commencing to draw.  
Enlarge the copy to 4 inches.



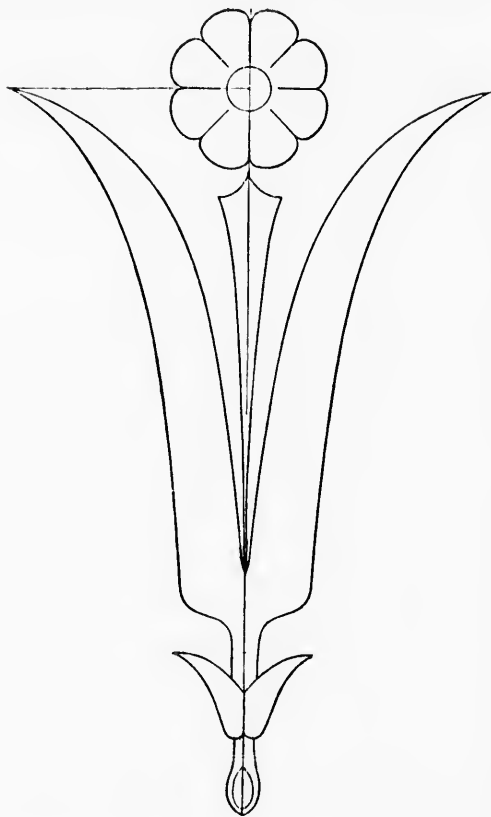
On this page is given an ornamental form which will give excellent practice in spiral and circular curves.  
The pupil should find no difficulty in selecting suitable construction lines for himself. No definite proportions can be given. Make the drawing about five inches long.



In drawing this ornamental form commence with the vertical line, divide it into ten equal parts and through the second division from the top draw a horizontal line equal to six of these divisions.



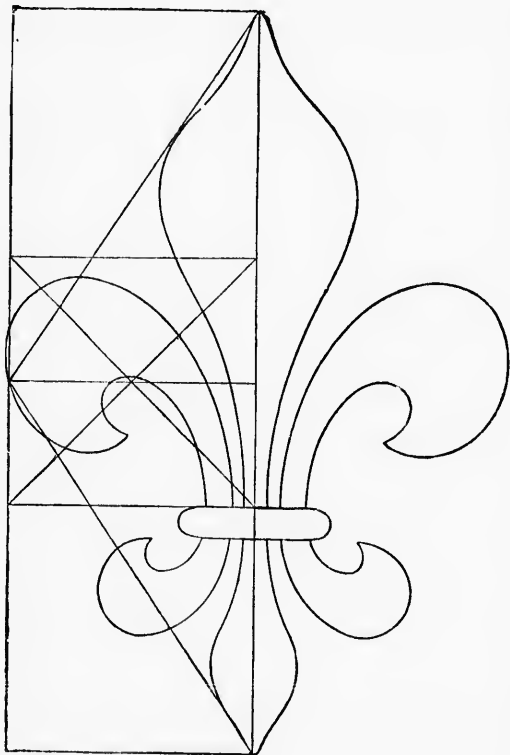
Enlarge the copy as much as possible.



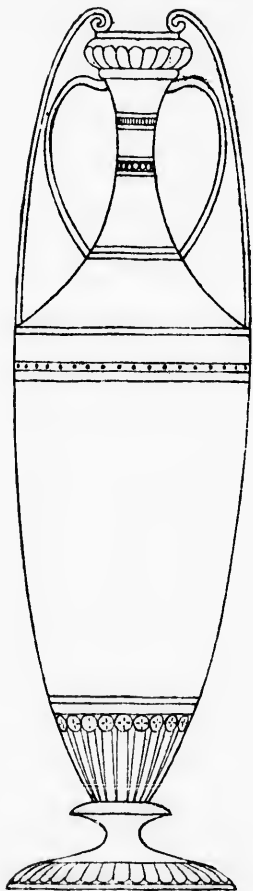
The construction lines for the ornamental form given on this page are similar to those used for the one on page 13.  
Draw the curves of both of these figures with great care.  
Make the central vertical line about 5 inches long.

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e.



On each side of a vertical line 5 inches long draw the construction lines shown and use them as guide lines in drawing the curves of the fleur de lis. The greatest width is two-thirds of the length.

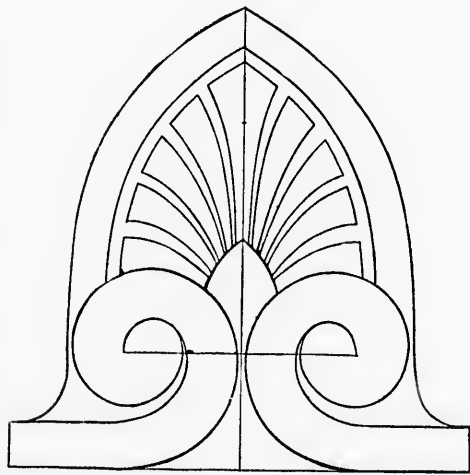


Make a reduced drawing of the vase given, in the space below. Draw a vertical line through the centre as a guide to symmetry and arrange the curves of the sides with regard to it.

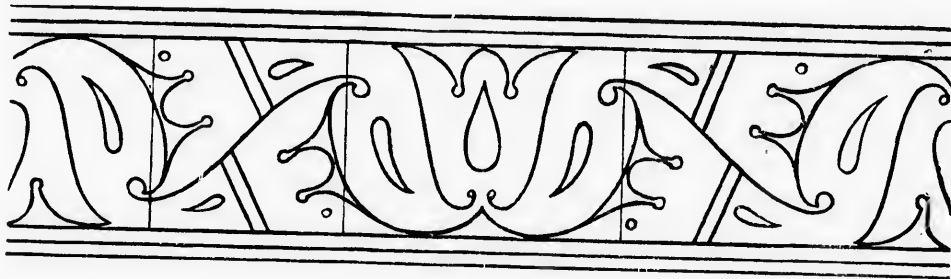
below.  
symmetry

Antefixæ are architectural ornaments and were used by the ancients on the eaves of their buildings to hide the ends of the tiles covering the joints in the roof.

An example is given for the pupil to copy on an enlarged scale. Its form is based upon the palm leaf and scroll. Divide the central vertical line into four equal parts and the proportions of the different portions of the ornament will be easily ascertained.

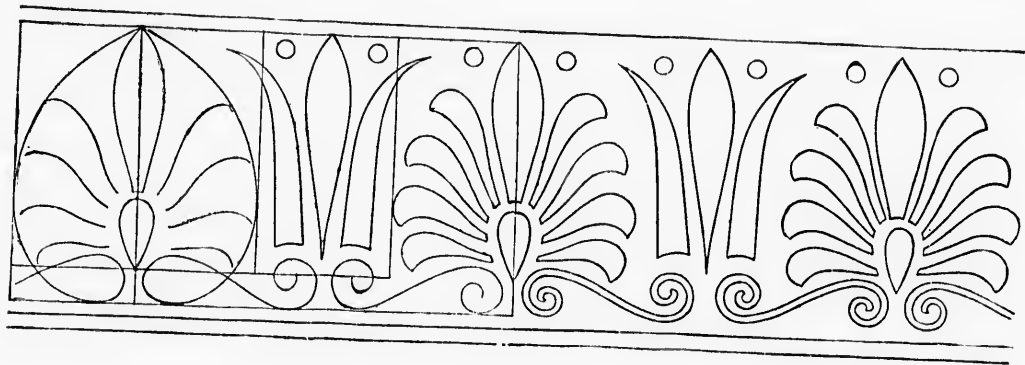


The Arabian ornament given on this page is from an architrave of a window of a mosque in Cairo.  
It may be said to be based upon alternate squares and oblongs the proportions of which are about as 2 to 3, the length of the oblongs being a little less than one and a half times their width.  
Copy the ornament in the space below, reducing its width when complete to one and a half inches, but make its length as great as the paper will allow.



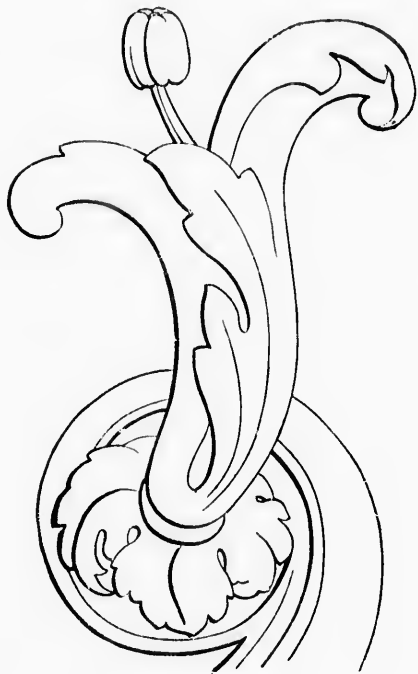
oblongs  
great as

An example of a Greek border is given on this page as an exercise. The construction lines shown should be followed carefully. For the proportions, if the side of the square be divided into seven equal parts, the width of the oblongs alternating with the squares will be equal to  $\frac{4}{7}$ , and the width of the narrow oblongs at the bottom equal to  $\frac{1}{7}$ . The ornament in the squares is a conventional form of the honeysuckle flower, and that in the oblongs a conventional form of the lotus. The lotus was used very much as a motive for ornamental





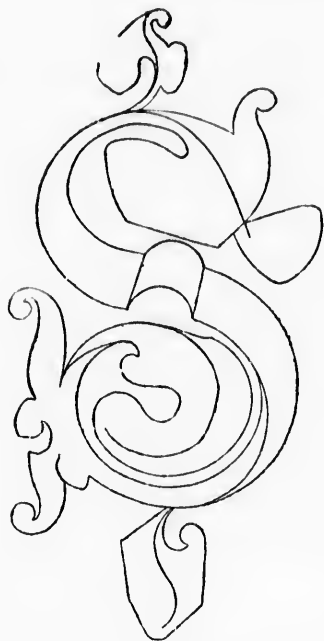
The pupil is left to determine the proportions and necessary construction lines for drawing the scroll terminal given below. It should be drawn as large as possible.



An interesting leaf scroll is given below. It is a good illustration of a grotesque ornament. A little simple shading is introduced to make the design more effective than it would be in simple outline. Do not add more shading than is shown.



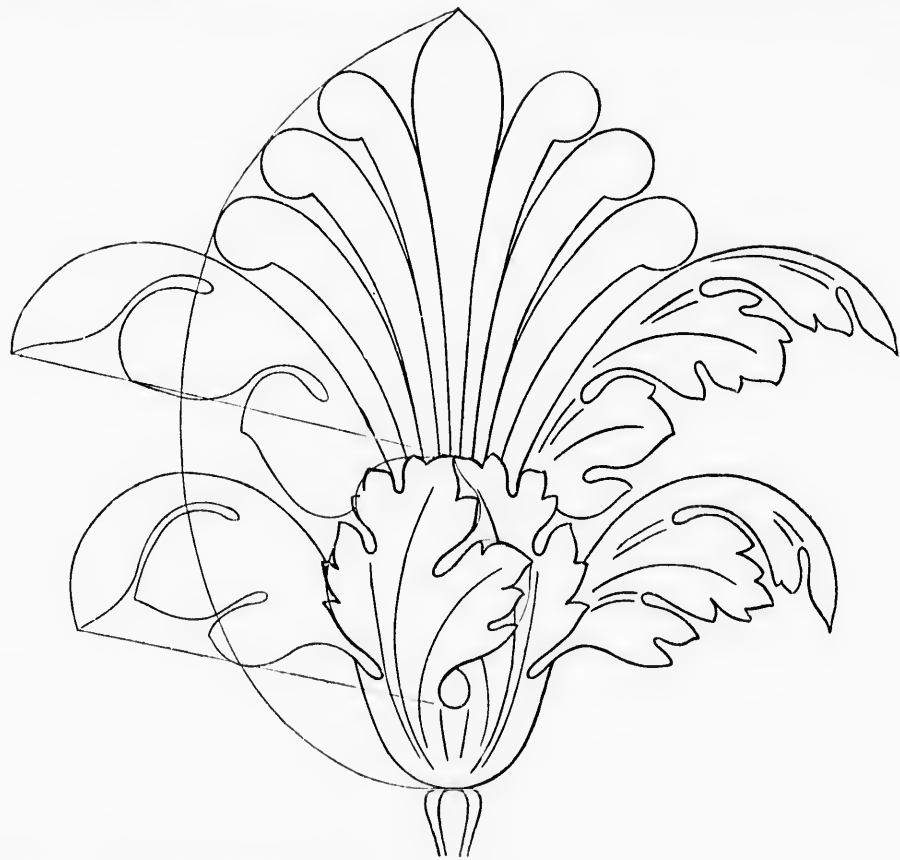
Copy the initial "S" making it as large as the space to the right will allow. Use the construction lines indicated.



The Arabian border from the Mosquo of Tooloon, Cairo, given below will give some practice in shading. It may be filled in either with a pencil or brush. If done with a pencil the background should consist of a tint formed by parallel lines as shown in the upper portion of the copy. In filling in a tint by means of parallel lines, see that the lines do not overlap where they are broken else the flatness of the tint will be destroyed.

Copy the border as large as possible.





The figure on the preceding page is apparently a combination of the conventional honeysuckle and acanthus. Divide the central vertical line into seven equal parts. The upper portion occupies four of these parts. The width from tip to tip of the upper leaves is equal to  $\frac{2}{3}$  of the central line, and the width across the lower leaves is of the same length as the central line.

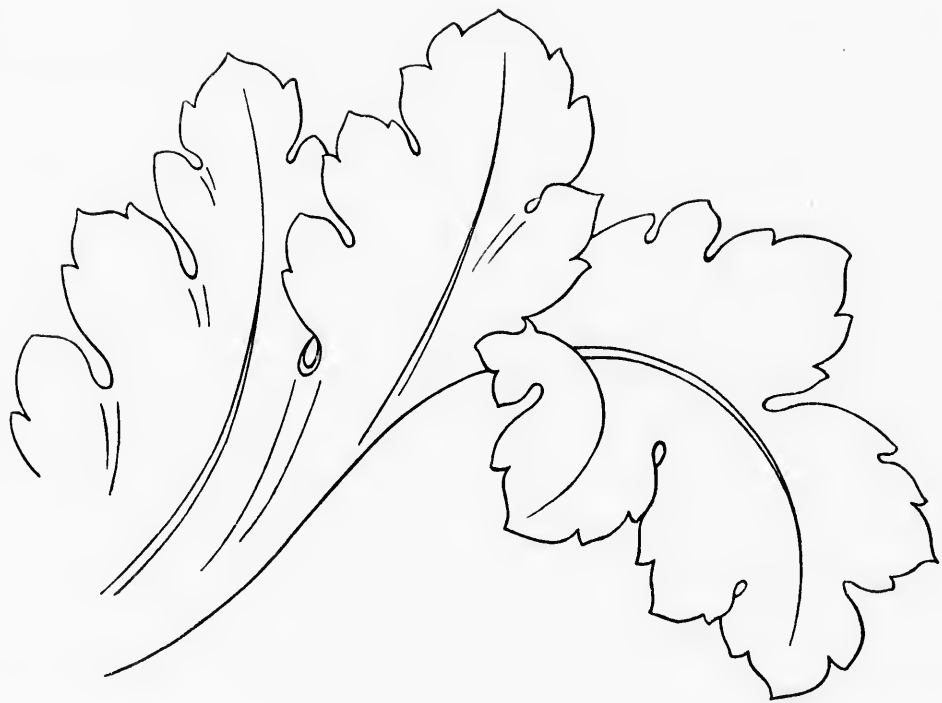
Finish both sides first in the manner indicated by the light lines to the left and, when correct, add the smaller indentations of the acanthus leaves and "line in" carefully.



The acanthus ornament on this page will not prove difficult if the construction lines given on the left side of the axis of symmetry are followed. Finish both sides in this way and then add the details as shown to the right.

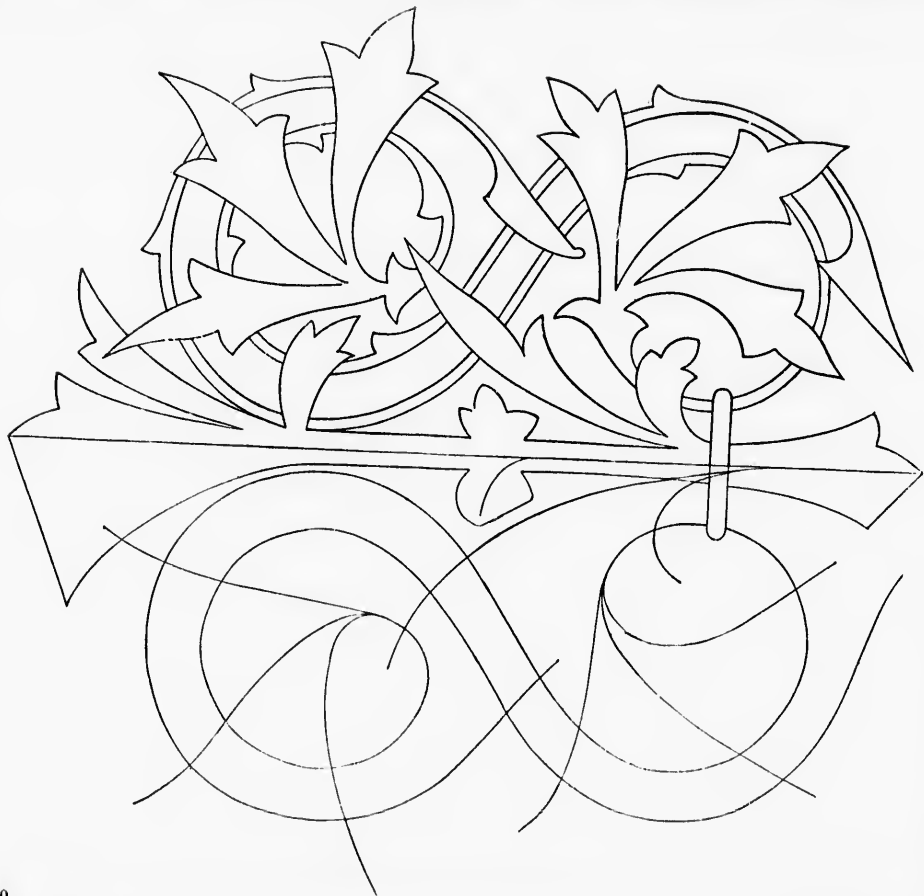
The acanthus ornament on this page you not prove difficult if the construction lines given on the left side of the axis of symmetry are followed. Finish both sides in this way and then add the details as shown to the right.





Copy the conventional acanthus leaf enlarging it slightly. Treat its outline in the manner shown in the two preceding illustrations.

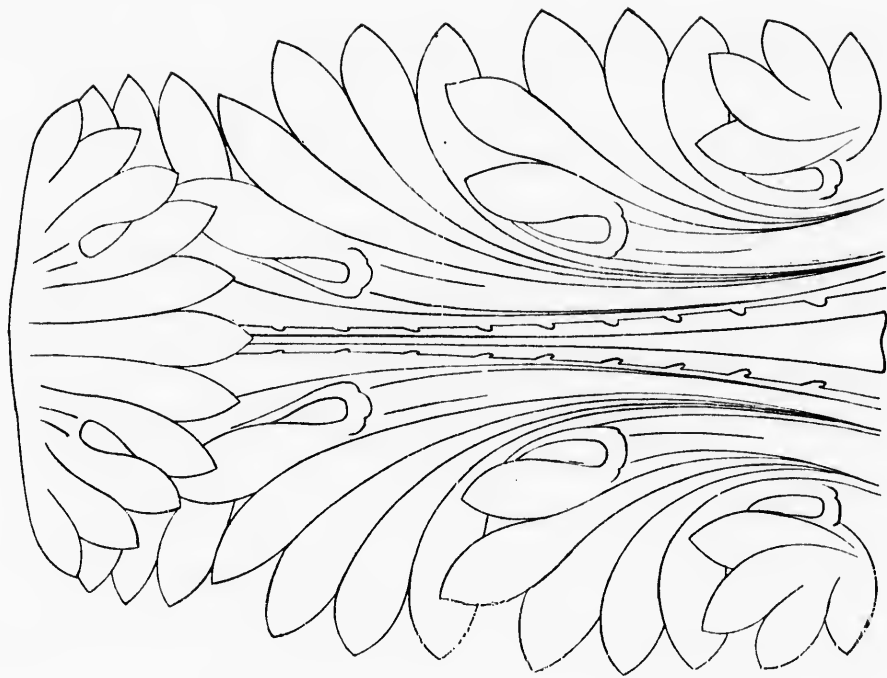




The exercises on this and the following page need no explanation. Though somewhat elaborate they are interesting and are well calculated to cultivate freeness of hand.

... to the race freedom of hand.

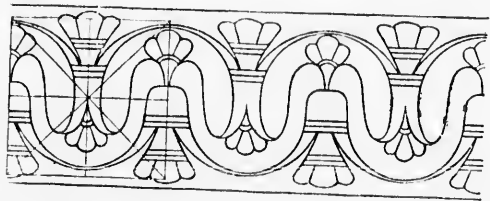
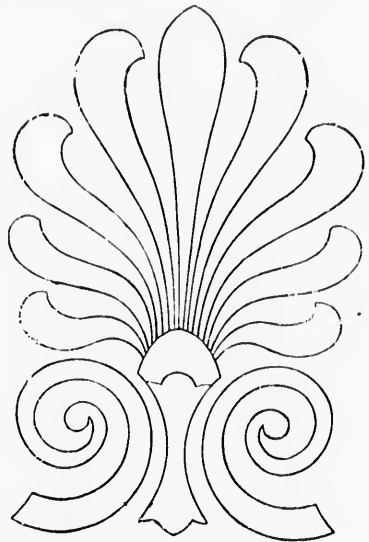
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The Greek anthemion and Greek border on this page should be drawn with great care, paying special attention to symmetry. Enlarge the border and reduce the anthemion.



metry.

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