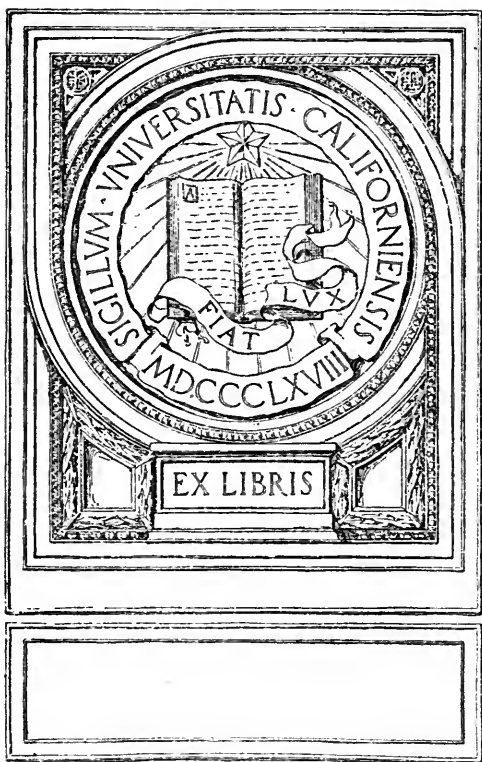


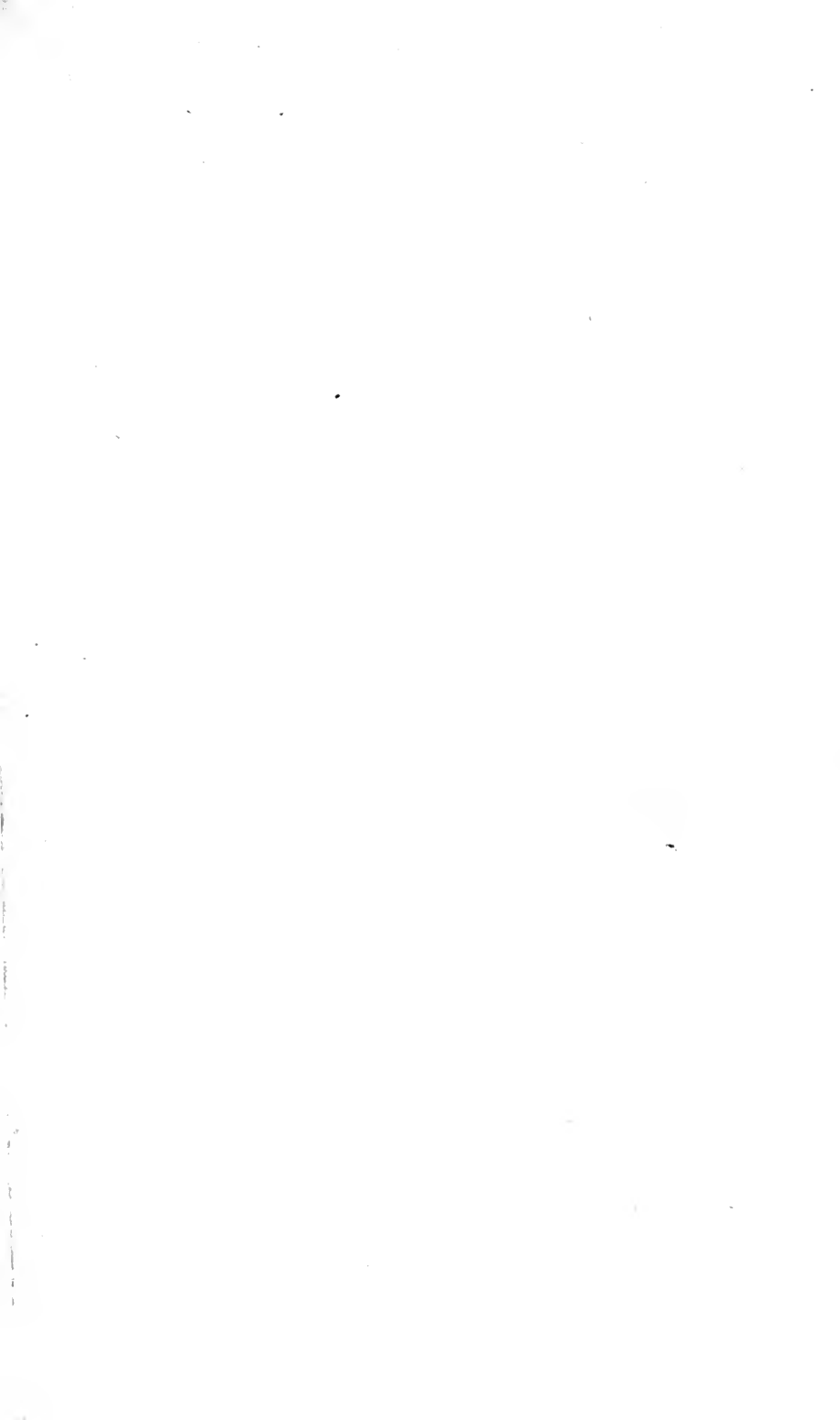
LINE

Handwritten signature in cursive script, possibly reading "L. H. H. H."



Handwritten text in cursive script, possibly reading "L. H. H. H."





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LINE



MARIE, MARAT, AND THE FLEUR DE LYS

A study in the symbolic use of line, with an endeavour to maintain a judicious balance between realism and idealism.

LINE

AN ART STUDY

BY

EDMUND J. SULLIVAN

Author of

"THE ART OF ILLUSTRATION";

Illustrator of

"SARTOR RESARTUS," "THE FRENCH
REVOLUTION," "OMAR KHAYYAM," "THE
KAISER'S GARLAND," Etc.



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IN MEMORY OF MY FATHER
"SULLIVAN OF HASTINGS"
(1875—1914)
SOMETIME PRESIDENT OF
THE SOCIETY OF ART MASTERS

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INTRODUCTION

THERE have been times when I wished that I had not undertaken to write this book. At first it appeared (and of course should remain) so simple an affair to explain what seemed like a discovery,—that all drawing resolves itself into the combination at various angles of units of straight line, consisting of two dots, that all should be plain sailing.

All drawing is nothing more than that—the combination of straight lines into curves, which I had been combining nearly all my life—not quite unconsciously as the *bourgeois gentilhomme* spoke prose; but as a deliberate and conscious artist.

Having undertaken the book, in the full belief that I had bitten off something well within my powers to swallow, since such a book has been in mind for over twenty years, the question was—“exactly where to begin.”

Since the pointing out of the simplicity of drawing was of the essence of the task there could be no more obvious answer than “At the beginning, of course!” and forthwith to start writing, and go on until the ink ran out.

Well, then, what is the beginning of drawing? A point? If we accept the definition of a point as having

position but no magnitude, we are landed at once into a consideration of the infinitely minute. But for the practical purposes of ocular demonstration with which drawing is concerned, even at its lowest, we must start with a visible dot, which, no matter how minute, has magnitude, diameter and—has it?—position. What is position, which is the one quality allowed to an ideal point? It is harder to define than those qualities of magnitude which the definition of a point denies. Position implies relation to something else, not isolation in space. Position in relation to what? What is measurement but an examination of relations? To what are we to relate a point (which is an intensified infinity in space) except to infinity in the other—the extensive—direction?

Take a line as the trace of a moving point—let it be a straight line—as defined—the shortest line between two given points. Shortness is subject to conditions, and is not absolute. To conceive two tangential ideal points is impossible.

Let the mind travel as far forwards as it can in its conception of the infinitely remote, there is the equally remote backwards, and to the right and left of the conceiving mind. Of course we come to the unrealized paradox of the mathematicians.

A straight line—where does it end? In two infinities. But the paradox of infinity leaves us with a curious nostalgia for some resting-place in the flux.

To find out for oneself and to realize that at infinity parallel straight lines *do* meet—that therefore straight lines are only parts of infinite circles; that space, so far as we can conceive it, is a sphere, and that at that limit of conception all lines and spaces become but as the

point in the centre of the next full-stop or the dot over the next small "i," is enough to make the brain whirl like a teetotum, which has neither right nor left hand, North, South, East, nor West—all becomes blurred and a giddy streak, as all appearance and all external being, the conscious and the unconscious, merge into one, as it must to the lulled criticism of a whirling Dervish, when he himself becomes confounded in living atonement with the infinite and the eternal.

Once get both eyes of the mind glued down to a line and it becomes next to impossible to detach it. At times it is reduced to the ecstasy of the mesmerized hen, unable to lift its beak from the fascination of the chalk-mark stretching out to an infinity beyond the comprehension of its inverted eyes.

Let the mind lunge forward as far as it can with its needle-lance through those terrible blanks between the stars and beyond them all, it draws back the point with nothing impaled upon it—unblunted even by the least obstruction. Yet it has passed through something more than emptiness—has surely been somewhere—though it may have nothing by which to show that it has been as well employed as in patching breeches.

It is out of this mazed contemplation that the mind comes back to its comic little task of writing a modest book on drawing, and to explain that drawing is so simple that a child can do it. To put it forward as a pleasant task for the entertainment of a leisure hour, more fascinating than patience, solitaire, or even bridge.

If in a train I should see the most unlikely businessman—grocer, stockbroker, solicitor—begin to fidget with a pencil, reach for the nearest paper, and make unintelligible signs on margins of books, newspapers and the backs

of envelopes—then pause, puzzled between a desire to tear up his effort and an intention to carry on—then suspicion will whisper: “He has got it. The hook has struck—he has eaten of the tree—La Belle Dame Sans Merci hath him in thrall—he has been reading this book ” and is “counting his investments in the infinite and the eternal—he is learning to draw.”

What, after all, is drawing but this—the shortest line between the two points of an infinity withheld from our comprehension? A short cut that the artist takes, while the mathematician goes round? Through and beyond lines, algebraic symbols, signs and formulæ, it is the artist’s trade—

“To see a world in a grain of sand,
And a heaven in a wild flower;
Hold Infinity in the palm of his hand,
And Eternity in an hour.”

By drawing he does, if he is lucky, capture and bring home, like a Palmer’s shell, some dried scrap of the Infinity in which he has travelled—for himself the keepsake from a dream; and, for the unbeliever, something approaching a proof.

CONTENTS

CHAP.	PAGE
INTRODUCTION	vii
I. INTRODUCTORY	I
II. DRAWING MATERIALS	7
III. ABSTRACT STRAIGHT LINES, ANGLES AND CURVES	24
III. (<i>Continued</i>) FREEHAND DRAWING OF ABSTRACT LINES	36
IV. FREEHAND DRAWING OF NATURAL FORMS, CON- SISTING MAINLY OF PLANE SURFACES OR SINGLE LINES	42
V. THE THIRD AND FOURTH DIMENSIONS	47
VI. THE PICTURE PLANE	56
VII. FORMAL PERSPECTIVE	64
VIII. DRAWING OF SOLID OBJECTS	70
IX. SOLID OBJECTS IN SHADE AND SHADOW	96
X. MODELLING OF SOLID OBJECTS	111
XI. EXPRESSION OF SOLIDS IN RELATION TO ONE ANOTHER—AERIAL PERSPECTIVE	124
XII. SHADOWS, REFLECTIONS AND AERIAL PERSPECTIVE	133
XIII. FIGURE DRAWING	139
XIV. BEAUTY	159
XV. CONCLUSION IN PLASTER	185

LINE

I

INTRODUCTORY

WHETHER drawing preceded writing or writing drawing might have been difficult to say; but that drawing came first may at any rate be assumed from a study of the normal human progress as observed in the growth of an ordinary child, quite apart from the evidence of scholars as to the evolution or devolution of written symbols from representations of observed form. Though not so early as speech, it is probably the earliest form of the conscious and wilful arts of expression for its own sake, as soon as the line of absolute necessity or use has been passed, unless making a noise be accounted music—and so the earliest effort at rendering thought permanent.

A child will begin to draw crude symbols of things seen before he will learn to write, and this drawing will proceed from impulse, whereas writing must be taught.

This appears to stand to reason, for a drawing, a visible mark, stands as a symbol of something seen in order to be recognizable by another; and this symbol may be so elaborated as to be so like the thing seen as to be under certain conditions deceptive enough to be mistaken for the thing symbolized.

In the case of written speech or song the symbol is incapable of being mistaken for the thing symbolized by

the word. Not until mechanical means of reproduction of sound were introduced (which significantly or otherwise followed photography, which is the mechanical means of reproducing appearances) did it become possible to place sound on record otherwise than by means of symbols which had to be translated into sound in the mind of the reader after passing through the sense either of sight or touch.

All these symbols of sound had to be agreed upon by any community employing them, just as the language of a tribe or people was an agreed convention, constantly enlarging, changing and adapting itself to the requirements of the tribe, so that different symbols of sound, or systems of written speech, are still in existence at the present day—as witness the Chinese, Hebrew, Indian, Persian, Grecian and Roman characters and alphabets and their many modifications.

On the other hand, drawing was and will remain a universal method of communication of ideas, by means of symbols intelligible by all, regardless of time and geography. A kitten or a puppy may be taken in by a reflection. A dog may bark at it. But its sense of smell as well as of sight teaches it very early to discriminate between the actual thing and the appearance. The learned pig or pony, still to be met with at fairs, does not discriminate the letters of the alphabet, but is trained to exercise an apparent choice, but only in obedience to the indication given by the trainer.

To observe that the symbols used vary according to the skill of the maker, in their simplicity, complexity and subtlety, or in the taste of their selection, is only to recognize that they are the work of the human hand and brain; beyond these factors, which are primary in

the artist's mind, concerned directly with his own primitive impulse towards expression, must be reckoned the effect of fashion upon his employment of them—first as to such symbols as he has already seen employed, which will be easier to imitate than to recreate anew (since it is easier to follow than to lead), and second from the pressure of public opinion, which will more readily accept symbols to which it is already accustomed than worry itself by following the track of the exploring artist's mind. The puppy that may be taken in by the realistic reflection in the mirror cannot understand a drawing at all.

Form being the first essential of any material object, any means that expresses this must take precedence of such as can express only an attribute of the form, and this being so, sculpture (or drawing in the round), which repeats the tangibility, and drawing upon the flat must take precedence of any means taken towards the coloration or scent or sound produced by objects or their activities. Leaving sculpture and its tangibility as a solid aside, drawing, being the means of expressing the essential shape of an object and its bulk and situation in relation to others, must be the primary consideration in any scheme of visible symbolization of that object.

That all men see alike is not to be maintained, but it may be demonstrated that men—and women too, for that matter—see much more nearly alike than is generally supposed.

The story of Turner's reply to the lady who objected that she did not see sunsets as he painted them—"Don't you wish that you could, Madam?"—has been almost as often misunderstood as it has been quoted; having been taken as supporting the idea that Turner saw things

differently from the bulk of man- and woman-kind and was even proud of the fact. A learned optician wrote an essay to prove that Turner suffered from astigmatism as evidenced by his pictures.

It used to be thought that the Chinese and Japanese artists saw differently from Europeans. The early Italian painters have been nicknamed "squint-eyed Primitives"; and Gauguin and Van Gogh regarded as innovators of new ways of seeing. Whistler, because he saw things as beautiful or beautified by the semi-obscurity of tone, was thought to see differently from the man in the street. We are taught to read rather than to see. We recognize similar streets rather by name than by appearance, and our powers of observation run the risk of atrophy from lack of use. It is not that one artist's optical equipment is different from another's, or from that of the ordinary man, that produces the difference between one man's pictures and those of another. It was not Turner's astigmatism, nor was it a mote, a beam, or a squint in the eye of the Chinese or the Italian primitives which brought about a differentiation of symbols between the art of one and another. When a man or woman defends an inaccurate drawing which purports to be a true representation on the score of "that being the way they see it," we may set them down as untruthful. That no two painters sitting side by side painting the same subject will paint exactly alike is also true.

It is not that they see differently, but that they will be differently interested, and, supposing them to vary temperamentally while being equally skilled, their emphasis will naturally fall differently. The selections they make will consciously or unconsciously vary one from another. The interest of an artist varies from day

to day; and it is a difficulty he frequently experiences to recapture an earlier frame of mind in continuing work already begun. Though temperamentally alike as twins, it is still likely that two artists may vary in skill, or temporary aim, and that the results will differ accordingly. It is these differences that constitute personality in art. Turner, if he had set himself the task, had sufficient skill at any time in his career to have painted something uncommonly like a coloured photograph of any landscape in front of him, just, indeed, as he saw it. There are early Chinese drawings in which a convention extraordinarily like that of Holbein is employed; Botticelli and certain of the Japanese masters have so much in common that it is frequently more the medium and the subject than any personal outlook that divides the work of one from the other.

Two highly skilled artists whose work from Nature varies as much as variation is possible, if set to copy conscientiously a picture by a third artist, will yet produce works almost identical; thus showing that their vision, so far as vision is a matter of eye-sight, is exactly similar in every particular, and that skill or handling alone will differentiate one result from another.

More even than in the case suggested above of two artists at work upon the same subject at the same time and place whose work varies in accordance with temperament, skill, upbringing, aims, intentions, and the medium employed, will the work of races or nations separated by blood, religion, language, customs and ideas, even by thousands of miles in space, and hundreds of years in time, differ one from another. Yet it is not the differences so much as the similarities of the work that are more remarkable.

That there is some underlying principle common to all pictorial art is therefore obvious; and it is our purpose to examine such of those principles as apply in the case of drawing, which, as already suggested, is itself the basis of pictorial art, since it is the simplest form of symbolism of things seen.

II

DRAWING MATERIALS

A LINE being "the trace of a moving point having length but not breadth," and a point "having neither length, breadth, nor thickness," so far as theory goes, and leaving the ideal, it falls to be discussed what is a "trace" or "line" in practice, what in practice is a "point," and how, in practice, is it moved?

Let us take the point first.

Probably the earliest drawing was made with a twig of charred stick, such as is still largely used, or it may have been scratched upon the sand, or in clay. "Willow charcoal" is sold by all artists' colourmen, and is doubtless as good, but no better than it used to be. It varies largely in freedom of working and in richness of colour—some being harsh and uncertain in action, yielding alternately a free black line and an almost imperceptible scratch.

Altogether preferable to the stick charcoal is the Siberian compressed charcoal. This is not yet so well known or so much used as it might be. It is put up in round sticks much like pastel, and is graded in regular degrees of hardness and softness, from a stick yielding a precise grey line, and that only under pressure, to one of so crumbling and powdery a character and of such density of blackness that it requires the utmost delicacy of handling to avoid ponderosity where such is not desirable.

An advantage in the use of charcoal nicely balanced

as a disadvantage, is its slight capacity of adherence, particularly in the soft and most freely working varieties. Generally the richer the effect the more readily can it be removed, being little more than a line of dark dust lying upon the upper surface of the paper, so that it may be flicked off with a duster, or even be simply shaken away. My friend A. S. Hartrick told me of a Zulu model at Julian's or Cormon's studio in Paris who was an expert with the stock-whip, giving, as an exhibition of his skill, a flick at a study of himself, at the full length of the whip. Without tearing or damaging the paper, he shook every loose particle of charcoal off it, and turned what had been a carefully drawn nigger into a pale ghost upon the white sheet.

A charcoal drawing should be "fixed" as soon as finished.

An efficient and inexpensive fixative may be simply made by making a saturated solution of fiddler's rosin in methylated spirit. This should be applied with a spray, either in the form of a blow-pipe, or with a bulb such as ladies use for scent, which latter is recommended to bilious subjects.

Charcoal has also the advantage of deadness of colour. It does not reflect light, as does lead pencil, but absorbs it, so that it reproduces well photographically. A fair approximation may sometimes be made by direct process reproduction of a charcoal drawing in line without the intervention of a ruled screen in the camera, though a certain amount of delicacy will generally be lost in the printing. Such reproduction should not be attempted if fine gradations have been attempted by smearing the charcoal.

Black chalk shares some of the characteristics of

charcoal. It yields a dense black and does not shine. It varies considerably in hardness and softness, and has an advantage in that it may be brought to a fine point which will not wear down so rapidly as charcoal, so that it is possible to carry out work requiring the utmost minuteness with a greater degree of precision than is easily possible with charcoal.

To sharpen charcoal or chalk with a knife it is advisable always to cut from the point backwards, otherwise the end will almost inevitably be snapped off. An easier and more rapid method of sharpening chalk is to have a sheet of glass or emery paper always at hand, by which means a number of points can readily be prepared. Paul Renouard, who used chalk more than anything else, always had about a dozen ready prepared, so that he could select a suitable point at will, without having to stop working for the irritating job of sharpening one. He used Hardtmuth's chinks in holders; as also did Phil May when working in chalk, though most often he made his studies in lead-pencil.

Beautiful results are obtainable with "sanguine," or red chalk. The writer has little experience of it in working, but has found certain kinds to be of a greasy nature, rejecting water-colour. This may have been of an artificial kind, in which wax was used as a medium for the colour. It is not always good for students to use, as from its own quality of colour it may make a bad drawing deceptively attractive among a number of black ones.

Chalk, like charcoal, being absorbent of light, and non-reflective, reproduces admirably. It does not rub so easily, and so stands in less need of fixing than charcoal. It is nevertheless advisable to fix drawings as soon as

possible where precision and sharpness of line have any value, as very little chafing or knocking about, even in portfolios, will take the "edge" off them.

Lead-pencil, as commonly known to-day, is of comparatively modern introduction. The present generation hardly knows, even by reputation, the old Cumberland lead, which used to be advertised in all the stationers' windows, and made English lead-pencils the finest in the world. Liking a chisel edge for drawing with, but not finding such as the artists' colourmen supplied, if they supplied them at all, of sufficient width, the writer had a fad for a while of drawing with a carpenter's pencil. These are coarse, gritty and grey. It was therefore with delight that at Brown's, the stationer's shop that used to be in the Strand opposite St. Clement Danes, hard by the old *Graphic* office, he discovered a supply of a gross of pencils that had been in stock for fifty years or so, and that they had never been able to sell. These had been made, they thought, for J. D. Harding, and it is easy to imagine him using them for the various "tree touches," ash, oak, elm, etc., that it was the fashion for drawing-masters to impart to young ladies with a "nice taste in ruins" and a *penchant* for "landskips" in those romantic days. These pencils were of solid Cumberland lead, six B, of a generous width, $\frac{3}{16}$ or thereabouts, that cut like cheese. What stuff it was! What a vintage! The gross was bought and shared out with Hartrick, Phil May and Renouard. They were a delight to use, and it was a joy to give one away to anyone who could appreciate it. Phil May's share was very little used, as a retriever he had at that time fell in love with them and the box, and chawed them to bits! There are, therefore, none or few of his drawings which show

the characteristics of a chisel-edged pencil having been employed. Modern pencils are made of compressed black-lead-powder and clay in varying proportions according to the degree of hardness or softness. There being an excess of clay over graphite in the harder degrees, there is a consequent greyness or lightness in the line arising from the double cause that the amalgam is reduced in blackness and that less is discharged upon the paper.

The greatest characteristic of a lead-pencil line is its metallic silvery lustre. A fairly rich black is obtainable in some degrees; but it does not compare in this quality with chalk. It is capable of being very sharply pointed, and so is an instrument of most delicate precision for line, as well as yielding a considerable range of tones, extending from the delicacy of silver point almost to the richness of colour of chalk, which it exceeds in its peculiar luminosity. On account of its lustre it is somewhat tricky in reproduction, as, unless reflections are carefully guarded against by the photographer, it may photograph more faintly than the drawing, some parts even disappearing altogether. The softer the pencil, or, in other words, the blacker the drawing, the more liable is it to rub, and so should be fixed, unless it is to be mounted or framed at once.

It is best not to endeavour to force the colour either by digging into the paper, or, as the policeman and shop assistant generally do with their pencil stumps, by licking them, but to accept the natural limitation. No amount of pressure will make the lead blacker, and licking only makes it mark more freely for a stroke or two, so that an uneven result is likely.

The drawings of many of the English illustrators of

the 'sixties were made upon the wood in lead-pencil—notably those of Boyd Houghton for the *Arabian Nights*. All the characteristics of pencil drawing, even some of the flexibility of its line, are necessarily lost in a wood engraving. This, it should be said, was not the engraver's fault, but an inherent limitation of the method. It is sad to realize how much of delicacy had to be destroyed in order to print what was left !

The French wood-engraver Florian achieved a remarkable translation of a pencil drawing that was published in the *Revue Illustré* about 1890. This was a *tour de force*, but it was exercised upon a larger scale than the ordinary book or magazine could carry, and upon a simpler drawing than is frequently necessary in illustration. Such work would be out of the question ninety-nine times out of a hundred.

We now come to consider such instruments as are vehicles of colour, not giving colour themselves, as do pencil, charcoal, etc. Of pens a volume might be written. The word is obviously derived from *penna*, a wing, or wing feather, and so means originally a quill. These are now little used even by old-fashioned lawyers, though a judge may still punctuate his summing-up with a large feather; but the general use of quills is recalled by the word penknife, long after the association of the ideas of knife and pen has ceased.

Artists and colourmen still call a certain type of small steel-barreled drawing pen by the name of "crow-quills."

Metal pens used by the Romans at the time of the occupation of Britain are to be seen in our London Museums, but it was not till well into the nineteenth century that the metal pen was so improved as gradually to supplant the quill in popular use.

At the present time the choice is so great that every fancy can be met, from the sharpest point to the broadest chisel edge, cut at any angle—with one or more slits and



“ THE VISION OF SIN ”

Practically the same in treatment as the “ Lady Flora ” drawing, based as it is mainly upon two thicknesses of line, being laid in heavily with a Waverley pen, and qualified with a 303 Gillot.

It is pleasant to remember that Phil May wrote “ Kow-Tow ” on the margin of this drawing.

with or without reservoirs, and in so great a variety of patterns as to be bewildering.

It is advisable to have a number of penholders, each

fitted with a different style and width of pen point, so that the right instrument can immediately be chosen.

The correct pen to use will depend upon the scale of



FROM "OMAR KHAYYAM"

An effort to maintain stringency of style in the presentation at once of form and light and shade without allowing the effort or the method to obtrude itself. (Pen used, Gillott's 303.)

the intended work, upon the surface upon which the drawing is to be made, and the style in which it is proposed to draw. For a clear line of unvarying thickness, as in so-called "decorative" work, a stiffish pen that

naturally yields the required thickness without pressure is the best. Where surface modelling is to be attempted, if simple, a greater degree of flexibility is desirable; but where the range of "colour" is great, or fine shades or textures are to be suggested, the pen point should be as fine as possible, but so flexible that it will readily yield a rich, fat line on pressure, but, this relaxed, will immediately give a fine line again, like a good sable brush.

A great deal of nerve will be saved and better results will be obtained by seeing to it that the right pens are handy when required, as a drawing may easily be ruined by attempting to carry on with a pen unsuited to the purpose.

A fine pen that has to be pressed upon steadily throughout the length of a line in order to make it yield the requisite thickness will generally betray the artist into irrelevant accents. The choice of such a pen is a more common error than that of choosing a too heavy one, since timidity is more common than boldness, against which it is not generally necessary to issue a warning.

A curious instrument is used by packers for addressing parcels that may be of interest and sometimes of use to the artist. It is a facile means of drawing generous curves on a large scale, as it is designed to carry a large supply of ink, and should be handled on the chisel edge principle, or as the quill was used by the old scribes. For large work it is difficult to imagine anything better, unless it be a brush.

Reed pens, like the quill, have been almost entirely supplanted by the steel nib. The writer has small experience of them, but well remembers J. Pennell, that most expert technician, getting excited about them; and if an artist can become pleasurably excited about the handling of a tool, that tool is for the time being the

best possible. That it is the calamus of the ancients lends it a special charm. A set of them as used by the Egyptians can be seen in a case at the British Museum, doubtless as they fell from the hand of the artist as though but yesterday, whom age-long death has made more reverend in our eyes. They are not always easy to buy since "The demand is so small. The last has just been sold," or "The new consignment that we are expecting has not yet arrived from Japan"—so that just when they are wanted they may not be had in the shops.

Of instruments that leave a trace without colour either by incision or in a yielding material such as wax, the most important are the wood-cutter's knife, the engraver's burin, and the etcher's needle.

The stylus was probably the earliest writing instrument, being used to impress marks in wax or clay, and though it has doubtless had a certain influence in the formation of letters, this has been almost obliterated by the use of the pen by which the original design has been modified, and the strokes even in our modern movable types are derived rather from the thin and thick strokes of the pen than from the incisions of the stylus, punch, or chisel. Frequently the carved inscriptions on our monuments and gravestones show the reactionary influence of penmanship, the child, in this case more paradoxically than usual, fathering the man.

The etcher's needle is the nearest approach to the stylus in common modern employment by artists, used as it is either as a "dry point" or preliminary to the use of acid.

In dry point a line is scratched upon a metal plate, the ploughed scratch throwing up what is called the "burr" by the side of the incised line in proportion to the depth of the scratch made. It is mainly this burr

which holds the printing ink when the plate is wiped after being heavily coated with it. Either a steel needle or a diamond point is used.

The late William Strang devised an instrument with a hooked end which he used largely for forcible dry-point work; this instrument required less effort than the straight needle, as it made a more direct incision, and could be dragged with more facility, as well as guided with more precision and certainty than the needle, which is capable of running away with the hand.

The true "etcher's" needle is either the same or an instrument similar to that he uses for dry point, but its purpose is not to make an incision in the plate, which, for "etching" proper, has previously been coated with wax, but only to scratch away the wax and so lay bare the metal to the subsequent action of acid. It is the acid and not the needle which furrows the line in such a manner that it will hold the desired width and depth of printer's ink. The word "etching" means "biting," and refers, not, as is frequently thought, to the use of the needle, but to the use of the acid. An "etching," or *eau forte*, is the result of two main operations, respectively biting and scratching, which operations should not be confused. The present writer once ventured to introduce this definition of the two processes as "biting and scratching" into the draft of an official report; but it never got beyond the draft, being considered too vivid and undignified for an official document.

The burin is a V or wedge-shaped chisel, which is driven through the surface of the metal or wood from which it ploughs out a strip without leaving a burr, as does the dry point, which "ears" the metal without removing it. When used for engraving on metal the

finished plate is covered with printing ink and then wiped, as in etching: this leaves the ink in the incised line, while the surface of the plate is clean. A print being taken, the line represents the trough cut by the burin in the metal. The ordinary visiting card is an example of engraving on copper; but the printing of these, where many are required, is frequently done by taking transfers from the plate to a lithographic stone, so that a number can be printed at once, more rapidly and at less expense.

In the case of a wood-engraving the reverse takes place. It is not those parts removed by the burin that afford lodgment for the printer's ink, but the surface left standing and untouched by it. The sunk parts receive no ink at all, only those parts left at the original level of the block receiving ink from the roller with which ink is applied. It is not the black line, dot, or space in the print, but the white line, dot, or space, which represents the labour of the engraver. "Wood-peckers" was the appropriate nickname for the engravers at the time when the papers and magazines relied on artists and engravers for their illustrations, before the camera and the "process-monger" or "process-server" supplanted first one and then the other, scattering them like ninepins in a skittle alley.

Wood-cutting is one of the earliest means used for the reproduction and multiplication of drawings by printing. It was supplanted in Europe by the introduction of the burin, previously used only for engraving on metal; which introduction is generally attributed to the Bewicks. *Wood-cutting* and *wood-engraving* differ in two ways; for not only is the tool employed a knife in one case and a chisel in the other, but the wood used is different, not only in its character, being softer for cutting (as pear or cherry) and hard for engraving (generally box),

but the wood-cutter uses the block plank-wise, while the engraver uses the end grain. The use of the graver made much finer and more elaborate work possible; while the primary hardness of the wood and the direction of the grain made it possible to print practically unlimited editions under conditions that would have worn out a pear-tree block.

Of late years artists have revived the use of the soft plank wood for original work, as well as the wood-cutter's knife. Even linoleum has been employed in place of wood. As stereotypes, electrotypes, or photographic reproductions can be made from these if necessary, the size of an edition is not limited by the softness of the wood or other material chosen by the artist, though naturally the character of the work to be done is influenced by the limitations of the tools and materials employed. Very fine and minute work will require a hard surface and a precise instrument, while for broad lines and masses the softer the better, consistently with the printing requirements of the surface.

For commercial purposes both wood-engraving and wood-cutting have been almost extinct for many years, being employed only by enthusiasts for particular purposes and effects, such as limited editions appealing only to the few, of book plates and such-like, where the designer usually acts as his own engraver or cutter for love of the method rather than for love of profit—out of which starved conditions so much good work arises.

The use of the word "wood-cut" remains—even shortened to "cuts," in reference to engravings on wood, or to other, even photographic, methods of reproduction where no engraving tool, let alone a knife, has been employed. Without any desire to be pedantic, it is

thought worth while to point out, particularly to writers on art, the interesting differences that exist between wood-cuts and wood-engravings and process reproductions, and the consequent importance of discrimination. There is as much likeness and as much technical difference as between dry and wet fly-fishing and tickling for trout, or between the use of the rifle, the smooth-bore and the air-gun. There is room for a book on the sportsmanship of Art.

In a category by themselves stand lithographic "chalk" and lithographic "ink," which are very nearly of the same composition, consisting of the same elements differently proportioned. Each name is in a sense a misnomer, as the substance is neither chalk nor ink in the generally accepted sense of either word. It is true that in so far as "ink" may be derived from "encaustic" in its relation to burnt wax, there is a certain coincidental connection of ideas between "ink" as commonly used and the lithographic ink invented by Senefelder.

This "chalk" or "ink" is generally compounded of soap, tallow, wax, bitumen and lampblack in varying proportions; the soap being introduced to render it soluble in water, the tallow and wax to render it resistant to acid and water, and the black to make the effect of the artist's work clearly visible to him while making the drawing.

It is upon these properties that lithography is based, lithography being the art of drawing upon and printing from stone. If the stone upon which a drawing in this chalk has been made be dampened, it is possible to charge the drawing with printing ink from a roller, without soiling the stone where no grease has previously been deposited. As, however, on account of the rapid drying of the stone and other risks such as excessive pressure from the roller, the white parts of the stone are apt to

take ink and "scum," to use the printer's phrase, the stone is treated with a mild solution of nitric acid, which serves two purposes. First, it fixes the soap which forms a large proportion of the ingredients of the chalk or ink, and, secondly, it opens up the surface of the stone, slightly pitting and roughening it. The stone is then treated with a wash of gum which enters the pores of the stone, from which no amount of water alone will dislodge it. The gum prevents the tallow from spreading in the stone; and it remains damp longer, and as gum itself rejects grease, it is then safe to proceed with the damping and rolling up of the stone with ink. Even should the gum dry, and grease be applied, this is readily washed away, as it will not penetrate the gum.

Lithographic chalk is made in varying degrees of hardness and softness. It is generally sold in round or square sticks, but can be bought in the same form as lead-pencils encased in wood or strips of paper. It is capable of making a mark as fine as the most delicate lead-pencil, or may be made to yield a stroke as fat and black as may be obtained from Siberian charcoal.

Lithography has of late years been much revived by artists, after it had fallen into disrepute on account of its having been vulgarized by ignorant hands for commercial purposes. No finer work was produced during the war than the posters of Brangwyn and the series of drawings made direct on the stone, some actually under fire, by Spencer Pryse. The Senefelder Club has been the main instrument of this revival, and the writer is proud to have been its godfather.

For its employment to the best advantage no amount of time or trouble should be spared to obtain a suitably grained surface upon the stone for the style of drawing proposed.

The best work can only be obtained by directness of treatment; that is, by striking the full force of the intended line or tone at the very beginning, coaxing the chalk into the grain of the stone with a firm hand. If this is not done, the chalk is simply piled up upon the tips of the grain, and a harsh ropiness inevitably results, instead of the juicy or velvety richness of which the medium is peculiarly capable, but which can only be obtained by coaxing the chalk as far as desirable into the valleys of the grain at the outset.

The usual way of sharpening lithographic chalk is with a penknife cutting from the proposed point backwards, as in the case of ordinary crayon; and as the chalk wears away rapidly upon the stone, this must be frequently done if a sharp point is required. The writer claims a little credit for devising a method whereby time, temper and trouble may be saved, and all waste of chalk done away with. His method is to take the chalk and hold one end some little way above a lighted candle or other flame—a match will do. Care should be taken to soften only, and not to melt the chalk, sufficiently to make it easy to roll or press the end into any desired shape between the fingers. This is the work of a few seconds, and a point of any fineness or a chisel edge can be obtained at will. Of course, the chalk is lengthened in the process, so that a new chalk will not go back into the box in which it was purchased. It is therefore advisable to have another box ready to receive the newly-sharpened sticks—an ordinary cigarette carton is as good as anything for this purpose. Ten or a dozen sticks may be sharpened or reshaped in a few minutes in this method, and a constant supply of points kept ready at hand. Odd ends or stumps of chalk which would otherwise be thrown

away may be softened and stuck together by heating the ends of two at once over the flame, squeezing them together, and rolling the joint between the fingers till it is thoroughly welded.

This little device should save a lithographer considerably more than the price of this book every year, and I have much pleasure in laying him under a slight obligation.

Further, as lithography is the most autographic of all the means of reproduction, every artist should practise it. If such were the case, all artists, and not only lithographers, would be in my debt, which is a happy thought wherewith to conclude my chapter on points.

III

ABSTRACT STRAIGHT LINES, ANGLES AND CURVES

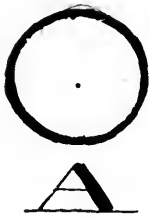
A LINE is a trace of a moving point.

Lines are considered to be either straight or curved, according to the presence or absence of curvature appreciable to the eye.

The Euclidian definition holds good of a straight line as being the shortest line between two given points.

All measurement is relative. But in order to establish any system of measurement it is necessary to find a unit either to multiply or divide.

In any consideration of concrete line and the constitution of a curve we must start with a point.



For the artist's purposes, apart from the mathematician's, a point must be visible, as in the centre of the circle A; and in order to be visible it must have a certain magnitude, unlike the theoretic point of the mathematician. The concrete point most nearly approaching the theoretic must therefore be considered as having magnitude, but not greater in one direction than another; and must therefore be circular.


All lines, no matter whether curved or straight or what their direction, consist of a series of tangential points as at B.

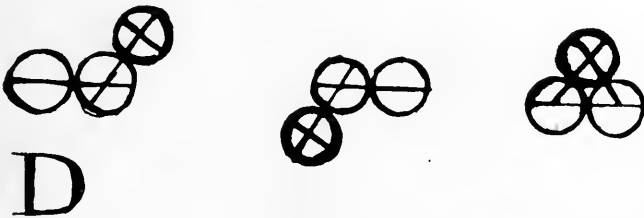



For the purposes of demonstration we may imagine these points much magnified—as here : so that they are not only visible, but may the more easily be conceived of as having a diameter as any concrete thing must have ; since nothing exists which cannot be conceived of as being divisible. Nevertheless these points are to be looked upon as the smallest possible units to be employed in practice.



A line has length greater than its breadth ; therefore the shortest conceivable line will consist of two tangential points (as shown at **C**), whose united diameters form the smallest unit of any line ; since even if a

third point  be added whose diameter does not continue the line of the other two diameters, this cannot affect the relation already established between the two points, which may be said to be as nearly as possible absolute, as shown at **D**.



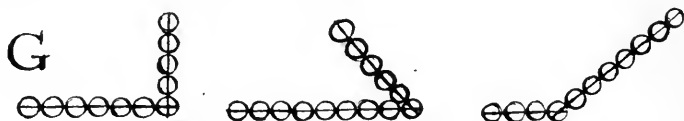
It will be seen that the point marked  establishes with each point it touches a relation similar to that already existing between the other two points, so forming a new unit of line.

So long as the diameters of the units meet they will form

a continuous straight line as at **E**; should they change direction gradually and progressively as from **F** they will



form a curve. But should they change direction abruptly or violently and continue in another straight line (as at **G**) a perceptibly angular figure will be produced, without the characteristics of a curve, the essential quality of which is in the slight perceptibility of the angles of which it is composed.



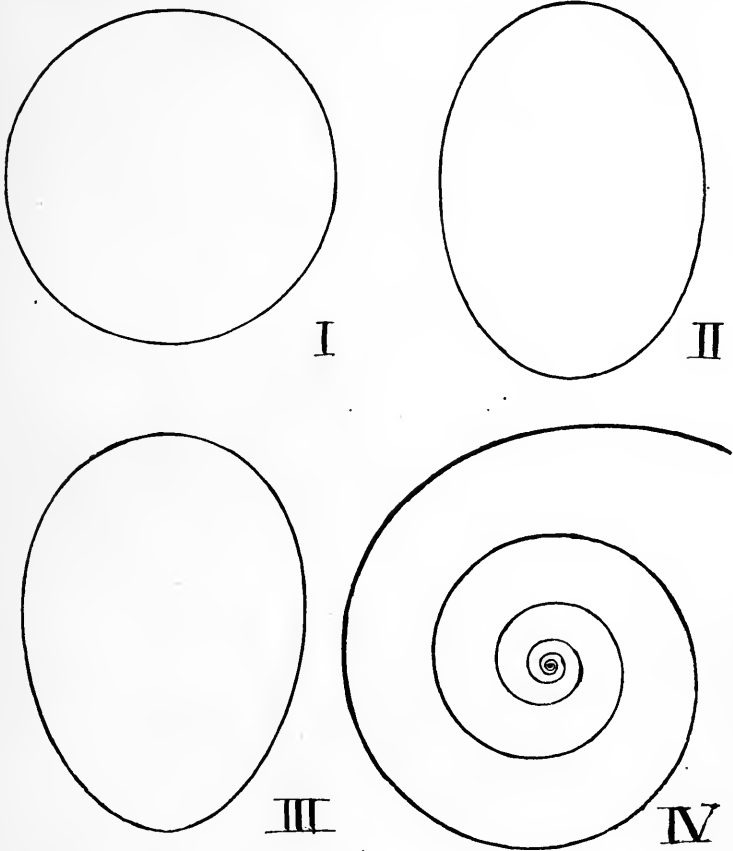
The character of the line will depend upon two factors. First, the number of points, if any, whose diameters combine beyond the inevitable two; and second, the angles which divergent units make with each other.

The main curves are I, the circle; II, the ellipse; III, the oval, and IV, the spiral; other curves being either compounds or modifications of these.

A good idea of angles may be formed by taking a ruler and drawing the letter V in a good bold Roman character. Let the lines be three inches each; then see how many more V's can be drawn inside it before the two arms touch and so become one line. Having drawn as many as possible inside it, try how many can be drawn outside it from the apex before the two lines become continuous as one horizontal line, like the outer sticks of an extended fan.

If all these lines are kept of even length they will be the radii of a circle. If from the V's drawn with the aid

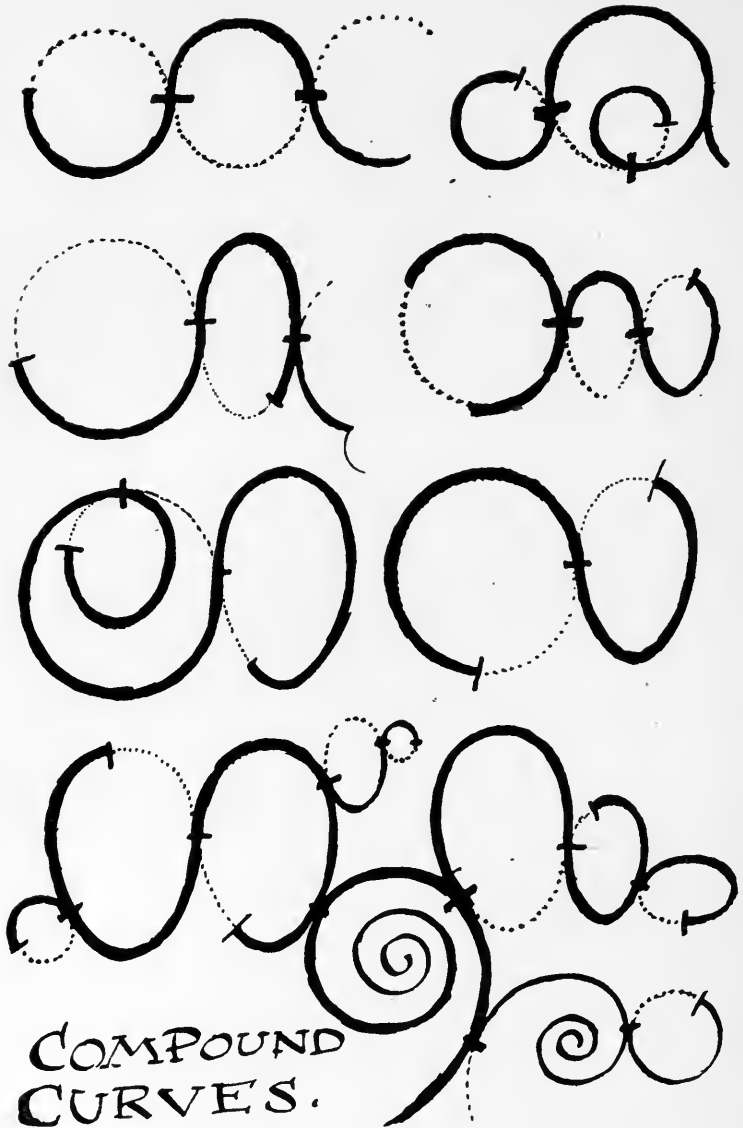
of a ruler the eight or ten which most nearly divide the space between the upright and the horizontal are chosen and the ends joined, it will be seen, that although the



Curves I, II and III composed of straight lines, drawn with a ruler.
Curve IV partly freehand.

resulting line is in every part straight, the total effect is that of a continuous curve, hardly distinguishable from a circle drawn with the compasses.

Now look at a watch. At three o'clock everyone knows



Sketch to show how rhythm and continuity are maintained through the tangential point of curves of like or unlike orders, so that intersection is avoided. The dotted lines show the order of the curve,

that the hands form a "right angle," or an angle of 90° —the angle at which one line is at its greatest opposition to another, as at the corner of a square.

Every minute represents 6° .

If a line be drawn from nine o'clock to three o'clock we have a straight horizontal line, and from twelve to six o'clock a vertical line dividing it into two equal parts.

If we draw a wide V of equal sides from $14\frac{1}{2}$ minutes to twelve to $14\frac{1}{2}$ minutes past, it will make an internal angle of 174° ; the divergence from the horizontal will be 3° on each side, or half a minute, the total divergence being 6° , or one minute. If we now add a line of equal length to each tip of the V, making a similar angle, and to these again add similar lines, we shall eventually arrive at a 60-sided figure, just as though we had joined up the 60 points that mark off the minutes upon the watch face. The experiment may be tried with a box of matches or cigarettes, laying them end to end, and noticing how soon the straight units appear to be lost in a sense of curvature.

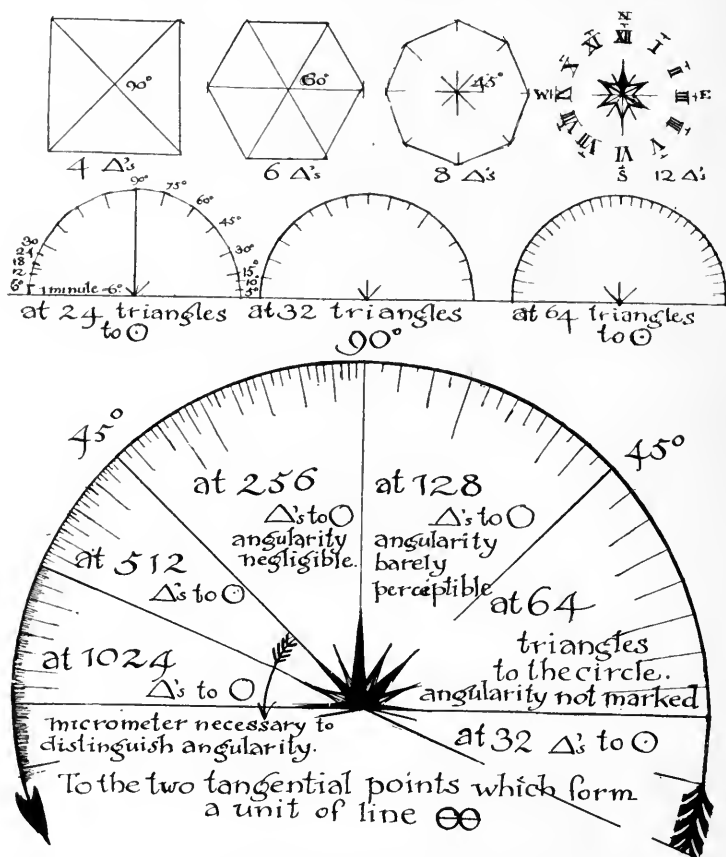
What practically amounts to a circle will have been made without striking from a centre at all.

Let us now take a square.

By cutting off the corners at an angle of 45° so as to make a regular octagon (while curiously enough the sides are not half the length of the sides of the square) we immediately approach a rough suggestion of the circle, which is intensified with each halving of the sides and doubling of the angles. A square of paper may be taken and the corners cut off or folded down again and again for this experiment, counting the number of cuts or folds before it becomes impossible to "circularize" the square further.

I had the curiosity to work out the proportions at

which the straight line becomes practically indistinguishable from a curve; or, in other words, the number of points necessary to establish a curve.



Sketch of curves composed entirely of straight lines drawn with a ruler.

For this purpose I drew a 6" square, in which I inscribed a regular octagon, the sides of which work out at $2\frac{1}{2}$ ". Then by cutting off the corners to produce a regular 16-sided figure a distinct suggestion of a circle was arrived at; while the 32-sided figure is so nearly



Curves composed entirely of straight lines drawn with a rule. Some angles are left deliberately obvious to the eye.

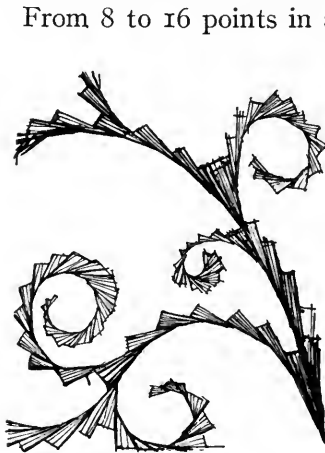
circular that it requires neat workmanship and a fine line to subdivide the angles again in such a way as to discriminate clearly the 64 sides from the parent 32.

This means that a regular polygon of 32 sides may for

most practical purposes of the artist be regarded as a circle, which may be interpreted into the statement that a continuous straight line which is divided into equal lengths, each length diverging $11\frac{3}{4}^\circ$ from the last, will eventually meet, and when viewed as a whole will give a distinct sense of circularity. If the degree of divergence be diminished so that a figure with a greater number of sides (say 60 or 64) is produced, the eye will be deceived.

A figure of 128 sides becomes an almost theoretic circle, though the divergence of each side from its neighbour amounts to $2\frac{1}{8}^\circ$, or almost half a minute.

In practice to inscribe a figure of 256 sides having a divergence of $1\frac{1}{8}^\circ$ would be a task of great delicacy on any manageable scale, and in the rough experiment made an impossibility, as any multiple of 64 would have been included in the thickness of the line already drawn.

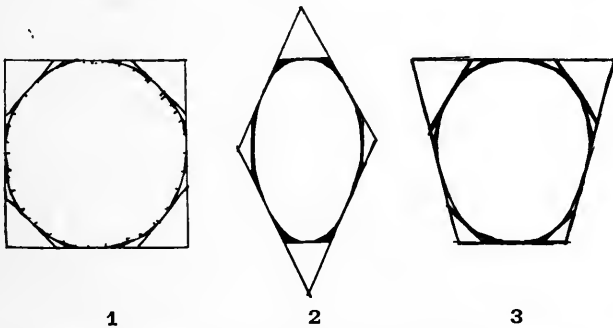


From 8 to 16 points in a quadrant will therefore be a sufficient number of points to establish to arrive at a sense of continuous curvature, and frequently it will be found that the fewer points established the handsomer the curve will appear. Watts's theory that largeness of style in draughtsmanship depended upon a flattening of curvature, as though a small curve were made up of a system of greater curves, is exemplified here.

By varying the length of the straight units of line, or the angle of diversion, or both, any conceivable curve may be arrived at, as may be experimentally shown with a set of picture wedges, as in the sketch.

By successive reductions in the length of line while maintaining the same angle of diversion the rate of curvature will be proportionately increased, as well as the smoothness of the curve, which will, if sufficiently continued, from a straight stem rapidly become spiral.

Before proceeding to draw curves with a free hand, it is well to become acquainted with these simple facts, and to carry out exercises with a pencil and a ruler, first in the production of circles by joining up the ends of a number of radii, and next by breaking down the triangle, square, or other regular-sided figure by arithmetical progression.

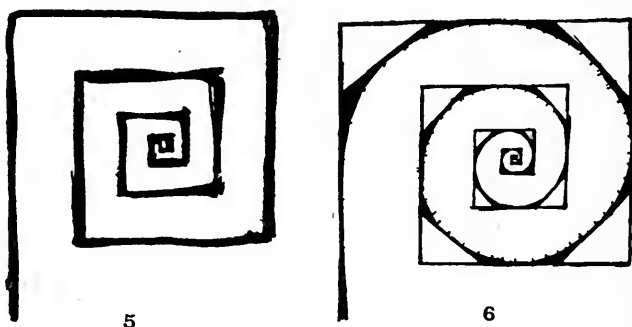


Having arrived at the conclusion that anything beyond 32 points at regular angles and intervals to each other will, if joined by straight lines, be sufficient to establish the sense of circularity, and that therefore 8 or more such points will establish a quadrant, we may form some idea of the number of points requisite to establish any curve (Fig. 1).

Without going into the mathematical principle of the ellipse, but regarding it roughly either as a circle compressed at one diameter, or evenly extended at another, we may exercise our sense of curvature by first making an oblong or rectangular figure, and proceeding to break down the angles, much as we did in the case of the square (Fig. 2).

The ellipse and the oval are frequently confused on account of their similarity, but to arrive at the true oval by means of breaking down angles or cutting off corners, a quadrilateral of two equal and two unequal sides should be drawn, the unequal sides being parallel to each other, according to the desired proportions of the oval (Fig. 3).

On the same principle we may arrive at the spiral



curve, or volute. Let us begin with a tall upright line, as tall as our paper conveniently allows, and at right angles to it at one end draw a shorter horizontal line, then a shorter line at right angles, and so on, so that we arrive at the figure of the Greek fret, which is then broken down by cutting off the angles as in the preceding examples (Figs. 5, 6).

It will be seen how the curve is accelerated by the progressive shortening of the straight lines composing it, while the angles are kept similar. If the width of the angles is reduced still more, rapid curvature is the result.

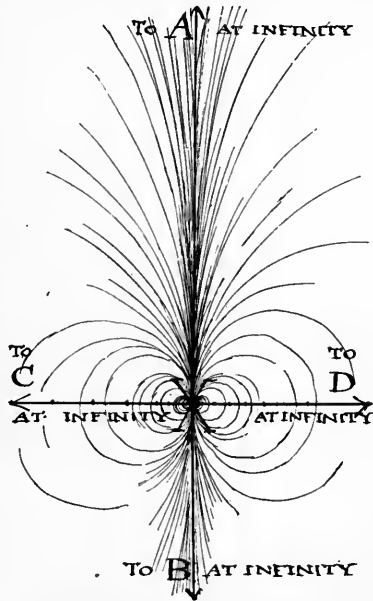
By increasing the angle of divergence the curve will become more rapid or even violent. If too much increased the angle will become obvious to the eye, and the sense of curvature be lost, but a divergence of 6° or even 12° (of from a minute to two minutes of move-

ment of the hands of a watch) will maintain the character of a curve if there be a sufficient number of these divergences.

In the stealthy employment of a scarcely perceptible angle often lies the life and beauty of a curve, and its character of vigour or languor, its speed or slowness.

It will be seen that only two generations from the square are needed for a figure to acquire much more the character of a circle than of a square. The third generation from the square — its great-grandson — the 32-sided figure, is already to all intents and purposes a circle, though requiring a little polish. By the next generation all trace of the harshness of its origin is obliterated, and beyond this differences become indistinguishable.

It would be a nice though fairly simple calculation to work out the exact divergence from the circle struck at six miles from Charing Cross of one side of a regular 128-sided figure inscribed within it, but it would be fairly safe to wager that there is hardly a micrometer made that would detect the curvature in a yard cut from a circle mathematically true.



Sketch suggesting that even within measurable distances the curvature of a true circle may become practically indistinguishable from a straight line, and that a circle struck at infinity is a straight line.

III

(Continued)

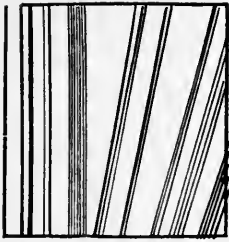
FREEHAND DRAWING OF ABSTRACT LINES

HAVING now acquired some knowledge of the constitution of the various curves, considered as combinations of straight units, we may proceed to exercise our knowledge by practising the production of such curves freehand, without mechanical aid.

If a large Roman I and a large O be made with a J pen handled as a chisel edge for the finest parts of the line and gradually presenting the flat to the paper for the thick parts, it will be seen that since the I consists of a straight line, and the O as drawn with a pen consists of a circle in contour, and contains an ellipse, we find in these three of the most important elements in abstract line, already discussed.

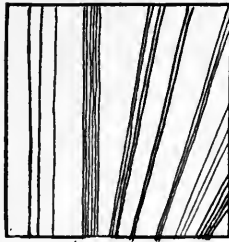
From combinations of these lines or parts of them, all the remainder of the alphabet is formed, as A E F H I K L M N T V W X Y Z, all straight letters; C O Q S, all curved; while B D G J P R U are combinations.

There can be no better or pleasanter exercise for the hand than the formation of these letters with a pen if a good model be chosen, and if the pen be properly handled. An ordinary J pen should be taken, if the special pens made for scribes are not available; then holding the pen flat to the paper a bold down stroke should be made with the full breadth of the pen, but without applying pressure. For practice several of these down strokes should be made, and the pen then turned sideways so that the chisel edge



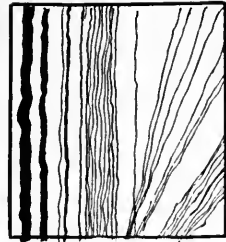
1

Ruled lines vary little from each other except in thickness, and consequently may give a mechanical effect: but except for this there is no immorality or "cheating" involved in the use of a ruler where it will serve the purpose.



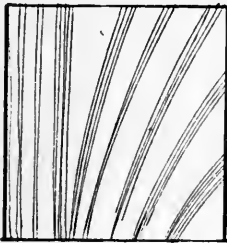
2

Freehand slowly drawn straight lines have a character of their own, being almost inevitably slightly wavy.



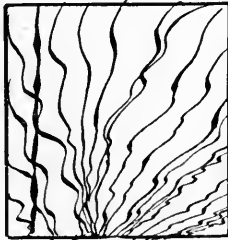
3

Deliberately wavy lines are useful for many purposes, particularly to avoid a mechanical effect.



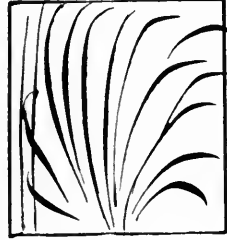
4

Swiftly drawn freehand lines have a smoothness approaching the mechanical, and tend towards curvature. Hard smooth forms are often best expressed by a swift line.



5

Lines varying in thickness in their course.



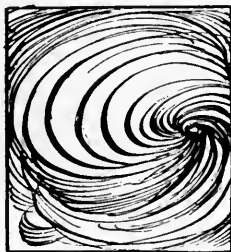
6

Lines gradated at both ends, being thickest in the middle.



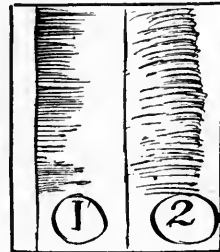
7

Lines thick at each end.



8

Characteristic line of a chisel edge rhythmically employed.



9

Lines thick at one end and thin at the other for emphasis and gradation respectively.

A SUMMARY OF THE POSSIBLE VARIATIONS IN THE QUALITY OF A LINE

is presented to the paper, to make a series of fine strokes at an angle of about 45° to the horizontal.

A combination of fine and heavy strokes should then be essayed, for instance, by drawing a series of large Roman A's.

Do not press upon the pen, but notice how the design of the letter has largely grown out of the natural and most easy manner of holding the pen itself. It is quite outside a good calligraphist's methods to "paint up" the thickness of a letter—he makes the pen do it for him first by choosing the correct type of instrument, and then using it in the right way. Don't fight your pen; take Walton's advice about the worm—"handle him as though you loved him." More than a worm, a pen will turn.

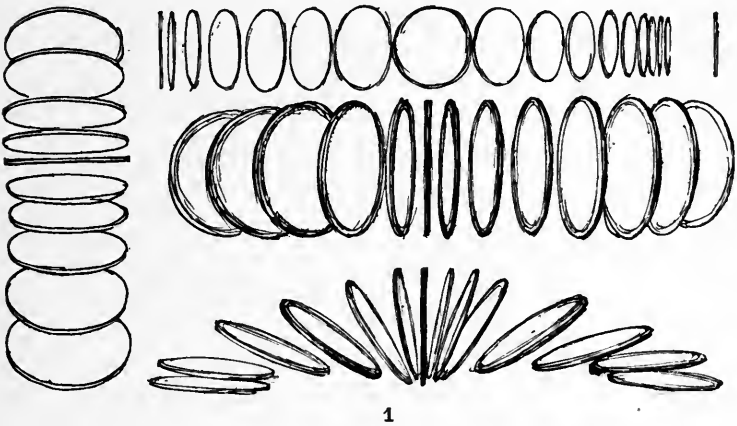
Now make a series of large O's. These may be made in two strokes, both downwards, one from the top slightly to the left, the second from the same point, to meet the first at each end. This is to avoid splutter. It requires a light hand to move the pen upwards without catching in the paper; with a sharply-pointed pen no wise person will take the risk more than once. Gently does it.

A well-shaped P Q R S U should then be attempted, all of various sizes.

After drawing an O somewhat small and as nearly circular as possible, and using a broad pen as has been directed, it will be noticed that the included space will form a very passable ellipse; and it will be a good exercise to endeavour to draw a series of O's starting with a circular one, and each succeeding one based on the inside curvature of the last, so that eventually we arrive at a very compressed curve.

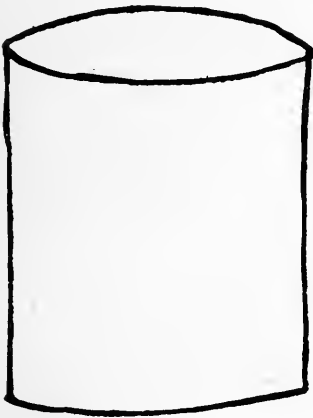
Exercises should then be carried out in drawing

ellipses with the long axis horizontal and in other directions as in Fig. 1.

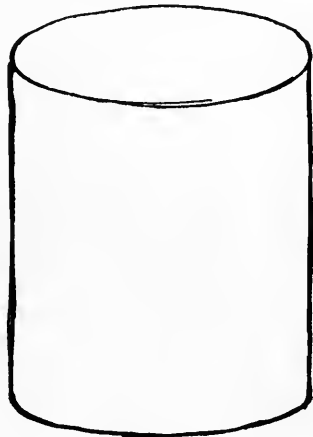


1

A very frequent failing in the drawing of ellipses, is that instead of turning well at the ends, the two long



2



3

sides come to a sharp point, or very nearly so, instead of forming a continuous and regular curve. This is a highly important matter, not only because the figure

is not so graceful in itself, but that, in the drawing of cylindrical solids, it is essential that full value should be given to this turn, otherwise they will appear to be flattened in depth, and to come to an edge, as in Fig. 2. The further above or below the level of the eye the more nearly circular will the ellipse appear; so that the common error exemplified in Fig. 3 should be noted for avoidance. It is well to acquire some facility in the drawing of this curve in every position, and in varying sizes and proportions.

The ellipse arises from a section through the axis of a right cone, and varies in proportion according to the angle of the section. From this to the egg form is a natural step.

This is probably the curve most generally found in natural forms, either singly or in combination, so that in some ways it is the most important of all. It is closely related to the ellipse and the parabolic and hyperbolic curves, and might well be thought to be a section of the right cone like them; but this is not the case.

Connected with this is the spiral curve, such as is made by a conical spring or screw. This will be less frightening in practice if it is realized in the mind much as a series of capital M's or E's as many people write them, or as a child draws smoke coming out of a chimney, and the hand exercised in making the curve with its free and natural rhythm, without too much sense of responsibility to begin with, but taking the risk of failure quite light-heartedly.

In script, indeed, which arises from the readiest method of combining the various forms of letters into words, and curvature affording the most rapid means of transition, we find the straight letters gradually becoming curved, and a natural rhythm is produced by the *hand itself taking the line of least resistance*.

These forms arise only from the use of the pen, and bear no reference to the use of the chisel, where the connecting stroke would be a most laborious undertaking. To see imitation script over shop fronts carried out in carved and gilded lettering is a perpetual affront to a well-formed taste, even though it may be unable to give its reason off-hand; and "Sacred to the Memory of" carved upon a headstone with all a writing-master's flourish is a desecration.

A rhythmical combination of all the curves is to be found in the musical sign of the treble clef, as here indicated.

The student who has mastered these curves may confidently proceed to apply them either to the composition of ornamental design,

or to the representation of objects, since he has already dealt with every element of curvature to be met with; proportion and arrangement are the only lions in his path, so far as drawing is concerned, apart from emotional expression.



IV

FREEHAND DRAWING OF NATURAL FORMS, CONSISTING MAINLY OF PLANE SURFACES OR SINGLE LINES

HITHERTO consideration has been directed entirely to ideal, non-representative curvatures and abstract lines.

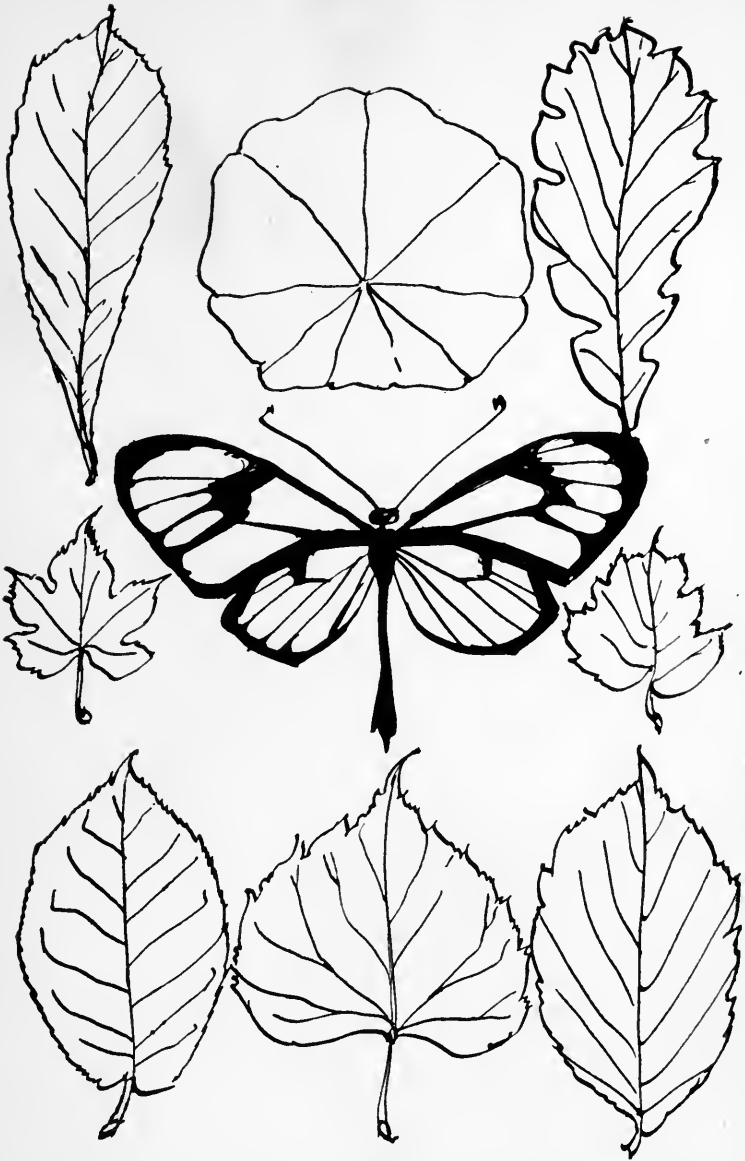
Though the elements studied appear to be so few, it is out of these that the infinite variety of form in Nature is built up; and Art itself, the last and highest product of Nature.

The simplest natural objects to study from the draughtsman's point of view will be such as most nearly approximate to the two dimensions in which he himself works—length and breadth. Of course, even a leaf, a feather and a butterfly's wing have thickness, but it is so slight as to be generally negligible, being frequently less than that of the line used in demarcation.

One of the first things noticeable in natural objects is that, while they appear to be made to pattern, it is very rare to find two objects exactly alike, except in general plan. Symmetry is there in the main, but with minute differences and divergences; in the case of plant form, for instance, according to conditions of soil, climate, or other accidents.

It will be seen in the study of natural form how generally the curvature is made up on some such principle as that upon which the circle was built up, of a multitude of sides rather than from a simple single curve.

The simplest form of leaf may, to a hasty glance, appear to be composed of a straight and stiff midrib in-



In Nature there is generally to be found under the main rhythmical curve a minor recurrent rhythm, full of incident and variation. The mathematical simplicity of the rainbow is not frequently met with.

tersecting the arcs of two circles, but upon closer observation many varieties in the curvature are likely to appear. The midrib itself may be composed of a series of slight curves, and the outline of the leaf full of minor unexpected oddities that in sum may constitute its chief beauty.

To find an apparently rotund and sweeping curve made up of lines almost straight at unexpected angles, or a line that is almost straight full of delicate incident, is the best corrective to a hand inclined to dominate a drawing with the too glib flourishes of the writing or drawing master, which contain no pause and no variety, becoming mechanical and machine-like in their accuracy with no element of surprise. Nature rarely yields to such; she generally dwells lovingly upon her line, with many a slight pause and turn; nor is the line often flabby or relaxed or turgid, but firm and strenuous. Even the most luscious peach or plum has considerable flattenings and varieties in its curvature, and the pulpiest orange may be far from round. Nature, as artist, appears to work much more by hand than by machinery; for in spite of her power and the perpetual repetition of kinds and seasons, she does not turn out an eternal series of exact replicas, but each is subject to accidents of time and place, like those of any other artist. Her works are the result of many experiments, trials and compromises between apparently conflicting laws and interests. Frequently it is possible to remark how the main intention has partially miscarried or been entirely frustrated because her elbow has been jogged. Evolution seems to consist in the making and discarding of an interminable succession of sketches and studies, each one of which might be described as a masterpiece until the next comes along, and the sketch for it is destroyed.

While it is frequently necessary that the artist should simplify or summarize the works of Nature, presenting us with the central essential fact rather than refining it away by an over-emphasis upon variations and subtleties, these should not be overlooked.

While wishing to insist on a close study of Nature, it is not intended to inculcate a photographic or imitative reproduction of the external facts observed. Equally with Nature, Art and its purposes and conventions must be taken into account, with the necessity for selection from the mass, the choice of the right means to employ, in order to present the selection when made, and the method of that presentation either simple or complex.

If the laws underlying appearances be studied the variety of Nature will be better appreciated, and consequently better displayed by the artist when he deals with appearances for their own sake. If appearance only be studied, the artist becomes dependent upon things external to himself, and is unlikely to arrive at the power to combine or compose unlike things into a harmonious whole. The laws of growth and construction, the "how" of things, are at least as important to the artist as the appearances of them under given conditions or accidents of light or position, interesting as these particulars may be: indeed to the draughtsman logical construction takes a higher place than accuracy of appearance.

It is the degree and number of divergences from the norm or "average," if these can be established, that yields not only beauty but interest and character to all things. Bacon, in his essay on Beauty, insists upon a "degree of strangeness in the proportions." The "perfect," if there is such a thing, is hardly beautiful or interesting. A "perfect

gentleman " or " perfect lady " is called for by a crude or inexperienced mind in a novelette, but not in Shakespeare, who shows us divergence rather than conformity with a stock specimen, the interest generally deepening with the extent of the divergence, while yet the main curve, the credibility, of the character, is maintained.

There are also several natural forms, such as certain kinds of grass and reeds, so slender and graceful that they may frequently be represented by the use of a single rather than a double line. Distant trees may sometimes be better expressed by such means.

In most cases of growing plants and trees, it is the best plan to draw them from the ground upwards, in order to get the sense of life, growth and spring into the line.

It looks as though Turner drew his trees in this manner, for they always appear to be growing out of the earth, and not hung by their leaves out of the sky, or just stuck into the ground without roots, like telegraph poles, as so often they appear in pictures.

Landscape painters are so preoccupied with problems of mass, light, air, tone, or colour, that their drawing is sometimes lifeless and stiff, since they draw the inessential shape rather than the necessary construction.

Like Turner, the Japanese give invariably this sense of life and growth by the vivacity of their draughtsmanship, which never appears as though it had been " blocked out " in mass, or even thought of in that way, but to be based upon the principles of construction and growth.

The use of the brush-tip for line drawing is also to be taken into account as the frequently deciding factor in the Japanese line; as the flexibility of the brush demands constant alertness of handling and consequent vivacity of attention on the part of the artist.

V

THE THIRD AND FOURTH DIMENSIONS

APART from the more limited view of perspective as the projection of solid objects upon a plane surface, it may properly be defined as being the expression of the relative position of the observer to the object observed. With every movement on the part of one or the other, change takes place in this relation, so that it is generally thought necessary for the artist to take up or imagine a fixed moment in time and a fixed position in space by which all parts of his picture are related one to another, and to himself. Time is nothing but movement, whereas the pictorial conception most usually adopted is static. In early days many of these relations were either overlooked or ignored, and it cannot be denied that the introduction of the expression of the third dimension into pictorial art, while adding another string to the bow of the artist, has misled him as frequently as not rather to a display of science than of art, while his task has become more complex with the added complexity of the means placed at his disposal.

A scientific attempt at truth to appearances took the place of a quite happy understanding that Art was a convention in which symbols and not realities were employed; but with the introduction of a close realism, so close as even to attempt deceptiveness of appearance, the symbol began to lose its force.

The world became tired of the perfected conventions

of pattern, and welcomed each step forward in the direction of naturalness of appearance, until every competent art student could, if he would, paint a bunch of grapes like that (probably fabled and certainly horrible) bunch by Zeuxis that took in the fly, and has taken in countless people; like flies, as to the proper functions of Art ever since.

However, that was the way of the world, and the way of the artist in it. Increasing realism and naturalism—"copyism" we may call it, if we may coin an ugly word—ran through all the arts, till it was difficult to distinguish painting from a photograph, or stage or novel dialogue from a gramophone record of a conversation.

The true convention of Art, apart from the convention temporarily (*i. e.* fashionably) uppermost, was in danger of being lost. Even "Impressionism," that staid effort to reassert the personality of the artist, while endeavouring with considerable success to absorb all that was new in the way of scientific analysis of light and movement, was regarded at first as revolutionary; but this was but a beginning. The public is now so familiar with Impressionism that it is looked upon as "academic."

Even "Post-Impressionism" is old-fashioned, and Cubism, Vorticism, Expressionism and the other -isms are chasing after it. All of these contain varying degrees of sincerity and truth, and will survive in accordance with what amount they possess. An exhibition of works by the Italian Futurists held in London some years ago was interesting, and (how they would hate it!) "highly respectable," as being firmly stood, apart from a good deal of frothy anarchistic nonsense, upon a quite bourgeois scientific basis, which we may examine under this head of perspective.

— A man in a field may see a brook in front of him.

“Absolutely charming landscape,” he ejaculates. “If anything can be more absolutely beautiful I would go a long way to see it.” Looking in the other direction he sees a fiery bull charging at him. Turning again to the brook, he starts to run, with a mental image of a snorting bull, based upon a fleeting optical view rapidly enlarging in his mind, and a brook simultaneously occupying a larger and larger share of his field of optical vision.

“Can I jump the beautiful brook before the horrid bull butts in behind?” is the artist’s thought as he runs, love and hatred battling in his mind.

Here are two forms of vivid and simultaneous vision, each intensified by emotion to its utmost stretch.

How is such a problem to be tackled by the artist if, of course, it be regarded as proper subject-matter for pictorial Art at all? Must he disregard his own self-consciousness?

The brook that at one moment was beautiful will be hateful until he is upon the other side of it. Its width means exactly opposite things according to the point and moment of view, though the brook is practically constant, while the bull is rapidly becoming an ogre filling not only the background of his thought, but changing, as we see, the entire emotional outlook upon the scene presented to the eye.

Is the artist then to paint the brook or the bull separately without reference or relation to his emotional stress when viewing them, or shall he endeavour to present not only what the eye sees in front, but the equally vivid content of his mind? He can’t, of course, do it then and there, but when he remembers his emotion in tranquillity in his studio ——?

A cinematograph might, of course, as a detached spectator, produce a highly exciting film of such a subject

in its physical aspects, which also lend themselves admirably to the art of Mr. Frank Reynolds of *Punch*.

An old tapestry designer might give a series of incidents as happening simultaneously upon the field of his design, but even this will be from a detached spectator's point of view.

The painter or the critic who maintains that the artist's business is only with what he sees with his eyes, will insist, of course, upon his painting either the bull or the brook at a chosen moment of optical vision.

Blake might externalize himself and present his emanation as pursued by an ogre across asphodel and the rivers of "this green and pleasant land."

Yet it may be said that while all of these methods are true in part, none of them yields the exact and most exciting record of a most exciting moment.

The Futurist endeavours to solve the problem by superposing one picture upon another in such a way that the sum of impressions shall appear at a glance, and in this he is entirely logical. The only question is whether he is æsthetically justified.

He is not content with the fixed point of view either in time or place upon which the hitherto laws of perspective are based, but demands a new and complex convention for the expression of his complex emotion in the presence of external facts.

If for a moment we will imagine that instead of movable eyes in a movable head, by which we are enabled to see all round our standpoint in successive moments of time, we had eyes all round our heads recording simultaneously in the brain, we should readily enough accept the Futurist attitude as an almost normal method of presentation.

It may be, however, sometimes even more complex than this, since there is no reason why, if more than a single point of view be introduced into a picture, successive or separated instants of time should not be insisted upon.

By such means, not only those images presented to the eye at a given moment, but those present to the mind either in the memory, the sense of the past, or its combining and so forecasting faculty, *i. e.* the sense of the future, may become relevant to the pictorial statement; and we arrive at an expression which, though extremely complex, may approach more nearly to the absolute than the mere statement of the visible at a given moment from a given point of view.

There is bound to be a great overlapping of realism and idealism in such work—the expression at once of the present, the past and the future—of fact and idea, in which, while pictorial unity, as it has been generally understood, is hard to find, a higher unity may eventually be achieved, a perspective of the whole mind—of time as well as space, and not of the outward-looking eye alone.

Crude attempts in this direction have comically enough been highly popular in England; the Futurist has only endeavoured to bring about in a scientific manner a synthesis such as Phiz produced when he drew Tom Pinch dreaming his dreams at the organ—and here is the meeting point of the extremes of Italian scientific art and naively inartistic British sentimentality!

It is probable that the artists had arrived in their travels at a conception of the value of relativity before the scientists; but this is as it should be, since it is their own relation to things seen that has concerned them. The nearest approach to certainty of statement is that

of our own relation or reaction to something else, and it is the artist who has been at work on this from time immemorial—to find and fix himself and his place in the general flux, and to immortalize his moment.

In connection with the fixed point in space and time, as regards the artistic outlook, the writer may be permitted to recall a summer of long ago when painting as a boy with his father at Normanhurst, near Battle. The father was working upon a large canvas of a panoramic view from the terrace, while the boy had the run of the stables, where the horses interested him much more than the landscape.

His father's methods of work were extremely precise; he outlined the entire panorama topographically upon the canvas, including every hill and tree right away into the distance, and the boy assisted in setting out the perspective of the tiles upon the terrace and drawing the flower-tubs in the foreground. When this was complete the painting began, and was carried through from day to day with the same careful and minute accuracy until the summer holiday was over.

While he was occupying himself in the identification of Telham Hill in sunshine or under a cloud, and doubtless thinking "across this hill the Normans advanced, while in that valley ——" and so on, tracing out the progress of the Battle of Hastings as the soldier in him would—"then Harold fell," the youngster was drawing or painting away at horses.

There was a pony, "Killeauea," named after the volcano by the first Lady Brassey, that struck his fancy; and he was making a careful study of it, held steadily facing him by a pair of pillar reins, so that its head was fairly close up, and the rest foreshortened. He was no

end pleased with the result until the stud-groom looked over his shoulder. "Yes—the 'ead's all right, but where's 'is barrel, sir?"

He explained foreshortening to the groom as well as he could. "You can't see any more of it than I've painted if you look from here," was as nearly convincing an argument as he could muster. "That may be; but you come and look round 'ere; there it is right enough!" and he insisted on proving that there it was round there right enough.

From this was eventually deduced the reason why Herring and other horse painters chose the broadside view, as offering less of a puzzle to the "horse sense" of their patrons. Though why the question as to "where's 'is chest?" never seems to have occurred to them, does not appear even now. It is true that the young artist felt humiliated in that he was unable to oblige the groom with what he so reasonably clamoured for. He would have done so if he had known how. But his father and all he stood for, and all tradition behind him, would have thought him mad.

Two points of view were here called for.

As to the moment of time. His father's picture went on, with continual daily accuracy, while the green of summer was rapidly changing to the brown and yellow of autumn. If it were possible to remove it strip by strip, underneath the uppermost surface might be found layer after layer recording such change as it became noticeable, like a painted diary of the vanished summer. How many pictures of lovingly recorded beauty lie under the topmost skin of the still unfinished picture of early autumn I do not know, but there is a great deal of my father buried in it. He was after something which his

conscientious pursuance of a method would not give him. Time beat him, or rather his method, daily on land, and hourly in the sky.

These two examples may serve to show what the Futurist apparently means when he speaks of "divisionism."

To show the perspective in space of the front view of the horse at the same time and on the same canvas as his consciousness of the length of his barrel is put on record, presents a nice problem in pictorial statement; and to present a picture of the changing colour of a season as it presents itself in a perspective of time upon a single canvas amounts to much the same. That such a problem in synthesis admits of a pictorial solution I am not prepared to deny; and, since the mind of the stud-groom required the barrel as well as the chest of the pony which was offered, and my father's method required the record of the changing time and season, it appears possible that the art of the "Futurist" will only be "filling a long-felt want" as soon as its terms of "divisionism" become generally understood.

In the meantime most will plant their cabbages, and cultivate their gardens, content to be old-fashioned and to speak the old language—like Stacey Marks, the old R.A., painter of monks and parrots, who went down on his knees night and morning, to thank God he was born before everybody was so clever!

At present, a return to simplicity rather than an advance to complexity of statement seems to be most called for. Even a return to a use of abstract symbols is acceptable, not only among thinking artists, but by the most thoughtless public. An examination of the popular prints and ladies' journals of France, England

and America shows that what in the 'nineties would have raised shrieks of horror at its eccentricity, almost its immorality, is now the weekly fare of the fashionable woman, even of the "flapper." In these journals we find the illustrated pages equally divided between photography on the one hand, and an abstract method of ultra-conventionalized drawing on the other, in which appearances are entirely disregarded.

Perspective in the sense of "projection," both linear and aerial, is deliberately eliminated, even from the presentation of every-day scenes of fashionable life. Even the single point of view is done away with, and a flat elevation is given of an abstraction of a fashionable crowd, on the same principle as that on which an architect bases his drawing of the façade of a town-hall. Not only this, but the drawing appears to be carried out with the architect's instruments of compasses and ruling pen with the aid of T and set squares.

In order, therefore, to understand the multiple points of view, it is necessary to examine the single aspect with which every student of perspective is already familiar.

Elementary as it may appear to many minds, it will be as well to state the simple theory upon which most pictorial art has been based since the time of Ucello.

VI

THE PICTURE PLANE

IN any work of pictorial art purporting to be based upon unity of time and place, perspective must play a large part, and a sense of perspective having become general, any ignorant breach of its laws will cause misunderstanding and consequent offence to the spectator.

The theory upon which is based all such pictorial art as deals with the optical appearance of objects is that a picture is a window through which the spectator looks, and beyond the plane or glass of which all that is represented appears.

The fixing of the distance from the spectator of this imaginary plane is purely arbitrary; but while this is so, it is not implied that it is a matter requiring no consideration, little as it generally gets, and unscientifically as it is generally regarded. In practice, it is more often "felt for" than "thought for" by the artist; but if the principle of the picture plane be thoroughly grasped a great deal of fumbling and the cause of many failures unexplainable except by a misconception or disregard of the principle may be avoided.

If the means used be a point, whether etching needle, pencil, miniature brush, or pen, which have to be handled by the fingers rather than by the arm, and must be viewed at close quarters on account of the fineness of the work, the plane must be imagined as relatively near the eye, so that the drawing shall appear while in

progress as nearly as possible the same size as the object drawn.

If a portrait approximately life-size is to be attempted, the canvas (which stands for the picture plane) should be placed so near the sitter that it will nearly approximate the life in actual measurement.

This principle of the picture plane is frequently overlooked in life schools; in some places the students, both those close up to and those at a distance from the model, being indiscriminately expected to fill a half imperial or imperial sheet.

If the fiction of the fixed point of view for the point drawings and the so-called "life-size" portrait be maintained, the etching, pencil, and pen drawings and painting should all appear of the same size as the object depicted at the distance at which they were drawn, and therefore the same size as each other, since each is supposed to represent a section at right angles to the axis of a cone or pencil of rays from the eye to the object, only differing from each other by the means of expression and the distance at which the section is taken.

Moreover, the eye is perpetually being differently adjusted according to the distance or nearness of an object; so that it follows that if the fiction of a single point in time, *i. e.* moment of observation, is to be maintained, objects in order to be kept in relation in the picture must be drawn or painted in such a manner as to suggest this relation.

If a near object be shown in focus, an object at a distance will be blurred, and *vice versa*.

Again, the angle of conscious vision is very wide, extending even to a straight line at right angles to its direction. It is possibly greater with some people. This

may be tested by holding the arms extended right and left horizontally and as far back as possible, and bringing them slowly forward, to discover at what point the eyes become conscious of their presence simultaneously.

(This is a matter of some difficulty to test quite honestly !)

It will be seen that there is a large space of partial vision, not in this case quite dependent upon the focus, but upon the direction of the eyes. In this space objects could only be pictorially represented as a blur, if the fiction of a fixed direction of the eyes is to be maintained.

From this two things may be deduced.

First, that it is unwise to set up the picture plane so as to yield undue prominence to objects of relatively small interest to the main subject upon which the attention is naturally focussed; but that such objects, unless their pattern be of value in the scheme, should be dismissed as irrelevant, which from their nearness occupy too great a space on the field of vision. They should therefore be treated as non-existent for those pictorial purposes which are based upon this convention.

Second, that it is equally unwise to extend the picture to include more than that central cone of rays from the eye in which objects are clearly seen at a glance, unless the enlargement of the angle of vision adds beauty or interest otherwise unobtainable to the central field.

In any case in fixing the picture plane these considerations should not be overlooked.

I remember about 1890 making a drawing in which the endeavour was to represent all that came within the field of vision at a given moment. This naturally included the right hand, and the drawing itself upon which I was engaged. Even my knees came into the picture, and

it is probable that the blurred rim of eyeglasses, the cord, and parts of a reduplicated nose were suggested. This broke both the suggestions I have just put forward for the wise course to pursue, since not only was it necessary frequently to change the focus of the eyes, but also their direction, in order to see clearly the different objects introduced into the drawing, the picture plane being fixed too near, and the angle of vision being too wide.

The attempt had a certain interest and amusement, but I never repeated it, or saw the same thing tried until recently exactly the same thing was done by a student at Goldsmiths' College. Such are extreme cases of apparently logical conclusions; but the more extreme the case, the more readily is the error detected. Any photographer will understand the force of the above suggestions.

The picture plane, it need hardly be said, is in general taken as being at right angles to the direction of vision, and as being truly "plane," though, of course, in decorative or panoramic work curved or angular surfaces may have to be dealt with, involving special considerations which lie outside the scope of our present enquiry. What these considerations involve may, however, be indicated by suggesting that the reader should examine his reflection in a brightly polished spoon or dish-cover, or by sitting close up, and much to one side of the screen at a kinema show.

Ford Madox Brown in "Behold your son, sir!" has blended direct vision with a curved reflection in such a manner as to give the dignity of the result, but to subtract all the dignity from fatherhood itself in so curiously mixed a way, as to give at once both the sublime and the ridiculous; neither, perhaps, quite true, and in sum perhaps even less so. The reflection upon a spherical mirror shows

the distorted figure of an absurd little man rushing happily forward, while a nurse or midwife stands like a Madonna with a child in her arms. It is two pictures in one rather than one picture—an expression of two detached visual impressions at detached moments of time, in two conventions, yet in a way forecasting the attitude of the Futurists in Art, which is dealt with elsewhere.

Let us imagine now that we are seated in the middle of a long and simple rectangular room, facing an end wall. Say that it is entirely unfurnished but for the chair we sit on. The first thing noticeable is the convergence of all the parallel lines of the right and left hand walls, and the floor boards towards an unseen centre. What is this centre?

If we rise from our chair the floor space appears larger, and the ceiling correspondingly diminishes, though the end wall does not appear to change. The lines of floor and ceiling nevertheless converge in the same manner to a centre.

If now we step right or left still looking direct at the end wall, the centre to which the lines converge will move with us.

This convergence or divergence from the vanishing point has a curious effect upon the mind. From the apparent widening of the floor boards and ceiling and the heightening of the walls, as they approach nearer to our position, it is natural to feel that behind our heads they would continue to enlarge, and that if we could only turn suddenly enough, we might catch the walls and mantelpiece at the end in the very act of dwindling in size to their eventual appearance.

It is a pity that Addison, composing his articles in the long room at Holland House as he paced from the bottle

of port on one mantelpiece to the bottle of port on the other, does not appear to have paid attention to this sympathetically shifting quality of inanimate things, or we might have had a charming essay upon it.

Let us now imagine our picture plane set up in this room, like a glass screen, to divide the part we wish to represent from that in which we stand, as the curtain divides the stage from the auditorium.

It would be easy enough to trace off upon this screen, window or picture plane the lines of the cornice, skirting and floor boards, and the rectangle of the end wall, if they did not themselves appear to move with every movement of our own, up, down, or right and left.

We have therefore to fix upon a point of view, and its height above the floor, or ground level; its distance from the picture plane, and its direction, or the centre of vision. This last is taken in all ordinary practice as being at right angles to the picture plane.

Holbein, in his picture of "The Ambassadors" (National Gallery), has used two picture planes—one at right angles for the main subject, and another, at an acute angle, for the representation of the skull that makes so puzzling an appearance in the lower portion. Why he did this it is difficult to conjecture, unless to satisfy some whim on the part of his sitters, as the trend of his mind seems to have been all for clarity and simplicity of statement, subtle though it was. I doubt his being more than an accomplice in this matter, since he is the last person to be suspected of being a *mystificateur* or practical joker. He may have been giving a practical exposition of perspective to a couple of minds kind enough to be curious in such matters.

If the direction of the eye be parallel with the length of the room and the floor boards, the unseen point

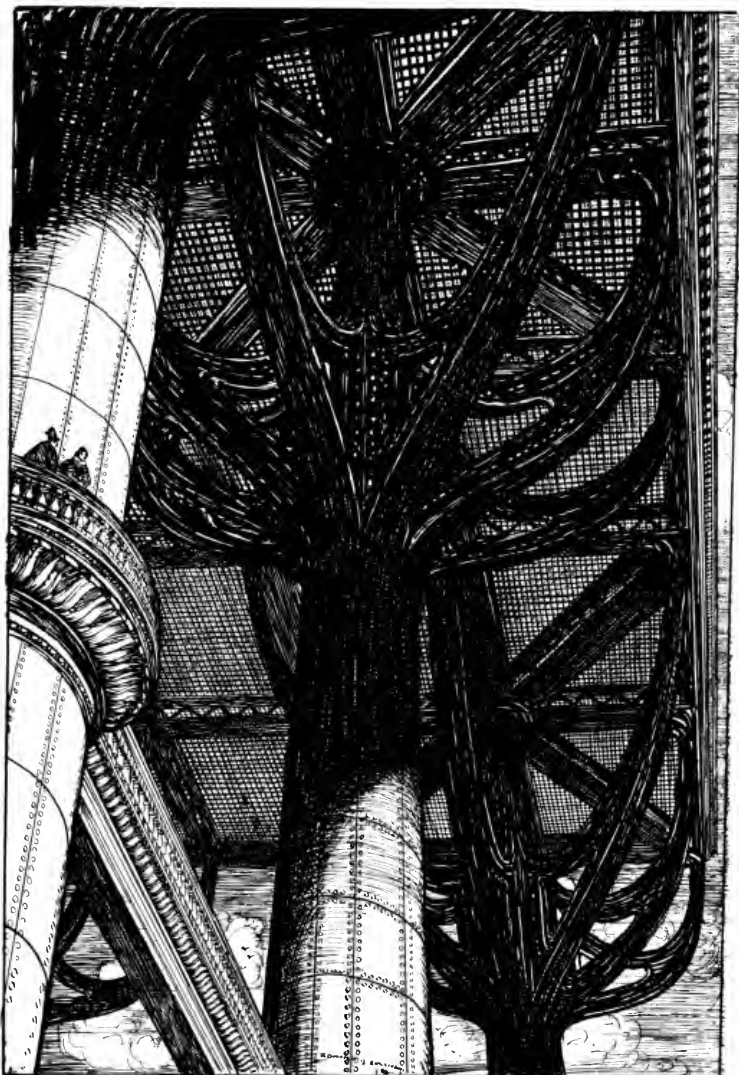
towards which they and all lines parallel to them appear to converge will correspond with the point we now imagine ourselves as marking upon the picture plane to represent the centre of vision. If lines be now drawn radiating from this point to the edge of the picture plane on the floor to every joint between the floor boards, we shall have a perspective view of a floor stretching away to the horizon, or level of sight, where all horizontal planes vanish. The floor, of course, is interrupted by the rectangle of the end wall, which will cut off the lines horizontally, as also the apparently converging lines of the ceiling and side walls in the same manner.

Any line, straight or curved, in any plane parallel with the picture plane will be represented at its true angle; so that all vertical lines will appear vertical, since they are conceivably in a plane parallel to the picture.

This may be well observed if we place pictures in rectangular frames flat upon the side and end walls.

All the uprights of all the frames will appear upright; but the horizontals of the frames on the side walls will converge to the vanishing point of the walls. These pictures will appear "foreshortened"; sometimes with strange results in proportion as regards the content of the pictures; whereas the horizontals of the frames and the pictures themselves upon the end wall will appear as they were intended to do by the artist, all the lines, no matter in what direction, appearing correct in length and angle.

The size of appearance in pictures on the end walls will be conditioned by the distance of the wall from the spectator, but the proportions will remain unaltered, the whole picture appearing to enlarge or diminish at once as we approach or recede.

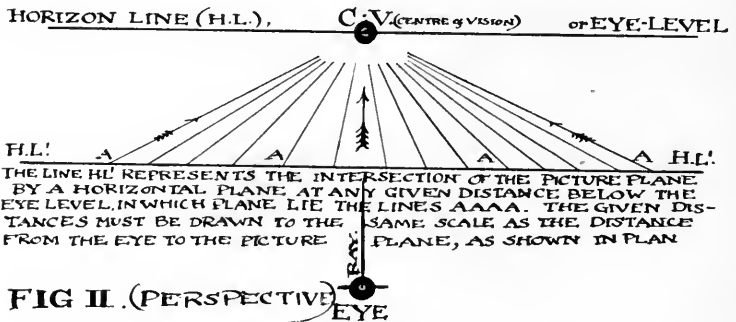
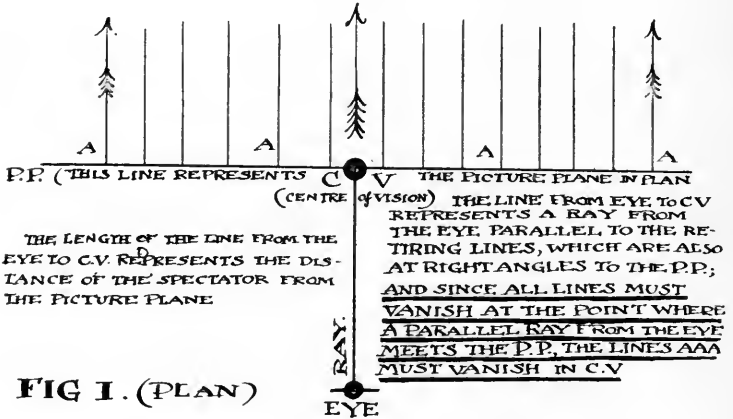


Perspective used to convey the idea of height as seen looking upwards.

VII

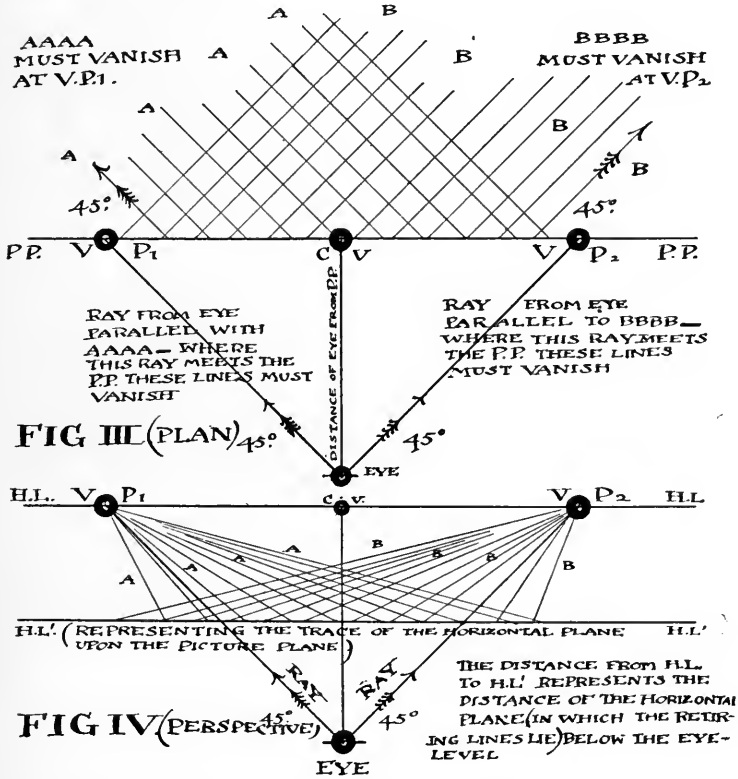
FORMAL PERSPECTIVE

THERE are many treatises upon perspective, and it is not proposed to go deeply into the matter of projection



but to dwell particularly on the subject of "measuring points" upon which so much of the theory and practice of perspective depends.

The most important rule in perspective—it might be called the only rule, since from it all others may be deduced—is that the *vanishing point of any line coincides with that point at which a parallel ray from the eye meets the picture plane.*



For instance, all lines at right angles to the picture plane will appear to converge towards and vanish in the Centre of Vision (C.V.), which is the point at which a parallel ray from the eye pierces the picture plane.

Similarly, a line at 30° , 45° , 60° , 70° or any other angle will appear to converge towards and vanish where a ray

from the eye at a corresponding angle meets the picture plane.

To find any point C at any given distance from the spectator the line of intersection H.L.' of a horizontal plane with the picture plane having been drawn at the given distance of C above or below the eye, a line is drawn from B at the given distance right or left of the spectator to vanish in the C.V. This line represents the perspective of a line at right angles to the picture plane; consequently the point required must lie somewhere upon this line; and the angle made by this line B.C.V., and the line H.L.' is a perspective view of a right angle.

The required distance beyond the picture plane is now set off upon H.L.' to right or left of B, which is the apex of the right angle.

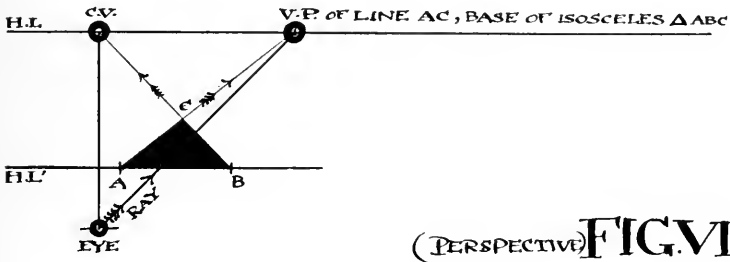
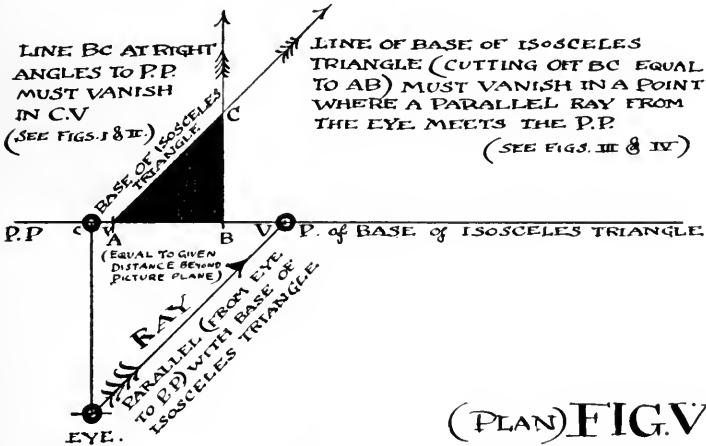
If a line from this point be now found that shall form the perspective base of an isosceles triangle, one side AB and one angle ABC.V. of which we already have, this line will cut off at its point of intersection with the retiring line BC.V. a distance equivalent to the side AB which lies in the ground line, and so give the point required at C.

The rule being that the vanishing point of any line coincides with that point at which a parallel ray from the eye meets the picture plane, and since the base of a right-angled isosceles triangle makes an angle of 45° with the other two sides, the vanishing point of the base will be at 45° from the eye.

This point is found by setting off a point V.P. upon the horizon at a distance equal to that between the Centre of Vision and the eye, thus forming a right-angled isosceles triangle EYE, C.V., V.P. The point V.P. is the point at which a horizontal ray from the eye at 45° is projected to the picture plane; and in which all parallel lines will vanish.

A line from this point to the point A already marked

upon the ground at the required distance from B the apex of the triangle, will include the base of the isosceles triangle required, and will cut off upon the retiring line at the point of intersection C a distance equal to the side of the



triangle lying upon H.L'. The point C is the point required to be found.

It is a convenience, when once this principle is understood, to call the vanishing point of the base of such an imaginary isosceles triangle the Measuring Point of the given line and of all lines parallel to it.

Exactly the same principles are involved in the finding of any point in any horizontal line, although its vanishing point does not fall in the Centre of Vision.

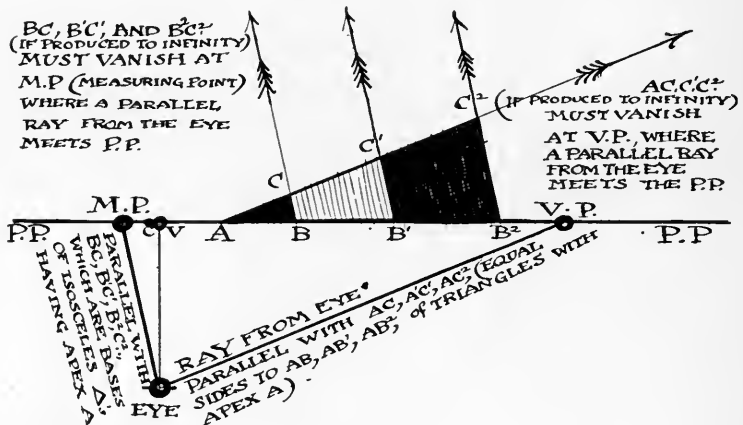


FIG VII (PLAN)

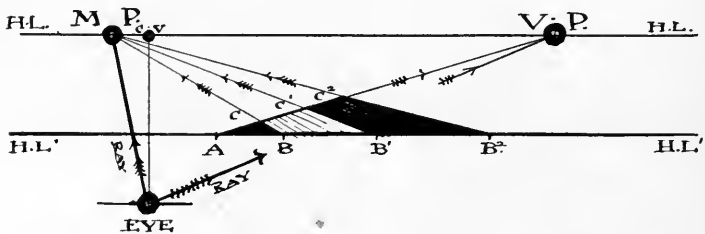


FIG VIII (PERSPECTIVE)

The points of intersection made by the given line with the horizon and H.L.' being found, the vanishing point of the base of the isosceles triangle, which will be the Measuring Point, is found by setting off along the horizon a distance from the vanishing point of the given line equal to its own from the eye.

Any two lines from this Measuring Point intersecting the given line and produced to meet H.L.' will mark off there the true dimensions of the perspective portion of the given line included between the points of intersection; or, *per contra*, any two lines drawn from H.L.' to the Measuring Point and intersecting the given line will measure off upon it the perspective equivalent of the real distance marked upon H.L.'

A plane vanishes not in a point but in a line; as in the case of the horizontal plane, which, should it be a plane exactly opposite the eye, appears only as a line.

All planes parallel to each other appear to vanish in the same line.

Vertical planes at right angles to the picture plane, *i. e.* parallel with the line of vision, will vanish in a vertical line drawn through the Centre of Vision.

Vertical planes at oblique angles to the picture plane will vanish in a vertical line drawn through the horizon at the vanishing point of their trace upon the ground.

A retiring plane whose trace upon the picture plane is horizontal, or if upon the ground is parallel with the picture plane will vanish in a horizontal line drawn through the point at which a parallel ray from the eye meets the picture plane.

A retiring plane whose trace upon the ground is oblique to the picture plane will vanish in a line drawn through the vanishing point of the trace at the angle made by the plane.

Vanishing points and measuring points are found upon these vanishing lines exactly as they are found upon the horizon.

If these few principles are once thoroughly grasped the application of them will be found simple.

VIII

DRAWING OF SOLID OBJECTS

Solid Objects in Line.

As soon as the question of expressing the relation of the spectator towards a given object by means of line crops up, we have to think in terms of finite space and concrete lines.

The force of line, therefore, should bear some relation to the space occupied, and will naturally be greater in proportion to the space, and particularly to the distance from which the drawing is intended to be viewed, in order to make it "carry" sufficiently to be readable. The best distance to choose will generally be that at which the objects drawn will appear to the spectator about their natural size.

A frequent error is to imagine that a "fine" (*i.e.* a thin) line has some virtue of delicacy in itself; or, on the other hand, that a thick line has virtuous qualities of "boldness" or "strength" *quâ* thick line; or, on the other hand, being "coarse" it is inferior artistically to a "fine" one. Nothing is farther from the truth, since these qualities are entirely relative to the space in which the lines are drawn.

The next point to which attention may be paid is as to whether the outline is to be regarded as being outside the object, or whether the middle of its thickness is to

represent the exact division between the object and surrounding space, or if the whole line is to be regarded as



FROM "A STORY OF THE DAYS TO COME," BY H. G. WELLS

In spite of the difference of subject, the method of treatment is much the same as in the drawing of Lady Flora, though the "noun" line is rendered deliberately "brutal," as well as the character represented by it. (Pens—"Waverley" and Gillott's 303.)

belonging to the object itself. Minute as the consideration may appear, it yet has much importance in practice.

Circumstances will decide the best employment of line in any or all of these ways.

If it is desired to represent a white object, even though no dark background be introduced, it will be well to let the outline belong rather to the surrounding space than



1

be allowed to steal from the bulk of the object itself: *e.g.* in drawing the moon, an electric lamp, an egg or a white cast, the line should be regarded as being outside the object. The reverse will hold good in the drawing of a dark object upon a light ground, *e.g.* a ^{new}nigger or a top hat. Compare Figs. 1 and 5.

Where light and shade are introduced, even although the background be left unshaded, this will in general hold good.

An error is frequently made, as in Fig. 4, in the represen-



2



3

Note that the force of line employed is stronger upon the light side of the object, but that it belongs to the background. On the shadow side it belongs to the object. The darkest shade falls nearest to the main source of light.

tation of light objects from a lack of appreciation of these simple principles. It being imagined that a light object will appear light if it is represented with a light outline, a "fine" line is set down on the light side of an object, and a "bold" one on the shaded side. This is doubly wrong.

If a bold line be set down *on the outside* of a white object, it will summarize the background as being darker than the object, and the included space will appear more



4

A common error. Note how the dark side appears to come forward, and the light retires.

brilliant to the mind by force of the contrast; on the shaded side the darkest part of the object will be that which projects most towards the source of light (Figs. 2 and 3), and not at the limit of the form, which will most probably be in receipt of more or less reflection. If the outline on the darkened side of an object be darker than the included shade, this line will appear to come forward sharply out of its place and prevent the "turn" of the object, by emphasizing its edge. Many drawings on this account are

made to look thin, papery, harsh, tinny, or cast-iron, according to the degree of the defect.

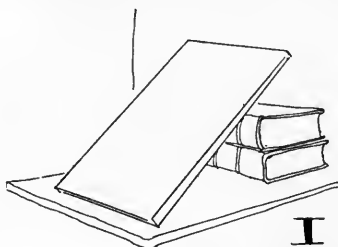
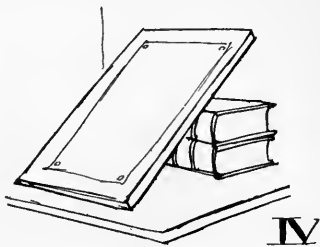
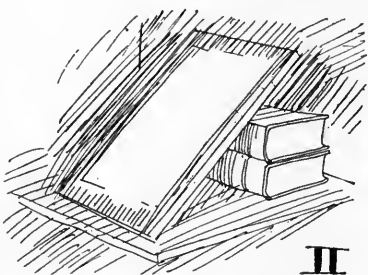
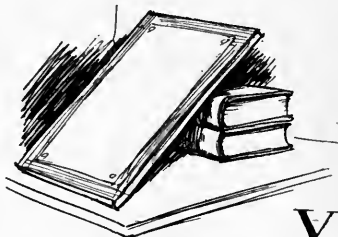
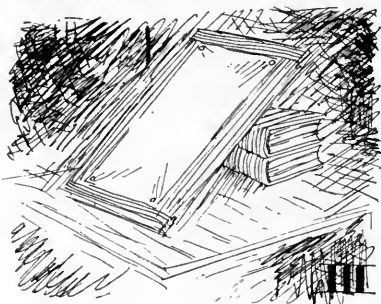
Holbein's line, where the drawing is of a head in a flat



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The outline of a dark object upon a light ground belongs to the object. light without background, belongs as nearly as possible to the object, which is logically correct, as the retiring planes are in receipt of less light than those at right angles to the light. The line, therefore, belongs to the darker object.

Where light objects are represented upon a dark background these considerations become very important, increasingly so in proportion to the smallness of the object, If there be strong lines employed in the shading of the

**I****IV****II****V****III****VI**

background with correspondingly wide spaces of white between the lines, it may even happen that the technique employed to suggest an intangible darkness overpowers the lines employed as outline to the solid, and even the white space which they include, as in Figs. I, II and III.



Forcible feeble; the emphasis being squandered on inessentials while the essentials are understated.



Lack of unity; the essentials being suggestively treated and the secondaries made out with precision.



Light air and the character of objects arrived at by suggestion.



Fuller range of colour employed than in No. 3, with a more "matter of fact" result, and greater solidity.

Solid Objects in Silhouette.

Allied in some ways to pure outline is the expression of form by means of pure silhouette.

This may be summarized as the simplest way of expressing the bulk and shape of an object in terms of contrasting



Pure Line.

spaces of light and dark without modelling or other qualification of the included surface.

It is obvious that, as in an unqualified outline, it will be essential to choose that length and breadth for representation which are most characteristic of the object when expressed in such limited terms. Unless, for instance, a

man have extraordinary ears, it is likely that his profile will yield the most characteristic result. The front and back of the head being asymmetrical, and both of these being shown in profile, will give greater interest than the oval of the face viewed from the front. The slope of the



White appears to expand.

forehead, the type and proportions of nose, mouth and chin, with the angles of the top and back of the skull, are all expressible, while none of these can be shown either in silhouette or outline taken from a front or back view, characteristic though such may be in particular cases.

Light having a tendency to expand, a white silhouette upon a black ground will appear greater in mass than

black upon white. This is not necessarily an advantage in itself, but it should be borne in mind.

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We now come to the consideration of lines used not singly as an outline, but grouped together, either for the



A black silhouette appears smaller than a white one.

modelling or qualification of a surface, or in order to form a tone.

Certain lines, when used to express form included within an outline, may partake much of the quality of this line, being frequently of an importance equal to or greater than the contour itself. In portraiture, for example, the spacing and drawing of the eyes, nose and

mouth in a front view may be made to yield more character than the boundaries of the face itself. These lines are indeed outlines of form—primaries, in short—and hardly fall into the category of grouped or surface lines it is now our purpose to discuss.

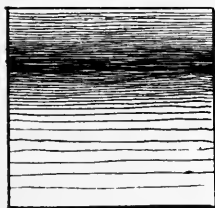


Pure line of varying thickness.

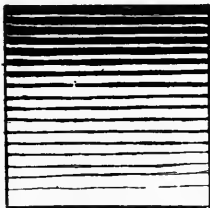
Any constructive line may be considered as a “ noun ” or “ substantive ”; while lines used for qualifying a surface, or for veiling it in tone, may be looked on as “ adjectives.”

The simplest method of grouping or massing lines is by arranging them as parallels in any direction. Alternating as they will with white spaces between, the spaces

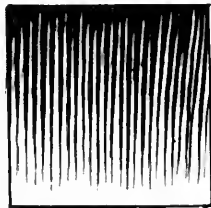
take on the character of white lines, so that the black lines and the white spaces will, if rightly proportioned, combine



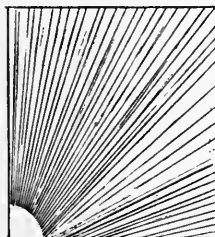
Gradation by spacing of lines of equal thickness.



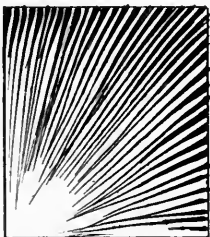
Gradation by lines of unequal thickness.



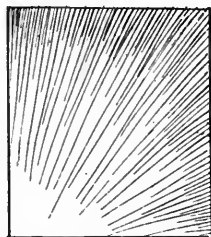
Parallel lines, thick at one end, and thin at the other.



Gradation by radiation of lines of equal thickness; the darkest falls nearest the light.



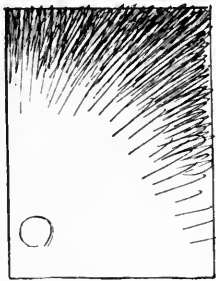
Gradation by means of radiating lines fine at one end and thick at the other.



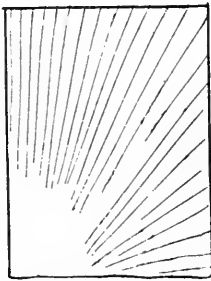
Gradation by means of radiation and interlining.



In a large space a new series of lines may be an advantage.



Gradation may be suggested or implied.



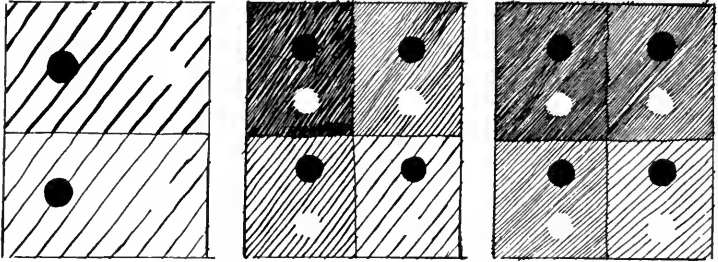
Lines too far apart may appear as a pattern rather than as a gradation.

A SUMMARY OF THE MEANS OF GRADATION IN LINE.

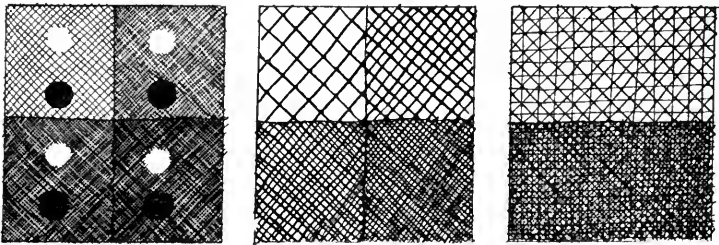
to produce the effect upon the eye of the grey tone. This tone will vary in depth in accordance with the

thickness of the series of black lines in proportion to the white spaces left between.

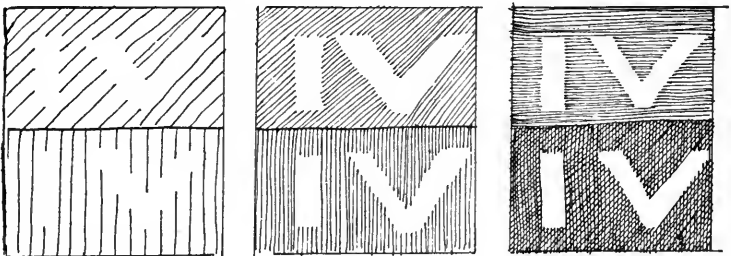
These lines may be placed so far apart relative to their length and the space occupied that they hardly appear as



Studies in proportion of the number and thickness of lines to a given space



and their contrasting values, in single series of parallel lines and cross-hatched.



In order to define form by contrast it is necessary to avoid confusion between the scale of the object and the spacing of the lines.

a tone, but as individual lines, independent of each other except in so far as their parallelism is marked. They then take up a position which may challenge the supremacy of the main constructive lines of the drawing, so that the

adjective is more forcible than the noun, as in a common and senseless form of swearing, or they may appear, not as belonging to and suggesting surface or an intangible shade or shadow, but as something positive, either as construction or pattern. A study of the thickness or force of these lines in relation to the contour as well as in relation to the spaces between them is important in order to realize how easily such lines may be forced out of their due place, and take on the character of individual primary lines, or of a patterning upon, rather than a symbol or qualification of, a surface, or a quiet statement of tone. It will be seen that cross hatching may appear like wire-netting or a cane-bottomed chair.

A good technical point to observe in the drawing of such lines is, if they are horizontal or nearly so, to draw the uppermost line first, and to continue the series downwards in order.

The reason for this is that the instrument employed does not conceal the line or lines to which the parallel is being drawn, so that accurate distance may be more readily maintained throughout. Should the instrument used be pen or brush, a second reason is, if the lines be carried out in reverse order there is a great risk that the ink, which is standing up wet in the last line drawn may catch the ink at the point of the pen or brush, so that the two lines are run together either in whole or in part, and a single thick line results, entirely breaking up the suavity of the passage.

In the case of vertical lines, a right-handed draughtsman should start the series with the line farthest to his left and work regularly towards the right; a left-hander should reverse this process.

A note may be inserted here on "left-handers." Old-fashioned schoolmasters and schoolmistresses used to discourage children in the use natural to them of the left

hand, demanding uniformity of practice. A left-handed child would be held up to ridicule, and the hand tied to prevent its use. In some parts of England left-handers are called "cack-handed"—(κακός, "evil-handed," I suppose; just as "sinister" has acquired a meaning far away from the simple "gauche"). Yet, paradoxically, some of the most "dexterous" (literally, *i.e.* "right-handed") technicians have been left-handed. The late F. H. Townsend, of *Punch*, was left-handed; so is Joseph



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Pennell; and doubtless many other well-known artists could be named. The prejudice in favour of uniformity and against left-handedness as unorthodox has died out to a great extent, but it may still linger, so that it may be as well to state here that the mere fact of being left-handed is no hindrance to perfect technical accomplishment.

When Vierge was paralysed down his right side, he had, of course, to give up drawing for a time. All he could do was to move his hand a little, then a little more, day by day. "Patience," he would smile. He never drew with his right hand again; but in three years he was drawing with the left, not only in his old style, but with all the old technical certainty of line.

When a drawing is strictly based upon a statement of form in light and shade it is a good general rule to

make any group of lines used for the modelling of a surface follow the form, on some simple scheme.

The simplest plan, perhaps, is to keep them guided by the



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fall of light upon the object, when they will, if the light be not far away, fall into a rhythmic scheme of themselves.

For instance, if the lines are arranged at right angles to the source of light, the main direction of the groups,

in spite of a great amount of modification of individual lines, will be on a series of concentric circles, like ripples from a stone cast into water (Figs. 1 and 2).

It is only the effort to state the principle in words that has now for the first time explained to me a method that is frequently adopted, most probably unconsciously by many artists, myself included.

This method, if rigidly pursued, is least satisfactory where the groups of lines run parallel, or nearly so, with the outline of the form. It is then difficult to give the sense of "turn," and a certain flatness or stringiness may result.



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It has its grace, but may tend towards weakness in statement of form. It is well in such a case to depart somewhat from the simple scheme and to lessen or increase the angle between the groups of lines and the light rays in such passages, so that this parallelism with the outline may be avoided.

(In the example given the nose and arms offer occasion for a change of direction with advantage.)

Another scheme based upon the fall of light, which will also bring about a rhythmic arrangement, is that in which, instead of contradicting or intercepting the direction of the rays as in the last method, they are accepted as a guide. The result will be that, instead of the lines

used being arcs of concentric circles, they will form parts of the radii of a cone, the apex of which is the source of light. Instead of the scheme of lines being upon the

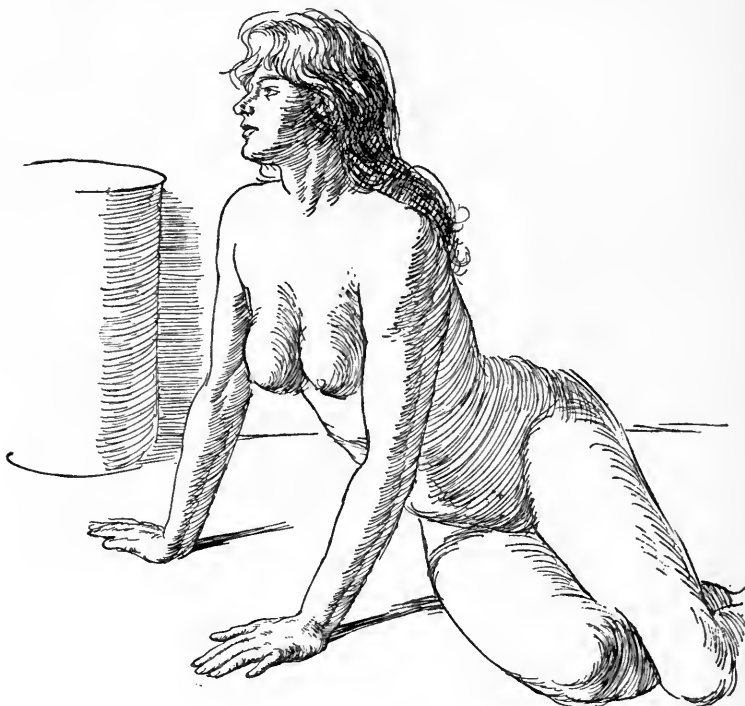


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principle of ripples from a stone cast into a pond, they will partake of the effect of a bursting bomb (Figs. 3 and 4).

In this case, as in the last, it is where either the circle or the ray of light is prevented from falling upon the object that the line is drawn.

Another method, and that probably the most difficult but most masculine, is based more strictly upon the form itself, and demands the greatest knowledge of it. This may perhaps best be explained by asking the reader to imagine a series of sections taken through the form at



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right angles to its length. If the direction of these sections be drawn as they would appear in perspective, the form is expressed with great accuracy; but it will be seen that nice points of treatment will occur at such passages as the line of the jaw and the junction of the neck; at the breasts and at the pectoralis muscle and the ankles and such places where a sudden change of direction is involved.

Unless these complexities are artfully dealt with, the rhythm is interrupted, and a nasty jar occurs to the linear system. Such problems can only be dealt with as they arise by the judgment of the artist. The simplest solution is generally the best.

Each of these methods is logically sound; and *each may be blended with* or modified by the other, provided the sense of unity is not destroyed; but a drawing should not be begun with one method in one part and carried on with another elsewhere in a sort of mosaic or patchwork quilt of techniques, as is frequently done (Figs. 6 and 7).

The point, whether needle, pencil, pen, or brush, being a line rather than a tone instrument, even when light and shade or tone are suggested by it, all a fastidi-



6

ous spectator's pleasure in a drawing may be destroyed by a wrong use of direction in a space of modelling, no matter how fine the lines composing it may be, or how pretty the general effect. Some silver points may be remembered very popular and fashionable in their day, which, in spite of the gossamer delicacy of the medium itself and an almost sugary sweetness of subject, were yet ugly in every way. The apparent sensitiveness of the artist, on a close view resolved itself into a brutality of handling of line that no lightness of tone could conceal from a lover of form and rhythm. Thinking of these recalls a discussion

between John Morley and Gladstone in the House of Commons as to who was the ugliest man on the benches opposite. John Morley picked his man, and Gladstone,



7

while admitting the ugliness, yet objected that if enlarged to colossal size, a certain dignity and grandeur would result ; “ but look at ——” he said, “ and imagine him as a

Colossus in size. Nothing could conceal the smallness and meanness of the man ; it would only be made the more apparent the more he were to be enlarged."

If the silver points mentioned had been intensified and enlarged, the same result would have happened to them—the charm dependent on the medium itself, and the prettiness so largely a result of the smallness of scale, would have vanished, and the hard, conflicting lines, which broke step in every direction, would have appeared in all their anarchy.

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The question is often asked whether cross-hatching should be employed in drawing or not, as though there were virtue or the opposite in the mere employment of it regardless of all considerations of how and when and where.

It is frequently of great value where two opposing forces of line meet, as by its means a neutral space is established, where the lines may either die away, or from which the more powerful may emerge triumphant. The greatest neutrality is arrived at where lines of equal strength cross each other at right angles, or in a perspective of right angles upon a given surface.

Except as the rhythmic solution of these forces of line or for the establishment of a neutral tone, it is better avoided, it then having no value, unless as a correction of an error in tone, when, of course, it stands as a confession of underlying weakness.

This is probably the reason why cross-hatching, unless as the resolution of opposing forces of line, becomes increasingly unpleasant the more elongated the included white "diamond" becomes, as the weakness of intention in the original lines is made more manifest.

IX

SOLID OBJECTS IN SHADE AND SHADOW

It is essential in discussing the effects of light upon solid objects, to form a clear conception of what is shade and what is shadow. For instance, the side of the moon away from the sun is not in shadow, it is in shade. If, however, the earth comes between the sun and the moon, the earth casts not a shade, but a shadow, upon the moon.

Reflected light is sometimes seen when the phenomenon mentioned in the ballad of Sir Patrick Spens, "the young moon with the old moon in its arms," appears; when, in addition to the powerful light reflected direct from the sun, indirect sun rays are projected to the shaded side after first striking the earth. In this case the moon does not appear simply as a flat disc or pale wafer stuck upon the sky, but we see and realize its existence as a sphere modelled in relief and swimming as a solid in the surrounding vague of space.

Outline being a convention or symbol by which the limit of an object is stated upon a comparatively flat surface, the included space rather than the line corresponds with the thing represented; and it might seem a hopeless task to endeavour to convey the most distant suggestion either of shade or shadow by means of line or lines.

Nevertheless, the convention of such expression has become so common that its conventionality has been

almost entirely overlooked, and it is now accepted as something entirely in the normal order of Nature and Art.



Drawing by forcible division into light and shade, minor qualifications being almost disregarded ("Waverley" pen).

Artists themselves have done a great deal towards concealing the convention of line, by reducing the lines



·Forcible contrasts of tone and local colour. A free method admitting considerable margin for suggestion of surface characteristics.
(“Waverley” and Gillott’s 303 pens.)

to such a fineness that, to an uninquiring eye, the result becomes as nearly as possible a tone rather than a series of lines. Even the line is sometimes broken up into a

series of dots, so that the statement is one of surface rather than of form, and has no more construction, backbone, or force than a piece of shortbread.

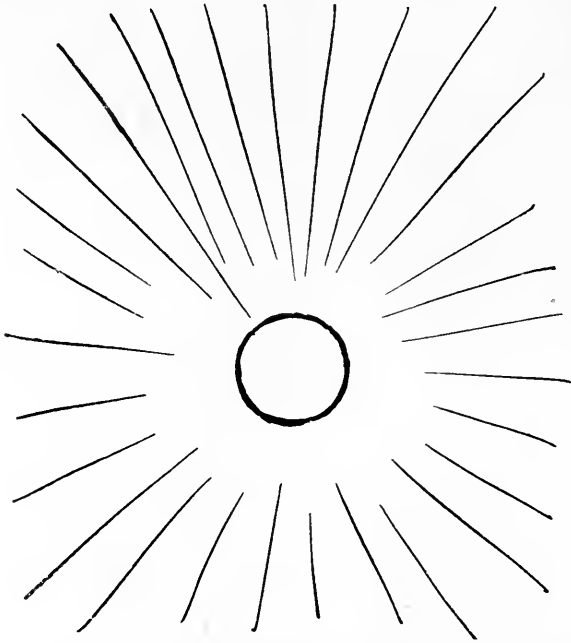
Dismissing arbitrary and ill-considered schemes, even those which fumble sincerely towards the light, as well as those which base themselves upon some fad or prejudice, we find two prime factors to be examined in the endeavour to discover what law may underlie any satisfactory scheme for the suggestion of light and shade, or the modelling of the space included by an outline. These two factors are, first, the source of light, and second, the form of the object upon which it falls.

The drawing should embody the expression of the relation of these two factors, in such a manner as to convey it to the mind in the terms of the medium used, in full and unconcealed acceptance of the limitations this medium imposes and in the knowledge that, if properly employed, the limitations may even be turned to advantage.

Unpromising as line at first sight appears for the purpose, it can be shown that it may be made to display form in some ways more clearly and forcibly to the mind than any other medium, and that the display, if made according to logical rules, will lead to a rhythmic statement, containing certain elements almost necessarily beautiful.

To begin with the representation of a primary source of light, let it be said at once that this is impossible by the ordinary means employed by the artist, since white is the highest light he has at command and black the deepest dark. Primary light can be symbolized, but not represented. Even a candle or rushlight is beyond representation.

The employment of transparencies or reflecting surfaces does not come into our consideration of artistic means at the moment—artistic and legitimate, or vulgar, tricky and meretricious as they may be, according to the taste dictating their right or mistaken employment. The gilded background of a Fra Angelico presentation



The commonest symbol employed for a direct source of light is that of radiation.

of Heaven to express a brilliance and a glory beyond the scope of dull pigment, and the staining of glass to temper the heat or light of the sun, or to add a colour to qualify the greyness of a cathedral, are both legitimate and beautiful in their place, and pleasanter to think of than the vulgar uses of similar means which need not be specified beyond the frosting of Christmas cards.

White and black being taken as our brightest and

darkest, a further consideration comes in as to absolute qualities. In order to see even the whiteness of this page, light is necessary. You cannot see the white in the dark, all becomes equally black with the type. Strictly speaking you do not then see the black, since it

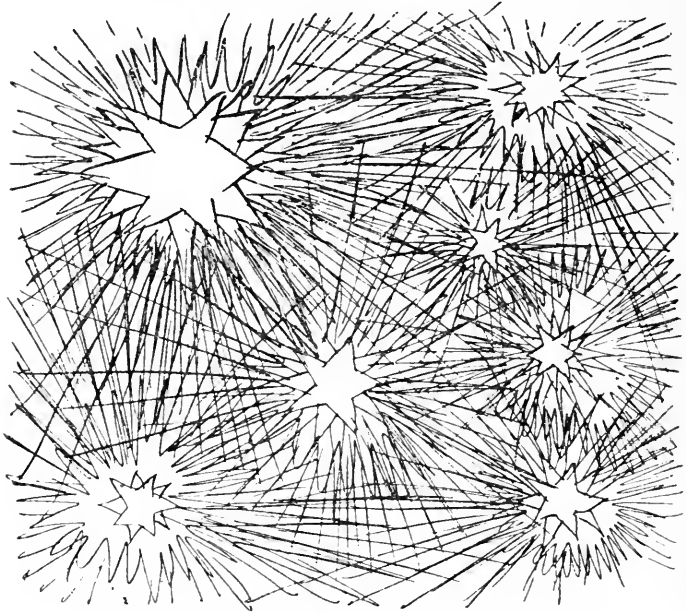


Even the dimmest direct light can only be symbolically expressed.

is swallowed in the darkness, and becomes as indistinguishable as a cupful of water poured into the sea. In order to see the black, or rather to distinguish it from white, a certain amount of light is necessary; but if the light should be too fierce the black becomes invisible; and just as the white became invisible in the darkness, so the black is swallowed up in light.

For our optical comprehension a tempered light is

necessary, that shall strike a mean by which the black and the white are as nearly as possible equally visible to the eye. Simple truism as such a proposition may seem, the overlooking of it has led to many misguided efforts on the part of artists to overstep the limits of the conventions of their *métier*, so that they have been misled



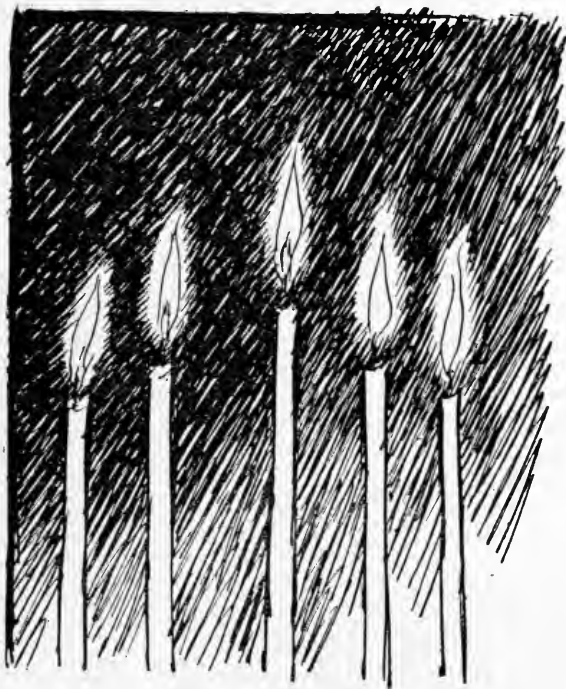
Unresolved oppositions of line leading to confusion.

into the construction of many a futile little tower of Babel or sand castle that has perished.

It may be said once for all that the effort to match sunlight at one end of the scale, or black in shadow at the other upon a flat surface is outside the scope of Art; that any success in this direction can only be partial, and can act but as a lure and a temptation.

These, full sunlight and absolute darkness, may be suggested, but cannot be represented.

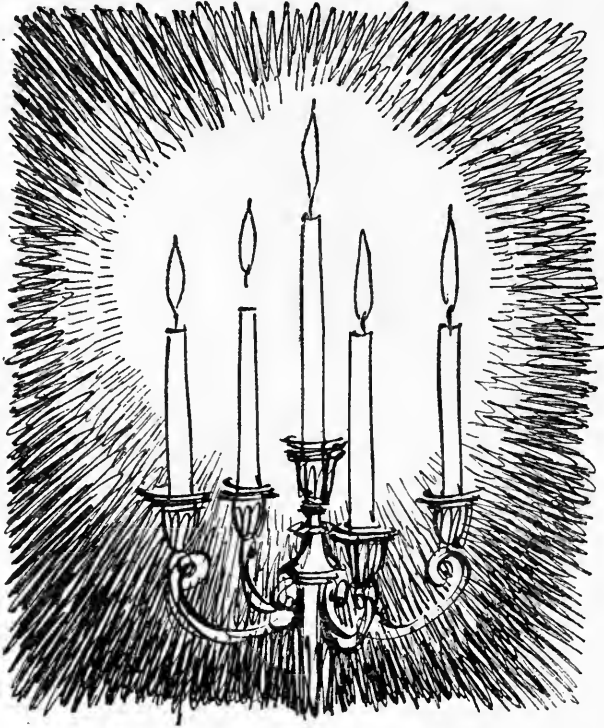
Let us bring this matter to a concrete test. Imagine an artist who proposes to paint a realistic portrait of of a man in evening dress, posed in a strong light, which falls full upon his shirt-front, collar, diamond stud and black coat.



An inclusive scheme of contrast for a multiplicity of lights.

It will readily be granted that since the diamond stud reflects the primary source of light, only a little lower in intensity, it is beyond the scope of a dead white and unreflecting pigment to express. To prove this, if proof be necessary, the light has only to be compared with the white of the shirt-front at right angles to the light which, if the sitter be in the "immaculate evening dress" of the novelist, will be white raised to the n th

power. If the surface of the shirt-front be polished and so reflect the source of light, no matter how much lower in brilliance than the diamond, even this will be beyond the scope of representation by the painter's non-reflecting pigment.



Another inclusive scheme for a multiplicity of lights by treating the group as a unit.

So far so good, as to the lights; an average will have to be struck, and the consent of the spectator begged to allow the diamond and the reflection on the shirt-front to be lower in tone than they appear in nature. If their relative brilliance is to be insisted upon, the shirt in

general will have to be put down in tone, to the discredit of its immaculate condition; but let that pass, while we go on to the consideration of the representation of the black coat.

Surely this is within the scope of paint? Not only not more so than the white shirt-front, even when proportioned to the light of the diamond, but still less.

The black coat itself is as black as can be; but its wearer is seated in a strong light, throwing deep shades and shadows in the folds of the coat. The painter has nothing beyond black to represent the darkest of these shades and shadows, and must modify his pigment to represent the coat where light falls upon it, in accordance with whatever key he has set up for himself to work by. If he has much reduced the white of the shirt in order to emphasize the brilliance of the diamond, his range of contrast between the deep shadows and the light upon the coat is already much restricted. But again, let that pass.

Let the sitter leave the throne; and now imagine the picture placed at right angles upon the throne which the sitter has just left, and at right angles to the same source of light. Being upon the flat, the black which stood for the deepest shadows in the coat will be in receipt of light, equally with the representation of the shirt-front and the diamond stud. The whole flat surface will throw back light, except that it is conditioned by the absorbence or non-absorbence of the pigment composing its patches of local colour and tone.

Now what happens? The blackest shadow in the painted coat will appear no lower in tone than did the coat where it was in receipt of light at the same angle as the picture now receives it.

The middle tones may be true; but above and below

these tones it will be seen that representation is outside the capacity of pigment on a flat surface.

If the light be turned up to enhance the light passages of the picture, by so much also the deep shadows are weakened; and if the light be turned down, by so much the brilliance of the diamond and the laundry work will be diminished in the picture.

It is, of course, possible by forcing the note to paint a picture for a given situation as regards lighting conditions that shall enable the painter, by a careful study of these, to obtain a highly realistic effect, such as may be seen in the Wiertz Museum in Brussels, where the spectator looks as through a keyhole into a kind of peepshow; but away from such exceptional conditions such work will almost certainly appear false.

All such methods belong to the showman and the penny gaff, and have little to do with the fine arts; and unless he is professedly cynical or jesting in their employment, the artist can blame no one but himself if his taste is discredited as a result.

A picture or drawing that is not primarily for a specified purpose, when it should be conditioned by its purpose and situation, as a wall decoration, or a book illustration, cannot lay down its own terms of lighting or other circumstance, but must be calculated for average conditions; the owner can hardly be expected to build a special cupboard with lighting artfully arranged for every picture, nor to squint through the keyhole to enjoy it, nor expect his guests to line up in a queue to take their turns to admire.

Failing such conditions the artist should confine himself within the limits and conventions of his art; and given such conditions, let him—well? what?—turn away from them and all such clap-trap.

It may be laid down as an axiom that light, unless it fall inside the limits of black and white, cannot be represented, but only suggested. If representation be attempted, the truth of the representation will be falsified as soon as the conditions under which the representation appears true are altered. Further, that unless for such fixed conditions, it is an error of taste or judgment, or both, to attempt such realism of effect, even should it lie inside the scope of the medium employed. Relative truth is another matter, and the truth to be expressed should be selected according to the method employed. If this be granted of such means as oil paint, which is the most inclusive of all media, it will more readily be granted of line, which is the most selective and exclusive.

Line is the expression of limit and direction, rather than of subtleties of gradation of tone or colour.

Form is displayed first by the space it occupies, and second by its interception of light.

The limit of form, or outline, is therefore the first essential. The direction of light in relation to it is the second.

In expression of light and shade the first thing to establish is the division between the two.

This will be most forcible where the rays from the main source of light become tangential to the object illuminated.

The strongest light upon any surface other than a polished or reflecting one will be where the surface most directly fronts the rays. If this surface be at right angles to the light, it will intercept its rays with the fullest effect. The nearer it approaches the right angle, the lighter it will be, and the nearer the surface approaches the parallel to the rays, the darker it will appear.

An object set up in gloomy space in which there are no

reflections, and illuminated only by a single appreciable light, will be revealed to the sight only by that part which is in receipt of direct light rays, and will be entirely obscured at and beyond those points where the rays become tangential to the object.

This is the most familiar appearance of the moon, which presents a good example of a dull object in receipt of light from another source. If the moon had a polished surface like a billiard ball or a bald head, we should receive light from it in quite a different manner.

If the light be very powerful (since we have already observed that qualifications by local colour, even as far apart as black and white, may be entirely swallowed up so far as our power of vision goes either by light or by darkness), gradation becomes negligible, and we have the moon presented as a flat wafer when at the full, declining through its gibbous phase to half, and then hollowed out until only a thin rim of light shows, in accordance with our own relation to the sun and moon. The more nearly we are between the pair the fuller the moon appears. The nearer the moon is between us and the sun the finer the illuminated rim, and the greater the amount in shade.

A billiard-player among the stars would have his game enormously simplified and made easier for a cannon off the earth or the moon into the sun by aiming his cue at the dividing line of light and shade.

Unless the light, however, be so powerful as to flatten out these differences to the eye to the infinitely minute, and so not to be discriminated except by the mathematician or by mechanical or chemical aid, another problem arises, concerned with the relative positions of the source of light and the object which it illuminates.

This is the distance between the two, which may be expressed as the distance at which a ray of light becomes extinguished or swallowed up by surrounding space so far as the eye can discern, the eye being, for purposes of art, the deciding judge.

An object will appear higher in relief the more nearly it is approached towards a light strong enough to reveal the surfaces at or nearly approaching a right angle to it, but so declining in power as not appreciably to affect surfaces approaching parallelism with its rays.

In the case of the sun these rays may be said for the practical purposes of the artist to be parallel in direction and infinite in length. Of terrestrial illuminants the nearest approach to the sun is that concentrated by a lens into the searchlights we became so familiar with during the war. Even the headlights of a motor car will, in the surrounding darkness, reveal a suddenly emerging face as though it were cut in paper, and as flat to the eye as the moon, all gradation being obliterated by the force of light upon every plane presented to its rays, any reflection being negligible. The utmost appearance of relief will be obtained by a single light of low power, like a candle, falling upon an object in a space where there is nothing to yield appreciable reflections, so that while all surfaces at right angles to the light will be illuminated, the power of the light being limited, the force of the illumination will be appreciably less the greater the distance of the surface from the source of light; and even the slightest divergence of the form from a right angle to the light becomes obvious to the eye by its greater relative darkness.

We thus arrive at two principles by which light may be presented to the mind in terms of line.

The first of these principles is the direction of the rays.

The second principle is their length, or effective force.

In both of these principles "infinity" is taken as represented by those tones or colours beyond which differences become inappreciable to vision—the colour "vanishing points" of black and white, equivalent to vanishing points and lines in linear perspective.

The direction of the rays is readily expressible by means of lines forming a cone or pencil of which the source of light is the apex.

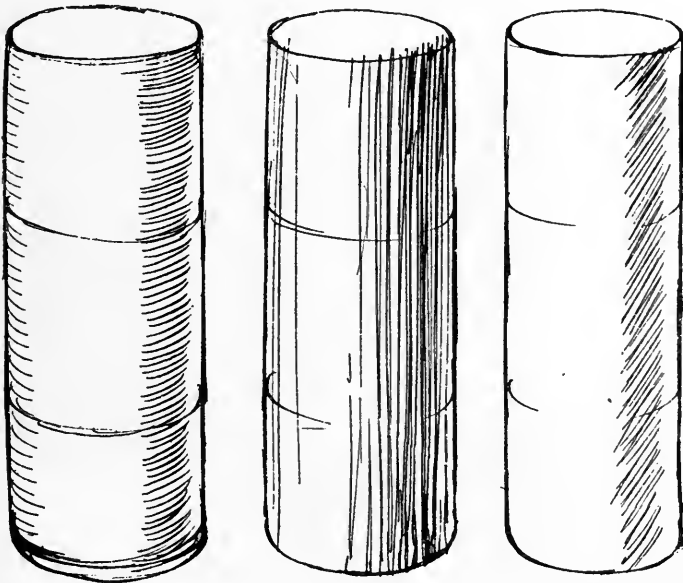
Their effective force in space may be expressed by a series of concentric circles struck from the point of light, becoming relatively closer together as the circumferences increase, to the infinity or vanishing tone where blackness or ultimate dark sets in, and becoming wider apart towards the infinity or vanishing point of whiteness or ultimate expression of light.

But if the rays be intercepted by an opaque object, before they are exhausted or dissipated by distance from their source, darkness is the result either in the form of shade or shadow. The shadow will be broad or narrow in proportion as the angle of the surface approaches a right angle with the source of light, and so intercepts many of the rays, or approaches the parallel, and so intercepts but few. If the rays be very powerful and the object absorbent of light, as in the case of the sun shining upon the moon, gradation of light and shade may be so reduced as to become negligible, the circular rather than the spherical character of the moon being made apparent to our eyes.

X

MODELLING OF SOLID OBJECTS

It is important to realize the great part that a sympathetic ending to every line plays in dealing with modifications of curved surfaces. Although these endings are more conspicuous on the lighted side of an object,



1. Modelling by sections of form 2.

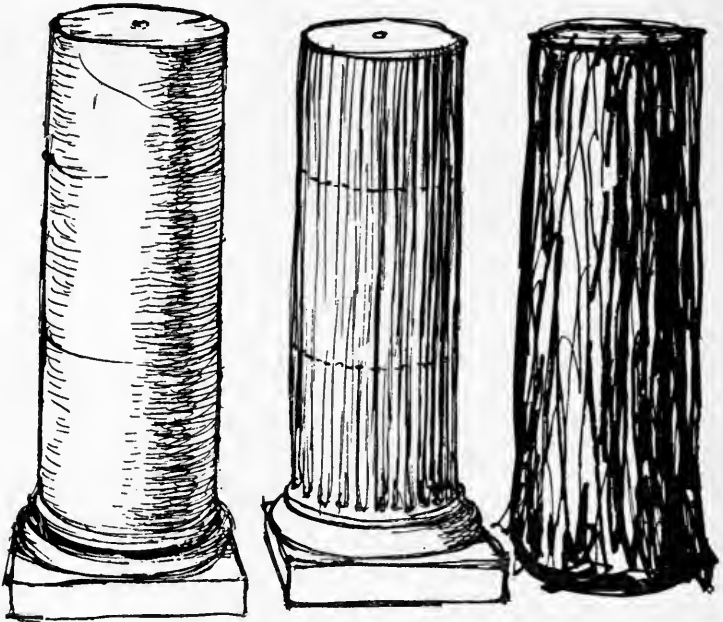
2. By gradations of straight lines.

3. By the fall of light.

they will, if too abrupt in the shade or shadow, though felt rather than seen, destroy the luminosity and beauty of any passage in which they occur.

It is sometimes feasible to break down such an abruptness of transition by the use of dots in addition to lines,

as Vandyck, Legros and many other etchers have done. But in spite of such good authority it is a device to be sparingly employed. The weaker the draughtsman the more danger there is in the practice, as the temptation will be more and more towards drawing by surface rather



Methods of modelling dictated by the character of objects.

than by construction, ending possibly by basing the drawing entirely upon such means, like Bartolozzi, who, little as he was, was the greatest of all stipplers—a kind of human air-brush, who as such still occupies a certain order in the abyss.

Such use as Vandyck and the master draughtsmen have made of these abbreviated lines and dots has always been subsidiary to that of line.

In drawing with the pen, if a flexible one be employed,



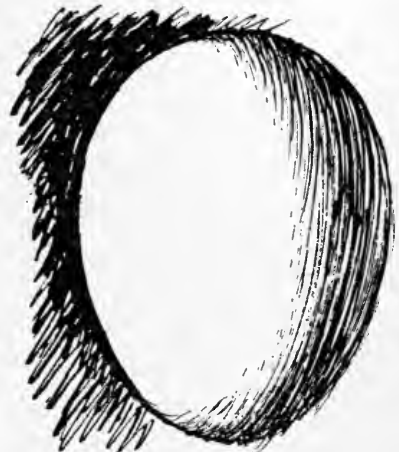
1. Modelling by lines across the direction of the light rays;



2. by horizontal sections of form;



3. by lines parallel with the rays of light;



4. by vertical sections of form.

SIMPLE METHODS OF MODELLING OF SOLIDS.

the stroke should be begun in the air before the pen is brought into contact with the paper. This should be at an acute angle. When the thick part of the line is



Pure line of almost even thickness, slightly modified by the use of dots. Methodical and stylistic—tending to be cold, hard and unsympathetic. (Gillott's 303 pen.)

complete, the pen should be raised gradually, thus relaxing whatever pressure is employed as it approaches the end of the stroke, so that the stroke is continued in the air,

the pen not being allowed to rest at the end of the line it leaves.

If a quill, reed, or J pen be used, it should be so held



Drawing by patches of simplified tone, with suggestion of local colour. ("Waverley" pen.)

that the edge and not the flat is addressed to the paper to begin and end the line, should it be desired to gradate both ends, the pen being turned so that the flat is presented to the paper only in the middle of the stroke.

Unless the pen is handled in such a way a blob will form at the end of the line, and gradation be destroyed. In the management of a large patch of shadow, attention



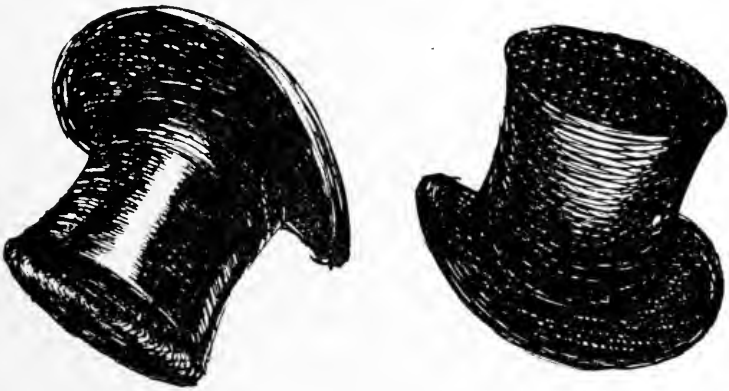
Inclusive method in which local colour and texture are freely introduced, so that considerable realism is possible.
("Waverley" and Gillott's 303 pens.)

to this point is as important as the even laying of the lines, otherwise an ugly and obstreperous joint may appear which will destroy all the charm and sense of

mystery. The shadow will take on the character of a positive object, like a black but indeterminate something floating about in space, instead of standing for a negation, an intangible gloom, or the qualification by tone of some object partially lost in darkness.

Local Colour and Surface

Hitherto attention has been paid only to individual forms as expressed by line and light and shade.



It may be as well to consider at this point the introduction of a suggestion of "local colour," as the colour belonging to individual objects is called, apart from how the form itself is affected by light; as a red coat, a blue skirt, a yellow jacket, a green tree, an orange kerchief, a purple anemone, the brown earth, a grey sky. The colour of light itself varies so greatly that an orange sunset, for instance, by powerfully modifying all those objects upon which it falls, brings them into unity or harmonious relation one to the other, no matter how harsh their juxtaposition might be in a colourless light. This is not our immediate concern, but is stated in order

to emphasize what is meant by "local colour" strictly understood.

In line drawing the limitations of the medium are such that it is generally the wisest course to restrict the effort at discrimination of local colour to a few simple tones, selecting only the most obvious, rather than attempting the whole range.

Where great subtlety in this direction is aimed at, the brilliance and vivacity of effect generally suffers, and the loss will probably be greater than the gain. Minor half-tones and the delicate complexion of objects should be dismissed as not proper to the genius of the medium, which deals primarily in form as expressed in line, emphasized by light and shade.

All very light tones should be ruthlessly dismissed, though a statement of the form of a white object should not be shirked on the score of the blackness of the line necessary to express it.

The use of local colour is at times essential to proper expression no matter how restricted the means used may be.

The difference at a first glance between an Englishman and an African is one of colour rather than of form; and a black silhouette would give a closer idea of a nigger to a person who had never seen one, than would a simple outline upon white paper.

If, then, we imagine an outline characteristic of a negro so far as form is concerned, filled in with black instead of the practice hitherto followed of qualifying the white included space with black lines, and so revealing the form by drawing the essential shades and shadows, we may reverse the process and draw the essential lights upon a dark ground.

Just as we disregarded those minor light tones when

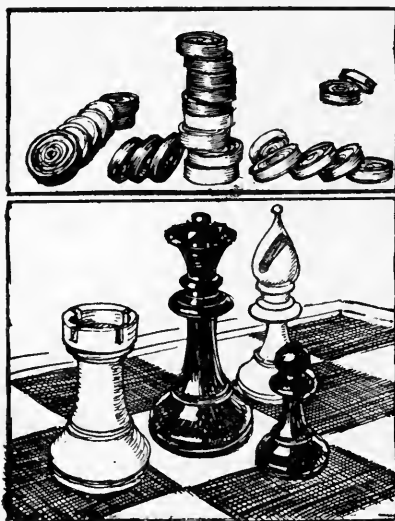
working in black on white, leaving them as undisturbed white, so we may disregard the minor differences of dark-



“Local colour” is sometimes almost as essential as form. ness, leaving them undisturbed black, with the result that darkness preponderates in our statement.

I have spoken of “imagining” a silhouette, into which

modelling may be introduced and carried out by means of white lines, as a wood-engraver like Bewick would do. This method may be actually followed by the artist by means of an opaque white upon the prepared black surface, and such a method has its advantages; but in practice it is more usual to build up the requisite darkness by means of black lines and masses and to leave the



Local colour is sometimes necessary for discriminating purposes.

necessary whites.

Unity of treatment is thus preserved; but a considerable danger lies in timidity of statement. Black should bear roughly the same proportion to the mass as does white in the drawing of a light object, and in order to achieve this proportion considerable boldness of handling is necessary.

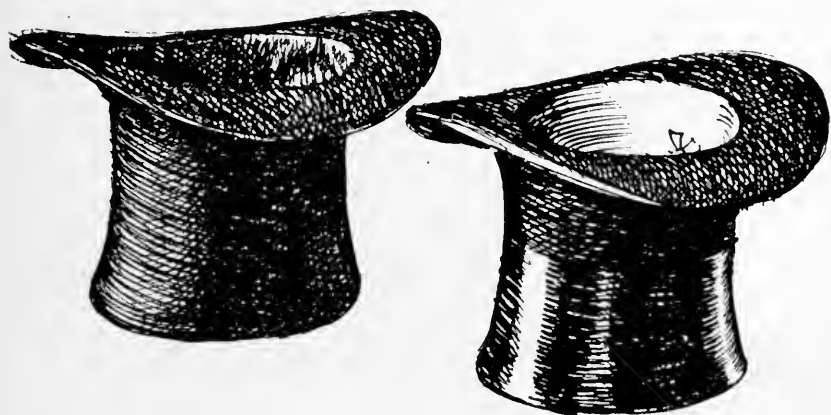
If it is borne in mind in this case that the form will be revealed by

the lights rather than by the shadows, and that these lights should be as carefully selected and restricted as the black of an ordinary drawing, well and good, and all is plain sailing.

The fall of light upon dark objects is more obviously modified for the draughtsman by the character of the surface than upon light ones, since, if the surface be a polished one, reflections, though not actually brighter than upon a similar light surface, may be made to appear so by force of contrast.

In the case of a white glazed jug the artist in line would not generally attempt to express the difference between the white mass and the brilliant reflection, since in order to discriminate the white on white it would be necessary to sacrifice the general effect to the high light by drawing the jug grey, but in the case of a black object this does not hold good.

An admirable example of the effect of light upon dark objects is provided by the comparison of an ordinary silk



Light upon dull and shiny objects compared.

hat with a shiny surface with a dull opera hat, placed side by side in similar positions.

The French have nicknamed the one *huit reflets*; and I have heard it said that the chief claim to immortality of the Prince de S——, the smartest man in Paris, lay in the fact that he was so well groomed and slick that his topper had nine.

The nickname is a good one.

Though the outlines of the two hats may closely resemble each other, and while both hats are black, their characters would hardly be expressed without cognizance

being taken of the difference of effect of light upon them, for while one absorbs, the other reflects it.

In one case the direction of the fall of light is all-important and reflection counts for next to nothing, so that in the ordinary process of strict selection and simplification it may be almost or quite disregarded. In the other the surface acts as a mirror, so that the direct fall of light from the main source may, and most often does, become secondary to the reflections. This highest light will be not where the ray is intercepted by the surface



Light on absorbent and reflecting surfaces compared.

of the hat, but at that point where a line from the eye to the surface will make an equal angle with the ray; that is, at the point at which a billiard-player would aim if he wished to cannon off the hat into the source of light. The brightest light indeed may fall not on the most illuminated side of the hat at all, but should there be a distant light insufficient even to make an appreciable effect upon the shaded side of the opera hat, may yield by reason of the angle formed between it, the silk hat and the eye, so brilliant a reflection upon the shiny silk as to

appear almost to upset the laws of the fall of direct light.

For instance, should the main light be diffused, as from a north window, and a candle be placed so as to be reflected in the silk hat, yet at such a distance as hardly to affect the opera hat, the highest light may be that of the candle reflected in the silk hat.

In the case of the opera hat the light will remain unaffected by the position of the spectator relative to it; but with every movement of the spectator relative to the silk hat, the angle of incidence and reflection will be changed, and every light will appear reflected from another part of the shiny surface.



These examples are chosen as affording typical examples of the fall of light; and the same effect will appear upon any dark shiny object, whether it be the reflection of a window upon a black bottle, or the sunlight upon the back of a wet nigger.

XI

EXPRESSION OF SOLIDS IN RELATION TO ONE ANOTHER— AERIAL PERSPECTIVE

EVEN in such cases as portraiture, where it is the desire of the artist to concentrate all attention upon a single object or person, so that he usually introduces only such background and accessories as will enhance or intensify the interest of the beholder upon the main subject, the question of relation of objects one to another will generally arise.

A drawing or picture is frequently admirably drawn and arranged and yet fails as a whole from a lack of proper understanding of the principles by which a proper relation is maintained between the component parts.

This lack of unity will generally be owing to inconsistency of lighting, to errors of linear perspective and proportion, a multiplication of focal points for the eye, or a disregard for the effects of atmosphere.

Most of these subjects have already been touched upon; but the importance of aerial perspective yet remains to be dealt with.

In a grey and moist climate like that of England aerial perspective is generally more marked than in clear, dry and sunny countries.

An eye accustomed to gauging distance in England with great accuracy may yet be wildly astray in a clear air, as our riflemen found in South Africa, most of whom

began by snicking their sights short by hundreds of yards.

The old-fashioned "London particular," the "pea-souper," has of late years become of increasing rarity, and many young people cannot realize what they were like, and will hardly believe quite true tales of them. They are probably destined to become a mere discredited legend. French artists like Adrien Marie, Renouard and Morel, when they came over to draw for the *Graphic*, used to become wildly excited over their first experience of fog and the dramatic effects to be observed. In extreme cases these fogs involved a negation of all form, swallowing it entirely in gloom, and became a subject for the writer rather than for the painter or draughtsman, who deals in visibilities.

In the 'eighties and 'nineties the Londoner, from Queen Victoria to the office boy, was reduced by the fog to the state of the metaphysician, so vividly compared to a "nigger in a dark room searching for a black hat that isn't there."

Between the density of the "London particular" which obliterated everything and the clear dry air of India and the veldt in which, as far as the eye can see, everything is sharp and distinct, lies all the range of atmospheric effect.

My friend A. S. Hartrick made a most illuminating observation to me on his return from the Mediterranean to London, saying that whereas in our dark climate detail of modelling and local colour were only properly seen in sunlight, in the fierce sunlight of Algiers detail was almost flattened out, and the eye could only properly appreciate it in the shade.

The enchantment that distance is said to lend to the

view arises not only from the diminished scale of its appearance, but from the simplifying and harmonizing effect of the veil of atmosphere which part reveals and part conceals it.

The harmonizing cause is not only that the sharpness of local colour seen through a haze is reduced, but that the colour of the atmosphere itself qualifies equally all colours seen through it, so reducing the contrast still further.

The magic of these colour harmonies and gradations is for the painter alone, being outside the scope of line to do more than suggest, and that by some form of association rather than representation. The draughtsman's concern is more often with the revelation of form than with its concealment; but atmosphere comes to his aid by helping him by a natural process to discriminate the relative projection of objects in relation to his point of view.

If equal emphasis be given to the statement of every object in a composition, the result must be a certain flatness out of which nothing projects and beyond which nothing recedes; and we get a pattern, or at the utmost a "high relief" drawing, in which objects, though solid, appear to be very nearly, if not quite, in one plane.

If a drawing be made in correct linear perspective with equal power of line and mass throughout, there will be considerable difficulty in detaching or discriminating one form from another, particularly where they are complex and fall close together upon the picture plane, although one be much more distant than the other.

While an appreciable mist will diminish the power of a direct light seen through it, the light will be visible at a greater distance than a solid object.

To a spectator standing under a lamp a person emerging from fog will be visible by the light falling upon him before the shadows appear, all these being still veiled by the luminous fog.

Dark is more affected by mist than light; this means that while light may be reduced in force, darkness is even more rapidly lightened, and this in proportion to the density of the mist.

At a certain point an average is struck between the two forces; but darkness is sooner swallowed up than is light. If this were not the case we should see the whole of the moon at all times of its visibility, and not only the illuminated part; but the shaded part does not show as darker than the sky, it is swallowed up by the semi-opacity of the atmosphere, no matter how clear this may be.

The principle that emerges for the artist is that in aerial perspective the lights are less affected than the darks. If, therefore, a continually reduced stress be laid upon the shadows and local colour in proportion to the distance from the spectator, a perfectly natural means will be followed by him. As light itself is farther beyond the scope of the means he employs in representation, the point is sooner reached beyond which discrimination is either possible or necessary to his means; and the diminishing of light by mist may be most frequently disregarded.

Few objects, in fact, in the sense we are considering are "lighter than air."

It is such considerations as these that have led to the old rule of thumb for landscape drawing, which lays down that "black comes forward, and light retires."

Upon this rule is based the practice of many artists by which foreground objects are laid in with a powerful



Drawn with very flexible pen yielding great range of thickness of line from exceedingly fine to very broad: such a method is capable of sparkling vivacity of effect, as well as the expression of solidity, texture, local colour and relative distance of objects. The rule of thumb is that black comes forward and light retires. (Brandaeur 518 pen.)

line, diminishing in force for the farther objects in proportion to their distance.

Forain's and Phil May's method of establishing the relations of objects is based almost entirely upon this use of line of varying strength according to distance.

Etchers of landscape subjects act largely upon this principle, giving a short biting to their distances, with deeper and longer bitings in proportion to the nearness of objects to the eye.

At close quarters, as, for instance, in an ordinary room (unless it be a den of smokers!), aerial perspective may be almost absent at most times. Not, of course, that there is no air in them, but that the distances are so small and the veil of atmosphere so thin as to be almost negligible—yet the principle holds good in practice, frequently as the only means whereby relative projections can be simply expressed.

In long galleries with side windows it is sufficiently obvious, where the motes are dancing in a shaft of light so powerful that a figure beyond may be almost hidden by it. But here another factor besides aerial perspective comes into play.

This factor is the force of the illuminating power, and while much wrapped up with the study of aerial perspective, it should not be confused with it.

A room in daylight may be quite a light room although there is no sunlight in it, all the light being reflected either from the sky, the ground and such surrounding objects as walls or trees, and again reflected with varying power and angles by the walls and objects in the room.

In this process subtraction of force goes on at every reflection, more and more light being absorbed, till a point of apparent inertia is arrived at, and reflection is lost, at least to sense.

The figure beyond this shaft of light is illuminated

only in this secondary manner, and neither the light nor the shadow upon a form so illuminated will have either



Force of direct light suggested by enlargement, and the unity of lighting effect, maintained by the scheme of radiating line adopted. The light is enhanced by strong contrast with the bottle.

the force or the sharpness of definition of those thrown by the direct light.

Direct artificial light acts much like sunlight, but the

rays of the sun coming from so great a distance as to be practically parallel, shadows thrown by it do not radiate as do those of artificial light. This is always within measurable distance, so forming the apex of a pencil or cone of rays tangential to the object; which tangents will outline the shadow projected upon the nearest obstruction to them.

Besides this, the power of sun-rays falling unobstructed or unfiltered upon an object is undiminished, regardless of terrestrial distances, while the effective range of all ordinary artificial lights is very limited. The power of the old rushlight was only sufficient to "make darkness visible." The rays of a single candle may hardly penetrate to the four corners of a little room. In the case of any but the most brilliant artificial light objects are appreciably less illuminated, even at very close range, if the candle power be low, in proportion to the distance of their removal from the source of light.

If, then, there be but a single source of light, and this of insufficient power to set up reflections from surrounding objects, only such form will be revealed as comes within the effective range of its rays.

The cone or pencil of the rays tangential to the object illuminated will form a wider angle the nearer the object is approached to the light, and the object will throw a wider shadow. Every child who has made shadow pictures of rabbits, swans and negroes upon a wall knows that the rabbits, swans and negroes become larger and less distinct the nearer the hands are brought to the candle, but the smaller and more distinct the nearer the hands are brought to the wall.

Here two principles are involved. The penumbra of the hand increases as the hand approaches the candle,

and the base of the pencil of rays is increased, because the rays spread not from a single point only but from a space of light. Should the candle gutter and make a tall flame, the penumbra will be still further enlarged, rays from the top and bottom of the flame getting upwards and downwards to the wall tangential to the hand from many more points, so that an increasing angle of penumbra is formed. Should the flame be very tall and the hand very small, no part of the wall may be absolutely deprived of light. As the hand is approached to the wall, not only does the angle of the penumbra so diminish as to become negligible, the edge of shadow being hardly gradated at all, but the possibility of reflection is more and more shut off from whatever sources may chance, and the depth of the shadow is therefore much increased.

XII

SHADOWS, REFLECTIONS AND AERIAL PERSPECTIVE

A CURIOUS effect may frequently be observed on almost any autumn morning in which a low mist lies hovering over the water of a lake or river, yet I have never seen it remarked upon, though it has in it all the elements of enchantment. Mr. De La Mare should have remarked and written of it, as it is peculiarly "a subject made to his hand," as well as to his name; nor have I seen it painted, though it must have been familiar to Corot in all its charm.

The layer of mist shuts out all but the nearest objects on a level with the spectator's eye in every direction, so that little but the ground he walks on and the sky immediately above his head are visible to him, though he may be conscious of the shining of a pale sun, so that he walks upon an almost obliterated earth with his head in a cloud of mother-o'-pearl.

Nothing is startling in such an atmosphere, so that to see with wide-awake morning eyes a world turned upside down, and almost to tread off solid earth into the green tree-tops, seems at the moment in so hushed and strange a world like a familiar experience, with all the familiarity of a dream.

Only with the increase in the power of the sun the mist disperses and things gradually resume their normal appearance. It seems then less like sacrilege to examine into corners in order rudely to explain mysteries by solid matters of fact and cool reason.

It is indeed only by understanding that the artist can recreate the enchantment at will. The particular enchantment is all a matter of reflection. The mist lies slightly above the level of the water, leaving the surface clear. While horizontally it is too thick and opaque for the eye to penetrate to the far side of the lake, vertically it is but a thin sheet, and the reflections of the tree-tops are most vivid at the spectator's foot, while the trees themselves are entirely cut off from vision by the horizontal mist.

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A common error is to confuse "shadows" and "reflections"—a notorious example being in the misnamed fable of the dog and his shadow. A shadow is caused by the obstruction of light rays from falling upon any object regardless of the position of the spectator to it.

On the other hand, a "reflection" proper, in the sense of an image projected upon a polished surface of any kind which then acts as a mirror, varies with the position of the spectator in relation to the object reflected, and the angle which the polished surface makes between the two.

Two or more spectators will see the same shadow, but no two persons see exactly the same reflection. It is true that the reflection will appear much the same to persons standing close together; but should they stand far apart it will be different parts of the object which they will see reflected, regardless of whether it is the illuminated or shaded side. In the case of the shadow of an object it is only the perspective of the shadow that will be affected by a change of position on the part of the spectator.

Yet there is a pretty phenomenon which might be thought to make an exception to this rule.

Any one who has walked up Regent Street or along Oxford Street on a sunny day may have noticed by the

side of those shops which advertise their names or their goods in gilded lettering how the lettering is reflected in reverse upon the pavement. This reflection does not move with the movement of the spectator, only its perspective being changed according to the changed relation.

It will be observed in such cases that the sun is not flashed into the eye of the spectator from the illuminated surface, and that in order to see the direct reflection of the sun it would be necessary to intercept the light falling upon the pavement. The pavement is, in fact, in the relation of an unconscious spectator, and the rule set up that a reflection varies with his relation to the object reflected holds good. The movement of the earth which is the "time o' day" could be as effectively measured by the position of the reversed lettering on the pavement, as by Gilbert White's sundial.

The same effect may be observed in a room should sunlight fall slanting upon any brightly polished object—a mirror projecting its image in light upon the floor, while a brass fender and fire-irons may project lights upwards to the walls or ceiling.

The glass wind-screen of a motor-car shows the phenomenon beautifully, as the reflecting surface itself is moved, and the reflection moves accordingly.

A horrid little boy (whom I remember) exploited this scrap of observation from a safe distance by flashing the bright sun-rays with a bit of looking-glass into the eyes and upon the razor of a gentleman who stood shaving at a window; and from the language in which he was induced to indulge by the performance, it is probable that the gentleman was cutting himself.

The heliograph had doubtless long been in use at that

time, but it is no more than the practical application of a knowledge of reflections of this order, and may indeed have been invented by a mischievous boy who had studied its effects in the way just described.

The difference between shadows and reflections may be well seen where there are trees standing by clear shallow water so that a shadow falling from the tree can be seen upon the bed of the lake or stream. This will not share the colour of the tree, and its shape will be conditioned or contorted according to the shapes of whatever objects lie at the bottom; nor, as has been said, will it move as the spectator moves.

On the other hand, the reflection will share the colour of the tree, being a reversed image of it, not indeed so strong as the direct image of the tree itself, but, if the water be smooth and the light strong, almost as vivid. If the water be stirred into ripples, the incidence of the reflection is varied accordingly. If the angles of the ripples are not sharp, but "oily," the accuracy of the image may be only slightly interfered with; but should the water be sharply but regularly broken, the ripples may not reflect the tree on one of their sides at all, and we may have bars of reflected sky cutting across the reflection of the tree. If the water be irregularly broken, so many reflecting surfaces are presented that it may be difficult to trace any particular image or colour, and a rapidly changing kaleidoscopic effect is produced.

Many beautiful effects are thus set before the eyes of the artist. A natural symmetry is set up by a simple unbroken reflection, while the predominance of the reality is preserved. Where the image is broken by bars of sky a *résumé* of the forms and colours reflected takes place, and a more complex harmony is usually the result. In a

swirl of waters it is frequently by the reflections that the form of the water is displayed, while the object itself is distorted out of recognition.

It was a study of these matters that rendered the work of the late Fritz Thaulow so interesting. The effects are so beautiful in themselves that a merely accurate scientific presentation of them would almost of itself become beautiful also; but indeed it would be difficult to carry out such a subject without some infusion of emotion to save it from spiritual flatness.

Another and perhaps more beautiful example of shadows and reflections at one and the same time may be seen when the gulls come inland for the winter, and are standing about upon or hovering over the frozen lakes. Gulls are in themselves so beautiful in flight, particularly with the sun upon them, that it is a joy to watch them at all times; but to watch one wheel and settle down upon the ice is a peculiarly beautiful vision, for as it approaches the ice a faint reversed ghost of itself appears to rise, taking shape and body to meet it, from the dimly reflecting surface of the lake, to sink and fade away into pale ice again as the gull rises into flight. As the gull stands upon the surface, the shadow and the reflection are readily distinguishable, as they both start from the feet. The reflections will partake of the colour of the bird, falling invariably towards the spectator, while the shadow will fall away from the sun. As the gull rises, the trinity of bird, shadow and reflection is broken up; shadow and reflection part company, and gradually dissolve as the bird rises higher in air, and the force of the shadow is reduced either from the effect of secondary lights and the thickness of the air, and the reflection is diminished in scale, or dissipated from similar causes, till it vanishes altogether.

The reflection will always be in a vertical line between the gull and the spectator, but the shadow will depend upon the direction of the sun.

Reflecting surfaces, no matter how highly polished, can never give back more light than they receive.

There is a fallacy common among journalists and popular writers, by which diamonds "blaze" even in the dimmest light. At the coronation of King George in Westminster Abbey, I pointed this out to Mr. (now Sir Philip) Gibbs, and chaffed him as to what I expected him to write about the dazzling array of peeresses, whereas it was impossible to see a single spark in the dim light. "You have to exaggerate for the public," was his comment. In descriptions of the festivities of the week by other hands I watched the increasing brilliance of the same diamonds, until in a report of the gala night at the Opera they were "dazzling, blinding in their radiance," and this was; I think, the most bright-eyed description of all. This is doubtless good journalism, but is bad in a picture. What effect a diamond has must be conditioned by the light it receives. It may gain in effect from contrast with dark surroundings; since a glint of light from the prime source may be reflected with but little diminished strength from a gloomy corner, among dull objects where the rays are all otherwise absorbed. In consequence of such gain it may trick the eye into a belief that it is even brighter than the source of light upon which it draws; but it has no light of its own, only a reflecting and concentrating or focusing power.

XIII

FIGURE DRAWING

ADMIRABLE books are published on artistic anatomy, and no knowledge of form and construction can come amiss to the artist. At the same time, in the writer's experience, a knowledge of the bony framework in its simpler aspects acquired by repeated drawing rather than by "mugging up" a long list of Latin and Greek names of muscles, tendons, and their origins and insertions will stand him in most stead in the practical matter of drawing. Let him be able to draw the skeleton moderately well by heart, and he will find it of more service in the setting up of a figure from life than the most abstruse knowledge of the muscular system.

The proportions of the figure, its poise and action, are all readily established if the elementary lines of the bones are well observed to begin with.

In examining a large number of drawings from life, it is curious to find how generally the action is understated. This frequently arises from the method of beginning the drawing at the head and continuing hanging each bit from the last, the neck from the head, and the chest from the neck, and so on to the feet, as though the head were a clothes-peg from which the body hung like a wet rag, instead of being stood firmly upon the ground, with rigid bones inside, properly poised from the feet upwards to support the head at the top.

No matter how beautifully the detail of the separate parts may be drawn, the expression of the figure itself is lost, and, if this has any value in the particular case,

there is no hope for the drawing from beginning to end. At the best the drawing is a tame and spiritless affair, with no "catch-hold" about it.

Unless this poise and action are seized upon to begin with all the labour is in vain, and the more effort is spent in making it presentable by tickling the surface modelling in pursuit of "finish," the more grievous is the spectacle to the judicious, since the end cannot take precedence of the beginning.

Such a result will be less likely if, instead of the practice largely inculcated in Schools of Art known as "blocking out," the relative positions of the feet and the angle they make upon the ground are marked upon the paper. It should then be noticed upon which leg the weight mainly falls, if upon one more than another, as this will affect the position of the pelvis. The points of the knees and of the pelvic girdle should be marked with a dot. If it be a front view, the direction of the breast-bone to the root of the neck, and the relation to this of the collar-bones, might then be indicated lightly upon the paper: if a back view, the line of the backbone from the base of the skull to the pelvis is of the utmost importance, and in many poses is the most essential line, dictating to or dominating all the rest.

The head should then be securely fixed upon the neck at its correct angle, and the perspective lines of the jaw, nose and eyebrows carefully determined in this relation.

The arms of a standing figure being free members are particularly subject to variation of position without to any extent altering the rest of the pose; yet they may take a large part in the establishment of the silhouette.

But if the system of "blocking out" be followed, the comparatively immobile parts are made subservient, and

to depend upon what is properly dependent, which is a reversal of the logical process of drawing by construction.

If the points of the shoulder are rightly determined, it should be a simple matter to establish the action of the arms by sketching the angles of humerus, forearms and hand by a single line, instead of tamely blocking them in as solids with two, both of which may be wrong.

The action is the first thing to be observed and stated; and the expressive line of this will be found to be that of the skeleton, so that this is by far the safest as well as the simplest guide to follow, not that of the muscular contours.

“Blocking out” is a dangerous habit to get into, as it means the setting down at the very beginning of at least two lines that are not even intended to remain, but must be eventually rubbed out. It presupposes absolute stillness in the thing drawn, and unlimited time for the execution of the drawing. It treats all objects alike, and takes no cognizance of their essential differences. It leads to a lazy, because indirect, habit of mind, and a bad notion of style, as it is inclined to destroy the sense of suppleness of line, or, at best, to retard its acquirement.

The fewer lines that are put down as scaffolding—that is, with the intention of taking them out—the better; and the less the habit of using indiarubber is encouraged the better. Directness and freshness are qualities of high value in themselves, in line as in every other medium. In any attempt at stylish drawing, therefore, it is better, even though the line be tentative, to aim as nearly as possible at finality, and to let the first brave but mis-directed attempt alone, setting a second and conquering line still more boldly by the side of it or partly over it.

It is not that any elaborate anatomization or even

much thought of such should be gone into in the presence of the model. Little or nothing more than a child's drawing of a man in straight lines, yet with more knowledge and intention, is proposed, in order to get the expression of the figure, which is as important as that of a face, and as definite as laughing, weeping, or smiling.



Points and angles to be particularly observed in setting up a figure from life.

It is readily seen how much of the energy and expression of a figure is conveyed by these few lines and with what ease they may be stated. Yet how often do we see a drawing purporting to represent equivalent action arrived at with the utmost care and time in blocking out, but as listless as a wet blanket on a clothes line. It is sad to see a conscientious model in a difficult pose "withering and agonizing" for such a result.

Insufficiency of knowledge is frequently a temptation

towards display, as may be observed in many ways; and students who know a little of the subject are often disposed to underline the muscular anatomy in a life study, much as a scholarly citizen of Stratford-atte-Bowe will introduce a French *cliché* or Latin tag—"pro bono publico" and "pour encourager les autres," shall we say? but really for his own glorification. The study of anatomy has in view the more accurate expression of the life, and not the skinning of the figure to show that we know what muscles lie underneath.

Over-emphasis on detail detracts from the large simplicity of the whole, and should be carefully guarded against. Moreover, beyond a certain point, every added accent discounts or even cancels out a previously existing one, so that the effect is one less of strength than of weakness in the drawing.

A drawing rightly begun starts with the points and lines of the most vital significance; so that no matter how little time may be given to it, or what interruption may prevent its carrying to the intended conclusion, nothing can rob it of this vitality, arising from the artist's energy of mind as well as from the character of the object. Something of value is put there from the very start; whereas if the attack is indirect, and the work be interrupted from any cause whatever, there may be nothing left behind but the pathetic evidence of a vague frustrated intention to draw something. Failure, in short.

For one over-statement of the main action of a figure in a life class, it is safe to say that there will be at least twenty under-statements; while the reverse may be the case in the expression of detail, which is generally too large, if it is at all intricate, and disproportionately emphasized in regard to its modelling.

One master may be remembered by the author's contemporaries mainly by his one word of advice directed against this last most common tendency. "Sweeter—sweeter," was all his criticism as he went from easel to easel. He was one who found life so bitter that he was found trying to dash out his brains against the studio wall.

It is more cheerful to see a drawing that tends towards caricature, which bespeaks energy of mind, than towards an under-statement that bespeaks listlessness on the part of the artist. If mistakes are to be made, a bold mistake is better than a timid one.

The construction is much more important than the modelling or fine discrimination of surface qualities. These belong to the skin, and it is impossible to build any but a second-rate man from the skin inwards.

If it were not for the underlying bony formation, the human figure would be no more interesting to draw than a cottage loaf or a jelly-fish. Softness has its charm in the right place—so has hardness. Soft cushions, yes—soft hearts, and so on—but not soft heads and soft bones. Feminine grace is based upon as firm a skeleton as is masculine strength. The "willowness" of a figure is not to be expressed by any compromise of this underlying rigidity. The surface forms change, but the bones are constant.

It is a good exercise now and again to see in how few lines the figure may be expressed, even endeavouring to draw the entire contour with one continuous line, as Rodin did. This is not proposed as an exercise to be indulged at the expense of close and careful study of severe and close draughtsmanship; but occasionally

only, with a view to check a tendency to narrowness of vision and timidity in attack. It will help the student to realize what lines are most expressive, and the value of simplicity of statement, as well as how much of the interest of a drawing depends upon the silhouette of the form.

In every case of a study from life attention should be paid to its placing upon the paper, so that the silhouette is well arranged within the space to be disposed of.

To see a figure in profile with the tip of the nose close up to the edge of the paper as though smelling it, while a wide expanse of empty space is left upon the other side, is one of the minor distresses of the critic with any decorative sense; a worse being to find that a student has started with the head so low down that he either finds himself telescoping the lower limbs as he approaches the bottom of the paper, cramping in the feet like a bad boot-maker, or reduced to cutting them off altogether, in the manner of Procrustes, that rough host, putting his unwilling guests to bed.

Beginning of the Study of Grouping.

The student should remember that no matter how well he can make an individual study from the life, this is not the end of his education as an artist; nor should the master allow him to think so. It is but a means to an end.

The model is as a rule posed in a strong light against a clear and simple background, so that selection has already to a large extent been made for him.

If from looking at the model he will turn to look at the semicircle of students, he will see that to draw them

in line is a task much more complex than would be the painting of such a subject.

This arises from the fact that they are not generally so brightly illuminated, but that there are many cross lights upon them; and that, since this effect is outside the natural scope of line expression, it is undesirable even to attempt a full-tone statement. Yet some suggestion of tone will be necessary if a sense of reality is to be conveyed, in order to express the sense of nearness or farness of the individuals composing the group, unless an entirely conventional means of expression be adopted, when the sense of familiar reality is likely to be lost.

To this end he will find how strictly selective he will have to be—that is, in other words, how exclusive. He will find it difficult to resist the temptation to express the charm of delicate reflections cast upward from the drawing-paper, and the many varieties of complexion and local colour which to a painter might prove the main interest of such a subject. He must not forget that it is form upon which he must base his expression, and that such complexities call for other than line treatment.

It is, he will find, frequently easier to make his studies for such a subject in some medium that will call for less selection than is necessary in strict line; for instance, in charcoal or line and wash, from which he will find it comparatively easy to translate the subject into line, as his mind will not be distracted in the task by the many accidents of colour, lighting and movement, and the normal difficulties that drawing in any medium entails.

If the preliminary sketches and studies be made in pure line he will be too readily induced to copy them, defects and all, instead of *re-creating* the subject with a fresh mind.

Sketches, Studies and "Finish"

It may be worth while to discriminate between certain aspects of drawing, sketching, or the making of studies.

What, for instance, is meant when we speak of a "sketch," a "study," and a "finished" drawing? What is a "design"?

There is much confusion as to the meaning of these different terms, particularly between the words "sketch" and "study."

Apart from dictionary definitions and etymologies, a sketch may be taken to be a work undertaken and carried out from beginning to end under the prime impulse of the artist, and left, like the log in the proverb, to lie as it falls.

A "finished sketch," meaning a sketch that has been critically dealt with after the impulse is exhausted, is, in this light, a contradiction in terms. Properly a "sketch" as understood by the artist is "finished" as soon as the original impulse has expressed itself. While under this creative impulse the critical faculties are practically dormant, or are called in only as candle-holders; whereas later, to produce the "finished sketch," the candle-holder dictates to the worn-out impulse.

Walter Sickert in the early 'nineties, when an academic ideal of "finish" was more prevalent than now, turning over a bundle of D. S. Maccoll's delightful water-colours, raised the point as to whether their charm lay in exact knowledge of when to leave off, or (chaffingly of course!) in an incapacity to go on.

Such a medium as gouache in itself forbids any disturbance of its freshness, and it must be handled as a unit.



Drawn with very flexible pen (Brandauer 518). Great richness and force as well as extreme delicacy may be obtained by such means, much as in a dry-point.

The aim is taken and the trigger pulled, and Fate decides the rest. To watch elderly gentlemen at billiards, or at bowls, urging with fantastic contortions and exhortations an unwilling servant in the shape of ball or bowl, is to see the futility of endeavouring to correct whatever mistake has been made in the exercise of the first intention.

A sketch is necessarily limited, having for its success as uncomplicated an issue as possible. It should not be "fired into the brown" on the off chance of bringing something down, but should confine itself to a single bird. Of any given subject there are, of course, many aspects, so that for or of it many sketches may be made. The line arrangement, the colour scheme, or the chiaroscuro may each call for a separate and impulsive attack, each in turn being treated as of the utmost importance. From these will arise a knowledge of the subject, and a clearing up of the mind's intentions, that should find an issue in the full and more complex, or even better, more simple expression to be attempted later.

For here is the difference—or at least one difference—between a "sketch" and a "study." The sketch is rather a clearing of the mind, a putting on record of intentions, thoughts, or ideas uncomplicated by a critical attitude or reference to any standard but its own. It is, therefore, as far as a work can be, the expression of the subjective side of the artist's mind. The "study" is undertaken with a view to filling up those gaps that exist in the knowledge or in the mind with information pertinent to the matter in hand.

The sketch will be the most intensely emotional and unhesitating expression of the artist's personality, and the "study" the more altruistic and tentative, as its object is the taking into the mind, while also recording,

something outside itself, rather than primarily externalizing a thought. > The sketch is the means of giving out from, and the study a means of taking into, the mind, an artistically egoistic and explosive expression of personality for its own sake in one case, and in the other a record of an impression upon it with an ulterior purpose, generally of an informing nature for the artist himself, or for exercise in craftsmanship. One generally runs into the other, but here is the main difference.

Essays or studies should be made not only with a view to acquiring knowledge of external things, but also to decide upon the appropriate treatment of what it is desired to express in accordance with the requirements of any given case.

Where information is the main object in a study, the style of setting it out is of secondary importance; but after the capacity for making a plain and accurate statement (which every student should be able to acquire) has been achieved, a habit of setting it down in an interesting as well as a truthful manner should follow.

The artist's interest and activity of mind is generally shown in his selection from, rather than by his sleepy acquiescence in, whatever is put before his eyes. Selection involves rejection, and does, of course, in itself involve an emphasis.

The "finished" drawing is not simply a tidying up of loose ends, a stippling, smoothing out and filling up, as is so commonly supposed.

"Finish" is relevance, and nothing else—the inclusion of what matters, and the exclusion of everything else. To introduce anything that distracts from the calm contemplation of the essential fact or idea is actively to unfinish it. A "sketch" or "study" may be a finished



“ THE MAN WITH THE MUCK RAKE ”

In spite of the looseness, commonly called “ sketchiness,” of handling, the artist considers this drawing to be as “ finished ” as any of his drawings, the attempt having been to render a certain type of emotion in the technique itself.

work of art, and in the hands of a master generally is so, though it be but a pair of hands. Just as the best ornament will be subservient to and emphasize construction, and the finer the construction the less ornament will be required, so "finish" is a matter of simplification rather than of elaboration. The tale of the charwoman and of the doorstep ladies with arms akimbo is never finished, being equally emphatic all through, all its parts having equal importance. Time alone brings it to a pause, rather than to a conclusion.

The sketch and the study may both precede the finished drawing, and clear the way for its accomplishment.

Both should be kept at hand, or it will almost inevitably happen that, in the critical endeavour to improve upon them, their peculiar vitality will be lost by an evaporation that only a constant reference back to them will check.

Every artist knows, to his sorrow, how easy it appears to improve upon a sketch which he has made under a happy and excited impulse, and at the time thought little of, and has cast aside, only to find how far the laboriously "finished" performance falls short in all but its laboriousness.

There is, or was, a curious pleasure taken by the Philistine in the evidence of much time and painful labour bestowed by the artist upon his work, instead of ease and joy in its fulfilment. This painful labour in the result shows, rather, slipshod preparation in the beginning, and gives no pleasure to any but the ignorant or the callous. It calls for pitying contempt for a person who makes a fuss over the hardship of his lot and the difficulty of his job. It is a breach of artistic etiquette, as of a conjurer whose tricks are clumsily performed for want of practice in them. On the other

hand, the nonchalance that is sometimes affected, of "knocking a little thing off," is if anything more irritating. Thackeray said, "Your easy writing makes damned hard reading," and the saying might be adapted to apply to a certain type of facile draughtsmanship which is far too common. It is not only irrelevant in parts, but altogether, like whistling in church, or autograph albums.

In the East, particularly in the finest work of the Chinese, it would appear to be a point of honour with the artist to show no signs of hesitation or fumbling in the finished work—so to have studied every stroke beforehand that only the quintessential thought shall appear, so that a drawing is as perfectly condensed as a sonnet of Shakespeare's. It might almost be said that as rigid rules had been established for the limitation of a picture to a given number of lines or strokes as those by which the poet limits his sonnet to fourteen lines of ten or eleven syllables. In England we are generally more lavish and slipshod, as though Swinburne should have accepted the commission given by a noble editor to write a sonnet for his magazine to run to "not more than five or six pages."

Necessity for Original Observation

The necessity of using their own eyes not only in the performance of set studies, but as they go about the school, and out of it, should be pressed upon students. It is the things with which we are most familiar that in general interest us least, and we look elsewhere for romance and adventure, not seeing that it is only our own lack of appreciation that finds ourselves and our lives common or ordinary, and that nothing ever happens.

Almost every young man in an Art School begins by wishing to draw great allegories, and the young girl too

often mistakes the drawing of fairies on toadstools for original imagination. They do not realize how often they are but repeating what they have already seen, and that it is more imaginative to divine the romance that underlies their own lives and is inherent in their own surroundings. The fairies and the allegories will both be better conceived by an artist with a knowledge of life derived not from a youthful contempt of its ordinariness, but from a healthy interest in the daily life of the school, of home, and in the man in the train or street. Who can draw from memory the staircase he goes up and down twenty times a day, or the familiar door even of the house he lives in? The most observant artist must observe in a particular way in order to do such things. Phil May, who had the most remarkable capacity for drawing a portrait from memory, rarely or never succeeded in drawing a portrait of his wife, and it was more often than not a chance acquaintance or someone unknown to him whom he introduced into his drawings. He replied to my question that he had to look at people *with the intention of drawing them* in order to memorize them properly.

Students should be encouraged to draw and caricature each other, and masters should not be offended if they find themselves not too flatteringly handled. It should also be pointed out how good a background is always to be found in the Antique or modelling rooms, how effective is the lighting and grouping of a set of students at work, and how graceful is the natural pose of anyone absorbed at any task. Many students never observe groups at all, concentrating upon individuals, so that the establishment of the relation of one figure to another is a source of trouble ever afterwards.

Even if such observation does not issue in actual draw-

ing, its exercise is one of the pleasantest habits of the mind, and fills even a journey inside a 'bus with interest. What would Holbein make of the fat lady opposite? And with what different eyes would Rembrandt and Keene have viewed her!

Observation of life and character makes the drawing of all other things easier. The man who can "see" and draw a man or woman can, from that training, and its greater complexity, see and draw, once his interest has been stirred, a mountain, a tree, or a wave better than one who has studied only the wave, the tree, or the mountain. Once acquired the habit will never desert him, even should he abandon entirely the pursuit of Art; and if it does nothing else for him, it is likely to sweeten his passage through life, by giving him a perpetual interest outside himself.

War and Art Students.

So far as can be seen as yet, the war has had little effect upon the outlook of the normal student. Those who left their studies and returned seem in the main to look upon the war as a hyphen between the serious businesses of life—an interruption of their studies, like an ill-spent vacation. They have been through hell and appear to have forgotten. War, as subject-matter of Art, does not seem to occur to them, and they go contentedly and docilely through the same old curriculum with an almost pathetic deference to its very mild authority.

What effect the war will have eventually remains to be seen. It has not even yet been digested. A generation is growing up whose first recollections are of a state of war, to whom "peace" so-called is a new experience.

Every type of character is represented in a school. It isn't, of course, the business of a school to teach the many varieties of character presented to it, what to express, but how to express themselves, and to induce a knowledge of whatever special gifts may be theirs. Many ex-service men received grants to enable them to study Art as an eventual means of earning a living by it; and the readiest field open to them appearing to be the application of Art to commercial purposes, it is likely that the level of popular taste may be somewhat improved by its becoming accustomed to the artistic appeal. The risk is that in the rush of preparation of great numbers of men, and their necessity to earn an immediate living by such means, the standard of what is considered "good enough" may be kept too low. The "practical man" in the educational world, who considers that he has done well as soon as he has "put a living into a man's hands," may defeat his ideal by lowering the standard and so cheapening work to a point that a living by that means is little but an existence. It is not always bad for the business if a little of the dream should penetrate the multitude of it. The highest business of a School of Art is the training of taste—higher even than its elementary duty of training in skill.

It is sometimes overlooked in the training of students for commercial work that forcefulness can be achieved without violence or vulgarity, in posters as in other affairs. In advertising a suggestion is more persuasive than a command of the "this means you" order.

If the primary object be to call attention, other considerations come in. In sound there is all the difference between a motor-horn and a carillon. The honking road-hog with his preemptory "get out of the way" apparatus,

such as is advertised as "very authoritative," and the announcement to a dreaming city that another quarter is gently passing, so leisured that the four quarters are filled with the music of their passing in an almost continuous chime, present some of these in an obvious manner.

Attention may be called so violently—so shockingly indeed—that the mind revolts against the giving of it and reacts with added force against so churlish a command. Just so with certain pictorial commands; there are certain soups, certain boluses, certain soaps, that we would rather go ill, go dirty, go hungry, than wash with, eat, or swallow—all of them, soup, soap and pills, assault our eyes in the manner of the road-hog. We get out of their way as for our own safety.

Sometimes the most effective advertisement is one that in a noisy world whispers in the ear quite close, while the noise and shouting of the crowd cancel out into a roaring background where no individual voice is discernible. It is remarkable with how little effort a voice of the right quality and pitch can carry, and it is believable that a child's or a woman's untried clarity might be heard through the husky bellowing of a herd of bulls. So with a work of distinction rightly judged. Modesty of appeal will gain more from any person of spirit than a ruffianly command.

Students join up generally with the vaguest ideas of what they want to express, sometimes with the crudest notions of the good and bad in Art, having seen nothing higher, frequently enough, than the lurid wrappers of books and the cheaper Press. These should be confronted as soon as possible with the best of the kind of thing they admire, so that they may see that differences and degrees exist, even in the abyss. Some, no matter what their upbringing, are gifted by Nature with a flair for the best,

and these aim directly at it as soon as seen, without the necessity of its being pointed out.

Reproductions of the best work of all styles, countries and periods should be readily available as examples, though the best influences will generally prove to be those who were the strictest in drawing, such as Holbein, Dürer, and Botticelli, and those masters of selection and observation and stylish disposal of space, the Chinese and Japanese. Of moderns, Ingres and Alfred Stevens are both good influences, and might well be studied together, since either cancels out to some extent any tendency to excess or weakness in the other.

XIV

BEAUTY

So far as we are concerned in what is called the creation of any work, all that can be said is that Beauty consists in exactitude of application to purpose, which will imply the greatest economy of force to a given end.

A square peg in a round hole is the antithesis of Beauty.

The definition of dirt as "matter in the wrong place" is admirable.

The quality of squareness in a peg is not in itself admirable, nor, on the other hand, is roundness. Of two pegs, one perfectly round, the other perfectly square, what is there to choose, all other things being equal? Each implies a purpose or design, so that neither is beautiful unless it fulfils the condition laid down in the purpose—to fit.

An unrelated quality as smoothness, yellowness, coolness, dryness, brightness, has not in itself Beauty. The quality must be appropriate.

It cannot be said that a cube is more beautiful than a sphere, except it be better adapted to its end, otherwise our lovers might be sighing in the rays of a cubical moon.

A billiard ball is a beautiful billiard ball according to its capacity for accurate rolling, which is in exact accordance with its sphericity—its singleness or impartiality of surface; a die is beautiful in accordance with its exact partiality into six surfaces, so that there may be no doubt as to which side lies uppermost. While in both die and



FROM "A DREAM OF FAIR WOMEN"

An attempt to combine severity of line with richness of modelling and colour. In the dark passages the white spaces become more important than the black lines which include them.

billiard ball exactitude of balance is called for, a bias is put upon bowls. Gilbert's fancy of a "cloth untrue with a twisted cue and elliptical billiard balls" as a punishment to fit the crime of the billiard sharp, and Lewis Carroll's flamingo's neck as a croquet mallet, have the beauty that belongs to the purpose of stirring our risible faculties by tickling our sense of the incongruity of the instrument with purpose—an unexplainable "cussedness," a kink in things that mars the perfect order.

The crux comes when we begin to consider those things either inside or outside ourselves where the purpose is obscure or entirely beyond our comprehension, which yet excite pleasure in the contemplative mind.

What is to be said of those beauties that exist without purpose, so far, that is, as we can see or realize the purpose, as in a sunset, a rose, or a butterfly?—all these appearing to squander a quite unnecessary loveliness out of proportion to any useful purpose so far as the materialist can see.

What are these but ornament without economy? Does the flower of the rose contain more beauty than its thorn, the placid sunset more beauty than the thunderstorm, or the butterfly more than the worm, since each equally serves a purpose, and the purpose served being frequently more readily appreciable in accordance with the obviousness of the purpose?

We must reckon here, I think, with the purposes of our own life, and the beauty implanted in our own minds. This may sound like begging the question, but we must admit mystery here. "Not every height is holiness, nor every sweetness good."

A child with the most limited range of association will love bright colour for its own sake, and will prefer the pink

part of the blanc-mange to the white, though there be no appreciable difference in flavour. Hereditary instinct will not guard it against yew berries or deadly nightshade, and horses and cattle are frequently poisoned by the yew, apparently by a wanton malice on the part of Nature. Offensiveness of this kind, so far from proving protective, might well have led to the entire extinction of the yew and of nightshade, by leading to a vendetta against the offender.

We love roses for the unexplained pleasure which they yield to the senses of scent and sight, apart from any obvious purposes they may serve other than these gratifications; we rear them, not for propagation of their own kind, but for our own gratification, to the extent that we perfect the regularity of their form, and the delicacy of their scent and colour; we assist in the recreation of loveliness; but what is it primarily that impels us to appreciate the original flower in its form, colour and scent—since the wild rose apparently served little other end than its own will to live? and in what does that differ from the nettle?

The purpose of creation of a work may be ugly, yet what more beautiful objects have been wrought by man than his perfected weapons of destruction, from the sword and the stiletto to the rifle and the man-o'-war?

Balance, sharpness, line and appropriate ornament, either for deadliness or display, in the blade, the hilt and the scabbard, these are examples of fitness for purpose.

As to mankind itself, it is beautiful in proportion to its economical adaptation to the purpose of its own being. To put sand in the wheels of the social machine is an ugly act, no matter how profitable it may appear for the moment to the individual. Being anti-social he will be destroyed

as soon as society can lay hands upon him, so that his destruction is to all intents and purposes suicide, as surely as a murderer who is hanged may be said to have destroyed himself as well as another. This is uneconomical, a waste of two lives, good and bad together—altogether an ugly business.

All waste is ugly.

The best use is economy; so that we come to this, that utility and beauty are allied. Cutting blocks with razors is a waste of razors, it is inappropriate—therefore ugly.

The most useful of its kind will be the most beautiful of its kind.

The highly specialized for a particular purpose, though to some extent incapacitated for general use, will have a highly specialized beauty; as a shire horse for slow strength, and a thoroughbred for speed, or a bull-dog for tenacity and a greyhound for swiftness.

Their relative beauty will depend upon the relative value set upon these qualities; so that as these qualities may be more or less in demand at different times, so will their beauty or otherwise vary in the minds of men.

It is possible that the general agreement upon the so-called "classic" type of beauty arises from the small degree of specialization for any particular purpose—the small amount of raciality involved, let us say, in the Venus de Milo, so that, except for the dignity and grandeur with which the sculptor has invested her, she may be said to contain all the possibilities of, and therefore to represent, all women to all men rather than any particular individual or characteristic.

Such a summary presentation is only to be achieved by great knowledge; and to attempt such, as so many

artists do, without that knowledge, by a simple repetition of type, is to run upon failure. The safe way is to aim at a full appreciation and selective presentation of character as the artist himself sees and feels it, not squeezing an arbitrary mould upon the living character, and suppressing its variations, but accepting, and even emphasizing, whatever deviation may appear from the normal.

Here is an indication of two attitudes or two conceptions of Beauty—one that shall “blend, transcend them all,” by presenting to our view a bouquet of all the flowers, carefully cultivated without thorns or weeds; and another that shall not only recognize but display with a nicely proportioned emphasis one individual flower at a time, not only in what to a superficial view is its perfection alone, but even the defects of its qualities, which to a large mind and a deep-seeing eye are part of its true perfection, just as a day contains darkness as well as light.

Portraiture of individuals comes within the latter category, and the beauty of a portrait will reside rather in its specialization of character than in its conformity with a conventional type.

The purpose of a work of art will dictate which point of view the artist should adopt—whether stress should be laid upon the type or upon the individual.

A picture of a drawing-room scene of to-day in which attempt should be made to represent all the women according to a single type of Venus, and all the men as Adonis, would fail in the dignity aimed at, since it would fall into pomposity and absurdity by reason of its palpable untruth to familiar facts.

All may be well, but there can be, in an imperfect world, but one best. That there may be many kinds of goodness and so many varieties of “best” is a blessing.

Just as "dirt is matter in the wrong place," so there can be no pleasure derived from Beauty misapplied. Here again is lack of economy. For the rough work of the world rough tools and means are requisite.

It is distressing to see a sculptor impatiently polishing the marble before he has finished with the punch and chisel. Such a work can never be finished because it has not been properly begun. In a drawing, if pattern, no matter how beautiful in itself, be applied to a weak construction in order to conceal its weakness, or, worse still, to take its place, nothing but irritation can be the result for any but shallow minds. Construction must take precedence of pattern or ornament, and only ignorance or vulgarity can hold otherwise.

A jug that will not pour, or a table that will not stand steady because in either case considerations of ornament have preceded considerations of the purpose of the thing designed, is an ugly jug or an ugly table.

Armour loses its beauty as soon as its protective value is lost sight of, or replaced by its decorative value, so that it becomes an encumbrance. The sons of King Gama in Gilbert and Sullivan's *Princess Ida*, inæsthetic as they imagined themselves, and contemptuous of such matters, were acting in accordance with the canons of taste when they preferred to fight in shirt-sleeves. The armourer had become a poor artist, and it is to be supposed that a Cockney youth, who could manage with a length of his washerwoman mother's clothes-line to trip up the most gallant knight, could have him at his mercy though he himself were armed with no better weapons than the coke-hammer and the bread-knife. Here is a reduction to the absurd, which Beauty cannot be.

Meanwhile the beauty of roses troubles us.

Is it roses, or is it ourselves, that more demands explanation is this particular?

Where is the economy of a sunset or a rose? Or is it in us that economy is being exercised? And that having a mental hunger food is provided for it?

What is the purpose of a rose in its relation to us, or of us in relation to a rose, that we should become excited over their presence before our eyes or in our memory?

Why do we compare a rose favourably with other well-loved flowers? Besides, there are many varieties of roses, each more beautiful than the other; one we admire for its size, another for its smallness; one for its redness, another for its whiteness; one because it is nearly black, another that its pallor is hardly flushed; one for its doubleness, another for its open singleness and simplicity. What is here but flat contradictoriness in such reasons as we assign to our appreciation of them? Nor do we question them as to the purpose of their existence, nor demand the least explanation from them as to how they are justified by anything but their beauty, or, what comes to the same thing (does it?—or doesn't it?), the beauty we find in them. Does the beauty of roses exist in roses themselves or in our love of them? Is it roses we love, or the gratification they give us?

Tennyson's "Day Dream" comes to mind here:

"So, Lady Flora, take my lay,
And if you find no moral there,
Go, look in any glass and say,
What moral is in being fair.
Oh, to what uses shall we put
The wildweed-flower that simply blows?
And is there any moral shut
Within the bosom of the rose?"

It is one of the questions that will tease humanity to the end—riddles which we cannot answer, and yet must go



“LADY FLORA”

An attempt to achieve richness without sacrifice of the underlying severity of line, which is very heavy in order to support the superposed “colour.”

on eternally seeking to find out. If we could solve the mystery, would Beauty remain?

Certain abstractions such as Unity, and Variety in Unity, Harmony, Proportion and the like are put forward as essential qualities of Beauty, but each of these may be as hard to define as Beauty itself.

It would be necessary to examine the bases of sensation themselves to arrive at any satisfactory solution of only the first of the many facets to the question, "What is Beauty?"

In the case of sight with which we are immediately concerned, association alone is not sufficient guide. Red in its many degrees may be associated with sunset, with apples, with deadly nightshade and with blood; with food, with contentment and rest, with poison, with horror; with good and bad equally. If this is the case, association of ideas alone is not enough to account for our appreciation of colour; and if of colour, why not in other matters also? That association is not necessarily the basis of our pleasure in colour may readily be proved by deciding whether we prefer the appearance of the red or the green railway signal against the night sky. The general choice will probably be the red, in spite of its being well known to all as the danger signal.

Colour will appeal to the sense more than to the mind, being an attribute of form; but form that does not appeal to the reason, and so offends it, either on account of its chaotic condition, its ineptitude for purpose, cannot please a fastidious mind. The mind demands construction and purpose in form, and unless this demand is met, not only is the mind not satisfied, but is actively dissatisfied and resentment is set up.

Discoloration, as being inappropriate to the object

coloured, will also stir resentment in the same way, though the colour may not in itself be unlovely. Green or yellow cheeks, for instance, a jaundiced or cadaverous complexion, just as an excess of red, may be definitely unpleasant to the mind. But "discoloration" involves an association of ideas; in the given case of green cheeks implying an unhealthy state of body or an affectation suggestive of vicious taste, as opposed to pink as implying health and naturalness. The same shade that would be unpleasant upon a cheek may in itself give pleasure in a scheme of decoration for a wall or a china vase, where no particular thing is represented or even suggested, so that the association of ideas is, if present at all, so vague and remote that it may be dismissed as the basis of our sensation of pleasure. A vivid green or yellow reflection upon a face as apart from the local colour may, on the other hand, give exquisite pleasure, and that of the most innocent order, as from the bright green reflections of sunlit grass, or of yellow, as when children test each other for "how much they love butter" with a fresh-pulled and glossy buttercup held under the chin.

A face under a green or red sunshade, in firelight, or near a coloured lamp-shade may remain beautiful, may even be beautified, though it be reddened to the hue of a toper's, made crimson as a beetroot, or orange as a carrot. The colour being an attribute of the light and not of the object upon which it falls, these associations do not present themselves to the mind, which may be delighted either by strangeness, which may be called an inverted association, a dissociation that is from ordinary experience or a departure from the normal, or by that unexplained pleasure which we take in colour for its own sake, as giving comfort to the eye. This comfort to the

eye may arise from two extremities of cause—either of rest or of excitement.

Lady Burton, the wife of Sir Richard Burton, the explorer and translator of the *Arabian Nights*, explained that she wished all her carpets and wall decorations to be green, as a rest to the eyes after so long time spent in hot, sandy and arid places. On the other hand, the red blind of an inn on a cold night will delight the half-frozen traveller with its communicated sense of warmth. Children, young people and savages like bright colours, just as they like strong flavours, and to express themselves gaily, while old sobersides may prefer subtle variations from the neutral in cool greys, fawns and such-like tertiary colours, suitable to one who is content to occupy the background of life, or as a gourmet, to whom a hint of a flavour is sufficient.

Heraldic Colours as represented in Black and White.

The poetry of Keats is filled with glory of colour, like the heart of a rose. It is for this pictorial sense of glowing splendour that two of his verses have become so widely known and endeared to those who know them :

“ A casement high and triple-arched there was
 All garlanded with carven imag'ries
 Of fruits and flowers, and bunches of knot grass,
 And diamonded with panes of quaint device,
 Innumerable of stains and splendid dyes,
 As are the tiger-moth's deep-damask'd wings;
 And in the midst, 'mong many thousand heraldries
 And twilight saints, and dim emblazonings,
 A shielded scutcheon blush'd with blood of queens and kings.

“ Full on this casement shone the wintry moon,
 And threw warm gules on Madeline's fair breast,
 As down she knelt for heaven's grace and boon;
 Rose-bloom fell on her hands, together prest,
 And on her silver cross soft amethyst,
 And on her hair a glory like a saint;
 She seemed a splendid angel, newly drest,
 Save wings, for heaven : Porphyro grew faint :
 She knelt so pure a thing, so free from mortal taint.”

It may not be generally known that there is a recognized series of symbols to be employed in the black and white representation of heraldic devices by which the colours are indicated. Thus a dotted ground represents "or," or gold, parallel vertical lines "gules" or red, parallel horizontal lines azure, or blue, cross-hatched lines sable, and diagonal lines "purpure" or "vert," purple and green, according to their direction.

Mr. Emery Walker, of high authority in such matters, has assured the author that such indications are not necessary, and that it rests with the taste of the draughtsman whether or not he should employ them. Particularly in small drawings to be printed with type, such indications are frequently better left out altogether, as they may interfere seriously with the clarity of the heraldic design.

Any artist who proposes to employ heraldry for any purpose, such as a book plate, should consult a handbook on the subject, not only to get his heraldry correct, but also that he may employ a good and appropriate style. Stationers' heraldry became very florid and debased. The best is never realistic, but highly conventionalized, clear and simple, its original purpose being to be recognized by all at a glance.

A hint might be taken from this heraldic method of indication of colour in making sketches from Nature in pencil or other black-and-white medium, as a reminder of the colours and tones of objects; and it should not be difficult for an artist so to elaborate a code of his own composed of lines and dots as to make truly valuable memoranda in this manner in his sketch-book, instead of the somewhat vague written notes generally found.

The Pursuit of Beauty.

The objects in the artist's mind, apart from his unexplained impulse urging him to his task, may be many and various, but usually tending towards Beauty in one of its many manifestations. Even the fiercest caricature may arise from a love of Beauty finding its expression in a hatred of ugliness.

The artist may be narrow in his range of ideas and the scope of his appreciations in Nature, or may be so specialized in his craft as to be limited by it; or even so skilful in it as to remain content with the repetition of a performance in which he can be assured of success.

The spectator, on the other hand, is frequently narrow in the range of his pictorial understanding, while the majority of picture lovers love them primarily not as pictures, but as pictures of or about something, which recognized something it is that gives rise to the pleasure of the spectator.

The love of pictures for their own sake is comparatively rare.

This may be exemplified easily enough by an examination of what is thought most likely to appeal to popular taste, as exemplified in the covers of the magazines, novel jackets, posters and advertisements of commodities of all kinds. As a subject a pretty girl wins hands down all the time and all along the line. A pretty girl with a dog, a pretty girl with a parasol, a pretty girl in evening dress, a pretty girl in a bathing dress or in none, is made to act equally as a decoy for any and everything, from a tin of condensed milk to a seaside resort and a bottle of Epsom salts. Everybody loves pretty girls, and the love of them spreads over into a love of pictures of them.

This example is chosen in order to explain in an obvious

way the difference that exists between the two forms of appreciation of a work of art, either primarily for something extraneous to itself, or primarily for itself alone.

Love, of course, is like that, and it is natural to an artist to prefer that his art should be loved for itself alone, like a jealous heiress who is afraid it is not her beautiful eyes and soul quite so much as her money-bags that have proved the attraction.

The honest public is quite puzzled that artists appear to take such small stock in many works that are "perfectly sweet" to its own palate.

The fact is that these works may be not only not pleasing to the artistic taste, and therefore negative and negligible, but are often actively displeasing. A picture of a pretty girl, no matter how pretty the face, may be a denial of beauty, and so, actively, an ugly picture.

"The Beautiful is hard" according to Aristotle; but while the mistake is frequently made of confounding prettiness with Beauty—they have little or nothing in common—"prettiness" is the easiest thing in the world. The prettiness here in mind is the prettiness of blanc-mange, of pink wall-papers, of sentimental tunes, of view-painted clocks, of cochineal, of unreserved cheap scents, powder puffs, rouge and lip sticks—in short, it comes to one word, "fragrance"; or to another, "cheapness"; or to another, "commonness"; or to another, "speciousness"; or to another and last word, "vulgarity."

Of all these "speciousness" is perhaps the most damning. "Falsity" in art is to be shunned like the plague.

"Prettification," in the mistaken idea that in that direction Beauty lies, is the first step along the downward

path in Art. A little to begin with, then a little more, then excess; like a girl with a rouge pot, a dram drinker or a dope fiend—all the true austerity of Beauty is lost.

This applies only to prettiness where it masquerades as a form of reality, and where its unreality is not felt, in consequence of a flaw in the mind of the producer or spectator. There is no more depressing sight than a badly powdered and painted harridan in an opaque heliotrope complexion, and all the colours of the spring without the line, where it is to be supposed that the bloom is intended to be taken as the bloom of youth itself. The fib makes too great a demand upon our politeness, and we feel awkward, as being accessory to a falseness. Age is rendered absurd, and its absurdity hurts our sympathetic inclination. Where reality is not implied and acquiescence in the fib is not demanded, where the affectation is perfectly frank, we have quite an amusing form of Art; and it is not easy to see why, if a lady had good reason to be dissatisfied with the colour of her hair, she should not have it dyed emerald green, if it so pleased her; or why elderly gentlemen with a nice taste for colour and form should not have their wigs made purple, and crested like a peacock. In such a case, our acquiescence would be complete, and we should not hesitate to praise the charm of the result, where now we are compelled to keep silence on the subject of hairdressers.

A lie is a lie, or a fib is a fib, only where acquiescence is expected, where it is intended that the hearer should be deceived and "taken in." The risk of "prettification" is that the artist may take himself in by it as much as the public. If he begins fibbing to himself, he may end by lying outright to all the world.

Sincerity is therefore one of the first requisites in Art,

never to be lost hold of; but Sincerity is not to be regarded as a synonym for dullness or excessive Puritanism; still less for Pomposity. Cheerfulness may well break in. The most religious people are often the gayest and most amusing.

The desire to represent external objects, to imitate with a near or far approach to actual reproduction, is the simplest aim and form of Art.

Pleasure is taken in this, both in the making and in the contemplation of the result, for what reason is not yet cleared up, even after all that has been written upon Art and Æsthetics.

The reason remains as obscure as that which makes us prefer toffee and jam, let us say, to Turkey rhubarb, even in the minutest quantity, and no matter how urgently this may be called for by our condition. A healthy palate will choose what is best for it, being *en rapport* with the rest of the body.

It is to be imagined that lack of skill alone, in the early stages of the artist's progress, restrains him from exactitude and fullness of imitation. He would probably, if he could, take photographs in bronze, and colour them in everlasting paint so to resemble life that it might be mistaken for it—even to pray the Gods to endow the work with life and movement, as did Pygmalion.

The "Sleeping Beauty" at Madame Tussaud's remains to the yokel mind the last word of wonder. Not alone the waxen beauty of the complexion, but the mechanism, pneumatic or other, that heaves the bosom from morning to night during opening hours with a perpetuation from year to year equal to the blush—each affords an equal satisfaction to his æsthetic appetite.

The yokel is our nearest approach to the savage state here in England. Yet most of us carry a yokel somewhere concealed within us, no matter how deeply we have managed to bury him.

In country places a tomato or a carrot, or a "forked radish fantastically carved," resembling a man or woman, will be passed from hand to hand and be for the time it lasts the wonder of the village community. The mandrake that is said to resemble a baby, and is fabled to scream like a lost soul as it is torn from earth, belongs to this order. Fancied resemblances in rocks or trees to men, to animals, or to other things not themselves give rise to a peculiar pleasure, even when it appears that Nature herself has been the artist, without assistance from the hand of man. "Castles in the clouds"—who has not seen them built and unbuilt out of that flimsy material? What child has not commanded those troops that ride by, and watched his full-sailed navies sweep across blue, suspended seas, to vanish or founder like the realities they suggest?

Is it because a picture—indeed any work of art, whether a statue, a play, a song, or a story—offers a way of escape into other surroundings not our present—into a timeless other place—a cheap transit to foreign parts, an excursion to the moon without payment to go, without baggage, pain, trouble or seasickness in the going, and without heartsickness in the home-coming to reality that lies at the root of our pleasure?

Is it all really a wool-gathering, a tale of home to a homesick mind?—at its best the vision of an inn such as a tramp might dream as he lies soaking and penniless in the ditch by the hedge?

We are not content, and it is a beguilement with news

of elsewhere than where we are. We are at home, and we wish to be abroad. Our sordid life is not our true reality, and we wish for the dream to come true; or, life is too real, and we wish to escape into a land of enchantment where the roads are swept and policed for us by a witch's broom and a wizard's wand.

It is something of this kind that lies at the root of our love of resemblances, which are nothing but reminders of something we are interested in. While the beloved is with us we have no need of a portrait. Yet would not Michael Angelo have carried a *carte-de-visite* size photograph of Vittoria Colonna in his breast pocket?—or Dante one of 'Trice, rather than a perfect work of art? Would not Ulysses in his wanderings have frayed and worn out a penny picture-postcard of Ithaca? The lover is anxious for every particular, but we would have the artist's summary and emphasis.

These responses to our desires, direct or indirect, as they answer our longings, or seduce us from the present, are surely the basis of our love of Art, the meat for our hunger. Yet the delicate flavours, the sweets, the sours and savouries, the caviare, the Amontillado, the peaches, the fine things of the palate, that carry hints of memory and vague hopes here into the present—tales of countries unexplored, unthought-of even—these also come in to satisfy something more than simple hunger.

It seems to sort itself out to this—that Art is a form of altruism. Our bodies seem to be transported by an appearance away from the present in time or place, or our minds are placed, by a willing submission or surrender, under the will of another, accompanying them upon the road they go, like Ruth with Naomi. As though for a short time we said, "Thy people shall be my people, and thy god my god."

It is the skill with which this submission and surrender to self-forgetfulness is attained either by the presentation of the loved thing—the actual girl or the house which is the home we left behind, or the golden girl, Côte d'Or, or Eldorado we set out to seek—the Paradise we have left or go in search of, or simple companionship on a road we ourselves must go, that decides our opinion of the work, its success or failure with us as creators or spectators.

It might be objected that the ironic presentation of things as they are, in the spirit of Voltaire's *Candide*, or of Thomas Hardy's *Return of the Native*, of Hogarth, Daumier, Degas, Forain, and the whole race of caricaturists, is against this view—that Rembrandt himself presents no golden girl, no Eldorado, but rather the out-cast from Paradise, the homeless and disinherited.

Yet still the argument holds. All these are akin; for though the appeal of the work be less personal, less entertaining, less direct to our desires, it is made through our sense of the lot we have in common with all mankind. Not our love, perhaps, but our pity, which is proverbially akin, is involved. Hardship, injustice, all the sorrow of life, what does our recognition of these imply but a sense of something lost—not a denial of the existence of Eldorado, but an emphatic recognition of it, though elsewhere than here and now? Art, then, becomes the comforter of our pilgrimage, a sharer in it, where a tale of far-away home or heaven might seem too like a mockery of our footsoreness. What use to talk of golden slippers to a man on the march, with a blistered heel? It is then that a sense of fellowship in suffering makes the march easier for most, if not for all.

Art is indeed in this view nothing but an expression

of our home-sickness—of a divine nostalgia, shown in our pity for things as they are and a regret for them as they might be.

Portraiture, it is true, demands sometimes a stiff digestion, where "likeness" is all that the artist gives us; as of the fat Lord Mayor, who has come into his Paradise here and now, and can be seen in chubby enjoyment of it. He has found the Eldorado for which he sighed, and here is the picture of a contented man—no nostalgia here, a clothed body but a naked soul—Nunc dimittis—his is the work of art; he commissioned it and set the subject, and wrought through the craftsman's hand, and this is the material expression of his material ideal—Himself. He has regained his Paradise, and here he is seen, immortalized, actually sitting in it.

To the spiritually hungry an effect may be produced akin to that upon the body by feasting seen through lighted windows, or by the music that mocked and emphasized the loneliness of Henley as he passed along the street. At best, the Mayor may bore him.

This is one of life's little ironies. Few people in these degenerate days are found to pray—

"God bless the Squire and his relations,
And keep us in our proper stations."

But this was never really a folk-song, or true poetry in spite of the rhyme; and so with the portrait.

Artistic "Properties."

Art casts a wide net; and we come to a brief consideration of what means are best to be employed in accordance with what fish it is proposed to catch.

If a space be given, the purpose of that space will be the first factor dictating treatment; as, whether it be a fixed space, as a wall, or a movable one, as a book or easel picture.

In the case of the fixed space the design should be made with due regard to the lighting.

The size and position of the given space will dictate the scale of the composition, and its surroundings will largely determine the style of treatment to be employed.

Nothing is more irritating than an affectation of an unfelt archaism, professing more or less learnedly to harmonize with an ancient building, or than a self-satisfied application of a fashionable and independent modernism. Witness the effects of certain Gothic revivalists, and of the introduction of the pseudo-classic white marble wall-slabs of Flaxman's time into our village churches, or the statues of Canning, Disraeli and others into Westminster Abbey in more recent years. The spirit of place and time must have a large say in the matter, and any aggressive or unscholarly display of personality at the expense of its surroundings, unless steeped in this spirit, no matter how permissible or admirable elsewhere, will be a vulgarity, a display of artistic ill manners.

A wall should remain a wall, however treated, and no effort, or apparent effort, be made to make it appear other than what it is. Is it not, therefore, to be used for a display of the artist's powers of realistic representation, but all should be kept, no matter what amount of modelling or light and shade be used, well inside the scope of the conventions of decorative art. The presence of the wall as a wall must not be lost sight of—it should not be camouflaged into a doorway or into a projection.

In the case of a book-page, or of an easel picture, the

restrictions are generally less severe, though even here a willing submission to the limitation imposed by the means used is a sign not of a slave, but of a master of his craft.

The finer the mind the more selective it will generally prove, searching rather than to put in all, to leave out all but the essential to the purpose in view.

In the case of a book, the style and period of the writer will dictate to the artist to much the same extent as will the style and period of a building. The purpose of the book, its size, and the " make-up " as regards paper and type must all be kept in view.

Flat pattern alone will suffice for the illustration of certain forms of thought, but it is painful to see the effort made to force a style based, let us say on Beardsley's, upon a subject it is entirely incapable of expressing. A sincere admiration of Beardsley's art and the novels of Charles Dickens is doubtless entirely compatible, but any effort made to illustrate Dickens by the employment of abstractions of pattern alone is to reduce Art to an absurdity. Solidity of form and as forcible a presentation of character as possible should be the aim, even leaning somewhat towards caricature rather than to any suppression of reality as the artist sees it.

The easel picture may range from the entirely decorative and conventionalized pattern, even to the deceptively realistic, or, as in recent years, may be made the vehicle for the expression of the most abstruse and abstract ideas of form, line and colour. It may be static, or endeavour to cross the border-line of time, to dismiss the arbitration of the clock, and deal with movement itself as the prime motive of its composition. To what developments this may lead it is hard to say, but there are signs

that, at any rate in some quarters, this effort has for the time being exhausted itself.

Cubism, vorticism and other movements contain elements and ideas with which the author is insufficiently acquainted to analyse or expound, not from lack of sympathy with them, but out of pure ignorance, and perhaps an indolent habit of mind which has allowed him to retain his ignorance in contentment.

In so far as they aim at freeing Art from its bondage to a merely reproductive or imitative function, and in so far as they have achieved this aim, they have clarified matters; but it is to be feared that this clarification is more than counterbalanced by the amount of confusion they have wrought in other directions.

To aim at achieving Beauty by the simple expedient of drawing only obviously beautiful things or people is a mark of a commonness of mind that decks itself up in a beauty not its own, as in a second-hand suit of finery that has seen better days.

Nothing is more beautiful than flowers, and nothing simpler and easier than to paint them—"in a way." But is there a painted flower picture in the world that can compete in beauty with the vision of an old woman's wrinkles as etched in colourless line by Rembrandt?

Again, a work that depends for its interest upon its repetition of another art, without recreating it, as in the case of the bulk of architectural drawings, can only take a low rank in the scale of artistic expression. Where these are fiercely and imaginatively dealt with, as in Piranesi's "Carceri," or where they form the basis of a design whose stylism acts like a pillow to contemplation, as in Cotman's large vision, the artist makes good his claim to the material of his choice; but most often

the subject is greater than the artist, and we are inclined to wish that he had let it alone.

Much the same applies to such pictures as depend for their interest, not on any quality of vision on the part of the artist, but upon the quality and kind of studio properties he may possess—furniture, costumes, armour, china and the like. The beauty of these things belongs to themselves and to their creator. They are in themselves finished works of art, and the building up of a picture from such material, no matter how beautiful the material may be in itself, and no matter how it may exhibit the connoisseurship of the artist as collector and antiquarian, is apt rather to show his artistic mentality in but a poor light. The copying of such objects is so simple an affair that it frequently is but one remove, from copying another man's picture and calling it one's own.

Rembrandt loved these things, but they never took precedence of his love of humanity.

Watteau used them to take us to a world just outside our own—a world of as delicate a charm as the gardens of the Abbey of Theleme—the Abbey of heart's desire, whose motto was "Fay ce que voudras." In Watteau's world hear Monsieur Bon Mot accusing Madame Bon Bon of having a heart made of chocolate, and her retort that his brain was composed of a cracker motto, and a chorus of regrets from the ladies on the expensiveness of a shepherdess's life in brocades and flowers. But how well worth the expense! And how all these costumes became them "in that station of life to which it pleased Watteau to call them" out of the inane—so delicately real, so delicately unreal in that glimmering twilight of the silken world of his creation. These fripperies were but an attribute, not the basis, of his charm.

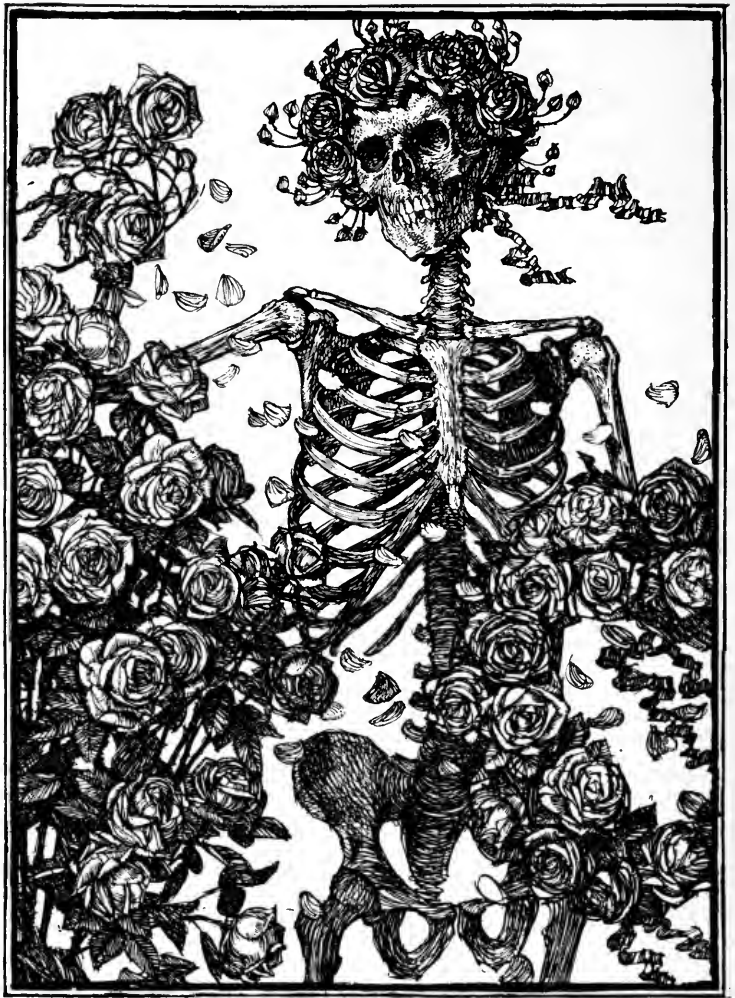
Too often such pictures are mere shops of spurious "curios"—spurious is a good "portmanteau" for them—"specimen rooms" of "period" furniture lucky if no error of style crops up in them; "still life," or, as the French expresses it better, "Nature morte," dead stuff. As Blake said, "A fool can do this, as it is the work of no mind."

XV

CONCLUSION IN PLASTER

YESTERDAY was the last of the College year. One of the Art masters had given reminiscences of Watts, of Whistler, of Phil May—three artists who between them had covered so wide a range of Life and of Art, who had lived and worked with such different aims and in such different ways—one to a great age, one to be old, and the other barely to the middle of the allotted span—yet all died in the same year, the high, serious mind, the wit and the humorist alike. Useful illustrations of the inclusiveness of Art! The master had known them all, and had admired them all “this side idolatry”; they had been almost the gods of his boyhood and young manhood, which didn’t after all seem so very far behind him. He suddenly realized that he was speaking to a generation that had sprung up to whom the names so familiar to him were but names of lives remote—that he was telling of a vanished time which to these youngsters was as ancient as the history of Greece and Rome, out of which he, like a newly-discovered gramophone of the period, had, by the chance touch of a spring, been set going, so that they heard in the present a voice speaking out of a dead past.

The distant years get telescoped together for the young, and years that to middle age seem but yesterday, are for them beyond the horizon. To them “Victorian” has no qualifications such as “early,” “mid” and “late.” A decade or two in that direction makes no difference. All is at the vanishing line. It is



EDVARD MUNCH. 1900.

Severe use of line for the expression of form, with the endeavour to maintain the same severity throughout, both in local colour and shade.

the nearest—past and future—the foreground, in fact, that takes up so much room in the perspective of time. At twenty, thirty years ago is a lifetime and a half. Nevertheless, from a very young student the question, “What was Turner like?” and “Did you know Constable?” came on him as something like a revelation. If it had been ridicule he could have held his own; but it was Innocence at large with something too uncommonly like reverence for an age of which he couldn’t boast.

It was as though, when thinking it is still early, a clock, even though it be an hour too fast, strikes a sudden reminder that it is later than we thought.

Leaving the illuminated “Life” room, he took the short cut through the “Antique,” now deserted in the summer twilight.

There was the fresh, clean smell of pine and deal—the new “donkeys” had just been delivered. He took a deep breath of it with all the other familiar faint scents of cut cedar pencils, paint, turpentine and drawing boards that predominate so pleasantly in a School of Art. He had known them all his life. Why should they strike him all afresh to-night?

In the twilight there stood the clapping Faun; he had done his stippled drawing of that, and anatomized it when he tried for the R.A. probationership. There was the slave of Michel Angelo; he had painted that in monochrome—had even got a prize for it. There was the Discobolus; in that he had passed the memory examination. It was so familiar that he had almost forgotten it. “O, W X Y Z, you had clean gone out of my head, Darling Mr. Discobolus!” he misquoted.

Someone had placed a small school study in modelling from the life between the knees of the great broken Torso

of Herakles. How powerful it looked—greater, more titanic in its sweep of line than ever for the contrast with the small and precise realism of the student. He had always thought it fine—somehow to-night it was finer. Yet these were but the hackneyed old masterpieces, the chopping-blocks for beginners in Art. By the door through which he was about to pass glimmered the great Aphrodite of Melos. Hackneyed? Of course—most hackneyed of all. But some things—some truths—never become platitudes. He paused and stepped back. Here, in this deserted twilight, he looked at her anew, as he had not looked at her for years.

He was caught and held back by her in that momentarily receptive mood that comes at the end of a job accomplished. How often he had hurried by, always, it is true, with reverence, but with that absurd sense of something more pressing to attend to. All the little things—requisition forms for rags, for paper, for press black, for middle varnish—Aphrodite could wait. But to-night, there was nothing—his job was done, and there was no hurry. She showed none—it was part of her dignity.

Everything fell away from him into a dim background, until the twilight held nothing but these two—the glimmering presentation of Aphrodite and the grey man. Art and the artist confronted each other. To him it seemed not so much that he but that she was the living and active force.

Once before, in the Louvre, he had experienced something of the same exaltation, but with a difference. Then he had heard the blow of the mallet and the chipping of the punch. It was the sculptor rather than the Goddess who had come alive, just as it was always Velasquez rather than Philip who lived upon the canvas in the

National Gallery. Ah, yes—technique—technique—at its highest self-sacrifice and discipline in the aristocratic suppression of display; this he knew. But to-night it was the Goddess of Beauty herself who appeared, looking across two thousand years and more, not dead, but living—not still living only, but eternal.

Nor was she born only of the mallet and punch that wrought her, that he had heard chipping in the Louvre.

Her origin is before Eve, before Lilith, before Pandora.

The exaltation passed. He knew well enough that this is but a manifest of her who is in the brains and hearts of all men. Eternal Beauty, eternal calm, eternal rest for the tired spirit, the fulfilment of all desires, the great Ideal here realized as far as may be on this earth. Here is the summary of all that went before, the completion of the strivings of the little men like him who each had struggled forward, adding their contribution to the sum of thought, of knowledge, of worship and of skill. The chisel he had heard in the Louvre was the spearhead of the phalanx of dead men behind the sculptor. Our-Lady of Melos—Eternal Mother—Goddess, not of Passion, cruel and blind, but of Beauty and of Love, which sees, and understands, and forgives—eternal solace of mankind—was she not too a revelation as divine as that bestowed upon the prophets of the vindictive and terrible Jehovah of old? A revelation, not in a dialect of Babel, but in the unchanging and timeless language of perfect form, speaking the tongue that needs no translation, being understood of all nations, through all ages, by literate and illiterate alike. Pagan? Pan and the death of the gods? He didn't understand. The thought seemed stupid. Here, at least, one Goddess was alive. The Hebrew, the Greek and the Latin tongues were dead. But

Form survived for all to see. All Beauty was Revelation; and Form the god-like language of it, since it speaks to all. There is no dispute nor argument. Beauty does not, cannot, lie, for untruth is ugly. The Goddess of Beauty is Goddess also of Truth. . . .

The twilight deepened. The model had got into his clothes, and came through the Antique room. His teeth flashed out of the gloom. "Good-night, sare." "Good-night, Antonio." Just so would the clapping Faun have looked in trousers and a bowler hat. How those Italians took the starch out of a London bowler was a miracle!

A jazz tune struck up in the students' common room; they were dancing. The masters broke up and away.

"Good-night, Marriott. Good-night, Buckman. Good-night, Fenn. Good-night, Bentley. Good-night, Gardiner."

Darkness fell, enwrapping the tired slave, the tireless Faun, and the Goddess alike, with the secret of that ghostly interchange the words of which no listener has caught; only the carven groan of the slave, the chuckle of the Faun, and Beauty's self filling the silence with the throb of Life.

With what strange activities the mind can animate inert matter—were they nothing but plaster?

No—they, and all Art, are alive, and lifegiving.

Next day the school would be empty of all life but this—this and the charwomen and the caretakers—and the master went out, feeling a little like a priest according to the order of Aphrodite.

At least he had seen the Goddess.

"After all, Art is worth while," he said, as he boarded the tram for the "Elephant"—"in spite of the artists' absurdity."

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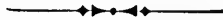
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