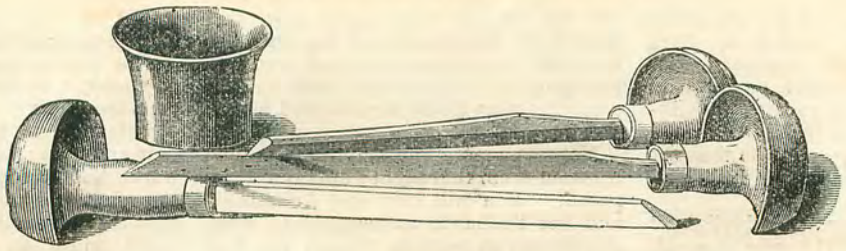


WOOD ENGRAVING AS AN EMPLOYMENT FOR GIRLS.

By RICHARD TAYLOR.

THOUGH there are few things at the present day more familiar to our sight than impressions from engravings on wood, hardly a book appearing without a picture of some kind, either on its cover or in its pages, and scarcely a shop-window that does not display some token of the existence of this pictorial art, it is surprising how few persons there are who have any definite notion of the way they are produced. Before saying anything about engraving on wood as an employment for girls, it would perhaps be well to prefix a word or two in explanation of what engraving is. If required to give an abstract definition of the word engraving, I could not do better than repeat that of Professor Ruskin, who calls it* the art of "scratch and furrow," but as I purpose giving a few hints by way of instruction in the art, I must content myself with a narrower signification than his, for certainly a definition that declares the marks of the plough on the hillside and the scratches of a kitten on the mahogany table to be "the purest types of the art," is too vague and comprehensive for my purpose.

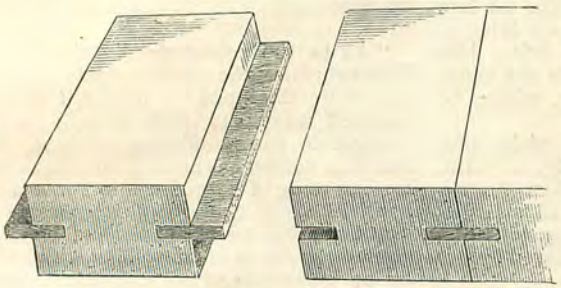


FIG. 1.

When Washington climbed the side of the natural bridge in Virginia, and cut his name in the solid rock as a record of his daring, can we say he engraved it? Or when you, at school, cut your name on your desk with a penknife, were you an untaught practitioner in the art? If so, engraving is a natural instinct, and every cockney who cuts his name on a park seat is a born engraver.

But if this be engraving, it is not what I am going to write about, or wish you to understand by the term.

In my view, engraving is an "occult" art made visible only by another art—that of printing: A means to an end, not an end in itself. So I will limit the professor's term, and call engraving a species or branch of the art of "scratch and furrow." As in the arts collectively, "scratch and furrow" are found under various forms and names. Your object was achieved when you had ornamented your desk with your initials, and therefore you might have put the work forward as a specimen of your skill in carving; or if after cutting them you had filled these same furrows with a thick, black ink, you might with equal truth have called it a piece of Niello work in wood; or supposing, having filled the cuts with ink, you had pressed paper firmly against them so that the ink should adhere to its surface, you could with the same propriety have called the sheet of paper with its rough ink marks an impression from an engraving. Again, if instead of filling the cuts you had dabbed the ink on the surface of the desk before pressing the paper on to it, they would have appeared as white lines on the blackened paper, and you would really have had in your hand a proof of a wood engraving. Now, had you cut your furrows for the express purpose of taking the impressions, you would have exemplified the meaning, which, for my purpose, I wish you to attach to the word engraving.

Without the printer the art in this sense has no existence; it is as much a tool adapted to his use as the type he arranges into words, or the press with which he prints, and therefore is only free to express itself in ways that shall not render it unfit for this its primary purpose.

From the two ways in which you printed your cuts, the difference between metal and wood engraving can be clearly apprehended. The engraver on copper or steel cuts his lines so that the ink may be put into them; while he who engraves on wood intends the ink to be spread on the surface. We can now understand the characteristic advantages of the two arts severally—how it is that steel can excel in rendering subjects requiring fineness and delicacy, and wood, those in which richness and force are the essential qualities, and why the power of one is in its light tones and the other in its dark. If you have ever experimented with your knife in the way assumed, you must have noticed that it was easier to cut in one direction of the grain of the wood than another, and that lines formed by cuts across the grain were very likely to chip out and break; this would never do for the engraver. He must be able to make firm lines in any direction, so that wood for his purpose is cut endways of the grain. The tree trunk is sawn into slices about an inch thick, not lengthwise like a plank.

FIG. 3.

The wood must be hard, too, or the thin lines will not stand the pressure of the printing press; and though mahogany, pear, holly, &c., will do for very bold common work, such as advertisement bills and the large pictures pasted on walls, box is the only wood yet found to answer all the requirements, and even that has to be carefully selected. Soft, red, or brittle wood is the engraver's *bête noire*, while the pleasure he feels in engraving on a block formed of hard, fine-grained wood of a pale, yellow colour is akin to that which an alderman is supposed to experience when eating turtle. The tools cut without effort, and the lines are free and clear.

As the diameter of the box-tree is small, and

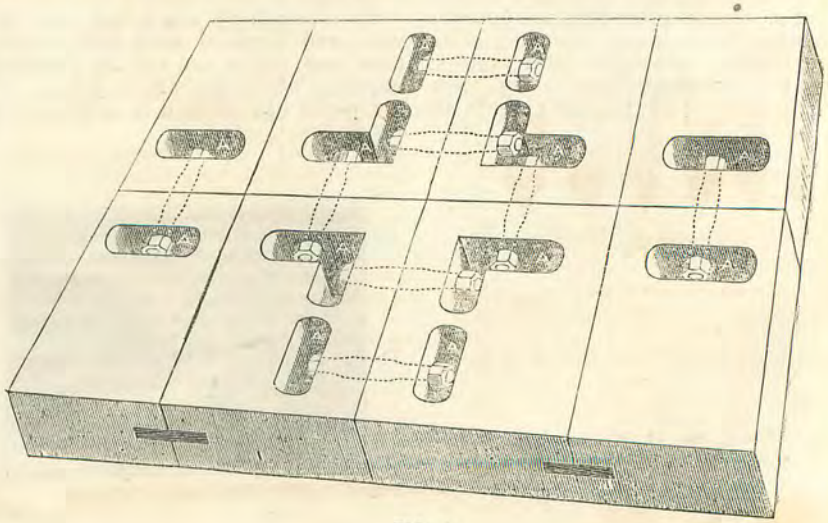


FIG. 2.

* "Ariadne Florentina." Lecture I.

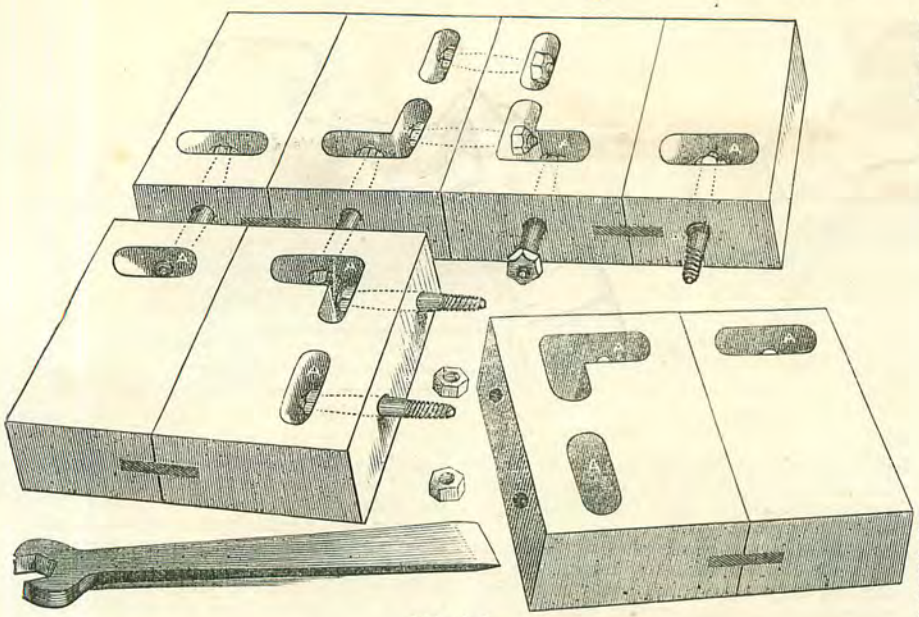


FIG. 2 A.

the slices, or "rounds," as the blockmaker calls them, will seldom finish a block as large as four or five inches square, it is necessary to glue and fasten pieces together by inserting what carpenters call a tongue in the way shown in the annexed diagram to form those of larger dimensions (fig. 1). It is obvious that only one engraver at a time could be engaged on a block so constructed, and apart from the inconvenience of working on a very large piece of wood, it might take so long to execute that, in the case of subjects of passing interest, the event he had to illustrate would be forgotten before the block was out of his hands. These "amalgamated" pieces are therefore formed into still larger blocks, that can be taken apart, engraved, and afterwards re-united by putting a brass bolt with a screw at each end, through holes in the sides of pieces intended to be joined, screwing nuts on each end of the bolt, and thus screwing the pieces of wood closely together.

The diagram will make it clear perhaps; it shows the back of a block, the dotted lines how the bolt passes through, and the parts marked A, the holes (which go about three parts through the block) where the nuts are put on and the "spanner" used. Fig. 2 A shows the same block taken apart.

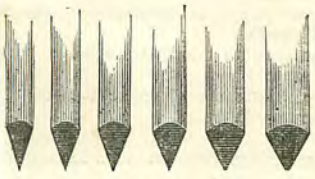


FIG. 5.

The blocks are plained to a smooth polished surface. Great care is taken that the wood is well seasoned, or each piece may warp and twist, or separate from its fellow, but in spite of all, sometimes the joins will open and appear as white lines right across the picture. Blocks should be kept in as even a temperature as possible, stood on their edges when not in use, that the air may circulate equally on each side of them, and wetted as little as possible. When laying the ground, as will be afterwards explained, the back of the block should be slightly damped; that both that and the face may swell equally, otherwise the wood may warp, as in the accompanying diagram (fig. 3). The tools used are few and inexpensive, and are named more from the uses to which they are put than from any great difference of form between them.

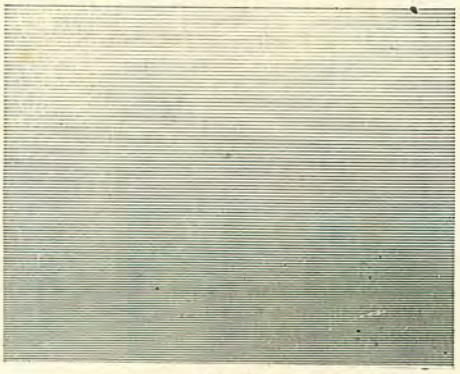


FIG. 6.

The graver (fig. 4) may be taken as the typical form. With several of them of various sizes (fig. 5), everything that is done on wood can be executed.

Being broader at the "back" than the "belly," a little pressure more or less will enable you to produce an open cut or a fine one at will, but where the object is to engrave a series of parallel lines, a tint (fig. 6), or others, with mechanical evenness, this is not an advantage, as a slight unintentional pressure might defeat the object in view, so a tool a little narrower at the back than the graver, and called a "tint tool," is used.

The tools are fitted to cut lines of different widths by rubbing the "belly" of each on an oilstone till it is broad like the back of a penknife, instead of being, as when purchased, sharp like its edge.

Here the dotted line (fig. 7) shows how much has been taken off a set of seven tools, and the lines opposite their points the width of the farrows which they have each been fitted to cut. The scooper, or scauper, as it is called, is narrower at the back than the tint tool, and is, besides, broad on the belly, without being made so by the engraver. It is used for scooping or clearing out the large white places such as the part here left (fig. 8) black between the lines of the triangle.

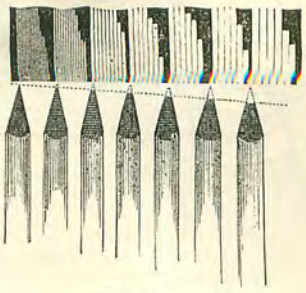


FIG. 7.

A magnifying glass (fig. 9) such as watchmakers use to look at fine work, a small chisel or "flat tool" to lower the extremities of the lines as they go into the white, a leathern cushion, about six or seven inches in diameter, filled with sand (to make it heavy), to rest his block upon, and to enable him to turn it round freely, and an oilstone to sharpen his tools upon, are the principal things actually required by the engraver.

FIG. 8.

The mode of holding the tool is not always the same. When working near the extremity of a block, the thumb is placed as in the annexed engraving (fig. 10), pressing against the edge, and allowing the hand to move the tool backwards and forwards. When the parts to be engraved are too far to be reached in this way, the thumb is placed on the surface of the block (fig. 11), and pressed on to it, so as to form a stay for the hand when moving the graver about.

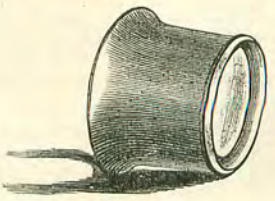


FIG. 9.

It is scarcely necessary to say that a good light is essential, and that in the foggy, dark days of an English winter, when an engraver for weeks at a time is compelled to use an artificial substitute for daylight, the strain on the

FIG. 4.

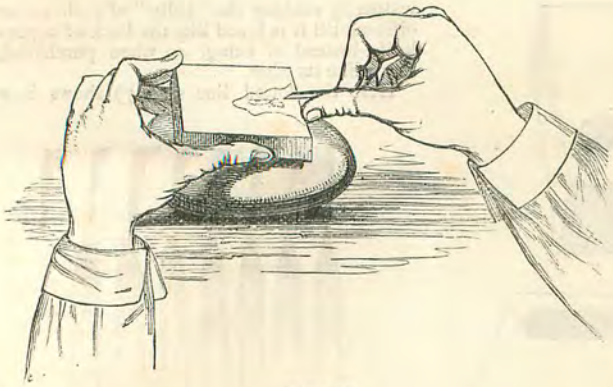


FIG. 10.

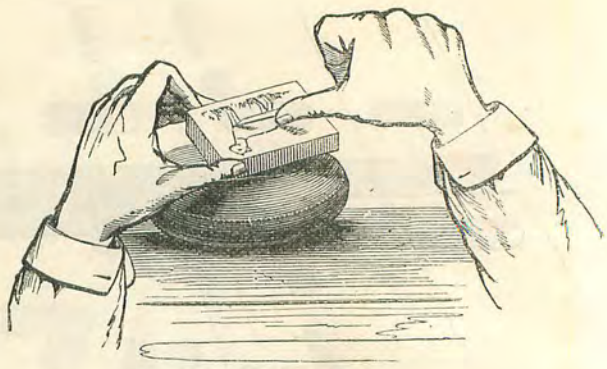


FIG. 11.

sight is very great. The best gas-burner, even with an opal reflector over it, will not enable him properly to see his work. So he places in front of his light a glass globe filled with water (sometimes coloured green with a few drops of nitrate of copper), which focuses or concentrates the light on to his block. By this contrivance a clear bright light is obtainable, and one burner placed on a round table will suffice for four or five persons.

A bullseye, such as policemen have in their lanterns, will answer the purpose as far as the light is concerned, but it does not protect the face and head from the heat of the gas so well as a globe.

If an engraver slips, makes a mistake, or his work becomes accidently injured, the defect can only be corrected—more or less imperfectly—by inserting another piece of wood, and re-engraving on that. This he calls plugging. The part to be altered is cut away, and a hole made nearly through the block with a gimlet or drill, a piece of wood is cut the required size, dipped in glue, and inserted in the hole, and driven firmly home with a hammer. As it stands a great deal above the surrounding surface, much care is required to saw off and smooth the plug down level with it. If the work be delicate, plugs are seldom a success, the adjacent lines are nearly sure to be bruised or pushed out of their place; sometimes, too, the plug itself will sink or come out.

(To be continued.)

VARIETIES.

THE CRICKET ON THE HEARTH.—In Dumfriesshire it is a common superstition that if crickets forsake a house which they have long inhabited, some evil will befall the family; generally the death of some member is portended. In like manner, the presence or return of this cheerful little insect is lucky, and portends some good to the family.—*Sir William Jardine.*

ON KEEPING SECRETS.—Guard thy secret from another; intrust it not; for she who intrusteth a secret hath lost it.—*Arab Saying.*

AN OLD SUPERSTITION.

Wash your hands, or else the fire
Will not burn to your desire;
Unwashed hands, ye maidens know,
Dead the fire, though ye blow.
—*Herrick.*

GOOD COUNSEL.—There is as much difference between the counsel that a friend giveth and that a man giveth himself as there is between the counsel of a friend and of a flatterer. —*Bacon.*

CRAMMING CHILDREN.—Children would be more free from disease if they were not crammed so much by fond mothers.—*Locke.*

SALUTATIONS AMONGST THE MUSLIMS.

Various modes of salutation are practised by the Muslims. Among these the following are the more common or the more remarkable; they differ in the degree of respect that they indicate nearly in the order in which I shall mention them, the last being the most respectful:—1. Placing the right hand upon the breast. 2. Touching the lips and the forehead or turban (or the forehead or turban only) with the right hand. 3. Doing the same, but slightly inclining the head during the action. 4. The same as the preceding, but inclining the body also. 5. As above, but previously touching the ground with the right hand. 6. Kissing the hand of the person to whom the obeisance is paid. 7. Kissing his sleeve. 8. Kissing the skirt of his clothing. 9. Kissing his feet. 10. Kissing the carpet or ground before him.

The first five are often accompanied by the salutation, "Peace be on you!" To which the reply is, "On you be peace and the mercy of God and His blessings!" The sixth mode is observed by servants or pupils to masters, by the wife to the husband, and by children to their father, and sometimes to the mother. It is also an act of homage paid to the aged by the young, or to learned or religious men by the less instructed or less devout. The last mode is seldom observed but to kings, and in Arabian countries it is now very uncommon.—*G. W. Lane.*

GOING OUT TO DINE.—About a century ago the Horse Wynd, in the old town of Edinburgh, had inhabitants who kept their carriages and maintained such state that one lady is said to have driven from her own door to the house where she was to dine, the heads of her front horses being before her neighbour's door ere the carriage left her own.

EVENING THOUGHTS.

When darkness fills the western sky,
And sleep, the twin of death, is nigh,
What soothes the soul at set of sun?
The pleasing thought of duty done.
R. S. Hawker.

DOUBLE ACROSTIC.

We're two domestic animals, and yet each name
A famous writer of this century can claim.
The first, whose genial humour so inspires his pen,
To touch, with homely words, the hearts of other men,
Has from his essays shrewd ideas so quaintly flung;
His readers know his hand was readier than his tongue.
The second, Nature's poet; all untaught, his strain
Flow'd from imagination's pure creative vein,
And, nurtur'd in the solitude of hills and streams,
Told in his verse the fairy-lore of peasant's dreams.

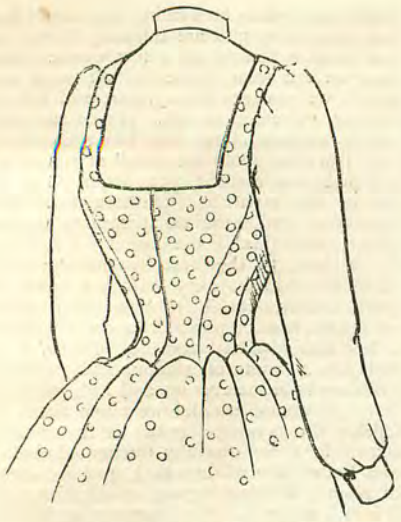
1. A loving maid, who by her younger sister's side,
Was disregarded, but, by fraud, was made a bride,
Yet, still uncar'd for, disappointment marked her life;
Proud, as a mother, but neglected as a wife.

2. In Central and in South America is found
A quadruped that burrows deeply underground;
Admiring the defensive armour which it wears,
The Spaniards gave it the descriptive name it bears.

3. The maiden city, known a thousand years ago,
Built on an isle past which the silv'ry waters flow,
Long deem'd impregnable; but in religion's name
A furious war was kindled. Shot, and sword, and flame
Did here destruction's work; the city fell, and all
Her country wept with horror when they knew her fall.

4. A Danish navigator, who, by sailing round,
A passage 'twixt America and Asia found.

XIMENA.



EARLY ENGLISH BODICE.

expressed by those who can only see the pretty effect, and pronounce the economical wearer "extravagant." Men are peculiarly prone to form this kind of crude opinion. Trimmings are all extravagant in their eyes, the only economical gown being a plain cotton with few gathers, built on the most austere lines; whereas the woman or girl who retrims an old dress knows better when she sees that these austere straight lines mean new material, perfect and faultless. Her old dress must be covered up, not unveiled, and the kindly shade of the trimmings will hide the marks of wear and tear.

In selecting your stuff, you will find brown a good wearing colour; but, remember, there is no saving in buying cheap linings, especially so far as your skirt is concerned. A good alpaca is the best skirt foundation, and will repay the first expenditure upon it by its admirable wear; and now that the under part of the dress is all lining, save a very little, it must be sufficiently good to wear out the dress. Most home dressmakers have a "dress-stand," or "dummy," and with that to aid you, it is easy to arrange the drapery so as to be graceful and hang well; indeed, it is nearly impossible to manage without it. The bodices of dresses are plain, pointed in front, with a postilion back (or round-waisted), with a belt. The other new shapes for thin dresses for summer, or for light woollens, are shown in this article, and are given on paper patterns.

The two bodices illustrated as having been selected for the paper patterns of the month show two pretty styles for summer gowns and frocks. The first is a pointed bodice, with a top and sleeves of coloured plain material, the rest of the dress being spotted or figured. The second bodice has a top of figured material and a gathered bodice of plain; and both of these patterns are suitable for any light cotton, or even woollen, stuff, or thin silk.

The bodice with the yoke consists of eight pieces—*i.e.*, two sleeve pieces, front, back, two yoke pieces, belt, and collar. The amount of material required of twenty-two inches wide will be three yards. This pattern is not only suitable for girls, but for any slight figure, some people being so thin that a full bodice is a great improvement to their appearance.

The "Early English bodice" consists of an under-bodice of five pieces (front, back, collar, and upper and lower sleeve) and a plain bodice of four pieces (a front, back, and two side pieces)—in all, nine pieces. The sleeve given is a coat sleeve, but it can, if desired, be made with the deep cuff shown in the design, the cuff being a plain, straight band of material, requiring no pattern.

Both these patterns can be obtained, price one shilling each, of "The Lady Dressmaker," care of Mr. H. G. Davis, 73, Ludgate-hill, E.C., enclosing postal note for the amount.

The following is the list of those already issued:—April, braided loose-fronted jacket; May, velvet bodice; June, Swiss belt and full bodice; July, mantle; August, Norfolk or pleated jacket; September, housemaids' or plain skirt; October, combination garment (underlinen); November, double-breasted out-of-door jacket; December, zouave jacket and bodice; January, princess underdress (bodice and skirt combined); February, polonaise, with waterfall back; March, spring dress bodice; April, divided skirt, and Bernhardt mantle, with sling sleeves; May, bodice with yoke, and Early English bodice.

"The Lady Dressmaker" begs to say that only one medium size is prepared for sale (36 inches chest measure). No turnings are allowed for, and no other paper patterns are prepared save those distinctly advertised for sale. She hopes that great care will be taken by applicants to give their addresses correctly and clearly, adding the county, and, if residing in a village, the nearest post-town. Patterns are forwarded with as little delay as possible, and it is strongly advised that everyone should take the numbers of all postal notes enclosed.

BODICE WITH YOKE.

WOOD ENGRAVING AS AN EMPLOYMENT FOR GIRLS.

By RICHARD TAYLOR.

BEFORE a design can be engraved it has to be drawn on the wood. This was in many cases formerly done by the engraver himself. Now it is a distinct profession; an unfortunate separation, though, for commercial reasons, inevitable. The blocks being planed to so smooth a surface, it is necessary before attempting to draw on one to lay some kind of ground to afford a hold to the pencil, which will otherwise slip about.

For this purpose, some draughtsmen lay on a thin coating of Chinese white with a large brush; others, a prepared white, procurable at the artists' colourmen's. And many take simply a little flake white, or zinc white in powder (sold at every oil-shop), and put it on the block with a small pinch of finely powdered bath-brick and a drop or two of water, into which a little gum arabic has been dissolved, spreading it with the fingers as evenly as possible, and allowing it to dry for a few seconds, then with the ball of the thumb lightly rubbing off as much as they can until the grain of the wood is clearly visible, turning it about that it may not be streaked in any direction. When as even as it can be made, it is left to dry thoroughly.

The great thing is to put as little white as possible, for the sake of both artist and engraver. If there be too much, it pushes up in a heap in front of the pencil every time a vigorous mark is made; if too little, the drawing does not look bright. If too much brickdust be put, the ground will be rough, and the hardest 6 H pencil will make a broad, chalky-looking line; and if too little, it is difficult to lay the ground evenly. Experience only enables the practitioner to know the best proportions. Artists are very diverse in their methods of doing almost everything: some add bath-brick to the Chinese white in the way named; others think it not necessary; some put a little powdered alum or borax with the white, saying it makes the ground less likely to wash up, proceedings which others, again, call "fads."

The design is usually first made on paper, and more or less finished according to the skill or preference of the artist, and varies in exceptional cases from the roughest scrawl, marking only the disposition of figures, etc., to a nearly complete drawing, where the light and shade and everything but the smallest details is carefully delineated.

A piece of tracing paper, a little larger than the block on to which the drawing is to be transferred, is then placed over the drawing, and a tracing made of it; and in cases where only a slight sketch has been made, defects in drawing corrected. A piece of red or black transfer paper is now placed on the surface of the prepared wood, and the tracing (reversed) on the top of that, and firmly secured to the block either with a little gum being put along the sides, or by rubbing them with beeswax and pressing the overlapping margin of the tracing firmly upon them.

The traced design is then gone over lightly with a hard pencil, or ivory tracing-point, made not too sharp, and still further corrections and additions made in the drawing. The paper being removed, the design appears faintly but distinctly drawn on the wood in red or black, according to the colour of the transfer paper used.

The method of finishing from this point differs considerably. Some artists will work over it with the lead pencil, and produce a drawing having much the character of an etching or pen-and-ink sketch, the whole being done with the point, the shades, textures, etc., being expressed by lines suitably undulated and crossed.

This is technically known as a facsimile drawing, from the fact that the engraver has simply to leave the lines strictly as they are; and when printed the engraving should appear exactly like the work of the artist on the block.

Some artists go over the traced line with the lead pencil, and make a complete drawing in outline of the whole subject, and then put in the shades with a wash of Indian ink or other neutral tint, and finish up with the pencil again.

This, perhaps, is the mode in which the greatest variety is attainable, and which suits most subjects best. Others will work up their drawing entirely with washes of Indian ink, but as there is no texture or variety indicated in this way unless in the hands of a skilled engraver, who can put in these essential requisites of good quality, they are liable to look flat and monotonous. Some, again, will draw in the facsimile style, using the point of the brush and lampblack, instead of the lead pencil, and such drawings, if done by a skilful draughtsman, are the simplest of all to engrave; while others, having got their outline traced, will slop about with lampblack and Chinese white, painting out and painting in – feeling about for their forms, and patching them into a recognisable shape, and making really a "body-colour" drawing on the wood. This is the most unsuitable style of work; it is that of the ignorant and amateur draughtsman. It puts on a thick coating of paint which powders all over the drawing when an attempt is made to cut it, and quite prevents the engraver seeing the thickness of the line he is producing, blunts his tools, and does every injury and causes every inconvenience to him that a drawing can; only an approximate resemblance to such a drawing is possible by the engraver, the delicate lines and tones become erased, and the white detached in the process of engraving powdering over the darks, reduces the whole to a more or less unintelligible mass of grey before his task is half finished. Each of the other methods has something to recommend it, and some subjects which it is alone best qualified to represent. Until within the last twelve or fourteen years, all drawings for the engraver were made on wood in one or other of the ways mentioned, but since that time the art of photographing on wood has been discovered, and drawings can now be made on paper or card, at the convenience of the artist, and transferred on to wood by its means. This is a great advantage to one unaccustomed to draw for the engraver, as it leaves all consideration of direction of lines, etc., etc., to the latter, and it is far better that he should have no lines at all to work from, than to have bad ones, expressing false forms and textures.

The discovery has given a great impetus to amateur work, and many persons, learning that technical knowledge is less necessary than formerly, unfortunately believe the power to draw at all may also be dispensed with, and so waste valuable years of their life in attempts which must end in grievous disappointments. Though there are some half-dozen persons who photograph on wood, the art of doing it is itself a secret, each practitioner having made an independent discovery of a method which he follows.

Some of these methods produce better results than others, but all require the artist to draw in a medium that will allow of a faithful reproduction of the delicate tones of his drawing. A little thought on this matter and a knowledge of the colours that will photograph best save much time, and enable the engraver to do justice to the artist and to himself. This discovery allows the artist much more latitude in methods of work, and is a means of saving time by enabling him frequently to utilise the preliminary sketch. As long, too, as he observes the given proportions of the block on to which his subject is to be photographed, he can make his drawing any size he pleases; in this way less finish in detail is admissible, and defects in drawing are less apparent when the whole is reduced.

It is true the large scale frequently tempts him to "sloppy" execution, and to put so many tones of grey into his work as to make it look flat and monotonous when all are retained in the engraving; but still, the advantages to him are very great, and the defects can be easily avoided with a little care.

When making the preliminary drawing on paper, the form of the block given, of course, determines to a great extent the arrangement of the subject, and sometimes demands a great deal of ingenuity and thought to adapt. Besides telling the story, the composition has to be arranged with a view to obtain the greatest breadth of light and shade possible. This is a very important point.

It sometimes happens that a drawing, good in composition and drawing (using the word to mean correct delineation of form), but feeble in effect, has been pushed aside as dry and uninteresting, and many a draughtsman on wood has failed to make the position he deserved through nothing but inattention to the management of his light and shade. Some artists see this fact so clearly that it is the only thing they are solicitous about. They hardly give themselves the trouble to form anything accurately, and yet will so arrange their blots and "touches" that their slovenliness or ignorance is not apparent to a casual observer.

Decision and delineation are the characteristics of all engraving, and effects incompatible with these qualities should not be attempted. The engraver cannot indicate. All form he expresses with definite lines, and though a shapeless patch of colour may not offend in a drawing, yet unless it be so finely engraved that the lines are all but invisible, its untruthfulness will be glaring when it leaves his hands. Work of such artists when printed frequently appears as if spoilt by the engraver, the general effect suggesting a drawing of greater excellence than has been carried out in the details. On the other hand, an artist well educated in form on first coming to wood will sometimes find his knowledge an embarrassment. It tempts him to overload his design with unimportant details, and so cut up his masses that their true relation is destroyed.

In all drawing something has to be left out, and the power to select those details which contain the characteristic facts of a form or picture is only acquired by great study and observation. The drawings on wood by Sir John Gilbert are remarkable examples of this power, and any person liable to the fault here mentioned cannot do better than study them carefully.

Drawing for wood engravers is really adapting one art to the capabilities of another, and is at its best in the hands of those who have obtained a practical acquaintance, however slight, with the technicalities of wood engraving, and more especially of the limits of its powers of expression. They then avoid those effects which, however charming in another medium, the art is incompetent to render, and insist on those which it is peculiarly fitted to represent.

Effects are frequently produced in black and white which are unrealisable by wood-engraving, or only realisable under conditions of printing and cost which are exceptionally attainable. As, too, the art is useless without the aid of the printer, it cannot be considered adapted to its purpose unless his requirements have been taken into account. Work that is to be carefully printed with good ink and on fine paper admits of more elaboration in form and gradation of light and shade than that which has to be "worked off" on common paper at the rate of 1,200 an hour. Black, white, and sufficient middle tint to support and blend these into one another are the only resources open in such a case. Masses of delicate greys and half lights must be excluded, or a dull monotony will be the consequence. To make drawings fitted for this rough usage does not by any means imply inferior skill, but rather the reverse, as they should simply differ in completeness from those intended for careful working: they fall short only. Adapted for their purpose by being deficient, not different as far as they go, they should be as good. They are the same drawings arrested at a stage of their progress.

Artists should always be informed of the kind of printing their work is to have, and judgment should not be pronounced upon it without considering its fitness for the purpose in view; and great injury is sometimes done to them by printing roughly that which they designed for careful execution. Like most other things, drawing for wood-engravers is much subdivided; some artists confining themselves exclusively to the figure, others to landscape or architecture, others to animals. Some artists copy portraits or pictures, others design ornamental work, borders, floral subjects, etc. Some draw only machinery, etc. Each artist, again, is more or less a specialist in the particular branch he follows. Thus there is a wide field open, and those who are incapable of the higher and more artistic work, but endowed with that best substitute for genius – the ability to take pains – may get a good living in one of the inferior employments if modest enough to follow it.

Most unsuccessful draughtsmen—and there are many—are unsuccessful because they aim too high. They estimate their capacity by their wishes, and make no impartial comparison of their own work with that of others. They have not the patience (they avow) to draw pots and pans for a hardware catalogue, and they feel "tied down" if required merely to copy. So they dash at "the figure." As Mr. Ruskin humorously puts it, in a pamphlet written many years ago,* "People reason in some such fashion as this:—'I don't seem quite fit for head manager of the firm of —— and Co,, therefore in all probability I am fit to be Chancellor of the Exchequer.' Whereas they ought to say, 'I don't seem fit to be head manager of the firm of —— and Co., but I daresay I might do something in the small greengrocery business.'"

If they would but try lower and lower, till they find the work their skill could compass, remunerative employment would in most cases be the reward of their humility.

For youths training for the profession there is no better way to obtain a mastery of the materials and that neatness of execution which is essential in all work than by practice in ornamental and what is understood as commercial drawing on wood.

As for remuneration, it is regulated mainly, if not entirely, by the ability of the artist. A man skilled in ornamental architecture or mechanical drawing will earn more than an inferior figure draughtsman, and so on, the best in all cases being sure of constant work.

The highest payments are made to those who can illustrate stories well. Such artists need many talents, and very talented artists are necessarily rare.

Readiness of composition, ability to draw pretty well everything—figures, landscapes, or animals—with equal facility, imagination to conceive and power to individualise the characters described by the author, a certain dramatic instinct in picturing the scenes and situations, a wide experience and retentive memory of manners, costumes, scenes, and things, are some of the essential requisites for this work.

(*To be continued.*)

* "Pre-Raphaelitism," 1852 edition, p. 6

lowered that I could only distinguish a word now and then, although the door of communication between the two rooms stood slightly open. Then my father seemed to be imploring him to be patient or asking help of him. Whatever it was for which he pleaded, Howard responded with some suggestion from which my father appeared to shrink.

"There is no alternative," I heard Howard say, in his hard, metallic tone. "In no other way can I help you. I have a right to demand such security."

"But the children," I heard my father say, in a voice so broken and feeble that I knew he must be sorely troubled; "I cannot bear to make things hard for the children."

I could not catch the reply that Howard made. I fancied he said that father could have no anxiety about Mabel, and he added something about "the others" that escaped me.

"But Dorothy—poor child?" I heard father say.

With that I started up, my cheeks flaming, as I remembered how wrong it was of me thus to listen to what was obviously not meant for my hearing.

What should I do? Father had evidently forgotten my presence in that room, and Howard Steinthorpe did not suspect it.

I pushed my chair back rather noisily, and moved to and fro once or twice, hoping thus to attract their attention. But, apparently, they were too absorbed in their talk to heed the sounds I thus made.

Presently solicitude for my father prompted me to adopt a bold course of action. I would show myself in the dining-room, for I hoped that thus I should bring to an end the interview which I knew must be sadly worrying to father. I waited till my excitement had subsided somewhat, and then, stepping firmly across the room, I pushed back the door and passed into the dining room. Father was seated at the table with a pen in his hand and some papers before him. He was writing when I entered; his face looked grey and worn, and his hand trembled visibly. Steinthorpe was bending over him; but he started up, flushing hotly, as I appeared. For a moment he could not conceal the annoyance he felt at my intrusion; but he quickly regained self-control, and said, in his usual, nonchalant way, as he held out his hand to me—

"Ah, Dorothy, how are you? Your father and I are just arranging a little matter of business."

Though he spoke so carelessly, his eyes searched my countenance with a keen, suspicious air. Then he glanced at the magazine which I carried. He knew my love for reading stories, and, I doubt not, assured himself that I had been too absorbed in my book to hear anything that had passed between him and father.

"Father is hardly strong enough yet to be troubled with business," I said; "I hope you will not keep him long over it."

"Certainly not; we have just done," said Howard, quickly. "I quite understand how desirable it is that Mr. Carmichael should not over-tax his strength."

My father said nothing, but I fancied there was a helpless, beseeching look in his eyes as he raised them to mine for a moment. I quitted the room. Ten minutes later I heard Howard leave the house; then I went back to my father.

He was still seated at the table; but now his elbows were resting on it, and his face was hidden in his hands. He raised it, however, as I approached him, and looked up at me with a sad, weary expression.

"Oh, father!" I said, "you should not have let Howard worry you with business matters."

"There is no escape from worry for me," he said, wearily; "there will never be anything but worry for me in this world."

"Father," I said, impulsively, "is Howard as kind to you as he should be in business affairs?"

"Business and kindness, Dorothy, are words that have no connection," father said, drily.

"Perhaps not, generally speaking," I returned; "but between you and Howard it should be different. He ought to look upon you as a father."

Father did not reply, but he laughed to himself as I spoke—a feeble laugh, with no mirth in it, a laugh which it pained me to hear.

"Dorothy," he said, sadly, after a pause, "I have been a very unfortunate man. Remember that, if ever you feel disposed to blame me. I always meant to do well by my children, but I have been very unfortunate."

My affection for my father was never demonstrative. As a child I had stood greatly in awe of him, and up to the present time there had been an impassable barrier of reserve between us. But now there was such a pathetic expression on his face as he looked up at me, that my whole heart went out in a desire to give him comfort.

"Whatever happened, I could never blame you," I cried; "that is impossible." And I threw my arm about his neck and laid my cheek fondly against his. It was the first and the last purely spontaneous caress that I gave him. There came a time when I was deeply thankful to remember that on one occasion, at least, I had shown my father that I loved him.

He seemed touched by my impetuosity, much as it startled him.

"You are a good child, Dorothy," he said, gently, and kissed me.

Then he rose and went off to his own room, whither I did not follow him

(To be continued.)

WOOD ENGRAVING AS AN EMPLOYMENT FOR GIRLS.

By RICHARD TAYLOR.

ASSUMING the design to be drawn or photographed on the wood in one of the ways named, the engraver's first care, when it reaches his hands, is to protect it from accidental erasure during the time he is engaged upon it, the moisture from the hand or breath being sufficient in a short time to obliterate the pencil-marks or blur the tones, if precaution be not taken. This he does in much the same way as the artist fastens his tracing to the block, as already detailed; that is, by rubbing the sides with a piece of bees'-wax, covering the entire surface with paper about half an inch larger each way, and pressing the surplus margin to the waxed sides until it is evenly stretched and firmly held. A small hole is then torn in the paper, and the part on which he begins to work is thus exposed to view. As he works, he gradually enlarges this hole until the entire piece of paper is torn away, when, the engraving completed, the necessity for protecting the drawing no longer exists. In fact, there is no drawing needing protection; but in its place are the incisions which the graving tools have made. Where before was an even wash of Indian ink, there is now a series of parallel lines; pencil-marks that told sharp and bright on the prepared surface of the block now appear as an intricate piece of network from the spaces between them being cut away. The whole thing has been translated, as it were, into a different language, and, according to the skill and aim of the translator, so is the author represented.

I say skill and aim, because a drawing is evidently capable of two interpretations—being produced by means, and on certain surfaces, say by charcoal on paper, or paint on wood or canvas. The engraver can concentrate his attention on reproducing the appearance given by the means, quite regardless of the varying forms and textures of the subject represented. He may make a charcoal sketch on paper look like what it is, and can reproduce the appearances given by lumps of paint and the accidental marks of the painter's brush on the canvas (see illustration).

On the other hand, he can work as the artist's

AN EXAMPLE OF MODERN ENGRAVING.

[See remarks on previous page.

auxiliary, endeavouring to make his cuts in the wood expressive of the form and texture of the thing depicted.

The style of work now fashionable in the American, and, indeed, some English magazines owes its fineness and much of its peculiarity to this difference of aim, the whole attention of the engraver being directed to a representation of the means of delineation, instead of the thing delineated.

Formerly his duty was to follow his drawing closely where it was true to the fact to be represented, and to disregard it entirely where it was false, or could be better expressed with his graver.

To make lines indicative not only of varying depths of shade, but also of form and texture, was his object—not of texture alone, or of shade alone, though sometimes of form alone, as that was the prime consideration, but if possible of these three essentials of all pictorial representation in monocrome combined. When engraving a face, for instance, he would aim to make his lines indicate by their direction, etc., the roundness and varying undulations of the surface forms as well as the soft texture of flesh.

Now, it is sometimes said the engraver has nothing to do with truth of representation. The artist comes between him and nature. His business is solely with the drawing before him, and therefore if there be nothing distinctive in the touch of the artist to reproduce, he should, if engraving a face, cut a series of parallel straight lines in any direction across the face, and cross them with another series of the same kind of lines at right angles to them—ignoring indication of form, obtaining roundness by delicate variations of shade, and by fine thin lines the smoothness which persons, uneducated in the art, conceive to be its greatest excellence.

This must not be accepted as the true function of the engraver, as the reputation of its earlier practitioners depends upon their having followed an opposite practice.

One is reluctant to find fault with Bewick, for instance, because in his "History of British Birds" he set himself to express with his graver the form, colour, and texture of feathers, or say that he would have done better had he confined his attention to representing the granulated appearance given to the pencil lines of his drawings by the rough paper on which they may have been made.

His work, too, is not fine, indeed, quite the reverse; but as his lines are expressive their very visibility is an advantage, helping, by their direction and sensitiveness, to express the qualities he desired to represent.

That some gain results to the art by breaking through old traditions must be admitted. Its language is more copious, but the engraver, from the training gone through, lacks the knowledge of fact indispensable to effective application.

Fine work (I do not mean refined work) is a necessity of the non-realistic style. A line that is visible, if not expressive, becomes objectionable. To imitate brush marks the lines must be cast about in all directions, following the accidents of the painter's hand, so that no flow or unity can be expected in them. Look, for instance, at illustration on page 549, which is part of a block that appeared in one of the best illustrated newspapers in the world. The effect is very nice and sunny, and the engraver's work very "painter-like," but the lines are so evident that they suggest forms, and forms, too, that have no special interest, for no one is interested in the shape of a dab of paint. The lines are not beautiful in themselves, nor do they, by their flow or direction, help to express the characters of the things represented.

Look at the hair and whiskers of the flute player; the ears, features, fingers, etc., of both figures; the foliage showing through the smooth glass of the windows; the lines of music in the book; the geranium on the window-sill, etc., etc. In the mass, and seen from a short distance, they express local colour and variations of shade, but individually they have no value, and should therefore be cut so finely that the unaided eye could not readily detect them.

Beyond stating principles, it is impossible to say how the engraver works, why he cuts lines in one direction and not in another, why short, and why long, etc. This is his art and the object of his study. He knows that by lines he has to express himself, and if he have true feeling for their beauty and composition, and the ability to make them expressive, while keeping them fine enough to avoid their asserting themselves to the detriment of the form represented, he will be careful that they shall not be so fine as to lose their power of expression.

FIG. 1.

As Professor Ruskin observes: "All great painters, however delicate their perception of colour, are fond of the peculiar effect of light produced in a woodcut by the gleaming of the white paper between the black lines." And the engraver, having nothing to be ashamed of in their flow and meaning, can therefore honestly submit them to view without fear of offending the most fastidious eye.

If the block handed to the engraver be a large one, in all probability it would be bolted (see fig. 2, 1st paper), and after covering it with paper he would proceed to cut the joins—that is, to engrave all the work on the extreme margin of adjacent pieces, constantly cutting across the line of separation, and for about an eighth of an inch on each side of it. This done, the pieces would be taken apart by unscrewing the "nuts," as already explained.

Each of the pieces can then be given to a different engraver, and if he be careful to follow closely the work commenced on the margins, the pieces when reunited will appear as if engraved by one person. In this way the large blocks filling two pages, or more, of the *Illustrated London News* or *Graphic*, and divided into 24 to 36 pieces, may be executed by as many different engravers in a few hours. I need hardly say that "cutting the joins" is a very important office, the degree of fineness, effect, and style of work on the whole block being thereby fixed and determined. A mistake there is irremediable. The drawing being now, as it were, cut into the wood, may be safely rolled or dabbed over with printing ink. The next step, therefore, is to get a trial proof, an impression sufficiently good for the engraver to see what corrections, if any, are needed. For this purpose and for small work, a dabber (fig. 1), made of wool and horsehair, and covered with strong fine silk, is the best, but for larger work, a roller, such as printers use, is the most suitable. Printing ink is spread with a palette knife on a smooth surface, generally a piece of marble, iron, or glass, and worked about with the roller or dabber until quite fine and evenly distributed. The block is then carefully cleaned with india-rubber to remove any greasiness that the engraver's hand may have left on it, and the roller passed over it a few times backwards and forwards, until sufficient ink adheres to its surface to yield a black impression. A piece of India paper is then laid on the block, and the paper rubbed at the back with a steel burnisher (fig. 2) or ivory paper knife, until the ink sets off on to it.

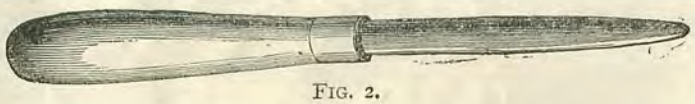


FIG. 2.

In order to see what progress he is making, where the lines are sufficiently printed, or where more rubbing is required, the operator will from time to time lift a corner of the paper and bend it back so that he can see the surface, keeping all the while the left hand firmly pressed upon the block, so that the paper may not shift and a blurred, or doubled, impression be the result.

Proof-taking is a delicate operation, requiring taste, practice, and care. Few engravers excel at it, the efforts of some even skilful engravers being simply absurd. If too much ink be used, or if it be not worked about enough before being put on the block, it will get into the fine cuts and fill them up. If the burnisher be used with too heavy a hand, the thin lines will be irremediably injured. To guard, therefore, against such a casualty, the proof-taker usually interposes a thin piece of card between it and the paper, rubbing on that, and only touching the paper with the burnisher to bring up the strongest darks.

Lines running to the edges of the block, or into large spaces of white, are very liable to accidents from careless rubbing and other causes, and it is on that account customary to leave the spare wood in such places uncleared until just before passing the block to the printer, when it may be quickly cut away with a gouge.

The block on page 549 was in this state when the India proof was taken, and so that the superfluous wood should not appear, a piece of paper was cut to fit and laid over it after the inking process had been gone through.

Now that the engraver has got his trial proof, it will be asked, How does he know what corrections to make, seeing that he has cut away his only guide—the drawing on the wood?

A pertinent question, to which the answer is, Only by recollection, and for that reason few engravers rely much on after touching when, from the nature of the subject, a very exact reproduction of the drawing is required.

The best work bears the stamp of decision and foreknowledge of the effect of the various cuts, and it is seldom indeed that a properly-trained engraver will spend more than an hour on the revision (other than manipulative) of a block that may have taken a week to cut, unless some obstacle has been thrown in his way by the quality of the wood or the nature of the drawing-surface. As has been said, when speaking of drawing on the wood, some artists will from carelessness, others from indifference, and most from ignorance of the consequence, so prepare the drawing-surface, or so thickly plaster their paint upon it, that it is all but impossible for the engraver to see the substance of the lines he is cutting, and therefore of the depth of shade they will produce. When this is the case, much more than is desirable has to be left to the finishing process. In extreme cases, I have known it to be necessary to outline the objects with the graver, as far as possible, touch in pieces here and there as memoranda of the depth of tone, etc., and to cleanly scrape off the drawing, ink the block, and complete entirely from memory.

(*To be continued.*)

WOOD-ENGRAVING AS AN EMPLOYMENT FOR GIRLS.

By RICHARD TAYLOR.

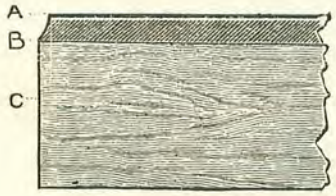
When working from a photograph on the wood the engraver has the advantage of having the original drawing before him to refer to, if in doubt about the effect when, the proof, being taken, the revision stage is reached; but then as the best photographs, if they do not leave out altogether the delicate shades of a drawing, never truly render them, he is at a great disadvantage until this time arrives, and has to refer constantly to his original, the relation of shades to one another being sometimes most inexplicably falsified, the grain of the paper or marks of the brush appearing, in place of the varying shades represented in the drawing. Thus, while he is helped by a photograph in the final stage, that stage is prolonged and made all important by the imperfection of the process of photography itself. The ground, too, is in many cases a great impediment: its thickness and toughness prove as much a hindrance as a thickly painted drawing on the wood; but doubtless with the improvement of the art these obstacles will be overcome and future engravers may enjoy the advantage of seeing the artist's drawing faithfully rendered on the block, and still have it in front of them to correct inadvertences when finishing their work.

It has now been shown how engravings on wood are produced. The process has been indicated step by step, and the reader may form some idea of the care and intelligence demanded of block maker, artist, and engraver before a block is ready for the printer, and will therefore, I have no doubt, be surprised when he learns that after all has been done to prepare it for the printer's use, it is very seldom indeed that he sees it. As a rule not more than two or three impressions are taken from the block, and these are made by the engraver, not the printer. The wood is so delicate and liable to injury that the carelessness of a printer's boy might destroy in a moment the labour of weeks, and postpone the issue of the book or journal in which the illustration was to appear. Consider also the consequences of taking 150,000 to 200,000 impressions from a block. Thin lines would be worn to thick ones by the friction, and others to a black mass.

How long, too, would it take to print even the smaller number mentioned above? Why, at the rate of 1,000 an hour, more than six days of twenty-four hours each. At this rate there would not be time to print one week's issue of such a magazine as The Girl's Own Paper before the next became due, and it would be impossible to supply so large a demand were it not that the art of electrotyping enables us to reproduce in metal any number of replicas of a block. It is no part of my subject to speak of this art, so I shall merely tell you generally that the block when finished is sent to the electrotyper instead of to the printer, and he having ready some softened wax, presses it in a press against the engraved surface, and thus obtains an impression from it in wax, showing all the engraver's cuts reversed, that is, as little hills instead of valleys.

This mould is then placed in a bath containing a solution of sulphate of copper in connection with a galvanic battery for a few hours until a thin deposit of copper is formed upon it, following and reproducing, of course, all its undulations, the face nearest the wax being the exact counterpart of the engraved surface.

This shell of copper is then backed up with type metal till it is a little more than one-eighth of an inch in thickness, and screwed on to a piece of hard wood to make it the same height as printer's type. The diagram, showing a section of such a cast, and the wood on which it is mounted, may help the reader to understand the description. A shows the copper shell, very much exaggerated in thickness; B, the type metal backing; C, the wood on which the whole is mounted. This metal cast or *cliché* can now be used in place of the engraved block, and when it begins to show signs of wear, it being comparatively inexpensive, another can be substituted for it. The wood block is preserved free from all risk of injury, and as a replica of a page of type can be as easily obtained in this way as that of a wood block, many printing machines can be employed at the same time to print the weekly issue of such a magazine as this.



Block and electro being ready for the printer, on his skill now rests the entire effect of the work of both artist and engraver. It remains with him to determine whether their work shall be adequately presented to the public, or in a way that shall make them regret that they had anything to do with it, knowing that good work badly printed appears far inferior to indifferent work when pains are taken in this final process.

I say on his skill, but that is not quite correct, for such is the interdependence of various arts and trades that he has to rely upon the electrotyper, the paper maker, and ink manufacturer performing their respective parts satisfactorily. These conditions unfavourable, the most skilful printer may strive in vain to produce good work.

I have spoken of the process of electrotyping (though strictly not a part of my subject), thinking it might be interesting to the reader to know something of the arts closely allied to it; and for the same reason, therefore, it may not be out of place to conclude with a word or two on the method of printing woodcuts.

If the reader read carefully the paragraph describing the way the engraver takes a proof, she knows that he does not rub all parts with the same degree of force.

Where he had a delicate grey to print he rubs lightly, not only to avoid bruising the thin lines, but so that he may gently lift the ink from their surface instead of spreading it down the sides of them, and to print a piece of black or dark shade he would rub vigorously in order to take up from the block as much ink as possible. It is only the method the printer adopts to obtain the variations of pressure that I now allude to, for on this part of his duty being properly performed—other conditions being favourable—depends the correct rendering of the artist's and engraver's work.

With the block, or *cliché* (for blocks are sometimes, though not often, sent), it is usual to hand the printer one of the two or three proofs taken by the engraver, as a guide to him and an example of the way it should appear when printed, and his aim is to reproduce by his machine thousands of impressions like it. If the proof be defective and he follows it, he is blameless. He is true to his model. His method is first to take some half a dozen impressions from the block on paper (not too thick) and to carefully cut away from one of these impressions all the parts which he sees by his model should be the lightest.

Then, taking another impression, he will cut from that all the parts which should appear a degree darker. These he pastes over what he preserved of the first impression, being careful that the superimposed parts fall exactly over the same parts in the first sheet; then, cutting from another impression the parts that are to be still darker, he pastes this on the top of the previous sheet, and so on, forming layers, the darkest parts having the greatest number.

This overlay is then attached to the tympan of the press, or cylinder of his machine, and carefully adjusted to fall over the places on the block corresponding to those of the proof.

The block, or form in which it is fixed, being then rolled over with ink, the sheet of paper on which the impression is to be taken is placed by the action of the machine between the surface of the block and this overlay, and will consequently be pressed by it more or less firmly to the block in proportion to the number of layers of paper composing it.

COURTLEROY.

By ANNE BEALE.

CHAPTER XXXV.

ALL THAT BIDDY KNEW.

In the afternoon of that auspicious day, Patrick and Biddy were summoned to the library, in order to tell all they knew of George Hope's early history. This was not much more than Patrick had already made known; still, Biddy had a few letters, or more properly memorandums, in her possession, together with some trifling articles of dress which she was anxious to place in George Hope's possession. He and his foster-parents questioned her from time to time as she told her story, and at their request Miss Heath listened. She sat near a remote window, the others by the large library table.

Biddy said she lived with her mother on the outskirts of a place called Bragh, where was a small garrison. One day she saw a soldier with a child in his arms, wandering about as if seeking someone. He looked into their

a summons from him. He has been hardly used throughout. But he now has Mimica, and she will console him."

The following morning they were astir early. It was soon apparent that Miss Heath could not accompany them to town. She was unable to leave her bed. The excitement of the previous day had quite prostrated her. George went to her room to take leave of her, and was much struck by her haggard appearance. It is easier to keep than to disclose a long pent-up secret. He made her promise to write to him, and by his warmth of manner comforted her.

"I am glad to know who I am," he said gaily. "You have taken a burden from my life."

And so, first embracing her affectionately, he left her.

He had a different leave-taking with his devoted madre. She had done everything that human ingenuity could devise to prepare a suitable kit, helped by Ada, now her maid, and still devoted, as were all the servants, to George.

Sampson was to accompany him and Mr. Prettyman to London, where they were to sleep a night, before proceeding to Portsmouth. The Prettymans were noted for never parting with a servant, and their less constant friends were wont to say that their domestics ruled them; so George was always greeted with joy, and parted from with grief, by the friends of his childhood. Tears and lamentations followed him as he bade goodbye, first individually then collectively, to the household; but when his madre clung to him as if she would not let him go, he fairly broke down, and had no words to tell her how he loved her.

"You won't change me for—for—Lady Margaret," she sobbed.

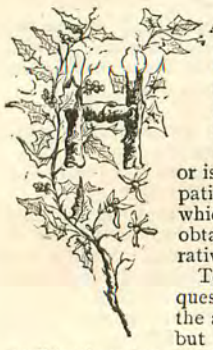
"You are ever my dearest, dear madre," he replied, as he gave her the last, more than filial kiss.

For many a year the scene of that leave-taking was graven on his memory. As they drove off, he saw her at the top of the great flight of steps, weeping, surrounded by the household, many of whom were weeping also; and he asked himself, "Who am I to have gained this wealth of love?"

(To be continued.)

ENGRAVING ON WOOD.

By RICHARD TAYLOR.



ENGRAVING said all that is necessary in explanation of the art of engraving to put the reader in possession of its chief features, the question arises—Is it, or is it not, a suitable occupation for girls; and one in which they may expect to obtain permanent remunerative employment?

To the first part of the question—the suitability of the art itself—there can be but one answer. Its chief qualifications are good sight, artistic perception, and patient industry; and these are not the exclusive attributes of the male sex.

In some respects, indeed, it would seem peculiarly fitted to be an employment for girls. It can be practised in any room and anywhere—at home or when on a visit to a friend in the country, a steady table and a good light only being essential. The tools will pack into a good-sized pocket, and can be put out of sight in a moment or two should circumstances make it desirable. No noise to disturb a sick member of the family; no dirt or litter to make the practitioner or her room unpresentable at any moment; no daily visits to the City at inconvenient hours and in unfavourable weather.

The mere mention of these advantages would induce anyone who knows of the urgent inquiries that are made after suitable occupations for girls to assume that such a business could not exist long without in a short time being almost monopolised by them; and yet so far is this from being the case that, in spite of the efforts made at various times by institutions and State-aided schools to teach the art to girls, very, very few indeed have ever followed it as a profession.

The Government, even, years ago interested itself in the matter, and established a school at South Kensington, with this as its avowed object; and Mr. John Thompson, one of the best engravers of the time, was appointed to conduct it. Classes were formed, lectures delivered, and the usual routine of a professorship properly gone through; but after diligent inquiry I have not been able to learn that the endeavour, earnest and praiseworthy though it was, added one single practitioner to the art.

The chief reason for this is, perhaps, the time it takes to learn—being too difficult to take up and practise as a source of income for a few years only. Most girls who come to the business young enough to learn it look forward to possibilities arising which may make it unnecessary for them to follow any profession whatever as a means of livelihood. To this circumstance is probably, or at least partially, due the failure of many to reach even a paying standard of excellence, the lack of earnestness and steady application consequent on such expectations being fatal to success. Nor is it a business that can be successfully commenced late in life—I mean much after maturity. Few men who have come to it after that period have reached more than very ordinary skill, so that it could not be turned to after the time of vacillation in a girl's life is over; and how many are there who will quietly determine to give up nine hours out of every day for four or five consecutive years—say between the ages of sixteen and twenty-one—to acquire, not proficiency in the art, but skill enough to execute subordinate parts? Yet boys do this; and girls can be qualified to compete against them only on the same conditions. No parent expects his son to learn a business well enough to get his living by it in less time than I have named. In fact, the usual term of apprenticeship in this—indeed, most others—is much longer. Yet when they place their daughters to a difficult business, such as engraving, they are surprised that so much time should be required. They first declare their girls are equal in ability to their sons, and the business as well suited to them (which I for one am prepared to admit), and then appear to argue in the whimsical way attributed to the Irishman, who on hearing a demagogue ask, "Is not one man as good as another?" replied, "Of course he is, and a great deal better." They expect their girls to succeed as well as their sons with half the practice, and under conditions which, in the latter case, they would consider most unfavourable. They do not value their girls' time and attention enough, and allow both to be frittered away in conventional formalities and trivial employments, utterly inconsistent with purposeful work; then expect results which they would consider ridiculous to require from their sons. They affirm the equality but assume the superiority of a sex in a way contrary to that in which it is usually maintained. They court cruel disappointment for a girl, and are surprised that she is disheartened when she encounters it. They expect pressing need and earnest endeavour to take the place of time-taking qualification, and after a year or two of imperfect training and desultory practice will permit her to apply at an engraver's office for employment, when a little consideration would tell them how hopeless must be the endeavour and how unkind to permit it to be made. There are few engravers who, when such an applicant calls upon them, will undertake the painful duty of telling her that inexperience causes her to overrate her power. She is too frequently sent away with misleading compliments and excuses, and it is not until continued failure forces it upon her does she realise the true state of the case. Even then the ambiguously qualified phrases she has received, and the hopeful tone of the various suggestions for improvement, may leave her in doubt, and she is quite as likely to think it is her sex that is against her, and not her lack of skill. Such, however, by the way, would not be the case. As a competent engraver she would stand exactly the same chance of obtaining employment as a man. The field she would find as open to her as to him. No partiality or prejudice would stand in her way. Skill, combined with the usual business qualifications, promptness, and punctuality are the only factors of success in it. Moreover, the payment would be the same in the one case as in the other. Time and skill regulate the cost of work almost entirely. A block—say five by seven inches—might be highly paid for at £2 and poorly paid for at £20, and in neither case would the question of sex enter as an element of the charge, for to those who required the blocks it would be immaterial whether they were spontaneously produced by an intelligent machine or laboriously worked out by a man or a woman. Some people work slower than others, and if she were one of these she would have to sell her work—though it took more time—at the same price as the quick ones accept for theirs; but that, of course, would be its fair market value.

Another reason why so few girls become engravers may be the difficulty of obtaining proper instruction and practice. There is no place in England within my knowledge where one could obtain the same advantages in this respect as a youth, no office being open to them. In Sweden, the business being mainly in the hands of the ladies, I am told that it is not unusual to see young men and girls working side by side; but this is not the custom here, nor is it one likely to be adopted, I think.

For an engraver to set apart a room for female pupils would reduce the difficulty; but still, a youth would have the advantage of working with those who were greatly his superiors in skill, seeing their work, and hearing their opinions about it.

I reluctantly confess I have no faith in

its being effectually taught in "schools" or classes, or in a "limited number of lessons." It has been tried now for so many years and under such varying circumstances, and I have not yet met with a single individual who has attained by such means skill enough to earn a livelihood, though I have met many who would give much to get back the time they have fruitlessly wasted in the attempt.

Many ladies have followed, and do still practise, the art, and some have prominently distinguished themselves; but they, in the majority of cases, have been related to engravers or had opportunities of working with them.

I do not say it is impossible to be taught by lessons or classes, or that failure is a necessary consequence of the system itself; for everyone who has had to instruct optional pupils knows how hard it is to induce them to go through the drudgery by which alone success is attainable. An apprentice in an engraver's office is compelled to do that which his instructor tells him, whether he likes it or not; and perhaps the failure before alluded to should be attributed to the pupils having been allowed too much of their own way; being permitted to do landscapes and other pictorial work that would conceal their deficiencies from themselves, before they were able to engrave a diagram of a few straight lines correctly.

A teacher of a class must please his pupils if he wishes to retain them, and therefore cannot insist, with the requisite firmness, on the course of training which experience dictates as the right one. He may wish to do his duty, but be compelled by circumstances to neglect it; he may see girls wasting their time in exercises that must lead to naught, and know that all attempts of his to set them in the right way, if it be a less pleasant one than that they are inclined to, will simply drive them to a less conscientious instructor. Perhaps he is not wholly to blame for this. When a teacher of music desires his pupils to daily practise tiresome exercises, he is supported in his request by public opinion, it being an accepted axiom that skill cannot be obtained without some distasteful work. But it is not so with the teacher of engraving; he has no public opinion to appeal to in support of his authority. The friends of a pupil, knowing nothing of the thing to be aimed at, may rather undermine what little is attached to him as a teacher by praising everything his pupil does that looks like a picture, and in recognising no merit in less attractive work. And what more natural than that she should prefer their ignorant and therefore injudicious commendations to his irksome requirements and qualified praises? Moreover, there is a habit of assuming that girls take to the study of this, and, indeed, most arts, simply as an amusement, and from mere good nature a teacher will allow difficulties to be shirked that under a different belief he would require to be faced.

Again, the kind of teacher available in most cases is against successful results. It is too precarious an occupation for any competent engraver to take to, even if he admits its utility; consequently it has fallen into the hands of those who, in the majority of cases, having failed to acquire sufficient skill in the art to practise it, consider themselves properly qualified to teach it. Frequently they are content to take small sums for their "lessons," under the belief, perhaps, the pupil will be able to receive any number without fear of acquiring sufficient skill to detect the imposition; in other cases a high price is demanded, to gain as much as possible while they have the chance. In neither case, therefore, can the remuneration demanded be taken as a test of ability.

Unless it be that the system of class teaching is unsuited to the purpose in view, it is hard to say the probable cause of the failure of the Government attempt to impart a practical knowledge of the art to ladies; many of those suggested above apply to private teachers only. Mr. John Thompson was well known to be a first-rate engraver, and on this account, as well as from the post he held, his utterances and methods would be listened to with respect and followed without question. It was a matter of indifference to him, pecuniarily, whether he made his teaching pleasing to his pupils or not; his duty was to set them in the right path and leave them to follow it as they pleased. The place, the hours of study, and the cost of instruction would all be arranged in favour of the student. Of course, the materials for practice would have to be purchased by her, and would certainly form a serious item in the cost of her education—particularly in those days when there was no photography on wood, and only transfers or drawings (more or less expensive) were available for practice; now, the resources open would reduce it considerably, but it would still be a heavy charge.

There is a certain disheartening effect, too, in the practice, under such a system of instruction, which could not but have a very depressing influence on a nervous or anxious pupil. To see a block she had expended much time and pains upon thrown behind the fire or put out of the way as useless as soon as completed, then to purchase another, and in due time to see that follow its predecessor, and so on, month after month and year after year, and in this way be incessantly reminded of the fact that the block with its drawing before she touched it was more valuable than after a week or two's labour.

In an engraver's office this monotony of failure is varied by trifling successes. The pupil, after a few months' teaching, is able to assist in "clearing" and cutting unimportant parts of blocks—diagrams and other simple commercial work—and not only gets practice without cost, but, knowing his work to be of use, makes greater progress than when employed on that which he does for exercise only. In fact, the most efficacious method of stimulating the flagging attention of a youth is to find him some insignificant part to do on a commissioned block, and the effect is sometimes surprising—one day's call on his attention and energy in this way being worth all the progress made in the one or two previous months.

In classes the pupils would be too equal one with another in skill; there is the proper rivalry created by this, of course, but not the stimulating effect consequent on knowing that the majority of those who are watching them and urging them on to pass the others are greatly their superiors; neither is there the educational result from the constant sight of good work about.

The art, having no independent existence, is not like that of drawing or painting, where even the slightest knowledge is an advantage and a possible source of pleasure to the student or her friends. If the acquired skill be not sufficient to enable the student to produce work worth printing, the time given to the study is absolutely wasted; neither does the practice before that point is reached help to form an intelligent critic or an appreciative observer of the best work of others, as it does in the arts before mentioned. The first exercises given to the student of engraving are directed exclusively to the acquirement of manipulative power, and this is the aim for years.

The higher qualities of engraving are more artistic than technical, and the manipulative dexterity acquired by the preliminary practice is only a means to an end; and this end the student, in the early stages, is not, by his practice, necessarily able to perceive.

(To be continued.)

JANET'S TRUST.

CHAPTER III.

SOME ten days later George Moore sailed for New York. He struggled hard to preserve a cheerful demeanour to the last, but almost broke down when reminding Janet of her promise of writing to him frequently.

"I shall always be thinking of you—always longing to know what you are doing," he said, in a broken voice. "Oh, Janet, Janet, do not forget your friend, but write to me when you can."

"Yes, dear, I will. And I will tell you everything that goes on, every little thing that happens, you may be quite sure."

"God bless you for those words, Janet, dear;" and with one long look of love, one clasp of the hand, he sprang from her side and was gone.

And now came a time of dreary loneliness for the two girls. Meta fretted and moped from morning till night, complaining incessantly of their hard fate.

But Janet bore her troubles bravely, and did all she could to be cheerful, working more closely than ever, that she might be able to keep her promise and send Meta to school.

And as time went on, and George Moore's letters came to comfort and cheer them, the sisters grew more reconciled to their loneliness, and began to talk of the bright days before them, when their friend should return, to fight and win their lawsuit.

But suddenly a most unexpected trial came upon them, and they found themselves reduced to a state of extreme poverty.

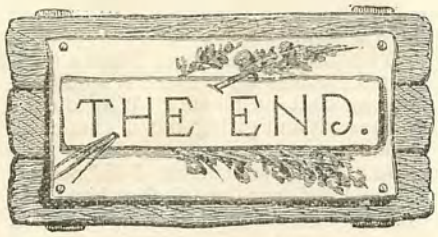
The ill-paid, monotonous work, at which Meta had been wont to grumble, ceased to come in, and the sisters found themselves without any means of earning their daily bread. They were terrified at this unforeseen affliction, and knew not what to do or where to turn.

The lady whose work had been promised to Janet some weeks before, had not been heard of again. The little money they had in hand was well nigh spent, and when that should be finished a miserable fate lay before them. Then, if work did not come in they must take their choice between starvation and the workhouse.

Janet's nights were passed in sleepless agony; her days in making anxious inquiries for work at every shop or place of business that she knew of.

But all her efforts were in vain, and each evening brought her home, tired and weary, without hope of assistance from any quarter. She grew pale and thin, and seemed like the ghost of her former self as she paced up and down the room, wondering what would become of them, and what they should do.

may read these pages, Aim at contentment. Do not be restless and anxious, do not be impatient as you look forward to the future. Let your life come to you as God may order it, and trust your happiness to the Father's care. Wherever your lot may be cast, and whatever your experience may be, it will be well with you if in all your ways you acknowledge Him that He may direct your paths.



WOOD-ENGRAVING AS AN EMPLOYMENT FOR GIRLS.

By RICHARD TAYLOR.

SUPPOSING that a girl be willing to make the indispensable sacrifices as to time that have been named, and determined to become an engraver, it is still most difficult to say how she had best proceed. To work in company with competent engravers of her own sex would be most favourable to success, and would place her on an equal footing with youths against whom she will have one day to compete for employment; and the nearer she can place herself in such circumstances the better it will be. But as far as I know there is no office conducted by ladies at present open to her. Perhaps she may be able to find some male engraver who would take her as an apprentice. Much of the work in London is done by engravers working by themselves in their own homes, and there would be fewer objections to her working with one of these in the house with his family than to her doing so with him in an office in the City.

AT WORK.

Personal instruction and constant supervision would be ensured in such a case, but there would still be the drawback before alluded to as to materials for practice, the engraver under these circumstances, as a rule, having only such work entrusted to him as he cannot delegate to another.

In an office an apprentice usually pays a fee of £30, for a term of not less than five years; and this sum, with an additional £50 or £60, is returned to him during the term in the form of weekly wages, none being paid during the first year.

Probably if an office were open to girls it would be on similar conditions, as their general usefulness would not be greater than that of boys. An engraver working in the way named might accept a lower fee, but in any case it behoves the would-be pupil to be very careful indeed as to the integrity and trustworthiness of the person with whom she might be engaging, as unfortunately there are some—indeed many—who advertise and take apprentices with no other object in view than to get possession of the apprenticeship fee, and practically there is no remedy at law for this species of dishonesty.

I have said I doubt very much the utility of class practice, still it may be that a girl, having formed the resolution spoken of, and having other means open to her, might like to know that there is a class for instruction in wood engraving, established by the City and Guilds of London Institute, at 124, Kennington Park-road. It is in charge of a thoroughly competent engraver, and if it be possible to learn this art by such means, the object should be attained there; and there is also a class at the Lambeth School of Art, Miller's-lane, Kennington-lane.

I have spoken of preliminary practice and method of study as if all engravers who had given thought to the subject were agreed as to the course to be followed. This is not the case, however. Some advocate an entirely different procedure to others.

Engraving on wood is not only an art in the sense that drawing and painting are arts—a means of artistic expression; but it is also a commercial employment, and the difference of opinion may arise from the degree of importance attached to this fact by engravers. In a manual of instruction* recently published by one of the best—I had almost said the best—that England has produced, the student is advised "not to begin with mechanism. To begin with a desire for art, to be an artist. "Let no would-be engraver," it says, "be content to become a mechanic. The days of mere mechanism in wood-cutting are numbered. It is only the art, the artistic part of engraving, that is still worth our attention, and that artistic part is drawing with the graver. Learn, then, first to draw, to see form; and after earnest endeavour, to be able to express it in the easiest way, by pencil upon paper. It is much easier to learn to draw in this way than to learn to draw with the graver. When you can draw with some facility of hand, and some knowledge of what you are drawing, then, and not till then, give your attention to engraving."

This advice, and much more that follows, is most excellent, and the student cannot do better than to take it well to heart; but the writer is evidently *looking at* wood engraving in one of its functions only, and the method of study afterwards recommended,† however beneficial in this view, would, in my opinion, be

* Wood Engraving: a manual of instruction. By W. J. Linton. J. Bell & Sons, 1884.

† Wash a dark tint over your block, that you may see the lines you cut, and try what sort of a drawing you can make with your graver only. At first take a single graver (size 2 or 3), and merely cut a few *not unmeaning* lines; something which has form in it, in order to learn not only how your graver cuts, but how to cut with it to definite purpose, making it obedient to your hand, whether for depth or direction of line. Practise well this "white line" work, this drawing with the graver. You may vary your practice if it so please you by endeavouring to cut a few lines in relief, clearing away the rest of the wood, and leaving them standing undamaged on the surface; but this (it cannot be said too often) is merely mechanical, easy enough of performance. The first thing to conquer is the command of your graver in cutting lines as surely as you would draw them with a pencil. Bear in mind that engraving is only drawing with the graver; the mere mechanism of leaving lines drawn for you, or by you, with pen or pencil, any intelligent but careful handicraftsman can

doubtfully advantageous for an ordinary student; for such students as a rule have not the "brains and taste of an artist." Practically, accidents in most instances determine the choice of a profession, and not special aptitude in the particular one selected; and if it were not so, it would be impossible to say how a pupil would turn out until after he had acquired sufficient command over his graver to direct his undivided attention to the artistic rendering of the subject before him. Some pupils, after rapid progress, stop suddenly short in a most unaccountable way, and never fulfil their early promise; while others plod along for years without evincing the least ability, and just as suddenly and unaccountably develop unexpected powers, rapidly striding forward to the front ranks of the profession. Singular to say, too, it does not follow as a consequence that an artist will make a good engraver. He may be by nature an originator, a designer, and being limited to translating the thoughts of another may quite nullify his artistic predisposition. Several well-known artists at the present time could be named as evidence of this. Apprenticed to engraving on wood, and failing after three or four years' practice to acquire even ordinary skill, they have exchanged the graver for the pencil, greatly to the advantage of themselves and the public.

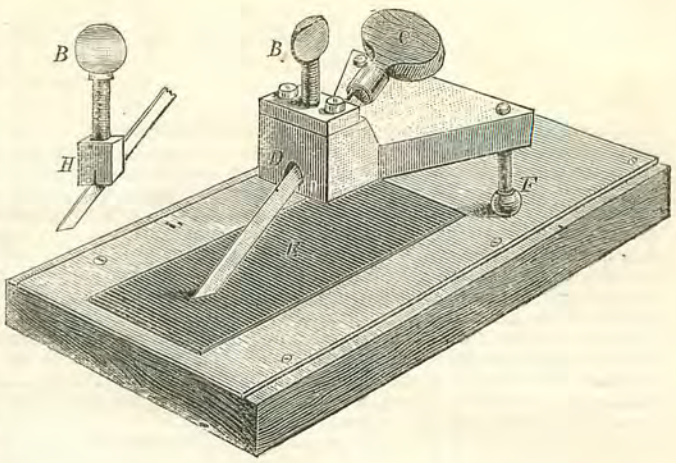
Some successful engravers, on the other hand, have become painters, and if this were the place it would be interesting to note the different artistic peculiarities of the two classes of men.

A system of instruction that recognises only one development of the profession, though that the highest, and leaves a pupil stranded, if he be not qualified by Nature to profit by it, is, to say the least, defective, and one that should be adopted with caution. It is certainly unpractical taking no account either of the object for which a business is learnt or its industrial position in the community. There are qualities to be exercised in engraving, quite as important to the community as artistic power, and to deny instruction in the art to persons who have those qualities only would be as great a loss to it as to them. To endeavour to stamp out the handicraft would be futile and absurd, and to compel your born artist to do handicraftsman's work would be no improvement on asking your handicraftsman to do the artistic.

It is, of course, gratifying to the vanity for a student to assume that he or she has been peculiarly qualified by nature for some particular walk in art, but it would be most imprudent not to provide for the opposite contingency, should time and practice show the belief ill-founded, and the procedure, therefore, which would appear most advisable should, while having the higher purpose in view, still qualify a student to fill the lower; and, therefore, instead of advising the student not to begin with mechanism, as Mr. Linton does, I should say let her direct her whole attention to it. At first acquiring technical skill, she can then put artistic feeling into her work if she have it, and if she have it not she can turn her attention to the industrial side of the art, where technical skill is the only qualification.

It is acknowledged that there is not such a field here as there was a few years ago, but no chemigraphic engraving processes will ever supersede it entirely, and what there may be the best qualified will secure.

The style of work popular in the American magazines localised here, again, would require a peculiar training, and one that would not necessarily qualify a pupil for anything beside; and if there were an opening for much such work in England, the time required to make an engraver competent to execute it might be considerably less than I have named, as it is the simplest of all styles of work, everything being expressed by one kind of line. In evidence of this I may instance the blocks engraved in competition for prizes offered some three or four years ago by the proprietors of one of the magazines in question. Marvellous results were obtained by pupils of from six to eighteen months' training. The first prize, taken by a student of sixteen, after only two years' practice, was equal to any of the engravings of the same class of subject that usually appear in the pages of the magazine.



To those who seek to enter the profession as a means of living, it is perhaps fortunate that the conditions of printing, etc., here make it unlikely the style will be naturalised; for if competent engravers could be manufactured in two years, the scale of remuneration might be so reduced by competition that the object in view would be frustrated.

In the "Treatise on Wood Engraving," by John Jackson, published about fifty years ago, a course of training is recommended which, with slight modifications to suit individual preferences, has been the one commonly followed up to the present day; and if the pupil's desire be to make herself generally useful within reasonable time, she is more likely to attain her end by the procedure there put forward than (unless she have the "brain and taste of an artist") by practising the "white line" method of Mr. Linton. The book is unfortunately not often met with now, and it is greatly to be regretted that the chapter containing the practical instructions is not revised and republished in handbook form. It would certainly be a useful and, I should think, profitable venture in paper and print. As it is but of little advantage to a student to know where she can obtain information unless the source be open to her, I will, by way of conclusion, shortly indicate a method of practice—following, in the main, the procedure recommended in the book, together with any suggestions of my own that may occur to me as likely to be useful; though, of course, if the pupil have a teacher, it will be wiser to follow his instructions than suggestions of mine, for they will be adapted to her particular needs, while much of what I shall say will be valuable only on the assumption that she have no teacher, or, at least, no constant supervision. The steps should be simple, that she may see her faults herself, if she will look for them, either by clearly apprehending the purpose in view or by comparison with other work. And in the first place, as all-important in preventing her wasting her money and her life, let me repeat that I have not overstated the time necessary to acquire available skill in the art. Some girl may say to herself, "Yes; five years may be requisite for most, but I, knowing how important it is, etc., can surely learn it in less." This is a fallacy; let her give it up. She won't do it in less; in all probability she will take longer if she be vain enough to think herself cleverer than other people, as she will despise the simple practice by which alone a sure foundation is laid.

The obstacle that first presents itself is where to get proper tools—those purchasable at the ordinary tool-shops require "making up," a difficult operation to a beginner, and one requiring knowledge of what a tool should be. In Paris they are sold in sets properly sized, sharpened, and ready for use, and the student's best plan will be to write to one of the makers—Rubin, 33, Rue au Maire, is perhaps the best—and ask him to send, say, one dozen burins à teinte (tint tools), sizes 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16; half-a-dozen burins (gravers), sizes 1, 3, 5, 7, 9, 12; and two scaupers (outil à chanlever). The ordinary tools will be too long for the hand, so you must ask the maker to shorten them. Including handle, they should be about 4¼ inches—say eleven centimètres at most.

When they are ready he will let you know, and on remittance will forward them; they cost from 10d. to 1s. 8d. each, and with careful usage will last for years. The other things not mentioned above you can purchase here. You will notice when you get them that the "faces" (fig. 4, page 373) are perfectly flat; mind you keep them so. Few things so retard the beginner as blunt tools, with short, uneven faces. If you find it difficult to manage this, you might get an engineer to make some such contrivance as that figured in accompanying engraving; it will cost about 9s. or 10s.; and though to use it takes a little longer time, it is thoroughly efficacious.

Put the tool (C) through the slot (D) far enough to allow the face to fall flat on the oil-stone (E). Screw down the clamp (B) to hold it firmly in its place; then push backwards and forwards over the stone (which passes between the two legs) (F) until the tool be sharp. To allow the legs to slide freely, a strip of thin iron, about one and a half inches wide, should be screwed on each side of the stone, and nearly level with its surface. In withdrawing the tool, take care that you unscrew the clamp far enough, or you may break off the point.

Provide yourself with a comfortable seat and a firm table, with a box or something steady to put your sandbag on. I have seen some attempt to work on a pile of books that swayed this way and that with every movement of the hand, having their attention constantly distracted by the endeavours made to keep them in their place. It is well to have a shade for the eyes, and to cover up the lower part of the window for about eighteen inches above the level of the table, so that the light may not be reflected on to your face. Put your tools on a piece of cloth or something

(*Continued on page 827.*)

accomplish. That last is but a question of steady hand, good eyesight, and patient attention; it needs the brain and taste of an artist to do the other—Page 57.

(*Continued from page* 823.)

soft, to guard the points and bellies from injury. On a smooth table a slight touch may cause one to twirl round and knock its point off against its neighbour.

It is very important that you should get into a proper way of holding the tool. Diagrams won't teach it. It can only be rightly learnt by example. Assuming this knowledge, therefore, I should advise you to go to an engraver's block maker (the addresses of some may be got from the London Directory) and buy 5s. worth of "practice pieces." Take your ruler and compasses and copy the diagrams in Euclid or any geometry, all the straight line ones first; they are as good first practice as you can have. See that you engrave the lines the same thickness throughout their length. The kitchen utensils in an ironmonger's catalogue will do as well, and so, in fact, will anything where incorrectness of form and unevenness of line is easily detected, and having no teacher or trained eye to see with, this is what you want.

The diagrams in Lindley's School Botany are a good next step, only here you must be more watchful of yourself than ever; the forms being less familiar, a variation in them is not so easily seen. As a change from this outline work you can practise cutting a tint first straight then waved, then gradated dark at top, lighter at bottom (fig. 6, page 373), making the gradations first by using tools of different sizes, then by doing as much as you can with one tool, pressing on it more and more each line, until it cuts too deeply to work freely, then taking another that will just fit the cut last made, and doing as much as you can with that, and so on; and don't be satisfied until you can't see the places where the tools have been changed.

Draw a few boxes, or any rectangular solids in angular perspective, and try and show the gradation of tones on the receding sides by both methods; then draw a pillar or a cylinder and show its roundness in the same way; keep to objects with even, definite lines. New buildings are excellent practice for you, as, if the lines be not true almost anyone can detect their falsity. Get an engraving of one that strikes you as being good, but with as little detail at first as possible, have it photographed on to a piece of wood (the blockmaker will tell you where you can get it done; it is, as I said, a speciality, no ordinary photographer can properly perform it), and with the engraving in front of you, set to work and see how near you can come to your original. Then make a drawing of the same building on a piece of card, putting the shades in with a wash of Indian ink, and get the photographer to put that on the wood for you, and set to work again. In the first case you had the actual lines of the engraver to help you, now you have your wash of Indian ink to translate into line; but if you have learnt the previous lesson well you should have no difficulty, with the original engraving in front of you, of doing this.

This method of study you can apply to any subject, and, if you be honest to yourself, will teach you much. Occasionally the original drawings on paper made for publishers are resold for a comparatively small sum after having been photographed from and engraved, and if you should be fortunate enough to buy one of these, as well as a print of the engraving that has been made from it, you have a valuable teacher to hand. Have the original drawing photographed on to a piece of wood, put the print of the engraving up in front of you, and you can see, line by line, how the tones of the drawing should be rendered. If two or three friends were to unite and purchase several drawings, from which they could study, in this way they could exchange one with another, and get a great deal of variety and valuable practice, and if the drawings be really good, and kept clean, they could be probably resold at a trifling loss.

The space at my disposal will not permit me to make suggestions as to the kind of subjects to choose, but generally I may say you will learn more from those having definite form in them—heads, figures, drapery, animals, etc., etc., than from landscapes or others where tone is the prevailing feature. For the same reason I can say nothing of the actual manipulation, when and how to begin, etc., etc. To do so would require too many diagrams and minute descriptions of details most uninteresting to a general reader. This the student must learn from personal instruction. I shall only say above all things don't hurry forward; do each thing as well as you can. Form a habit of looking at your work to find out its faults; strive against your belief in its goodness until some competent person tells you it is right. Don't ask the opinion of an ignorant friend, or value it when volunteered. Look closely and leisurely at good engravings (not necessarily fine ones)—a glance is of little use—taking your magnifying glass, and following the lines, noticing when and how they are "dropped" (broken off,) how surface and texture are expressed by their opening and *closing, thickening* and crossing, how in all good work the lines appear to flow naturally one into the other, helping by their thickness or tenuity to indicate perspective, distance, roundness, etc., individually expressive, never losing their character as lines (long or short). Form a habit of selecting excellence, and passing over defects, and there are very few blocks that won't teach you something, and moreover it will help you to knowledge without arousing that feeling of self-glorification which the opposite practice engenders. Compare your work with the best you can find. Don't take the worst, and because yours may be as good think the goal reached. "Nothing succeeds like success," and nothing is so disheartening to a pupil as failure. Do not, therefore, try things too far above your powers. You want to establish the well-grounded confidence in yourself which comes of frequent success. Some persons do this by shutting their eyes to their faults. Should you come across such, let them alone; they will but misconstrue your motive, should you try to open them.

As your skill increases, remember that artist and engraver are but accidentally separated; both work in a more or less conventional way to represent certain truths of nature. The painter by means of colour, pictures a round object on a flat surface, and an engraver's purpose is to do the same thing by means of lines. Do not be tempted, by the desire to do something clever or original, to make your picture in lines look like what it is not. You can give it the appearance of a lithograph by chopping it about to represent the grain of the stone easily enough, but no representation can equal the thing itself, so your work, after all, can only be equal to an inferior print from the stone, and the same remark applies to imitation of all *means*—charcoal, paint, and brush marks. Keep the thing you are engraving mentally before you, make lines expressive of that; follow your drawing with slavish submissiveness, so long as it represents the facts truthfully; to wantonly alter it would be an insult to your artist, but to follow it when you see it is wrong is to degrade your art and yourself.

VARIETIES.

A Faithful Dog.

A remarkable story is told by Jesse of a dog that accompanied its mistress when returning from market with a basket of provisions. They were overwhelmed by a snowstorm and not discovered for three days. The woman was found dead, but the dog, which was lying by her side, was alive.

The honest creature, however, had not touched the eatables in his mistress's basket, but, as neighbouring villagers remembered when too late, had been endeavouring on the evening of the storm, by whinings and sighs which they could not comprehend, to induce them to follow it to where its mistress was.

Being and Seeming.—Were we to take as much pains to be what we ought as we do to disguise what we are, we might appear like ourselves without being at the trouble of any disguise at all.—*Rochefoucauld.*

Cunning People.—The sure way to be deceived is to believe ourselves more cunning than others.—*Rochefoucauld.*

A Fall of Snow in a Ball-room.

To illustrate the production of snow by change of temperature the following anecdote is told by Professor Dove, of Berlin. On an extremely cold but starlike night a large company had assembled in a ball-room in Sweden, which, in the course of the evening became so warm that some of the ladies fainted.

An officer tried to open a window, but found it was frozen to the sill. He then broke a pane of glass, and the rush of cold air from without produced a fall of snow in the room. Its atmosphere was charged with vapour, which, becoming suddenly condensed and frozen, fell in the form of snow upon the astonished dancers.

From a Mother's Point of View.—"I am afraid all these children are a great deal of trouble to you," said a minister to a mother who had children of all ages about her and who was far from strong.

"Oh, no, sir," she said, "children aren't trouble; they're only fatigue."

Seized for the Rent.

A gentleman in New Orleans was agreeably surprised the other day to find a plump turkey served up for dinner, and inquired of his servant how it was obtained.

"Why, sir," replied Sambo, "dat turkey has been roosting on our fence tree nights, so dis morning I seize him for de rent of de fence."

On the Way to Happiness.—The path of virtue, indeed, is devious, dark, and dreary; but though it leads the traveller over hills of difficulties, it at length brings her into the delightful and extensive plains of permanent happiness and secure repose.—*Zimmerman.*

The World's Treatment.—We may be pretty certain that persons whom all the world treats ill deserve the treatment they get. The world is a looking-glass, and gives back to everyone the reflection of her own face. Frown at it and it will in turn look sourly upon you; laugh at it, and with it, and it is a kind and pleasant companion; and so let all young people take their choice.