On Finishing.

We have been so often importuned to give some articles on finishing that we are glad now to be able to turn our attention to this important branch of the trade, and we intend to try and suit all classes of our readers by making our remarks thorough and explicit, so that anyone desiring to take up the work of finishing may have some guidance. We hope these chapters may be of service to the many small provincial binders who are often at a loss how to vary their styles of work, partly by reason of want of tools, and partly by want of the facilities for seeing the varieties of work that the finishers in our large towns possess.

In all our future remarks we wish this to be borne in mind: the methods we shall try to explain will be the best methods of doing good work, which need not therefore be expensive. A book may be well bound, and well finished, though the materials are but paste-grain and though but plainly filleted and lettered. Neatness is often preferable to elaborate ornamentation, always to gaudiness. The full gilt back is often but a means of hiding a multitude of faults in forwarding and material, and it is easier to butter-stamp a back all over, than to fillet it straightly and letter it evenly. On the plain book the drunken letters and lines like dog's hind legs show up in all their naked hideousness; so does the dirty preparation and the smears of glaire extending beyond the narrow margins of the lines.

Ours is not the intention to promote hasty methods, but we shall from time to time give hints of the speedier methods adopted in large houses.

The materials most frequently in use in small binders' shops are paste-grain, roan and persian, so they must be taken into consideration as well as the more costly calf, Russia and Morocco. Of the former, paste-grain and roan have a body that requires but little preparation, and it is always advisable to use as little as possible. (1st) Because finishing requires just so much and no more; (2nd) to use more is wasteful both of time and material; (3rd) it spoils the appearance of the leather; (4th) too much preparation tends to prevent solidity in the gold work, instead of helping it.

Paste-grain may be easily finished with a slight preparation of very thin glaire; the less, the better, because experience will soon show you that thick or dirty glaire will lay entirely upon the body surface of paste-grain, show up white, even crack up, and when you come to work it, your gold may come out in flakes. I well remember an old finisher—who was teaching me when an apprentice—saying, "Humph! If you shake that lettering you'll find it on the floor;" and when I used the rubber, two or three letters came out bodily like casts of gold. That was simply because the preparation had been too thick. Of course paste-grain should be covered with glue, and not stretched in the covering: if so, no paste washing is required, as the glaire will rest on the surface. But even thin glaire sometimes shows up white, and perhaps the very best thing to use is sal-ammoniac, one pennyworth of which may be dissolved in a pint of water and bottled for use.

For paste-grain, only half the strength is required, that may be laid on lightly with a sponge; the solution will not stain, nor turn up white. The main fault with sal-ammoniac is that gold does not work up so bright on it as on glaire, so that glaire is preferable for other leathers.

Roan also requires no paste wash, as whatever is used, lies on the surface, consequently thin glaire is the best medium for gilding; but sal-ammoniac may be used.

Persian is both a porous and greasy leather; being greasy, the glaire does not run into the pores so much as might be expected on a flat surface, but when a book is covered with paste the leather is stretched and it becomes necessary to give it a thin wash of pastewater, which should be smoothed off either by the palm of the hand, or the arm, as it easily shews streaks. Again, persian often will be found to have a surface dye that is easily moved, so that both back and sides of a half-bound book should be washed over to make an equality of tint. The paste water should be clean; persian requires careful treatment to prevent it looking mucky, but no clean work can ever be depended on, upon any material, if dirty preparations are used.

Calf is the most porous and easily stained of any leather, it therefore requires a thicker and more consistent preparation than any other, and where it has been stretched, as across a back, paste water is not sufficient. After marking up, a calf back intended for gold work should be dabbled over with paste, which should be well rubbed in with the flat side of a folding stick, then the surplus paste washed off, leaving a thin film evenly covering the whole surface, but of this we shall have occasion to speak later on.

Russia is best treated with a wash of thin paste water made of equal parts of old urine and water.

Morocco always looks dirty if paste water is used upon it. The best wash for this leather is old urine pure and simple, though for very light colours and open grains, a little paste may be put in to thicken it.

Though in common use, very few could tell you why this liquid is to be preferred. After glaire has been applied to leather, evaporation takes place, causing the albumen to coagulate. After it has been laid on some time, it becomes very dry and brittle, and more difficult to work than when it was fresh. You cannot work on glaire till it is dry on the surface at least, and what is wanted is something that will retain a certain amount of moisture beneath the dry surface of the albumen for the longest possible period. That something is secured by the use of a wash of old urine, old being preferable to new, since it is only in its stale condition that you get the slight fermentation needed to bring into play its special properties, for which it is valued. Urine contains among other things urea, which after fermentation takes place becomes changed into carbonate of ammonia, and this keeps the leather in a moist condition, so that when the hot tools are applied a steam is produced, which, softening the ininspissated albumen, assists in causing the gold to adhere as brightly as if the preparation were quite fresh.

[To be continued.]
On Finishing.

PLAIN FILLETED WORK.

MARKING-UP is the first thing to be done, and the top line should be so placed that it comes just to the edge of the book itself, leaving the width of the headband beyond. Measure out from this point at the head six points equidistant, so that the sixth reaches such a distance from the edge of the book at the tail, that there is room for another fillet, still leaving the width of the headband, and with a space between large enough to put in the place and date of publication. No matter whether it is intended to put it on or not, the double tail gives a finish to the work. Be careful that the lowest line marked at the tail is just the width of your fillet above the edge of the book, because you should work from head to tail. Let this be borne in mind: always work one way, from head to tail; that is, with the head of your book to your left hand. Of course this does not apply to working against bands when the book must be turned round, even then you should work from left to right, but always make a system of working downwards and you will not be in an everlasting quandary as to which way you have marked the lines for working. Mark with a folding-stick pointed, guided by a narrow strip of stout vellum held across the back in your left hand. If you have a number of books of the same size, especially a set, you should mark up the first and last volumes separately, making sure that the marking corresponds, and then tying them all up together in proper order as they would be on the library shelf, stand them up on their tails and knock up even; then gently lay them on the foredge so that you do not disturb their even arrangement, and placing a straight edge across from the first to the last volume already marked, run a folder carefully over the lot.

While this method is quicker than that of marking each one separately, it has this disadvantage, the marks are rarely straight and only serve to show where the fillet should be worked, being no guiding line such as the vellum guided mark would be. Except on very small books, always have five fillets between the head and double tail; four looks mean and paltry.

Prepare your books according to directions in the last number if your materials are paste-grain, roan, or persian; or if the calf is to have a polished back. For persian and calf with polished backs next glaire up—for persian with thin glaire, for calf stout glaire; with two coats each laid on and with a soft sponge evenly, care being taken not to let the glaire run into or beyond the joints; the first coat being thoroughly dry before the application of the second. For persian or calf without polished backs, take a small camel's-hair pencil and paint across the back a narrow band of glaire about the width of your fillet, going beyond the line right over the head and double tail to the edges of the back, and also with a pencil glaire over the lettering panels. Do not let the glaire float, that is: lay on in pools, and do not go over the surface more than once for each coat. When you start on the second application move quickly, or you will find the damp hairs of your pencil sticking to the dry surface of the glaire and pulling out, making your work dirty and disturbing that even surface of preparation already secured. Should you wish a gold tool in the centre of your panels it is better to have polished backs, but if the polished back is not desired, the tools must be blinded in and glazed in with a pencil.

For Russia and morocco always blind in your lines and tools first, then wash up, and glaire in the blind impressions, confining your glaire to that limit to secure clean work. The letterings should also be blinded in the same manner, but as that is a long job and prices do not always pay for it, the lettering panels are often glazed over, the same as on calf. There is an intermediate plan, however, which is preferable: glaire over the panels required and then with the fleshy under-part of your hand dab over the surface, removing as much of the glaire as possible; that will still leave sufficient on to enable you to letter a book if worked fresh, and yet not look so shiny and mucky as if glazed all over in the usual way, while any little defect in the gold work may be easily remedied by a touch on the weak spot with an almost dry pencil and another impression on a fresh spot of gold.

When working your books always have them in the press between a pair of nipping boards, those at least which you put in the press. For this purpose take an ordinary pair of backing boards and plane down the bevel on the outsides, making it a long gradual slope towards the top edge, because you require room for your tools to work, and the incline of the bevel on backing boards is too sharp. The more gradual the slope of your boards the closer you may put them up to the joint without being in the way of your fillet or palette. They should be lined with stout pieces of calf, fibsly side out. These boards will prevent the bevels of the press marking your books, and will give that solidity to the back which is needful for finishing, while yet the back is sufficiently far out of the press to make workable.

Many common books are filleted without being put into the press in shops where large numbers are done. To do this a T board is used, the top of which is similar to a backing board deeply bevelled with a stem underneath which is fixed between the cheeks of a press, the flat side towards the workman, and the bevelled side away from him; on the bevel a slip of

THE T BOARD.

[To be continued.]
On Finishing.

Before dealing with the application of the gold, we would recommend the use of "best deep" on everything but the very commonest class of work; pale gold makes a book look so poor that the extra profit gained by the slight difference in price should tempt no one to sacrifice the character of his work for such a paltry consideration.

For paste grain, roan, and dark moroccos, oil may be used for laying on; but for light moroccos, persian, russian, and especially calf, always use lard. Screw up a small piece of cotton wool so that it will form a little pad that will not fray out, and grease that. With this greased cotton you may grease the leather for laying on.

The gold is applied with a piece of clean cotton wool dabbed on the cheek; the very slight amount of grease on the face will generally be found sufficient to cause the gold cotton to pick up the gold.

A gold rag may be made of a piece of flannel, or almost any soft stuff of open texture, by sprinkling olive oil on it and then wringing it tightly to spread the oil, so that it will not stain the leather. Always use good olive oil, and not cheaper and thicker stuff which will turn miserably sour and rank. The gold rag is used for greasing tools and for wiping off the superfluous gold after the application of the tools, and should be kept as clean as possible.

India-rubber is also used for cleaning off the smaller particles of gold left on by the rag, if the soft rubber is used, it is better not to apply the gold rag at all. Take a piece of "bottle rubber," i.e., pure india-rubber, and cut it into thin shreds, put the pieces into a gallipot and pour on spirits of turpentine enough to cover the rubber; let it stand for 48 hours uncovered, then knead up the softened mass till it is thoroughly worked into one piece again, but soft for use. This is far more economical to use than a piece of hard rubber, because, with the hard, the pieces fall away as it wears—taking with them some of the gold you desire to save—while with the soft, the gold is being constantly worked in. As the turpentine evaporates the rubber would get hard again, but the grease worked in with the gold prevents that, until at last it causes the rubber to become too sticky to use, but by that time it is worth something considerable. Besides being the best gold saver, it cleans the work better and is far less likely to mark soft calf; but for hard-grained moroccos, it is advisable also to have a piece of hard rubber at hand.

We are now ready to commence with the gold. Lift the sheet and tap on your cushion with the flat blade of the knife close to the book; the little current of air will curl over the sheet of gold; place your knife under the curl of the sheet and then breathe in the centre of it, when it will fall flat and may be lifted out of the cushion; withdraw the knife and breathe again, and the gold will lie flat for cutting. This is an amusingly difficult task for a novice, but difficulties have to be overcome. Cut the sheet into links, i.e., strips, about twenty to a sheet for an ordinary two-line fillet. After taking one sheet out of a book, always turn your book over and begin at the other end, because the end sheet of gold is more apt to become damaged by chafing as you are taking other sheets out, owing to the looseness of the outer leaf of the book, and this plan will save you many a spoiled sheet.

Take the fillet in your right hand, and with the gold rag in your left, give the wheel a sharp spin round, letting the edges run against the greased rag, thus greasing the surface enough to pick up the gold, then pass the fillet lightly over the links, so that they will pick up. Most fillets hold about 3½ links, but only take up three, so as to save further cutting or waste. Hold the fillet firmly as low down the handle as you can, your thumb stretched upright under it and the end resting on your shoulder; keep your elbow close down by your side and push the fillet steadily over the back of the book as it rests firmly screwed up in the press. The pressure must be firm, steady, and equal, and the heat of the fillet will cause the gold to adhere to the leather solidly in proportion to your ability in the use of the fillet. Further instruction we cannot give, you must gain ability by experience.

By damping your finger on your tongue and dabbing the tool you may test the heat required. For paste grain, roan, and morocco, the damp should vary barely fizzy; for persian and russia, it should be a little warmer; and for calf, a brisk heat is necessary: but calf should not be attempted till you can successfully work other leathers, because that especially needs the quick and decisive touch of a practised hand.

If a pallet is used instead of a fillet, the same process is adopted, that is, the gold is picked up and rarely laid on, but the work is done by the wrist. In holding the handle, place the thumb on the end and keep the right elbow out, so that the fore-arm is parallel with the book; that will give free play to the wrist and greatly assist in working the lines straight as compared with the often-seen cramped fashion of keeping the elbow by the side. There are proper and improper ways of working and even holding tools, and many good finishers give little heed to these points; but in teaching, we ought to be precise, and we are therefore taking some pains to indicate the best methods that have come under our notice even in such simple things, which many of our readers will think every boy ought to know, but which we are convinced many men do not practise.

The exact period when gold stamping was first applied to bookbinders' cloth is clearly marked by the publication of Lord Byron's life and works, in seventeen volumes. The volumes were published monthly, and had a sale of about 20,000. They were bound in green cloth, and the first volume was issued in 1832 with a green paper label on the back, matching the cloth in colour, on which was printed, in bronze, the title and a coronet; on the succeeding volumes the paper label was dispensed with, and the coronet and title was stamped in gold upon the cloth itself.

To possess a book is the bibliophile's happiness—to hunt for it is his favourite occupation, and to find it his supreme happiness.
On Finishing.

LETTERING.

After filleting your books the next step is to letter them, the panels which require lettering having been prepared at the same time as the rest of the back.

On a plain filleted book the lettering is far more conspicuous than on a full gilt back; it is, therefore, more than ever necessary that care should be exercised in the choice of letters, the arrangement of the title, and the exactness of the working. In most well appointed shops there are at least two classes of letters, square and oblong. On thin books the narrow oblong letters may be used to advantage, but square letters make the neatest lettering, and whenever the space is sufficient, square letters should be used.

We would recommend that the title should always be written out, as arranged to go on the back, and the number of letters in each line indicated, thus:

- Progress ...... 8
- Cassell’s ...... 8
- Poverty ...... 7
- Family ...... 6
- Magazine ...... 8

This will prevent many errors which are likely to occur through trusting to memory. Then with a strip of paper take the width of the back from joint to joint and see which sized letter will best fit by putting down a number of N’s corresponding to the longest line.

Having chosen a box to suit—as you gain experience you may judge by a glance without the above mentioned test—lay the letters out on the finishing-pan, in order from right to left, leaving out J, Q, X, and Z. Then lay down a point or full-stop, a comma, and a small piece of break-line; and, furthest away from you, the J, Q, X, and Z, because they are seldom wanted. Around the handles of the vowels paste a piece of paper or cut a groove to distinguish them from the others; this will assist you greatly in readily picking up the right letters without needing to look at their faces to see that you have got hold of the one you want.

Lay on the gold all over the lettering piece and press down firmly; if you want to patch it, breathe gently on the gold already laid on before adding another piece; do not let any lay on loosely, or when you mark it, it will rough up. Measure out the spaces for your lines with a pair of dividers or screw compasses, testing the arrangement on the gold close to the edge of the back on your right hand, and, if satisfied, just touch the gold in the centre of the back leaving a mark, and, placing a fine piece of silk on those marks, saw it to and fro across the back till you have rubbed off the gold in fine lines, which will be a guide for your letters. Next screw up your dividers and mark above each line the spacing for your letters.

In lifting the letters, a cut across the hasp will be the token that you have hold of the letter the right way up, and you must keep your eye on the angle at the left front side of the hasp to determine the squareness of the letter before making the impression, guiding it with your left thumb-nail. Keep your head fairly over the letter, hold it firmly and steadily, and with a little practice you will succeed in obtaining a square and sound lettering.

There are many things to be borne in mind when engaged at this work, a few of which we will indicate as they come uppermost:

On French or any other foreign books place the author’s name in the top line; then a break; then the title.

On English works reverse the order, and either place the author’s name after the title, and divided from it by a break, or in the fourth panel above the vol.

Whenever it is possible, make the longest line either in the middle or at the bottom of a lettering. If the number of letters is the same in two or more lines, this may be done by spacing out the lower lines; at any rate, avoid top-heavy letterings by all means.

Small words such as “the,” “and,” “of,” etc., when placed in a separate line should be either in one size or two sizes smaller than the rest of the title. Authors’ names should also be one size smaller.

Never use “&” unless you are compelled by want of space; always use the full word in a separate line, and smaller letters.

Keep your letterings well within bounds, not spread out from joint to joint, because the first and last letters will be hidden when the book is placed between other volumes on the library shelf.

Never allow a greater space between the lines than there is between the fillets and the lines of lettering.

You will sometimes have to deal with books which are divided into volumes and parts, as well as sets. In sets, let the second panel contain the general title, say, “Thackeray’s Works,” and the fourth panel the vol. and contents, say, Vol. I.—“Vanity Fair.” Let this be a rule: always keep the greater at the top. If Part I. runs over two or three volumes, then letter Part I. and put the vol. underneath. If, however, a volume contains two or three parts, and the title shows it, then letter, say, Vol. II.—Parts 3-6.

Always use Roman numerals for the volume, but in magazine work give preference to dates.

On encyclopaedias, or other works divided alphabetically into volumes, letter the vol., and below the catch-letters, thus, Vol. II., Bez-Chy.

On best work—complete books and not serials—always put the place and date of publication in a small panel at the tail.

For plain library work a bold lettering is often desired, but for private work, err rather on the side of neatness than by making the lettering too large.

A society has been formed and a journal started in the interests of book-plate collectors, information about which may be obtained of Mr. W. H. K. Wright, Borough Librarian, Plymouth, hon. sec. (pro temp.), and editor of The Book-Plate Collectors’ Miscellany.

A syndicate of Jews recently offered the Pope a million francs (£40,000) for the Vatican Version of the Holy Scriptures, and should His Holiness accept the offer, it will be the highest price ever paid for a book.
On Finishing.

Binding in letterings is an easy task on a flat surface, because the lettering may be first put on paper, the paper laid on the leather, and an impression made through it in the marks already produced, but on a round back there is a difficulty in securing a piece of paper. The easiest way is to take a piece of fine silk or thread and run it through a piece of chalk, when enough chalk will adhere to make a faint white line on the back, sufficiently plain to work to. On calf, a slight pressure of the thread will leave a mark that will generally come out when dampened; morocco must be dampened first to allow such a mark to be serviceable, it can afterwards be picked up with the point of a needle. The clearest mark, however, will be made by the chalked line, and it brushes off without trouble. To become an expert letterer it is advisable to give up the use of guiding lines as early as possible, starting at first upon the short words. If the practice of using lines be continued for any length of time it will be more difficult to give it up than it would have been while still comparatively a learner. Many finishers can letter off six or seven lines without any more guidance than a touch of the dividers to show where the lines should be, and this skill may be arrived at with as much ease as a person may learn to write straight on note paper; but without lines it is usual to begin the line with the middle letter, or, if the number of letters in the line are equal, with one of the two middle letters, working to the left to the commencement of the word, and then to the right, finishing the other half. This plan saves marking out a lettering.

Type letterings are usually worked from the side, just the same as a pallet.

Pallet letterings—i.e., when the whole lettering is cut in one brass piece—are worked either way, according to the taste of the finisher. We have heard many arguments as to the best method, but could never determine it; we prefer for ourselves ordinarily to have the book straight before us and work as if with a centre tool, but for heavy long lines, no doubt greater power may be gained by working from the side.

For cooling letters or tools you will find a flat piece of sponge, laid in a saucer with enough water to fill it, the very best thing to use. If your sponge is overcharged with water, some of it will go into the crevices of the letters and often cause a blur, for however little the damp in the tool, as soon as you apply it to the gold, the damp spreads and the gold will adhere to the leather in a big round spot. Have the sponge higher than the rim of the saucer, so that the hasp may lie on the damp surface, and the face of the tool does not touch. After standing about for months the sponge becomes dirty and sticky, and when the face of a tool touches it, the tool becomes mucky and the gold adheres to that instead of the leather.

To clean the faces of letters while in use, gently rub them on the corner of the gold cushion now and then; for tools, have a small piece of leather by your side, and rub them on the fleshly side of it. Remember that if you want your work bright, your tools must be bright—other conditions being perfect—but hot brass is very soft, and it does not pay to scrub at the tools every few minutes; that would soon spoil them. Fine tools require very delicate handling, yet we have seen some barbarians cleaning them with Flander's brick as if they were stair-rods.

Another point worthy of attention is the placing of tools or letters on the pan. Some finishers are very careless, and their handles are always burning; yet it only requires a little method of orderliness to prevent this. After regulating the gas to the necessary height, if the tools are put down properly, they will be found hot enough for use, but if they are put down anyhow, when wanted they will need pushing into the fire to heat quickly, and may so cause the handle to be charred, or the handle may be on fire, and the tool so hot as to require an extra cooling. It is simply a matter of habit.

After a book has been lettered and the gold cleared off with the rubber, any little specks still adhering in the interstices of the tooling may be removed by a point of the dividers. Calf and Persian books must then be polished with a flat polishing iron—which, by the by, is not flat. See that the iron is clean and bright; for this purpose a board should be kept, on which, if very dirty, other tools may be cleaned, such as lines or steel tools.

You can make one of a piece of mill-board lined with leather, the fleshy side out; on that put some dabs of lard, and then sprinkle on some fine emery powder; then rub it well in with the iron. That will make a good polishing board, and is especially useful for rubbing notches and burrs out of lines.

In polishing, grasp the book firmly at the head or tail as may be required, with the left hand, and move the iron quickly up and down as if following the outlines of an oval. Of course on narrow places such as the head piece you may pass the polishing iron straight across the back, but the oval movement is best for the panels, being least likely to cause streaks. When you have done the back always finish off by passing the iron over the head bands; that will give a nice sharp appearance to the edges at the head and tail which a forwarder is not always successful in securing.

Next, with a damp soft sponge wash the panels of calf or Persian books between the fillets, to remove any shiny appearance, and put a narrow ornamental pallet beside the lines in blind. For morocco work, a blind line looks well in thus completing the back.

We have given considerable space to plain filleted work, because, on this easy style every finisher passes his initial course of instruction; but in every other style the process is much the same. If the points already given are borne in mind, we shall not need to repeat the instructions as we proceed.

“A GUIDE TO GRANGE AND ARNSIDE” (Ulvoston: Jas. Atkinson, King-street) is noticeable for its very neat get up and clear impression, but especially for the excellent manner in which the fine half-tone illustrations are made-ready and printed. The book, which includes a capital map of the district, is in all respects above the average of publications of its class.
LETTERING PIECES.

In calf work it is usual to put a lettering piece of another colour on the back of any book in better style than plain filleted work, and to do this neatly the leather must be pared very thin and even.

In many small shops it is customary to use up any odd scraps of leather from the necks or margins of the skins which cannot be used for other binding purposes, but we are convinced that this is a false and expensive policy, because what is saved in cost by the use of such odd pieces is more than lost in the extra time it takes to try and pare up the rubbish, and the pieces always have a mean appearance. The scraps taken from the edges of the skin are nearly always faulty, and so porous that, if stretched while damp, the surface easily breaks, causing a rough, harsh face with a washed-out appearance that cannot compare with a lettering panel on which a decent piece of letter has been used. We are sure it will be found more profitable in the long run to use a strip of good leather, cut right along the skin, than to potter about with fragments which are only fit for the waste bag, as they often will not stand the strain of stretching or tear when the knife goes into them.

To pare leather properly, the paring knife should have a broad blade, with the under side quite flat from back to edge, the upper side being a little rounded; the edge must be very sharp with a smooth edge finished off on an oil stone, but, as use dulls it, it is well to give it a rub up on a leather strop on which a little emery powder and lard have been well rubbed in.

Cut strips of straight grained morocco of the colours desired a little wider than the width of the panel, to allow for stretching; cut the reverse way of the grain, and put them in a tub of water. After soaking, squeeze them out and lay in a heap by your side; then take one, and, laying one end on the stone, stretch it with some force but do not break the surface; then smooth it out with a folding stick, squeezing out all the surplus water. Commence by paring the right-hand edge as broadly as you can right along, then turn the leather round and do the same to the other edge, leaving a narrow central thickness untouched. You will soon learn that the leather pares easier one way than the other, and you will choose that way for taking off the central strip.

For this, hold your knife very flat, with considerable pressure on the leather, and make a long, straight cut, moving the knife diagonally as well as straight forward, that is, pushing in to the left, commencing with the tip of the blade, run the length of the stone, and finish up with that part of the blade nearest the handle, so as to take off as much as possible with one cut. Do not niggles with the knife, for if you make little choppy cuts the consequence will be that the leather will be full of ridges, whereas with a bold, free sweep you may clear the fleshy side off quite evenly. This is where the advantage of having the leather cut the right way becomes apparent; with little odd pieces, some cut one way and some another, the leather stretches, in some in the wrong direction, and, when you begin to pare it, it twists round the corner or cockles up, causing holes, and paring becomes a difficult operation even for a practised hand. The great object of paring is to reduce the leather to the thinnest film possible, while preserving the surface intact, but it must be even, or the ridges will show when it comes to be polished. Keep your stone clean and free from the little pieces which work off. When stropping up your knife always finish off on the top side, and keep the under side flat.

Your best plan is to periodically pare up a number of strips of different colours; as you finish each, lay it flat on the others and between a clean piece of folded paper with a strip of board on the top; you will then find they dry flat, and you will always have a stock ready for use.

To piece a book, take a pared strip and cut off the end with a pared edge, square with the top edge; lay it on the panel even with the top band or mark, and the edge of the back joint leaving a slight margin for the board to open freely without wrinkling the piece; draw the strip over, marking with your thumb-nail the edge of the joint on the front side and the lower band or mark, then lay the strip on the stone and cut with a pared edge on the marks made. Be careful to have the pieces perfectly square; nothing shows up worse than a badly shaped piece. Cut your edges cleanly, a feathered edge is grossly untidy. Stick the pieces on with paste, and rub them down with the flat side of a folder on a piece of paper. Never let your pieces project beyond the marking you have laid out for the work.

Whenever two lettering pieces are required on a back, place the brighter colour in the top panel, except in the case of the lower panel only having a little oval or circle in the centre, when a bright colour should be used to draw attention to the number of the volume. Be careful as to the harmony of colours; a green piece on a blue calf back hurts the feelings of any sensitive person, so does a maroon piece on a red back, and vice versa. For those who desire some better variation than the red, green, blue, purple, and maroon pieces commonly used, we give you a few combinations which are now fairly easy to procure, as leathers are being made in a greater variety of tints than formerly:

Claret on olive-green; a warm-brown on orange; pale-yellow on light-blue; a lemon-yellow on scarlet; grey on a deep-red; olive on a deep-blue; terra-cotta on blue; very pale-green on violet; these combinations all harmonise nicely with the gold work, and are worth remembering.
On Finishing.

The side of a calf half-extra book will need no more marking than a line just a little way in from the joint, and a line run round parallel with the edge of the board, with the dividers, though the latter is not generally required by those who are used to the work. The side is then pastewashed closely up to the fillet along the back, and while the leather is damp, run the finger-nail lightly along the edge of the fillet and remove any dabs of glaire or other preparation which may have gone beyond the marking for the back. To have your work clean, now is the time to remove any blemishes. If it is light calf, and any dirt is hard to remove, a few drops of oxalic acid may be put into the paste water, but be careful not to overdo it. Finish off by passing the sponge along the edges of the board, and then smooth the side over with the arm or fleshy part of the palm, to level out any streaks which the sponge may have left. When dry, the side must be carefully sized all over with Young's patent size, as used for the back, evenly and free from streaks, with as little as possible along the joints. To do this nicely, use a large soft piece of sponge, oblong in shape and fine in texture, which you can shape up like a roll. Go over the surface quickly and not more than once, and let the book lay flat with the back board opened out till dry. If it is desired to block the side, as in the case of many school prizes, the block should be put on before it is filleted. Then, with a pencil, glaire round the edge just far enough in to take the fillet you intend using, and along the mark up the back; finish off by glairing the edges of the board at the same time; glaire twice. Then fillet the sides, taking up the gold on to the fillet; be careful to stop before reaching the edge of the board. Finish off the joins of the lines with a rosette in gold. To roll the edges, the books should be placed between flat boards before being put in the press; if there are any number it is usual to put three or four books in the press at once with a millboard between each book. Remember that the nearer the edges of the boards come to the narrow surface to be rolled, the firmer that surface will be.

You must next varnish the side all over. It is best to keep varnish for this purpose in a glass pickle bottle or some similar vessel with a wide neck which can be tightly corked up. A large, flat sided sponge should be used, and it should always be kept, when not in use, in the bottle with a piece of string attached and hanging out of the corked neck; the string serving to easily draw out the sponge. The sponge must not be overcharged with the varnish, or thick streaks will be the result, but it must contain enough to leave a thin coat all over in the quickest manner possible. Never go over the side twice. When varnished, lay the book flat with one of the boards spread out, to dry. As soon as it is dry enough—which, if you had a number on at once, would be when you had thus varnished about twenty-five—rub lightly over with a clean oiled rag such as you would use for a gold rag—place tins inside the boards and place between japanned iron plates for one hour, with a heavy pressure.

For calf extra, the whole manner of proceeding is much the same, but the panels of the back should be mitred. Begin by putting a fine "broad and narrow" on each side of the bands in blind, damping the calf to bring the lines up as dark as possible. The outer line of the pallet used for mitring should be worked into the fine line of the "broad and narrow," thus leaving only the one blind line against the band, which should be jogged up after the back has been polished, sharpening the bands and giving a neat appearance to the back. The sides are also mitred, and often an inner frame is worked, with a fine line connecting both frames at the corners. That, of course, depends upon the taste of the workman. The insides of the boards should be gold rolled, or, better still, have a gold mitred fillet next the paper, and a gold roll worked outward from it and run off the edge of the board.

On tree calf, or any kind of fancy stained calf, or mottled Spanish moraccos, where the beauty of the staining in the skin is of primary importance in the decoration, the sides are always left as plain as possible, having little else but a frame round. The backs are, however, generally full gilt, and as some of the colours do not show off the tooling nicely when the usual corners and centre are used, "lacing" is frequently resorted to. This is very difficult to do well, especially—as not infrequently happens—when one end of the back is a little thicker than the other. In such cases, however evenly the finisher may have worked his pallet, he will find the lines of the design, instead of being perpendicular and parallel right down the back, tending to the one side or the other. The greatest care must be exercised to start from a given point on the pallet—it should, therefore, be marked on the side—and that point must be rigidly adhered to and brought each time to the exact level of the lines on the sides of the back. Before laying on the gold, always measure the back from side to side, and be sure that the marked lines are equi-distant all the way down. It will save you a lot of trouble.

One word more as to lettering: very often finishers are troubled by a queer old method of marking dates, and if the back is not wide enough to put in the Roman figures, they are at a loss to translate them into Arabic; to such this may be of use: IC means 500 and CI5 means 1000.

Denver (Colorado, U.S.A.) Public Library Bulletin for June says: "A great stew in New York over the opening for a few hours on Sunday afternoons of the Metropolitan Museum. Things are different here. In the east it's the saloon that never closes; in the west it's the library."
On Finishing.

On all best work a liberal margin of leather is allowed for the turn-in, so that the insides may have a good broad border, which gives a rich appearance to the book. Some books have a leather lining or double, when the outsides are generally quite plain, but as the style of finishing such interiors is much the same as the outsides might be, we shall not deal with them here.

Assuming we have a crushed levant book to do, it should first be subjected to a heavy pressure between japanned iron, or nickelled plates, or plates of German silver, with good smooth tins inside. Of course, the book must be thoroughly solid and the joint exact, when the book is placed so that the plates project beyond the back. This will assist in the flattening out of the grain on both outsides and insides, but be careful that the cover is thoroughly dry. Then the insides must be polished down with a very cool iron, gently at first, then with greater pressure, taking care not to stain the leather. Lay the book, board open, on a rolling block—made as shewn below, with a concave groove into which the back will fit, while the surface of the block supports the board close up the joint; such blocks should be kept in three or four sizes. The marking up depends upon the design to be worked, but usually all the marking that will be required will be lines for the fillets; the intervening spaces may be filled in with rolls or tools without special marking, as the fillets will be a sufficient guide to the experienced workman. Keep your outer line as close as possible to the edge of the board and use fine lines. Sometimes a fine cat's-tooth is run outward from this outer line just to cover the edge of the leather, but it requires a careful and steady hand, or the roll is apt to slip off. Sometimes a small roll as a cat's-tooth or pyramid is run on to the edge of the paper to hide the join; that depends entirely upon individual taste. When the lines are marked in, paste wash, and glaire all over; lay on double—not with doubled gold, but leaves laid on singly, one on top of another—so that any cracks may be mended by the second lay on. In working the lines, begin with the piece of mitre at the left-hand bottom corner on either side of the square, then run the fillet along from those impressions to the opposite end of the line as far as you can without overlapping, then finish off the further corners with the piece of mitre. Never put in both corners before filleting, and beware of digging in the points, yet, at the same time, keep the corners sharply joined.

In rolling, it is often necessary to sway a little first to one side and then the other, especially with wide or worn rolls, but an ordinary-sized roll in good condition may be worked flat, and it is best to work them as flat as possible, because the tenderest points are on the outside and the constant swaying produces the greatest pressure on the weakest parts, so that rolls wear out quicker under that method of work than they do under the use of one who runs them flat. If you would work easily with light labour, try and adopt such methods as save your tools, because the sharpest tools are easiest to work. With many rolls, it is advisable to mark off on a strip of paper the length of your two spaces, that is, long-wise and cross-wise, and try the roll on the paper so that you may estimate the number of times the pattern is repeated and where would be a good point to start from. For instance, with a double French roll, a very good mitre may be made if you only regulate it in this manner, or with a double Greek roll, and the result of a natural joining of the pattern is far more effective than that of any haphazard work. Some rolls are better mitred in this way than stopped with a corner tool. We saw a book in an exhibition recently, where a corner tool of the same device as the roll had been used, but it was more open than the roll and the effect was an openness and bareness that contrasted unfavourably with the rest of the work, and which might have been prevented by simple mitreing if a little care had been exercised, so that it is not always the best plan to stop, and, in fact, you can only stop when you have a corner tool which matches exactly with the roll you are using. To mitre properly, begin by bearing on the outside of the roll and bringing it gradually up to the flat when you reach the point of the inner line, then roll flat till you come to the further corner, when you must reverse the process, gradually bearing more and more outward till the finish; then wipe off the gold diagonally from the inner corner to the outer on the part you have just worked before commencing the next run, and by so doing you will prevent the heavy and blurred look that is present in corners that have been run over and the design doubled.

If you do not intend having an outer line, but only a roll run outward from an inner frame, see that your roll runs well over the edge of the board, because, if you mark up to just allow of the roll touching the edge, and then swerve in the slightest degree, you leave an ugly bare strip of leather. A narrow bare space on the edge of the board never looks well, except perhaps beside a plain mitred line; even then, it is likely to appear irregular unless the leather on the turn-in is pared very evenly. The tendency, on the part of the forwarder, is to pare thinner at the
corners, so that you may constantly observe the fore-edge squares slightly bowed, bearing outward about the middle of the board, and when you have been particularly careful to have your lines nice and straight it simply exaggerates the defect.

If your inside is to have mitered lines only, let there be at least one line showing beyond the leaves all round when the book is shut; and the same distance must be allowed between the edge of the paper and the inner line as between the outer line and the edge of the board.

If at any time your work is blurred, pick out the gold which is not wanted with a piece of sharpened wood, especially on light colours, as the dividers may stain if damped.

If an inside is spoiled in any way, do not attempt to wash the gold out: there is a better and more expeditious method than that. Get a strip of the same leather, wet it and pare it as thin as possible, rub over the spoiled side with a piece of fine sand-paper, polish it flat and slightly rough it again, then lay on the strip flush with the edge of the board. The roughing up will guarantee the sticking if ordinary stout paste is used, and you will have a cleaner and better job than any washing out will effect.

Mr. Reginald J. Lake, a member of the Master Printers' Special Committee, has written to the Publishers' Circular, "pointing out that the agreement for an eight hours' day in the bookbinding trade was not confirmed by the meeting at the London Chamber of Commerce . . . but rejected. The thirty-nine firms that signed the agreement will alone be bound by it, and it has not been universally adopted by the trade." Tut! tut! tut! to what depths some people will descend. It is on a par with the circular issued by the Printing and Allied Trades' Association, which is to much the same effect, and which concludes with the delightful sneer that the agreement had "been signed by some cloth and leather binding firms who alone will be bound by it." The italics are ours, but alas for the prediction and for Mr. Lake's statement. Twenty-five more firms have signed the same agreement, others who have not signed are quite willing to act upon its conditions, and several have already put the eight hours into operation, and have no need to sign. The list includes firms who are by far the most important as bookbinders, which is the first consideration. Some of the firms who seem inclined not to agree have large establishments, and, may be, large resources; but they are almost everything but bookbinders, their binding departments being comparatively small, with one or two exceptions.

The circular of the Printing and Allied Trades' Association complains "that the interests of the printing trade, which employs a very large number of binders, had not been consulted or taken into consideration in any way in the conferences that had taken place." Well, whose fault was that? To the earlier meetings at the Chamber of Commerce the complainers were invited, and some attended; but they seem to have indulged in the vain hope that by boycotting the meetings they could upset the movement, and only at the finish, on September 24th, did they put in a strong appearance, when they swamped the binders with a hostile vote. The consequence was that the binders who do not go in for envelopes and cheap stationery making, pen making, handball printing, and half-flush binding refused to be bound by their vote, and excluded it from the decision of the meeting. Quite right, too, after having ignored the invitation to confer, and only having come to upset. What common interest can men like Burn, Longman and Leighton, Collins, Frowde and Paveley, Morrell, Riviere and Zaelhausdorh have with the producers of half-flush work? This is what it comes to: the houses relying upon really skilled vellum binders will afford to lose their hands, except upon the idea that they may secure the services of some poor, underpaid, lesser skilled hands, who may be pushed on during an emergency, to frighten the able men into the belief that their work is being done by others.

We are convinced that the movement is a justifiable one, that its success is inevitable, that it has been too hastily advanced, and that it will benefit both parties, and we regret the system of terrorism and intimidation which is being pursued toward certain of the men, who, having been tried, have declined to play the part of traitors to their comrades. Had it been prejudicial to the interests of the trade at large, plenty of evidence would have been produced to that effect; but the absence of such evidence, and the desire merely to burke it without reason, show a lamentable absence of rightmindedness on the part of the Printing and Allied Trades' Association.

There succeeded to the Harleian binders, Roger Payne, whose name is associated with a particular style. Russia leather had come into use about the middle of the 18th century, and much of Payne's best work is done in that. His tools were original in form, and some say both designed and engraved by himself, these were placed at intervals in the spaces to be decorated, and the field studded with gold dots. He used the straight grain morocco then in fashion, and his designs, though not important in composition, look well upon it and were distinctly original. He did every part of the work himself. He died in 1797.—S. F. P.

In England, a little colony of Germans—Baumgarten, Benedict, Walther, Staggemeier, and Kalthoeber—contained the traditions of Roger Payne; though it was Charles Hering who worked chiefly in this style, Kalthoeber's work has nearly always a star or circular ornament on the back; he also revived the practice of paintings on the edges of books, underneath the gold, a practice carried out since then more extensively by Edwards, a binder in Halifax.—S. F. P.

Ex-Libris.—A German Ex-Libris Society has been founded in Berlin, which proposes to hold monthly meetings and to issue a periodical at intervals as the funds allow. The president is Counsellor Warnecke, Friedrich-Wilhelmstr, 4, the secretary Mr. Seyler, Gneisenaustr, 99, and the treasurer Max Abel, Unter den Linden 59a.
Levant is the material which above all others is used for choice bindings, and it is the material on which the finisher is able to exercise his highest skill in the production of art work. The first thing to be guarded against is damp in the cover, and the next, scratches. After pressing the book, as indicated last month, lay it on a baize board, and never turn it round except by shifting the board. The crushing out of the grain requires considerable care, first to be sure that the iron is perfectly clean, but even when that is assured some speck of grit may fall on the book as the polishing is going on, and unless instantly detected, a grievous array of scratches will be the result; scratches so fine that it is almost impossible to get them out. Then too, care must be exercised as to the heat of the iron, or streaks will creep in, so commence with a very cool iron and gentle pressure, increasing the pressure as you proceed till the cover is as level as calf, when the design must be blinded in.

We shall not attempt to lay down rules on the vexed question of design; we have heard many theories concerning it, which are mostly based upon deductions from the work of past masters, but designers care little for theorist's fads, and no words of ours could give any one that special creative faculty which stamps the man capable of design. It is necessary however, whether the man has the faculty of design or not, that he should have a fair amount of the draughtsman's ability in the use of his pencil, in order to sketch out his ideas, if he wants to get beyond the ordinary common-place frame and border patterns.

The best plan of procedure is, therefore, to draw on paper a sketch of what you want in outline, and after selecting such tools as will best produce harmonious results, to work them in as nearly as may be to the sketch, modifying or amending it as may be necessary. Rolls need never be put upon paper or blinded in, because the working of the roll stretches the paper and may cause your work to be awry, and they are rarely cut so perfectly as to fall exactly into the same impressions again; a marked line will therefore generally suffice. Should the design be a geometrical one, repeating itself in its parts, the working out of one corner on paper will be sufficient guidance for the binding in of the side.

Take, for instance, the two corner pieces given above, which may be used either on the outside or double, and this is the way in which we should work. Mark a line round the side, close to the edge of the board, and perfectly square. Cut a piece of paper to fit exactly within that frame, fold in half length-wise, and cut it. You have now half the side. Divide that in two, and work out one of the corners, then double the paper and go over the tooling again, repeating the working, and the other corner will match exactly. Then unfold the paper and put it on the side, holding it firmly with a small weight, when the pattern should be pressed into the leather on the upper half of the side, and after shifting the paper, repeated on the lower half. You have now the framework marked in,
but it is advisable to go over it again with the lines and
gouges in direct contact with the leather, making a
clear but not deep impression. Next put in the tools.

The side may now be prepared, first with a wash of
vinegar or clear urine. Do not use paste-water,
because it gives the surface a cloudy and mucky
appearance. Pencil in all the tooling, keeping as
closely within the impressions as possible. You will
find on some leather, glaire, as it dries, cracks and
turns white, if so, wash off at once and thin down the
glaire. We find it best to give two coats of thin
glaire; first pencil in the whole side, then such parts
as you can work off while the preparation is fresh.
The solidity of the gold depends to a great extent upon
the freshness of the preparation, and the brightness
upon the coolness of the tool. On a dried ground
greater heat is required, when you lose some of the
brilliancy that may be secured with cool tools on a
fresh ground. Lay on with best olive oil, and lay on
double at least.

In working such patterns as we give here, great
delicacy of touch is required. The beauty of French
finishing is the equality and lightness of the impression;
English work is generally deeper, a fault which may
be somewhat remedied by heavy polishing, but with
it comes the appearance of being dragged to the
surface, instead of that of lying there naturally.
With worn tools there is a difficulty in securing a
solid impression which is at the same time light, hence
the necessity of keeping them sharply cut; on the
other hand new tools are dangerous in heavy hands,
and they should always have a rub down on a soft
thick piece of leather before using them. Let your
aim be to use as little pressure as possible to secure
solidity.

Now a word as to working gouges, which are
perhaps the most difficult to use of all finishing tools,
and what is still worse, few firms have complete sets.
In most shops the gouges are a higgledy-piggledy
lot, composed of parts of many sized circles, and not
equal in breadth of line. In fact the most important
and comprehensive tool is relegated to the lowest
place in the odds-and-ends box, giving place to some
vulgar butter stamp which covers the greatest space
at one dab. In the art of finishing, the gouge should
hold first place, and each set should be marked and
kept together with the greatest care. Do not put
them down flat, but work with the points horizontally
before you from left to right, leaning slightly towards
yourself, and shifting the book before each fresh
impression, to retain that position of working. If you
have to make a join, owing to the gouge being shorter
than the length of curve required, overlap the working,
that is, begin again at some distance to the left of
where your last impression ended; taking care that
the tool fits exactly into the impression previously
made; that will help to ensure the right direction of
the curve. Be careful not to dig the points in, nor
to thicken the lines by leaning outward too much.
Special care should be taken in the selection of
gouges for joining curves running in different direc-
tions, in order that the join does not make a sharp
corner, destroying the free and graceful meandering
of the line.

After the work is finished clean off with rubber and
a piece of flannel or baize; polish again, and press in
japanned plates.

Do not varnish, it spoils the smooth feel, and the glaze
does not last as long as that obtained by polishing.

Why does rag paper go mouldy? is the question
which Otto Winkler, of the Leipzig Paper Testing
Institute, has lately been discussing in the Papier
Zeitung. After remarking that it had generally been
supposed that the woody fibre was the cause of
moulding, he shows that the same phenomenon
occurs in ragpapers and that the moulding in these
papers is of a distinctly different character to that of
wood pulp papers. The result of numerous experi-
ments with various kinds of papers was that unsize-
ad animal-sized papers are either not subject to
mould at all or only in very slight degrees. Rosin-
sized papers, on the contrary, appear to be affected
by mould in proportion to the more or less inferior
character of the rosin used.

Mr. T. W. Farrell, bookbinder, has commenced
business on his own account at 167 Ingram-street,
Glasgow. Mr. Farrell was for some time manager
with Messrs. R. Riviere and Son, Regent-street, and
since then has been manager in the Bible Binding
Department of Messrs. Wm. Collins, Sons & Co.,
Ltd., being formerly over 12 years in business at
Glasgow. He announces his intention of following
the lead of London by giving the 48 hours, thus being
the first to do so in Glasgow.

We understand that Messrs. Kampe & Co. are
bringing out a new Thread-Sewing Machine for book-
binders. The advantages claimed for this machine
are simplicity in all the mechanical motions, and a very
low price (considerably less than that of machines now
in the market.) The machine is expected to be ready
for sale early in January. There are three or four
other different labour-saving novelties in hand, but
of these we shall speak later on.

It may be interesting to mention here that the
"Netherland Society for the Promoting of the Book
Trade" is organizing an International Exhibition
of the book trade and its allied branches, to be
held at the Palace of Industry, Amsterdam, during
the months of July and August, 1892, in celebration
of its 75th anniversary. Class F will comprise Book-
binding: Tools, machines, etc. Bindings: Hand-
made, machine-made, etc. Designs for bindings:
Dies, drawn patterns, etc. Ornaments, materials:
Leather, vellum, cloth, paper, glue, etc. Class K is
for retrospective exhibits; that is, work executed
prior to the last fifty years. Besides this exhibition,
the "Book-day," which was so successful two years
goal at Antwerp, will be this year held at Amsterdam
during the run of the exhibition. Those desirous
of securing space should write as soon as possible—
before February 1st next—to J. E. van Someren

Bible binders are very quiet just now, owing to
the stoppage of orders by the Oxford house, which is
simply crowded up with work.
On Finishing.

There are many points of difficulty which arise in connection with the finisher's art that we have not yet referred to, and which we wish to clear up before proceeding to the questions of inlaid or mosaic work and that of blind tooling, which we have purposely separated from all previous articles. To those who know what we are going to say, by reason of a long experience and a thorough knowledge of drawing, it may be stale, but many finishers find themselves in difficulties over simple things, and we wish to make these articles helpful to all, especially to the less experienced ones, and if there has been any technical difficulty not dealt with in these friendly chats rather than formal instructions, a question may be easily asked through the post. We have been glad from time to time to see the interest awakened by these articles, in those engaged in the work, and have at all times answered questions sent to us either upon this or other points of practical work, and we shall be happy to do so again, should anything appear uncertain or ill-defined.

It sometimes happens that a man may have a set of books of different sizes to finish, on which it is desired that the same pattern should be worked. This more frequently happens in the case of Bible work, when one may have, for instance, a minion octavo Bible and a minion 32mo. prayer, both to be done to match. In this case, it is handy to know how to enlarge or reduce a design with absolute certainty of proportions, and we give an illustration to shew how the thing may be done. Take the size required for the larger book and sketch out your design. Having worked it in—avoiding the use of tools of which you have not the smaller duplicates, divide the whole pattern into equal parts both ways; by that means you will have a crossed line right through the centre of the pattern. It matters very little what number of divisions you make either way, so long as they are equal and not odd in number; it may sometimes, however, be best to make them odd in number—a great deal depends upon the design—but generally the even number has the advantage, having the design equally divided in its centre. Next take the smaller size required, and, on paper, sub-divide that by just the same number of lines, when you may fill in the design, space by space, until you have the larger design reduced in fair proportions. For some designs it may be also advisable to divide the central perpendicular line into three, drawing crossed diagonal lines so that they meet on the points marked off—that you can best decide for yourself.

To make an oval or lozenge-shaped panel, first take the length you require, that is to say, from head to tail, and having drawn a line of that length, divide it into three equal parts. With your compasses still set, draw a circle from the second point on the line, which will cover the top one; then move them to the third point and draw another circle, which will cover the fourth or bottom point. Where the circles cross on one side, place one leg of the compasses and open them till you can join the two circles at the opposite side with the curve of a larger circle; then reverse the process to the other point where the circles cross, drawing a similar curve, and you have an oval.

To make a gothic (pointed) oval, draw two crossed lines, exactly square the one with the other, and mark off the length and breadth required equally from the centre point. Next place one leg of the compasses at the point on the horizontal line which is the limit of width and open them, keeping the other leg on the horizontal line, till you can find a curve that will run from either limit of the perpendicular line across the point of width to the other point of length. Then shift the movable leg to the point of width on the other side, and placing the stationary leg at the proper distance on the horizontal line, draw a similar line, which will result in the desired oval. If the corner of a frame is to correspond and run parallel with the oval panel, run a line from the right-hand point on the horizontal line to the left-hand corner of the frame and move the stationary leg till the working leg reaches the points of the frame from which the curve is to diverge, then make the curve which will correspond with that of the oval. Be careful to draw the diagonal lines from the corners of the frame to points on the opposite sides of the horizontal line that divides the oval.

In throwing out a long corner-piece, the usual plan is to fold a piece of square paper so that the corner is divided diagonally in half, when the proper direction of the line may be ascertained; or it may be done on the flat by drawing a half-circle against and inward from each edge of the frame, starting from the corners, and running the line out from the corners to the point where the half-circles join.

In Latin crosses, have the arms and top of the shaft of equal length, and the shaft below the arms two and a half times as long as either of the arms.
Leather Mosaic, or inlaid work, is the most beautiful and interesting of all branches of the finisher's art—whether the style be the interlaced geometrical devices adopted by Gollier or the richly variegated colour pictures of Le Monnier—as may easily be seen by those who have had opportunities of visiting various exhibitions where the craft has been represented, and the beauty of this particular class of work has been largely the reason why bookbinding has held such a foremost position in the industrial arts. On white vellum, especially, the effect of inlaying is very fine, vying with the illuminated manuscripts of earlier times, from whence the idea was probably drawn, or it may have been, from the custom of enriching old book-covers with precious stones of varied colours; that is by no means certain. The style was, no doubt, of Eastern origin, and was borrowed, with that of gold toothing, from the covers of Persian and Arabic manuscripts, by the Italians; but many of the earlier books had painted devices, while later on many different kinds of enamels were tried with more or less success for this form of illumination.

Nothing, however, has succeeded so well as the inlaying of leather, and it is to this branch of the art that our attention will be confined.

The most elementary step towards inlaying is that of piecing backs, and in one sense that is the whole of the art, so far as the manual process is concerned. If you can pare, and piece a back properly, there is no reason why, with care and patience, you should not inlay a side, the extended operation requiring only many different shaped pieces. The main point in it all is the paring.

First, give the book—we will assume of levant—a thorough heavy pressing between japanned plates, with a leaf of good paper of close texture next the sides to prevent glossing, which would result if the cover touched the plates, and which somewhat prevents the paste penetrating the cover, and therefore the inlays more easily peel off.

Next, work in the outlines of the design. If it consists of interlaced strap-work, and more than one colour is to be employed, you must be careful that each part of the design is complete in itself, as a circle is, or you may get a queer arrangement of colours,
BLIND TOOLING is by far the most ancient part of the finisher’s art. M. Libri in his “Monuments Ineditis,” says, “It would not be difficult to prove that, in all probability, the impression by blind tooling of figures on the skin employed for the covers of books, preceded every other impression of figures from engravings either on wood or metal.” From the earliest time when tanned hides began to be used for book covers, it was customary to burn in lines for ornamentation, or impress them upon soaked leather. Then followed the old, ugly, and clumsy-looking devices cut in wooden blocks, and squeezed into the wet leather in a standing press, where they were left under pressure to dry. Doubtless within the memory of many living men books have been similarly treated by small master binders who had no blocking press. We have seen it done in London since 1860. The making of frames and panels round the centre stamp was done by hand with just the same kind of tools as we now use, but with the development of the art and the introduction of gold ornamentation, blind stamps and blind tooling naturally fell into the background, though it has never died out. The improvements made in tool cutting for gold work, enabled men to do better work in blind, and fine bindings in blind tooling are as proportionately plentiful as they have ever been since gold tooling became generally known and practised, and only those who have never stepped outside of their own narrow sphere can think that the art of blind tooling is in abeyance. The old hideous stamped bindings of German, French, and English production—which are only interesting as showing the development of the craft, or as historical monuments—have given place to thousands of prettier, and more delicate designs, worked in the glossiest black by a warm blocking press; and the old crooked lines with unmitred ends, to many a richly tooled side.

There has been, however, a restriction in the practice of blind tooling at different periods in accordance with the vagaries of fashion, and generally, towards its selection as the most suitable and appropriate form of decoration for religious and devotional work, which is mere sentiment, but a prevailing sentiment not easily overridden. Hence we usually associate a blind-tooled exterior with a book of religious tendencies, leaving gorgeous gold work for butterfly literature; but few works look finer than a hand-tooled morocco quarto bible, a style for which Messrs. Bagster have been renowned for nearly a century. After morocco, calf is next most in use, and with pigskin is the oldest material used, though modern skins are much thinner than those used in bygone days; Russia is also used, but rarely; morocco, calf, and pigskin are the most suitable for this class of work.

Calf is a delicate leather to begin on, as the damp very easily penetrates the leather, and where a large surface has to be worked, the repeated wetting is apt to loosen the paste, and unless great care is taken, the leather will slip and pucker under the pressure of the tool. Again, the heat required for calf is very slight, as it easily blackens on the points between the fine fretwork of the tool if it is dwelt upon for ever so short a time longer than is necessary to obtain an impression. Then you will occasionally get a harsh piece of calf on which mineral dyes have been used, that will try your patience to the uttermost to get an evenly black impression, which may only be obtained after repeated wettings and a gradual increasing of the heat in the tool. In this work there is no opportunity for hurry; the leather must be properly wetted, and care and vigilance exercised at every step; and every impression should have three distinct workings: once when first wetted, then after the whole side is worked, and before it is dry you must go over it again, and when dry it must be polished.

Russia lends itself easily to blind work, and rarely presents any difficulty beyond that of scabby spots showing through the hard glossy surface of the tooling, which can only be remedied by placing a thin film of the pared leather,—the surface only,—over and into the impression, letting it dry, and then carefully damping it in and renewing the impression, without frizzling up or disturbing the patch. Some people think blind tooling an admirable method of hiding a bad cover, but our experience shews us that flaws shew up under blind tooling, if anything like solid tools are employed, to a greater extent than with a gold design. A double thickness of gold may hide a flaw that no blind impression can conceal.

Pigskin of almost any colour is easy to work, but the light browns and natural coloured leather give the best results. On these, blind tooling may be produced in varying tones, from a light rich mahogany tint to a colour almost as deep as black, while the pitting of the skin is as pleasant to the eye, and more regular, than the grain of morocco, as a rule.

Moroccos give, perhaps, greater variety of difficulties than either of the other leathers. Only the softer skins should be used for blind tooling, and the grain should never be fired. Where particularly hard-grained leather is used,—which can only be obtained by firing the leather after graining,—it is almost impossible to obtain a good evenly black impression all over, and the strain of using heavy tools is very great. Then you will have greasy hides that will resist the water; mineral-dyed hides which will refuse to turn black; sticky hides that you cannot jigger upon without fear and trembling, or that stick to the tools and the surface breaks; and scabey hides that shew the flaws under the tooling; but you will have to get over all these difficulties, and next month we shall try and shew you how to do it.
On Finishing.

We said last month that on morredds there is a greater variety of difficulties than on other leathers, yet morocco is the easiest to begin on, as the surface of the leather is stouter, and does not break so easily as Russia or calf.

Marking up should by this time present no difficulties, but a word on the subject may be advantageous for antique work. If the boards are bevelled, the frame must be kept close to the inner edge of the bevel, or you widen the appearance of it. On a plain side, for ties only, let the ties reach across one-third of the side; measure the distance from the fore edge of the board; with a square, mark the centre line first from the middle of the board to the point indicated, and afterwards the diagonal lines from that point to join the outer line on each side of the bands.

Having marked up your back or side, take a bowl of clean soft water and wash it over with a sponge until the damp has fairly penetrated the surface equally, then, with tools just below fizzing heat, make two or three sharp impressions one on the other, allowing the steam to escape between each, and see if the leather blackens. If it does not it may be because: 1st, the leather is not wet enough; 2nd, the tool is not hot enough; 3rd, a mineral dye has been used; or, 4th, the skin has been fired. The first two are easily dealt with, as your own common sense will show you, for though you must be careful not to soak the leather too much, it must be fairly damp, and if you have made the impressions it does not turn black, nor yet show any signs of drying, you will perceive that more heat is required in the tool; or if it showed signs of drying, it wanted more water. Perhaps you will find it goes partly black, having a piebald appearance in the impressions: that is probably the result of mineral dyes on a greasy hide, and your best plan, if the leather is dark—as is almost always the case—is to put about half a teaspoonful of salts of tartar—made according to the directions in articles on Sprinkling and Marbling, October, 1890—into a pint of water, and use that. Do not use this on light colours, or it will darken them. If the skin has been fired after sprinkling, this difficulty will arise: the water will not run in; but the same difficulty occurs on greasy hides; then use hot water, and beat it in with a morocco brush until the leather is soft enough for your purpose, but without breaking the grain. If the leather sticks to the tool and the surface breaks, that may be remedied by putting a piece of soda, about the size of a small walnut, into a pint of water. Besides this, it is advisable to use something greasy to dab the tool on; now lard, or oil fat alone, often causes a dull impression instead of a bright one, and you will find the best thing to use is equal quantities of lard and white wax run down together, and after they are cold, smear a little on a fleshy piece of leather, and dab the tool on it occasionally. If you cannot get a good black impression by these means, then put a half-gill of spirits of wine into a pint of water, and use that. Have a clean fleshy piece of leather by your side on which to burnish your tools, because the brighter the tool the brighter the tooling. Do not imagine that you can get up a nicely tooled side with dirty verdigris or rust-stained tools. We have pointed out before that all tools must be kept properly clean, while at the same time hot brass must be used tenderly.

With fillets, do not be afraid of using a straight-edge as a guide, especially for one-liners; the slightest variation in the straight run of a fillet shows up directly, but it may be prevented even by the less experienced workman, by running against a straight-edge, besides which, you can get over a delicate surface quicker with the aid of such a guide. For rolls, first measure out the amount of pattern to go into a given space, and then mark off on the left-hand side of the roller the point to commence from, say by pasting a V shaped piece of paper on it. This is needful, because you cannot depend upon the repeated portions of the design being cut so exactly, that any one part will fit into another, so that on renewing an impression you must know the point from whence you started. Tools should be put in two or three times until the impression has a solid smooth surface, then left awhile. In working ties over a bevelled edge, have a tin inside the board, and flush with the edge to support it and prevent any break or depression upon the thinnest part. Also in working ties across the back of the board from the bands, it is best to have a tin inside to lift the board a little, and thus get a good impression over the joint.

After the whole side has been worked in, and before it is dry, go over it again, which will greatly assist the polishing, then, when dry, polish up. Where lines are concerned they may be jiggered—this must not be attempted while the leather is damp,—either with a piece of mitre or a blocked fillet. Take a piece of hard wood—an old tool handle is very good—cut it wedge-shaped at one end, not more than 3⁄8-inch broad, and drive it between the fillet and the carriage on the upper right-hand side, parallel with the handle; that will keep the fillet locked, and at the same time be out of the way either of the sight, when in use, or fire when on the stove. For rolls and tools, burnish and keep on making impressions, slightly rocking on the tools until a sufficient glaze has been obtained. Do not be tempted to varnish your work; such expedients are only used for common jobs, to save time. Wherever tooling is varnished the glaze is less durable than if properly worked up by hand, as the varnish forms a conveniently tacky surface on which dust accumulates and from whence it is difficult to remove it; whereas good hand-polished tooling may be easily cleaned by a wash with clean water, and brightened up with a brush. Black varnish is often used on red morredds, but the effect is tawdry and common compared with good blind tooling.

[To be continued.]
In wetting calf for blind tooling, clean soft water should be used with a soft sponge; the water penetrates this porous leather very quickly, and therefore it should be used so that the leather is not soddened. The tools must be kept very cool and the impressions made as sharply as possible, as the leather is more easily stained by the heat and the steam enclosed in the small interstices of the tool than any other, and the blur caused by such stains is ineradicable. Never work on floating water, but, having wetted the side, let it sink in well before you commence tooling. On light colours, a few drops of oxalic acid may be put into the water, or on dark colours and sticky leather, a small piece of soda dissolved in the water is very helpful, but never use soda for light colours or oxalic acid for dark ones.

Do not give up an impression till you have secured an even, black, and hard scaly-like surface; calf, properly blinded in, will, when dry, polish up as brilliantly as if the tools and lines were japanned, and on lighter colours the effect is very fine, but it is heightened where the blind tooling is interwoven with the more delicate tracery of gold work.

The simplest form of blind and gold work is the broad and two narrow lines, in which the broad line is in blind and the outer and finer lines are in gold. We give here a design of Arabic character worked out entirely by pieces of line, which may be used either for blind, blind and gold, or gold, and looks equally well for either. In working such a design, if for blind only it would be best to damp only such parts as may be immediately operated upon, and not keep on renewing the moisture to the whole side, or the leather would become so soaked that it would shift and pucker in working; long before the side could be completed. If you intend putting the fine lines in gold, the whole side should first be worked in dry with very cool tools, then wet the parts and work in the broad lines; after the cover has been allowed to dry thoroughly, renew the impressions of the fine lines wherever the application of water has made them faint by swelling the leather and the subsequent contraction in drying. Then pencil in the fine lines with a mixture of dissolved blood-albumen, and paste water, or Young's patent size and paste water, or thick paste water alone will do; but if you can make a mixture of the others, it will support the glaire more surely on light colours, without fear of staining. You will find that on very light calf, especially on pale yellow and buff, light green too, repeated wetting renders the leather more liable to stains, and stout paste water is scarcely sufficient unless used so thick that it is only worked with difficulty. We have found it very advantageous to use albumen for the purpose here mentioned, because it can be used thin enough to slip along easily. Even used without paste water, albumen rarely stains, as it does not run in like glaire, but with paste water in equal proportions, it may be used on any colour, and one coat of glaire is then sufficient; whereas, by using paste water alone, two coats of glaire will be required; the saving of time is therefore considerable. Having glaired in, laying on will be a difficulty because of this same liability to stain, and yet it is necessary to fasten the gold tightly down, for single lines especially. Here the mixture of lard and white wax mentioned last month will prove valuable, or you may use a piece of tallow candle, but do not use lard or oil, and whatever you use must be sparingly applied. If, however, when your work is completed and cleaned off, you find that grease stains have crept in, take a pad of cotton wool and wash all over the side with benzine; be careful to go all over it, lightly and once only, not rubbing it as if to wash out something, but enough to damp all equally, and then let it evaporate. You must
always go all over the surface, and not dab it on the spot where the grease lies, or as the benzine dries out you will find a dark ring stain of grease which the benzine has only dispersed to the outer edge of its contact with the leather. Never dab benzine on anything, or you will find our experience true, but properly used it is a most valuable assistant to the finisher. And here, just another moment's digression, the grease stain that benzine will not remove may be got rid of by applying caoutchouc—the liquid form of indiarubber dissolved in spirits of turpentine—applied thus:—dab on a thick coating of the slimy paste made by this dissolution, and let it dry on the spot until it will rub off in a roll under the friction of the finger. If you leave it on too long, on soft leather like calf, it may adhere so tightly that in rubbing it off it will tear up the surface of the leather, so be safe by being early, and if the grease is not gone put another dab on. It is almost certain to have drawn up and absorbed the grease by the time it is dry enough to touch without sticking to the finger.

The polishing of the tooing should be performed just as described last month, and finally the book should be pressed between japanned plates.

[To be continued.]

Famous Men in the Book World.

James Ballantyne, the celebrated Edinburgh publisher, and the friend and adviser of Sir Walter Scott, was educated to the law and commenced practice, but his inclinations led him to abandon his profession and open a printing office in Kelso, where his fine printing soon won him a high reputation. In 1796, he began a small newspaper, and first met Sir Walter Scott on the top of a coach on a journey to buy some fresh type. He printed Blackwood's Magazine for many years; in 1822, there issued from his press no less than 145,000 volumes, all from the pen of Scott—an extraordinary number in those days of hand presses. Born, 1772; died, 1833.

Thomas Frognall Dibdin, the author of many of the finest works on the history of printing that have ever been published in this country, and the hero of the bibliomaniac of the latter end of the last century, was born in Calcutta, his father being a naval captain. Being left an orphan at an early age, Dibdin was sent to England, where he studied for the law; afterwards he decided in favour of the Church. He was a great book lover and book collector, and the friend of many of the most eminent literary men of his age. Born, 1775; died, 1847.

Thomas Bensley, the celebrated printer, was the son of a printer in the Strand, where he was at first established, but afterwards removed to Fleet-street. His edition of Macklin's Bible was a masterpiece of art, and welcomed with great enthusiasm by the bibliophiles of the day. He was instrumental in assisting Kenig, the practical inventor of printing machines, before the Times took up the invention. Died, 1833.

To Our Subscribers.

Two or three country subscribers to The British Bookmaker have recently complained that they don't get their money's worth each month, but they don't point out where the failure is.

We give far more technical articles, far more reading matter generally, and the illustrations are not only far better but far more numerous than in the old Bookbinder, and as a result we have five times as many subscribers; the latter fact makes it look as though we gave five times the satisfaction of our predecessor.

Our grumbling friends forget that bookbinding is a limited trade, almost entirely confined to London, outside of which even the largest cities have but few binding shops.

A limited business means a limited number of subscribers, and also limited scope for advertising support, and without plenty of support from the latter, the former cannot get so much for their money as from journals whose supporters are ten times as numerous, as for instance in the case of the printers.

This is the whole thing in a nutshell.

If our subscribers will exert themselves, and each one try to secure us another new subscriber, they will place us in the right position for giving them more for their money.

But binders outside of London—with few exceptions—don't interest themselves in what goes on in their own trade. They decry the efforts of those who are trying to assist them, and seem to prefer to remain in ignorance of progress made elsewhere.

In the past eighteen months we have spent a considerable amount in making The British Bookmaker better known to provincial binders, and sent a special representative on a missionary tour through the large towns in England and Scotland; the result was anything but encouraging—not a hundred subs, rewarded his efforts. Some "Knew the whole business and didn't want to learn any new fads"; others wanted the whole art and mystery of leather, cloth, and vellum work in one number, and because it wasn't in the number shown them they would not subscribe.

It seems to us that binders are somewhat like printers were a few years ago—want too much for their money.

They have probably been comparing The British Bookmaker with The British Printer, and found the latter four times as thick as the former. They forget that the B.P. has over 10,000 subscribers, and getting on for a hundred pages of advertising support, and this enables the publishers to give so much more for the money.

If the binders will—as we have suggested—increase the number of subscribers, we will soon give them more for the money. The remedy is in their own hands.

Comparing quality with quantity, so much cannot be got elsewhere for the same subscription. In fact, it cannot be got at all.
On Finishing.

Silk is a difficult fabric to finish, because it is so thin and hard, affording no depth for the tooling, and it is as difficult to prepare on account of its delicacy; yet it is frequently used for linings of fine bindings and sometimes for covers, and in either form the finisher is often required to give it some ornamentation. Silk should first be mounted either upon clean white paper or cartridge. The tooling should then be firmly blindfolded in as deeply as possible without injuring the fabric and pencilled in with Young's patent size, or isinglass, both of which should be used warm, applied lightly and rigorously confined to the impressions made. Then pencil in with clean glaire; for this work it is advisable to beat up the white of an egg separately, adding not quite so much water as there is albumen. Glaire made with vinegar should never be used for silk, unless perhaps the colour be very dark, when it may do, but it is the best and safest to make a special glaire for this material. No oil or grease should be used for laying on; but, instead, touch a clean finger on your hair (if you do not use oil) and gently rub it over the place on which the gold is to be laid, when it will adhere sufficiently for the purpose. The tools must be used hot, a greater degree of heat being necessary than for leather, and two or three successive workings will often be required to obtain a bright and solid impression. Clean off with a clean piece of flannel, rubbing very carefully, or you will remove the bloom on the silk (especially in such colours as violet and mauve), or fray the cording.

Satins is especially difficult to work, as there is a loose catchy fibre about it that seriously interferes with the solidity of the gold. It must be treated in just the same way as silk, and, with patience, good results will follow.

For both a dry preparation is often used, known as blocking powder, which may be bought of Messrs. Berry and Roberts, or almost any dealer in bookbinders' materials. The best is made of gum arabic, gum mastic, and gum sandarac in equal proportions, ground down to a powder as fine as flour. Or gum juniper may be used. Either of these may be dusted on with a loose piece of cotton wool, or shaken out of a box through two or three pieces of muslin tied across the top. A very common mistake is to put too much on; use as little as possible. The gold must be lifted on the greased tool and worked sharply on the powdered surface. This system does fairly well for an odd letter or two, a fillet or roll, but for any closely tooled design, it is absolutely necessary to blind in first, and then the powder is of little use as the projecting edges of the gold interfere with the sight, and make it very difficult to place the tool exactly in the impressions made. Besides this, you can never be quite sure of clean and clear impressions with powder, some part of the tooling is invariably blurred or rough at the edges; so that altogether, the advantage for good work is with the one who uses glaire. Powder is very useful for putting on a few letters while someone waits, as for purses or bags, or for such cheap work as will not pay for the time expended on glairing in, but for quality, nothing is so good as glaire on any work, whatever enterprising salesmen may say.

Velvet is rarely finished; but as it is occasionally, a word on the subject may be advisable. The nap or pile must first be destroyed by repeatedly blinding in with very hot tools, until the impression cakes the fabric into something like a solid surface, then paint in some stout size, or thin paste; let that dry, and then give two coats of glaire. The gold must be lifted on the tool, but as there is usually only a very simple form of ornamentation on this material, this may be done easily. Should it be necessary to lay on, the impressions must be painted in very slightly with oil, taking care to confine it to the surface requiring it. Clean off with a soft brush, using it the same way that the pile runs.

Vellum having a very hard and close texture, needs no other preparation than the glairing in of the blind-in pattern if the cover is clean, as it should be, when it comes into the finisher's hands. But unfortunately it is very often not in this perfect condition, and needs washing. A great deal depends upon the kind of vellum used; the finest, known as artists' vellum, has a specially prepared surface which is very easily spoilt. Should any dirt be found upon this, it is best to try and remove it by means of a small brush with clean water, but if the side has to be washed, a soft sponge and clean water only must be used, going over the surface as lightly and as little as possible. Oxford vellum is a good material of natural colour and without a specially prepared surface; this may be cleansed with thin paste water, in which a little oxalic acid has been dropped. Roman vellum is darker and more interspersed with blotches or varying shades, and the oxalic in paste water is good, especially if the dirt be stubborn. These directions only apply, however, to cleansing the cover. The tooling must be blinded in; then the book is usually pieced. Before sticking the lettering piece on the surface to be pieced, it should be gently roughed up with a knife or piece of sandpaper to make it porous enough for the paste to hold. Then wash all over either of the two latter kinds with a wash of paste water, with a little glaire added and well beaten up together, which will decidedly improve the appearance. Next glaire in the tooling; or, if a full-gilt or laced back, sal-ammoniac may be washed all over, which will save much time. Lay on with lard. Great care must be taken that the tools do not slip in working, as vellum is of a greasy nature as well as very hard; and the tooling, while firm, must be on the surface. Use the tools moderately warm; if too hot they will cut into the skin, and the gold will appear dull and boiled. Clean off with soft india-rubber.

After the gold work is done, a pleasant contrast may be made by ruling in single lines with a bow pen charged with red, blue, or some other coloured ink; or, tools may be smoked and the black impression brightened by repeated workings; but this style, though very effective when new, is subject to smearing when handled, unless the tooling is finely varnished in.

[To be continued.]
or few points now remain to be dealt with, and this paper will close the series.

Never use silver, as it turns black after very little exposure to the atmosphere, but instead use platina, which is of the same colour and retains its brilliancy for an indefinite period. The difficulty of getting it to stick down sufficiently to show the impression of the tooling through it, is just as great as with silver. Grease as much as you dare, press the metal well in with clean cotton wool, and use your tools rather hotter than for gilding calf; that is all you can do. It is always difficult to work and may need repeating to get solid impressions, hence it is not often used, yet it has a fine effect against gold.

Very pretty effects may also be obtained by using different shades of metal upon certain portions of a design, and the effect may be heightened by a little artful inlaying of small pieces of different coloured leathers, and frosting such portions over so as almost to conceal the colour, when just sufficient will show to give the effect of a different coloured gold. Leaves may thus be inlaid with a light green, frosted over, and the veins worked in, with pale gold, while the curling portions may have a darker shade of green frosted over with deep gold. Or a sword handle may be inlaid in red and treated in the same style. To obtain the greatest variation these small inlayings are best, as the metals used for certain tints easily tarnish, it is therefore advisable to use gold of which there are only three tints. We are aware that this is against what has been laid down as a canon of the art, that all ornamentation on book covers should be treated flatly without perspective, but we have seen many specimens which departed from this rule, here a little and there a little, without infringing the general principle that should govern book ornamentation, and on which very happy results followed. Here is just one of the points where such a departure is possible, it is but a kind of trick in finishing, not readily discerned, but very catching and pleasing to the eye.

On headbands and the edges of the boards make your ornamentation as light as possible. First polish gently with the iron to give a flat surface on which to work, and then use fine single or very fine double line, taking care that they join perfectly at the corners. It is best to protect the edges of the book by laying a strip of stout board on them in case of a slip.

For illuminating edges, they should be first gilt dull, then tool, and burnish such parts as may be required bright. Next scrape away the gold from the parts of the design to be coloured, using an old piece of knife, the edge of which has been rubbed on a piece of steel to turn it up like the edges of a scraper. Then paint in with water colours and shell silver.

For a gold or silver pattern on a coloured edge, the edge should first be coloured and burnished, using as little beeswax as possible to secure a good gloss. Next dissolve gum arabic in water, making a very thin mucilage, strain this through very fine muslin and put it into a little muriatic acid, just enough to make it bite when applied to the tongue. This must be very sparingly applied to the edge with a broad flat brush—such as is used for damping copying books—while the book is screwed tightly in the press, going over once only, as a second application will remove the colour. So will the acid if you put too much in. When dry, pick the gold up on the roll; platina may be laid over the surface, but no grease may be used; work heavily and with a brisk heat in the rolls or tools. This is not an easy thing to do, for you cannot mark out an edge, but a good roll may be worked or the edges dotted with stars or such like small tools, and the effect is somewhat novel because not often seen.

For blacking in letterings on vellum, rough calf, or canvas, take a dab of printers' ink on paper, use the letters barely warm, dab your forefinger on the ink and work it up a bit, then dab it on the face of the letter, just enough to darken the surface, and impress it on the material. Be careful to clean your letters thoroughly when you have done with them.

For blacking rough calf (except letterings) the rolls should be used very hot, and run over the surface very quickly, steadying the roll with some old tool or other metal point at the starting place, as it is too hot for your fingers. That is the best method, but very commonly a sponge dipped in iron liquor is fastened to the carriage so that it chases the roll as it revolves, which leaves a stain in the impressions.

To clean a roll choked with grease or dirt, lay it in a bath of salts of tartar overnight; take it out in the morning and give it a good brushing.

If there is anything that has been forgotten, or anything which we have not made clear to our readers, we shall be happy to make up for the omission in our Answers to Correspondents.

For the past sixteen months we have been engaged in dealing with the subject of Finishing, as precisely and thoroughly as our practical experience would permit, reducing our instructions and suggestions to the simplest form, in order that even the youngest apprentice might learn something thereby. We have recognised that we had to learn, and we have done what we could to assist others. But since we began to learn we have never left off, yet a great deal of the knowledge gained can neither be communicated by writing nor learnt as a lesson from a book. We have pointed out the order and methods of work, the materials used and some of the difficulties which most commonly crop up, and we have been pleased to find by unmistakable tokens that our efforts have been appreciated. What we cannot convey to you, however, is personal experience. Some have complained because difficulties which came up before them had not been explained, but in every branch of the trade.
difficulties will arise, often through a man's own fault in some previous stage of the work, which, without seeing, we could not explain nor warn you of. Not all the books in all the world could make you finishers, nor all the personal instruction of the finest workmen, if you have no aptitude for finishing. But if you have, and study carefully what we have written, we feel convinced our instructions will guide in all matters where your own common-sense is not sufficient. Whatever you do, aim at doing it well. Exactness, solidity, and brightness are the points to seek after in execution, but greater than all these, is design. It is of no use disguising the fact that few have the faculty for originating patterns; but on the other hand, some who are very fair designers may not have the fine executive ability of the ordinary finisher. While it is to be desired that a finisher should be able to design, it is not necessary, for one designer may furnish sufficient patterns for a hundred finishers, and yet not be able to work out one of his own ideas. To you who work at the trade, learn to draw; study the nature of your materials; by sobriety and steady living cultivate steadiness of nerve and delicacy of touch, and pay no heed to those who sneer because you cannot design. There is a great range of difference between imbecility and genius, whatever faddish amateurs may say. The masterpieces of finishing were generally not designed by those who worked them, and you may live to beat the execution of those who have gone before, but you will have all your work cut out, without designing. We are not going to confound the two things, nor should you. Aim at design by all means, cultivate whatever natural taste may lie within you, strike out for yourself whenever and wherever you have the opportunity, but do not fritter away the powers within your grasp for shadows that flit before your vision, sun-tinted shadows, of glory and great things only to be won by a heaven-born genius, one in a hundred thousand. Do what you do well, and you will have at least the satisfaction of earning an honourable living and the respect of those by whom you are surrounded.

In the Journal of the Ex Libris Society, Mr. Laurence Hatten notes that the earliest book-plate known to collectors is German, and is believed to belong to the end of the fifteenth century; the oldest dated book-plate, also German, contains the figures 1516. To Albert Dürer has been assigned the title, "The Father of Book-plates." Of English, the oldest-known example bearing an engraved date is of the year 1574. The first English artist who is known to have signed one of these is William Marshall, in 1662. While heraldic devices were most popular in this country, our volatile neighbours in France freely indulged in "bright and fantastic designs, plays upon proper names, ingenious monograms, drawings characteristic in some way of their owner's profession or position in life—all of them unconventional and imaginative."