

CHAPTER V

INKING—ADVANCED METHODS

THE simple and straightforward method of inking with ink of one consistency has been described, and is quite an efficient method for more or less accurate reproduction of the values of the original bromide print. In order to produce prints showing to the greatest advantage the capabilities of the Bromoil process, other and more elaborate methods may be employed. Some of these procedures, advocated and used by several workers of repute, will be discussed in the present chapter, and should be taken rather as examples of the variations in technique which are possible, than as cut and dried methods which may be followed or rejected. Probably each bromoiler of individuality in the end adopts a method peculiar to himself, and this is part of the charm of the process. The methods at present mentioned may be taken as such, or used to suggest further avenues of experimental possibilities leading, eventually, to the method which exactly suits the aspirations of the worker.

Hard Ink Technique. The inking process described in the last chapter, providing the swelling temperature is kept low, is, in fact, the Hard Ink Technique. The characteristics of prints made in expert hands by this method of working are: vigour and contrast of image, forceful shadow tones, and frequently an altogether delightful fine grain, giving character to the whole. A hog hair brush is almost a necessity, especially if the hardest ink possible is to be used, as fitch brushes do not fare very well with exceedingly stiff inks. The drawbacks of the method have already been discussed, in that the variations in air and tap water temperatures interfere with standardization of soaking and inking conditions. With experience, however, there is no

difficulty in making allowance for these changes in conditions, and much beautiful work is produced in this way. The particular method of inking best suited to this form of the process is what might be termed the building-up process. In other words, after securing a light deposit of ink all over, it is best to concentrate on particular regions, bringing up the image to full depth, finally unifying the whole. Using this technique it is not easy to make wide variations from the tone values of the silver print as with a softer ink, and it is not easy to secure soft or blurred outlines, such as are favoured by some workers. However, a type of very broad result may easily be achieved by roughing in the ink with a rather full brush and keeping down subsequent working to a minimum. A very attractive and powerfully generalised treatment is achieved in this way. Using hard ink a rather darker silver print can be worked, than if a higher degree of swelling were employed, because the hard ink possesses great power of differentiation of shadow tone. To secure this to the full, swelling must be thorough, and the ink must be well worked into the darker portions without being allowed to block up.

The Mixed Ink Technique. The method of inking now to be described is perhaps the best all-round method of pigmentation. It is recommended and used, among others, by Mr. Bertram Cox, that outstanding master of the process, and is worthy of trial on this account alone. This method of working allows of wide variations in the final type of print according to the taste of the worker, and although the farthest limits of control are possible, the matrix throughout exerts a gently restraining influence on the possible over-enthusiasm of the pigmenter. The method to be followed is now detailed:

First swell the print to such a degree that the hardest ink available will just take to full depth on the shadows and deeper half tones. Ink up these portions, being careful not to over-ink, as further pigment will be deposited at a later stage of the process. Do not attempt to force the ink on the lighter parts of the image, or the result will be granular and unpleasant. When the deeper portions are well worked up place the print back in the soaking

bath, having previously raised its temperature by 5° F. Allow the print to soak 5 or 10 minutes, keeping it fully immersed and free from air-bells. The best plan is to immerse the bromoil face upwards, wipe off any air-bells, and then turn it over. After soaking, remove from the water and replace on the inking support. Dab off superfluous moisture and continue the inking, this time with ink thinned with one or two drops of medium, or better, with an equal quantity of thin ink. If, during the first inking, contrasts had tended to become muddy, due to partial drying off, a gentle hopping with a clean brush prior to resuming inking will easily place matters on a satisfactory basis. With the mixed ink it is a simple matter to cover all but the highest lights, working the softened ink over the shadows already inked, in order to unify the whole work. After completion of this inking the soaking temperature is again raised 5° F., and the ink again softened with a drop of medium, or the final inking may be conducted with soft ink alone.

Bertram Cox's account of his own method of working is well worth reading, and is expounded in full in *Tracts for Pictorial Photographers* No. 3, written by him in conjunction with F. C. Tilney. Mr. R. C. Grimwood also describes this method in *British Journal of Photography*, 1925, pp. 320-322, and his account is again worth the attention of the serious worker. Mr. C. J. Symes, in reviewing Bertram Cox's account, did not quite agree as to the necessity for the increased soaking temperatures, but the reader will by now readily appreciate that this is not a matter of *necessity*, but of a process adapted to produce prints of a particular type and character, different from those made with hard ink alone. The real use of the temperature increases lies in the way the highlight detail is brought up by increased swelling. If the original print has the requisite short scale of gradation, it is possible to dispense with high temperature soaking, and yet get the highlight gradation. In the author's experience, however, the high temperature soaking, combined with the use of soft ink, has, at any rate, the merit of being a much easier method. In fact, there is little doubt that

this constitutes the most generally, useful and flexible method of inking.

There is one little difficulty which occasionally puts in an appearance when using this method of working. When the print is put into a soaking bath at a higher temperature, part of the ink already deposited becomes loosened, and on attempting to recommence inking with the softened ink, it is found that ink is removed instead of deposited, leaving a very contrasting and apparently hopeless print. This state of affairs is generally caused by the first inking having been carried out with too soft an ink, or possibly by excessive drying out of the matrix having permitted the acceptance of a good deal of ink which would not be retained by a properly swollen gelatine. It will usually be found that if the print is allowed to remain undisturbed on the inking support for about five minutes after dabbing off the superfluous moisture, the softened ink will take quite nicely, and will speedily give a more presentable appearance to the picture. In any case, it is often difficult to get the new ink to take until a little evaporation of moisture has occurred, and it is a good plan always to wait a few minutes after re-soaking and dabbing off before proceeding with the inking. It will also not be necessary to do more than call attention to the fact that the second and third and subsequent dabbings off must be very gentle or marks will appear on the image. In fact, if the print is in good condition for transfer such markings are almost inevitable. They should, however, cause no undue worry, because a few dabs with a lightly charged brush will serve to even up matters. The only case where this might prove a little difficult would be in the midst of a big area of even tone, such as a plain sky. Even here, however, careful repairs will usually be quite successful.

Soft Ink Technique. An altogether different type of print results if soft ink only be employed in the pigmenting, coupled, of course, with the necessary high degree of swelling. By soft ink, we understand an ink of the consistency of Sinclair's *Encre Taille Douce*, but by no means as soft as the Lechertier *Barbe* soft ink, which is almost as thin as a medium. The type of picture so produced is

characterised by an almost complete absence of grain, at any rate, if the working up with the brush is fairly thorough. There is also a Corot-like delicacy of definition. The reader need only call to mind the work of Leonard Misonne, which, though usually oil prints and not bromoils, gives an idea of what can be done in this way. The process is so flexible in the form at present under discussion that a warning must be given lest the whole picture gets completely out of hand. The silver image need form so minor a part of the finished picture that a very clear idea of what is being attempted must be constantly borne in mind during the entire pigmenting.

The most usual method of working with soft ink alone is to soak the print until a high and easily visible relief is obtained (at about 90° F. with most English papers) and then to adjust the ink until it takes easily all over the print, with a dim outline of the subject showing in the general depth of tone. Working with the brush is now continued, accompanied, if necessary, by further soakings, until a full depth of deposit is secured in the shadows, and the other tone values appear as and where desired. Any part of the image which is required to be slurred over is left in its original obscurity.

In the hands of a worker who knows exactly what he is out to do there is a wonderful freedom of expression in so working, and indeed it is a good training for the imagination to try a few prints in this manner as an occasional experiment. There are, however, several drawbacks. In the first place, prints made in this way are a long time before the ink is thoroughly hard, and even when dried right out the surface must be protected from abrasion. This may be quite well done by means of the cellulose varnish type of fixatif frequently employed for fixing pastels. Such fixatifs are made by Lefranc, Girault and most other pastel makers, but should be carefully distinguished from the ordinary methylated spirit charcoal fixatif, which is useless for this purpose.

A New Inking Procedure. A method of inking which has been devised by the author yields prints of a much stronger and more virile quality than the normal soft ink technique, and

while preserving and even increasing the flexibility and freedom of the process, yields a very pleasant quality of pigment, after a little experience. The gelatine is submitted to a high degree of swelling as for the use of soft ink alone.

A very soft ink and some of the hard ink are spread separately on the opposing corners of the palette. The soft ink may be the softest available, possibly softer than the Sinclair Encre Taille Douce. The print is first more or less evenly covered with the soft ink, which will work up a soft and smoky-looking image. If the ink is of the right consistency there will be no depth of deposit anywhere, and equally there will be no clean highlights. Some hard ink is now taken on the brush—the same brush may be used, but it should be well worked on the hard ink to make sure that the consistency of the actual ink on the hair tips is not too soft. It will be found that if this be applied to portions of the image where contrast is desired there is at once a great clearing up of the image, depending on the extent to which the hard ink is applied, until finally the purest of white highlights and the deepest of dark shadow tones are obtained. If this operation has been effected without too much brush work, the pigment will show a delightfully free, smooth yet slightly grainy texture, characteristic of the most spontaneous inking. By taking now hard ink, now soft, and again an intermediate grade, made by mixing the two on the palette with the brush, the consistency of the ink may be made to suit the exact degree of contrast required at any point in the picture. Similarly, after a very little experience the inking throughout is perfectly spontaneous, and the colour of the pigment is uniformly good, owing to the well swollen base. For this same reason the prints inked in this manner are especially good for transfer, under which heading more will be said of the method. The main claim of this procedure for trial must, however, rest upon the easily secured spontaneity of inking, and the general artistic control which it so readily allows.

The Art of Removing Ink. Before closing this section, it will be well to pass in review the available methods for local removal of ink. As has been said before, the hopping

stroke results in the removal of ink. Here a distinction must be drawn between hopping with and without ink on the brush. If the brush be charged before the hopping operation, the result is to transfer ink from the lights to the darks. In other words, contrast is increased at both ends of the scale. If a clean brush be used for hopping, and if it is kept clean by dabbing on some clean writing paper after each few strokes, ink is removed from all parts touched. The very small brushes of from one sixteenth to one eighth of an inch diameter are very useful for lightening small portions.

Other than by the use of brushes there are three methods of removing ink. These are:

- (a) by rubbing off on to a piece of plain paper
- (b) by damp sponge
- (c) by plastic rubber.

The first method is really localised bromoil transfer. It is useful for removing large areas to a definite shape, as in creating a basis for worked-in clouds. A piece of paper (ordinary writing paper does excellently) is placed over the part to be lightened, and the desired shape is rubbed over gently with the ball of the finger. The ink will be more or less completely transferred to the paper according to the pressure. The remaining image will show the grain of the paper, but this can easily be worked out with one or two strokes of a lightly charged brush. In fact, it is important to remember that *after all removals of ink, by whatever method, it is advisable to even up with one or two gentle strokes of a brush holding a trace of ink*; otherwise differences of texture are liable to result.

The damp sponge method is of restricted application, and is best carried out by means of one of the small sponges mounted on a stem sold by the Drem people. This is filled with water, pressed free from excess and applied with a stroking action to the print. This tool is also of great use in the working in of clouds. It has been remarked that it is impossible in bromoil to draw a single line. Provided it is a line lighter than the surrounding tone it can be done with the small sponge.

For picking out the highest lights, and, in skilled hands, for general tone modifications over not too large areas, the plastic rubber is the tool *par excellence*. If it is firmly used, the pure tint of the paper base is reached, whereas usually after hopping a faint general tone remains. It is not a difficult matter to remove an inconvenient figure from, say, the middle distance of a street scene by the use of the rubber, and by carefully levelling up the surrounding tonal areas to obliterate all trace of the figure from the final print. This, and other aspects of control will, however, be deferred to a later section of the book.

In attempting to remove ink, one or two factors should be noted. In an incompletely swelled, or partially dried print, it is not possible to remove ink at all without using violent methods, which will ruin the gelatine matrix. With a print inked with hard ink it is more difficult to remove ink than with one which has been inked with softer ink. All removal of ink except slight reductions of tone by gentle hopping, should be reserved till the final stages of the inking, as once the surface has been touched with rubber, or rubbed with paper, it may not be possible to go over it again, should the alteration be unsatisfactory, and have to be covered up.

SUMMARY OF CHAPTER V

- (1) The difficulties in using the hard ink technique are enumerated.
- (2) The mixed ink technique is recommended for general use, combining flexibility with maintenance of the essentials of the photographic basis.
- (3) The soft ink technique constitutes the most flexible form of the process—requires great artistic skill for proper utilisation of the powers it conveys.
- (4) A new technique is suggested in which the normal order of use of soft and hard inks is reversed. This method allows exceptional spontaneity in inking, and gives a distinctive quality.
- (5) The methods and precautions necessary in local removal of ink are discussed.