

Colouring of Book Cover Leathers.

PRACTICAL dyers of finely-grained leather claim that the skin texture is so peculiar that it will not stand treatment with alcoholic solutions, and that, therefore, the aqueous dyes are preferable. If alcoholic solutions must necessarily be used, they ought always to be diluted to the verge of precipitation. There are, in fact, some technical points on leather colouring of which it is desirable that job bookbinders should be informed, because, infrequent as the opportunities may be to put such knowledge to a test, when an occasion accidentally presents itself in some sudden emergency or dilemma, the information now given will be likely to prove of great advantage.

To obtain any quantity of selected morocco without abrasions or visible defacements, which are more or less perplexing to the binder, is conceded in the trade to be impossible. Even the operation of tawing the close yet marvellously flexible goatskin does not rid it of the scars and blemishes incidental to the rough skurrying of the hardy animal from which it has been stripped. On the contrary, that softening process is apt to develop the flaws and cause them to become annoyingly perceptible at the finishing stage.

Expert dyeing of the skin may partly, but will not wholly, remedy these abrasions. They lurk in a concealment whose insufficiency is apparent the moment that a costly full or half binding is subjected to leather expansion from cold or to shrivelling from heat. The skilled craftsman must not be blamed needlessly for defects which he is quite unable to control.

Mechanical pressure, intelligently applied as to its surface distribution, may in time reshape or reset a warped book. To restore the discoloured or faded leather casing of that book to its pristine hue is, however, generally regarded as a hopeless task. That success which results from a "try again" doggedness is the more substantial when it creates an exception disproving the hitherto accepted rule.

It is known there is a natural and very strong tendency in supple leather to fix aniline colours without the aid of mordants; hence, those dyes are particularly available for the finer qualities of dressed skins. In the initial preparation of book leathers, after soaking, scraping, liming and hair peeling, they are plunged into a barrel containing alum, salt, and yolk of eggs. The receptacle is for a while swiftly rotated until the skins are in a proper state to admit of colouring.

Now begins the more difficult process. Good book leather must not only be pliable, closely textured, and of fine and even grain, but capable of setting almost any tint which might enhance its value in the eyes of the critical, increase its specific usefulness, and add to the beauty of its outward dressing.

Acid colours are more important than the basic. Whatever dyes do not uniformly set on the whitened surface of the leather must be mordanted. In most cases tints are best applied with a brush. Of the saline mordants the most essential are the varied soaps. A pure, hard soda soap should be given preference.

Subsequent to painting the skin it is rinsed with cold water while yet upon the colourer's table. Then it is thoroughly stretched, so that all its pores may be susceptible to the dye. Another application of the colour is made; again the skin is washed off, slickered and rubbed until the water runs clean from its surface and the tint appears to be evenly set.

All colours which require deepening or darkening are skilfully brushed over with a solution of Salzburg vitriol, chemically known as ferroso-cupric sulphate, about twenty-five grams of which are dissolved in three litres of water. Afterwards the leather is finally washed in clean water and dried for packing.

The subjoined formulæ or recipes are condensed from an authority of high repute. Each is reprinted with a view to inform non-professional leather stainers how they may at a pinch repair a damaged book cover. They are explicitly cautioned to try and set the colour first on a waste strip of vellum or white kid.

To obtain dark brown, eight parts of fustic, one part of logwood, two parts of Brazil wood, and one part of red sanders are boiled in soft water for an hour and then strained through cambric or a fine linen towel. The vitriol treatment deepens the shade. This is, of course, omitted for light brown, and the skin is primed with dilute potash.

For chocolate brown, one and a half parts of Brazil wood are boiled with forty-five parts of water for about two hours. A little iron acetate is added, proportioned to the tone desired. Chesnut brown is more difficult to obtain. The moistened leather is primed with a solution of one kilogram of copper acetate in fifty litres of water, then slicked out and painted with a solution of yellow prussiate of potash in weak acid water.

A decoction of half a kilogram of cutch, sixty grams of copper sulphate and forty litres of water applied upon a feeble priming, develops a uniform and acceptable brown; while two parts of Hungarian fustic, one part of quercitron and a quarter part of logwood well boiled, if applied upon a strong priming of potash, and followed with the vitriol treatment, results in a beautiful olive brown.

Ordinary red is secured from a decoction of sanders-wood used upon a weak priming of alum free from iron. Cochineal in a linen bag boiled with water containing two per cent. of aqua ammonia will produce a good even red. Alizarine red, a delicate flesh tint, is obtained by brushing the leather with a solution of alizarine in dilute soda and then rinsing with soap water. Zaffer extract, diluted with sixty parts of water containing one part of tartar, is painted on a weak priming of annatto, resulting in a vivid scarlet.

For orange a red priming is given by Brazil wood, and fustic is applied to impart the yellow tinge. Seventy-five parts of the former to twenty-five of the latter produce a red orange, equal parts an ordinary orange, and twenty-five of Brazil wood to seventy-five of fustic develops a brilliant yellow orange. One kilogram of barberry root in thirty of water with two hundred grams of alum, free of iron, makes a definite

