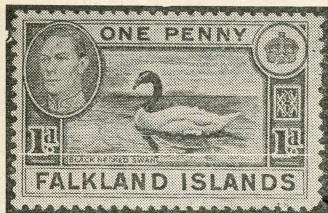


★ ★ COLOURS IN STAMPS ★ ★



A Printer's Complaint

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(The illustrations are of stamps that have well-known colour variations.)



As a printer who has recently joined a philatelic club I cannot but help being amused at some of the weird and wonderful ideas which the average stamp collector has about stamp printing. For instance, take the question of colours on stamps.

Now I am perfectly well aware that the average stamp collector is not a printer, and consequently cannot be expected to be an authority on a subject about which he probably knows nothing. Nevertheless, the idea behind this article is to explain in simple non-technical language some basic facts concerning colour work as it affects the printer.

In printing there are three primary colours. These are red, blue and yellow. They are called primary colours because, as far as the printer is concerned, they cannot be broken down into any other colours. Theoretically, by mixing these three colours it is possible to obtain any other colour required. In actual practice, however, it is found advisable to add black, as this improves the darker colours.

So much for the primaries. Now for the secondaries. The secondaries are obtained by mixing primary colours. The secondary colours are orange, green and violet. Orange is made by mixing red and yellow, green is obtained by mixing yellow and blue, and violet is the result of mixing red and blue.

Tertiary colours compose the third group of printers' colours. These are russet, citrine and olive. Russet is a mixture of orange and violet, a mixture of green and orange gives citrine, and olive is obtained by mixing green and violet.

Black and white are colours on their own, and grey is generally grouped with them.

Another group of colours are the metallic colours. These are gold, silver, copper, bronze and aluminium. These are obtained by using metal dusts.

The Making of Ink

Questions which the readers may be asking themselves by now are "From what sources are printing inks derived?" and "What proportions of primaries are used in order to obtain secondaries?"

Let us deal with the first question first.

The materials used in making printing inks (other than the metallic inks) are derived from three different sources. They are: vegetable, earths and chemicals. For instance, a yellow ink can be derived from all three sources, so can a blue. This means that the sources from which the ink is obtained must be known to the ink-mixer if he wishes to avoid making a mess of his mixing. Why? Because the colour yellow derived from the three separate sources give him three different shades of yellow. So if he mixes an earth red and an earth yellow he obtains an earth orange. If however he mixes an earth red with a vegetable yellow the resultant orange will be different in tone to the first mixture. So if inks are to be mixed it is important that the inks all come from a common stock.

In order to obtain secondary colours equal proportions of primary colours are used, generally 50 : 50. However, when it comes to the mixing of the secondaries in order to make tertiary colours, the proportions vary according to a fixed schedule. If

these proportions are not adhered to the result will not be what is expected. So it will be seen that ink mixing is an exact science.

Shades and Tints

These two terms are very loosely used by the layman. What do they mean? A shade is any colour to which a percentage of black has been added, and a tint is any colour to which a percentage of white has been added.

At first sight this definition may appear rather vague. What percentage may be asked. Well, different percentages give different results.

For instance, one manufacturer may add five per cent. white to his blue and call the result light blue, whereas another manufacturer may add seven per cent. and call the result light blue. What then is light blue? There is no such colour. The name does not mean a thing. The important point is the percentage of white that has been added. Unless this factor is known it is impossible to arrive at a colour known as "light blue". Of course, you can take a guess—stamp collectors do—and the result is that several people have made a great deal of money by trading on the ignorance of the public. Merely by claiming a stamp is a different colour—without proving their claim—gullible people pay large sums of money for the "rarity".

Let us examine this question more closely.

Paper is made from a large number of raw materials, wood-pulp, grass and cloth being three of them. During the course of paper-making, a large number of powerful chemicals are used. A certain percentage of these chemicals are retained in the paper.

During ink-making certain chemicals are also used, and a proportion of these are retained in the ink.

When considering the question of glue, it is found that this substance probably contains the highest percentage of chemicals of the lot.

Therefore, in a stamp there are a large number of chemicals. As the stamp grows older, these chemicals come into contact with each other and reactions are set up. In nine cases out of ten this results in the colour of the stamp being affected.

Does this change in colour mean that a new catalogue number is called for, and also a re-valuation of the stamp? Most decidedly not. Yet in practice the stamp is invariably revalued. A plain racket, isn't it? And yet, how many misguided stamp enthusiasts fall headlong into this trap? It is merely a case of trading upon ignorance.

Take another case. Say it has been decided to run off a stamp in violet ink. The first batch are prepared, printed and sold. Everybody is quite happy. A second printing is called for, but here instead of using the original ink recipe, there are minor changes made. The stamp dealer immediately hails this as a new variety and alters the price. Yet the change effected may be no more serious than the reduction of the time taken to mix the ink, or it may have been fed on to the plate in a thicker stream than its predecessor.

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Colour *(Continued from page 431)*

Of course there are colour charts, which the collector can buy and use as a "key". However, one question: Who prints these charts—the stamp-printer or a private firm in no way connected with the firm printing the stamps? It is the private firm every time, because, for security reasons, the firm printing the stamps are not allowed to give the general public details of their inks. What a wonderful opportunity for forgers if the ink-mixings were made public!

The sun can affect the colour of stamps. If stamps are printed in England in mid-winter and sent to the Sudan they arrive in midsummer. The heat can cause the colours to fade. If these stamps are then sent back to England, do they warrant a new catalogue? In what way has their value altered?

Then, of course, a stamp seen during an overcast day will appear different when it is seen on a bright day, and different again when seen under electric light, and even different under different kinds of electric light.