

THE PERMANENCY OF PHOTOGRAPHS.*

BY FR. WILDE.

Translated from the German by J. F. Sachse.

THE following communication to the *Photographisches Wochenblatt* (Berlin, Nov. 27, 1890), by Fr. Wilde, of Görlitz, a photographer of over forty years' experience, should be carefully read and studied by all photographers, professionals as well as advanced amateurs. We have endeavoured to reproduce the paper with all the idiom of the original, and trust that it has not lost any of its excellence in the translation from the language of the Fatherland.

With great injustice has the reproach of instability been so often cast upon our silver prints. Usually this has been done for advertising purposes. In the commencement of the seventies it was done in the interest of the carbon or pigment process; in later years, to boom up the platinum process. I, however, claim, according to my own experience and observations, that when a silver print changes or fades, it is entirely due to carelessness in the process of its production, such as insufficient fixing or non-elimination of the hyposulphite of soda, or the use of unsuitable paper or faulty preparation of the same. Out of my long practice as a photographer—since 1848—I possess specimen silver prints from each year, and all are faultlessly preserved. The oldest photograph in my possession was made in the fall of 1850. Prior to that time I made Daguerreotypes exclusively; the demand for these ceased only with the introduction of the collodion process. At that period photography was not so easy or convenient as it is to-day. There was no extensive technical literature, in which thorough professionals so disinterestedly published their experiences for the good of the profession in general. No paper especially manufactured or prepared for photographic purposes was to be obtained in the trade, nor were the necessary chemicals to be obtained in their requisite purity without the greatest difficulty.

Prior to the introduction of the collodion process the negatives were made on paper, which the photographer had to prepare, as well as that for the prints. The latter remained the case for a long time, even after glass was substituted for paper. All causes of failure had then to be sought for at home, and could not, as now so often the case, be shifted upon the shoulders of the manufacturer, without cause or justice. Those who went through this epoch of photography—and there are but few of such veterans—must admit that the progress which the art has made with such giant strides is not altogether due to the professional photographer, but that to the amateur, with his equipment of greater scientific knowledge, much of the credit is due. On paper prepared merely with the salts, the image invariably sunk more or less into the paper; to remedy this defect, additions of various substances were made to the salting solution, such as different kinds of starch (arrowroot paper), or decoctions of various mosses (algein paper), of gelatine, whey, or casein, in connection with such acids as tartaric, citric, or succinic acid. The best results which I ever obtained were on a strong, somewhat rough Steinbach paper, which was prepared with casein, sodium chloride, neutral citrate of potassium, and floated upon an eight per cent. silver solution. They were more vigorous than prints on albumenised paper, and reproduced the finest detail and beauties of the negative better than the latter.

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The gold baths for toning prints were not known. With sulphurous fixing baths the prints were simultaneously fixed and toned—a method valueless for albumen; therefore it was only used occasionally for landscapes and architectural subjects. It was not until the discovery of the gold toning bath that we were enabled to give the desired tones.

To return to our subject, even such prints as were produced by the silver-sulphide toning bath, which have been in my possession since the commencement of the early fifties, have kept perfectly, without exception. This is the result of the great care which I always insisted upon to thoroughly eliminate all traces of hypo from the prints. The method I follow was communicated to me by Lutze. Although it is but rarely practised, I would recommend it to all the craft, on account of the excellent results. The method is as follows. The well-fixed prints are placed direct from the hypo into a solution of common salt for sixty or ninety minutes, during which time the solution is frequently renewed until, when a piece of the paper is chewed, the taste is clear salt, without any disagreeable after-taste. Then the prints are to be washed in clear water until the same test shows that the saltiness has also disappeared. This method may seem to many home-baked and mechanical; still, it is valuable in the practice.

I have already mentioned that faulty or unsuitable preparation of the paper may cause an instability of the silver print. This is especially true of prints on albumenised paper if the albumen is more or less coloured with pink or violet. Prints on such paper in the course of time all assume a dirty colour, while on paper coated with a film of uncoloured albumen the prints remain unaltered. When albumenised paper was first introduced, it was prepared by the individual photographer from pure egg-albumen, without the addition of any colouring matter. It is only since the wholesale production of photographic papers that the various shades of colour have been introduced. In later years, however, a little more caution is exercised in the use of such papers; the use of a decided pink shade is especially on the decline. The thickness of the albumen coating on the paper is also a factor in the stability or permanency of the photograph. Photographs made by myself thirty years ago, on paper with a thin, colourless coating of albumen, have kept much better than many made in later years on paper which was heavily albumenised.

The object in introducing albumenised paper was not to obtain a high gloss, but mainly to keep the image upon the surface of the paper by the aid of its thin, hard surface. The small form "visite" whole figure, which dominated for several years, gave the incentive for a paper with a heavier, glossier coating. At present, in carte and cabinet sizes portraits only are required, and in these we can well dispense with the exaggerated gloss so often seen. It is a matter of taste whether the addition of a high gloss is desirable for portraits, about which we will not argue. Taste and demand are regulated by fashion. Many of our fashions are extremely ugly; nevertheless, the public demand them because they are the fashion. Many of our best artists abhor the highly glossed photographic portraits, and find in the platinum print all requisite requirements.

Albumen films after a time all incline to become yellow, even if ever so little. As I became aware of this fact, years ago, I tried the means taken by our domestics to keep their washed linen white, viz., before hanging up to