THE PHOTOGRAPHIC NEWS.

VOL. XI. No. 457.—*June* 7, 1867.

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"DEVELOPMENT BY LIGHT."

Most of our readers will be somewhat puzzled by the heading printed above. "Development by Light" seems an absurdity. Printing by light photographers understand very well; intensifying by light some of them probably remember, as suggested by M. Blanquart Evrard; but as for any action of light upon a plate having a latent image, except fogging it all over, the notion seems absurd enough. The phrase is, however, gravely used by an experienced photographer, with whose valuable practical suggestions, published from time to time, many of our readers are familiar. We refer to Mr. F. B. Gage, of Vermont, who patents in this country and in America a method to which he refers as "partial development by light in the camera." We scarcely think the phrase is quite fitly used, as the effect produced is scarcely of a developing character; but the proposition is startling enough, apart from the phrase which designates it. Although, as it will be seen, the idea is not strictly novel in itself, it is very decidedly so in its mode of application.

Mr. Gage proposes to submit a plate which has been already exposed, and is impressed with a latent image, to a certain amount of diffused light, for the purpose of "illuminating the shadows and harmonizing the lights and shades in the photographic impression;" and, as an old and experienced portraitist, he has sufficient faith in the plan he proposes to secure a patent, not only in America, but in this country, where he has already lodged a complete specification, to which he has obtained the great seal. We must confess that he is a courageous and a sanguine man, for by what means he can enforce his patent or detect infringement, however valuable the process might be, we cannot very well see. But we will proceed to describe the process.

Old Daguerreotypists will remember very well a little operation for shortening exposures under certain circumstances, which was amongst those "secret dodges" which most persons get to know. It was of real utility in obtaining portraits of young children, who required an extremely short exposure. It consisted in exposing the excited plate for a moment to diffused light before putting it in the dark slide. We have practised this in some instances with considerable success, producing delicate and satisfactory pictures with almost instantaneous exposures, which would have otherwise required ten or fifteen seconds. The cases where it was most available and yielded the best results were portraits of fair children in white or light clothing. It will be seen that in such cases no blacks were required in the picture at all, the deepest shadows being only dark grey. As the black polish of the Daguerrreotype plate, like the bare glass in the collodion picture, furnished the deep shadows, it was possible, with the class of subjects to which we have referred, to materially shorten the exposure in the camera, by allowing the whole plate to receive sufficient light to produce a uniform grey, instead of retaining a uniform black, as the starting point of the operations. The operation might be likened to producing a drawing in white chalk on a grey board; the result would not be so brilliant, because the contrasts would not be so vigorous, as a skilfully produced drawing with similar material on a black board, but a more harmonious picture would be produced, with much less labour, on the grey, than would be possible on the black. The same idea was subsequently proposed in another form for general adoption: it was proposed to accellerate the exposure by whitewashing the inside of the camera. Such a notion, it will be readily understood, was never put into general practice, as it would only have tended to produce, in many cases, flat weak pictures without force and brilliancy. The expedient, which was useful under certain conditions, would have been mischievous if applied in all cases.

The principle of Mr. Gage's plan is analogous to the momentary exposure of the Daguerreotype plate to diffused light; but it is different in application. Some may wonder why a "dodge" which was found useful in obtaining Daguerreotype portraits of children should not have been applied in working wet collodion. The reason for not attempting its application will be very obvious on a moment's reflection. In the Daguerreotype process fog was an unknown evil; the universal reduction all over the plate we term fog, was a trouble introduced with the collodion process. This was annoying enough when it came from any cause, and no photographer would readily risk securing it by deliberately exposing his plate to diffused light. Furthermore, from the greater sensitiveness of the collodion process, the operation was less necessary and less possible, for it would be difficult to expose a wet collodion plate to diffused light, even for a moment, without producing universal fog at once.

Mr. Gage has devised a method by which, even with wet collodion plates, he can utilize a minimum portion of diffused light to secure a certain end. Having excited and exposed the plate as usual, or exposed a shorter time than is usual, the lens is turned towards any dark dead surface for a short time, so that the whole of the plate is subjected to the weak radiations which are reflected from this surface. A screen of about eighteen inches square, covered with thick black woollen cloth, with a handle about two feet in length, is found convenient for the purpose, and is held in one hand whilst the cap of the lens is removed with the other. The screen is kept in motion, so that no image of its texture shall be formed on the plate. The time of the exposure to this dark surface varies, according to circumstances, from one fourth of the time of the original exposure to double the time. Instead of submitting the exposed plate to this action of light, under some circumstances it is recommended to sub