

Cyanogen (the bi-carburet of nitrogen) is, as is well known, always found when azotised matters are exposed to an elevated heat, particularly in the presence of energetic bases, and traces of this principle are sometimes found to be produced as a consequence of the putrefactive process. Building, then, on this fact, and on the well known facility with which purulent matters undergo spontaneous decomposition, we can, he says, feel no difficulty in accounting for the occasional discharge from wounds of a minute quantity of Prussian blue.*

Unhealthy pus frequently exerts a chemical action on the surrounding parts, sometimes containing free acids, *carbonate of ammonia*, or other constituents which chemically exert an injurious effect.†

According to Dumas, even *hydrocyanic acid* may be formed in the process of suppuration.‡

In the report on the progress of chemistry, published in the first volume of that extensively circulated and excellent work, Ranking's Abstract, are detailed three, selected from several, analyses of pus made by Dr. Wright. In one, the pus from a vomica, he detected a *trace of iron*.

In South's translation of Chelius,§ the latter author states, that this fluid (pus) contains, besides other constituents which he details, *hydrochlorate of ammonia* (Bonnet) and a *trace of iron*.

Thus we see that the actual constituents of cyanuret of iron, namely, carbon, nitrogen, and iron, may be furnished from the pus itself, and very possibly in these cases of blue pus, there may be an excess of the latter element, which from the decomposition of the pus on its immediate formation, generating carbonic acid, ammonia, hydrocyanic acid, and other compounds, would very readily form a distinct compound, possessing the characters of Prussian blue.

Mr. Butcher's explanation of the for-

mation of blue pus is a very rational one, but I sincerely believe that in those cases, in which there is a communication with the bones, they themselves have a certain direct influence in producing these chemical changes. The contact of atmospheric air would seem also to be more or less connected with the developement of the blue colour, as the pus, when freshly secreted and coming in contact with the lint, does not immediately become converted into a greenish blue, this change being gradual, as noticed by myself in the case already reported.

Can this discharge be considered an unhealthy one, or likely to be in any way injurious? The testimony is in favour of its being neither. In a statement of cases which follow, only one that we know of was fatal, and that resulted from internal chronic disease.

The occurrence of these cases of blue pus, or as I shall term them, *Cyanopouon*, Dr. Benson very justly remarks, cannot be considered as a novelty; and doubtless many medical men have witnessed such, although few are recorded. The following summary comprises all I can meet with in the Journals:—

- 2 cases are recorded in the Gazette Medicale (1831 and 1834) in which the serum of a blister was coloured blue. 2
- M. Olioli's case at Turin, in which, after amputation, blue pus was produced, though only simple dressings were employed. 1
- Case in M. Maisonneuve's wards. Blue pus occurring in the person of a woman who had formerly been operated on for a cancerous breast, and now returned with a reproduction of the disease. Canquoin's caustic was applied, and, after the eschar fell off, the pus discharged was observed to be of a greenish-blue, and that whether medicinal applications were made to the part or not. 1
- Sir Benjamin Brodie has met with some cases,* say. 3
- Case recorded in Dublin Journal of Medical Science, by Dr. Croker.

* Dublin Medical Press, 1849.

† Vogel's Pathological Anatomy, by Day

‡ Comptes Rendu, 1841. Vol. xiii.

§ Volume I. page 40.

* Dr. Benson in Dub. Med. Press, April 1849.