

Citation:

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in regular bands, resembling to the schemata of the root-innervation of the skin given by Prof. BOLK (photo's N^o. 3 and N^o. 4).

It seems difficult to explain the pathogeny of these hyperalgetic bands, but the nexus between their anatomical localisation and the distribution of the root-innervation of the skin seems very probable.

Geology. — *“The so called opaque minerals in transmitted light”*.

By Prof. J. L. C. SCHROEDER VAN DER KOLK.

(Read June 30, 1900.)

Among the outward characteristics of minerals, colour, as we know, occupies a principal place. With many minerals, more especially with the sulphides, the colour is so dark, that it often seems to be black. It is the powder however, which in many cases is the true indicator of colour. This powder is obtained generally in small but sufficient quantity by rubbing the mineral on an unpolished porcelain surface (the streak). Not a few apparent black minerals produce a coloured streak, but a good many others show one equally black or at least of as little colour as the mineral itself. Hence it is that with some dozens of minerals the streak is of little if of any value. It naturally suggests itself to attribute the absence of colour in the powder to the too great coarseness of the grains, which prevents them to become transparent. In fact in a great many cases, the rubbing down of the powder produces a distinct colour effect. It is easily reduced to smaller grains by rubbing out the streak with a hard object, a piece of quartz or with one of unpolished porcelain.

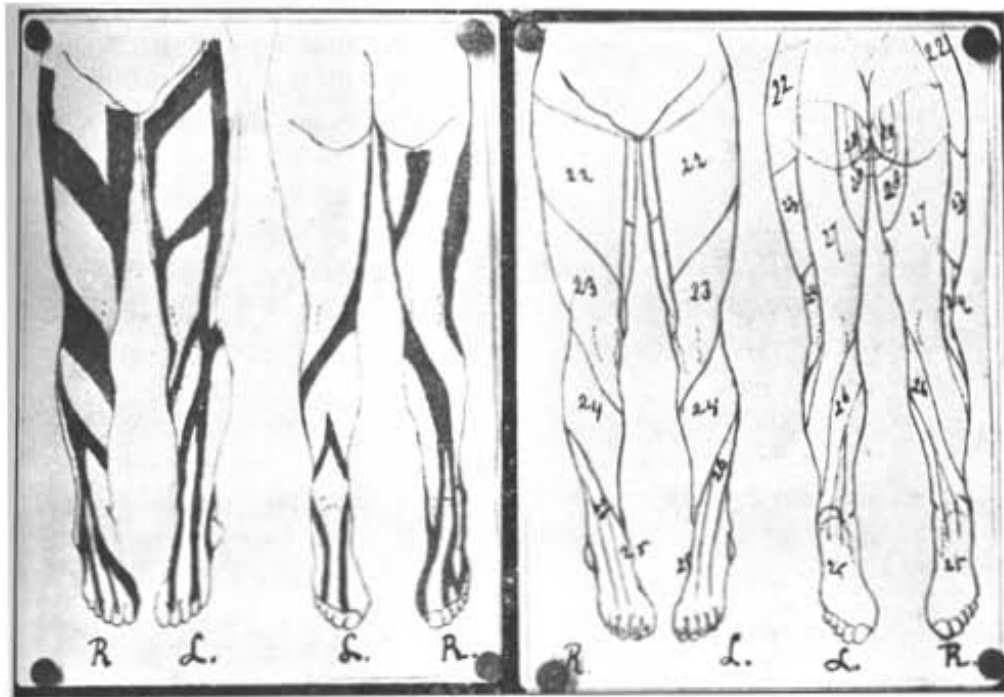
The following minerals are striking instances:

Pyrite pale brownish lilac; galena brown, a middle colour between bistre and Indian ink. Clausthalite reddish brown; pentlandite lilac; covellite more or less brownish green; stibnite very bright yellowish brown; chalkopyrite brilliant deep violet; boulangerite reddish brown and bournonite brown.

It needs hardly be said, that colour cannot be described. Only by experimenting the thing will become clear. I may recommend here always to compare the colour with that of a rubbed out graphite-streak. To facilitate this experiment, I add a list of those minerals, which are more or less analogical as to the colour. Identity I however never met with and even tolerable resemblance of colours in two different minerals is very rare.

Green are molybdenite and covellite and bornite.

D. H. BELJERMAN: Curious disturbances of the sensation of pain in a case of tabes dorsalis.



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Violet are chalkopyrite and pentlandite.

Pale brown, lilac tinged are pyrite, and more or less smaltine, cobaltine and ilmenite. The colour of the last mentioned mineral approaches some more reddish brown tetraedrites.

Pale yellowish brown are stibnite and jamesonite, whereas hausmannite and manganite in colour approach the following group.

Reddish brown are boulangerite and clausthalite: bournonite is less red and as to colour forms a transition from the two last to stephanite, which approaches yellowish black.

Yellowish black are galena (greenish tinge) enargite and chalcocine, further berzilianite, argentite and berthierite. Finally anthracite might be mentioned here.

Pale brownish grey are magnetite and polianite; further stannine and corynite, although the streak of these last mentioned minerals is of a rather pure grey colour.

Still purer is the grey of graphite and pyrrhotine.

The above mentioned colours were an immediate result of the fineness of the particles growing transparent in consequence of that fineness. Still another effect is produced by rubbing down the streak of certain minerals. I will just passingly mention it here, later I shall treat it more fully.

The effect I mean is most apparent in minerals which contain copper and best in cuprite. In rubbing out the brownish red streak the colour grows more and more greenish; at last to dissolve into a bluish green. However when shutting out the air with a drop of glycerine, no change of colours takes place. This same final colour is obtained in azurite and malachite.

I need hardly point out, that all those colours may be a great help in determining the so called opake minerals.

Mathematics. — On "*The spacial anharmonic ratio of curves q^n of order n in the space S_n with n dimensions*". By Prof. P. H. SCHOUTE.

1. If on the curve q^n in S_n , forming the subject of this short treatise, we take arbitrarily $n-1$ points $A_i, (i=1, 2, \dots, n-1)$, we also determine thereby a space S_{n-2} containing these points, and we can assign the points of the curve one by one to the spaces S_{n-1} through S_{n-2} containing them. This gives rise to a correspondence one by one between the points of the curve and the spaces S_{n-1} of the pencil of spaces with the basis S_{n-2} , which proves the