

d'hémoglobine est un peu plus élevé que dans les femelles. Un des facteurs qui peuvent diminuer le taux d'hémoglobine est la présence d'un grand nombre de parasites dans les poumons, l'intestin et la vessie urinaire. — La valeur moyenne du taux d'hémoglobine est de 91 (15.5 grammes d'hémoglobine dans 100 centimètres cubes de sang; moyenne de 669 déterminations).

Geology. — RAVEN, TH.: *Are there post-miocene peneplains and peneplain escarpments in Europe? In which climate can they have been formed? (Morphological difficulties. II)*, p. 124.

The theoretically deduced conditions for the formation of piedmont-escarpments are tested on the observations of JESSEN and DAVIS. In savannah-climate as well as in arid climates, lateral denudation is seen to form remarkably sharp, concave nicks at the base of the escarpments. The corresponding convex nicks at the head of the escarpments, however, do not appear by far to be developed so as well under arid conditions. The author tries to explain this difference in the existence of a laterite zone, which is formed in Aw- and Cw-climates, as described by KÖPPEN. This lateritic armour is thought to have protected the peneplains against the denudation, even after the dissection. In support of the climatological hypothesis the author mentions the small effect of the denudative lowering of miocene peneplains in Europe. In fact the dissection of these peneplains, as observed throughout our continent, should have activated the denudation but for the change in climate, which caused a new type of denudation, corresponding with a higher value for the minimal slope permitting denudation. Finally the danger of a — too actualistic — comparison with the abnormal distribution of recent climates is emphasized (cf. BROOKS, C.E.P., Climate through the ages. London 1926).

Géologie. — RAVEN, TH.: *Y a-t-il des pénéplaines post-miocènes et des escaliers de pénéplaines en Europe? En quels climats peuvent-ils se former? (Difficultés morphologiques. II)*, p. 124.

L'Action de la dénudation latérale, telle qu'elle a été déduite dans la livraison I de cette série, doit avoir déterminé le relief spécial des régions des savanes, comme p.ex. celui de l'Angola. La formation d'une carapace de latérite y semble paralyser l'action de la dénudation normale (qui est nullement exclue par la dénudation latérale comme telle). Justement l'absence de cette carapace dans les déserts y explique la destruction rapide des niveaux surélevés. Le fait de la dénudation remarquablement peu intense des pénéplaines Européennes depuis leur dissection semble fournir un appui de l'hypothèse climatologique. En effet cette dissection générale devrait activer la dénudation destructive, si le changement postmiocène du climat n'eut pas inauguré un nouveau type de dénudation,

exigeant une pente plus grande que celle des pénéplaines miocènes. Ainsi celles-ci furent à peu près immunes contre la dénudation pliocène. Enfin l'auteur avertit contre une comparaison trop rigoureusement actualiste avec la distribution actuelle des climats, celle-ci étant assez abnormale (BROOKS, C.E.P., Climate through the ages. London 1926).

Geophysics. — DORRESTEIN, R.: *On the significance of the resemblance of the coasts on either side of the southern Atlantic Ocean as an argument for the hypothesis of the shifting of the continents*, p. 133.

The contemplation of the striking resemblance in the form of the Atlantic coast lines of S. America and of Africa made WEGENER draw up his theory of the shifting of the continents. This similarity in form is still used as an argument to prove that in former times these continents must have formed a whole, or at least must have been situated very close together. The value of this argument, however, is doubtful, for in principle it is just as well possible that this similarity is "mere chance". In order to discuss this question as far as possible quantitatively, we may start from the fact — according to NIEUWENKAMP — that by mutual shifting of the continents over the globe the two coasts may be caused to coalesce over a distance of 3200 km measured along the coasts, with a maximal bilateral transverse deviation of only 50 km. This we will call here "the phenomenon". BAYES' formula may be used:

$$\frac{w_1}{w_2} = \frac{p_1 q_1}{p_2 q_2}.$$

p_1 represents the *a priori* probability of the correctness of hypothesis H , that the two coasts have always been perfectly independent of each other, p_2 the *a priori* probability of the correctness of hypothesis \bar{H} , that there has in fact been a close interaction between the two coasts during their formation; in the values to be estimated of p_1 and p_2 the occurrence of "the phenomenon" is not yet taken into account; q_1 is the chance that "the phenomenon" occurs somewhere on two coasts such as those of the southern Atlantic ocean, if hypothesis H is correct, and q_2 is this chance, if \bar{H} is correct; \bar{H} may be defined so that q_2 does not deviate far from unity; w_1 is the *a posteriori* probability of hypothesis H , and w_2 that of \bar{H} , after considering the occurrence of "the phenomenon".

We have statistically estimated a value for q_1 , starting mainly from the Atlantic coasts themselves as statistic material. This was done by checking up the number of times that it happens that the two coasts may be brought to coalesce over a distance l with a maximal margin of 50 km, as function of l for l from 800 to ca. 1800 km, and extrapolating the exponential decrease found to $l = 3200$ km. Thus we find a value for q_1 of about 1:50. According to BAYES' formula the connection between $w_1:w_2$ and