hydrogen. We found for the volume susceptibility $K = - 0.186 \times 10^{-6}$ and, taking DEWAR's value for the density of liquid hydrogen 0.07 we find $\chi = - 2,7.10^{-6}$. Within the limits of experimental error this value agrees with that calculated by PASCAL [1] $\chi = - 3,0.10^{-6}$ from the organic compounds. As we do not propose to repeat this determination for the present we think that there is sufficient reason for us to communicate this result here.

Physiology. — *"The permeability of blood-corpuscles in physiological conditions, especially to alkali and earth-alkali metals".* By G. GRIJNS.

Messrs HAMBURGER and BUBANOVIC reproach me in their communication in the meeting of February 25, 1911, that in my criticism (Proc. of Oct. 29, 1910, p. 489) I should not have taken account of the fact, that, after the addition of water or NaCl, the original volume was used again for the analyses. This accusation is unjustified. Messrs. H. and B. said in their communication of June 25, 1910, p. 259 : *"To accomplish this in an efficient manner, a certain quantity of blood was centrifugalized, the serum was partly removed and mixed with the necessary amount of NaCl, or water; then it was added to the rest of the blood and well mixed with it"*·

This seemed to me perfectly clear and rational. Relying on it I have calculated the dilution by the water on the entire quantity of blood. Now Messrs H. and B. say, that they retained so much from the serum mixed with water or with NaCl that, after the mixture with the residue, the original volume was obtained. Consequently they followed another method than the one they described. I therefore complied with their request and repeated my calculations with this new statement.

In the experiments with water we must now not calculate the quantity of a component of the blood that the mixture must contain by multiplying the total quantity by the fraction indicating to what proportion the entire quantity was diluted; but we must subtract 1/11 of the quantity contained in the serum from that total quantity. For only from the serum something is taken off, and there after to 10 parts of the serum that is still present, 1 part of water has been added, as follows likewise from the example given on p. 220.

[1] P. PASCAL Ann. chim. et phys. (8) t XIX p. 5; 1910.

As the addition of 0,2 °/₀ of NaCl to a serum does not yet increase the volume by 0,1 °/₀, the neglect of it can cause at the utmost a difference of 1 in the third decimal. As for the experiments with addition of NaCl, consequently the result does not change by the new calculation.

As for the experiments with addition of water, with KCl the difference is reduced from 0,118 G. to 0,0596 G. With NaCl it mounts however from 0,292 G. to 0,447 G. and with Cl from 8,5 on 10 cM³ 1/10 Norm. AgCl-solution.

I ask myself, if the gentlemen have themselves made the calculations they required me to do.

Geology. — *"Some considerations on the geology of Java"*. By Prof. K. MARTIN.

(This communication will not be published in these Proceedings).

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(June 23, 1911).