the "Concise Oxford Dictionary": "Flake—light fleecy tuft or piece, esp. of snow." It is the 'fleecy' quality which is essential to a snowflake, and this fleecy quality is given by the cohering together of a number of ice crystals. It is, therefore, an inadmissible extension of the word snowflake to apply it to the individual ice crystals composing the flake, which have nothing fleecy about them and would not be described as snowflakes if exhibited individually to anyone familiar with the English language but unacquainted with the nature of snow.

I may mention that Prof. Nakaya's use of the terms snowflake and snow crystal is in full agreement with the practice of the Meteorological Office as set out in the "Meteorological Glossary" published by the Office.

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Sept. 7.

I AGREE with Sir George Simpson that the word 'snowflake' is not a perfect description of a single ice crystal falling as snow (indeed I said so in the passage which he quotes), but can a better be found?

'Snow crystal' is not good, for after having fallen the snow particles remain snow crystals or crystallites right through the *firn* stage until they become the *ice* crystals of pure glacier ice. Therefore in a description of snow phenomena it is continually being found that some separate designation is required to differentiate between snow crystals in the falling and the fallen states, *the more so because their characteristics in the two states are quite different.*

My 'flake' is not quite so bad as Sir George suggests, for I chose it after consulting "Webster's Dictionary", which gives: "A loose, filmy or scale-like mass; a film; a flock; lamina; . . . and on turning to 'lamina' I find: "A thin plate or scale."

I may say that Prof. Nakaya has now accepted my nomenclature; nevertheless, I am still not completely satisfied with it and will gladly accept a better name for the particle of fallen snow, though not, I fear, the appellation 'snow crystal' which, as I have tried to show, applies equally to the falling and the fallen condition, and is therefore ambiguous.

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Points from Foregoing Letters

A PHOTOGRAPH showing an enlargement of the green mercury line in the third-order spectrum obtained by means of an aluminized diffraction grating with 30,000 lines to the inch is submitted by Prof. R. W. Wood. Gratings with 15,000 lines to the inch give high concentration of light in the first-order spectrum and have been used with very good results at Mt. Wilson Observatory. Replicas of such gratings made by flowing on them a nitrocellulose solution have been successfully used by the Lick and Harvard Observatories for studying the extreme red and infra-red spectra of the stars, and for obtaining the distribution of the different gases in nebulæ. Prof. Wood hopes to prepare both plane and concave gratings by the use of plastics and a moulding process.

A table showing the wave-lengths of a number of new lines in the spectrum of the corona observed during the solar eclipse of June 19, 1936, is given by Prof. R. Sekiguti, who discusses some of the features of the spectrogram. The new observations confirm the existence of the line 4725 A. This and other lines are close to certain lines in the spectra of nebulæ and novæ. Prof. F. J. M. Stratton remarks that if Prof. Sekiguti's identification is accepted, then in the lines 6548 and 6584 we have evidence, for the first time, of a known element in the corona, since these lines are ('forbidden') lines in the spectrum of nitrogen (N II).

Experiments by Prof. G. Hevesy, Dr. K. Linderstrøm-Lang and N. Nielsen indicate that, unlike plants, yeast cells immersed in a solution containing 'labelled' (radioactive) phosphorus atoms (as phosphates) do not take up or exchange such atoms. This may mean either that all the phosphorus in the yeast is in bound organic form (as hexosephosphates or adenylphosphoric acid) or that yeast cells are impermeable to phosphate ions except when growing.

Dr. H. Weil-Malherbe finds that the addition of coenzyme I to α-glycerophosphoric dehydrogenase does not affect its ability to take up oxygen and to dehydrogenate α-glycerophosphoric acid. A powerful dehydrogenating enzyme was obtained from horse brain by using pyocyanine as carrier.

Dr. K. Miescher, W. H. Fischer and E. Tschopp report on the effect of enol-esters of testosterone on the capon's comb and on the sexual organs of the rat. They state that the enol compounds produce on the rat, but not on the capon's comb, the strongest and longest duration of all hitherto known male hormones.

Prof. B. N. Singh and N. K. Anantha Rao find that in the tropical plant *Bassia latifolia*, as the leaves grow old and the amount of green colour (chlorophyll) decreases, there is an increase in the carotin and xanthophyll colouring matter, but these also disappear almost completely at the shedding stage of the leaf.

Dr. B. Cunningham points out that the widely held view that, at a river bend, the speed of the water on the outside of the bend is greater than on the inside, does not agree with the observations of the late Prof. J. Thomson. He found a vortex type of motion which led to the velocity being greater on the inner side of the bend. The erosion of the outer side is due, in these circumstances, to a transverse current of water which flows along the bottom towards the inner side, carrying with it detritus.

S. D. Emslie develops the Faraday tube hypothesis for the treatment of gravitation and, by introducing the mass-energy equation, arrives at a relation for the field intensity which, he claims, disposes of Einstein's objection to an infinite Newton-Faraday universe. Further considerations lead him to the view that the recession of the spiral nebulæ is due, not to a real repulsion, but to the field's intrinsic instability, so that an expansion once started would become oscillatory.