value and made it possible to obtain insulin from animal pancreas in quantities for practical use. He expected to find an insulin-like substance wherever glycogen occurred in Nature, and for this reason looked for it in vegetable extracts. Our belief that oxidising ferments cause glucose metabolism led us to examine vegetables for these ferments and for substances with an insulin-like action. It seems that Collip's theory and ours dovetail. A storehouse of food (glycogen, starch, etc.) and a ferment for the metabolism of this food are necessary wherever growth occurs in vegetables.

Our studies have led us to the tentative suggestion that insulin, which is apparently not itself an oxidase or peroxidase, indirectly stimulates or activates oxidising ferments in the tissue cells to action upon glucose, whereas vegetable extracts contain active oxidising ferments and act directly when injected into animals.

It would seem that the work of Winter and Smith, of Collip, and of ourselves was being carried on simultaneously and independently. Collip, very properly, suggests that " These authors [Winter and Smith] would, therefore, share coincident priority with me in this particular." We think that we should be included in this share of priority.

WILLIAM THALLINNER.
MARGARET C. PERRY.
Laboratories of Columbia Hospital,
Milwaukee, Wis., June 20.

Scientific Names of Greek Derivation.

DR. J. W. EVANS'S letter in NATURE (July 7, p. 9) may serve as an excuse for commenting on certain names which have recently been introduced into zoological literature without sufficient regard for etymological principles. Bathosella and Leiosella (Polyzoa) may be given as examples of a series of new genera, proposed in 1917 and later years, with the derivations, as stated, *bathos*, depth, and *leios*, smooth, respectively. In these genera the entire Greek word is used, instead of its root, and the generic name is completed by the addition of a Latin diminutive termination. The suffix *-sella* is in any case likely to cause confusion in Polyzoa, among which *-cella* is the termination of many familiar generic names.

A second series of new genera ending in *-nea* is also of recent introduction, to express an affinity to Idmonea, which was presumably based on ἴδμων. Mesonea and Pleuronea may be mentioned as examples of this misused employment of *-nea*. A third unfortunate suggestion has just been made, to the effect that the Latinised form of ξένος or ξένη (a guest) should be added to the generic name of a host, in forming the trivial name of its parasite. Among the illustrations of this supposed emendation in nomenclature are *ranaxena* and *bufoxena*, both based on Latin words.

According to the Rules of Nomenclature, generic and trivial names cannot be rejected on purely etymological grounds. The same rules do not apply to group-names, and it is accordingly justifiable to suggest that some of them may be amended; for example, that Aplousobranchiata, which has been proposed in Tunicata, should be replaced by the more euphonious name Haplobranchiata.

Dr. W. D. Lang (*Geol. Mag.*, N.S., December, vol. iv., 1917, p. 282) has previously discussed some of the points I have indicated. It may be useful, however, to raise a protest against the continued introduction of names formed in defiance of accepted principles, and I venture to think that this practice will not tend to raise scientific nomenclature in the estimation of scholars.

SIDNEY F. HARMER.
British Museum (Natural History),
July 7.

IN 1844 Sir John Herschel wrote to Owen regretting his spelling of the name of the fossil bird Dinornis, and urged that a Frenchman would pronounce the word Denornis, which he would not do had it been spelt Deinornis. To this Owen answered by directing attention to our pronunciation of the word receive.

Herschel does not seem to have retorted, but he might have done so by quoting—

" segnius irritant animos demissa per aurem
quam quae sunt oculis subiecta fidelibus et quae
ipse sibi tradit spectator."

And the retort would have been final.

F. JEFFREY BELL.
The Athenæum, Pall Mall, S.W.1,
July 8.

The Scattering of Light by Anisotropic Molecules.

PROF. L. V. KING's interesting letter on this subject in NATURE of May 19, p. 667, calls for comment, as his results do not seem to be acceptable in the light of the work carried out at Calcutta in this field during the past two years.

Any proposed scattering formula should satisfy two simple tests, namely, that for a fluid consisting of isotropic molecules it should reduce to the Einstein formula, and that for a sufficiently rarefied fluid it should become the Rayleigh law of scattering. Prof. King's formula (3) satisfies neither of these tests, as can easily be seen on putting $\rho = 0$ in it. The appearance of the adiabatic compressibility in the formula is inconsistent with thermodynamic principles. Einstein has very clearly pointed out that the expression for scattering must involve the isothermal and not the adiabatic compressibility. Further, the omission by Prof. King of the factor $(\mu^2+2)^2/9$ which appears in Einstein's formula, cannot be reconciled with the acceptance of the Lorentz refraction formula for a fluid consisting of isotropic molecules.

Prof. King's explanation of the diminution in the depolarisation in the case of liquids, which occurs as the critical temperature is approached, as due to the breaking up of crystalline aggregates, seems inappropriate in view of the fact that a precisely similar effect is shown by vapours, where obviously the conception of crystalline aggregates is entirely out of place. Mr. Ramanathan's paper on the scattering of light in benzene vapour at high temperatures, which is appearing in the *Physical Review*, clearly illustrates this. The effects observed both in liquids and vapours have been very simply explained without recourse to artificial hypotheses in my papers in the *Phil. Mag.* for January and March, where quantitative data strongly supporting Einstein's formulæ are set out.

The fundamental error in Prof. King's reasoning seems to arise at the point where he suggests that a fluid consisting of comparatively stationary anisotropic molecules, with equally probable orientations in all directions, would scatter only polarised light. This is certainly not the case. It can easily be seen on resolving the effect due to an ælotropic molecule oriented arbitrarily that the components perpendicular to the light vector in the incident wave are affected with a sign which may be either positive or negative at random, *i.e.* irrespective of the position of the

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