

generally adopted; the author of this new "uniform system," however, has chosen the other course.

If the author of the "uniform system" had been contented with tabulating the system of transliteration which has been so long in use, he would have earned the gratitude of those devoted to literature, as well as of those who cultivate science. As it is, I am afraid he has merely given the world of art and letters an opportunity for gibes at what they are sometimes pleased to call the narrowmindedness and pedantry of scientific men.

I may, perhaps, be permitted to give a few examples of the defects of the new system;  $\Gamma$  in Russian has three sounds, one nearly resembling the English  $g$ , another very like  $h$ , and a third guttural sound, to which there is nothing analogous in our tongue. The author proposes to get over this by transliterating  $\Gamma$  by  $gh$ !! The eminent chemist Hemilian thus becomes masked as Ghemilian, whilst Gustavson appears as Ghustavson, and a well-known political character, Gortchakoff, is altered to Ghorchakov. For comparison, I give these names, and a few others, as transliterated in accordance with the two systems:—

Present system,			New system.
Hemilian	...	...	Ghemilian.
Gustavson	...	...	Ghustavson'.
Gortchakoff	...	...	Ghorchakov'.
Alexcéff	...	...	Aleksyeev'.
Gregoreff	...	...	Ghrigor'ev'.
Ogloblin	...	...	Oghloblin.
Mendeléeff	...	...	Mendelyeev'.
Chroustchhoff	...	...	Khrushchov'.
Michael	...	...	Mikhail.
Joukovsky	...	...	Zhukovskié.

Geographical names are even more weird; for example, it becomes somewhat difficult to recognize under the disguise of Nizhni Novghorod and Volgha, the town of Nijni Novgorod and the River Volga. Such words as "Journal" and "Chemie," when occurring in titles, can be at once recognized; this can scarcely be said of them if the new system of transliteration is used, as they become "zhurnal" and "Khimii" respectively.

It is much to be regretted that the Royal Society, the Linnean Society, and the Geological Society should have pledged themselves to adopt this novel "system of transliteration," instead of adhering to the one which has been so long in use. As a Fellow of the Royal Society, I feel very great regret that the Council are going to adopt this system in their publications, as it will seriously detract from the value of their supplementary "Catalogue of Scientific Papers" now in the press, at all events as far as Russian literature is concerned.

No protest of mine, however, can be half so forcible as the unconscious sarcasm of the author himself, in his paper, where he says that "an expression of grateful thanks is due" to two Russians "who have assisted in the arrangement of the system." The names of the Russians are then given, and if my readers will take the trouble to study them by the light of the table for transliteration by the new system, he will see how they express their appreciation of the author's labours by carefully avoiding every one of the novelties he has introduced.

CHARLES E. GROVES,

Editor of the *Journal of the Chemical Society*.

Burlington House, March 17.

HAVING in view the increasing importance of Russian to literary and scientific men, it becomes very desirable to have a uniform system of transliteration, such as that recently proposed in your columns.

But, in order to be useful, everyone must agree to conform to it, nor should any such system be adopted off-hand without full discussion of any points which may seem susceptible of improvement.

It seems to me objectionable to indicate the semi-vowels ( $\bar{b}$  and  $\bar{a}$ ) by a simple  $\bar{v}$ , and to omit them altogether at the end of a word. They really correspond, to a certain extent, to our  $e$  (mute); and I would suggest that it would be better to indicate them by a full letter—perhaps  $\bar{z}$  for one and  $\bar{d}$  for the other.

March 11.

W. F. KIRBY.

ONE or two points in the criticisms on this subject call for some notice before the publication of a more detailed account of the system.

As regards Mr. Kirby's suggestion, the transliteration of the semi-vowels was discussed, but it was not thought advisable to exaggerate their importance by using two letters for them, especially as their use is becoming discontinued in Russia.

When recommending a uniform system, we did not imagine that Mr. Groves or anyone else would infer that this was intended to limit the right of Russians who dwell in England or who write in English to spell their names as they please; we have not asked Messrs. Kelly to apply it to all Russian names in the Post Office Directory or the Court Guide; we should never think of altering such names in ordinary correspondence. Even in catalogues and records, for which this system is intended, the familiar form should of course be quoted with a cross reference, as recommended by us in the clause dealing with proper names.

Mr. Groves asks why we have not tabulated "the system which has been in use in England for about a century." Our efforts began with an attempt to discover such a system, and resulted in the tabulation of a large number of systems, including that employed by Mr. Groves in the *Journal of the Chemical Society*; since, however, no two authors agree in the English symbols intended to represent either the sounds or letters of Russian words, we endeavoured to frame a system combining as far as possible the features of those already in use in England and America.

We are much obliged to Mr. Groves for supplying further illustrations of the desirability of using  $gh$  for  $\Gamma$ ; the letter has, of course, more than the three sounds to which he limits it.

The uniformity of "the system which has been so long in use" may be illustrated by the following examples, in which we confine ourselves to the names of chemists, and to the words quoted by Mr. Groves:—

Consulting the "Imperial Gazetteer," Lippincott's "Gazetteer," and Keith Johnston's "Atlas" alone, we find Nijni, Nijnei, Nishni, Nizhnee, Nijnii, and Nischni-Novgorod.

One journal is given in Bolton's "Catalogue of Chemical Journals" as

*Zhurnal russkova khimicheskova i fizicheskova*;

in the *Geological Record* as

*Furnal rosskoi chimicheskago i fizicheskago*;

and in Scudder's "Catalogue of Serials" as

*Zhurnal; russkoye khimicheskoye i fizicheskoye*.

Hence it is difficult to see why Nizhni and Zhurnal should be unintelligible.

In the Royal Society Catalogue, the *Geological Record*, and Chemical Society's Journal, the same name is spelt Jeremejew, Jeremejeff, Jereméeff. Which of these words represents the pronunciation?

In the Chemical Society's Journal, Wroblewski and Flawitzky correspond to the Wroblevsky and Flavitzsky of Armstrong and Groves' "Organic Chemistry."

The same journal frequently quotes the name Markownikoff where the same Russian letter (and sound) is denoted both by  $\bar{v}$  and  $\bar{f}$ , while in the examples of Mr. Groves it is also represented by  $\bar{v}$ ; here, of course, and in similar cases, the name comes through a German channel.

Mr. Groves transliterates a few names; since, however, in his "rational" system one Russian letter has more than one English equivalent ( $\bar{v}$ ,  $\bar{f}$ ), and one English letter ( $\bar{e}$ ) has more than one Russian equivalent, while the sound is not correctly represented ( $\bar{a}$ ,  $\bar{d}$ ), it is obvious that this is neither "rational" nor a system (it does not profess to be "empirical"; perhaps Mr. Groves will now call it the "graphic method").

Since, moreover, the system recommended by Mr. Groves is not used by him in the Chemical Society's Journal, we hope that he may yet see his way to adopting the one which has now been accepted by so many of the leading English Societies.

H. A. M.  
J. W. G.

"Like to Like"—a Fundamental Principle in Bionomics.

THE following letter has been intrusted to me for seeing through the press, and therefore I deem it desirable to state that it does not constitute the writer's reply to Mr. Wallace's criticism of his paper on "Divergent Evolution." This reply, as previously stated (*NATURE*, vol. xl. p. 645), will be published by him on some future occasion.