

degrees of consistency without altering the relative position of the same, which cannot fail to be of interest and value to such as wish to make and mount thin sections of corals or alcyonarians, while in most of the numbers there are under this head to be found notices of collections for sale or specimens to be exchanged, and when this journal becomes, as we have no doubt it will, known to all directors and assistant-directors of zoological museums we anticipate for this section a very extended use. Another portion of the journal is devoted to short notices on general zoological subjects. Thus No. 11 contains a short notice by Prof. Salensky, of Kasan, on the embryology of the ganoids; one by Prof. Goette, of Strasburg, on the development of the bones in the limbs of vertebrates; a note by Dr. A. Gruber, of Freiburg, on the formation of the oviducts in the Copepods; one by Prof. Entz, of Klausenberg (Hungary), on the evolution of gas from the protoplasm of some protozoa, in confirmation of a record of the same fact by Prof. T. W. Engelmann; and one by Prof. E. Martens, on our knowledge of thread-spinning snails.

Another characteristic of this new journal is that, under the heading "Personal-Notizen," will be found a very exact list of all the museums and schools of anatomy and zoology in the world, commencing with those in Germany. This list has now got as far as Belgium. The directors' and assistant-directors' names, with those of the professors and assistant-professors, are given in full, and, if when the list is complete, an index of the names of the various teachers in all the colleges and schools were added, the list would serve many a useful purpose.

We feel persuaded that this most useful little journal will require only to be known in this country to be duly appreciated, and we wish its talented editor every success in his undertaking.

E. P. W.

La Vegetacion del Nordeste de la Provincia de Entre-Rios. Informe Cientifico. Del Dr. Don P. G. Lorentz. (Buenos Aires, 1878.)

THIS is a book, or rather a pamphlet, of 179 pages of closely-printed matter, and illustrated by two maps of the country described, the nature of which with regard to its vegetation is very carefully recorded in the first division, which occupies forty-seven pages. The second part consists of a list of species arranged scientifically under each natural order, the paragraph referring to the individual plant comprising such information as to the frequency or scarcity of the species, the colour of the flowers, period of flowering, and any properties for which the plant may be economically valuable. These lists are useful in many ways, for instance they often show the widespread geographical range of many well-known plants, and in the lists before us we find many European introductions. A separate list of thirty-two species of fungi is added, and some notes on the maps given.

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.]

[The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to ensure the appearance even of communications containing interesting and novel facts.]

Was Homer Colour-Blind?

UPON reading Dr. Pole's two papers (NATURE, vol. xviii. pp. 676, 700) my first feeling was to ask: "But how could

"The blind old man of Scio's rocky isle"

know anything at all about colour?" Presuming, however, that the tradition of his blindness might be unwarranted, and further, that it may be a mistake to suppose, as many do, that the

"Iliad" is a collection of rhapsodies by different poets, I again asked myself: "Are there in Homer more anomalies in the nomenclature of colours than may be accounted for by the vague use of words? Are there more than we should find in this country among uneducated men of the labouring class?" About two years ago I made extensive inquiry as to the prevalence of colour-blindness among children, and in the village schools of this part of Somersetshire I found that the girls could name the neutral as well as the other tints readily and correctly, but that many of the boys had but about half-a-dozen words to use, and would refer orange to red or to yellow, and purple to brown or to blue, merely for want of terms; for they could match the test papers with other papers, or with the girls' dresses.

If we refer to the old ballads and early romance poetry of our own and other languages, we shall see that the popular poets of the middle ages, like the peasant boys of the present day, misused terms of colour as much as Homer; although the many beautiful paintings that still exist prove that people could see and distinguish colours as well then as now, and that Mr. Gladstone's theory of a development of the sight from one generation to another is a mere delusion. Certain terms are adopted and handed down traditionally as stock epithets in poetry and technical terms in trades. They are known to be wrong, but they are used from habit.

Dr. Pole assumes that the colour-blind see black and white as others do; or, to use his own words (p. 700), that their vision in regard to them is normal. This I doubt. One of the gentlemen who is so affected tells me that he cannot distinguish snow upon the steps of his front door. Now if white is a combination of all the colours of the prism, and we omit red and green, there will be seen a combination of blue and yellow, and these when spun together in a colour top produce stone colour, which I believe to be the white of those who have a dichromal vision. As to black, it is singular that in Anglo-Saxon *blac* means not "black," but as the Flemish *bleek* and Germ. *bleich*, "pale," a case in point to show the instability of language in these matters.

To take Homer's terms *seriatim* :—

Ἐρυθρός.

A poet must not be pronounced colour-blind if he compares wine to blood, and calls it red.

"The king sate in Dumfermline town, drinkin' the bluid-red wine."

Sir Patrick Spens, l. 1.

"And aye she dighted her father's wounds, His blood ran down like wine :"

Douglas Tragedy, st. 8.

Conversely, in slang language to give a man a bloody nose is to "tap his claret." The chair-cushion upon which I am sitting and the curtain of my window are of a dark crimson, but in the language of upholstery would be called "maroon." Now *marron*, from which the word is derived, is a Spanish chestnut, and that is a full brown without any visible red in it.

In our old English ballads and early romances, and in the German, Flemish, Swedish, and Danish, and in some more modern poems gold is constantly called "red" and "ruddy;" as in Dryden :—

"A crown of ruddy gold enclosed her brow."

In a German ballad by Ehrhardt, "Die Nonne," st. 5 :—

"Was zog er von seinem Finger? Einen Ring von Gold so roth."

In a Flemish ballad of the sixteenth century called "Het Soudaen's Dochterken" in Thijm's "Gedichten," v. i. p. 246 :—

"Sijn hayr dat blinkt van verwe schoon,
Als waer het roode gouden."

In an ancient Swedish ballad called "Gångarpilten," Arwid's v. ii. p. 156 :—

"För jag har intet rödt guld att sätta mod er.

And in the corresponding Danish ballad, Dan. Viser iv. p. 122 :

"Jeg haver ei det røde guld."

Milton, "Paradise Lost," bk. ii. l. 889, calls flame "ruddy flame."

In old herbals, as in that of Lyte, fol. 1578, p. 162, marigolds are called "Ruddes." "They be called in English Marygoldes and Ruddes."

Hair, such as is usually called "red hair," is better named in Greek *πυρρόν*, fiery; for certainly its colour is widely different from blood. Where in the Old Testament the word "red" is applied to horses and heifers, the Greek of the Septuagint has *πυρρόν*.