

metal cools, the evolution of heat cannot be detected by the unaided eye. I may add that I fully share with M. Osmond, with whom I have so long worked, his appreciation of the value of Prof. Barrett's investigation.

Royal Mint, June 9.

W. C. ROBERTS-AUSTEN.

#### Harvesting Ants.

IN the spring of 1878 I was much amused with watching the apparent want of common sense displayed by the harvesting ants in storing the little fruits of the plane-tree (*Platanus orientalis*) in one of the avenues at Mentone. It was with much interest, on revisiting the Riviera in May this year, that I observed the same clumsy methods still being adopted by these ants under the plane-trees, not only at Mentone, but also at Hyeres and Alassio.

Comparing the fruits to an umbrella in which the ribs are represented by the parachute of long hairs springing from the base or narrower end, while the upper and broader end is frequently surmounted by the remains of the style forming the handle of the umbrella, the ants in bringing the fruits to the nest, hold them pointing out in front, carrying them by the handle. On reaching the entrance, one would naturally suppose they would push them in as one pushes an umbrella into a stand, with the hairs pointing upwards. This would be comparatively easy, as the hairs in question would close round the fruit and offer no obstruction. Instead of doing this, the ants take the trouble to turn round and reverse the fruits, and then attempt to drag the tiny umbrellas in by the handle, the ribs pointing downwards and catching against the sides of the aperture. A large amount of time and energy is wasted by the ants in tugging and struggling with the fruits in order to make them go in, and very often a considerable number of ants are kept waiting about the entrance laden with similar spoil until their turn comes. Occasionally when the aperture is large the fruits go in more easily, but this is exceptional. The considerable "midden" of hairs outside the nests is evidence that the ants remove and reject the hairs after taking all this trouble.

I have never seen the ants carry a fruit into their nests with the hairs pointing upwards, except when I have thrust one well into the aperture in this position, and I have known the ants to reverse the fruits after I have tried to make matters easier for them. The present observations show (1) that after twenty years' experience in the same avenue at Mentone the ants have not learnt such a simple lesson as the proper way to get plane-tree fruits into their nests; (2) that this apparent lack of ingenuity is not restricted to the ants of one particular place, but is shared by the harvesting ants all along the Riviera; (3) that the ants know one method, and one method only.

June.

G. H. BRYAN.

#### Bessel's Functions.

THE phrases quoted by Prof. Gray furnish additional examples of the laxity of style amongst scientific men, to which "C. G. K." has called attention.

The English language does not readily afford a means of converting the name of a person into the corresponding adjective; and the result is that a slovenly practice has grown up of using the name itself as an adjective. In certain instances, this practice has become sanctioned by usage; and whenever this is the case, the *same* word must be regarded as doing duty for the proper noun and the corresponding adjective. But the practice is not to be commended, and ought always to be avoided if possible.

In my former letter, the word *conception* is a misprint for *corruption*.

A. B. BASSET.

Fledborough Hall, Holyport, Berks, June 16.

#### Limnology.

AS introduced by Prof. Forel, and widely accepted by scientific men in all countries, the term *Limnology* is applied to the science of lakes exactly as *Oceanography* is applied to the science of oceans. It is consequently with some surprise, and even a little shock, that I find a review in the current issue of NATURE headed "Limnology," and dealing with the small organisms of drinking-water. These have been termed *Limnoplankton* by some writers; but treated from the practical point of view their study is surely not Limnology, and from any point

of view only a very small part of it. When a scientific term is new and tender, it runs some risk of unintentional abuse which may impair its future usefulness; and I would appeal to scientific writers not to allow *Limnology* to fall into the confusion which now attends *Physiography*. HUGH ROBERT MILL.

THERE is, no doubt, some measure of justice in the remarks of your correspondent. More stress might have been laid on the fact that the book in question, in spite of its title, is much concerned, not only with the numbers, distribution, and seasonal abundance of the organisms in lakes—as stated on p. 147 of the review—but also with statistics regarding the temperature of the water at various depths and seasons, the penetration of light, and other physical phenomena coming under the head of Limnology in the sense required. THE REVIEWER.

June 17.

#### "Index Animalium."

WILL you allow me to appeal through your columns for the loan of any of the books in the following list? I wish to see them in order to complete my manuscript from 1758-1800, now rapidly preparing for the press. Parcels may be addressed to me, care of Dr. Henry Woodward, F.R.S., British Museum (Nat. Hist.), London, S.W., and any books lent will be carefully returned in the course of a few days. No other editions are wanted.

- Bourguet, L. "Traité de Petrif." 8vo, Paris, 1778.  
 Catesby, M. "Hist. Nat. Carolina," fo., Nurnberg, 1770.  
 Doeveren, G. "Abb. Würmer Mensch. Korpers," 8vo., Leipzig, 1776.  
 Edwards and Catesby. "Receuil des Oiseaux," 8vo, Nurnberg, 1768-76.  
 Grossinger, J. B. "Hist. Nat. Hongrie," 8vo, Buda, 1794.  
 Guidetti, G. "Vermi umani," 4, Firenze, 1783.  
 Happe, A. F. "Abb. Schmetterling Afrikas," fo., Berlin, 1783-4.  
 Hiller, J. F. "De Papiliones ferali," 4, Witemb., 1761.  
 Houttuyn. "Museum," 8vo, Amsterdam, 1786.  
 Humphrey, G. "Mus. Humfredianum," 8vo, London, 1779.  
 Lancklavel. "Zerbst Kunst u. Nat. Kabinet," 8vo, Leipzig, 1777.  
 "Leipziger Magazin f. Naturkunde," for 1785-6-7 and 8.  
 Le Vaillant, F. "Naturges. Afrik. Vogel." (Bechstein's ed.), 4, Nurnberg, 1797-1802.  
 Le Vaillant, F. "Naturges. Afrik. Vogel." (Forster's ed.), 8vo, Halle, 1798.  
 Le Vaillant, F. "Reise innere Afrikas," 8vo, Frankfurt, 1790-97.  
 Linnæus. "Systema Naturæ" (Müller's ed.), 2 parts, 8vo, Nurnberg, 1796 and 1809.  
 Linnæus. "Systema Naturæ" (Vanderstegn van Putte's ed.), 4 v. 8vo, Bruxelles, 1793 and 1796.  
 Linnæus. "Systema Naturæ" (Panzer's ed.), 8vo, Berlin, 1791.  
 "Magazin d. ausland Insekten," 1 No., 8vo, Erlangen, 1794.  
 Meyer, F. A. A. "Versuch 4 füssiger Thiere," 8vo, Leipzig, 1796.  
 Nau, B. S. "Oek. Nat. Fische Mainz," 8vo, Frankfurt, 1788.  
 Nau, B. S. "Beitr. Nat. Mainzelandes," 8vo, Mainz, 1787-8.  
 Pezold, C. P. "Lepidopt. anfangsgrunde," 8vo, Coburg, 1796.  
 Quensel, C. "Diss. Hist. Nat. ignotis Insect," 4, Lund, 1790.  
 Schneider, J. G. "Amphib. Physiol." (Spec. iii.), 4, Trajecti, 1797.  
 Schaffer, J. C. "Element Entom." (ed. 3), 4 Regensburg, 1780-87.  
 Theil, M. "Abb. würm. mensch. Leiber," 8, Berlin, 1766.  
 Turk, C. W. C. "Verz. meiner Insect. Sammlung," 4, N. Strelitz, 1799.  
 Wartel, C. P. "Mém. Limaçons Artois," 12, Arras, 1758; and ed. 2, 1768.  
 Wolff, E. J. "De Verm. intest.," 4, Giessen, 1763.  
 Wolff and Frauenberg. "Abb. Besch. Franken Vogel.," fo., Nurnberg, 1799. C. DAVIES SHERBORN.