

"ἵππος, vi., in Compos.; it expressed anything *large* or *coarse*, as in our *horse-chestnut*, *horse-laugh*; v. ἵππῶ-κρημνος, -μάθρον, -σέλιον, -τυρία, -πορνος; cf. βου-."

Long Ditton, Kingston, Aug. 5 M. W. MOGGRIDGE

The Rotundity of the Earth

WE have seen the statement signed "Parallax," at page 236 of No. 38 of NATURE, and shall be obliged if you will afford us an opportunity of briefly saying in reply, that when we tried the "flag experiment," the person calling himself "Parallax" was not present.

The experiment was conducted in his absence, as he did not come at the time appointed. He did not come at all that we know of; we did not see him.

Norwich, August 10

J. NEWBEGIN
C. W. MILLARD
W. H. DAKIN

Cuckow's Eggs

A SHORT time ago I addressed you on the subject of Cuckow's eggs, giving you some experiences of my own. I now have much pleasure in forwarding to you a portion of a letter on the same subject from an esteemed and observant correspondent, Mrs. Barber, of Highlands, near Graham's Town, to whom I communicated the substance of my letter to you. Mrs. Barber's name is well known in the botanical world as a most accurate scientific observer; of her ornithological acuteness my work on the Birds of South Africa amply testifies, and you may place full confidence in the statements she has made in this communication.

Cape Town, June 1870

ED. LAYARD

"Your remarks on the eggs of the cuckow tribe are very interesting. I confess that I am a believer in natural selection, and Darwinian in my opinions, but nevertheless in this matter I do not see the necessity for the intervention of natural selection; however, I hope you will bear in mind that I am speaking only with regard to the cuckows of my own country (South Africa), and as far as my observation extends, the eggs of these birds bear no resemblance to those of the birds upon which they are parasitic.

"Many of the different species of the cuckows of this country lay white eggs; the whole of those included in the genus *Chalcites* produce white eggs, the birds upon which they are parasitic are the various species of *Fringillidae*, they do not, however, confine themselves entirely to this tribe.

"I have frequently seen the eggs of the 'Dedric' (*Chalcites auratus*) and the 'Metje' (*C. klaasi*) in the nest of the Cape canary (*Fringilla canicollis*) and the 'Streep Koppie' (*Fringillaria vittata*), where they were conspicuous not only for their pure white unspotted appearance, but for their size also, which is nearly twice that of the Cape canary, and considerably larger than the eggs of the 'Streep Koppie.'

"I have also found the egg of the 'Dedric' in the nest of the green Sun-bird (*Nectarinia famosa*), where it was also much larger than the grey speckled eggs of the sun-bird, and likewise dissimilar from its pure white colour.

"The egg of *Cuculus solitarius* is of a dark mahogany brown, and this egg I have seen in the nest of the wood robin (*Bessornorius phanicurus*), when its difference was obvious both in size and colour, my son (F. H. Barber) found one of these dark brown eggs in the nest of the Cape canary! and despite its great dissimilarity compared to the small white speckled eggs of that bird, the work of incubation was quietly going on.

"The birds upon which the 'Honey Guides' are parasitic are *Laimodon leucomelas* (vel *L. undulatus*). I have frequently seen them at the nests of these birds, where great conflicts occasionally take place between the *Indicators* and *Laimodons*, the latter being fully aware that the 'Honey Guide' is an intruder, the egg of the *Laimodon* is speckled, that of the *Indicator* white.

"The 'October bird' (*Oxylophus colinus*) deposits her white eggs in the nest of the large woodpecker; my brother (Bertram Bowker) once met with *three* of the young of this cuckow in the nest of that bird; it is not a common occurrence, I believe, that so many eggs should have been deposited in a single nest; the large woodpecker is, however, equal in size to the 'October bird'; when the birds upon which they are parasitic are smaller, the cuckow deposits but one egg, as the food and space required will in that case be only sufficient for a single individual.

"In the nest of the green sun-bird (*Nectarinia famosa*) I once observed a young 'Dedric,' which nearly filled the nest. It

was not quite full fledged, and its frequent calls for food induced the sun-birds (both male and female) to exert themselves to the utmost, and in fact they had to work hard to satisfy the cravings of this greedy intruder; however they did it with a good will, and apparently without any suspicion that they were being imposed upon. Birds in general have no suspicion on this score, they suspect no trickery, and are therefore willing to incubate any kind of egg, provided it is not too large to fill up the nest. I think I told you how I had occasionally changed the eggs of various species of birds from one nest to another, making fearful confusion in consequence, yet the owners of the nests never suspected that anything was wrong, but proceeded quietly with their work. With regard to eggs, the discriminating power of birds is very obtuse, in fact they have none at all, and therefore in this case the agency of natural selection would not come into play; it would not be required. In nature there is no waste, no failure, no useless expenditure of time and ingenuity, every arrangement is sufficiently perfect to work out its own end without being overstrained or overwrought.—M. E. BARBER."

Special Modification of Colour in the Cushat

IN reading the chapter on "Mimicry," in Mr. Wallace's valuable collection of essays lately published, I was struck by a remark there made in regard to the special modification of the colour of the wood-pigeon. It is stated (p. 53), on the authority of Mr. Lester, that "the wood-dove, when perched amongst the branches of its favourite fir, is scarcely discernible, whereas, were it among some lighter foliage, the blue and purple tints in its plumage would far sooner betray it." This description may be accurate enough in regard to *Columba oenas*, but our experience is against its application to *Columba palumbus*. It was a common pastime of our boyhood to stalk the cushats in a mixed wood of the usual Scotch trees, and while familiar enough with their habit of making their nests in the spruce, unquestionably their favourite perches were on beeches and other hard-wood trees. Even after surmounting the somewhat delicate task of approaching the roosting-place of a cushat, it was no easy matter to detect the bird, except by its note, so closely did its general colours blend with the smooth, lichen-covered boughs of the beech, even where no leaves intercepted the view. The bird appears to build its nest especially in the spruce, not because its general colour agrees therewith (which it does not), but because the thick nature of the foliage and branches gives it, the eggs and young, sufficient privacy. Under all other circumstances it prefers to perch on the beech and other hard-wood trees, where its colours so adapt it for concealment. Of course the casual alighting on the pinnacles of the spruce during the breeding season is of little moment in the present question.

W. C. MCINTOSH

Colour Blindness

ALTHOUGH I have no intention of discussing the theory of colour-blindness propounded by Mr. Monck in NATURE of July 28, it may not be inopportune, while the subject is under the notice of your readers, to call their attention to a peculiarity with respect to the perception of colour, of which I have been able to discover no instance.

Some years ago I was sitting in a chapel opposite to a stained glass window, a portion of which (towards my left) was hidden from me by a pillar, and I observed that, as I moved my head to the right, the window flashed out into brilliancy where it had appeared dull before, while the contrary effect was produced as I moved my head to the left. On examining the conditions of the phenomenon carefully I found that it was due to the fact (which I had not the least suspected before) that my right eye is distinctly less sensitive to colour than my left. This I have since verified in various ways, though the difference is not very easily perceived unless the colours are brilliant, as in stained glass, bright coloured flowers, many of Turner's pictures, &c. The difference consists in this, that all colours appear less bright, or, as I should say, *greyer*, when seen with the right eye, and the more delicate gradations of colour cease to be perceived, while in many cases of even strongly contrasted colours, I should find it difficult to distinguish them with certainty with the right eye, especially if I had not previously seen them with the other eye. I have found too that the central part of the retina of my right eye is more defective as to the perception of colour than the lateral portions, since in looking at an extended surface of a