

FRONT WINGS COLLECTED OVER A WIDE AREA OF THE CHURCHYARD

	Male		Female	
	L	R	L	R
May 18	15	23	5	4
" 19	4	6	6	7
" 20	4	9	2	2
" 21	4	1	—	3
	27	39	13	16

Hind wings are disregarded as it is often impossible to assign their sex.

COLLECTED ON BARE GROUND A FEW YARDS SQUARE IN THE CHURCHYARD

	Male		Female	
	L	R	L	R
May 18. 12.30 p.m.	6	4	8	7
" 19. 1.10 p.m.	2	2	—	1
" 20. 10.40 a.m.	1	2	—	1
" 20. 2.10 p.m.	2	1	—	—
" 21. 11.55 a.m.	5	5	2	—
" 21. 4.15 p.m.	—	1	1	—
	16	15	11	9

The figures show that in four days birds had destroyed at least 54 males (the number of right front wings found), and 24 females (the number of left front wings found). A churchyard is not, of course, a place where females would congregate to lay eggs. The wings had been seized by the bases and pulled

off; the bases are usually much rubbed, but in some cases a clear individual imprint of the bird's beak can be seen.

This is the case in 22 of the front wings and 10 of the hind wings; in most cases the imprint corresponds with the beak of a house sparrow, but in one at least it seemed to be that of a chaffinch (see Collette, *Proc. Zool. Soc., Lond.*, Part 2, Pl. 1; 1935).

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May 24.

Binocular Vision

I NOTICE in the current number of the *Proceedings of the Royal Society* (vol. 128, p. 552) the question raised "Do two eyes see better than one?"

I would refer those interested in the question to my note in the *Transactions of the Ophthalmological Society* (vol. 44, p. 183; 1924) which contains a simple demonstration of the fact that they actually do.

Dalry Veed,

JOHN GRAHAM KERR.

Barley,

Royston, Herts.

Points from Foregoing Letters

C. F. Powell, A. N. May, J. Chadwick and T. G. Pickavance describe experiments on the scattering of fast protons of about 4 Mev. energy by some light elements. The scattered particles were registered by the photographic method, which enabled the energies of the scattered particles to be determined at the same time as their angular distribution. With neon as scattering element, two groups of scattered particles were found, one corresponding to elastic scattering, the other to inelastic scattering in which the neon nucleus had been raised to an excited state. Attention is directed to the possibilities of this method for obtaining information about the excited states of atomic nuclei.

The results of exposing photographic plates for five months at altitudes of 2,130 m. and 3,660 m. in India are described by D. M. Bose and B. Chowdhry. Various tracks were found, which are believed to be due mainly to mesotrons.

F. Weigert and J. C. Mottram describe three solid modifications of 3:4,benzpyrene which are distinguished by their fluorescence colours, green, yellow and blue, their relative stability and their solubilities. In the presence of cholesterol the intermediate stage of the blue form is stabilized temporarily. It is suggested that a similar stabilization occurs in cells which come into contact with benzpyrene. This would make available free energy for biological action.

Considerable differences in the behaviour of quartz-covered platinum wires and plain platinum wires immersed in flame gases, are believed by W. T. David and B. Pugh to confirm the view that a proportion of the newly formed tri-atomic molecules hold an excess of intra-molecular energy which cannot be handed over to the translational degrees of freedom. In virtue of this excess intramolecular energy, a much larger dissociation obtains in flame gases than in normal gases. A. S. Leah describes experi-

ments which lend further support to this view and shows that the observed dissociation constant varies with the amount of excess intra-molecular energy.

It has been demonstrated by R. M. Barrer that rates of diffusion of hydrogen through palladium may be independent of current density. This implies that the metal just inside the ingoing surface is saturated, which in turn requires that the rate of transport across the ingoing interface no longer controls the rate of diffusion.

M. A. Ellison describes the bright chromospheric eruptions of March 23 and 27, together with the terrestrial disturbances accompanying them.

During sugar absorption from isolated loops of the small intestine, but not during absorption of sodium chloride or amino-acids, inorganic phosphate appears in the intestinal lumen, according to L. Laszt. With selectively absorbed sugars, rate of appearance and reabsorption are different from those with other sugars. Iodoacetate as well as adrenalectomy suppress the phosphate reabsorption.

S. R. Bose reports the result of cutting out a sector from a bracket-shaped Polypore, inverting the sector and replacing it. The upper and lower surfaces of the sector developed the characteristics of the adjoining tissue.

J. Doyle finds that *Sequoia sempervirens* forms, in the young ovule, up to eight groups of gynospore tetrads, frequently tetrahedral in arrangement. These are surrounded by a tapetum, the whole appearance, unique in conifers, resembling a young pollen sac in section.

The large numbers of the destructive large cabbage white butterfly destroyed by birds are shown by the wings found lying in gardens, etc. G. D. Hale Carpenter supplies data from Mr. A. H. Hamm proving that in a certain churchyard birds had destroyed in four days at least 54 males and 24 females.