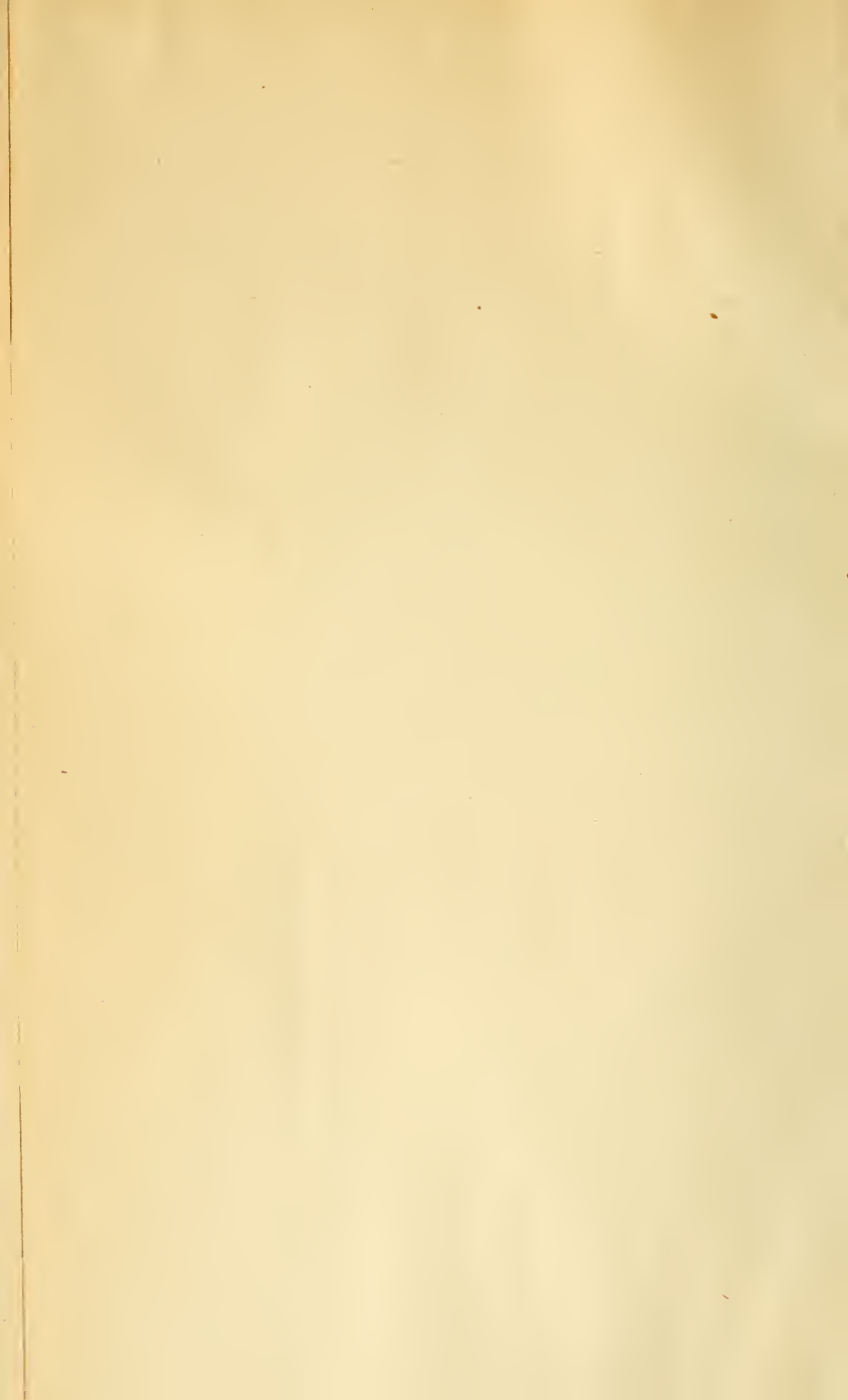






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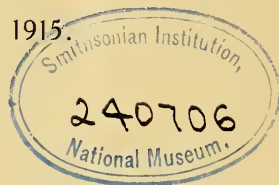
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THE AVICULTURAL : MAGAZINE :

BEING THE JOURNAL OF THE
AVICULTURAL SOCIETY FOR
THE STUDY OF FOREIGN AND
BRITISH BIRDS IN FREEDOM
AND CAPTIVITY.

EDITED BY
HUBERT D. ASTLEY, M.A., F.Z.S., M.B.O.U.

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REPORT OF THE COUNCIL FOR 1914-1915.

IT is with a feeling of great satisfaction that the Council has to report that another most successful year has just closed for our Society. The volume now completed forms the Sixth of the Third Series, and is the Twenty-first issued by the Society. Now that it has attained its majority, we feel confident that all its members will do their utmost to help the Society, so that it may continue to progress along the path it has always followed.

This last volume will be found quite up to the standard, both in size and quality of its contents to any of its predecessors, and it is this fact which calls for special thankfulness, for in this time of stress and anxiety, when so many of our contemporaries have had to be very much reduced, or have been forced to disappear altogether, we have been able to give our members their usual monthly magazine. How much this happy state of affairs is due to the unceasing efforts of our untiring Editor perhaps the majority of our members scarcely realize, for only those who see the actual production of a monthly magazine like ours know the continual strain and labour which it entails.

The Council would like to call special attention to the article on the scope of the Magazine, by our Editor in the September issue,

for only by the loyal support of our members can we hope to continue our useful work as heretofore.

The members of the Council tender their grateful thanks to all who have contributed to the welfare of our Society during the past year.

Signed for the Council,

T. H. NEWMAN,

Hon. Business Secretary.

Sept., 1915.

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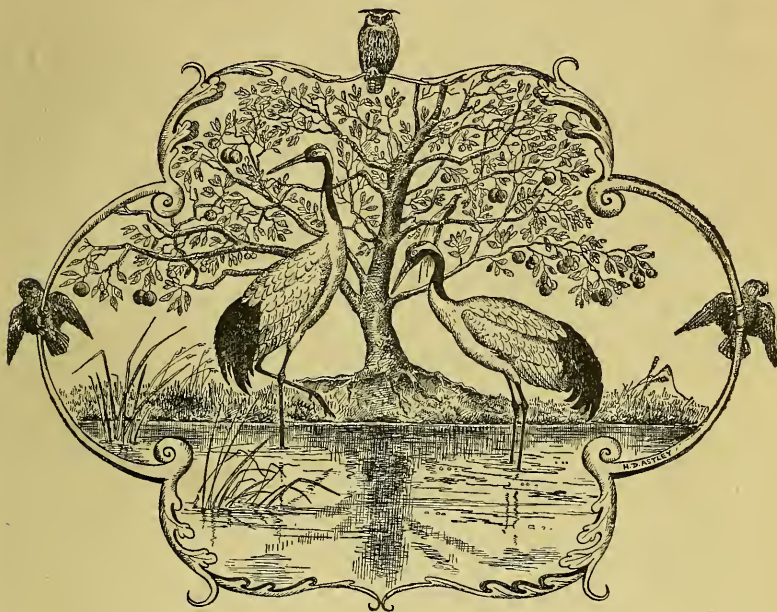
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- BENTLEY, DAVID; 80, St. Hubert's Street, Great Harwood, Blackburn. (July, 1895).
- BERESFORD-WEBB, G. M.; Norbryght, South Godstone, Surrey. (May, 1906).
- BERKELEY, The Rev. C. J. ROWLAND; Sibbertoft Vicarage, Market Harborough. (Nov., 1902).
- BLACKBURN, H. R.; Woodlands, Surrenden Road, Preston, Brighton. (1913).
- BLAAUW, F. E., C.M.Z.S., M.B.O.U.; Gooilust, 's Graveland, Hilversum, Holland. (Nov., 1901).
- BLAGG, E. W. H.; Greenhill, Cheadle, Staffs. (Sept., 1911).
- BLAINE, G.; Whitedaile, Hambledon, Hants. (Oct., 1908).
- BLATHWAYT, A. P.; The Grange, Northwood, Middlesex. (Jan., 1895).
- BONHOTE, JOHN LEWIS, M.A., F.L.S., F.Z.S., M.B.O.U.; Zoological Gardens, Ghizeh, Egypt. (Dec., 1894).
- 40 BORTHWICK, ALEX.; Vereena, Canonbury Grove, Dulwich Hill, Sydney, N.S.W. (Feb., 1909).
- BOSCAWEN, TOWNSHEND E.; 1, Old Burlington Street, London, W. (1913).
- BOSCAWEN, The Hon. VERE DOUGLAS; 2, St. James's Square, S.W. (Nov., 1910).
- BOUGHTON-LEIGH, HENRY; Brownsover Hall, Rugby. (May, 1900).
- BOURKE, Hon. Mrs. ALGERNON; 75, Gloucester Place, Portman Square, W. (Feb., 1911).
- BOUSFIELD, Miss M., 58, Southbourne Road, Bournemouth. (June, 1914).

- BOX, E. A. GRANVILLE; 76, Broomwood Road, Battersea, S.W. (Nov., 1907).
- BOYD, HAROLD; Box 374, Kelowna, British Columbia. (March, 1902).
- BOYES, FREDERICK; Norwood, Beverley, Yorkshire. (Sept., 1907).
- BRAMPTON, Miss E.; 31, Church Crescent, Church End, Finchley, N. (Feb., 1898).
- 50 BRAMPTON, Mrs. G.; Queen Anne Lodge, Stoke Newington, N. (July, 1914).
- BRAZIL, Prof.; Université de Caen, France. (1913).
- BRIDGEMAN, Commander The Hon. RICHARD, O.B., R.N., M.B.O.U.; H.M.S. "Hyacinth," Cape Station. (Dec., 1904).
- BRIDGEMAN, Colonel The Hon. FRANCIS C.; 59, Ennismore Gardens, S.W. (Oct., 1905).
- BRIGHT, HERBERT; "Lynton," Eaton Road, Cressington Park, nr. Liverpool. (June, 1914).
- BUFTON, R. P.; "Caerlyn," Llandrindod Wells. (Feb., 1914).
- BROOK, E. J.; Hoddam Castle, Ecclefechan, N.B. (August, 1905).
- BROWNING, WILLIAM H.; 16, Cooper Square, New York City. (March, 1906).
- BURDON, Mrs. W.; Hartford House, Bedlington, Northumberland. (1913).
- BURGOYNE, F., F.Z.S., 116, Harley Street, W. (1912).
- 60 BURTON, WALTER; Mooresfoot, East Sheen, Mortlake, S.W. (Dec., 1901).
- BUTLER, ARTHUR G., Ph.D., F.L.S., F.Z.S., M.B.O.U.; (*Hon. Correspondence Secretary*); 124, Beckenham Road, Beckenham, Kent. (Orig. Mem. *).
- BUTLER, A. L., F.Z.S., M.B.O.U.; Superintendent of Game Preservation, Khartoum, Soudan. (Aug., 1906).
- BUTLER, ARTHUR LARCHIN, M. Aust. O.U.; Waimarie, Lower Sandy Bay, Hobart, Tasmania. (July, 1905).
- BÜTTIKOFFER, Dr. J., C.M.Z.S., M.B.O.U., Director of the Zoological Gardens, Rotterdam, Holland. (Oct., 1907). (*Hon. Member*).
- BUXTON, E. HUGH; Fritton Hall, Great Yarmouth, Norfolk. (June, 1909).
- BYNG, Hon. Mrs. JULIAN; Thorpe Hall, Thorpe-le-Soken, Essex. (May, 1914).
- CADOGAN, Mrs. FRANCIS; Hatherop Castle, Fairford, Glos. (Sept., 1913).
- CAMPS, H. T. T., F.Z.S.; Linden House, Haddenham, Isle of Ely. (Orig. Mem.)
- CAPERN, F.; Avenue House, Cotham Park, Bristol. (March, 1903).
- 70 CARR, RICHARDSON; Home Farm, Tring, Herts. (1913).
- CARPENTER, The Hon. Mrs.; 22, Grosvenor Road, S.W. (Feb., 1908).
- CARPENTER, Prof. G. H.; Royal Zoological Society of Ireland, Phoenix Park, Dublin. (Oct., 1905).
- CARRICK, GEORGE; 13, King's Terrace, Maryhill, Glasgow. (March, 1898).

- CASTELLAN, VICTOR E.; Hare Hall, Romford, Essex. (Orig. Mem.)
- CATTLE, C. F.; Thurston, Bury St. Edmunds. (Jan., 1905).
- CECIL, Lady WILLIAM; Baroness Amherst of Hackney; Didlington Hall, Stoke Ferry, Norfolk and 23, Queen's Gate Gardens, S.W.
- CHAMBA, H. H., Sir BHURI SINGH, K.C.S.I., Rajah of, Chamba, viâ Dalhousie, Punjab, India. (Jan., 1908),
- CHAMBERLAIN, WALTER; Pendock Grove, Cobham, Surrey. (1912).
- CHARRINGTON, Mrs. MOWBRAY; How Green, Hever, Edenbridge, Kent). (May, 1906).
- 80 CHAWNER, Miss; Forest Bank, Lyndhurst, Hants. (July, 1899).
- CHRISTIE, Mrs.; Newton House, By Elgin, Scotland. (Sept. 1914).
- CLITHEROW, Mrs. CLAUD STRACKY; 20, Park Square, Regent's Park, N.W. (June, 1903).
- CONNELL, Mrs. KNATCHBULL; The Orchard, Brockenhurst, Hants. (Nov., 1897).
- CONSTABLE, The Rev. W. J.; Uppingham School, Uppingham. (Sept., 1901).
- COOPER, Sir EDWARD E.; Berrydown Court, Overton, Hants. (1912).
- COOPER, JAMES; Cavton, Scarborough. (Orig. Mem.)
- COOPER, WILLIAM; Aislaby Hall, Pickering, Yorks. (March, 1907).
- CORBET, Sir ROLAND J., Bart.; Coldstream Guards, Chelsea Barracks, S.W. (May, 1911).
- CORY, REGINALD R.; Duffryn, near Cardiff. (August, 1905).
- 90 CRAIG, Prof. WALLACE; Orono, Maine, U.S.A. (1912).
- CROFT, A. B.; The Clock House, Ashford, Middlesex. (May, 1907).
- CRONKSHAW, J.; 193, Manchester Road, Accrington. (Dec., 1894).
- CROSS, W. SIMPSON, F.Z.S.; 18, Earle Street, Liverpool. (Jan., 1898).
- CUNINGHAM, MARTIN; Goffs Oak House, Cheshunt, Herts. (Oct., 1908).
- CURREY, Mrs.; The Pit House, Ewell, Surrey. (Feb., 1906).
- CUSHNY, CHARLES; (*No permanent address*). (June, 1906).
- DAVIES, CLAUDE G., M.B.O.U.; "D" Squadron, Cape Mounted Riflemen, Matatiele, E. Griqualand, S. Africa. (July, 1909).
- DAVIES, G.; 96, Greenfield Terrace, New Tredegar. (July, 1914).
- DELL, CHARLES; 12, High Street, Harlesden, N.W. (July, 1900).
- 00 DENMAN, ARTHUR, M.A., F.Z.S., F.S.A., 12, Harley Gardens, South Kensington, S.W. (Sept., 1909).
- DENNIS, Mrs. H. E.; St. Leonard's Park, Horsham. (March, 1903).
- DE PASS, Miss O.; 6, The Orchard, Bedford Park, W. (March, 1914).
- DE TAINTEGNIES, La Baronne Le Clément; Cleveland, Minehead, Somerset. (Feb., 1902).
- DEWAR, D., I.C.S.; Pilibhit, U.P., India. (Sept., 1905).
- DEWINTON, WILLIAM EDWARD, F.Z.S., M.B.O.U.; Southover, Burwash, Sussex. (Aug., 1903).
- DIRECTOR, THE; Zoological Museum, Tring, Herts. (1912).

- DONALD, C. H.; c/o The Alliance Bank of Simla, Ltd., Simla, India. (March, 1906).
- DOUGLAS, Miss; Rose Mount, Pitlochry, N.B. (June, 1905).
- DOUGLAS, WILLIAM C., F.Z.S.; 26, The Boltons, S.W. (Nov., 1900).
- 110 DREWITT, FREDERICK DAWTREY, M.A., M.D., F.R.C.P., F.Z.S., M.B.O.U.; 14, Palace Gardens Terrace, Kensington, W. (May, 1903).
- DRUMMOND, Miss; Mains of Megginch, Errol, N.B. (Feb., 1905).
- DUFF, The Lady GRANT; Earl Soham Grange, Framlingham, Suffolk. (Aug., 1905).
- DUNLEATH, The Lady; Ballywalter Park, Ballywater, co. Down, Ireland. (August, 1897).
- DUTTON, The Hon. and Rev. Canon; Bibury Vicarage, Fairford. (Orig. Mem).
- DYOTT, R. A.; Freeford, Lichfield. (1912).
- ECKSTEIN, F.; Ottershaw Park, Ottershaw, Surrey. (1912).
- EZRA, ALFRED; 110, Mount Street, London, W. (1912).
- EZRA, DAVID; 3, Kyd Street, Calcutta. (June, 1912).
- FARMBOROUGH, PERCY W., F.Z.S.; Lower Edmonton. (June, 1896). *
- 120 FASEY, WILLIAM R.; The Oaks, Holly Bush Hill, Snaresbrook, N.E. (May, 1902).
- FIELD, GEORGE; Sorrento, Stapelhurst, Kent. (March, 1900).
- FIELD, Miss HILDA; Ashurst Park, Tuubridge Wells. (1912).
- FINDSEIN, A. S.; Hallowdene, Torquay. (May, 1914).
- FINN, FRANK, 36, St. George's Road, Regent's Park, N.W. (*Hon. Member*).
- FISHER-ROWE, HERBERT; St. Leonard's Grange, Beaulieu, Hants. (1913).
- FIREBRACE, Mrs.; 28, Old Queen Street, Westminster, S.W. (Feb., 1911).
- FITZGERALD, Hon. Mrs.; 18, Clyde Road, Dublin. (July, 1914).
- FLOWER, Captain STANLEY SMYTH, F.L.S., F.Z.S., M.B.O.U.; Director Egyptian Government Zoological Gardens, Ghizeh, Cairo, Egypt. (Jan., 1913).
- FLOWER, Mrs. STANLEY; Longfield, Tring, Herts. (March, 1909).
- 130 FOCKLEMANN, AUGUST; Tier Park, Hamburg-Grossborstel, Germany. (Nov., 1907).
- FOLLETT, The Lady JULIA; Woodside, Old Windsor. (Oct., 1903).
- FORTESCUE, Col. H.; Falmouth House, Newmarket. (Oct., 1908).
- FOSTER, E. HUBERT, Lower Bowden, Pangbourne, Berks. (1912).
- FOWLER, CHARLES, 26, Broad Street, Blaenavon. (Dec., 1894).
- FROST, WILFRID; 13, Fairlawn Avenue, Chiswick Park, W. (July, 1908).
- GALLOWAY, P. F. M.; Durban, Rectory Road, Caversham, Reading. (March, 1907).

- GHIGI, M. le Prof. Alessandro; Via d'Azeglio, Bologna, Italy. (March, 1911).
- GIBBS, Mrs. H. MARTIN; Barrow Court, Flax Bourton, R.S.O., Somerset. (April, 1904).
- GIBBINS, WILLIAM B.; Ettington, near Stratford-on-Avon. (June, 1895). *
- 140 GILBEY, Sir WALTER, Bt., F.Z.S.; Elsenham Hall, Elsenham, Essex (Dec., 1907).
- GILES, HENRY M., M. Aust. O.U. (Orig. Mem.); Zoological Gardens, Perth, Western Australia. (June, 1903).
- GILL, ARTHUR, M.R.C.V.S.; Mount Denison, Nova Scotia. (Dec., 1899).
- GLADSTONE, Miss J.; The Lodge, Parkstone, Dorset. (July, 1905).
- GODDARD, H. E.; Rothsay, Thicket Road, Sutton, Surrey. (Feb. 1899).
- GODMAN, F. DUCANE, D.C.L., F.R.S., F.Z.S.; President of the British Ornithologists' Union, 45, Pont Street, S.W. Oct., 1904). (*Honorary Member*).
- GOODALL, A. A.; 12, Ildersley Grove, West Dulwich, S.E. (Nov., 1909).
- GOODCHILD, HERBERT, M.B.O.U.; 66 Gloucester Road, Regent's Park, N.W. (Oct., 1912).
- GOODFELLOW, WALTER, M.B.O.U.; The Poplars, Kettering. (June, 1897).
- GORTER, Madame; The Delta, Walmer, Kent. (Nov., 1901).
- 150 GOSSE, PHILIP, M.R.C.S.; Curtlemead, Beaulieu, Hants. (April, 1911).
- GRABHAM, Dr. OXLEY; The Museum, York. (June, 1914).
- GRABOWSKY, F., Director of the Zoological Gardens; Breslau, Germany. (June, 1905).
- GRAY, HENRY, M.R.C.V.S.; 23, Upper Phillimore Place, W. (June, 1906).
- GREENING, LINNÆUS; Fairlight, Grappenhall, nr. Warrington. (Jan. 1911).
- GREGORV, Mrs.; Melville, Parkstone, Dorset. (Dec., 1901).
- GREY, Rt. Hon. Sir EDWARD, Bart, K.G., M.P.; 3, Queen Anne's Gate, S.W. (1913).
- GRIFFITHS, M. E.; Caizley House, Temple Road, Stowmarket. (May, 1902).
- GRÖNVOLD, HENRIK; 26, Albert Bridge Road, Battersea Park, S.W. (Nov., 1902).
- GROSSMITH, J. L.; The Grange, Bickley, Kent. (Nov., 1912).
- 160 GUILFORD, Miss H.; 23, Lenton Avenue, The Park, Nottingham. (March, 1903).
- GULDENKIAN, C. S.; 27, Quai D'Orsay, Paris. (Dec., 1908).
- GUNN, W. CECIL; The Red House, Bickley, Kent. (Jan., 1910).
- GURNEY, JOHN HENRY, F.Z.S., M.B.O.U.; Keswick Hall, Norwich; and Athenæum Club, Pall Mall, S.W. (Dec., 1904).
- HAAGNER, A. K., F.Z.S., M.B.O.U., Transvaal Museum, Pretoria, South Africa. (Nov., 1905).
- HAGENBECK, HEINRICH; Stellingen, Hamburg, Germany. (Nov. 1913).

- HAGGIE, G. E.; Brumcombe, Foxcombe Hill, Oxford. (June, 1914).
- HALKED, Lieut. N. G. B.; King's Own Yorkshire Light Infantry; (*No Address*). (Dec., 1908).
- HAMPE, A.; c/o Messrs. Arnhold, Kaxberg & Co., Shanghai. (May, 1914).
- HARCOURT, Rt. Hon. LEWIS, P.C.; 14, Berkeley Square, W. (1913).
- 170 HARDING, W. A., M.A., F.Z.S.; Histon Manor, Cambridge. (Dec., 1903).
- HARDY, LAWRENCE, M.P.; Sandling Park, Hythe, Kent. (Nov., 1906).
- HAREWOOD, The Countess of; Harewood House, Leeds. (March, 1903).
- HARLEY, Mrs. F.; Brampton Bryan, Herefordshire. (1908).
- HARPER, EDWARD WILLIAM, F.Z.S., M.B.O.U.; c/o Wardle & Co., Nairobi, British East Africa. (Feb., 1901).
- HARTLEY, Mrs.; "Lynchfield," Bishops Lydeard, Somerset. (April, 1897).
- HARVEY, The Hon. Lady; Langley Park, Slough. (Oct., 1906).
- HAWKE, The Hon. MARY C.; Wighill Park, Tadcastar. (Nov., 1900).
- HAWKINS, L. W.; 206, Clive Road, West Dulwich, S.E. (Jan., 1899).
- HAZELRIGG, Sir ARTHUR, Bt.; Noseley Hall, Leicester. (March, 1907).
- 180 HEBB, THOMAS; "Brooklea," The Downs, Luton, Beds. (April, 1914).
- HEMSWORTH, The Rev. B., M.A., J.P.; Monk Fryston Hall, South Milford, Yorks. (June, 1901).
- HETLEY, Mrs. HENRY; Beaufort House, 114, Church Road, Norwood, S.E. (July, 1910).
- HEUMANN, G. A.; Strand Arcade, George Street, Sydney, New South Wales. (Sept., 1913).
- HEYWOOD, RICHARD; Narborough, Norfolk. (Oct., 1911).
- HILL, Mrs. E. STAVELKY; Oxley Manor, Wolverhampton. (Oct., 1905).
- HINDLE R. FRANKLIN; 34, Brunswick Road, Liverpool. (Sept., 1898).
- HODGSON, The Hon. Mrs.; Clopton, Stratford-on-Avon. (March, 1903).
- HOLDEN, RALPH A., F.Z.S.; 5, John Street, Bedford Row, London. (May, 1906).
- HOPKINSON, Dr. EMILIUS; D.S.O., M.A., M.B., Oxon., 45, Sussex Square, Brighton. (Oct., 1906).
- 190 HOPSON, FRED C.; Northbrook Street, Newbury. (March, 1897).
- HORSBRUGH, Major BOYD R., A.S.C.; Tandridge Priory, Oxted, Surrey. (Jan., 1898).
- HOUSDEN, JAMES B.; Brooklyn, Cator Road, Sydenham, S.E. (Orig. Mem.)
- HOWARD, ROBERT JAMES, M.B.O.U.; Shear Bank, Blackburn. (April, 1903).
- HOWARD-VYSE, H.; Stoke Place, Slough. (Nov., 1906).
- HOWMAN, Miss; 6, Essex Grove, Upper Norwood. (Mar., 1897).
- HUBBARD, GEORGE; 112, Fenchurch Street, E.C. (Jan., 1905).
- HUTCHINSON, Miss ALICE; Alderton Vicarage, Chippenham, Wilts. (August, 1907).
- INCHIQUIN, The Lady; Dromoland Castle, Newmarket-on-Fergus, County Clare, Ireland. (Nov., 1897).

- INGRAM, COLLINGWOOD; The Bungalow, Westgate-on-Sea. (Oct., 1905).
- 200 INGRAM, Sir WILLIAM, Bart; The Bungalow, Westgate-on-Sea. (Sept., 1904).
- ISAAC, CHARLES; Somerton, Bath Road, Slough. (March, 1906).
- JAMRACH, ALBERT E.; 180, St. George Street, E. (April, 1913).
- JOHNSON, Major FRANK; Melrose House, Wilbury Road, Hove, Sussex. (1912).
- JOHNSTONE, Mrs. E. J.; Burrswood, Groombridge, Sussex. (May, 1908).
- KEAYS, Dr. C. LOVELL; Park Lodge, East Hoathley, Sussex. (Aug., 1913).
- KENNEDY, Lieut. G.; (*No permanent address*). (1911).
- KIRCHNER, Mrs.; Salisbury House, 20, Lewis Avenue, Margate. (Jan., 1911).
- KLOSS C. BODEN; (*No permanent address*). (1912).
- KUSER, J. DRYDEN; Faircourt, Bernardsville, New Jersey, U.S.A. (1912).
- 210 LANCASTER, JOHN; Dunchurch Lodge, near Rugby. (March, 1904).
- LASCELLES, The Hon. GERALD, F.Z.S., M.B.O.U.; Tillington House, Petworth, Sussex. (Oct., 1896).
- LEACH, C. F.; Vale Lodge, Leatherhead, Surrey. (June, 1914).
- LEE, Mrs. E. D.; Hartwell House; Aylesbury. (July, 1906).
- LEEKE, Miss DOROTHY; 9, Hertford Street, Mayfair, W. (May, 1909).
- LEICESTER, The EARL OF, G.C.V.O., etc.; 15, Hill Street, Berkeley Square, W. (May, 1913).
- LEIGH, CECIL; Lyburn Park, near Lyndhurst, Hants. (Nov., 1906).
- LEGG, Hon. GERALD; Patshull House, Wolverhampton. (Feb., 1913).
- LEMON, FRANK E.; Hillcrest, Redhill, Surrey.
- LE SOUËF, A. SHERBOURNE; Zoological Gardens, Sydney, New South Wales. (Aug., 1923).
- 220 LE SOUËF, DUDLEY; Zoological Gardens, Royal Park, Parkville, Melbourne, Australia. (1912).
- LILFORD, The Lady; Lilford Hall, Oundle, Northamptonshire. (Jan., 1898).
- LLOYD, Capt. A. M.; 1/24th Regiment, Chatham Barracks, Chatham. (April, 1912).
- LOCKYER, ALFRED; St. Monica's Lodge, Elm Park Road, Winchmore Hill, N. (Dec., 1905).
- LONG, Mrs.; Sherrington Manor, Berwick, Sussex. (Feb., 1907).
- LOVELACE, The Countess of; Wentworth House, Chelsea Embankment, London, S.W. (May, 1906).
- LOVETT, C.; Route 3, Brentwood, Tennessee, U.S.A. (Dec., 1912).
- LOW, GEORGE E.; 14, Royal Terrace East, Kingstown, Ireland. (Mar., 1913).
- LUCAS, Dr. N. S.; 19, Westbourne Terrace, Hyde Park, W. (Jan., 1913).

- MANCHESTER PUBLIC LIBRARIES; Reference Library, Piccadilly, Manchester. (July, 1913).
- 230 McDONNELL, Hon. Sir SCHOMBERG, G.C.V.O.; Dalness, Taynuilt, Argyllshire. (March, 1914).
- MCGEAGH, Dr. R. T.; Mona Lodge, Lezayre, nr. Ramsey, Isle of Man. (Aug., 1908).
- MCGEE, The Rev. Father; St. Laurences, Forbes, N.S.W. (July, 1908).
- MALONE, Mrs. M. L'ESTRANGE; West Lodge, Malton, Yorks. (Jan., 1902).
- MANNERS-SMITH, Lieut.-Col.; The Residency, Nepal, India. (1911).
- MAPPIN, STANLEY; 12, Albert Hall Mansions, Kensington Gate, S.W. (April, 1911).
- MARSHALL, ARCHIBALD MCLEAN; Chitcombe, Brede, Sussex. (Jan., 1906).
- MARTIN, H. C.; 147, Victoria Road, Old Charlton, Kent; and Saladero, Liebig, Fray Bentos, Uruguay. (Jan., 1897).
- MARTIN, H. J.; Clock House Farm, Woodmansterne, Surrey. (June, 1911).
- MARTORELLI, Dr. GIANCINTO, M.B.O.U., etc.; Collezione Turati, Museo Civico di Storia Naturale, Milan, Italy. (July, 1906).
(*Honorary Member*).
- 240 MASON, D.; 23, Prince of Wales Terrace, Kensington, W. (June, 1914).
- MATHEWS, GREGORY M., F.R.S. Edin., F.L.S.; Langley Mount, Watford, Herts. (Dec., 1909).
- MAUD, Mrs. CHARLES E.; Monterey, California. (July, 1913).
- MEADE-WALDO, E. G. B., F.Z.S., M.B.O.U.; Stonewall Park, Edenbridge, Kent. (Jan., 1895).
- MEDLAND, Miss LILIAN M.; 10, Newcastle House, Northumberland Street, W. (Oct., 1913).
- MERCER, WILLIAM; Doylestown, Pennsylvania, U.S.A. (March, 1913).
- MILLS, The Hon. VIOLET; The Wilderness, Sevenoaks. (Oct., 1907).
- MILLSUM, O.; 7, Cliftonville Parade, Margate. (Aug., 1909).
- MITCHELL, HARRY; Haskells, Lyndhurst, Hants. (Feb., 1904).
- MOERSCHELL, F.; Imperial Hotel, Malvern. (June, 1895).
- 250 MOMBER, Mrs.; La Junia, San Remo, Italy, (Sept., 1907).
- MONTAGU, Hon. E. S., M.P., M.B.O.U.; 59, Bridge Street, Cambridge, and 12, Kensington Palace Gardens, W. (May, 1912).
- MONTGEON, Mdle. de; Covertside, Hasfield, Gloucester. (Oct., 1913).
- MORGAN, Hon. EVAN F.; 37, Bryanston Square, W. (1912).
- MORRISON, Hon. Mrs. MCLAREN; Parkfield, Park Lane, Southwick, Sussex. (Sept., 1911).
- MORSHEAD, Lady; Forest Lodge, Binfield, Bracknell, Berks. (Dec., 1894). *
- MORTIMER, Mrs.; Wigmore, Holmwood, Surrey. (Orig. Mem.)*
- MUNDY, Miss SYBIL MILLER; Shipley Hall, Derby. (Jan., 1909).
- MUNT, HENRY; 10, Ashburn Place, S. Kensington, S.W. (1912).

- MYLAN, JAS. GEORGE, B.A., M.B. (Univ. Col.); L.R.C.P. and L.R.C.S. (Ed.) &c., 90, Upper Hanover Street, Sheffield. (Dec., 1901).
- 260 NAYLOR, ROWLAND E.; Marrington Hall, Chirbury, Salop. (March, 1913).
- NEWALL, Mrs.; Red Heath, Croxley Green, R.S.O., Herts. (June, 1911).
- NEWMAN, T. H., F.Z.S., M.B.O.U.; Newlands, Harrowdene Road, Wembley, Middlesex. (May, 1900). (*Hon. Secretary*).
- NICHOLS, WALTER B., M.B.O.U.; Stour Lodge, Bradfield, Manningtree. (Jan., 1907).
- NICOLL, MICHAEL J., M.B.O.U.; Zoological Gardens, Ghizeh, Cairo, Egypt. (1906).
- OAKEY, W.; 34, High Street, Leicester. (March, 1896). *
- OBERHOLSER, HARRY C.; 1444, Fairmont Street, N.W., Washington, D.C., United States of America. (Oct., 1903).
- OGILVIE-GRANT, W. R., F.Z.S., M.B.O.U.; British Museum (Nat. Hist.), Cromwell Road, S.W. (Dec., 1903).
- OGLE, BERTRAM SAVILLE, M.B.O.U.; Steeple Ashton, Oxford. (Dec., 1902).
- OLIPHANT, TREVOR; Bale Rectory, Melton Constable, Norfolk. (May, 1908).
- 270 ONSLOW, The Countess of; Clandon Park, Guildford, Surrey. (July, 1910).
- O'REILLY, NICHOLAS S.; 144, Eastern Road, Kemp Town, Brighton. (Dec., 1894).
- OSTREHAN, J. ELLIOTT D.; Bank House, Thame, Oxon. (April, 1903).
- PAGE, WESLEY T., F.Z.S.; Glenfield, Graham Avenue, Mitcham, Surrey. (May, 1897).
- PAINTER, K. V.; 2508 Euclid Avenue, Cleveland, Ohio, U.S.A. (Dec., 1909).
- PALMER, Mrs. G. W.; Marlston House, near Newbury. (Oct., 1905).
- PAM, ALBERT, F.Z.S.; Wormley Bury, Broxbourne, Herts. (Jan., 1906).
- PAM, HUGO, C.M.Z.S.; 65, Bishopsgate, E.C. (Sept., 1911).
- PARKIN, THOMAS, M.A., F.R.G.S., F.Z.S., M.B.O.U.; Fairseat, High Wickham, Hastings. (Oct., 1903).
- PATINSON, Mrs.; The Deanery, Brisbane, Queensland. (April, 1913).
- 280 PAUWELS, R.; Everberg, par Cortenberg, Brabant, Belgium. (Dec., 1904).
- PEIR, P.; c/o W. G. PEIR, Esq., 60, Elizabeth Street, Sydney, N.S.W. (July, 1903).
- PENNANT, Lady EDITH DOUGLAS; Soham House, Newmarket, Cambs. (Sept., 1908).
- PENROSE, FRANK G., M.D., F.Z.S., M.B.O.U.; Athenæum Club, Pall Mall, S.W. (Dec., 1903).
- PERREAU, Major G. A.; 2/4 Gurkha Rifles, Bakloh, Punjab, India. (Dec., 1903).

- PERCY, The Lord WILLIAM; Alnwick Castle, Alnwick. (May, 1913).
- PERRING, C. S. R.; 1, Claremont Avenue, New Malden, Surrey.
- PHILLIPPS, REGINALD; 26, Cromwell Grove, West Kensington Park, W. (Orig. Mem.)*
- PHILLIPS, JOHN C.; Knobfields, Wenham, Mass, U.S.A. (March, 1910).
- PHILLIPS, Mrs. E. LORT, F.Z.S.; 79, Cadogan Square, S.W. (April, 1907).
- 290 PICHOT, M. PIERRE A.; 132, Boulevard Hausmann, Paris. (Sept., 1910).
- PICKFORD, RANDOLPH JOHN; Thorn Lea, Carmel Road, Darlington.
- PIKE, L. G.; Kingsbarrow, Warehouse, Dorset. (1912).
- POCOCK, R. I., F.R.S., F.L.S., F.Z.S., M.B.O.U.; Zoological Society's Gardens, Regent's Park, N.W. (Feb., 1904).
- PORTAL, MAURICE; High Sandhoe, Hexham. (April, 1913).
- PORTAL, The Lady ROSEMARY; Kingsclere House, Newbury. (April, 1913).
- POTTER, Dr. BERNARD E.; 58, Park Street, W. (March, 1914).
- POWIS, The Earl of; 45, Berkeley Square, W.; and Powis Castle, Welshpool. (April, 1902).
- PRINCETON UNIVERSITY, LIBRARY OF; Princeton, New Jersey, U.S.A. (Nov., 1907).
- PYCRAFT, W. P., A.I.S., F.Z.S., M.B.O.U., &c.; British Museum (Nat. Hist.), Cromwell Road, S.W. (Nov., 1904). (*Hon. Member*).
- 300 QUINCEY, RICHARD S. de Q.; Inglewood, Chislehurst, Kent. (April, 1913).
- RADCLIFFE, Captain A. DELMÉ; 105th Maratha Light Infantry, Poona, India.
- RATHBORNE, HENRY B.; Dreenan, Boa Island, Pettigo, Co. Fermanagh. (May, 1901).
- RATTIGAN, G. E.; Lanarkslea, Cornwall Gardens, S.W. (Aug., 1908).
- REID, Mrs.; Funchal, Madeira. (Feb., 1895).
- RENSHAW, Dr. GRAHAM, M.B., M.R.C.S.; Bridge House, Sale, Manchester. (Jan., 1910).
- RICE, Captain G.; Persey House, Blairgowrie, N.B. (May, 1912).
- RILEY, JOSEPH H.; U.S. National Museum, Washington, D.C., U.S.A. (June, 1906).
- RITCHIE, NORMAN; The Holmes, St. Boswell's, N.B. Feb., 1903).
- ROBBINS, HENRY; (*Address unknown*). (April, 1908).
- 310 ROBERTS, Mrs., C.M.Z.S., M. Anst. O.U.; Beaumaris, Montpelier Street, Hobart, Tasmania. (June, 1903).
- ROGERS, Lt.-Col. J. M., D.S.O., F.Z.S., M.B.O.U. (late Royal Dragoons); Riverhill, Sevenoaks. (April, 1907).
- ROGERSON, A.; Fleurville, Ashford Road, Cheltenham. (Dec., 1902).
- ROTHSCHILD, LIONEL DE, M.P., 46, Park Street, W. (Nov., 1913).
- ROTHWELL, JAMES E.; 153, Sewall Avenue, Brookline, Mass, U.S.A. (Oct., 1910).

- ST. QUINTIN, WILLIAM HERBERT, F.Z.S., M.B.O.U.; Scampston Hall, Rillington, York. (Orig. Mem.)
- SCHLÜTER, JOHN C.; "Heathwood," 5, Dacres Road, Forest Hill, S.E. (Dec., 1910).
- SCLATER, W. L., M.A., F.Z.S.; 10, Sloane Court, S.W. (Aug., 1904).
- SCOTT, B. HAMILTON; Hamildean, Ipswich. (1912).
- SÉGUR, M. LE COMTE DE; 45, Avenue d'Jena, Paris. (Sept., 1913).
- 320 SEPPINGS, Captain J. W. H.; The Army Pay Office, Canterbury. (Sept., 1907).
- SETH-SMITH, DAVID, F.Z.S., M.B.O.U.; 34, Elsworthly Road, South Hampstead, N.W. (Dec., 1894).
- SETH-SMITH, LESLIE M., B.A., M.B.O.U.; Alleyne, Caterham Valley, Surrey; and Kampala, Uganda. (July, 1902).
- SHERBROOKE, Mrs. P.; Ravenswyke, Kirbymoorside, Yorks. (March, 1897).
- SIBAG-MONTEFIORE, Mrs.; 2, Palace Houses, W. (1913).
- SICH, HERBERT LEONARD; Corney House, Burlington Lane, Chiswick, W. (Feb., 1902).
- SILVER, ALLEN; 303, High Road, Streatlam, S.W. (Aug., 1904).
- SIMPSON, ARCHIBALD; Oakfield House, Stanks, Crossgates, nr. Leeds. (Feb., 1901).
- SMALLEY, F. W., F.Z.S., M.B.O.U.; Challan Hall, Silverdale, near Carnforth, Lancs. (1912).
- SMITH, C. BARNBY; Woodlands, Retford. (August, 1906).
- 330 SMITH, Miss DORRIEN-INNIS; Tresco Abbey, Isle of Scilly, Cornwall. (August, 1908).
- SOAMES, Rev. H. A.; Lyncroft, Bromley, Kent. (April, 1914).
- SOUTHESK, The Countess of; Kinnaird Castle, Brechin, N.B. (Feb., 1901).
- SOUTHPORT CORPORATION; Curator; Hesketh Park, Southport. (Jan., 1904).
- SPENCE, G. O.; Elmwood, Hartburn, Stockton on Tees. (1913).
- SPRANKLING, E.; Brookland Cottage, South Road, Taunton. (Feb., 1914).
- STANSFELD, Captain JOHN; Duniwald, Montrose, N.B. (Dec., 1896).
- STAPLES-BROWNE, R.; Bampton, Oxfordshire. (August 1898).
- STEAVENSON, Mrs. PAGET; Cross Bank Hill, Hurworth on Tees, Darlington. (June, 1914).
- STEVENS, H.; Gopaldliara, Nagri Spur, P.O. Darjeeling Himal. Ry. Sonada, India. (Oct., 1911).
- 340 STOCKPORT CORPORATION; Superintendent; Vernon Park, Stockport. (Oct., 1902).
- STONE, O. J.; "Cumnor," The Drive, Lawrie Park, Upper Sydenham, S.E. (March, 1914).
- STURTON-JOHNSON, Miss; Oratava House, Ore, Hastings. (May, 1897).
- SUFFOLK and BERKSHIRE, The Countess of; Charlton Park, Malmesbury. (Feb., 1909).

- SUGGITT, ROBERT; Suggitt's Lane, Cleethorpes, Grimsby. (Dec. 1903).
 SUTCLIFFE, ALBERT; Fairholme, Grimsby, (Feb., 1906).
 SUTTON, Lady; Brinsop Court, Hereford. (Dec. 1901).
 SWAYSLAND, WALTER; 47, Queen's Road, Brighton. (Orig. Mem.)*
- TAKA-TSUKASA, Mr.; 25, Kaminibancho Kojimachi Tokyo, Japan.
 (Feb., 1914).
- TANNER, Dr. FRANK L.; Vanvert House, Guernsey. (Jan., 1904).
- 350 TAVISTOCK, The Marquis of; Woburn Abbey, Beds. (1912).
 TECK, H.H. the Duchess of; Frogmore Cottage, Windsor. (April,
 1913).
- TEMPLE, W. R.; Ormonde, Datchet, Bucks. (June, 1907).
- TERRY, Major HORACE A., M.B.O.U. (late Oxfordshire Light Infantry);
 Compton Grange, Compton, Guildford. (Oct., 1902).
- TESCHEMAKER, W. E., B.A.; Ringmore, Teignmouth, Devon. (May,
 1904).
- THOM, ALFRED A.; The Citadel, Weston, near Shrewsbury. (June,
 1913).
- THOMAS, F. INIGO; 2, Mulberry Walk, Church Street, Chelsea, S.W.
 (June, 1914).
- THOMAS, HENRY; 15, Clinning Road, Birkdale, Southport. (Jan., 1895).
 THOMAS, Miss F. G. F.; Weston Hall, Towcaster, Northants. (March,
 1899).
- THOMAS, Mrs. HAIG, F.Z.S.; Moyles Court, Ringwood, Hants. Aug.,
 1907).
- 360 THOMASSET, BERNARD C., F.Z.S.; The Manor House, Ashmans-
 worth, near Newbury. (*Hon. Treasurer*). (July, 1896).
- THOMASSET, H. P.; Cascade Estate, Mahé, Seychelles. (Nov., 1906).
- THOMPSON, Mrs. F. F.; Canandaigua, N.Y., U.S.A. (July, 1907).
- THORNILBY, PERCY WRIGHT; Shooter's Hill, Weni., Shrewsbury,
 (Feb., 1902).
- THORPE, CHARLES; Selborne, Springfield Road, Wallington, Surrey.
 (Dec., 1901).
- TICEHURST, Dr. C. B.; Grove House, Lowestoft. (1912).
- TICEHURST, NORMAN FREDERIC, M.A., M.B., F.R.C.S., F.Z.S., 35,
 Pevensey Road, St. Leonards-on-Sea. (Dec., 1906).
- TOMES, W., J.P.; Glenmoor, 31, Billing Road, Northampton. (Dec.,
 1902).
- TOWNSEND, STANLEY M.; 3, Swift Street, Fulham. (Sept., 1898).
- TRENOW, EVELYN HENRY, F.Z.S.; Ivy Lodge, Epping, Essex. (Nov.,
 1910).
- 370 TRESTRAIL, Mrs.; Southdaile, Clevedon. (Sept., 1903).
- TREVOR-BATTYE, AUBYN, B. R., M.A., F.L.S.; Ashford Chace,
 Petersfield, Hants. (July, 1898).
- TUCKWELL, EDMUND H.; Bertharpe, Compton, near Guildford, Surrey.
 (1912).

- TURNER, Mrs. TURNER; Abbey Spring, Beaulieu, Hants. (July, 1910).
 TWEEDIE, Major W., Arg. and Suth. Highlanders; c/o Cox & Co., 16,
 Charing Cross, S.W. April, 1903).
- URWICK, DOUGLAS R.; St. Cross Mill, Winchester. (March, 1913).
- VALENTINE, ERNEST; 7, Highfield, Workington. (May, 1899).
 VAN OORT, Dr. E. D.; Museum of Natural History, Leiden, Holland.
- WACHSMANN, A. E.; "Maitai," Murray Road, Beecroft, New South
 Wales, Australia. (August, 1914).
- WADDELL, Miss PEDDIE; 4, Great Stuart Street, Edinburgh, N.B.
 (Feb., 1903).
- 380 WADE, LAWRENCE M.; Oakhill Road, Ashstead, Surrey. (Sept., 1913).
 WAIT, Miss L. M. ST. A.; 12, Rosary Gardens, S.W. (Feb., 1909).
 WALCOTT, F. C.; 14, Wall Street, New York, U.S.A. (March, 1913).
 WALKER, Miss H. K. O.; Chesham, Bury, Lancs. (Feb., 1895).
 WALKER, Miss; Persey House, Blairgowrie, N.B. (Jan., 1903).
 WALLACE, Mrs. R. W.; Moelwyn, Inglis Road, Colchester. (Sept.,
 1914).
 WALLACE, Mrs. WILLIAMSON; Kelton, Dumfries. (1912).
 WALLOP; The Hon. FREDERICK; (*No address*). (Feb., 1902).
 WATERFIELD, Mrs. NOEL E.; Blyburgate House, Beccles, and Port
 Soudan, Red Sea. (Sept. 1904).
 WATTS, R. J.; "Wilmar," Wiggenhall Road, Watford, Herts. (Feb.,
 1914).
- 390 WAUD, REGINALD; Hoe Benham, near Newbury. (May, 1913).
 WELLINGTON, EVELYN, Duchess of; West Green House, Hartley
 Wintney, Winchfield, Hants. (1912).
 WELLINGTON, Her Grace the Duchess of; Ewhurst Park, Basingstoke.
 (Oct., 1913).
 WHITAKER, JOSEPH I. S., F.Z.S., M.B.O.U.; Malfitano, Palermo, Sicily.
 (August, 1903).
 WHITEHEAD, Mrs. HENRY; Haslem Hey, Bury, Lancs. (March, 1902).
 WHITEHEAD, JEFFERY; Mayes, East Grinstead, Sussex. (1912).
 WHITLAW, Miss ROSA M.; Amerden, Taplow. (August, 1914).
 WHITE, STEPHEN J.; Lloyd's, London, E.C. (Oct., 1913).
 WIGELSWORTH, JOSEPH, M.D., M.B.O.U.; Springfield House, Wins-
 combe, Somerset. (Oct., 1902).
 WILMOT, Rev. RICHARD H.; Bishopstone Rectory, Hereford. (March,
 1914).
- 400 WILLFORD, HENRY; Upland View, Havenstreet, Ryde, Isle of Wight.
 (Nov., 1907).
 WILLIAMS, Mrs. C. H.; Emmanuel Parsonage, Exeter. (May, 1902).
 WILLIAMS, Mrs. HOWARD; 51, Harley House, Regent's Park, N.W.
 (April, 1902).

- WILLIAMS, SYDNEY, Jun., F.Z.S.; Holland Lodge, 275, Fore Street, Edmonton, N. (Feb., 1905).
- WILSON, MAURICE A., M.D.; Kirkby Overblow, Pannal, S.O., York. (Oct., 1905).
- WILSON, T. NEEDHAM; Harrow Lodge, Bransgore, Christchurch, Hants. (Dec., 1901).
- WINCHELSEA and NOTTINGHAM, The Countess of; Harlech, Merioneth. (April, 1903).
- WOLFE, Miss GEORGINA; S. John's, 37, Granada Road, E. Southsea. (August, 1904).
- WOOLRIDGE, Prof. G. H., F.R.C.V.S.; 30, Brixton Hill, S.W. (1912).
- WORKMAN, WM. HUGHES, M.B.O.U.; Lismore, Windsor, Belfast. (May, 1903).
- 410 WORMALD, HUGH; The Heath, Dereham, Norfolk. (Dec., 1904).
- WRIGHT, R. N.; Church Hill, Robert Road, Handsworth, near Birmingham. (Dec., 1908).
- YEALLAND, JAMES; Binstead, Isle of Wight. (July, 1913).
- YULE, Lady; Hausted House, Bricket Wood, Herts. (Feb., 1914).
- YOUNGER, Miss BARBARA HENDERSON; 4, Douglas Gardens, Edinburgh. (July, 1909).
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Rules of the Avicultural Society.

As amended January, 1908.

1.—The name of the Society shall be THE AVICULTURAL SOCIETY and its object shall be the study of Foreign and British Birds in freedom and in captivity. Poultry, Pigeons and Canaries shall be outside the scope of the Society. The year of the Society, with that of each volume of the Society's Magazine, which shall be known as *The Avicultural Magazine*, shall commence with the month of November and end on the 31st of October following.

2.—The Avicultural Society shall consist of Ordinary and Honorary Members; and the latter shall be restricted in number to six, and be elected by the Council.

3.—The Officers of the Society shall be elected, annually if necessary, by members of the Council in manner hereinafter provided and shall consist of a President, one or more Vice-Presidents, a Business Secretary, a Correspondence Secretary, an Editor, a Treasurer, an Auditor, a Scrutineer, and a Council of fifteen members. The Secretaries, Editor, and Treasurer, shall be *ex officio* Members of the Council,

4.—New Members shall be proposed in writing, and the name and address of every person thus proposed, with the name of the Member proposing him, shall be published in the next issue of the Magazine. unless the candidate shall, within two weeks after the publication of his name in the Magazine, be objected to by at least two Members, he shall be deemed to be duly elected. If five Members shall lodge with the Business Secretary objections to any candidate he shall not be elected, but the signatures to the signed objections must be verified by the Scrutineer. If two or more Members (but less than five) shall object to any candidate, the Secretary shall announce in the next number of the Magazine that such objections have been lodged (but shall not disclose the names of the objectors), and shall request the Members to vote upon the question of the election of such candidate. Members shall record their votes in sealed letters addressed to the Scrutineer, and a candidate shall not be elected unless two thirds of the votes recorded be in his favour; nor shall a candidate be elected if five or more votes be recorded against his election.

5.—Each Member shall pay an annual subscription of 10/-, to be due and payable in advance on the 1st of November in each year. New Members shall pay in addition, an entrance fee of 10/6; and, on payment of their entrance fee and subscription, they shall be entitled to receive all the numbers of the Society's Magazine for the current year.

6.—Members intending to resign their membership at the end of the current year of the Society are expected to give notice to the Business Secretary before the first of October, so that their names may not be included in the "List of Members," which shall be published annually in the November number of the Magazine.

7.—The Magazine of the Society shall be issued on or about the first day of every month,* and forwarded, post free, to all the Members who shall have paid their subscriptions for the year: but no Magazine shall be sent or delivered to any Member until the annual subscription shall have reached the hands of the Business Secretary or the Publishers. Members whose subscriptions shall not have been paid as above by the first day in September in any year shall cease to be Members of the Society, and shall not be re-admitted until a fresh entrance fee, as well as the annual subscription, shall have been paid.

8.—The Secretaries, Editor, and Treasurer shall be elected for a term of five years, and should a vacancy occur, it may be temporarily filled up by the Executive Committee (see Rule 10). At the expiration of the term of five years in every case, it shall be competent for the Council to nominate the same officer, or another Member, for a further term of five years, unless a second candidate be proposed by not less than twenty-five members of at least two years standing, as set forth below.

In the September number of the Magazine preceding the retirement from office of the Secretaries, Editor, or Treasurer, the Council shall publish the names of those gentlemen whom they have nominated to fill the vacancies thus created; and these gentlemen shall be deemed duly elected unless another candidate or candidates be proposed by not less than fifteen Members of at least two years standing. Such proposal, duly seconded and containing the written consent of the nominee to serve, if elected, in the capacity for which he is proposed, must reach the Business Secretary, on or before the 15th of September.

The Council shall also publish yearly in the September number of the Magazine the names of those gentlemen nominated by them for the posts of Auditor and Scrutineer respectively.

9.—The Members of the Council shall retire by rotation, two at the end of each year of the Society (unless a vacancy or vacancies shall occur otherwise) and two other Members of the Society shall be recommended by the Council to take the place of those retiring. The names of the two Members recommended shall be printed in the September number of *The Avicultural Magazine*. Should the Council's selection be objected to by fifteen or more Members, these shall have power to put forward two other candidates whose names, together with the signatures of no less than

*Owing to the extra pressure of work, the October and November numbers are liable to be late.

fifteen Members proposing them, must reach the Hon. Business Secretary by the 15th of September. The names of the four candidates will then be printed on a voting paper and sent to each Member with the October number of the Magazine, and the result of the voting published in the November issue. Should no alternative candidates be put forward, in the manner and by the date above specified, the two candidates recommended by the Council shall be deemed to have been duly elected. In the event of an equality of votes the President shall have a casting vote.

If any Member of the Council does not attend a meeting for two years in succession, the Council shall have power to elect another Member in his place.

10.—Immediately after the election of the Council, that body shall proceed to elect three from its Members (*ex officio* Members not being eligible). These three, together with the Secretaries and Editor, shall form a Committee known as the Executive Committee. Members of the Council shall be asked every year (whether there has been an election of that body or not) if they wish to stand for the Executive, and in any year when the number of candidates exceeds three there shall be an election of the Executive.

The duties of the Executive Committee shall be as follows:

- (i). To sanction all payments to be made on behalf of the Society.
- (ii). In the event of the resignation of any of the officers during the Society's year, to fill temporarily the vacancy until the end of the year. In the case of the office being one which is held for more than one year (*e. g.* Secretaries, Editor, or Treasurer, the appointment shall be confirmed by the Council at its next meeting.
- (iii). To act for the Council in the decision of any other matter that may arise in connection with the business of the Society.

The decision of any matter by the Executive to be settled by a simple majority (five to form a quorum). In the event of a tie on any question, such question shall be forthwith submitted by letter to the Council for their decision.

The Executive shall not have power

- (i). To add to or alter the Rules;
- (ii). To expel any Member;
- (iii). To re-elect the Secretaries, Editor, or Treasurer for a second term of office.

It shall not be lawful for the Treasurer to pay any account unless such account be duly initialed by the Executive.

It shall be lawful for the Business Secretary or Editor to pledge the Society's credit for a sum not exceeding £15.

Should a Member wish any matter to be brought before the *Council* direct, such matter should be sent to the Business Secretary with a letter stating that it is to be brought before the Council at their next meeting otherwise communications will in the first place be brought before the Executive.

A decision of a majority of the Council, or a majority of the Executive endorsed by the Council, shall be final and conclusive in all matters.

11.—The Editor shall have an absolute discretion as to what matter shall be published in the Magazine (subject to the control of the Executive Committee). The Business Secretary and Editor shall respectively refer all matters of doubt and difficulty to the Executive Committee.

12.—The Council (but not a Committee of the Council) shall have power to alter and add to the Rules, from time to time, in any manner they may think fit. Five to form a quorum at any meeting of the Council.

13.—The Council shall have power to expel any Member from the Society at any time without assigning any reason.

14.—Neither the Office of Scrutineer nor that of Auditor shall be held for two consecutive years by the same person.

15.—The Scrutineer shall not reveal to any person how any Member shall have voted.

The Society's Medal.

RULES.

The Medal may be awarded at the discretion of the Committee, to any Member who shall succeed in breeding in the United Kingdom, any species of bird which shall not be known to have been previously bred in captivity in Great Britain or Ireland. Any Member wishing to obtain the Medal must send a detailed account for publication in the Magazine within about eight weeks from the date of hatching of the young and furnish such evidence of the facts as the Executive Committee may require. The Medal will be awarded only in cases where the young shall live to be old enough to feed themselves, and to be wholly independent of their parents.

The account of the breeding must be reasonably full so as to afford instruction to our Members, and should describe the plumage of the young and *be of value as a permanent record of the nesting and general habits of the species*. These points will have great weight when the question of awarding the Medal is under consideration.

The parents of the young must be the *bona fide* property of the breeder. An evasion of this rule, in any form whatever, will not only disqualify the breeder from any claim to a Medal in that particular instance, but will seriously prejudice any other claims he or she may subsequently advance for the breeding of the same or any other species.

In every case the decision of the Committee shall be final.

The Medal will be forwarded to each Member as soon after it shall have been awarded as possible.

The Medal is struck in bronze (but the Committee reserve the right to issue it in *silver* in very special cases), and measures $2\frac{1}{2}$ inches in diameter. It bears on the obverse a representation of two birds with a nest containing eggs, and the words "The Avicultural Society—founded 1894." On the reverse is the following inscription: "Awarded to (*name of recipient*) for rearing the young of (*name of species*), a species not previously bred in captivity in the United Kingdom."



BROWN THRASHER

Order—PASSERES

Genus—TOXOSTOMA

Family—MIMIDÆ

Species—RUFUM

National Association of Audubon Societies

THE
 AVICULTURAL MAGAZINE,

BEING THE JOURNAL OF
 THE AVICULTURAL SOCIETY.

Third Series.—Vol. VI.—No. 1.—All rights reserved. NOVEMBER, 1914.

THE BROWN THRASHER, OR THRUSH.

Harporhynchus rufus.

By HUBERT D. ASTLEY.

Range. Eastern North America: breeds from the Gulf States to Manitoba, Maine, and Montreal: winters from Virginia southward.

Nest, of twigs, coarse rootlets, and leaves, lined with finer rootlets, in bushes, thickets, or on the ground.

Eggs, three to six, bluish white or greyish white; thickly, evenly, and minutely speckled with cinnamon or rufous-brown.

1.08 × .80. [Chapman: "Birds of Eastern North America."]

Mr. Chapman writes that this bird "is generally speaking an inhabitant of the undergrowth, where it passes much time on the ground, foraging among the fallen leaves."

"He is an active suspicious bird, who does not like to be watched, and expresses his annoyance with an unpleasant kissing note, or sharply whistled wheèu."

But he seeks an exposed position when singing.

"Morning and evening he mounts his favourite perch—generally in the upper branches of a tree—and deliberately gives his entire attention to his song. He is a finished musician, and although his repertoire is limited to one air, he rivals the Mocking-bird in the richness of his tones and execution."

Audubon was greatly impressed by the Brown Thrasher's song, for he wrote: "No sooner has the bird reached its destined

“ abode, than, whenever a fair morning occurs, it mounts the topmost
 “ twig of a detached tree, and pours forth its loud richly varied and
 “ highly melodious song. It is impossible,” he added, “ to convey
 “ the charms of the full song of the Brown Thrush ; you must go to
 “ its own woods and there listen to it. The actions of this species
 “ during the period of courtship are very curious, the male often
 “ strutting before the female with its tail trailing on the ground,
 “ moving gracefully round her, in the manner of some pigeons.”

It is of special interest to aviculturists to read Audubon's words, where he writes “ They breed well in aviaries, and are quite
 “ tractable in a closer state of confinement. In cages it sings well,
 “ and has much the movements of the Mocking-Bird, being full of
 “ activity, petulant, and occasionally apt to peck in resentment at
 “ the hand which happens to approach it.”

Audubon's friend Bachman wrote to him as follows concerning a tame Brown Thrasher that he had : “ So perfectly gentle did
 “ this bird become, that when I opened its cage, it would follow me
 “ about the yard and garden. The instant it saw me take a spade
 “ or hoe, it would follow at my heels, and as I turned up the earth,
 “ would pick up every insect or worm thus exposed. I kept it for
 “ three years, and its affection for me at last cost it its life. It
 “ usually slept on the back of my chair, in my study, and one night
 “ the door being accidentally left open, it was killed by a cat.”

The reproduction of the coloured plate was most kindly permitted by the National Association of Audubon Societies, and was originally published in “ Bird-Lore.” The Brown Thrasher is allied to the Mocking Birds, and is not a true Thrush.

BIRD-KEEPING IN CHINA

By ALEX. HAMPE.

To keep birds in China is in many ways not as easy as in Europe. There is first the climate which is changeable to the extreme, viz. : very hot and damp during the summer months, and rather cold, with sharp winds, from December until April.

The autumn is, however, delightful, and it is then when my birds always look their best and happiest.

Further, the supply of foreign birds is very irregular. A steamer from Australia or Singapore may bring some desirable species, but the same bird might not be imported again for years and it is of no use to give an order for certain birds to the dealers. They are not as amiable or intelligent as our dealers at home who will do their best to procure a bird which is not in stock and, of course, periodicals such as the *Avicultural Magazine* or *Die gefiederte Welt* do not exist in China.

The few bird and animal dealers of Shanghai visit the arriving steamers and buy what they can get at a cheap price, while the brightest coloured birds—often not the rarest—generally go to Japan where they fetch a better price. Of native Chinese birds, only the very few species, which John Chinaman keeps either for song, or for fighting respectively for gambling, are usually available, but to obtain the rarer species from Fokien or Szetchuen, is a task I have found so far very difficult to accomplish. Even coloured plates do not help much, as the distances in China are so large and the transport from the interior of course very difficult. This will, let us hope, soon become better, when China has more railways and the connections between the provinces are improved. We may then hope to obtain the lovely game-birds from Szetchuen and Thibet such as the white and the blue *Crossoptilon* and *Lophophorus lhuysii*, etc. which up to now seem to be out of our reach.

The Chinese are in a way great bird fanciers, viz., their love for birds goes as far as song and ability of talking and fighting is concerned. The last provides to them an occasion for gambling of which our eastern friends are only too fond.

Actually bred in captivity by the Chinese there are as far as I know only two birds. Our yellow friend, the Canary, and the Cormorant which is used for catching fish in the muddy lakes and creeks round Scotchau. I have read that the blue *Crossoptilon* pheasant is bred in captivity for its tail feathers, which in former years were in great demand for the hats of the mandarins, but I have my doubts, at least I have tried in vain, and offered what would seem to a Chinaman an enormous price to the dealers who sell the tail feathers. The principal birds kept by the Chinese are the following: The White Eye (*Zosterops simplex*), the Jay Thrush (*Garrulax*

canorus), the Crested Mynah (*Sturnus cristatellus*) and the Mongolian Lark (*Alauda mongolica*). The four are appreciated for their song, while the fighting bird par excellence is the little Suthora Webbiana* (I am sorry I do not know the English name), and secondly the amiable Dyal bird, which besides his fighting capacity has also an agreeable song.

The special favourite of the Chinaman seems to be the little White Eye (*Zosterops simplex*). He is kept in small neat bamboo cages and fed on bean flour and hard-boiled eggs, and every day one may see some Chinaman carrying the small cage with its inmate gaily twittering its song, while his master walks in his leisurely manner through the busy streets of Shanghai. I have always kept some White Eyes in my aviary and delightful little pets they make. Always neat and smooth in appearance, tame and lively, and never disturbing any of their companions. At present I have three different kinds with me: two pairs of *Zosterops simplex*, the usual cage-bird of the Chinese, one pair of *Zosterops japonicus*, and a single cock of *Zosterops erythropleurus*, which kind is generally for sale on the local bird-market in September. Of these *Zosterops erythropleurus* is the best songster. My little bird frequently sits on a high branch of the aviary and sings his song which is remarkably loud for such a small bird, with wings hanging and quivering. Curiously he takes no notice of the other White Eyes, but keeps friendship with a single Australian Waxbill (*Egitha temporalis*).

I have never succeeded to breed the White Eyes. The Japanese pair carried nesting material about for some time, but that was all. Probably my failure is due to the fact that too many different birds are kept in my aviary. Given a separate compartment, with plenty of green shrubs to which White Eyes would not do the least harm, these birds should probably breed successfully.

The Chinese Thrush, the Hooamee of the Chinese, is the bird of the poor Chinaman. Annually large numbers are brought to our market in very small cages where the poor birds can hardly turn round. One will then see mafus (grooms), gardeners, etc. stand before a pile of these cages and try to select a suitable good bird which will cost about two shillings. If the owner is lucky and

* The Suthoras are small Tit-like birds with short Finch-like bills.—ED.

picks a good singer, he will be able to sell his bird later on for twenty shillings or even thirty shillings, but only on rare occasions will a Chinaman part with a really good bird. The Hooamee is generally kept in a neat bamboo cage and fed on crushed rice. Attached to the cage is a small wicker-box in which grasshoppers and other insects are concealed in order that the bird may be presented with such a tasty morsel after a good performance. One often sees several Chinese take their birds in the morning to a garden or an open place where they hang the cages up in a tree. The birds are then uncovered and a real singing competition starts, while the owners listen attentively to the concert. I have never kept Hooamees.

They cannot be put together with small birds and their song is too loud for me, at least when the bird is caged up. I should however think they would make a suitable bird for turning out in Europe, as they are hardy birds and their song in a large park must sound lovely.

The Mongolian Lark is a great favourite with the Chinese. One often sees them in dome-shaped cages in public tea-houses and restaurants where they are taken by their owners, so that they may enjoy the song of their birds while drinking a cup of tea and having a friendly gossip with a neighbour.

In the middle of the cage there is a small platform on which the bird stands when singing its song, which to my taste is however too loud and shrill. I once saw a perfect Albino of this lark in the native city. The price asked for it was £5, but probably a serious buyer would have bought the bird for less than half the money. A good singing specimen costs however never less than 20/-.

The little Suthora is kept exclusively for fighting purposes. Two friendly owners will put their birds together for a fight and bet on one of them to win. The little birds fight desperately but do not kill each other, and after a time one of them will try to escape, when the adversary is removed. Of course the birds are trained for fighting, when in freedom they are very sociable and peaceful birds. I have never seen the Suthora in a Zoological Garden or private collection in Europe. I have kept a pair in my aviary for a few weeks and they proved very good and harmless companions to the other

inhabitants—small finches, etc. Their plumage is very simple and they have no song, but still their quaint and confiding ways make them a desirable and interesting bird. My birds seemed to be perfectly happy until spring came and they could hear the call of their wild comrades from the garden; then they became very restless and fluttered constantly against the wire-netting, so that finally I gave them their freedom. Last year I found a pair of the large *Paradoxornis gularis*—in my opinion a near relation to the small Suthora—in the bird-market. As they looked interesting birds, although I cannot call them exactly beautiful, I bought them and put them in a large garden aviary. They were quiet birds, equally peaceful as their small cousins, but unfortunately they escaped through a hole in the wire-netting only a week after they had come into my possession.

The Mynah is never caught as an adult bird, but always taken from the nest. They become very tame and attached to their owners, whom they will follow like a dog. They have an agreeable natural whistle and are certainly very clever in imitating the human voice and tunes. I have seen a Mynah which talked as well as a good parrot. I have never kept them, as some pairs nest regularly in my garden where I can watch them better than when in an aviary. At present a pair has its nest in a pigeon cote, and pigeons and Mynahs seem to agree very well together.

The Dyal Bird is a lovely cage-bird and I can fully endorse the interesting lines written in his praise in a number of last year's magazine. It is, however, not advisable to keep him with smaller birds together, as he is given to bullying the small companions. It is difficult to find hens here. Last autumn I procured a bird which moulted into a fine hen, but all my efforts to keep her with a very tame and perfect cock proved in vain. The cock fought the hen pertinaciously and certainly would have killed her if I had not removed her from the cage. I let her fly away in spring, while the cock lives now in freedom in the garden of a friend of mine, but always comes back to the verandah to feed and to roost in his cage.

These are the principal birds kept by the Chinese. Of other species one finds the following here in the market: The Ruby Throat (*Calliope camtschaticensis*), the Bulbul (*Ixus sinensis*), the Blue Fly-

catcher (*Muscicapa cyanomelana*), etc. and besides a good many foreign birds, chiefly from Australia and the South Sea Islands. Of them another time.*

BREEDING OF THE FAIR LORIKEET.

By E. J. BROOK.

Probably no member of the Parrot tribe is more graceful or beautiful than the little Lory, with the imposing name of *Charmosynopsis pulchella* or Fair Lory.

A gem of bright green and crimson, the breast marked across by a band of golden dashes like marks of interrogation. Always interesting with its vivacious impulsive movements, always on the move as if ready for any fun that may present itself, it is at the same time quite safe with other inmates of the aviary.

The pair I write about are in an aviary with Tanagers and Sunbirds and have never shown any inclination to harm their companions.

Just over five years ago I obtained these birds from New Guinea, and though they have nested on several occasions, the one egg they lay has always proved unfertile till this summer. I am not sure what the period of incubation was, for after numerous disappointments I ceased taking much interest in their domestic affairs.

We found that there was a young bird in the nest, evidently just after it was hatched, and it remained in the log exactly two months; it is now flying and feeding itself.†

The young bird differs from the parents in having no golden marks on the breast, these being displaced by a blotchy band of green. There are small green feathers blotched about all over the breast down to the vent, but the general colouring of this region is crimson as in the adult.

The green of the back is continued up the nape to the top of

* Some of these birds would be very acceptable to English aviculturists, especially perhaps the Blue Flycatcher.—ED.

† This is the first time that this species has been bred in captivity in the British Isles.—ED.

the head ; in the adult the nape is crimson and the top of the head is blackish purple. I can see no markings to distinguish the sex of the young bird ; in the adult these markings are very conspicuous.

I am pleased to record the appearances of the young of this species, as I believe that up to now no authentic description has yet been given.

BREEDING OF THE ORANGE-HEADED GROUND THRUSH

Geocichla citrina,

AND THE AMERICAN ROBIN

Turdus migratorius.

By Dr. MAURICE AMSLER.

It was with a feeling somewhat akin to shame that I met our hard-working Editor in September near the Western Aviaries at the Zoo, for is he not constantly reminding us that it is not his business to write and illustrate the *whole* of the *Avicultural Magazine*? However, a friendly and by no means complimentary allusion to the Mandrill and the Kaiser dispelled all fear that he had any personal grudge against me, and in the end, when we parted, I had promised a few notes on the breeding of the above two species. My reason for choosing these birds being that both males were given me two years ago by our Editor, and that he, who was the first in Great Britain to breed them, gave us but sparse notes of the events.

In my humble opinion the Thrush family are amongst the most attractive and intelligent of aviary birds: easily tamed, more inclined to breed than any other genus of softbills; their colouring whether bright or subdued, is always beautiful, and more important than all, they are fine songsters.

My Orange-headed Ground Thrush from the very first made himself at home—this was in the autumn of 1912—but had to be contented with the company of other species until the following spring when I obtained for him a much battered and travel-stained spouse, the latter I kept in a large cage for a time, but one day tried to introduce my male to her notice. Almost before I had closed the



Photo by Geo. E. Low.

ORANGE-HEADED GROUND THRUSH.
(*Geocichla citrina.*)

cage door she was on him, and before I had time to catch him up she had sadly spoiled his beautiful slate blue back and crown.

In May the hen was in quite fair plumage, so I turned her into the aviary with the cock, thinking that the latter could well look after himself seeing that he was in good plumage and stronger on the wing. I proved to be right and nothing happened for a fortnight when both these birds began to harass a pair of American Robins who were attempting to nest, so off they went into another aviary. Nothing of moment occurred until July the 10th, when I noticed the cock carrying hay. The site they chose was the top of a small nesting box containing some young Zebra Finches; this place was so insecure that the nest kept falling down, I thereupon nailed up a shallow cigar box just above the chosen site and placed the half-finished nest inside it. The thrushes quite approved of my help and continued gaily with their task, the female finishing off the lining with fine grass and cocoa-nut fibre, no mud was used.*

During the last few days of building and during incubation the male collected and gave every insect he could find to the hen. On July 23rd she was sitting, and a day or two later the hen being off I mounted a ladder and inspected the nest: there were three eggs, rather smaller than our thrush's, of a grey-blue ground colour with chocolate-rufous spots. The cock never incubated, but frequently fed the hen on the nest, the latter only coming off for a feed and a bath in the morning and again for a few minutes in the evening.

On August 4th—twelve days incubation—two chicks had hatched out: they were pinker in colour than the common thrush. Five days later one of the young birds had disappeared, but both parents assiduously fed their remaining offspring. On the 14th, I took away the young thrush to hand rear, hoping that the parents would nest again: in this I was disappointed as they shortly began to moult. The young bird was reared by my cook on hard-boiled egg and biscuit, together with any available insects. She (for I believe that was her sex) took kindly to the diet and throve apace; at two months she much resembled an adult hen, but both the

* I found that my Orange-headed Thrushes always preferred to use dry moss for the outer nest, which was compactly welded together.—ED.

breast yellow and the olive green of the back were duller in hue. In the spring of this year I sent her to the Isle of Wight in exchange for some other birds and have had no further news of her.

During the autumn the cock became very spiteful and almost killed his lately much-beloved wife. I had to separate them for the winter, and in March of this year, when I made sure they would get on, I returned the hen to the breeding aviary, the bullying began again, so for another month they were parted. On April the 22nd I once more tried them together and this time all went well: it was not until three months later, in July, that a nest was built. This year, however, the birds behaved differently from last, both birds took it in turns to squat on the empty nest and led me to believe that the hen had laid: this continued for ten days or so, until July 22nd, when at last I found the hen sitting in earnest. I was away for a few days after this event, and on my return on August 4th I found two young birds about a day old; odd that they should have hatched on the same date as last year. This time, however, *both* chicks disappeared and no trace of them has ever been seen since. Nothing daunted, three more eggs were laid by August 16th, and two young thrushes left the nest on September 12th and 13th.

In two more points the cock behaved differently this year; he never fed the hen either before or after she had laid, and he took no part in feeding the young, although there were two instead of only one. He made up however by singing most beautifully every evening until dark and also sometimes in the early morning. His song is much sweeter and softer than that of our thrush, but at the same time is reminiscent of that bird rather than of the blackbird.

The two young birds are growing well and are a pair, I say this not because there is any difference in the colour of the back as in the adult Orange-headed Ground Thrush, but because one bird is of a much lighter body colour than the other and looks almost like a different species. Both have brownish backs and greyish-yellow breasts with indistinct speckles of a darker hue, there is also a darkish line running from the eye downward across the cheek. The cock is already moulting heavily, and the hen, poor thing, is quite bare on the face and forehead, the result I think of digging for worms in the hard dry earth.

This species is obviously late in nesting, but at the same time appears to moult at the usual period, and there is therefore I fear little hope of getting a second brood. I do not think it likely that they would have made a second attempt this year had not the first brood disappeared when quite young.

I have already mentioned that my American Robin came from the same source as the Orange-headed Ground Thrush: he was in fact bred at Benham Valence in Mr. Astley's aviaries.

I was able to procure a hen for him from Fockelmann, and she arrived here, as do most birds from Germany (let us give them their due for *one* virtue) viz., fit to turn straight out into the aviary. These two birds were friends from the start and the hen very shortly became as tame as the cock. Within two months of her arrival she began to build and was helped in her labours by the cock. They both persisted in building on a hinged flap placed over the door of their shelter, and as the said flap has occasionally to be let down I did my best to discourage them and finally persuaded them to take possession of a shallow box placed near the chosen site. Here a coarse untidy nest was constructed, much like that of a blackbird, the lining being composed of fine grasses and hair, and of a much more workmanlike finish than the exterior.

On May 14th the hen was sitting on her nest and this she continued to do until the 24th, when she laid her first egg, almost like that of the common Song Thrush.* No more followed so I placed the egg under a wild thrush, who must have sat for a time and then forsaken, for when I visited the nest on June 10th I found the eggs cold, but the "foster-egg" contained a fully-formed chick.

To return to my Robins. The hen remained on her nest for three days after I had robbed her and then appeared to forgive me.

Here I may quote direct from my notes:—

- May 30th. Both birds building in a canary travelling-cage: almost completed nest in one day and then ceased work.
- June 7th. One egg dropped on aviary floor.
- „ 8th. Hen is "broody" and is sitting on bare wooden shelf, but does not lay.

* The egg of the American Migratory Thrush (or Robin) is a beautiful rich greenish blue, rarely having any spots. —Ed.

- June 15th. Hen is completing nest in canary cage.
 July 5th. Has been sitting for twelve days on one egg.
 „ 12th. Egg removed “clear.”
 „ 18th. Has laid again, one egg only.
 „ 30th. Chick hatched, flesh colour, white down.
 Aug. 3rd. Feather tracts on wing and back visible.
 „ 9th. Chick well developed, taken from nest to be hand-reared: parents quite placid.
 Sept. 23rd. Young robin well-grown handsome bird, dark brown back, orange brown breast with numerous and regularly arranged dark brown spots.

At or about this date I returned him to his native aviary, but had to take him indoors next day, for I found the poor fellow raw and bleeding, having been nearly scalped, by his parents I suspect. The old birds had had enough for one year and spent an uneventful winter out of doors.

On May 3rd of this year they again built in the same canary cage, three eggs being laid on the 11th, 12th and 13th; these all hatched out on 24th and 25th, the hen only sitting and the cock perching in a apple tree outside and singing lustily, especially in the early morning and during wet weather: the song is much like that of a blackbird—flute-like and mellow.

On the 26th, one of the young was picked up on the ground below the nest and replaced, on the following day he was picked up dead. The male bird was an exemplary parent and did more feeding than the hen. Both birds were wonderfully tame and I unwisely decided to repeat my experiment of last year when I let some tits out of their aviary for the purpose of foraging for their young.

I have already mentioned that the birds in question had built in the shelter-house of their aviary; no other birds had at that time a nest in the shelter, so I was able to drive the rest of the occupants to the outer flight where they were shut out. The shelter is entered from the garden by a door which opens into a small lobby. The first step was to encourage the parents to come out into this lobby: this was quickly done by putting the live bait in the lobby and keeping the door into the garden closed. I next opened the garden door also, the cock bird who was then doing most of the feeding

came to the threshold, hopped on to the path, took a mealworm from my feet and flew back to his young. So far so good. Next time I sprinkled some mealworms about and stood aside, out came our friend again, picked up all he could and once more returned to his family; during this time the hen was brooding the young, for which I was thankful, as I was not quite so certain of her, and rightly as my readers will see if they will bear with me a little longer.

At his next outing I had the pleasure of seeing my American Robin perfectly at home in the midst of an English rock garden, hunting successfully amongst Saxifrages, Helianthemums, Pinks and a hosts of other plants new to him, but doubtless containing much that he liked, for again he returned to his family.

Now comes what is to me a source of continual regret (but shall I be cured?) The hen appeared at the aviary door and came right out, she had no intention of doing wrong or of being unmotherly, but she had not been drilled as had the cock, and after collecting a few insects did not seem to know her way back; that she wanted to return I know, else why did she not swallow that beakful of insects (birds are not entomologists or coleopterists). Just as the poor thing was at the height of her distress, fully shared by myself, some kind friend thought fit to enter the garden, not with due respect and quietly, but noisily and with banging of gates; this was more than the frantic mother could stand, and off she flew over the aviary and out of sight. I searched the neighbourhood and called at various cottages, but no sign of my bird from that day to this. I hope that she may be happy in the wilds of Windsor Forest, where perhaps she may set up house-keeping with a British blackbird, or will her migratory instinct carry her away over the sea as it did the birds of this species liberated at Woburn Abbey.

But I too am wandering. The widowed cock was of course promptly shut in in the hope that he might bring off the young, but I saw from the first that he was absolutely *désolé*, he took not the slightest notice of his erstwhile beloved family and banged himself about against the wires like a newly-caught bird; still I left him, and next morning shortly after dawn I removed two poor little half-frozen birds, which I fed and then placed in our heated linen

cupboard, later on handing them over to our kind cook, in whose hands I knew they would be safe: they were only four days old remember. One of the chicks thrived and never looked back, but the other seemed not to grow at all, he had fits and internal troubles, common to all babies, and finally when two weeks old he left us. The survivor is I fear a male, so I am left with no chance of breeding these charming birds again. Should any fellow-member have a hen for sale, or in exchange for my young hand-reared male I should be pleased to hear from him.

No, Mr. Editor, I refuse to pay you 6d. for the last "18 words or less," I have sat up into the small hours producing the enclosed "copy," and I think I have earned the minimum price of an advertisement in the *Avicultural Magazine* !!

Later Notes.—October 10th. The young Orange-headed Ground-Thrushes have been moulting heavily—the young male is now an almost perfect replica of his sire—the female has lost her spots and grey colouring and much resembles the adult female.

NESTING OF HYPHANTORNES.

By RALPH A. HOLDEN, F.Z.S.

For some years I have, like Mr. Sidney Williams, devoted a good deal of attention to the various Weaver Birds, more particularly to those included in the genus *Hyphantornis*. And previously to 1914 I had almost succeeded in rearing young from the Spotted-backed Weaver (*Hyphantornis spilonotus*) and from a hen of that species paired to a cock Rufous-necked Weaver (*Hyphantornis cucullatus*).

The greatest difficulty which I have personally experienced is that of obtaining hens of the various species; the vast majority of the larger Weavers imported being cocks, and even when immature birds are bought (a period at which they are most difficult to accurately sex) a preponderance of cocks seems to appear the moment that adult plumage is assumed.

Last winter, I therefore counted myself fortunate in having secured from various sources six undoubted (though immature) hens.

These moulted well about April and, when this operation was complete, the question of identification of the species began. This is no doubt comparatively simple when one can actually handle the birds and compare them with the excellent series of skins at South Kensington. But it is quite a different matter in a large out-door aviary. However, to the best of my belief, the hens they may be labelled as follows:—four Rufous-necked Weavers, one Spotted-backed Weaver and one Spekes Weaver (*Hyphantornis spekei*).

I already had in the aviary five cocks of the Rufous-necked Weaver and one Spotted-backed Weaver. The latter, though in magnificent plumage and health, is I fear feeling the effects of Anno Domini.

Each of these six cocks marked out as his strict territory a portion of the aviary where he commenced nest-building operations and permitted no invasion. I should perhaps add no *male* invasion, for the periodic inspection of his handiwork by each of the hens threw him into an apparent ecstasy of joy, and one began to wonder how long his vocal chords would hold out. If ladies may be described as capricious the ones in question certainly carried out the traditions of their sex, for the inspection was most casual, and seemed to invariably end in stern disapproval both of the architect and his handiwork.

The ancient Spotted-backed cock was if anything the most industrious and, if human opinion is of value, certainly the best workman, for his nests were stronger, thicker, and more neatly finished than those of his rivals. I only hope that he derived satisfaction from these facts, as personally he was, and remains a dead failure with the fair sex.

The most vigorous of the Rufous-necked cocks appropriated as his reserve the interior of the bird-house, where on a single branch he constructed with great rapidity some twelve to fifteen nests, some of them almost touching each other.

Whether or not he had in himself some special attractions, or whether his architecture possessed some unique quality I do not know, but the fact remains that he speedily focussed the attention of all the hens and became a polygamist six times over.

I think myself that the hens were attracted by the idea of

nesting in a colony, and that his collection of nests appealed to their well-known sociable instincts more than the isolated efforts of the other birds. At any rate he became, so far as could be observed, the exclusive possessor of six wives, who, as if they had been drilled to do so, simultaneously lined the nests with feathers, and with amusing precision laid their eggs practically on the same day early in May. It may very well be that some of them had paired with the other cocks but such was not observed.

In every case, two eggs were laid. The variation of the eggs of these closely allied species is well known, and mine were no exception. Here are a few rough descriptions:—

1. Pure white (no spots).
2. Deep blue (no spots).
3. Blue green, entirely covered with long streaks of darker blue.
4. Pale pink, spotted and blotched with red, brown and ochre.
5. Deep blue (red spots).

The remainder were graduations between these types.

Every egg was hatched in due course, and the young birds did exceedingly well until a week or so old. At this stage disaster mysteriously overtook them and the majority of them died, one alone surviving for about a fortnight, by which time it was nicely feathered. In no case were any fully reared.

This tragedy has occurred three times, that is to say that eggs have been laid and hatched and young birds partly reared three times, and the indefatigable birds have to-day (September 2nd) a fourth lot just hatched. It will be seen that they have not waited very long between-times.

The aviculturist is ever hopeful, and I am still not despairing, but I fear that history may repeat itself. Every description of insect and soft food has been supplied. It is exceedingly difficult to supply enough of the former, especially when there are other birds in the aviary, including a pair of Shamas and a pair of Wagtails, and it may be that this insufficiency is the cause of death, but the dead birds appeared well nourished.

I observe that when hatching takes place the hens do not, as is usual with most birds, carry the shells out of sight but merely

drop them vertically from the nest. It may be that, nesting in such obvious colonies, they regard these precautions as futile.

One frequently hears a bad character awarded to the *Hyphantornis* in a mixed collection of birds, but this has never been my experience, and after a good many years acquaintance with a considerable number I regard them as practically harmless. They are without doubt extraordinarily fascinating birds and become very tame.

In the same aviary I have twice this year had Shamas hatched (but not reared) and the parents are again sitting. Pied Wagtails have also had two abortive sittings: one when the hen bird was in a full moult, that is to say without any tail and with an almost completely bald head.

Other results are a hybrid Green-Grey Singing Finch fully reared but since dead, and the usual complement of Ribbon-finches, etc.

NOTES ON NESTING OF HILL TITS.

Leiothrix luteus.

By GEORGE E. LOW.

The following notes are merely an accompaniment to the photos of Pekin Robins reproduced. They do not reveal, I fear, anything novel or out of the way, only a disappointing and not uncommon experience.

“Huggins” and “Muggins” derived their names from the habit these birds have of roosting side by side, one of the cock’s wings covering the hen’s back, the two having the appearance when asleep of one rather bloated and puffed-out bird.

They decided at the latter end of August—or rather “Huggins” decided, his wife taking little or no interest in the proceedings—to set up house. He accordingly selected the covered-in shelter attached to my little aviary, where bundles of heather are attached to the walls. The nest was built in one of these bundles and constructed entirely of grass. It remained unused for about a week, except when “Huggins” got himself into training by sitting on it at intervals.

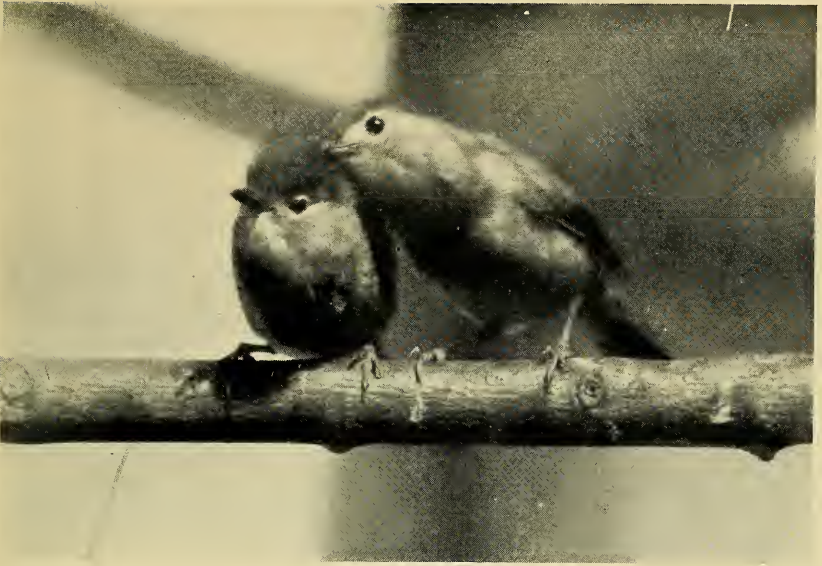
The first egg was laid on the 28th August and the first bird hatched out on the 9th September, the third of the three making its appearance on the 11th September, on which day the whole family were thrown overboard and deposited in various parts of the aviary.

During incubation the hen took her fair share of the labour and always sat facing outwards, the cock facing invariably in the other direction. The cock was very careful never to leave the eggs uncovered even for a short period, and immediately the hen appeared made his way to the nest. He always stood on the edge while he thoroughly puffed out his underneath feathers and then slipped in.

Which of them was responsible for the tragedy I cannot say. I rather think "Huggins," but whoever was the culprit "Muggins" has declared she will have no more futile attempts at rearing a family, and is now (21st Sept.) in the middle of a rapid moult and looking thoroughly dissipated. "Huggins," on the other hand, is as fresh as paint and looking just as well as when he came through the moult last year.

I have a pair of Gouldians nesting in the uncovered part of my aviary. Their first attempt was not a success and they are now making a second effort. These are the only two *pairs* of birds I have in the aviary with the exception of a pair of Cuban Finches.

My aviary is a lean-to wooden structure, with window opening into it from the house. Two features might be of interest—I have not heard of their being adopted elsewhere: one is sliding glass lights, similar to those used to cover garden frames, which cover the whole open front of aviary, keeping off wind and rain, and can be removed in summer time either altogether or partially. The other is waterproof roller blinds in boxes, which can be drawn over the portions of aviary which are unroofed, at night, thus excluding rain and visions of cats. As the early morning sun strikes the glass front the temperature of the aviary becomes appreciably higher than that of the outside air, an important matter in winter-time. Of course this arrangement of blinds would not be practicable in a large aviary, but it is quite feasible in a small one such as mine.



"DO LET'S NAME THE DAY."
HILL TITS (*Leiothrix luteus*).



FEMALE HILL TIT ("PEKIN ROBIN") ON NEST. Photos by Geo. E. Low.

THE BREEDING OF CACTUS CONURES.

Conurus cactorum.

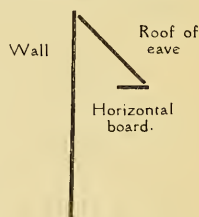
By DR. L. LOVELL-KEAYS.

Conures have one great drawback. They are noisy! My first pair of Conures were Quakers and the noise was so disturbing that I passed them on to a friend, since when I have not seen nearly as much of my friend, and my wife makes horrid inuendos. But I have long got hardened to mere screechings, and in April of this year I saw in a paper, more or less devoted to "the fancy," an advertisement telling of "Yellow-bellied Conures" for one sovereign. I sent for these rare sounding Conures and it took me some time to find out what they were. My description and the books' description seemed to bear very little relationship to one another. However, a visit to the London Zoo. at once settled the question. I found I only had Cactus Conures. I turned them out into my large parra-keet aviary—a very rough affair with practically no shelter but a very liberal allowance of eaves to compensate for this. *En passant* I should like to emphasise the many and great advantages of eaves. They are very cheap to construct and very snug and the birds appreciate them very much indeed. I have them made with a decidedly sharp pitch and a board inside, thus:—

I hang my nesting barrels under the eaves and supply a good assortment of stiff branches for the birds to roost on. But I found that one pair of birds would monopolise a whole length of eave, so I had it divided into "stalls" by short vertical lengths of board about two feet apart.

I take no credit for inventing eaves, but I have never seen another aviary specialise in eaves as mine do and they are an excellent device. [My aviaries have always had broad eaves.—ED.]

To describe the Cactus Conures very roughly, I should say they were a light olive green above with decided bluish green primaries and tail feathers. The head, neck and upper part of the breast is brownish, but the brown is very distinctly purplish in tone. By acetylene gas light the brown appears pure violet. The under surface of the body is a dull yellow. Hence my bird-friend's cognomen of Yellow-bellied Conure.



The birds were obviously a pair, but one can only sex these birds by comparison, and then the beak is the distinguishing feature. They quickly settled down and in my diary I find that by May 31st the hen bird was constantly incubating and, practically speaking, never left the nest. On one of the rare occasions that she did, I discovered four eggs, perfectly white in colour and roundish oval in shape and the size of a thrush's egg, only much rounded and fuller. Young were present on June 28th, and these apparently two or three days old and presented the ordinary hideous appearance of young parrakeets—absolutely naked and blind. The quills appear at about sixteen days and the eyes open soon after.

Cactus Conures have no distinctive nestling plumage, but probably assume their full plumatic characteristics as they increase in size. All parrakeets grow and develop very slowly and I have been tempted many a time to abandon all hope of young. In this case it was not until August 7th that the first young one left the nest, and but for an apparently slight difference in size and being considerably lighter in colour, one could hardly tell the difference between the young and old birds. I put the young bird back as it was a dull damp day, but the next day it was out again, and two days after two more young made their appearance. They all did well, and to-day one can hardly tell the young from the old.

The hen bird is incubating again and perhaps will present me with more young. I understand they had never attempted to breed before although they had been in captivity some time. They occupied an aviary with all sorts and conditions of birds, but never showed any disposition to quarrelsomeness. I might add that the hen does all the incubating and that the cock appears to feed the hen on the nest, but only when the coast is clear and nobody about. The sanitary arrangements are primitive, but do not cause a nuisance within the meaning of the act.

I have come to the conclusion that parrakeets are easy to breed if you give them room and not too much disturbance. They make ideal parents on the whole, but are inclined to neglect their young before they are well able to fend for themselves. No credit is due to me for having bred these birds. I only marvel that it has never been done before. I am sure the great difficulty is to get

a true pair and a breeding pair, *i.e.* a pair that want to breed. My pair nested in a 6-inch barrel and the hole was at the top and only big enough to admit a small hand. I have never found young birds experience any difficulty in getting out even if the hole is at the top, and I believe the longer you can prevent them getting out the better. With these few remarks I will acknowledge my indebtedness to Dame Fortune, the most successful aviculturist known.

ENGLISH NAMES FOR THE PARROTS.

By Dr. E. HOPKINSON.

(Continued from Vol. V., page 380.)

CAIQUE, a Parrot of the South American *genus Pionites*, of which the best known species is *P. melanocephalus*, the BLACK-HEADED CAIQUE, the *WHITE-BREASTED PARROT of Edwards and Latham. Other obsolete names: *BLACK-HEADED PARROT, *TISCHIH PARROT. Other species are: the WHITE-BELLIED CAIQUE (*P. leucogaster*), and the YELLOW-THIGHED CAIQUE (*P. xanthomerus*).

"CALANGAY," or "KALANGI," said to be the native name of the RED-SIDED ECLECTUS.

CAMPBELL PARRAKEET.= *Platycercus nigrescens*, a close ally of PENNANT'S PARRAKEET.

"CANARY PARROT," see BUDGERIGAR.

CANARY-WINGED PARRAKEET.= *Brotogeris chirri*, sometimes known as the ORANGE-WINGED PARRAKEET.

"CAR'AWAY," see SULPHUR-CRESTED COCKATOO, GREATER.

*CAROLINA ARARA, see CAROLINA CONURE.

CAROLINA CONURE.= *Conuropsis carolinensis*, the *ORANGE-HEADED PARROT, *CAROLINA (CAROLINE) PARROT, and *CAROLINA PARROT VAR. of Latham, the *PARROT OF CAROLINA (Catesby), *CAROLINA ARARA, of other early writers. Sometimes known as the CAROLINA PARRAKEET, or PAROQUET. "PARRAKEET," North American vernacular. "KELINKY," North American Indians' name.

*CAROLINA PARROT. (1) See CAROLINA CONURE. (2) *An obsolete (and most incorrect) name for the ORANGE-SHOULDERED AMAZON.

*CAROLINA PARROT, VAR. A., see CAROLINA CONURE.

*CAROLINA PARROT, Latham's original spelling of CAROLINA P.

"CATANICA," a native name for the RED-MASKED CONURE.

"CATEAU VERT," the vernacular name in the Seychelles for the SEYCHELLES RING-NECK PARRAKEET.

- CAYENNE PARRAKEET, see GOLDEN-FRONTED PARRAKEET.
- CERAM ECLECTUS.=*Eclectus cardinalis*, of the Moluccas, sometimes called CERAM PARROT. The CRIMSON LORY of Latham, and ? his BLUE-BREADED LORY (female).
- CERAM LORY, see CHATTERING LORY.
- CERAM PARROT, see above.
- CEYLONESE-HANGING PARRAKEET.=*Loriculus indicus*. Other names: CEYLONESE LORIKEET (or LORIQUET), GOLDEN-CROWNED HANGING PARRAKEET, sometimes CHROME-HEADED HANGING P., *RED-RUMPED PARRAKEET, *SMALLEST GREEN AND RED INDIAN PARRAKEET (Edwards), *RED AND GREEN INDIAN PARROT (Latham). CEYLONESE LORIKEET, or LORIQUET, see CEYLONESE HANGING PARRAKEET.
- CEYLONESE PAROQUET, LARGE, see CINGALESE A. P., under ALEXANDRINE.
- CHATTERING LORY.=*Lorius garrulus*, other names for which are CERAM LORY (Latham), and his Vars. A., B., and C., SCARLET LORY (Edwards and Latham), CRIMSON LORY. The last two names are also sometimes applied (incorrectly) to other birds, see under RED LORY. An occasional dealer's name is "SOLOMON ISLANDS LORY," though the species comes from the Moluccas.
- CHESTNUT-CROWNED PARRAKEET, see BLUE-WINGED CONURE.
- CHESTNUT-SHOULDERED GRASS-PARRAKEET, Gould's name for the TURQUOISINE.
- CHILIAN CONURE.=*Microsittaca ferruginea*, the *EMERALD PARROT (Latham), whence the occasional book name, *EMERALD CONURE.
- CHILI PARRAKEET, one of Latham's names for the QUAKER PARRAKEET.
- *CHINA, GREEN AND RED PARROT FROM. Edwards described the male RED-SIDED ECLECTUS under this name.
- *CHINESE PARROT, GREEN AND RED, Latham's name for the same.
- "CHOCOY," Chilian name for the SLIGHT-BILLED PARRAKEET.
- "CHROME-HEADED HANGING PARRAKEET," an occasional popular name for the CEYLONESE HANGING P.
- "CICEROO," see AUGUST AMAZON, under Amazon.
- *CINEREOUS PARROT, see GREY PARROT.
- CINGALESE ALEXANDRINE PARRAKEET, see under ALEXANDRINE
- CITRON-CRESTED COCKATOO.=*Cacatua citrinocristata*, sometimes known as the LEMON-CRESTED C.
- "COAST GREY PARROT," a not uncommon amplification of GREY PARROT.
- *COCHIN-CHINA PARROT. (1) One of Latham's names for the VIOLET-NECKED LORY, see under RED LORY; (2) an occasional old book name for the BANDED PARRAKEET.
- "COCKATIEL," or COCKATEEL (obsolete variants, COCKATILE and COCKATILLA), the commonly used name for *Calopsittacus novae-hollandiae*,

the COCKATOO-PARRAKEET of authors. Australian dealers' name, "ORNARY HEN"; occasional English fancy name, "JOEY." Book names: CRESTED PARRAKEET (Latham); CRESTED GROUND-PARRAKEET, CRESTED GRASS-PARRAKEET, PARRAKEET-COCKATOO, *RED-CHEEKED NYMPHICUS.

*COCKATILE, *COCKATILLA, see COCKATIEL.

COCKATOO, any bird of the family *Cacatuidae*. Formerly occasionally used for Parrots of other families, such as the HAWK-HEADED PARROT, and some of the MACAWS. An obsolete variant was COCKATOON, while *JACATOO was also an occasional vernacular corruption.

ALECTO COCKATOO.

BANKSIAN BLACK C.

BANKSIAN COCKATOO.

BARE-EYED C.

BAUDIN'S C.

BLACK COCKATOO (q.v., and under GREAT BLACK COCKATOO, below).

BANKSIAN BLACK COCKATOO.

GREAT BLACK COCKATOO, *see below*.

GREAT-BILLED BLACK C., *see below*.

RED-TAILED BLACK C.

WESTERN BLACK COCKATOO (Gould). = *Calyptorhynchus stellatus*, also known as the RED-TAILED C., and RED-TAILED BLACK C.

Obsolete book names: BANKSIAN COCKATOO, and Var. 5 (?) (Latham); *STELLATED GERINGORE.

WHITE-TAILED BLACK COCKATOO, *see* BAUDIN'S C.

YELLOW-EARED BLACK C. Gould's name for *Calyptorhynchus xanthonotus*. Also applied to the BLACK C. (*funereus*).

BLOOD-STAINED C.

BLUE-EYED C.

*BROAD-CRESTED C.

CITRON-CRESTED C.

*COOK'S COCKATOO.

CRESTED COCKATOO, *see* GREATER SULPHUR-CRESTED C.

*CROWNED COCKATOO, an obsolete book name for the HAWK-HEADED PARROT.

DAMPIER C.

DUCORPS' COCKATOO.

DWARF-COCKATOO, *see* PIGMY PARROT (*Nasiterna*).

FUNERAL COCKATOO, *see* BLACK C. (1).

GALAH C.

GANGA C.

GANGGANG C.

GOFFIN'S C.

GREAT BLACK COCKATOO, *Microglossus aterrimus*, also known as the GREAT PALM COCKATOO, or PALM COCKATOO. Earlier names: ALECTO C., BLACK C. (Latham), GREY C. (Latham), GOLIATH ARATOO.

*GREAT BLUE AND YELLOW COCKATOO, see BLUE AND YELLOW MACAW.

GREAT PALM C., see GREAT BLACK C., above.

GREAT WHITE C., Latham's name for the GREATER WHITE-CRESTED COCKATOO. See below.

GREAT-BILLED BLACK C. } = *Calyptorhynchus macrorhynchus*.
GREAT-BILLED C.

*GREATER C., see SALMON-CRESTED C.

GREATER SULPHUR-CRESTED C.

GREATER WHITE-CRESTED C. = *C. alba*, the GREAT WHITE C. of Latham. Also known as the WHITE-CRESTED C.

GREY C., see GREAT BLACK C., above.

*GUYANE, COCKATOO OF, an obsolete book name for the HAWK-HEADED PARROT.

HELMET C.

JAVA C.

LEACH'S C.

LEADBEATER'S C.

LEMON-CRESTED C., see GREATER SULPHUR-CRESTED C., and CITRON-CRESTED C.

LESSER SULPHUR-CRESTED C., see under SULPHUR-CRESTED C.

LESSER WHITE C., see SULPHUR-CRESTED C.

LONG-BILLED C.

WESTERN LONG-BILLED C.

LONG-BILLED WHITE C.

LONG-NOSED C.

*NASICUS C.

PALM C., GREAT PALM C., see GREAT BLACK C., above.

PARRAKEET-COCKATOO, see COCKATIEL.

PHILIPPINE C., an occasional book name for the RED-VENTED C. "PINK COCKATOO."

RAVEN C., see under BLACK COCKATOO.

RED-CRESTED C., GREATER RED-CRESTED C., see SALMON-CRESTED COCKATOO.

*RED-CROWNED C.

RED-FACED WHITE C.

RED-TAILED BLACK COCKATOO, see under BLACK C.

RED-TAILED COCKATOO, see under BLACK C.

RED-VENTED COCKATOO.

ROSE C.

ROSEATE C.

ROSE-BREASTED C.

ROSE-COLOURED C.

ROSE-CRESTED C., *see under* SALMON-CRESTED C. and ROSE-BREASTED C.

ROSY C.

SALMON-CRESTED C.

SLENDER-BILLED C.

WESTERN SLENDER-BILLED C.

*SOLANDER C.

SPECTACLED C.

SULPHUR-CRESTED C.

GREATER SULPHUR-CRESTED C.

LESSER SULPHUR-CRESTED C., *see* SULPHUR-CRESTED.

*TRICOLOURED-CRESTED C.

TRITON C.

WESTERN BLACK COCKATOO, *see under* BLACK C. *above*.

WESTERN LONG-BILLED C.

WESTERN SLENDER-BILLED C.

WHITE C., *see* SULPHUR-CRESTED C., GREATER.

GREAT WHITE C., *see* GREATER WHITE-CRESTED C. *above*,
and GREATER SULPHUR-CRESTED C.

LESSER WHITE C., *see under* SULPHUR-CRESTED C.

LONG-BILLED WHITE C.

RED-FACED WHITE C.

SMALL WHITE C., *see under* SULPHUR-CRESTED.

WHITE-CRESTED C., *see* GREATER WHITE-CRESTED C. *above*.

WHITE-TAILED BLACK C., *see* BAUDIN'S COCKATOO.

WHITE-TAILED C., *see* BAUDIN'S COCKATOO.

YELLOW-CRESTED C.

GREAT YELLOW-CRESTED C.

YELLOW-EARED BLACK COCKATOO.

COCKATOO-PARRAKEET, *see* COCKATIEL.

*COCKATOON, an obsolete occasional variant of COCKATOO.

COFFEE-BACKED PARROT (Latham).=*Urochroma wiedi*.

COLLARED PARRAKEET (Latham).=*Bolbopsittacus lunulatus*.

COMMON AMAZON PARROT, *see under* AMAZON.

COMMON AMAZON PARROT, VARS. A to H, *see under* AMAZON.

COMMON KAKA.

COMMORO VAZA PARROT, *see under* VAZA.

(To be continued).

CORRESPONDENCE, NOTES, ETC.

THE FEEDING OF BIRDS.

SIR,—I am writing to suggest that as so many new birds have of late years been imported, members might tell those less fortunate, *how they feed them*.* You will, no doubt, have noticed that in all cases where full description of the birds is given, where they come from, etc., no mention whatever is made as to what is found to be the best food, and as this last item is of the greatest importance, I have often wondered why it is neglected. The omission of this information really makes the Magazine of little use to anyone, who is a beginner, and new members must find it curious that the principal point about birds is left out.

Regarding Mr. Soames' suggestion of more medals. These might encourage the man in the street to compete, but as you say, it hardly requires that incentive amongst true bird lovers.

E. WARREN VERNON.

BIRD SHOW AND BRITISH RED CROSS FUND.

SIR,—With your permission I should like to point out to our members that the Foreign Bird Exhibitors' League, in conjunction with the London Cage Bird Association and the National British Bird and Hybrid Club, are holding their Annual Show as usual at the Horticultural Hall on November 26th, 27th and 28th, 1914, and intend to devote any profit arising from the Show to the British Red Cross Fund.

Whilst endeavouring to keep things normal during trying times, they hope if properly supported to make the exhibition a financial success, and this is assured providing a large entry of birds is made, coupled with a good gate. Thirty-one classes have been provided for foreign birds, and our Editor and Mr. D. Seth-Smith, of the Zoological Gardens, will be two of the judges. Especial arrangements have been made to collect and despatch exhibits coming and going by rail, so that provincial exhibitors need not keep their birds away. I therefore appeal to our members to do what they can to make this exhibition a success by entering birds for competition. They will be properly cared for by experts and little or no risk is attached to showing when birds are sent in suitable show cages.

Entry forms and other particulars can be obtained from Mr. F. Knight, 64, Chaplin Road, Wembley, Middlesex, on November 1st, and entries will be received by the Show Manager up to November 23rd. I shall be only too pleased to give anyone further particulars with regard to the Exhibition, and I hope that those who cannot show will at least pay a visit to the Show. All being well there will be on exhibition a number of unique birds, many of which are rarely to be seen in any public or private collection in Great Britain.

ALLEN SILVER, F.Z.S.

* Food for different species of birds has often been described in the back volumes of the Magazine, but perhaps some member would kindly write another treatise on the subject.—ED.

NEW MEMBERS.

It is hoped that Members will do their best to propose new ones.

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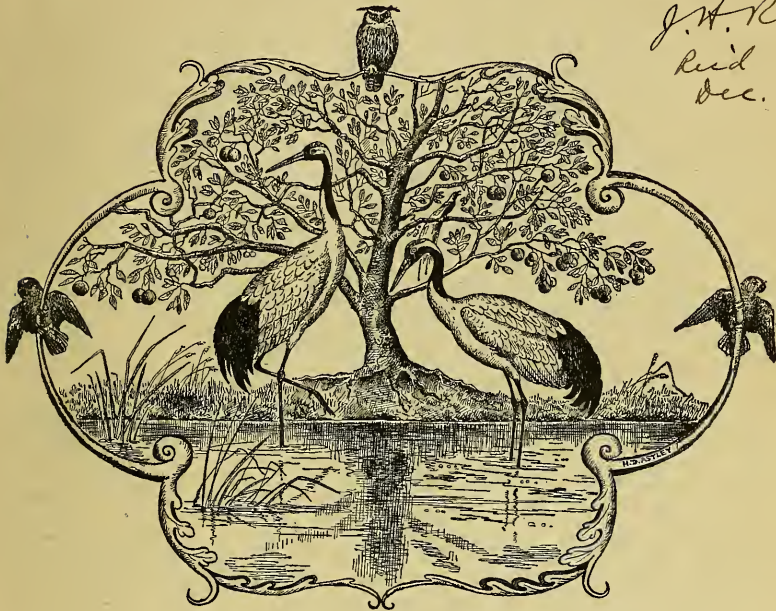
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All Queries respecting Birds (except *post mortem* cases) should be addressed to the Honorary Correspondence Secretary, Dr. A. G. BUTLER, 124, Beckenham Road, Beckenham, Kent. [*Enclose stamp for reply*].

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THE COMMON KINGFISHER.

(*Alcedo ispida*).

THE
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THE KINGFISHER.

Alcedo ispida.

By HUBERT D. ASTLEY.

Looking out of one of my bedroom windows one morning in October I saw the brilliant blue of a Kingfisher as he flashed over the moat and passed beneath the arch of the old stone bridge. That was my view of him on the south side of the room, where two windows with their sashes of Queen Anne period, one on either side of the chimney and fire place, look out on a wide prospect towards a wooded hill in the middle distance on the left hand, and to the Black Mountains in the further distance on the right.

And my next sight of him was in the big cedar-tree, planted by Wordsworth and Southey, which spreads its blue-green foliage in front of the other two windows on the west side of the room, stretching its red-brown branches over the broader part of the moat. Let me mention that I can lie in bed and see by night the moon above the wooded hill, which from that point of view forms a background to the cedar, gleaming through the branches; indeed on a winter's morning I have been able from one of the south windows to look at the sun rising in the E.S.E., and turning round, to see the full moon setting in the N.W., just as if she were thinking, "here he comes, my light is no longer needed." Does some impatient aviculturist break in with "what twaddle, go on about the Kingfisher, *bother* the moon!"

Well I will! The Kingfisher in question was perched within

twelve yards of my windows on a bare branch just above the moat, and every few seconds he bobbed his head, looking intently into the water beneath him. Perfectly still but for this bobbing of the head, he sat there for fully ten minutes, during which time my matutinal dressing was delayed. Suddenly he pulled himself together, gazed down with a greater alertness and then *splash*, and off he went to the Flamingoes' pond with a small dace in his long bill.

Another day, as I stood at one of the windows of the Dining-Parlour, where the moat is within a few feet of the house, and kept from it by a long bed of flowers and a narrow paved way, the Kingfisher came shooting under the stone bridge with a silvery fish in his bill, which contrasted wonderfully with the azure blue of his upper plumage, as the rays of the morning sun shone on him. I have, although I have been in my present home for thirteen months never seen more than one, always I believe the same bird, but I hope he may find a mate next year, and build in some spot that suits him and her.

Nothing saddens me much more in the matter of bird destruction than to constantly see stuffed Kingfishers. There they are in taxidermists' shop-windows, in gamekeepers' cottages, and in many a country inn, more often than not, most vilely set up as well as moth-eaten; besides which many are slaughtered by owners of trout streams. That this bird of gorgeous plumage should be so persecuted is to me monstrous. It is high time that the English, who are horrified at the barbarity of the Germans in the wicked war still raging, should instil into the rising generation a greater respect for and interest in the beauties of our wild life, teaching them from earliest years the pleasure to be derived from watching the birds, and emphasizing the virtues of mercy and love towards them. If the Kingfishers do prey upon very small trout, and as a rule these birds are to be found in the smaller back waters where minnows abound and form their food, cannot some be spared for these lovely creatures?

They perish enough as it is, during hard winters, when the nights are freezingly cold and the ice covers up their breakfast and dinner. Women too have worn their skins in their hats, more shame to them; our one British bird with really tropical colouring.

If after the war there comes a new heaven and a new earth, let us hope that the interest that has of late years sprung up in wild life amongst us, will continue to grow, so that many species of birds will also find a new earth instead of the contents of a cartridge. We shall surely have had enough of ruthless destruction!

Mr. Pycraft has written of the Kingfisher in 'The British Bird Book': "Of all our native birds it is one of the most interesting, " as it is also one of the most persecuted. It has been the theme of " fables, and of poetry, from time immemorial; for generations it " has been subjected to the desecrations of the milliner and the " bird-stuffer, while the malice of the fisherman has been scarcely " less malignant; only by the ornithologist has it been neglected."

" Some facts in regard to its life-history have been harvested " from the raids of the egg-collector; but of the rest of its economy " we know little. We are, however, it is hoped, entering upon a " new era in regard to the study of birds."

Our Kingfisher is the member of a very large family. A whole monograph, a good-sized volume, has been published.

The smallest Kingfisher known has a length of $3\frac{3}{4}$ inches, the largest, the laughing Jackass of Australia, is 17 inches long. In some the bill has a hook at the tip, in another species it is serrated along the cutting edge, whilst in another the beak is short and of great width. Neither have all Kingfishers the short tail that the British one has; for one species grows two central tail feathers with long racquets.

Some eat fish, like the British Kingfisher; others live in arid places feeding on lizards, insects and small mammalia.

In colouring too, the species differ considerably, from simple black and white in one, to blue and white, red and white, green, blue, and red, etc. in others.

With our own bird, the sexes are barely distinguishable, and the young in their first plumage, although decidedly duller on fore-neck and breast, are almost as brilliant as the adults.

As is well known to most people interested in birds, the Kingfisher builds in holes in banks of streams and cuttings. Mr. Pycraft writes: "The Kingfisher invariably digs for itself, and the mouth of " the burrow can be recognised at a glance from that of any other

“creature. And this because of its shape, which is oval, and with clean-cut edges. Thereby it differs from the burrow of the Sand-martin, which is cordiform, the apex upwards. The initial stage of the tunnelling is said to be performed by charging the desired spot at full tilt, using the beak after the fashion of a lance, till a cavity is made large enough to afford a grip for the feet.”

“As a rule, such nests take the form of a long ascending tunnel, about a yard in length, ending in a brooding chamber, the eggs resting on a platform of fish bones, and the hard part of shrimps and other indigestible portions of food. These remains are the gradual accumulation of pellets, thrown up as in the case of owls, hawks, and many other birds which swallow food containing much indigestible matter.”

The eggs are white tinged with pink, which tint is due to the colour of the blood vessels surrounding the yolk, showing through the shell.

I have seen Kingfishers, evidently on migration, on the Lake of Como in Italy in the autumn. On one occasion one passed, flying close above the surface of the water when I was in a launch at least a mile from any of the shores.

Kingfishers ought to live perfectly well in an aviary with a deepish pool in which minnows could be placed, but unless the aviary was really roomy, one would not have the pleasure of seeing the arrow-like flight of this lovely bird.

If any members can try to observe more closely the habits of the Kingfisher, especially in the matter of the display of the male (if any) and write an account for the Magazine, we shall be grateful.

CRANES IN CAPTIVITY.

There is something very entrancing in the sight of a well-kept enclosure of Cranes. The dignified, yet graceful, movements of these birds as they walk about; their beautiful and, at times, striking colouration, and the ease with which they are kept, have tempted more than one amateur to purchase these lovely creatures as additions to their aviaries or bird enclosures. Several, whose wealth has enabled them to gratify their natural inclinations in the fullest

degree, have included examples of all the known species of Cranes in their collections; the ability to do this, however, does not fall to the lot of everyone, for many of the species are very costly as well as difficult to procure.

Cranes appear to the greatest advantage when they can be allowed to run—pinioned, of course—in a large paddock or other similar place, a park for example. They are birds that require a good deal of exercise. Some of the different species of Cranes breed in captivity, but in such a case not more than one pair of birds should be in one enclosure; they make their nest on the ground, of reeds, rushes, and tall grass, with a few sticks. Two eggs are usually laid, but there generally the matter ends in the case of the ordinary aviculturist, for the eggs do not always hatch out, or if they do, the parents do not succeed in rearing the young. The great crux in the rearing of young Cranes hatched in captivity is providing an adequate supply of insect life as food. No one but those who have persevered time after time, in spite of many failures, realises what an enormous amount of *soft-bodied* insects these young Cranes require and how indefatigably the parents work in hunting and searching all over the paddock in order that the nestlings may have a proper and sufficient supply of food. It appears absolutely necessary that the insects for feeding the young Cranes must have soft bodies as I have repeatedly noticed the old birds, when given a large dish of mealworms, carefully pick out those that had just sloughed their hard coats for the nestlings and eat the others themselves. This seems rather strange, for adult Cranes will eat the hardest coated beetles with the greatest enjoyment, and when during the summer months flights of dor-beetles are common, the Cranes soon get to know, and in the evenings may be noticed searching the railings and tree-trunks of their enclosure for such of these insects as have settled after their flight.

One very great advantage that Cranes possess over Herons as pets is that they do not need such a quantity of purely animal food (fish, liver, etc.) as do the latter birds, but may be fed on soaked dog-biscuits, bread, grain, and insect food. When the latter runs short it may be necessary to give a little flesh or fish to make up for the deficiency of the other, but so long as earth-worms, grubs and

snails are plentiful they will not require the meat. The most suitable grain foods are wheat, barley and Indian corn, especially the last, which can be given liberally; in the case of those birds that have just been imported or that are weakly and ill, it may with advantage be soaked in boiling water until it is soft, otherwise it can be given dry.

The species *par excellence* for beginners with these birds is the Demoiselle Crane, a delightful creature of most delicate colouration. The body is of a beautifully soft pearl-grey tint, the wing feathers are long, pointed, and hang over the tail, being tipped with black; the face, throat, and fore-neck are a very dark slate colour, the feathers of the latter being very long and pendulous; the ear-tufts are silvery white, the feathers curving gracefully downward on each side of the neck. As may be judged this species is a particularly handsome and graceful bird; it is also one of the tamest in disposition and speedily gets attached to its owner. Another point in its favour is that it is perfectly hardy and thrives in most situations, although a dry soil suits it best. The average cost of a pair of these Cranes is from £3 to £4 when bought from a dealer, but a short advertisement in one of the live-stock papers would probably result in an offer at a lower figure; in fact, a short time ago I had an offer of Demoiselle Cranes at a £1 apiece. Being imported in fairly large numbers it is nearly always on the market and specimens are readily obtainable at all times from any of the recognized dealers.

Examples of this species have been bred in this country on several occasions, but all Cranes, and the Demoiselle is not an exception, are very capricious in this respect and will steadily refuse to do anything of the kind under what appear to be the most favourable circumstances. This may go on for three or four seasons, but during the third or fourth year signs of a desire to nest often become apparent to the observant eye. This is usually noticeable in an increasing shyness of the birds, and it is at this point that most amateurs go wrong by generally attributing this conduct to any reason but the real one, the most usual thing that the beginner thinks is that the birds have been frightened and their owner attempts to restore confidence by giving them a good deal of his or her company and by petting them up by following them about

with *bonnes bouches* in the shape of nice fat, luscious insects. Now this, well meaning as it is, is just exactly what the birds do not want ; what they do want is to be left severely alone. Directly it is observed that the Cranes are getting shy and retiring themselves from close observation, especially if they are noticed to be picking up bits of sticks, they should be left undisturbed as much as possible, and all dogs and strangers kept away from their enclosure ; an armful of twigs may be thrown in to them, or an old birch-broom untied and given to them. If it is really a desire to set up housekeeping that has rendered the birds shun observation they will make use of the twigs by commencing on their nest at once. Cranes in selecting a site for their nest are rather erratic in their tastes ; sometimes, and very often they are the shyest birds that do so, they will make their nest in a quite open and unsheltered situation, whilst another pair of Cranes will select a nesting site which is screened from observation by a protecting bush. Two eggs are generally laid, but if they have nested previously with unfertile ones, sometimes only one is laid and the hen starts sitting right away. When two eggs are laid the second is deposited two days after the first and the hen begins to incubate at once ; the period of incubation lasts four weeks and both parents take turns in the work, often relieving each other five or six times during the day. Like many other birds at this time they are very cautious in their behaviour, and if their enclosure is entered, even by their owner, the sitting bird will slip off the nest at once, often pretend to feed and nearly always walk in a different direction from its companion, in an attempt to draw the intruder's attention away from the nest and eggs : if this be unsuccessful and the person approaches too near the nest for the bird's peace of mind, the Cranes will adopt the same artifice as that displayed by the Lapwing, the hen tumbling along the surface of the ground as though she had a broken wing or was injured in some manner, while the male will puff up his neck and head feathers in an effort to make a show of ferocity towards the intruder.

The eggs will hatch out, if fertile, about the twenty-eighth day ; the young birds are dark biscuit colour, shading off to a cream tint, with chocolate markings and, like all nestlings, are dear little things. The parents start feeding the young at once, each parent

bird attaching itself exclusively to one nestling and devoting the whole of its attention to that one in particular. It is a most interesting sight to see the assiduity with which the adult birds will methodically search through a paddock for insects, with the young ones following them, leaving hardly a square yard unexamined; directly an insect is seen it is caught up by one of the parents and given into the mouth of the particular young one it is specially looking after. The young only remain in the nest for about four days after they are hatched, and from that time onwards the old birds brood the young ones in dry situations wherever the grass may be short, not always using the same place every night but moving from place to place as fancy takes them. At this time these Cranes are very intolerant of rain, and are most solicitous that the young should not get wet by always selecting at such a time a spot close to the bole of a tree as their sleeping place in order that the young can get proper shelter under the branches. The young seem to be entirely dependent on the old birds for at least a fortnight, and until that period has elapsed I have never seen them attempt to pick up anything for themselves; just after the second week the old Cranes commence giving the young wheat grains, and once they have succeeded in getting well on to this they will thrive rapidly. It is the first three weeks of their lives that is the most difficult period of their existence as they subsist entirely on small soft insects found on the grass stems and foliage of their enclosure, and unless there is a plentiful and constant natural supply of this kind of food they will invariably die. But once they have got over the first month they will make astonishing progress, so much so that a careful eye must be kept on them in case they escape from their paddock, for they can fly before the uill feathers are fully grown. If they do, they are not likely to get right away, for they will in all probability return to the old birds, but it may give their owner a nervous half-hour watching them as they soar round at an elevation of about 150 yards in a circle nearly a mile in diameter, wondering all the while whether they will come back or not.

Another species of Crane, well worthy of the serious attention of those interested in these birds, is the Australian Crane, the

“ native companion ” of the colonists. This bird is of a different shade of colour to the preceding species, being rather a bluish, or French grey, as the tint of its plumage, the top of the head and the beak are of an olive-green colour, as is also the gular pouch ; the back of the head is papillose skin of a brilliant scarlet. This Crane is not so reliable in its temper as the gentle Demoiselle and most individuals are inveterate practical jokers, as evidenced by the sly manner with which they will sidle up alongside any one who may be inside their enclosure, looking the pictures of innocence, and then give a nasty lunge with their spear-like beak at the person of the intruder, usually selecting, if it be a man, the back of the calf of the leg ; or, if a lady, the back or palm of the hand. Like the majority of the Cranes this species is very hardy and may safely be left out of doors during all weathers, saving the most exceptionally severe, when it is advisable to put them under shelter. They are so disregarding of the state of the climate that they will wade in a half-frozen pond during a frost and wait until they are literally frozen in and have to be released. In spite of my fears that they would suffer from the prolonged exposure to the ice-cold water, the experience seemed to have no ill-effects upon them and they were none the worse for it. Although I have not as yet had the good fortune in my own aviaries, these particular Cranes have nested in this country, but I am not certain whether the eggs hatched and the young reared to maturity ; I think that both the Duchess of Bedford and Mr. H. D. Astley were equally unfortunate in this respect. If the male bird is pinioned there is no need to perform the same operation on the hen, for she does not appear to want to fly away, although fond of long aerial flights from which she will always return ; at least such is my experience.

The Australian Crane is a very jealous bird, quick to take offence, and deeply resents the intrusion of another crane of a different kind to himself on that portion of the enclosure round which he has set an imaginary boundary, but will, directly a trespasser is noticed, run at him with outstretched wings and clattering beak and fairly chase him off the private territory that has been appropriated by himself and his mate ; in fact, the solitary example of the Common Crane is constantly being chased about by both the

pair of Australian Crane and the two Cape Crowned Cranes as he inadvertently steps into the area reserved to themselves by his companions, the three species being kept in one paddock.

The general favourites at first sight, with most people, are the Crowned Cranes, of which there are two or three species. The illustration of a pair of Crowned Cranes wading in the bed of a small stream gives a very good idea of the beauty of these birds, and it is the quaint-looking, stiff-plumed, top-knot which adds to the attractiveness of them. They possess certain advantages over the other species of Cranes in that they have, when they choose to give vent to it, a rather more musical voice than that of Cranes generally;* also, they are not nearly so destructive to growing plants as are some of the others, although, curiously enough, Crowned Cranes seem less fond of insect-food and more fond of growing grass-seed and grain generally. In disposition they are quite as gentle as the more commonly seen Demoiselle; gentle, that is, towards their owner,† for they are more determined at shifting trespassing Cranes of a different species, and will even vent their displeasure by chasing the offending bird all over the paddock. The call of these Cranes is not at all unlike the 'toot' of a motor-trumpet being sounded a little distance away, and those people who hear the call for the first time, without seeing the birds, often think that there is a motor car approaching along the by-road near the enclosure. They are distinctly greedy birds, always rushing up to the food-pan directly it is replenished and never allowing the others to have anything until they have quite satisfied themselves, and will often behave in a very 'dog in the manger' fashion by mounting guard over what is left to prevent the others having any, so that if this trait is noticed in any Cranes of this species belonging to my readers it will be as well to provide more than one food-pan, in order that the others may get their food without being obliged to wait for the Crowned Cranes to give way.

The Crowned Cranes are rather impatient of damp, and a very valuable 'tip' for the aviculturist, who has any of this species in his collection, is to make a small gravelled run in that part of the

* This is a matter of taste in music.—ED.

† This is by no means my experience with *two* of my Crowned Cranes.—ED.



CROWNED CRANES IN THE BED OF A STREAM.

Photo by Maurice Portal.

paddock which these birds reserve to themselves : a yard of gravel will be ample as this quantity will cover at least five yards of ground. When this is provided it will be noticed that in wet weather, when the grass is wet, particularly if it be long, these Cranes will always be standing on the gravelled patches.

In Crowned Cranes the cheeks are bare skin evenly divided into two distinct patches of pink and white, the proportion varying in different species : the general tint of the neck and body is ashy or greyish black, the wings and tail being white with a rich chocolate brown ; but the thick, upright crest of straw-coloured bristle-like feathers is the dominant features of these birds, and the one to which in no small degree their beauty and attractive appearance is due. There seems some diversity of opinion among those who possess these birds as to whether it is necessary to keep them entirely under cover or not during the winter months : some keep them indoors from November to March, others take no trouble with their birds in this respect and claim that these Cranes suffer no ill-effects by so doing. So far as my own experience teaches, all that is necessary is to put up a small summer-house erection made of wood, with a tarred roof ; this need not be larger in size than about 6ft. cube, entirely closed all round with the exception of a small open doorway, through which the birds can pass one at a time. It is an advantage if the floor can be raised a few inches above the ground level and covered with peat-moss litter. When such a shelter as this is provided for their use, the birds can then decide whether the weather is too inclement or not, and please themselves if they make a retreat into it. Generally it will be found that they will only seek its protection during the most stormy weather, especially that accompanied by a strong driving wind ; at other times, even the most cold, they will be proudly marching about the paddock, heedless of snow and frost. The roof of this structure should slope towards the back with the ground at that part raised a bit so as to carry the water away from the shelter as, if the roof slopes towards the front, unless the ground is well drained, there is always a pool just in front of the doorway. This point must be especially looked after if the floor is not raised.

Another very charming Crane is the Stanley or, as it is some-

times called, Paradise Crane. This is a most beautiful bird, bluish-grey in colour, with rather a massive-looking head and extremely long wing-feathers which almost reach to the ground. This species requires more animal-food than the other kinds and a few meal-worms are a very acceptable addition to the diet; if these are not readily obtainable, spiders and woodlice, especially the latter, may be given. For grain food, a mixture of wheat, dari, and rice in the husk is as good as anything. It is an extremely gentle bird.

The Sarus Crane, of which examples are often offered for sale by dealers, is not a suitable bird for mixed collection of Cranes, owing to its spiteful disposition, as it is always interfering with the other Cranes, pecking them and very often inflicting nasty injuries on them. When, however, a separate enclosure can be provided for it, this species makes a handsome addition to the aviaries. The cry is very loud and piercing and can be heard long distances, especially at night, and for this reason it is not advisable to have this bird in too close proximity to the dwelling-house as it is apt to disturb one's rest, more particularly if one is a light sleeper. The appearance of this species is very stately: the colouration is French grey and a considerable portion of the head and neck is bare skin of a reddish tint.

The Asiatic White Crane is a very beautiful bird of dazzling white plumage, with black at the end of the primaries of the wings. This species is a more shy bird than the Sarus and possessed of a very feeble voice, except during the breeding season. It never goes far away from the water pool. The feeding and management is the same as for the other Cranes.

The Common Crane, once widely distributed through these islands, is now no longer a resident and only a most irregular visitor. The colour is dark-grey. Their voice is trumpet-like and rather eerie, especially when heard in the early morning. They make nice additions to a collection, but are rather spiteful towards any companions in the same enclosure, especially if they be smaller than themselves.*

* A male bird I had for some time, twice stabbed his mates, and killed them.—ED.



Photo by Graham Renshaw.

THE RED-HEADED PIGEON HOLLANDAIS.

(*Alectoenas pulcherrima*).

THE PIGEON HOLLANDAIS.

By GRAHAM RENSHAW, M.D., F.R.S.E.

Some years ago there was living in the Western Aviary at the Zoo a curious pigeon which had been received from the Seychelles. The bird was of arboreal habit, sitting sluggishly on its perch, which it grasped with well-developed, powerful feet. Its head was crimson above, the neck and breast were grey, the upper parts and tail blue-black: the orbits, lores, and forehead were wattled. The writer at once recognised it as one of the wart pigeons (*Alectrænas*). Now although attractive from its rarity and also on account of its quaint yet beautiful coloration, the full interest of this specimen does not appear to have been grasped by aviculturists. The bird was already in poor health when photographed by the writer; no paper relating to it having appeared in the interval since its death, the present account may be of interest.

The specimen in question—the *Alectrænas pulcherrima* of naturalists—is known as the “Pigeon Hollandais” in the Seychelles. The reason for this is very curious: many years ago there existed [not in the Seychelles but in Mauritius] an allied species, then also called Pigeon Hollandais. This bird (*Alectrænas nitidissima*) had the head and neck white; the back, wings, and under parts indigo; the rump, tail and tail-coverts crimson; its popular name, in fact, denoted that it wore the colours of the Dutch flag. It was discovered by Sonnerat, who brought home two specimens in 1781. He appears to have been an early aviculturist, for one of his birds, still in the Natural History Museum at Paris, shows by its broken feathers the effects of prolonged confinement in a cage. About 1815 M. Dufresne had another specimen, but whether alive is not known; this bird is now in the Edinburgh Museum. To-day three museum specimens—in Paris, Edinburgh, and Port Louis (Mauritius)—are all that is left of a fine species.

Uno avulso non deficit alter. The name “Pigeon Hollandais” was transferred to the *Alectrænas pulcherrima*, although its coloration was markedly different, and it did *not* represent the colours of the Dutch flag. The present species is not a very accurate understudy of its departed relative; thus the neck and breast are grey

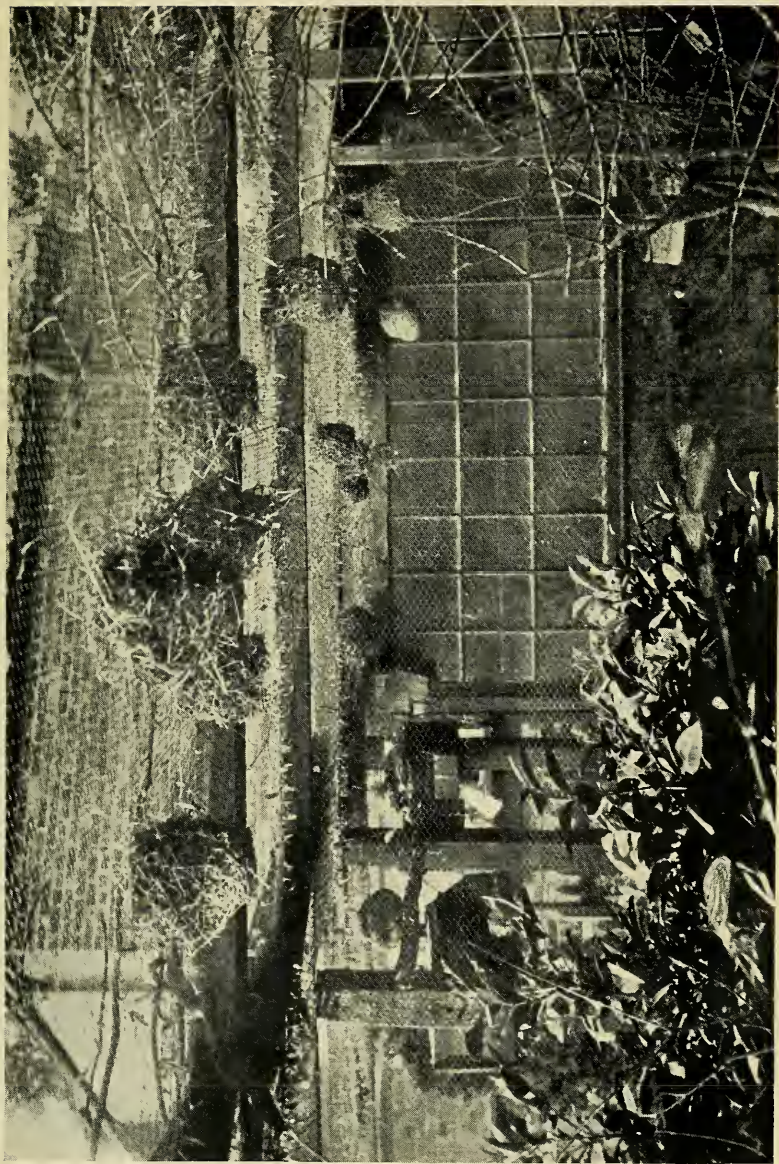
instead of white, the upper parts are blue black rather than indigo, while the tail is blue black instead of crimson! One may class the present instance as another example of the inaccuracy which seems to infest zoological nomenclature in Africa and its islands. Thus amongst the birds alone, the "Cape Lory" is really a Touraco and the "Toucans" are Tree Hornbills, while the Paauw or "Peacock" is a Bustard, the "Turkey" is a Ground Hornbill, and "Pheasants" and "Partridges" are Francolin!

Considerable avicultural interest attaches to the three young birds which were kept alive in 1862 by the Acting Civil Commissioner for the Seychelles. They are quite arboreal, and would not leave their perches unless obliged; they were fed on berries and small fruit. They were supposed to be the true *A. nitidissima*, and if so were among the last of their race; yet although they were fully fledged some uncertainty existed as to their species, and they may have been the "new" Pigeon Hollandais which normally inhabits the Seychelles. In the new Pigeon Hollandais its lamented congener lives again, rising Phœnix-like from its ashes. It is to be hoped that no more of these quaint, beautiful island species will be lost, and that the Pigeon Hollandais of to-day will soon be better known to aviculture.

WEAVERS.

By W. SHORE BAILY.

The Weavers—more especially those of the *Hyphantornis* group—do not seem to be very great favourites with aviculturists, and dealers tell me that, except for the commoner kinds such as *P. franciscana* and *afra*, they are not always easy of sale. I am sure that I do not know why this should be so, as in appearance they are extremely attractive birds, and besides being easy to cater for, are quite hardy. A group of Orange or Crimson Crowned males in full plumage equals in beauty anything I have seen in bird-life, even if it does not surpass it. In the Boyers House aviaries I have many varieties, and the following short account of some of their doings this season may be of interest to your readers.



WEAVER-BIRDS' NESTS IN THE AVIARIES OF MR. W. SHORE BAILY.

THE ABYSSINIAN WEAVER (*H. abyssinicus*). I have four cocks and one hen. The difficulty with all Weavers is to get true pairs. I bought so-called true pairs from two different dealers, only to find when they came into colour that they were all males. However I was lucky enough to pick up a hen from another source rather late in the Spring and this bird laid three eggs—white, finely marked with pink spots—and hatched one young one, which unfortunately only lived fourteen days, being drowned in the nest by a heavy thunderstorm. All the cocks proved great nest-builders, using almost any material that came handy. Their nests were retort shaped and usually hung from the wire roof of the aviary. They were not nearly so closely woven as some of the other Weavers' nests, and this was probably the reason why the pair that nested failed to bring up their young one, the rain finding its way through too easily. The brilliant black and yellow of the males make them quite the handsomest of all the large Weavers.

THE RUFIOUS-NECKED WEAVER (*H. cucullatus*). Of these I have three cocks and one hen. The cocks are much duller in colour than the Abyssinian and are in consequence less handsome. The hens of the two varieties are practically indistinguishable. Two of my males proved good nest-builders, but, although I frequently saw the hen inspecting the nests, no eggs were laid. These nests were built in bushes and trees and were fairly well woven. The song of the Rufous-necked is not so clear or varied as that of the Abyssinian, but is still rather pleasing.

Another large Weaver is the OLIVACEOUS (*S. olivaceus*), which is quite equal in size to either of the two varieties just mentioned. It differs from them in having no black about it and in having white instead of red eyes. When in full breeding plumage the face is dusky, its white eyes making it look almost black, but when compared with one of the other black-faced Weavers, the difference is at once noted. This is the finest nest Weaver I have, for although he failed to secure a mate, and consequently only built two nests and these early in the Spring, yet these nests are as good now as when they were built and are quite water-tight. From this bird and a hen (*H. mariquensis*) I raised two hybrids last season. The young male hybrid has also proved a great nest-builder and has

woven quite a score of nests this season, but has been unsuccessful in persuading a hen to occupy one of them. In colour he almost exactly resembles a hen Rufous-necked having no black or brown whatever about him and being about the same size.

THE BLACK-HEADED WEAVER (*H. melanocephalus*). I have five cocks and one hen. Here again the dealers seem unable to differentiate between the sexes when they are out of colour. One or two of the cocks proved good Weavers, but it is possible the absence of hens prevented the others from making any serious nesting attempts.

THE BLACK-HOODED WEAVER (*H. heuglinii*). I possess a single male. In appearance he is very like *melanocephalus*, but has less black on the forehead and a little rufous on the throat. He proved a very good builder, hanging his nests from the branches of a spruce.

THE HALF-MASKED WEAVER (*H. vitellinus*). Of these, three cocks only, hens apparently being unobtainable. With their chestnut coloured heads these are very pretty birds, and it was unfortunate that I was unable to find mates for them as they built many nests and were apparently most anxious to undertake parental duties.

THE GOLDEN WEAVER (*H. galbula*). I have two pairs of these and one pair nested, but I think the eggs must have been taken by mice, as the nest was rather low down in a bush and easily accessible to these vermin. The males are about the size of *vitellinus*, but the crown of the head is bright yellow and there is no rufous below the black of the throat.

THE SHORT-WINGED WEAVER (*H. brachypterus*). I have two cocks only. They very closely resemble *galbula* and are about the same size. Only one of these attempted to build; the sites chosen being very varied. The nests were always well-constructed, the entrance hole usually being in the side.

THE DWARF WEAVER (*S. luteola*). Of these pretty little birds I have two pairs, one of which nested twice, bringing up two young ones on each occasion. They are about the size of an English Siskin, and the males are like miniature *melanocephalus*, having no rufous or chestnut colour about them. The young, which were grey

in colour with white breasts, were raised very largely upon mealworms, although seed, principally spray millet, was also taken. The eggs were white.

TAHA WEAVERS (*P. taha*). Two pairs of these were given a large aviary, in which there were no birds larger than themselves, but strange to say no attempt at nesting was made. The cocks are extremely active and spent much of their time chasing each other and the hens around and around the aviary. They look very handsome with their brilliant black breasts, contrasting so vividly with the bright yellow of the other parts of the body. They differ from *P. afra* by having the black on the under parts of the body extended to the throat. Like all the genus they are very fond of mealworms, and when I was feeding the Dwarf Weavers with these they generally managed to get their share.

CRIMSON CROWNED WEAVERS (*P. flammiceps*). I have three cocks only of this handsome variety, two of which were purchased from a Continental dealer as a true pair of *P. oryx*. Hens of this variety also seem unprocurable, which is a great pity as they would well repay the trouble of breeding.* One or two of them built nests, but they were never properly completed.

ORANGE WEAVERS (*P. franciscana*). Five cocks and four hens.

NAPOLEON WEAVERS (*P. afra*). Three pairs.

RED-BILLED WEAVERS (*Quelea quelea*). Three pairs.

These four last-named varieties were all kept together in a large aviary, 13ft. high and having no natural cover. In with them were Budgerigars, Cockatiels and Rosellas; and although there were many nests, as far as I know no eggs were laid. This is I suppose what one might expect under these conditions, but the lack of success in breeding them is more than compensated for by the grand appearance they make in the aviary now that the males are all in full colour. Another season, if all is well, I shall hope to place them under more natural conditions, when some of them may bring off young ones.

* Dr. Butler secured two hens amongst females of *P. franciscana* (Vide Foreign Birds for Cage and Aviary, Vol. I. p. 194).

NOTES FOR 1914.

By Miss E. F. CHAWNER.

I have had very little success this year as far as nesting is concerned. Indigo Buntings built a neat nest of hay and grass lined with tow in such a position that it was impossible to go in or out of the aviary without almost brushing against it. Though plenty of cover was provided it was stuck up in the fork of a dead bough without any attempt at concealment. As the birds were new comers, and the hen in particular very shy, the attempt was doomed from the start. Three eggs were dropped in different parts of the aviary and then the hen brooded in the empty nest for about a week before giving it up. The cock did not appear to take the smallest interest in her proceedings and I never even saw him near the nest. Both birds are much tamer now, and I hope, if they come through the winter, for better luck next summer.

Long-tailed Grassfinches built and laid several eggs, then the hen fell ill, and though she recovered she wisely did nothing more in the nesting line.

The Hooded Siskins raised my hopes by carrying nesting material to most of the likely places in the aviary, but it went no further, and this autumn to my regret the cock died. He was a charming bird and I miss his gay song and lively ways every time I go to the aviary. I bought him in 1911, and to the day of his death he never looked sick or sorry.

My old Pekin Robins built a lovely cup of hay lined with dead leaves and hatched three young ones. But mealworms and live ants' eggs "gave out" and, owing to the war, no more were obtainable. I tried grasshoppers, and the old birds took to them at once and fed with them, but the young died just as the first had left the nest. I do not know for certain if the grasshoppers were to blame, but I have my suspicions. Hitherto the Pekins have always been successful and reared numerous youngsters on small mealworms, flies, wasp grubs, and live ants' eggs. This year, as luck would have it, wasp grubs were particularly late and small in this district and I hardly got any, though a fair number of nests were taken.

The solitary success is a pair of hybrids between a St. Helena Seed-Eater and an English Linnet. The Seed-eater died before the young were hatched and they were fathered by a Grey Singing Finch \times Linnet, which was hatched last year. In fact, seeing him so attentive to the young I took it for granted that he was their true father and did not discover my mistake until they came into full plumage. One is quite a pretty bird, a Seed-eater in size and shape, with a brown breast washed with yellow and a bright yellow rump, the back, wings, and tail resemble the Linnet. The other, which I take to be a hen, is much duller and browner. It is strange that the Seed-eater should have paired with the Linnet as there is a hen of his own species in the same aviary; he would have nothing to say to her, but continually followed the Linnet, driving off the Grey Singing-Finch mule, who also had aspirations to her and paired with her as soon as the Seed-eater died.

I wonder how other members have succeeded with the Black-chinned Yuhina? One only of mine has survived, a cock. Whether it has anything to do with his longevity I cannot say, but he has always supplemented his diet of sop and fruit with "eggbisco," which his companions would not touch.

Two baby House Martins, which had fallen from their nests, were brought to me and successfully hand-reared on mealworms, flies, and grasshoppers. As is the way of these delightful birds, they speedily became not only quite fearless but extremely affectionate, delighting in being handled and petted. When old enough they were set at liberty and immediately flew off. It is curious that being so tame they should never have returned to their human friends, but I have found it invariably the case that with them out of sight is out of mind.*

Another waif was a young Puffin, picked up in the forest by a beater. It was uninjured but starving; at first it had to be crammed, but after a few days would feed from hand. Then it took to picking up bits of herring for itself if they were put in its water dish; any bits left on dry land were utterly ignored, and grew quite plump. It was taken by a friend and turned out on the coast at

* The same thing occurred in the case of a young Swallow I reared by hand this summer.—ED.

Beaulieu, where I hope it will do well and fall in with others of its species.

The Eagle and Marbled Owls went to nest as usual, but their eggs were all infertile.

My Rainbow Buntings are now (Oct. 28th) in heavy moult but perfectly well. They are very beautiful birds and easily managed but not particularly interesting; they usually skulk in the thickest cover the aviary affords them, where they are practically invisible, and they never utter a sound or pay the slightest attention to anything except mealworms. They are perfectly peaceable and inoffensive, that is to say my pair is, I have no experience of any others.

THE CROWNED CRANES AT LOGAN.

By M. PORTAL.

The pair of Crowned Cranes at Logan, which are not pinioned, bred again this year for the fourth time, nesting close to the site of former nests, but again the two young birds died after a short time. As this year there was no rain to affect them, it is most disappointing.

The female laid two more eggs, and these have been placed under a hen and are not yet incubated. Their prospect of growing up is I fear remote, even if they hatch, as all food will have to be artificial and the weather cold, besides the fact that the hen will have some trouble to cover them after a few days.

If Mr. McDouall had a small greenhouse available I should have been inclined to heat it slightly and let hen and young have it to run in and out of, and wire off a portion outside. One fears otherwise that wet weather and a chill will see the death of these birds.

The food they pick up in the summer must be deficient of what the young need, and the only solution might be to enclose the nesting site and a couple of acres with netting and feed artificially from the start and not trust to nature any more.

SOME NOTES ON THE EGGS OF THE SUDAN CROWNED CRANE.

Balearica pavonina ceciliae.

By MICHAEL J. NICOLL.

In the Autumn of 1910 a pair of Sudan Crowned Cranes made a nest in the Giza Zoological Gardens in which two eggs were deposited.

As the birds seemed anxious to incubate, the eggs were not critically examined and measured although both Captain Flower and Mr. A. L. Butler noticed that they were strikingly different from the eggs of both the Grey and Demoiselle Cranes. At about the time when these eggs should have hatched both of them disappeared being probably taken by crows or rats. This year, however, a pair of Crowned Cranes have again nested and one egg was laid in the nest on 22 September and the next day another was found some little distance away in the long grass. As the birds showed no inclination to sit I put both eggs into an incubator. They proved to be unfertile.

As the eggs of *Balearica pavonina ceciliae* have so far as we can ascertain never been described I take the opportunity of publish these notes. The most remarkable feature about these eggs is that instead of being blotched with reddish-brown as are the eggs of the Grey Crane *Grus grus* and the Demoiselle Crane *G. virgo* they are white very faintly washed with greenish-blue. One, the larger, has a hard chalky coating so hard that it can only be removed with a sharp knife. Their measurements are as follows:—

a. *The egg taken from the nest*

Total length 73 mm.

Total breadth 53 „

b. *The egg found away from the nest*

Total length 75 mm.

Total breadth 55 „

The great difference between the colour of the eggs of this Crowned Crane and those of the Grey Crane is most interesting, though it should be remembered that while the former is a resident in the Sudan the latter is a migrant and that both the general appearance and the habits of the two species are widely different.

SOME NOTEWORTHY EXHIBITS AT THE INTERNATIONAL CAGE BIRD SHOW.

In spite of the distraction caused by the War, a really wonderfully fine lot of birds were brought together at the Horticultural Hall, Westminster, on the 26th November: Mr. A. Ezra's exhibition of two Humming Birds causing a sensation, and verifying my prophecy made some time ago that such a thing would be possible. Moreover, except for the fact that the glass fronts to their cages had an outer protection of white-painted wire bars, which perhaps might have been removed since they obscured the view of the birds within, the manner in which the two cages had been prepared showed what intense care and forethought had been bestowed.

The floors were covered with moss, whilst in each was arranged a group of Orchids, in front of which the Humming Birds occasionally hovered with rapidly-vibrating wings.

A thermometer fastened to the back inside showed the temperature varying from 75° to 80°, this heat being maintained by means of night-lights placed in a special receptacle beneath the trays. Mr. Ezra finds that these wonderful little birds should not be kept in warmth under 70° and preferably over.

Their liquid food is the same as given to Sunbirds: but they take it on the wing, hovering. Both of the Humming Birds received an equal first prize, the diploma and silver medal being awarded to the *Sporadinus ricordi*, a tiny insect-like looking Humming Bird of glittering emerald green, about which I have already written in our Magazine, with the hopes that later on we shall be able to publish a coloured illustration of this wonderful creature.

The Garnet-throated Humming Bird (*Eulampis jugularis*) seated on a bare twig projecting from among the orchids, sombre in colour until one caught the flash of intense garnet on his throat and breast, was also certainly worth going a long way to see. Mr. Ezra is to be congratulated upon his success. One is sure that such treasures mean constant care and trouble. Besides these two, he exhibited a dainty little white-eyebrowed Blue and White Fly-catcher, (Himalayan), a magnificent Malachite Sunbird, and the

rarer greater double-collared Sunbird as well as a fine specimen of the Lesser Double-collared. Mr. Ezra's lovely Minla, small Minivet, and Rufous-bellied Niltava, although these birds have appeared on the show-bench before, were none the less worth seeing.

Lady Kathleen Pilkington sent a beautiful pair of Black-chinned Yuhinas, charming little Himalayan birds with perky crests, and also a lovely Blue-headed Tanager, strangely resembling the Rufous-bellied Niltava in colouring, though rather smaller in size.

Mr. C. T. Maxwell showed a Red Sunbird (yellow rumped) in fine colour and condition, worthy of premier honours, but unfortunately having to compete against the Humming Birds, as well as the rarer Greater Double-collared Sunbird. Mrs. Algernon Bourke's pair of Purple Sugar Birds was very good too.

Miss M. Bousfield's Festive Tanager and Mr. O. J. Stone's Necklace Tanager were both good birds, losing nothing in beauty by reason of their having been seen before.

In the class for Starlings, Jays, etc., Mr. A. Silver exhibited a gorgeous pair of Purple-headed Glossy Starlings, which took first prize to Mr. J. Frostick's Blue and Black Yucatan Jay, which received second. In this class there were exhibits of Chinese Rosy Starlings, Mrs. Thynne being awarded the premier honours of that group (3rd prize), her bird being decidedly a finer specimen and cleaner too perhaps than the others, which were two pairs. But all these birds deserved some attention, although as is often the case, all could not equally receive it. To notice other exhibits in detail, there is neither space nor time, birds such as Mr. A. Ezra's King Paradise Bird, Mr. W. A. Shepherd's American Blue Bird (an old favourite, now scarcely ever seen) Dr. L. Lovell-Keay's pair of Hooded Siskins (incorrectly described as Columbian), Mr. W. Frost's Peter's Spotted Fire Finch, Dr. Lovell-Keay's Rainbow Bunting, and also Mr. C. T. Maxwell's, etc., etc., besides many Grassfinches and Waxbills, familiar to aviculturists, but always charming.

Perhaps we should also specially notice Mr. A. Ezra's pair of Himalayan Orange-headed Bullfinches, which won well, as they deserved to, since it was the first appearance of this species on the show bench.

Amongst the British Birds there were many worth looking

at and possessing, but there was no time to study them closely, and therefore I hope our members will not think so scanty a comment means a lack of appreciation, for in many points our native birds are hard to rival.

HUBERT D. ASTLEY.

PARROTS AT THE HORTICULTURAL HALL.

The London Cage Bird Association and the Foreign Bird Exhibitors' League are much to be congratulated on their determination to carry out their programme of holding their show, in spite of the general depression caused by the war, and the splendid way in which they were supported by aviculturists proves how much their confidence was justified. Our Editor has asked me to write a few notes on the Parrots exhibited.

The class for COCKATOOS AND MACAWS contained eight entries. The most interesting exhibit being one of the small Macaws, I think *A. hahni*, but these small Macaws, all of which are rare in captivity are not easy to remember off hand. This bird, which was shown by Miss Alfreda B. Smyth, took the first prize; a Bare-eye coming second, and a very perfect Sulphur-crest third.

The next class was for GREYS AND AMAZONS; the first prize going to a very nice Green-cheeked Amazon shown by Miss J. A. E. Smyth; the second to Mr. Frostick for a very fine Double-fronted Amazon; third and fourth to Mr. Allen Silver's Salvin's and Mealy Amazons respectively.

Some good Blue-fronts and moderately good Greys made up a class of no less than seventeen entries.

The third parrot class was for LOVEBIRDS, PASSERINE, and BROTOGERYS PARRAKEETS, and contained fifteen entries. Miss Alfreda B. Smyth took the first prize with a very perfect pair of Rosy-faced Lovebirds, well shown in a nice roomy cage. A pair of Orange-flanked Parrakeets, sent by Dr. Lovell-Keays, took second prize, the third going to Mr. C. T. Maxwell for a pair of Red-faced Lovebirds. Mr. Silver took fourth prize with a very nice pair of Passerines, and the same exhibitor took fifth with a pair of Madagascar Lovebirds.

st entry in this class was a couple of exceptionally fine

Red-faced Lovebirds, but unfortunately they were both cocks, so had to be passed.

The ALL OTHER SPECIES class as usual contained some of the most interesting of the parrots, other than parrakeets, shown. The Rev. G. H. Rayner took the first prize with a very fine pair of Meyer's Parrakeets, both of which showed a considerable amount of yellow on the head. Mr. Maxwell's Black-headed Caique, a very fine specimen, came second; and another pair of Meyer's, shown by Miss Alfreda Smyth, third. These latter were not nearly so steady as Mr. Rayner's pair, but it was interesting to compare them with his. Neither showed any trace of yellow on the head, which probably showed that they belonged to a distinct race. There are quite a number of local races of Meyer's Parrots which differ in the amount of yellow on the head and wings; this character, I believe, having nothing to do with sex and little to do with age.

The rarest bird in this class was a Short-Tailed Parrot (5th prize) shown by Mrs. B. J. Moore, but it was not in show condition and had an overgrown upper mandible. Other good birds shown included Senegal Parrots, Eclectus and Red-vented Parrots.

The class for Parrakeets of the RING-NECKED group, ROSELLAS, REDRUMPS, COCKATIELS and CONURES, contained sixteen entries: the first prize going to a very perfect Malabar Parrakeet shown by Dr. Lovell-Keays. This is a seldom imported species and a very beautiful one. The second prize went to a very fine Red-rump belonging to Miss Lydia Clare; the third to a very nice Blossom-head shown by Mr. Frost. Mr. Silver sent an unusually fine Rosella, Mr. Frostick a very tame little Conure, which was probably *C. aztec*, but off hand it is difficult to identify some of these small Conures.

The class for LORIES, LORIKEETS and HANGING PARROTS contained seven entries, the first prize going to Mr. C. T. Maxwell for a specimen of the very rare Red-fronted Lory, the first I remember to have seen at a show. Mrs. B. J. Moore took the second prize with a nice Ceylonese Hanging Parrot; the third to a very fine pair of Ceram Lories shown by Mr. W. S. Smith; the fourth to Mr Maxwell's fine pair of Red-collared Lorikeets.

Next came the class for BROADTAILS not previously men-

tioned. It only contained four entries: Mrs. McLean Morrison taking first prize with a good pair of Mealy Rosellas. Mr. Frostick second with a nice King Parrakeet; Mr. Frost third with a Barnard, and Mr. A. J. Shipton fourth with a Yellow-collared Parrakeet.

Only two entries were forthcoming for the last class, which was for the rarer Grass Parrakeets, *Polytelis*, and so forth. They were both valuable exhibits, a pair of Queen Alexandra's Parrakeets sent by Miss Lydia Clare and a Bourke's Parrakeet by Miss Alfreda Smyth. They took first and second prizes respectively.

D. SETH-SMITH.

ENGLISH NAMES FOR THE PARROTS.

By Dr. E. HOPKINSON.

(Continued from page 47.)

CONURE, any member of the genus *Conurus* and its allies, *Cyaolyseus*, *Pyrrhura*, etc., all American. The following are English names which have been given to different species:

AZTEC CONURE.

BLACK-FACED CONURE, *see* NANDAY.

BLACK-HEADED CONURE.

BLUE-CROWNED C.

BLUE-NAPED CONURE.

BLUE-VENTED C.

BLUE-WINGED C.

BROWN-CHEEKED C.

BROWN-EARED C.

BROWN-THROATED C.

CACTUS C.

CAROLINA C.

CHILIAN C.

CUBAN C.

DWARF C.

EMERALD C.

GOLDEN C.

GOLDEN-CROWNED C.

GREEN C.

JENDAYA C.

LINEOLATED CONURE, a *Bolborhynchus*, not a true Conure.

LUCIAN'S CONURE.

MEXICAN C.

MOLINA'S C.

NANDAY C.

PATAGONIAN CONURE.

GREATER PATAGONIAN C.

LESSER PATAGONIAN C.

PEARL C.

PEARLY C.

PEKIN C., an obvious misprint for PETZ' C.

PETZ' C.

RED-BELLIED CONURE, used for both the RED-EARED and BROWN-EARED CONURES.

RED-COLLARED CONURE.

RED-EARED C., applied to two species, *Pyrrhura cruentata* and *haematotis*.

RED-FRONTED C.

RED-HEADED C., usually = the RED-MASKED C., but sometimes used for PETZ' Conure.

RED-MASKED C.

RED-THROATED C.

ROCK C.

ST. THOMAS' C.

SHARP-TAILED C.

SUNHEAD C.

WAGLER'S C.

WEDDELL'S C.

WHITE-EARED C.

YELLOW C.

YELLOW-BREASTED CONURE.

YELLOW-CHEEKED CONURE.

YELLOW-HEADED C.

*COOK'S COCKATOO, a name of Latham's for one of the BLACK COCKATOOS, or rather for two of them, as it is now considered to have referred to both the BANKSIAN BLACK and to LEACH'S COCKATOO (*C. banksi* and *viridis*).

CORAL-BILLED PARROT. = *Pionus corallinus*.

CORNELIA'S ECLECTUS.

"CORELLA," common dealers' name for the SLENDER-BILLED COCKATOO. Occasionally (but wrongly) applied to the BARE-EYED C.

Variants: CORELLA COCKATOO, CORILLA, CORILLA COCKATOO.

"CORILLA," see CORELLA.

*CORIPHILUS, KUH'L'S, see under KUH'L'S LORY.

*COUNTERFEIT PARROT, see under AMAZON, BLUE-FRONTED.

*COWLED PARROT, see HOODED PARROT.

COXEN'S FIG-PARRAKEET, the BLUE-FACED LORILET.

*CRACKERS, the. Obsolete name for the Parrots (*Psittaciformes*).

*CREATURE, BLUE-HEADED, *see under* BLUE-HEADED.

*CREATURE, YELLOW-HEADED, *see under* AMAZON, YELLOW-SHOULDER.

*CRESTED COCKATOO, Latham's name for the GREATER SULPHUR-CRESTED C.

CRESTED GROUND-PARRAKEET, *see* COCKATIEL.

CRESTED HAWK-PARROT, the HAWK-HEADED PARROT.

CRESTED PARRAKEET, *see* COCKATIEL.

*CRIMSON AND BLUE-COLLARED PARROT, *see* HAWK-HEADED P.

CRIMSON-BELLIED PARRAKEET, a name for the BLUE-BONNET P.

*CRIMSON-FRONTED PARRAKEET, *see* MUSKY LORIKEET.

CRIMSON LORY. (1) Latham's name for the CERAM ECLECTUS. (2)

An occasional name for the CHATTERING LORY.

"CRIMSON-RUMPED LORIKEET," an occasional dealers' name for the VERNAL HANGING PARRAKEET.

"CRIMSON-WING," popular abbreviation of CRIMSON-WINGED PARRAKEET.

CRIMSON-WINGED LORY, a name used by Gould for a variety of the CRIMSON-WINGED PARRAKEET.

CRIMSON-WINGED PARRAKEET. = *Ptilistes erythropterus*, the CRIMSON-WINGED PARROT of Latham. "RED-WINGED LORY," Australian vernacular. Also popularly known as the BLOOD-WINGED and RED-WINGED PARRAKEET, and the abbreviations, "BLOODWING," "CRIMSON-WING." The CRIMSON-WINGED P. of Gould was his *Pt. coccineopterus*, now included in *erythropterus*.

CRIMSON-WINGED PARROT, *see above*.

*CROWLED PARROT, a name used by Latham, probably for the HOODED PARROT.

*CROWNED COCKATOO, *see* HAWK-HEADED PARROT.

CUBA AMAZON, *see* WHITE-FRONTED A., under AMAZON.

CUBA PARROT, *ditto*.

CUBAN CONURE. = *Conurus euops*. The *GUIANE GREEN PARRAKEET and *LONG-TAILED GREEN PARRAKEET of Latham.

*CURASSOW-PARRAKEET, *see* CACTUS CONURE.

"CUTTHROAT PARRAKEET," one of the dealers' names for BARRABAND'S PARRAKEET.

*DAMASK PARROT, *see* LEVAILLANT'S PARROT.

DAMPIER COCKATOO, the WESTERN SLENDER-BILLED COCKATOO.

DASYPTILUS, *see* PESQUET'S PARROT.

DERBYAN PARRAKEET. = *Palaeornis derbyana*.

DIADEMED AMAZON, *see under* AMAZON.

DOMINGO AMAZON, St., *see under* AMAZON, SALLE'S.

DOUBLE-FRONTED AMAZON, *see under* AMAZON.

*DOUBLE INSEPARABLE, old popular name for the ROSY-FACED LOVE-BIRD.

*DOUBLE-RINGED PARRAKEET, see MAURITIUS RINGNECKED P.

DUCORPS' COCKATOO.=*Cacatua ducorpsi*, of the Solomon Islands.

DUFRESNE'S AMAZON, see under AMAZON.

"DULANG," an Australian native name for PENNANT'S PARRAKEET.

"DUMDUM," the native name in Senegal for the SENEGAL PARROT.

DUSKY PARROT. (1)=*Pionus sordidus*, the name first used for this species by Edwards and Latham; it is also sometimes known as the SORDID PARROT; (2) *P. fuscus*, the LITTLE DUSKY PARROT (Edwards, Latham) also often bears this name, and also shares the popular name "VIOLET PARROT" with its near ally, *P. chalcopterus*, the BRONZE-WINGED PARROT.

DWARF-COCKATOO, see PIGMY PARROT.

DWARF CONURE, *Conurus nanus*, of Jamaica; *BROWN-THROATED PARRAKEET, VAR. (Latham); *YELLOW-BELLIED PAROQUET (Gosse).

DWARF PARRAKEET, an occasional book name for any of the "AMERICAN LOVEBIRDS" or PARROTTETS (*Psittacula*).

EASTERN BLOSSOM-HEADED PAROQUET, see under BLOSSOM-HEADED P., BURMESE.

*EASTERN PARROT, a name of Latham's which probably referred to the male WESTERMANN'S ECLECTUS.

ECLECTUS, strictly a member of the genus *Eclectus*, but also commonly applied to many of the *Tanygnathi*. English names are:

BLUE-CROWNED ECLECTUS (q.v.) *Tanygnathus luzoniensis*.

CERAM ECLECTUS, q.v.

CORNELIA'S ECLECTUS.=*E. corneliae*.

GILOLO ECLECTUS, an occasional name for the GRAND E.

GRAND ECLECTUS, *E. voratus*, the GRAND LORY of Latham, and probably his VIOLET LORY, and *GUEBY PARROT, VAR. A. Other names used are HALMAHERA ECLECTUS or PARROT, GILOLO ECLECTUS or PARROT, while the popular dealers' name, "ECLECTUS LORY," usually means this species, though it may be applied to any ECLECTUS.

GREAT-BILLED ECLECTUS, *Tanygnathus megalorhynchus*, the GREAT-BILLED PARROT and *GRISLED PARROT of Latham. Other book names are: GREAT-BILLED PARRAKEET, *GRIZZLED PARROT, and *BLACK-SHOULDERED PARROT, the two latter practically obsolete.

"GREEN ECLECTUS," the popular name for the male RED-SIDED ECLECTUS.

HALMAHERA ECLECTUS, see GRAND E., above.

LINNAEAN E., see RED-SIDED E.

MULLER'S ECLECTUS.=*Tanygnathus muelleri*, of the Celebes.

Other names, MULLER'S GREAT-BILLED PARRAKEET, MULLER'S

PARRAKEET, MULLER'S PARROT, WHITE-BILLED PARROT. "CACATU IDUI," native name.

NEW GUINEA ECLECTUS, a dealers' name for the RED-SIDED ECLECTUS.

RED-SIDED ECLECTUS.=*E. pectoralis*, strictly applicable to the male only, while the name LINNAEAN ECLECTUS (with the variant, LINNAEAN LORY) belongs to the other sex. The male also bears (or has borne) the following other names: *GREEN AND RED CHINESE PARROT, *NEW GUINEA GREEN PARROT (Latham), *GREEN AND RED PARROT FROM CHINA (Edwards), RED-SIDED PARROT, RED-SIDED GREEN LORY, GREEN ECLECTUS, the last a common popular name. Other names in frequent use are NEW GUINEA PARROT, NEW GUINEA ECLECTUS. "ABACAY," "CALANGAY," "KALANGI," are native names.

RIEDEL'S ECLECTUS, *E. riedeli*.

WESTERMANN'S ECLECTUS.=*E. westermanni*, the male of which was probably that meant by Latham's EASTERN PARROT.

"ECLECTUS LORY," a dealers' name for any true ECLECTUS; most commonly used for the RED-SIDED.

ELEGANT GRASS-PARRAKEET (Gould).=*Neophema elegans*. "ELEGANT PARRAKEET," occasionally "ELEGANT TURQUOISINE" of English dealers; "GRASS-PARRAKEET," "GROUND-PARRAKEET," Australian vernacular.

"ELEGANT PARRAKEET," a popular name for the above, and also often used for its ally, the BLUE-BANDED GRASS-PARRAKEET as well.

"ELEGANT TURQUOISINE," see ELEGANT GRASS-PARRAKEET.

EMERALD CONURE, a name for the CHILIAN CONURE, from Latham's name, EMERALD PARROT.

EMERALD PARROT, see above.

ESSLING'S PARROT, PRINCE OF, *Nestor esslingi*, a rare species of KAKA.

*ETHIOPIAN PARROT, an obsolete book name for the RED-FACED LOVE-BIRD.

EVERETT'S PARROT, *Tanygnathus everetti*, allied to MULLER'S "ECLECTUS."

*FALCON-BREASTED PARRAKEET, see BARNARD'S P.

FESTIVE AMAZON, see under AMAZON.

FESTIVE PARROT.

FIG-PARRAKEET, see LORILET.

COXEN'S FIG-PARRAKEET, another name for the BLUE-FACED LORILET.

SIR WM. MACLEAY'S FIG-P., the RED-FACED LORILET.

To be continued.

OBITUARY.

We regret to announce the death, on the 12th of November, of Sir WALTER GILBEY at Elsenham Hall, who had been a member of the Avicultural Society since 1907. Well known as a great lover of horses, he was also fond of birds, of which he had some rare species. He found time to be a connoisseur of art, of old furniture, silver, and china.

To the last he was slight and straight. He was wont to dress in the style of a country squire of the early nineteenth century. He was eighty-three when he passed away. Several of Sir Walter's rare birds were received at the London Zoological Gardens a few weeks before his death, including a Hunstein's Paradise Bird.

CORRESPONDENCE, NOTES, ETC.

THE NOCTURNAL FROLICS OF STORMY PETRELS AND MANX SHEARWATERS.

The Editor finds a letter in his editorial drawer written by a lady to him on the 28th of May, in which she gives an interesting account of how she and four companions camped out on an island off one of the coasts of England. She wrote: "We camped out one night just to see what the birds were up to. We reached the island about 5 p.m. and pitched our tents. Soon after dark the Stormy Petrels began to come out, and by 10 p.m. thousands of them were flying about in all directions. They were rather like great moths. One hit one of the party on the head. They flew quite close to us, coming in and out from under the stones and making a jolly sort of buzzy noise. Very soon after the Stormy Petrels began to fly about, out came the Shearwaters. *Thousands* of them! They make a weird harsh cry as they fly around, and they keep it up till the first sign of dawn; then all is quiet.

We turned into our tents at about 10.30 p.m., but it was impossible to sleep; the Shearwaters were much too noisy and they kept flopping up against our tents and scrambling up and down them, but we did not go to the Island for a good night's rest!

Two of us turned out at 3.30 a.m. and walked to the head of the island. It was lovely, with just the first signs of dawn, and the sun rose at 4.30, such a glorious cloudless morning. We would have stayed another night if it had not been for the very heavy dews, which came through our tents and dripped down on us. There was a large puddle on each side, and one would have thought it had been pouring with rain.

FOOD FOR TANAGERS IN CAPTIVITY.

SIR,—Do you think you could ask some one who has had *successful* experiences in keeping Tanagers to write on the subject ?

I have always found these birds a difficulty somehow, but on the other hand I have been successful in keeping two or three in quite an unorthodox way. For instance, a pair of Crimson Crowned Tanagers in a large aviary with a mixed lot of Finches, Cowbirds, Buntings (Hair-crested), Cornbirds, etc. These Tanagers used to have sop, fruit, and insectivorous food, but when placed in their present quarters they took to seed and now eat little else ; certainly no sop or insectivorous food, although no doubt they find a few insects. They seem to thrive on seed diet, looking better than when fed in the usually accepted way for this family.

I am yours, etc., E. J. BROOK.

* * * * *

Dr. Butler kindly writes as follows, in answer to Mr. Brook's request :—

ON FEEDING TANAGERS.

I feel somewhat diffident in replying to so experienced an aviculturist as Mr. Brook, because I have only kept fourteen examples and five species, but as our Editor has asked me to do so I will give my experience for what it is worth.

Undoubtedly those species which approach the typical finches most nearly (and which may perhaps belong to the *Fringillidae*) do extremely well upon a seed diet. The species of *Saltator* eat seed freely and doubtless could do without soft food. I should not, however, expect to keep *Euphonia*, *Calliste*, *Tanagra* or *Rhamphocelus* upon a seed-diet.*

My second example of *Tanagra ornata* died during its autumn moult this year ; it was one of a pair (or two) sent to me by our editor in the winter of 1903-4, and therefore had been in my possession nearly eleven years. My two male Scarlet Tanagers were purchased in the summer of 1897 and both are still in good health after nearly seventeen and a half years. Of course *Rhamphocelus brazilius* is one of the most easily kept of the Tanagers, but I think mine is a record even for that species.

The food which I give consists of " Cekto " mixed with an equal quantity of powdered chicken-meal, two hard-boiled eggs passed through a potato-masher and double the quantity of breadcrumbs ; banana, ripe pear or orange and grapes when obtainable ; insects or their grubs occasionally, and spiders. Upon this diet my Tanagers have done well and it is only during the moulting-season that they give the least cause for anxiety.

A. G. BUTLER.

Mrs. Reid writes that a pair of Brazilian Hangnests (*Icterus*) have eggs in her aviary at Funchal, Madeira, and that the birds seem to be taking matters seriously.

* For the benefit of members to whom these names are an unknown tongue, we may mention that *Euphonia* is represented by the Violet Tanager: *Calliste*, by the Superb, etc. : and *Rhamphocelus*, by the Scarlet Tanager. Dr. Butler gives a description of their food, etc., in his book " Foreign Finches in Captivity."—ED.

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Mr. R. MARLOW, 115, Manchester Road, Denton, Laucs.

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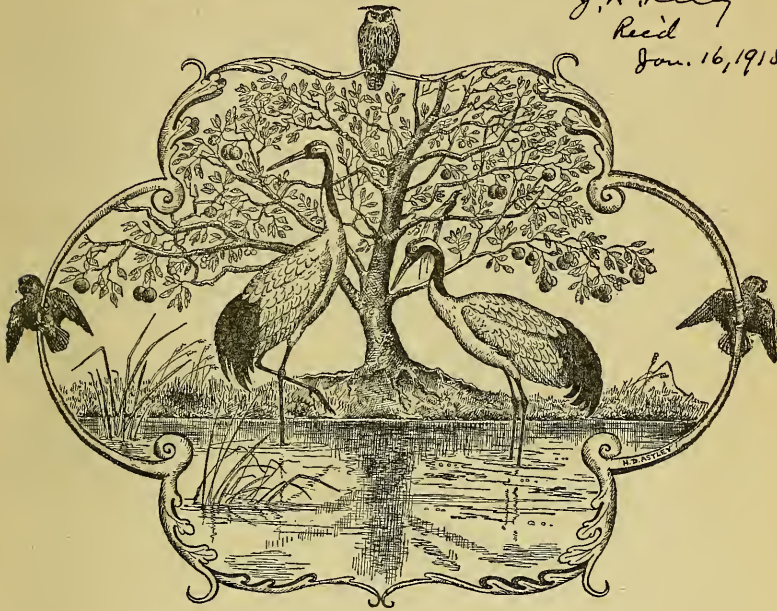
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*J. H. Riley
Recd
Jan. 16, 1915*



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ROSE-BREADED GROSBEAK

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Order—PASSERES	Family—FRINGILLIDÆ
Genus—ZAMELODIA	Species—LUDOVICIANA

THE
 AVICULTURAL MAGAZINE,

BEING THE JOURNAL OF
 THE AVICULTURAL SOCIETY.

Third Series.—Vol. VI.—No. 3.—*All rights reserved.* JANUARY, 1915.

THE ROSE-BREASTED GROSBEAK.

(*Hedymeles ludovicianus*).

By HUBERT D. ASTLEY.

An account of mine was published in the Magazine in September, 1911, Vol. II., 3rd Series, pp. 333, etc., of a pair of these Grosbeaks which nested in my bird-room, but as this species has not been illustrated I am taking advantage of the courtesy of the Editor of *Bird Lore* to have a coloured plate reproduced and to write a little more about one of the handsomest of the Grosbeak family. Indeed, the male can hold his own amongst a collection of many species when in his breeding plumage, with his mixture of black, white, and crimson.

The great ornithologist, Audubon, has written of the Rose-breasted Grosbeak, as follows:—

“One year, in the month of August, I was trudging along the shores of the Mohawk River, when night overtook me. Being little acquainted with that part of the country, I resolved to camp where I was, the evening was calm and beautiful, the sky sparkled with stars, which were reflected by the smooth waters, and the deep shade of the rocks and trees of the opposite shore fell on the bosom of the stream, while gently from afar came on the ear the muttering sound of the cataract.”

“My little fire was soon lighted under a rock, and spreading out my scanty stock of provisions, I reclined on my grassy couch . . . I closed my eyes and was passing away into the world of dreaming existence, when suddenly there burst on my soul the

“serenade of the Rose-breasted bird; so rich, so mellow, so loud in the stillness of the night, that sleep fled from my eyelids. Never did I enjoy music more: it thrilled through my heart, and surrounded me with an atmosphere of bliss.”

“I have frequently observed this beautiful species early in the month of March, in the lower parts of Louisiana, making its way eastward; and when residing at Henderson in Kentucky, and in Cincinnati in Ohio, I have noticed the same circumstance. At this early period it passes at a considerable height in the air, and now and then alights on the tops of the tallest trees of the forest, as if to rest awhile. While on the wing, it utters a clear note, but when perched it remains silent, in an upright and rather stiff attitude. It is then easily approached. I have followed its migrations into Pennsylvania, New York, and other Eastern States, through the British provinces of New Brunswick and Nova Scotia, as far as Newfoundland, where many breed, but I saw none in Labrador. It is never seen in the maritime parts of Georgia, or those of the Carolinas, but some have been procured in the mountainous portions of those States. I have found them rather plentiful in the early part of May, along the steep banks of the Schuylkil River, twenty or thirty miles from Philadelphia, and observed that at that season they fed mostly on the buds of the trees, their tender blossoms, and upon insects which they catch on the wing, making short sallies for the purpose.”

“The most western place in which I found the nest of this species was within a few miles of Cincinnati on the Ohio. It was placed in the upright forks of a low bush, and differed so much in its composition from those which I had seen in the Eastern States that it greatly resembled the nest of the Blue Grosbeak. The young, three in number, were ready to fly. The parents fed them on the soft grains of wheat, which they procured in a neighbouring field, and often searched for insects in the crannies of the bark of trees, on which they alighted sideways in the manner of sparrows. This was in the end of July. Generally, however, the nest of the Rose-breasted Grosbeak is placed on the top branches of an alder bush, near water, and usually on the borders of meadows or alluvial grounds.”

“It is composed of the dried twigs of trees, mixed with a few leaves and the bark of vines, and is lined with fibrous roots and horse-hair.”

Audubon goes on to write—“I am indebted to my friend, John Bachman for the following information respecting this interesting Grosbeak. One spring I shot at a beautiful male of this species in the state of New York. [When *will* man learn to be more merciful. The United States of America are now reaping the fruits of many, many years of promiscuous and selfish slaughter, *e.g.*, The Passenger Pigeon.—ED.] “It was wounded, Bachman continued, in one foot only, and although I could not perceive any other injury afterwards, it fell from the tree to the ground, and before it recovered itself, I secured it. Not having a cage at hand, I let it fly in the room which I made my study, Before an hour elapsed, it appeared as if disposed to eat: it refused corn and wheat, but fed heartily on bread dipped in milk. The next day it was nearly quite gentle, and began to examine the foot injured by the shot, which was much swollen and quite black. It began to bite off its foot at the wounded part, and soon succeeded in cutting it right across. It healed in a few days, and the bird used the mutilated leg almost as well as the other, perching and resting upon it. I procured a cage for it, to which it immediately became reconciled. It ate all kinds of food, but preferred Indian corn and hempseed. It appeared fonder of insects than birds of that genus are supposed to be, and ate grasshoppers and crickets with peculiar relish. . . . It frequently escaped from its cage, but never exhibited the least desire to leave me, for it invariably returned to some portion of the house at the approach of night.”

“Its song continued about six weeks during summer, and about two in the autumn.”

Mr. Frank M. Chapman in his book on the “Birds of Eastern North America,” writes:—

“There is no mistaking the black, white and rose costume of the Red-breasted Grosbeak, but the identity of his more modestly attired mate may long remain an open question. So little does she resemble him, that she might pass for an over-grown Sparrow with a rather conspicuous white stripe over the eye.”

“There is,” adds this author, “an exquisite purity in the joyous carol of the Grosbeak; his song tells of all the gladness of a May morning; I have heard few happier strains of bird music.”

This is the truth. The song of this bird somewhat resembles that of the English Blackbird; the Ouzel with its orange bill; but I think the key is higher and the tone sharper and more soprano. I do not mean to say it is superior, for to my mind the song of the Blackbird is as beautiful a song as can be heard, and none is more mellow, more sonorous. But that of the Rose-breasted Grosbeak is very joyous, very uplifting. When I first heard it last year coming from my aviaries, it was a still and sunny day in February, and the notes rang out clearly and sharply in the crisp air.

Great favourites of mine are the Rose-breasted Grosbeaks, difficult to obtain now in England, since their exportation is forbidden, and wisely so, by the authorities in the United States.

In the autumn the plumage of the male is dulled, the brilliant pointed patch of cardinal-rose on the upper breast fading almost away, and the sharply defined black with the white markings being suffused with brown, and broken. The immature male resembles the adult female, except that her under wing-coverts are *orange*, his being rose-red.

The eggs of this species $.90 \times .69$, are from three to five in number, pale blue with numerous olive-brown or rufous-brown markings.

AVIARY NOTES IN 1914.

By BERNARD C. THOMASSET.

My aviary was only built, or rather adapted, in 1913, for the shelter sheds were then pig-sties. It is of modest size and is in some ways only a make-shift structure.

It consists of two shelters each 10ft. \times 8ft. each with a flight 12ft. \times 8ft. It faces south, backing on to a large farm building. Unfortunately the shelters are rather low, only 8ft. high at the back and 6ft. at the eaves.

Ashmansworth stands nearly 800 feet above the sea, on

the top of the Hampshire Downs and we are subject to furious gales and a good deal of cloud and mist, especially in winter. One would think it a trying climate for foreign birds, but on the whole breeding results have been good.

A pair of Long-tailed Grassfinches purchased in the summer of 1913 have fully reared seventeen young ones in a year, in four broods.

Gouldian Finches, a Red-faced cock and a Black-faced hen, have also done well. Turned out in the summer of 1913, they remained in the aviary until the middle of last January. They were then brought into the house and spent the next four months in a large cage in a sitting room. There they moulted, and when turned out in May were in perfect plumage. They went to nest almost at once and reared six fine young birds; this was followed by a second brood of five, and later by a third brood of two—all being reared. The cock bird is a model father and took entire charge of the young ones when they left the nest.

While the young Goulds are in the nest, the parents consume quantities of seeding grass. The Long-tails, on the other hand, seem to rear their chicks entirely on dry seed.

My Brush Bronzewing Pigeons have brought up three young ones. The hen is apt to drop her eggs from a perch or on the ground and quite a number have been thus spoilt.

Diamond Doves have had continual nests but bad luck has pursued them. They were harried by the cock Bronzewing, and when at length a fine pair of young ones left the nest, these were killed by that spiteful bird. Since they were removed to an adjoining compartment, they have reared one bird, and now have two more in the nest.

Senegal Doves. This pair of birds is very timid and they desert nest after nest. They reared one young one until it could fly and then left it to starve.

The only other pair of birds consists of two Green Singing Finches. They made no attempt at nesting.

[*Nov. 1914.*]

REASON IN BIRDS.

By ARTHUR G. BUTLER, Ph.D.

We who keep living birds notice many instances of their reasoning powers, not only in their capacity for learning tricks for the gratification of their owners ; or, in the case of talking birds, of recognizing infallibly every member of a household by his name ; but in the more natural power of adapting themselves to circumstances in the construction of their nests and in learning by observation the method by which the doors of their cages may be opened and acting upon the knowledge obtained to the annoyance of their owners.

It used to be asserted that man differed from other members of the Animal Kingdom in his possession of reason, all others being guided by instinct ; but when one asks oneself what instinct is, one is forced to the conclusion that it is neither more nor less than inherited experience acquired through many generations of ancestors, who have had by reasoning and experiment to solve difficulties. As with the different races of mankind, birds are by no means equally gifted in their power of reasoning : consequently I suspect that there are many birds which could not be taught, like some of the small finches and parrots, to laboriously pull up their food and water in order to eat and drink. By the way, whenever I have seen an unfortunate Redpoll confined in a cage measuring perhaps 10 inches by 8 in floor-space and yet obliged to work for its living, it has always struck me as adding insult to injury. At the same time if birds were incapable of reasoning they would never be able to learn these futile tricks.

Once more, if Parrots were unable to reason, they would never be able to comprehend the practical meaning of certain sentences, such as " Give me a bit " or " Scratch her poll " as they undoubtedly do ; and they would certainly make mistakes in addressing the members of a household, as they undoubtedly don't. I am not at all certain that we don't very greatly underrate the intelligence of parrots as regards the comprehension of the things they say : their remarks are often most startlingly appropriate.

I have elsewhere pointed out how some of my birds, for obvious reasons, have entirely altered their mode of nidification,

Goldfinches and others having chosen to build in a Hartz-cage, because thus they had only to repel frontal attacks from other birds in the aviary, whereas in a bush they would have had to be on the alert at all points ; and of course we well know how many finches have acquired the habit of building in boxes, whereas in their wild state they were accustomed to building in a bush or tree ; but then finches do not seem to be quite so conservative as other birds in their methods of nidification since our common Sparrow is equally content to build his orthodox bag-like nest in a tree or merely to line a hole in a bank, wall or building, with straw and feathers : and a pair of Greenfinches which I caught nested without hesitation in a square Canary nest-box hung on the wires of their aviary.

This year, however, I was rather astonished by the behaviour of my female Hangnest (I discovered its sex by its dropping its eggs to smash on the floor of its ornamental aviary) : seeing that it was apparently restlessly searching for something, I supplied it with some long strips of bast, in the hope that it would construct a pendulous nest from the same and that I might be able to thereby secure perfect examples of its eggs for my cabinet. Well, at first everything looked propitious, it took a long strip of bast and hung it over a branch of fir (the top of a fir tree is suspended from the top of the aviary) ; it twisted this about for a time, then pulled it out and started afresh : presently, however, it seemed to change its mind and carried the strip into a nest-box (cigar-box type), and after this every strip was carried into that box and there the bird settled down, remaining in the box incubating nothing sometimes for hours at a time.

As we well know how many of the Old—and some of the New—World Starlings habitually build in holes ; the question came into my mind as to whether all Starlings originally nested in this manner and whether it would be possible to breed them all in this way now.

Of course the reasoning powers of the Starlings are very highly developed : I have pointed out previously that my older Hangnest, after watching me shut and fasten the door of his cage by turning a hook over into an eye, presently came down, passed his bill through the wire-netting lifted the hook over, pushed open the door and gave me twenty minutes hard work with a net before he could

be replaced : this he did on two occasions and his disgust was great when he attempted it a third time and discovered that I had added a second fastening to the door which he was unable to reach. This year my younger Hangnest let herself out of her little aviary in the same way and gave me some trouble : the hook of one of the doors had become slack and I had to bend it so that it closed with a spring and thus she was unable to lift it as before.

Now a bird which can watch its owner when he closes the door of its cage and say to itself " O, that's the trick is it? I'll do that presently and escape " is not a creature quite incapable of reasoning ; and even those, if there be any in these days, who believe that all created things are as they were at the beginning of the world, could hardly assert that it acted from "blind instinct"—a silly expression because instinct is never blind.

BIRDS OF PARADISE ON LITTLE TOBAGO (WEST INDIES).

In November, 1913, Third Series, Vol. V., No. 1 we published an account, with photographs, by Mr. Collingwood Ingram, and some additional notes by his father, Sir William Ingram, of the Birds of Paradise which were imported by Sir William and turned out on the island of Little Tobago.

Mr. O. MILLSUM has kindly sent notes of daily observations made later on by Robert Herold, who is engaged to watch the progress of the *Apodas*, and to protect them in any manner possible.

It will be remembered, by the way, that Mr. Millsum was for some little while, up to two years ago, at Everberg in Belgium ; where he tended the splendid collection of rare birds belonging to Monsieur Robert Pauwels, this collection having been entirely brought together under Mr. Millsum's direct supervision.

There is not much doubt that where once Monsieur Pauwel's aviaries stood, destruction and desolation, as is the case over nearly the whole of that ill-fated little country, reigns.

Mr. Millsum knows Louvain well, since it is only a few miles from Everberg, where he had under his care nine species of Paradise

Birds, comprising some twenty-five to thirty specimens. Anyone who knows Mr. Millsum knows also that they received constant and unremitting attention, for there is no aviculturist who is more keenly devoted to birds than he.

* * *

DAILY OBSERVATIONS AND REPORT ON LITTLE
TOBAGO, by BOBERT HEROLD, Caretaker.

Sent by O. MILLSUM.

August 1st, 1914. In Speyside.

„ 2nd. Cannot get boatmen on account of holiday.

„ 3rd. Arrive at Little Tobago at 6.40 a.m. Resuming of work, *viz.* clearing and planting of new paw paw ground. Heard loud calls from Apoda Hill and North Hill. Saw two female Apodas flying S.W. Saw two pair at feeding place, one young at Broadway. Heard calls from King Edward Road.

Afternoon. Went to North Hill and North Point. Saw one pair top of North Hill. Heard call below slope of North Hill. Went to King Edward Road, heard two calls from Waterhole. Saw female Apoda. At Broadway one male loudly calling at evening from Apoda Hill and feeding place.

August 4th. Weather dry. Work at clearing paw paw ground completed. Calls at early morning from Apoda Hill, North Hill and flat. One pair and one female at feeding place.

Afternoon. Went to Apoda Hill and Waterhole. Saw two females at Apoda Hill. Calls from South slope. Saw one male Apoda at Waterhole. Calls from top of Waterhole Hill. One female at feeding place, one pair at Broadway. Call from Mahoe Gully and King Edward Road. Calls from Apoda Hill at evening. Two females flying N.S., one female behind kitchen.

August 5th. Weather dry. Shot large Hawk at early morn. Calls from Apoda Hill and North Hill. Heard one call from north side of Alexandra Hill. Saw two females top of Waterhole. Call from Broadway, one female at feeding place, two calls from end of Waterhole.

Afternoon. Went to Guinea Point. Saw one female at King Edward Road, one female at Broadway. Call from Palm Grove and south slope of Apoda Hill. At evening two females flying N.S., two females flying over landing place S.E. Loud calls from Apoda Hill.

August 6th. Weather very bad, cannot go out, birds silent.

„ 7th. Weather clear. Loud calls from Apoda Hill, North Hill and flat. Went to Guinea Point. Saw one female at feeding place, one pair at Broadway, one male near by Dancing. Calls from East Road. Shot one Fowl (hen) and two half grown chicks.

August 8th. Weather very rainy. Birds silent during morning. Loud calls at evening from Apoda Hill. Saw two females flying N.S. One small shark in bay.

August 9th. Weather very clear. Loud calls from several points, also saw several males and females at North Hill. Apoda Hill, Waterhole and Broadway Road, one female in tree close by.

Similar reports continue, but Mr. MILLSUM quotes:—

REPORT IN GENERAL.

There is no change in the lives of the Apodas, they are as well as ever. In rainy weather they keep rather silent, but when it is fine they are heard all over the island. I have kept hidden half-way up trees, which I have climbed and which Apodas frequent, to make sure of the right shade of colour of head and throat of females, and I can say now with certainty that it is deep metallic indigo blue. All other parts of the body are brown, except at the end of belly, towards tail, a light greyish pink. I have received the colours from Mr. Brash and I shall try to colour the sketches of Apodas the proper shades. I shall forward sketches *via* New York. Fowls are seen again now and then. I have shot three, also a shark in the bay. All Hawks I have seen I have shot, they are very few and they are all strangers.

* * *

Mr. Millsum also sends an abstract of a letter written to Sir William Ingram.

When Mr. Brash visited the island he saw several Apodas,

viz., four females in one tree, two females flying close by when leaving for another place, one male Apoda flying towards Alexandra Road, and we heard several calls from different directions. Sitting in the gallery of the house he saw a large male passing North-South below house and a female later on. He also saw a female sitting at a long distance but before he could bear the glasses on it it disappeared. There can be no mistake at all between male and female Apodas. The male is, as you said, a larger bird than the female, and can be distinguished from a long distance even when flying, by its yellow colour at the back of its head. The female is all brown, but around the eyes and back of head, also part of throat there is a very deep colour which I take for very dark indigo blue. It may be a very dark purple brown. The female bird is certainly smaller and appears more slick. I shall write to-day to Mr. Brash for a few tubes of colour for myself, and then I will try to send you a coloured picture of male and female. I shall try to draw a little sketch now.

There are certainly two distinct colours in a female Apoda, but it is impossible to make a mistake as to the sex of the birds. I am very sorry Mr. Brash had no chance to view a male bird at close distance. Both males he saw were in flight. As to the number of the different sexes, I can state that there are six males, ten females, one young, sex unknown. These are the numbers I can vouch for. There may be two or three more, but there are certainly no less. It is impossible to say that there are exactly such a number of each sex on the island as they are never altogether to be seen and counted. I have done all that is possible to get a clear estimate, and what I have stated is the minimum, as I can run no chances in such an important matter. If the birds were not so restless and would keep together, it would not be so difficult, but they are such a disagreeable lot of birds and never keep up friendship with each other. So they are sometimes in pairs, mostly single and never in greater numbers than four or five, and those are rare occasions.

I have tried to explain matters as well as I can, but hope soon to send you sketches in colour, which will explain things better.

OUR PILFERING, CHATTERBOX FRIEND, THE MAGPIE.

CURIOUS FACTS ABOUT THE THIEF OF THE BIRD-
WORLD AND HIS DEPREDACTIONS.

By FELIX J. KOCH.

We were standing before a cage of large, black birds in the great City Park Zoo, out at Denver, watching the happy, chattering creatures, seemingly having the "time of their lives," while they flitted from bough to bough in the trees of their run, or circled round some nests they were building.

Jack Roosa had just been commenting how lovely the birds were—a foot and a half in length at least : head, neck, back and upper tail-coverts a jet black, while on the throat a stripe of grayish-white appeared, and there was the purest of white on the scapulars. In addition, the wing-coverts played a fine shiny blue, such as the purple-grackle will show in the sun-light. The birds appeared so well groomed, so immaculate, little wonder Roosa was impressed.

More than that, the entire flock of them seemed *so* solicitous about that nest. It was built as high up in the tree as they could conveniently get ; withal that, in the wild state, sometimes the birds will desert high trees for hedges—and outside there were sharp, thorny sticks, to keep out all intruders. Inside, however, the mother-bird had a downy bed of dry grass and roots, and, lest the rain pour in or the wind blow down, she was now preparing to cover this over with an intricate roof, making her entrance then at the side.

When this was completed she would lay her six or seven eggs inside it. "Beauty is what beauty does !" a voice remarked behind him, as the boy concluded, "Evidently you don't know in whose presence you are at this moment ?"

Jack flushed, wondering and puzzled : and we,—well, we had to admit we weren't so certain, either.

The attendant threw some food to the birds : then scenting the chance of a "tip," perhaps, went on :—

"Once upon a time—long, long ago—a humble serving-maid held a position in the home of a rich and powerful family. The girl had not held her place long enough to establish her reputation com-

pletely with her mistress, when, one day, a gold bracelet was missing.”

At once we recalled the story . . . in every school-reader.”

“Of course the maid was accused and she was condemned to be executed—as thieves were in those days—in the public square. A crowd assembled to witness the grim deed, the hangman placed a noose about the poor girl’s neck (who even here protested her innocence) . . . when, of a sudden, a bolt of lightning from the darkening skies rent a statue on the square and as it fell. . . .”

“Oh, I know now . . .” Perce interrupted, “of course! They found a Magpie’s shattered nest and in it the missing bracelet.”

“Yes, that’s Mr. Magpie, and he’s as wicked a thief to-day as he was in the centuries past. More than that, he’s not at all careful of his language.” One traveller, here last summer, told of a Magpie out before a place of business in Seward, Alaska, who keeps calling aloud : —

“Maggie’s a pretty bird ; a right pretty bird !” till a crowd collects, and then it rounds off with an oath of a blasphemous nature.

Jack Roosa levelled his camera to take a picture of the Magpies, and the keeper, slipping out a coin into his pocket, gratefully, drew a wallet from his inside coat pocket and produced a long paper.

“Here’s something may interest you,” he said, as he proceeded to read aloud much as follows :—

“The Magpie,” says Montagu,” is a great enemy to the husbandman and the preserver of game, but has cunning enough to evade their wrath. No animal food comes amiss to its carnivorous appetite, young poultry, eggs, young lambs, and even weakly sheep it will attempt to destroy, by first plucking out their eyes. The young of hares, rabbits and feathered game share the same fate ; fish, carrion, insects, fruit, and lastly, grain, when they can get nothing else.

“It is an artful noisy bird, proclaiming aloud any apparent danger and thereby giving notice to its associates. Neither the fox nor other wild animal can appear without being observed and

haunted ; even the fowler is frequently spoiled of his sport, for all other birds seem to know the alarming chatter of the Magpie.

“ This bird is easily tamed and chatters to those who feed him, imitates human voices and performs many amusing tricks. Like many of the Crow family, it has a strange desire to pilfer and secrete small, shining objects, especially pieces of money, and in this way is extremely mischievous when allowed to go about the house.

“ The Magpie is found throughout Europe,” (we remembered one, a pet, in a hotel court at Sara, on the East Adriatic), “ and is constantly seen in the meadows and fields of England, France, Germany and Italy. It is also abundant in the United States, though it is confined to the western regions, that is from Texas northward, through Louisiana, Arkansas, Missouri and the British dominions, to latitude 58.

“ Some naturalists suppose this must be a distinct species, as, by a strange instinct, it remains fixed in the unsettled territories of the West ; while in Europe it seems to haunt the abodes of man. It has, however, the same size, markings, structure and habits as the foreign Magpie, and is, therefore, supposed to be of the same species. Travellers in the west are sometimes very much annoyed with them, as they will often penetrate their tents and snatch the meat from the dishes, and if a horse chance to have a sore back, they will descend upon it and attempt to make a meal of the living flesh ! ”

“ That’s your thing of beauty, Jack,” we answered, teasing, as the man concluded.

“ I don’t care . . . ,” Jack had his answer. “ I guess I know a pretty bird when I see one. Anyhow, here’s for another snapshot of the birds,” and while the keeper took out a favourite in the flock, let it perch on his finger and chatter at him, Jack secured the unique picture of a real Magpie’s nest in an aviary.

“ Where’s Ethel ? Nellie ! Mother’s in the kitchen ! ” then, sub-rosa, plain and distinct as any human voice might be : “ Maggie, how’s that cold ? ” the famous bird of the Denver Zoo chattered. After this he coughed, scolded and began anew till the keeper set his tongue at rest with some coveted tit-bit or other from his pockets.

ENGLISH NAMES FOR THE PARROTS.

By Dr. E. HOPKINSON.

(Continued from page 78.)

- FIJI PARRAKEET, applied to two species of Fijian Parrakeets: (1) the SHINING PARRAKEET; (2) the TABUAN PARRAKEET.
- FINSCH'S AMAZON.
- FIRE-WINGED PARRAKEET, an occasionally used name for the ORANGE-WINGED PARRAKEET (*Brotogerys pyrrhopterus*).
- *FIRST BLACK-CAPPED LORY, Edwards' name for the THREE-COLOURED LORY.
- FORSTEN'S LORIKEET, *Trichoglossus forsteni*.
- FUNERAL COCKATOO, see BLACK COCKATOO.
- "FURA MATO," native name in Brazil for some of the CONURES, more particularly for the RED-EARED and WHITE-EARED CONURES.
- "GALAH," "GALAH COCKATOO," see ROSE-BREADED COCKATOO.
- GANGA COCKATOO, the GANG-GANG COCKATOO.
- "GANG-GANG," Australian vernacular.
- GANG-GANG COCKATOO, *Callocephalum galeatum*; also sometimes known as the GANGA C. Older names, RED-CROWNED PARROT (Latham), and HELMET COCKATOO. Australian vernacular, "GANG-GANG."
- "GARUBA," see GOLDEN CONURE.
- *GERINGORE, an obsolete book name for some of the BLACK COCKATOOS.
- *STELLATED GERINGORE, the WESTERN BLACK C.
- *GERINI'S PARROT, see under AMAZON, RED-THROATED.
- GILOLO ECLECTUS.
- GILOLO PARROT, see under ECLECTUS, GRAND.
- *GINGI PARROT, see under ALEXANDRINE PARRAKEET, CINGALESE.
- GLAUCOUS MACAW.=*Anodorhynchus glaucus*, one of the HYACINTHINE MACAWS.
- "GNIK-GNIK," South American native name for some of the Green Parrakeets of that region, such as the RED-EARED CONURE and ALL-GREEN PARRAKEET.
- GOFFIN'S COCKATOO, *Cacatua goffini*.
- GOLDEN CONURE, *Conurus guarouba*, sometimes known as the QUEEN OF BAVARIA'S PARRAKEET. Latham knew it under the two names, *BRAZILIAN YELLOW PARROT and *YELLOW MACAW-PARROT. Native names (Brazil) are "GARUBA," "GUARAJOUBA."
- *GOLDEN PARROT, a name used by Latham to describe a yellow variety of the rare RED-FACED PARROT (*Geoffroyus personatus*).
- GOLDEN-BACKED HANGING PARRAKEET.=*Loriculus chrysonotus*.
- GOLDEN-CROWNED CONURE, *Conurus aureus*, the GOLDEN-CROWNED PARRAKEET of Edwards, and RED AND BLUE-HEADED PARRAKEET

and BUFF-FRONTED PARRAKEET of Latham. Dealers, names : "YELLOW-BREASTED CONURE," "SUNHEAD CONURE," and "HALF-MOON PARRAKEET." The native name, "JENDAYA," is common to this and other allies.

GOLDEN-CROWNED HANGING PARRAKEET, *see* CEYLONESE HANGING P.

Golden-Crowned New Zealand Parrakeet, *see* next.

GOLDEN-CROWNED PARRAKEET. (1) *See* GOLDEN-CROWNED CONURE ; (2) = *Cyanorhamphus auriceps*, of New Zealand. Other names are GOLDEN-CROWNED NEW ZEALAND PARRAKEET, GOLDEN-HEADED PARRAKEET, YELLOW-FRONTED PARROT (usual name in N.Z.) ; *PACIFIC PARROT, VAR. C., and ? BUFF-FRONTED PARROT (Latham). Maori name, "KAKARIKI."

GOLDEN-FRONTED PARRAKEET. = *Brotogerys tuipara* ("TUIPARA," a native name). It is sometimes known as the TUIPARA PARRAKEET. Other names, RED-FRONTED PARRAKEET (Latham) ; CAYENNE PARRAKEET (? Latham).

GOLDEN-HEADED CONURE. = *Conurus auricapillus*.

GOLDEN-HEADED PARAKEET, *see* GOLDEN-CROWNED PARRAKEET (2).

GOLDEN-NAPED AMAZON, *see* under AMAZON.

GOLDEN-SHOULDERED PARRAKEET. = *Psephotus chrysopterygius*, sometimes incorrectly called the PARADISE PARRAKEET.

GOLDEN-WINGED PARRAKEET, Edwards' name for *Brotogerys chrysosema*. Also used for *B. chrysopterus* as well.

*GOLIATH ARATOO, an early name for the GREAT BLACK COCKATOO, *see* under COCKATOO.

GRAND ECLECTUS.

GRAND LORY, GRAND LORY, VAR. A., *see* ECLECTUS.

Grand VAZA, *see* VAZA PARROT, GREATER.

GRASS-PARRAKEET, (1) any member of the Australian genus *Neophema* ; (2) a generally used name for the BUDGERIGAR (q.v.), also popularly known as "ZEBRA GRASS-P.," "WARBLING GRASS-P.," and "AUSTRALIAN GRASS-P."

The GRASS-PARRAKEETS (*Neophema*) are seven in number and bear the following English names :

BLUE-BANDED GRASS-PARRAKEET.

BOURKE'S GRASS-PARRAKEET.

ELEGANT GRASS-PARRAKEET.

ORANGE-BELLIED GRASS-PARRAKEET, *N. chrysogastra*, the ORANGE-BELLIED PARROT of Latham ; also called ORANGE-BELLIED PARRAKEET.

ROCK GRASS-PARRAKEET. = *N. petrophila* ; "ROCK PARRAKEET" in Australia.

SPLENDID GRASS-PARRAKEET.=*N. splendida*; also known as the SPLENDID PARRAKEET, or the SCARLET-CHESTED GRASS-PARRAKEET.

TURQUOISINE GRASS-PARRAKEET.

GRASS-PARRAKEET, CRESTED, *see* COCKATIEL.

GREAT ALEXANDRINE PARRAKEET, *see* CINGALESE A. P., *under* ALEXANDRINE.

*GREAT BLEW AND YELLOW PARROT, MACHEO OR COCKATOON, *see* BLUE AND YELLOW MACAW.

GREAT BLACK COCKATOO, *see under* Cockatoo.

GREAT GREEN MACAW, the MILITARY MACAW.

GREAT MACCAW, *see* BLUE AND YELLOW MACAW.

GREAT PALM COCKATOO, *see* GREAT BLACK C., *under* Cockatoo.

GREAT VAZA.

GREAT WHITE COCKATOO. (1) Latham's name for the GREATER WHITE-CRESTED C., *see under* COCKATOO. (2) Sometimes also popularly applied to the GREATER SULPHUR-CRESTED C.

GREAT YELLOW-CRESTED COCKATOO, *see* GREATER SULPHUR-CRESTED C., *under* SULPHUR-CRESTED.

GREAT-BILLED ALEXANDRINE PARRAKEET, *see* ALEXANDRINE.

GREAT-BILLED BLACK COCKATOO (Gould).=*Calyptorhynchus macrorhynchus*, also known as the GREAT-BILLED C.

GREAT-BILLED C., *see above*.

GREAT-BILLED ECLECTUS, *see under* ECLECTUS.

GREAT-BILLED PARRAKEET, the GREAT-BILLED ECLECTUS.

GREAT-BILLED PARRAKEET, Muller's.=MULLER'S ECLECTUS.

GREAT-BILLED PARROT.=GREAT-BILLED ECLECTUS.

GREATER COCKATOO, *see* SALMON-CRESTED C.

GREATER PATAGONIAN CONURE, *see* PATAGONIAN CONURE.

GREATER RED-CRESTED COCKATOO, *see* SALMON-CRESTED C.

GREATER SULPHUR-CRESTED COCKATOO, *see under* SULPHUR-CRESTED.

GREATER WHITE-CRESTED COCKATOO, *see under* COCKATOO.

GREATER VAZA PARROT, *see* VAZA.

GREEN AND BLUE MACAW, the SEVERE MACAW.

*GREEN AND RED CHINESE PARROT, *see* ECLECTUS, RED-SIDED.

*GREEN AND RED INDIAN PARRAKEET, SMALLEST, *see* CEYLONESE HANGING PARRAKEET.

*GREEN AND RED PARROT FROM CHINA, *see* ECLECTUS, RED-SIDED.

*GREEN AND YELLOW PARROT FROM BARBADOES, *see* AMAZON, YELLOW-SHOULDERED.

GREEN CONURE.=*Conurus leucophthalmus*, the *PAVUAN PARRAKEET of Latham (also spelt PAVOUANE; sometimes PAVOUANE PARROT).

South American native names : "PAVOUANE," "MARACANA," "NEN-DAYA," and "ARAGUABY."

GREEN ECLECTUS, *see under* ECLECTUS, RED-SIDED.

GREEN GROUND-PARRAKEET, *see* GROUND PARRAKEET.

GREEN MACAW ; both the MILITARY and SEVERE MACAWS are sometimes thus designated.

GREEN MACCAW, BRAZILIAN, *see* SEVERE MACAW.

GREEN MACAW, SMALL, the NOBLE MACAW.

GREEN PARRAKEET, *see* ALL-GREEN PARRAKEET.

*GREEN PARRAKEET, GUIANE, *see* CUBAN CONURE.

"GREEN PARROT." (1) Tasmanian vernacular for the YELLOW-BELLIED PARRAKEET. (2) A common popular name for an AMAZON.

*GREEN PARROT FROM THE WEST INDIES, Edwards' name for the BLUE-FRONTED AMAZON.

*GREEN PARROT, LESSER, Edwards' name for the YELLOW-CHEEKED A.

*GREEN PARROT, LITTLE, Edwards' name for the ACTIVE AMAZON.

*GREEN PARROT, MANILA, *see* BLUE-CROWNED ECLECTUS.

*GREEN PARROT, MEALY (Latham), the MEALY AMAZON.

*GREEN PARROT, NEW GUINEA, one of Latham's names for the male RED-SIDED ECLECTUS, *see under* ECLECTUS.

*GREEN PARROT, WEST INDIAN, *see under* AMAZON, BLUE-FRONTED.

GREEN-CHEEKED AMAZON.=*A. viridigena*.

"GREENLEEK," "GREENLEEK PARRAKEET," Australian vernacular for BARRABAND'S PARRAKEET.

GREEN-NAPED LORIKEET.=*Trichoglossus cyanogrammus*, also called the GREEN-NAPED LORY. One of the species to which Latham's name *RED-BREASTED LORY belongs.

GREEN-NAPED LORY, *see above*.

GREEN-TAILED LORY.=*Lorius chlorocercus* ; *see under* PURPLE-CAPPED LORY (5).

GREEN-WINGED MACAW.=*Ara Chloroptera*, the RED AND BLUE MACAW of Latham ; also known as the RED AND YELLOW MACAW. Native names, "ARACANGA," "ARARACANGA."

*GREY COCKATOO, one of Latham's names for the GREAT BLACK COCKATOO, *see under* COCKATOO.

GREY PARROT, *Psittacus erythacus*. Early names are : *RED AND WHITE PARROT (Latham) ; *CINEREOUS PARROT (Latham) ; *ASH-COLOURED PARROT (AND VARS. A., B., & C.) ; *HOARY PARROT. Sometimes known as the COAST GREY PARROT, or RED-TAILED GREY PARROT. Common popular names are "POLL," "POLLY," "POLL PARROT," and older ones (probably originally native) "JACKO," "JACO," "JAKO." Obsolete English names (for this bird specially, but also including other Parrots) *POPINJAY, *POPINGAY (and other variants) ;

*PSITTAKE, a purely book name. The variety with more or less red mottling is commonly known as a "KING PARROT," and was described by Edwards under the name, *ASH-COLOURED AND RED PARROT.

GREY PARROT, COAST.

GREY PARROT, RED-TAILED, *see above*.

GREY-BREADED PARRAKEET, the QUAKER PARRAKEET.

GREY-HEADED LOVEBIRD,

GREY-HEADED PARRAKEET, the MADAGASCAR LOVEBIRD, *see under*
LOVEBIRD.

GREY-HEADED PARROT, an early book name for the SENEGAL PARROT.

*GRISLED PARROT.

*GRIZZLED PARROT, *see under* ECLECTUS, GREAT-BILLED.

GROUND-PARRAKEET.=*Pezoporus terrestris*, of Australia, the GROUND PARROT of Latham. Other book names: GREEN GROUND PARRAKEET, LONG-TOED GROUND PARRAKEET, *BLACK SPOTTED PARRAKEET. Popular names in Australia are "GROUND PARRAKEET," "SWAMP PARRAKEET." (2) a vernacular name for the ELEGANT GRASS-PARRAKEET in parts of Australia. (3) Book name to include the two Australian genera *Pezoporus* and *Geopsittacus*, the GROUND PARRAKEET and NIGHT PARRAKEET.

GROUND PARAKEET, CRESTED, *see* COCKATIEL.

GROUND PARRAKEET, GREEN, *see* GROUND PARRAKEET.

GROUND PARRAKEET, LONG-TOED, *see* GROUND PARRAKEET.

GROUND PARROT (1) Latham's name for the GROUND PARRAKEET.

(2) New Zealand popular name for the OWL-PARROT.

"GUARAJOUBA," *see* GOLDEN CONURE.

GUATEMALAN AMAZON.=*A. guatemalae*.

*GUEBY LORY, *see under* RED LORY (6 and 7).

*GUEBY LORY, VAR. A., *see under* RED LORY (7).

*GUEBY PARROT, *see* GRAND ECLECTUS, *under* ECLECTUS.

*GUERY LORY, *see under* RED LORY (6).

GUIANA LOVEBIRD, the GUIANA PARROTLET.

GUIANA PARROTLET, *Psittacula guianensis*, one of the AMERICAN "LOVEBIRDS." The GUIANA LOVEBIRD. ?=Latham's BLUE-WINGED PARRAKEET, which, however, may have referred to the PASSERINE PARRAKEET.

*GUIANE GREEN PARRAKEET, *see* CUBAN CONURE.

GUILDING'S AMAZON.=*A. guildingi*.

*GUINEA PARRAKEET, *RED-HEADED GUINEA PARRAKEET (Latham), the RED-FACED LOVEBIRD, *see under* LOVEBIRD.

*GUINEA PARROT, *RED-HEADED GUINEA PARROT, *ditto*.

*GUINEY SPARROW (Edwards), the RED-FACED LOVEBIRD.

HAHN'S MACAW, *Ara Hahni*, the *PAVOUANE PARROT, VAR. A., of Latham.

"HALF-MOON PARRAKEET," a dealers' name for the GOLDEN-CROWNED CONURE (q.v.).

HALMAHERA ECLECTUS.

HALMAHERA PARROT, *see under* ECLECTUS, RED-SIDED.

HANGING PARRAKEET, a bird of the *genus Loriculus*.

BLUE-CROWNED HANGING PARRAKEET.

CEYLONESE HANGING PARRAKEET.

CHROME-HEADED H. P., an occasional name for the CEYLONESE H. P.

GOLDEN-BACKED HANGING P.=*L. chrysonotus*.

GOLDEN-CROWNED H. P., the CEYLONESE HANGING P.

INDIAN H. P., the VERNAL HANGING PARRAKEET, *see below*.

JAVAN HANGING PARRAKEET, *L. pusillus*, also known as the YELLOW-THROATED H. P. The *PHILIPPE PARROT, VAR. A., of Latham.

PHILIPPINE HANGING PARRAKEET.=*L. philippensis*. The *PHILIPPINE PARRAKEET and *LUZONIAN PARRAKEET of Latham.

RED-FRONTED HANGING PARRAKEET.=*L. stigmatus*. Celebean native name, "TINTIS."

RED-NAPED HANGING P.?=SCLATER'S H. P.

SCHLECTENDAL'S H. P., *see* SCLATER'S H. P.

SCLATER'S H. P.=*L. sclateri*. Also SCLATER'S PARROTLET, SCHLECTENDAL'S H. P., and ?=RED-NAPED H. P.

SPRING H. P., *see* VERNAL H. P.

VERNAL HANGING PARRAKEET.=*L. vernalis*. INDIAN HANGING PARRAKEET. The VERNAL PARRAKEET of Latham. Other names, SPRING HANGING PARRAKEET, INDIAN LORIQUET, RED-RUMPED LORIKEET, RED-RUMPED DWARF-PARROT. Dealers' names: "CRIMSON-RUMPED LORIKEET," "RED-TAILED LORIKEET," "RED-THROATED LORIKEET."

YELLOW-THROATED H. P., *see* JAVAN H. P., *above*.

HANGING PARROT, a HANGING PARRAKEET.

HAWK-PARROT, the HAWK-HEADED PARROT.

HAWK-PARROT, CRESTED, *ditto*.

HAWK-HEADED CAIQUE, the HAWK-HEADED PARROT.

HAWK-HEADED PARROT (Edwards, Latham).=*Deroptyus accipitrinus*. Also known as the HAWK-HEADED CAIQUE, HAWK-PARROT, CRESTED HAWK-PARROT, Earlier names were, *COCKATOO OF GUYANE, *HOODED PARROT, *CROWNED COCKATOO (Latham), *RUFF-NECKED PARROT (Latham), CRIMSON AND BLUE-COLLARED PARROT.

HELMET COCKATOO, *see* GANG-GANG COCKATOO.

*HOARY PARROT, *see* GREY PARROT.

HOODED PARROT (Latham).=*Pionopsittacus caica*, of South America.

Sometimes known as CAICA PARROT. ?=Latham's *CROWNED

PARROT* (COWLED PARROT). (2) A name sometimes used for the HAWK-HEADED PARROT.

*HOODED PARROT, VAR. A. (Latham) ?=NANDAY CONURE.

HORNED PARRAKEET, *Nymphicus cornutus*, the HORNED PARROT of Latham.

HORNED PARROT, *see above*.

*HOWE'S ISLAND, PARROT FROM, *see* AMBOINA PARROT.

HYACINTHINE MACAW, any MACAW of the genus *Anodorhynchus*. Specifically *A. hyacinthus*. The other two members of the genus are LEAR'S and the GLAUCOUS MACAW.

ILLIGER'S MACAW.=*Ara maracana*.

*ILLINOIS PARRAKEET (Latham), *see* ST. THOMAS' CONURE.

IMPERIAL AMAZON, the AUGUST A., *see under* AMAZON.

*INCA, an obsolete book name for LEADBEATER'S COCKATOO.

INDIAN HANGING PARRAKEET, the VERNAL H. P., *see under* HANGING P.

INDIAN LORIQUET, *see* HANGING PARRAKEET, VERNAL.

*INDIAN LORY (? INDIAN LORY, VAR. A.), a name of Latham's which is considered to have applied to the BLUE-TAILED LORY. *See under* RED LORY (3).

INDIAN PAROQUET, LARGE, *see* ALEXANDRINE PARRAKEET, NEPALESE.

*INDIAN PARRAKEET (OR PAROQUET), SMALLEST GREEN AND RED, *see* CEYLONESE HANGING PARRAKEET.

*INDIAN PARRAKEET, RED AND GREEN, *see* CEYLONESE HANGING PARRAKEET.

INDIAN RING-NECKED PARRAKEET, the ROSE-RINGED PARRAKEET.

INDO-BURMESE ALEXANDRINE PARRAKEET, *see under* ALEXANDRINE.

*INSEPARABLE, an old book name for any LOVEBIRD.

*INSEPARABLE, AFRICAN, the RED-FACED LOVEBIRD, *see under* LOVEBIRD.

*INSEPARABLE, DOUBLE, the ROSY-FACED LOVEBIRD, *see under* LOVEBIRD.

*INSEPARABLE, MADAGASCAR, the MADAGASCAR LOVEBIRD, *see under* LOVEBIRD.

*JACATOO, an obsolete corruption of COCKATOO.

"JACKO," "JACO," "JAKO," *see* GREY PARROT.

JAMAICA BLACK-BILLED GREEN PARROT, *see* ACTIVE AMAZON.

JAMAICA PARROT. (1) One of Latham's names for the ORANGE-WINGED AMAZON. (2) An alternative name for the RED-THROATED A. *See under* AMAZON.

*JARANCA LORY, *see* RED-FRONTED LORY.

JARDINE'S PARROT.=*Poeocephalus gularis*.

JAVA COCKATOO, *see under* SULPHUR-BREASTED COCKATOO.

JAVAN ALEXANDRINE PARRAKEET, *see* JAVAN PARRAKEET *below*.

JAVAN HANGING PARRAKEET.

JAVAN PARRAKEET (Shaw, Latham). = *Palaeornis alexandri*. Also called JAVAN ALEXANDRINE PARRAKEET, ALEXANDRINE PARRAKEET, *ALEXANDRINE PARRAKEET, VAR. E. (Latham), JAVAN PARROT (Latham), *WHISKERED PARROT (Latham), *MOUSTACHOE PARRAKEET (Shaw). Common dealers' names are: "JEW PARRAKEET," "MOUSTACHE PARRAKEET," "MOUSTACHE PARROT," and "MALACCAN MOUSTACHE PARROT." Javan native name, "BETTET."

JAVAN PARROT, *see* JAVAN PARRAKEET.

"JENDAYA," native name for the YELLOW-HEADED CONURE, also for the GOLDEN-CROWNED CONURE, and probably for other similar birds. As a popular English name, indicates the YELLOW-HEADED CONURE.

To be continued.

OBITUARY.

BOSCAWEN.—Killed in action on the 29th of October, near Ypres, Second Lieutenant the Honble. Vere Douglas Boscawen, Coldstream Guards, third son of Viscount and Viscountess Falmouth, aged twenty four.

It is with the deepest regret that we have to record Mr. Vere Boscawen's death on the battlefield.

He was a member of our Society who always read the Magazine with the greatest interest, and his intense love of birds, and especially perhaps of Waterfowl, was a very real one. When he first went out to the war, having a free day before going to the fighting front, he employed his time in visiting some well-known resort of wildfowl in France, several miles away.

His personality was full of a great charm, with a gaiety, simplicity, and gentleness of spirit out of the common. No one who knew him well could but feel for him strong affection. For some weeks it was hoped that he was wounded and a prisoner of the German army, and it was not until the second week of December that his death was known of.

PLEASE NOTE!

Will members most kindly assist the Editor by supplying articles and notes, if they possibly can? Members who have friends or relatives in Africa, India, etc. could perhaps obtain 'copy' from them.

CORRESPONDENCE, NOTES, ETC.

THE KINGFISHER.

SIR,—I am sure many members of the Avicultural Society will wish that your interesting article in last month's number of the Magazine had been carried a little further, and had indicated with more detail the methods and difficulties of keeping Kingfishers in captivity.

I have never myself noted more than two instances of private individuals keeping them with any measure of success. One instance was that of a man who, after several efforts, netted in a long length of a natural stream well stocked with small fish, and kept a Kingfisher in the enclosure; and in this case it is only in a limited sense that the Kingfisher could be said to be in captivity. The other instance I have in mind was recorded at length a few years ago in "The Fishing Gazette" where one of a pair of Kingfishers having been wantonly destroyed, a man took the young birds and fed them for a time by hand. His life during the period of rearing was apparently rendered more or less miserable by having to feed at intervals nearly all the 24 hours, and if I recollect rightly he had to provide 200 minnows a day.

It seems quite impracticable for the ordinary individual to follow either of the above courses, and a possible solution of the difficulty to my mind would be if young Kingfishers could be hand-reared and got on to some sort of artificial food. I wonder if anyone has attempted this, and if so with what measure of success. It sounds very difficult, but after seeing Mr. Wormald's famous hand-reared Snipe I should not despair. If success could be attained it would be worth a determined effort.

There is one paragraph in your article respecting which I should like to offer with the greatest humility a mild friendly criticism, and that is where you say "If the Kingfishers do prey upon very small trout, and as a rule these birds are to be found in the smaller backwaters where minnows abound and form their food, cannot some be spared for these lovely creatures?"

To cast any doubt on the destructiveness of Kingfishers to trout is to my mind from a bird-lover's point of view adopting a position which cannot be defended and giving the enemy an opportunity to blaspheme. Overwhelming evidence is constantly being furnished from trout hatcheries and elsewhere as to the destructiveness of Kingfishers to trout fry, and under natural conditions King-

fishers are habitually to be found on the small tributary streams of larger rivers, which are just the places where trout go to spawn and where the fry are for some months quite defenceless. If Kingfishers only fed on larger trout they would not be so bad.

I venture to think that a safer ground of argument for preservation of Kingfishers is that one has to choose between conflicting forms of life, and that those who prefer Kingfishers to trout will let the Kingfishers do their worst, but that it must be recognised that both Kingfishers and trout cannot happily exist together. The fact that Kingfishers are often found near trout streams does not conflict with this statement, because under present conditions Kingfishers are kept down to a very small numbers or enormous numbers of trout have to be supplied artificially to make up for depredations. There are a great many areas in England where dace, minnows, etc., are found in abundance and no trout exist, and these areas will support any number of Kingfishers.

As regards the destruction of the birds for purposes of stuffing or for ladies' hats, surely the true ground of attack is (a) that in the words of an Eastern proverb "A live dog is better than a dead lion," and (b) that it is uneconomic to destroy so great a proportion of the breeding stock, which is already severely limited by the advance of civilization.

C. BARNBY SMITH.

* * *

I was unable to indicate with more detail the best methods for keeping Kingfishers in captivity, since I have never attempted it.

Of course Mr. Barnby Smith is correct in stating that trout fry are found in the small tributary streams of larger rivers, since the adult fish use them for spawning, but in a natural state of things a sufficient number must eventually grow up to fall a prey to man instead of to the Kingfishers, setting aside the question of minnows. When I first went to live in Berkshire, with a goodly portion of the Kennet flowing through the property, the trout-fishing had not been preserved on a long reach of the river near the house, yet one could always kill some good fish, in spite of three or four Herons and a sprinkling of Kingfishers, not to mention Otters. In former days, before trout were artificially reared, when Kingfishers and other fish-eating birds were in greater abundance, there must surely have always been trout, enough and to spare.

The truth is mankind is extraordinarily greedy and tenacious of what it considers are its rights. There is oftentimes too much of the spirit which strives to acquire and hold on to what it looks upon as having a claim to possess, which spirit we see fully brought to bear in all its horrors by the German nation in this wicked war. The English are, to the Germans, above all others, the Kingfishers who dare to trespass on their rights of full possession. They are not satisfied with sufficient trout, they must have all!!

HUBERT D. ASTLEY.—ED.

NOTICES TO MEMBERS—(Continued from page 11. of cover.)

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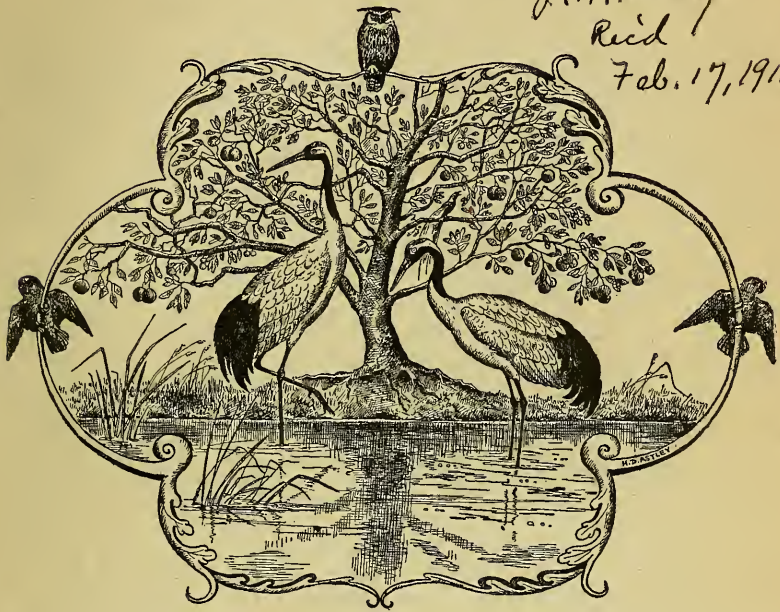
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Feb. 17, 1915.



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Third Series.—Vol. VI.—No. 4.—*All rights reserved.* FEBRUARY, 1915.

MY HUMMING BIRDS, AND HOW I
 OBTAINED THEM.

BY A FRENCH MEMBER OF THE SOCIETY.

November, 1914.

. . . . And first of all I wish to say that I feel the time somewhat ill-chosen to write about my birds,—when this country still feels the tread of the German heel, and so many daily give their lives to save it, as well as dear old England, from further indignities. But our Editor received my promise of this little contribution of mine to his great and incessant work, as many months back as last April,—and the time has come to fulfil it at last.

It was in February last we set out for the West Indies, intent on bringing back Humming-birds to Europe. Our success, or rather our luck with many species of African Sun-birds, had made us bolder, and preparations had not been spared to ensure, as we thought, a good number of Hummers being obtained in the islands we were to call at, in going and returning. I don't propose to dwell here on the horrors of a journey that resolved itself into a succession of gales, varied, on board, by an epidemic of small-pox among the black soldiers bound for Martinique; or on discomforts, personal to myself, that resulted from my occupation of cabins which were described as the best, yet turned out to be very much the worst for their stuffiness and noisy position. Then, in our eagerness to obtain the birds, we had not reckoned with such difficulties as the stupidity of officials, native slackness and lack of initiative; and, of course, port upon port was passed, yet no Humming Birds appeared. "It

was the wrong time of the year" (it always is); or the people "had thought it useless to procure birds that could not possibly live in captivity," etc., etc. In short, our expedition looked exceedingly like a failure, until luck turned at last and brought better prospects. It was March 9th, 1914, our steamer rode at anchor off the little harbour of Basse-Terre, in the island of Guadeloupe, when at about 11 p.m. I was roused from peaceful slumbers and informed that a cage full of Humming-birds had just been taken on the ship. They were in a bamboo cage, about half-a-dozen of them, in fairly good condition, being fortunately, freshly-caught birds,—most had been captured that very day. We discovered two species: *Eulampis holosericeus* and *Eulampis jugularis*.^{*} And gorgeous they looked under the glare of the electric lamps in the cabin, the latter especially, in their dress of purplish velvet, with a huge ruby shining at the throat and sapphire at the base of the tail; their long, slender bodies and sickle-shaped wings, clinging, bat-like, to the sides of the cage, their tiny claws clasping its bars, wild terror reflected in their attitude and in their brilliant eyes. In less than ten minutes we had boiling water, and the syrup was offered them in little tin-feeders, similar to those used for my Sun-birds. Some would not look at it, but several, I noted with joy, soon decided that desirable food lessens most sufferings, and were speedily lapping it up, inserting their long, thin beaks into the small holes provided for the purpose in the lid of the tins. A note from the catcher, delivered with the birds, informed me that, as desired, a pair of Banana-Quits had been obtained and put in with the Hummers; also that I must be careful to leave the latter in their company, as the quits would act as teachers "to the hummers," who, without their guidance, would not eat the food, and would assuredly starve themselves to death. This, however, proved to be one of the many ridiculous legends prevalent in the islands with regard to these birds: for their greed greatly exceeds their timidity which latter is apparent, not real, and vanishes incredibly soon, and they generally yield to the temptations of the syrup, if they are only held in the hand, whilst their beaks are dipped in the mixture. To

^{*} Mr. A. Ezra successfully exhibited *E. jugularis* and *Sporadimus ricordi* at the Cage Bird Show in the Horticultural Hall (London) in November 1914.

return to the Quits, a strange thing regarding them was that, although the message mentioned two birds, only one was in the cage as it was hauled up from the small boat that conveyed it on board the liner. I thought that one must have in some most unaccountable manner effected its escape,—but early the next morning, while the ship was steaming along the coast of the islands, on her way to the next port, the smoking-room steward caught another Quit as it flew into his bar and brought it to me. These two made up the pair, and thrive with me to this very day: but whether they were the two original ones, and the lost one, by calling to its mate, effectually enticed it over from the land while we were at anchor, or whether the second was a straggler of the wandering type, is a problem that can never be solved, though for reasons of romance I choose to cling to the former belief. And before I leave the subject of my Quits, I must state they are a new importation, quite unlike the common species (*Certhiola flaveola*), and belong to a local variety known as *Certhiola dominicana*,—a trifle larger than the former, much darker on the head, and a more vivid orange on the chest, in the case of the male. They utter a shrill, hissing, drawn-in kind of cry, similar to the sound produced by locusts, and to my mind equally suggestive of sultry summer days of sun-baked lands.

The morning following the happy advent of our first batch of Humming Birds saw us entering the palm-studded harbour of Pointe-à-Pitre, the capital of Guadeloupe. There, owing to the epidemic of small-pox I have mentioned, we were quarantined, and only stayed a few hours. But a second lot of Hummers came on board. Most of these had been caught some few days and fed according to the recipe given. Many had become soiled with the syrup and consequently looked seedy; for a hummer, as everyone knows (or should know), depends more than any other bird on its wings. The physical misery and discomfort caused by inability to fly, even momentarily, means for this swift, impatient, gnat-like creature of the air, complete immobility and often death through fretting. However, the new arrivals were quickly cleaned, distributed amongst the various cages, and we found we had in all a little over twenty birds belonging to three species, thus making up the

complete collection of the varieties that exist in the island. Of the third, *Bellona exilis*, the tiniest of all, only two or three specimens had been captured, and of these one survived and was successfully landed. A wonderful little fellow, hardly bigger than a bumble-bee, yet perfect in his minute size; a little gem clad in lavender-greys and soft greens, with a huge helmet or topknot, flashing emerald and sapphire lights, always alert, perky, lively as a cricket on a summer's day, he would buzz about in his little cage, hardly ever resting, even through the terrific storms that awaited us off the Spanish and French coasts. After his safe arrival and for many months he was my greatest joy, and excited the envy of all who came to see him. Alas! a few weeks ago, the end came: he had not moulted out properly during the warm days, and having lost some wing-feathers, yet not produced the new ones in good time, had lost the power to fly, and died of no other apparent cause, early in the present month (November), after being in my possession over seven months.

The first few days that followed our departure from Guadeloupe, homeward bound, were days of anxiety. Some of the Humming Birds took readily to the food and never gave any trouble; but others had to be fed by hand, at regular intervals, before they made up their mind that captivity was not so bad after all and life worth living yet. This was really hard work: for hummers appear to need an enormous amount of nourishment, and the business of catching each in turn and patiently holding the little creature over the syrup until he began to sip it up, had to be unceasingly repeated. To make matters worse, we met strong trade-winds with heavy seas directly we sailed out of Pointe-à-Pitre. The big vessel pitched and rocked, causing her passengers no little discomfort; then the cabin we had chosen specially for the birds,—a large, very light room with four windows,—from its high position on the bridge-deck, intensified each roll of the boat; occasionally a Humming Bird would escape from our hands, and of all ordeals perhaps this was the worst. Imagine running, or rather tumbling, round and round a large room, full of furniture, cages and trunks, on a tossing ship, a cloth in one hand and cap in the other,—for we had no net,—after a bird for whom flying is no exertion whatever, and whose firm intention next to dodging the pursuer, is never to perch at all. Indeed, I don't know



GARNET-THROATED HUMMING BIRD.
(EULAMPIS JUGULARIS).

how long a Humming Bird can fly in wild life without alighting, but I *do* know that it is nothing for him to keep on the wing, under the above conditions, for half-an-hour and more. However, these and other difficulties counted as little against the joy of observing the little hummers' progress. After two days, all without exception would eat from the feeder if the latter were just offered to them,—for such was the next step to actual hand-feeding,—and after less than a week all ate heartily and of their own accord. Of course, there were the usual losses inseparable from the importation of wild birds, the weaker ones dying in sad though speedy succession; but on the whole more than half soon settled down and could be pronounced as saved. Meanwhile, we had reached and passed the Azores: the weather became colder each day, necessitating the constant use of the radiator in the room; the wind and sea rose higher and higher, until, when a day off Santander, we encountered the worst storm of the journey, which went on steadily gaining in violence for the final three or four days. Days of helpless, silent misery, during which the cages had to be lashed around the walls of the cabin, whilst the vessel heaved in and out of the mountainous seas, burying her nose among rollers that broke on our deck, over the bridge, with an infernal and incessant roar. But the little birds did not mind at all: in fact, they seemed not to notice the motion or noise; they continued feeding, humming and buzzing through the storm quite unconcernedly. At last, about the second half of March, after a crossing of some ten days from Guadeloupe, we reached our port of destination. A motor, which awaited us at the docks, conveyed the cages, carefully wrapped up in thick flannels and warmed by several hot-water bottles, to a heated and reserved compartment in the train; our troubles were over, and success achieved so far.

(To be continued).

MY BROWN-NECKED PARROT.

Psephenus fuscicollis.

By HUBERT D. ASTLEY.

In the *Avicultural Magazine* of Feb., 1910, Dr. Hopkinson gave a most interesting account, accompanied by an excellent illustration of what someone was pleased to entitle as the Brown-necked Parrot, which someone must have been completely colour-blind. To begin with there is no brown about the bird at all, and secondly why "brown-necked"? for the whole head and neck to the shoulders is of the same colour, a difficult colour to describe I admit; but it is no more brown than it is blue or yellow! I should venture to call it silvery-grey, suffused with dull rose pink, that is to say each dull pink feather seems to have a silvery grey edging. "Silvery-headed" would have been nearer the mark. But there it is, some birds have names which make one wonder whether those who christened them were not what is called "ga-ga."

Now Dr. Hopkinson described this Parrot not only as difficult to keep alive but also as untractable, a biter and a screecher. Indeed any aviculturist after reading his most interesting article would undoubtedly say "Thank you, no Brown-headed Parrot for me." Have I found the exception to prove the rule? Mr. Cross wrote to offer me one which he said was very tame and had evidently been made a pet of. Mike arrived on the 29th September, 1914, and was consequently, without much self-congratulation as to originality, christened after the archangel.

And Mike is quite worthy of taking his place in St. Michael's angelic hosts, for wings he has, and an angelic temper too.

He's never happy unless he can sit on my shoulder, delighting in being handled, and making no end of a fuss when in his cage until one takes him out.

As yet he doesn't talk, but he tries his very best, and can imitate the sound of kissing and other such canoodling noises; but *scream*—never once have I heard him.

And he's a very gay spirit too, nothing morose, nothing stupid about Mike, with his dark brown eye full of intelligent expression.

Let me remind others, or inform them as the case may be, that he has for first cousins such things as the Grey Parrot, Jardine's and Meyer's, and that his native home is Africa, in the Gambia. As Dr. Hopkinson has told us, and as the illustration facing p. 107 of Vol. I., 1909—1910, will show you, this Parrot's bill is abnormally large, which feature one grows accustomed to in time, ending by thinking that this fine development of the nasal organ lends dignity, and if he took snuff what a fine pinch he could put in, not that he couldn't put that in anyhow.

[Who was it, bye-the-bye, who on being offered a pinch of snuff by the Regent, answered, "I thank your Royal Highness, but if "the Almighty had intended me to take snuff, he would have "turned my nose up the other way."]

My Parrot, I suppose I must say Brown-necked Parrot, is a frugal eater, but makes no fuss about not being supplied with ground-nuts. He partakes of a Parrot mixture of various seeds, drinks water and eats apples.

There is one of this species in the Parrot House of the London Zoological Society, and I remember seeing one in the Zoo at Amsterdam; but they don't grow on gooseberry bushes. By no means.

FIVE NESTING FAILURES & FOLLIES.

By C. BARNBY SMITH.

There are some sins of which one never sincerely repents, and in my case one of these is the awful waste of time spent in watching game and marsh birds with nests or young.

There is for me a fascination about this, quite out of all proportion to possible benefits derived for aviculture.* During the past season I have watched several interesting nesting failures in my garden, and give notes of five such.

I. A pair of my Cayenne Spur-winged Plover in March began to make that incessant chatter and posturing which indicate

* Much knowledge would be lost to aviculturists without this prolonged and quiet watchfulness by lovers of wild life.—ED.

desire to nest. I accordingly placed them in a small grass run apart from other birds, and they very soon made a small "scrape" for a nest quite close to where the gate of the run opened. I knew this would never succeed, and after some trouble induced them to adopt a better nesting site, where four eggs were laid. My hopes were then great, but, alas, a small rat managed to squeeze into the run and accounted for all the eggs. I shortly afterwards took out the parent birds and foolishly placed them in a run with some other non-nesting Cayenne Plover. The hen was killed within four hours, and the cock had to be taken out (a disreputable looking bleeding object) to recover in solitude.

2. My Glossy Ibis make some half serious attempts at nesting every summer, but so far it has always been a case of "much cry and little wool." I have provided them with a large nesting platform about four feet from the ground and consisting of wire netting (slightly dished) covered with birch twigs and rushes, and I always give fresh loose material each season. This season the nesting operations extended from mid-April to the end of July—both cock and hen continually moving the twigs and rushes and piling them into a little heap in one corner of the platform. They would often both seize the same twig and pull in opposite directions with small net result. At other times the cock would stand on the edge of the nest with his back feathers stiffly erected and with repeated bowings of the head and loud croaks call upon the hen bird to come and join him at the nest. Both cock and hen spent much time sitting on the nest, and in the end four eggs were laid at considerable intervals of time. One of the eggs (a soft one) was laid on the ground. The cock bird especially seemed wildly excited over the other three eggs, and (with curiously misplaced energy) would never allow them to remain in the nest, but repeatedly pushed them with his beak out of the nest, and occasionally, off the platform altogether. I tried replacing several of them, but without the least good result. The birds are in perfect health and quite tame. I much wish they were either less perverse or I understood better their normal nesting habits. I have asked a gentleman in the south of Spain if my methods could be improved to ensure the Ibis nesting better, but he says the nest provided he

thinks should meet the case judging from the habits of wild Ibis nesting in his vicinity.

3. I keep one pair of Californian Quails, and the hen bird this spring laid over twenty eggs in one corner of the shelter shed. These were all taken away by me, and she immediately started a nest by a tuft of grass outside and laid eighteen more eggs. Six of these being removed, she sat closely on the other twelve eggs and hatched twelve healthy chicks, of which eight were safely reared. The pride of both parents in the young hatched was intense. The hen could not easily brood such a large family, so the cock would constantly sit alongside and brood such chicks as failed to find room under the hen. He varied this peaceful domestic occupation by occasionally charging violently at my feet as I left the run. The habits of young Californian Quails are most pretty, and I do not think there are any more interesting small game birds, except perhaps young Chinese Quails, which it has never been my good fortune to see.

4. When I left home for Iceland early last June, I had what I hoped was a true pair of Australian Pectoral Rails nesting in a grass tuft in a small run. One bird was "sitting like a stone" on four eggs, and I hoped for good results. Unfortunately, a rat made an inroad during my absence and killed the sitting bird. On my return, I found that owing to this and other tragedies things had got rather mixed, and the surviving rail had been moved into a larger run (about 9 yards by 16 yards) where there were a lot of other Waders, including another Pectoral Rail. The surviving Rail was sitting closely in a tuft of grass on eggs believed by my man to be six in number. Thinking these eggs were certainly all clear, I somewhat stupidly had the bird frightened off the nest and gave instructions for the eggs to be put on a table in the potting shed to present to a schoolboy in due course. When the man went to the nest for the eggs only four were found, although six had previously been seen. As these Rails are always destroying their eggs, this was not surprising. The eggs were removed at 9.30 a.m. on Tuesday, 14th July—at 2.45 p.m. the same day, my man heard a chick trying to break through the shell of one of the eggs removed. He at once took all four eggs back to the nest and then discovered

that the two missing eggs had previously been converted into two little balls of black fluff, and the old bird had taken these chicks back to the nest and was brooding them there. The four eggs were replaced in the nest, and the following morning two more chicks were hatched (the other two eggs being clear).

The difficulty of feeding the chicks then commenced. In the first place, it was often most difficult even to find the parent birds, and when found the chicks for the first few days would scatter in all directions more often than not making frantic efforts to get through the $\frac{3}{4}$ -in. mesh wire netting enclosing the run, and on various occasions I rescued chicks that had pushed through and failed to return. The parent birds would at my approach display the greatest agitation—the cock very slightly setting up his feathers and rushing off with loud “clacks” of indignation, whilst the hen with similar “clacks” and with lowered head and wings, and feathers on the back erected, would repeatedly charge at me, especially if a chick was heard to cry. It would be of great interest to have had a photograph of the hen Rail while charging—She looked something like a Ruff in the breeding season, and the greatest possible contrast to the torpedo-shaped bird as I usually see her at other seasons, shrinking away through the grass at the slightest noise. The cock bird usually kept quite near the hen, but I never actually saw him brooding the chicks. For a fortnight I spent a good deal of time throwing crumbled hard-boiled egg, scalded gentles, finely chopped meat, poultry food and other dainties in open spaces where I hoped the Rails and not other birds would find them. It was most interesting when I could watch unseen to notice the hen bird coming out to fetch pieces of this food or catching flies with which to feed the young. I could always tell when the young were near, and I was unnoticed, by her constant low “grunts” calling them—a striking contrast to the angry “clacks” of one or both parents as soon as danger was suspected. One of the chicks died at the end of about a week and one when partly feathered. The other two flourished greatly, but just before getting feathered were the ugliest birds I ever saw in my life. The down with which they were hatched did not seem to have increased at all, and as the birds grew prodigiously they became straggling, black-skinned, semi-nude objects.

I often failed to find one or other of them for a week or so at a time, and it was interesting to notice that the young birds and their parents made long tunnels in the coarse-growing grass all over the run, as though the place had been infested with rats. A systematic hunt by several persons with sticks to poke in every tuft of grass was the only way of ascertaining what birds were there. The greatest care had to be exercised to avoid treading on the chicks.

5. I have written so often about the nesting of my Tree Partridges that I will now only add a short note as to a pair of these birds that spent the whole of last summer in vigorously making and pulling to pieces at least twenty nests, laying in several a few eggs which I took to the incubator. On the 13th August, the hen commenced to sit on four eggs in a nest deeply scooped out in the ground and so covered that she was, when sitting, almost invisible. She sat twenty-six days, and to my surprise then brought off four chicks. I have never previously known eggs of Tree Partridges take so long to hatch. When the hen bird finally brought off the chicks and I went to investigate, the cock came flying almost into my face from the other side of the run with a wild shriek and thereafter evinced the greatest excitement when I approached the hen and chicks and often made frantic efforts to lure me away. The weather for the first week was unusually cold and two chicks died. I put the other two with the parent birds into my sandgrouse shed (a wooden shed facing south with sand floor and glass shelter in front). They flourished well there, being fed on well cleaned gentles and small seeds. Of course, turf ground would have been more ideal, but then Tree Partridges should not hatch in September, and I had to do the best I could.

SUN AND SUGAR BIRDS.

By E. J. BROOK.

I have often thought that one of the most critical times of the year for small birds in aviaries with outdoor flights was late autumn and early winter. I have been greatly puzzled over this as cold could not be held accountable when the birds were shut into

warm quarters. Neither could want of exercise hurt the birds when the compartments they were shut into were large and gave ample room for flight.

Then, again, I have often been under the impression that this critical period was less noticeable one year than another with exactly the same class of birds. This year I have had considerable trouble with my smaller Sunbirds and Tanagers. These birds were in splendid condition when it became necessary to shut them in for fear of cold winds and heavy rain. I thought what a splendid store of health they had accumulated against a long winter. All the long summer and early autumn these birds had lived a life of practical freedom, feeding from the flowers that adorned the beds and pillars in the flights and the innumerable midges and other small insects. So much natural food did my Sunbirds get that they required very little artificial food for nearly four months. Then came the order to close the windows and shut up for the winter, and none too soon, for that very night the wind changed. The temperature fell and a much wanted rain came at last.

Now, instead of the birds that up to this time had looked so well, continuing in this state of health, those that had not quite got over the moult looked dull and dry in their plumage, in fact, they were stuck in the moult I should say. I did all I could to mend matters but evidently the sudden change from a natural diet to an artificial one was too much for their constitutions and I lost some of them. The larger Sunbirds and those over the moult did not seem to suffer. From what I have seen of a large collection of Sunbirds kept in an indoor aviary and in cages and that never get out into the open, I am inclined to think that the smaller species will do best in large cages where they can take exercise and are kept on the same food all the year round. Kept in this way there is no sudden change from one mode of life and feeding to another, and they are therefore safer.

While on this subject, I might mention my experience of the Sugar Birds. The Yellow-winged I have never had much trouble with and I have also found the Black-headed easy to keep, but the Purple has given a lot of trouble and so has the Blue (*D. cayana*). I think perhaps the Purple is inclined to get fat and possibly the

Blues are the same, as they seem to be greedy birds. I have had a number of Yellow-wings and nearly all have died of what I believe to be nothing but old age. The reason I think this, is that I have noticed as a rule those that have died have failed to go into eclipse plumage at the proper season for this change. When one of these birds has not made the seasonal change, it has, though perfectly healthy in appearance and continuing in brilliant plumage, died shortly before the next moult. I can only conclude that when they do not go into the eclipse plumage this is a sign that their period of usefulness is over and they are no longer wanted.

I may mention that I do not think any of my Sugar birds have suffered from being suddenly deprived of their garden flight, but perhaps none have been in the moult at that time.

Of all the vicious little brutes I have ever kept I think Sunbirds are the worst. Some of them will attack almost anything I believe. I have a hen *Zeylonica* that has seriously maimed Tanagers more than twice its size. I have now placed this little pest in a compartment with Peach-faced Lovebirds and I have seen the Lovebirds move from a branch where the Sunbird wanted to be. The Sunbirds nearly always injure each other with a vicious blow with the beak on the front of the skull causing a fracture or serious damage to the scalp. A fight begins without any warning and between birds that have lived for months in perfect peace and a hen or cock is quite as likely to attack one of the other sex as one of its own. Pairing seems to be a matter of selection on the part of the birds rather than a matter of chance. Probably age has a good deal to do with this. I have only had one pair that really paired and they were most affectionate and nested, but all other pairs that I have selected as likely to breed have lived in a sort of armed truce which has eventually ended in a fight.

SOME PRACTICAL REMARKS ON PRACTICAL AVICULTURE.

By Dr. L. LOVELL-KEAYS.

The title of my paper sounds rather comprehensive and I trust will prove not only so but also comprehensible. Although I have been interested in aviculture for just about twelve years, I have only taken it up seriously for about eighteen months. During that time certain facts (and I fear fancies) have impressed themselves on me and I feel, or at any rate hope, that committing them to writing may be of some interest, if not a little help, to others. I have had to learn so much by experience that I am sure others have had to learn by experience too, and I feel it is a pity that other beginners should also have to tread the beaten track of experience and have to learn by their own mistakes instead of profiting by the mistakes of others. This is by way of introduction and apology for expressing my views at all in print. Please do not think I have not had a great deal of advice, a considerable amount of help and ever so much enjoyment from other and more experienced aviculturists. Among aviculturists there is a true bond of brotherhood, and by far my most interesting correspondence is my avicultural correspondence. But I have constructed aviaries of various types, kept birds of various sorts and had failures of varying kinds. If ever I build fresh aviaries I shall bear my past experiences in mind.

I propose in this article, or series of articles, to deal, in the first place, with aviaries and their construction: in the second place with foods and their preparation; and in the third place with birds and their reception and treatment. I do not intend to deal with either section at great length, and I fear many of my deductions will appear false, and I am sure many will disagree with me in some of the things I shall say. In aviculture, as in all other sciences, it is indeed a case of "*Quot homines tot sententiae*" and I have no mandate from the Oracle at Delphi which could lead me to imagine I am infallible. For all my fallibilities I ask forgiveness, and for all my ignorance I crave indulgence.

I have seen many aviaries, but I have yet to see the perfect

one, and I certainly have yet to construct it. It is no concern of mine to give plans or elevations of aviaries here, but I wish to draw attention to certain obvious defects of my own. I have, I believe, what one may call twelve or fifteen aviaries, bird rooms, and so forth. Only one has a brick floor and is brick built as regards the shelter. It is quite unheated. It is lofty, well ventilated and well lighted. Moreover, it has an east window, and I take it that in the dreary half-lit days of winter, the early morning sun must bring cheer to the hearts of our feathered pets. I should like to have an east window in every aviary of mine. For it is in the winter our birds require most thought, for in the summer birds will do anywhere. My east window is double and measures three feet square. It is on a level with the main perching accommodation, and I put the food quite close to the window so that birds may get food as soon as dawn has arrived. The double window is to prevent too rapid irradiation of heat. The air space between acts as a non-conductor and so prevents the draught that is inevitable even with a closed and perfectly fitting window. I have all my shelters whitewashed. It is lighter, cleaner, and shows the dirt, besides which the whiting is good for the birds. In this aviary there is a good sized door above which I have had a glass door fitted which opens inwards. This is the main entrance for the birds and can be easily closed from the outside by a piece of string without the aid of pulleys or other devices. The frame of the door is between the birds' entrance and the door itself and birds are very fond of alighting on that before they make up their minds where they want to go, either on going in or out. Then this ledge is well protected from rain and I put sop or soft food on it during bad weather, for to move the food from right outside to right inside might cause a bird to die from being unable to find it. The door itself I have cut in half and had the upper part glazed for purposes of light. By having the door cut in half I can get in and out in severe weather without letting the birds out. It is not much of a stoop this 3ft. 6in. and I have never had a bird get past me yet. All the doors open inwards, you can push your way in and fill up the space with your body.

In this aviary, I can and do drive in my birds every evening at sunset, or earlier if necessary during the winter. It takes three

nights to train the birds to go in—never more. “Your birds must be very wonderful,” you say; until you see this aviary and then you realise that when driven the birds *must* go in, because birds when frightened always fly to the top, and birds when driven always fly away from the driver. Ergo, if the entrance to the shelter is at the *very* top of the flight and in one corner, the birds have nowhere else to go. I have tried to drive birds in in other aviaries, and when thoroughly exasperated given it up as a bad job.

In another aviary the flight is 8 feet high, and the shelter slopes down from a wall towards the flight and is only 6 feet 6 inches in height. The consequence is that the wire work has to be carried up from the top of the shelter to the level of the flight, and although this slopes it makes no difference, and when I drive or attempt to drive the birds in they merely cling to the wire-netting. It is only a little point, but it becomes important if you want to catch a bird up or to drive them in in very bad weather, and so on; and to my mind an aviary in which you cannot easily drive the birds in is not perfect.

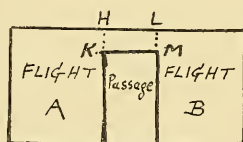
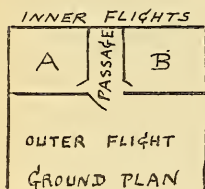
As regards the floor of the shelter, I need hardly say that a cement floor well covered with sand is to be infinitely preferred to the ordinary earth or even brick floor, and where the extra cost is not of great moment, there should be no corners, but the floor should be sharply curved at the junction with the walls. This is the only way you can be sure of keeping your shelter free from dirt and its attendant satellite disease. The further advantage of cement floors is that you can exclude mice. It should not be within the province of this paper to warn my readers against the evils of draughts. And yet I have seen aviaries where one can see daylight at the eaves. Birds will roost in the eaves; often people wonder that their birds get pneumonia, or in bad cases, won't use the shelter at all. I encourage the birds to use the shelters for feeding in and nesting in. How often do we hear of nestlings being drowned out. But *en passant*, let me make a suggestion. In the inner flight, when you are expecting young to leave the nest, get some nice leafy boughs and put them in the flight several days before the young are expected. By that time the old birds will have got used to the presence of these boughs and have lost their inquisi-

tiveness over them, and then when the quasi-helpless young birds leave the nest they will have some cover to hide in. I experienced the loss of a young bird the other day owing to the lack of cover in the shelter.

Two Avadavats left the nest. One was stronger on the wing than the other, but both were attacked most unmercifully by Green Avadavats, other Red Avadavats, Bib Finches and several other small birds. The one that was able flew out into the flight where there is a superabundance of cover, but the other was not able to manage it, and the latter, although it had the protection of the shelter and its crop was quite full, was dead the next morning, bullied to death; whereas the former is now fending for itself although we had frost on each night succeeding its plunge into the outer world. With regard to nesting accommodation, I can only make a passing remark and that is:—Don't put them where they make obvious alighting places for birds coming in and going out, and don't imagine birds prefer a dark dungeonlike sort of corner to nest in. My birds like to have the entrance to the nest in a good light and I have noticed that they nearly always prefer to use a nesting receptacle that faces the light rather than the reverse.

There is one point about my main Finch aviary that I have repeatedly found invaluable and always found useful. The inner flight of my new Finch aviary is the same breadth as the outer flight, and the shelter is entered from the outer flight. The passage divides the two inner flights and merely consists of wire mesh partitions. In this aviary, which was built against a south brick wall, the roof slopes upwards to the back, and is thereabout 8 feet high. Against the wall at the back I have had fixed a kind of square tunnel, but with the front made of wire work and made so as to open outwards. I thus have an easy means of communication between flights A and B. At the same time it takes up no useful room, being overhead. By means of sliding shutters I can instantly clear the tunnel at either end, *i.e.*, at HK or LM. The object of this is as follows: In the first place I can use either flight separately or as one large flight. Thus I can drive all the birds into flight A and clean or repair flight B, or I can keep flight A shut up and allow flight B to remain open to the outer flight, and so on.

But the chief use of these sliding doors is to catch up particular birds. Having ascertained that the particular bird I want is in the shelter, I close all the windows and find, perhaps, two dozen birds shut up. I roughly divide them into two flocks, one in flight A and the other in B. Then I close one or other of the sliding doors in my tunnel. The birds not wanted are let out into the flight to save them from being frightened. I then open the door leading from the inner flight to the passage and drive out some of the captives into the passage. If my bird is not there (and I endeavour to keep it in the flight as long as I can) I simply shut the door into the passage and open the door into the outer flight. By this means I eliminate the unwanted birds. If, however, the bird I want gets into the passage, I can always separate it from the others, and then pushing open the door between the passage and the inner



Back elevation.

Side elevation
through XY

flight, let the unwanted birds return to the inner flight. I am then in this position, the wanted bird is in the passage and all doors are shut. I let down the sliding door of the tunnel and allow the unwanted birds to escape if they like. I then catch up the bird I want by hand. It all sounds very complicated, but in reality it is quite easy and takes far less time than it takes to write a description of the method. I have never failed to catch any given bird within ten minutes, provided I can get it in the shelter to begin with. And in the winter, when one cannot have the birds out of doors at all, it is just as easy to single out a bird and catch it, but one has, of course, to slightly modify one's plan of campaign. By this means one avoids rushing round the flight making wild dashes for the bird with a butterfly net. I have found it an inestimable boon on many occasions.

I have still another use for my tunnel. I can, by fixing a lamp underneath it and covering the outside of the floor with sheet zinc, use my tunnel as a hot air chamber for ailing birds and many a bird's life has been saved in that tunnel.

These uses are not imaginary or illusory. They have been thoroughly tested and proved absolutely reliable and practical. Although this is one of my largest aviaries, I can catch birds more easily in this than in any other, simply because of this overhead communication between the two inner flights. As regards furnishing the shelters, last year I provided one with nice twiggy branches but bare, and the other with hazel boughs with the leaves on. The leaves were a great success and provided cover for the small birds, affording protection from bullies, and the birds relished the leaves as sheltering places to roost amongst.

As regards vertical or horizontal branches, I rather incline to the latter, but I employ both kinds. Perches are taboo with me with certain exceptions. With reference to lighting the aviaries during the winter, I am inclined to think it is waste of light. The great majority of birds go to bed at sundown and rise at dawn and eat nothing between. I give it as my opinion, and therefore only for what that is worth, that birds suffer no hurt from the prolonged abstinence during the winter nights. The subject is too big to discuss in a paper of this kind, but I am prepared to back my opinion by facts.

Many people are fearfully against ledges. I never could make out why, except that they get dirty. True, but they can be cleaned and kept so, and there is nothing a bird loves so much as a ledge. I suspect it rests the flexor muscles of their legs.

I must leave the shelter or inner flight and pass on to the flight proper. The dimensions of this must depend largely upon the room you have, the money you are prepared to spend upon it, and upon individual tastes in general. A lofty flight has much to recommend it and everything from a bird's point of view. It may, of course, double your cover, and you can grow decent trees and shrubs in it, but if you ever want to catch up a bird in a great lofty flight, the trouble then begins. My flights are practically 8 feet high throughout, and I find that a very convenient height. It gives

the birds room to fly over one's head and so ease panic, and one can drive the birds towards a given point at this height. Nests are easy to get at and the cost is not too great. The moment you get over 8 feet you will find the cost increases almost "in proportion to the square of the height" as the mathematicians say. The supports of my aviaries are all chestnut poles, and the builder, a sound practical man, assures me that chestnut will last 15 or 16 years in the ground and far out-live oak or any of the fir tribe. Iron is of course much more durable but much more expensive. Creepers (such as Honeysuckle, Clematis, etc.), do not like metal to climb up. Metal is such a good conductor of heat that the plants experience and suffer from great variations of temperature, much to their detriment. Wood has this advantage too, and that is it is more picturesque. Moreover you can drive nails into it. Another point is that wood harbours insects,—an advantage it is impossible to over-rate. I have been asked what kind of evergreens birds prefer. I have tried most kinds and I find the most favourite kinds are the Retinosporas and the Kryptomerias amongst the conifers. Laurels, Privets, are useful too, but in every aviary I would see planted an Elder. They are full growing, afford good shelter and are quite impossible to kill. Apart from the insects the flowers attract, the tree itself generally teems with insect life, and the berries too are greedily eaten by numbers of birds. Then Wichuriana Roses such as Dorothy Perkins, Hiawatha, and the most vigorous of all, Evangeline, may be planted, besides Honeysuckles, Clematis, and so on to the fancy of the aviculturist. Certain plants I shall touch on when dealing with pods, but mention must be made of Docks Plantains, Milk or Sow Thistles, one or two of the Umbelliferae such as Cow Parsley, of the Compositae as Michaelmas Daisy, and lastly of the Trumpet Honeysuckle (*Ecchremocarpus Scaber*). The dwarf perennial grasses or the so-called "flowering grasses" must certainly have a place, and the usual garden weeds such as Shepherd's Purse, Groundsel, Chickweed, and so forth. Lastly, in our flight we should all have a bird bath as designed and described by Mr. W. T. Page. Nothing adds such joy to the aviary or fascination for the aviarist as a properly constructed bird bath. They are simple shallow depressions in the

ground $1\frac{1}{2}$ inches deep in the centre and shelving away to nothing at the edges. The drain cock in mine is nothing more than the mouth and neck of a druggist's wide mouth bottle and a bung fitted to it. Being glass it is clean and no fear of verdigris or metallic poison. The cost of the drain cock was of course to me nil. Before leaving our flight, I would draw attention to the absolute necessity of an entrance lobby. Ever so small will suffice. It prevents the loss of birds through escape, and if one does get out through a hole anywhere or by some unforeseen accident, it is usually easy to catch them in the lobby, and I have known several instances where stray birds have been caught in the lobby. Then one word as regards the doors. All outer doors leading to the lobby and the lobby door above, should be fitted with a powerful spring. I have found the vertical coil spring the most efficacious for outdoor work, and it is quite inexpensive.

Those of our readers who read the writer's articles on Cactus Conures will recollect the mention made of eaves. Eaves are a supplement to, and not a substitute for, a proper shelter. All birds are fond of eaves both for roosting and nesting. Wherever I have a wooden partition between two aviaries there you will find a row of eaves and there you will find the birds sheltering during the wet and often roosting at night. In flights which are much exposed, it is a good plan to have a row of short boards along the top of the flight about 2 feet deep with eaves attached and under the eaves an assortment of branches. In such a case, each end of the eaves should be closed and so make a snug shelter for the birds. In my parrakeet aviaries I have hung perches from side to side the whole width, and at the far end of the flight, protected above and outside by match-boarding. This is by far the most favourite resting place for the parrakeets, protecting them as it does from the hot sun, the prevailing winds (S.W.) and also of course from the rain. Transverse perches are almost a necessity for the *Platycerci*, if one is to have regard for their feet. Climbers and creepers are not possible in a parrakeet aviary. By the way, there appear to be two things parrakeets don't destroy, and they are Stinging Nettles and the Common Bindweed.

With these few remarks on aviaries, utterly incomplete I know only too well, I hope later on to write something about Foods and their Preparation.

PAST IMPORTATIONS OF INDIAN PHEASANTS.

By WILLIAM JAMRACH.

[A letter addressed in French to M. A. GEOFFROY SAINT-HILAIRE, director of the Zoological Gardens of Paris, and translated by HUBERT D. ASTLEY.]

London, 31 Oct., 1882.

DEAR SIR.—You have asked me what is the number of Impeyan Pheasants (*Lophophorus refulgens*) and Tragopans (*Cerionus satyra*) which I have imported from India. I have consulted my notes and my memory, and I give you below the information that you wish for. In 1864, I sent from Calcutta by the Cape of Good Hope, 20 Impeyan Pheasants, seven birds having arrived alive after a voyage of 120 days.

In 1865, by the same route, I sent 50 Impeyans; all succumbed.

In 1866, still viâ the Cape of Good Hope, I sent 117 Impeyan Pheasants and Tragopans. All perished on the way.

In 1867, my consignment was sent by what is termed the land route, that is by railway from Calcutta to Bombay, by sea from Bombay to Suez, by rail from Suez to Alexandria, by sea from Alexandria to Marseilles, or Trieste, or direct to London. I sent 300 Impeyan Pheasants and Tragopans. Eleven birds arrived alive after forty-two days' journey.

In 1868, by the same route, I sent 285 Impeyan Pheasants and Tragopans; of which 40 were landed alive.

In 1869, my birds came by the Suez Canal, and since then all my consignments have followed this route.

Out of 100 Impeyans and Tragopans which were sent, 40 arrived in good health.

In 1870, out of 180 Impeyans and Tragopans, 16 arrived.

In 1871, out of 120, I received only 16.

In 1872, out of 20 pairs of Impeyans, only four birds arrived.

In 1873, out of 80 Impeyans and Tragopans, twelve only arrived alive.

In 1874, 40 Impeyans were despatched. Thirty-one arrived in good condition, which I sold to you.

In 1875, out of 80 Impeyans and Tragopans sent off, 70 arrived.

In 1876, I had 40 Impeyans and 25 Tragopans put on board ship, of which 31 of the former and 21 of the latter arrived.

In 1877, the 80 Impeyans and the 70 Tragopans sent off, all arrived alive.

In 1878, out of 70 Impeyans and 50 Tragopans, I lost only six of the latter.

In February, 1879, 60 Impeyans and 70 Tragopans were despatched, all of which arrived safely.

In March of the same year, a fresh consignment of 40 Impeyans and 20 Tragopans were despatched, none of which perished on the journey.

The year 1880, was full of incidents. After almost insurmountable difficulties I became possessed of the first Hastings' Tragopans (*Cerionis hastingsii*).

All shooting having been forbidden during the space of five years in the country under British rule where the Impeyans, Hastings' Tragopans, Wallich's and Pucrasian Pheasants, are met with; I had to push my researches in the independent territories, and consequently at great distances from my ordinary centre of action.

The captured birds reached Dharmasala (Punjab) after having being carried for many days on men's backs through country covered with snow. Fourteen pairs, and twelve males of Hastings' Tragopans, reached our aviaries. After three days journey by carriage they arrived at the nearest railway station, and after a week's journey reached Calcutta.

All these birds came to Europe safely and in good condition. At the same time I imported 32 pairs of Pucrasian Pheasants and two Wallich Pheasants.

M. Vekemans, the Director of the Antwerp Zoological Gar-

dens, took ten pairs of Pucras Pheasants; the others going to various amateur aviculturists. I could not look after all the captured birds, for there were more than I had room for, and also, I had left behind one of my men, who came on a month later with 60 pairs of Impeyans, 90 Tragopans (*Satyra*), 24 pairs of *Polyplectrons* (*Chinquis*) and 7 male Sumatran Pheasants (*Euplocamus ignitus*) which were the first to be brought over.

My man arrived with 54 pairs Impeyans, 67 Tragopans (*Satyra*), 18 pairs of *Polyplectron chinquis*, and five male Sumatran Fire-tailed Pheasants.

Prince Dhuleep Sing, residing in England, took the greater number of the Impeyans; which, I am told, were turned out in the Maharajah's coverts. In that same year, 1880, I was able to import ten Elliott's Pheasants, four males and two females, seven Argus Pheasants and four pairs of *Euplocamus pyronotus*.

(To be continued.)

ENGLISH NAMES FOR THE PARROTS.

By Dr. E. HOPKINSON.

(Continued from page 102.)

JENDAYA CONURE, the YELLOW-HEADED CONURE.

"JENDAYA PARRAKEET," a popular alternative for JENDAYA CONURE.

"JERRYANG," native name for the LITTLE LORIKEET.

"JEW PARRAKEET," see JAVAN PARRAKEET.

"JOA," native name for several of the New Guinea LORILETS.

"JOB0," native name in Gambia for the SENEGAL PARROT.

"JOEY" (3), Australian dealers' name for the ROSELLA PARRAKEET.

(2) An occasional English dealers' name for the COCKATIEL.

*JONQUIL PARRAKEET, see BLOSSOM-HEADED PARRAKEET.

"JULANG," a native name of PENNANT'S PARRAKEET.

"JULU-UP," see BLACK-TAILED PARRAKEET.

"JURNALERO," native name in Peru for the MERCENARY AMAZON.

"KAGULA," a Fijian name for the MASKED PARRAKEET.

"KAKA," primarily the Maori name for *Nestor meridionalis*, of New Zealand, now used as the common name for this bird, and also (2) in the plural (the KAKAS) for any member of the genus *Nestor* (sometimes Anglicised as the NESTORS), which contains six species, the two best known being the KEA (q.v.), and the KAKA, or KAKA PARROT,

known as "BROWN PARROT" in New Zealand, its other book names are: COMMON KAKA, SOUTHERN BROWN PARROT (Latham), SOUTHERN NESTOR. "KAKA-KORAKO" is the full Maori name.

The other species are: *N. septentrionalis*, the NORTHERN NESTOR; *N. esslingi*, the PRINCE OF ESSLING'S PARROT; *N. productus*, PHILIP ISLAND PARROT (Gould); *WILSON'S PARRAKEET (Latham); *N. norfolcensis*, the LONG-BILLED PARROT of Latham. The last two are extinct. (3) "KAKA" is also the Fijian name of the TABUAN and MASKED PARRAKEETS.

KAKA, COMMON.

KAKA, MOUNTAIN, *see* KEA.

"KAKA-KORAKO," *see* KAKA.

KAKA PARROT.

"KAKAPO," Maori name of the OWL-PARROT.

"KAKIRIKI" (also spelt KAKIRIKI), Maori name for the NEW ZEALAND PARRAKEET and for the GOLDEN-CROWNED PARRAKEET (2).

"KAKIRIKI," same as "KAKIRIKI."

"KALANGI," *see under* ECLECTUS, RED-SIDED.

"KEA," the Maori name for *Nestor notabilis*, one of the best known KAKAS, Now commonly used for this species, the "MOUNTAIN PARROT" (N.Z. vernacular). Other book names are: KEA PARROT, MOUNTAIN KAKA, MOUNTAIN NESTOR.

KEA PARROT, the KEA.

"KELINKY," North-American Indian name for the CAROLINA CONURE.

"KELLI-KELLI," native name in Gambia for the AFRICAN RING-NECKED PARRAKEET.

"KESSI-KESSI," Guiana native name for the YELLOW CONURE.

"KING AMAZON," dealers' name for one of the rarer Amazons, such as the DIADEMED A.

KING LORY, the KING PARROT.

KING PARRAKEET, another name for the KING PARROT. (2) An occasional old dealers' name for the TURQUOISINE PARRAKEET.

KING PARROT (1) = *Aprosmictus cyanopygius*, also called the KING LORY and KING PARRAKEET, while the hen is sometimes popularly known as "QUEEN PARROT." The Australian native name is "WELLAT," Old book names are: *SCARLET AND GREEN PARROT, VARS. A. & B. (Latham); *TABUAN PARROT, VAR. A. (=male), VAR. B. (=young hen), also Latham's. (2) Australian vernacular for the PILEATED PARRAKEET. (3) Popular name for that variety of the GREY PARROT which shows more or less mottling of red in its plumage.

"KU-GULA," Fijian name of the SHINING PARRAKEET.

*KUHLS CORIPHILUS. = KUHLS LORY.

KUHL'S LORY.= *Vinia Kuhli*, a near relative of the SAMOAN LORY.

Sometimes called *RUBY LORY and *KUHL'S CORIPHILUS.

"KULA," Fijian name for the SOLITARY LORY.

"LABU GIRAWA," Cingalese name for the CINGALESE ALEXANDRINE PARRAKEET.

*LACE-WINGED PARROT, *see* BLUE-CROWNED ECLECTUS.

LADY LORY, a book name used occasionally for both the THREE-COLOURED LORY and PURPLE-CAPPED LORY.

LA PETRE'S AMAZON.= *A. pretrei*.

LARGE ANDAMAN PAROQUET, *see under* ALEXANDRINE, GREAT-BILLED.

LARGE BURMESE PAROQUET, *see under* ALEXANDRINE, INDO-BURMESE.

LARGE CEYLONESE PAROQUET, *see under* ALEXANDRINE, CINGALESE.

"LAURA," Creole name in British Guiana for any Parrot.

LAYARD'S PARRAKEET.= *Palaeornis calthorpae*, one of the RING-NECKS.

LEACH'S COCKATOO.= *Calyptorhynchus viridis*, one of the BLACK COCKATOOS. Described by Latham under the names, *SOLANDER'S C., *COOK'S C. (q.v.), and *BANKSIAN COCKATOO, VARS. A. & B. "CARAT," the Australian native name.

LEADBEATER'S COCKATOO.= *Cacatua leadbeateri*. Australian vernaculars, "MAJOR MITCHELL" and "PINK COCKATOO"; "WEE JUGGLER" of Australian dealers. Old book names: *INCA, *TRICOLOUR-CRESTED COCKATOO.

LEAR'S MACAW.= *Anodorhynchus leari*, one of the HYACINTHINE MACAWS.

*LEAST GREEN AND BLUE PARRAKEET (Edwards), *see* PASSERINE PARRAKEET.

"LEMON-CRESTED COCKATOO," a commonly used popular name for the GREATER SULPHUR-CRESTED COCKATOO; more rarely for the CITRON-CRESTED C.

*LESSER GREEN PARROT, *see under* AMAZON, YELLOW-CHEEKED.

LESSER RED-FRONTED PARRAKEET, *see under* NEW ZEALAND PARRAKEET.

LESSER SULPHUR-CRESTED COCKATOO, *see under* SULPHUR-CRESTED.

LESSER VAZA PARROT, *see* VAZA.

LESSER WHITE COCKATOO, another name (originally Edwards') for the LESSER SULPHUR-CRESTED COCKATOO.

LEVAILLANT'S AMAZON, the DOUBLE-FRONTED A., *see under* AMAZON.

LEVAILLANT'S PARROT (Latham).= *Poeocephalus robustus*. Other names: ROBUST PARROT (Latham), *DAMASK PARROT, *LEVAILLANT'S PIONUS.

*LEVAILLANT'S PIONUS, *see above*.

- LINCOLN, *see* PORT LINCOLN.
- *LINEATED PARRAKEET, a name of Latham's, probably = the PALM LORIKEET (*Hypocharmosyna palmarum*).
- LINEOLATED CONURE, *see* LINEOLATED PARRAKEET.
- LINEOLATED PARRAKEET. = *Bolborhynchus lineolatus*. Sometimes popularly (but incorrectly) called the LINEOLATED CONURE.
- LINNAEAN ECLECTUS.
- LINNAEAN LORY, occasional book names for the female RED-SIDED ECLECTUS, *see under* ECLECTUS.
- LITTLE ALEXANDRINE PARRAKEET, *see* MAURITIUS RING-NECKED P.
- LITTLE DUSKY PARROT, *see* DUSKY PARROT.
- LITTLE GREEN PARROT, *see* ACTIVE AMAZON.
- LITTLE LORIKEET. = *Glossopsittacus pusillus*. *SMALL PARRIKEET (Latham). Australian native name, "JERRYANG."
- LITTLE MALAYAN PARROT, the BLUE-RUMPED PARRAKEET.
- *LITTLE RED-HEADED PARRAKEET, *see under* LOVEBIRD, RED-FACED.
- LONG-BILLED COCKATOO, *see* SLENDER-BILLED C.
- LONG-BILLED COCKATOO, WESTERN, *see under* SLENDER-BILLED C.
- LONG-BILLED WHITE COCKATOO, *see* SLENDER-BILLED C.
- *LONG-BILLED PARROT, the PHILIP ISLAND PARROT, *see under* KAKA.
- *LONG-NOSED COCKATOO, the SLENDER-BILLED C.
- LONG-TAILED ALEXANDRINE PARRAKEET, *see* Malaccan Parrakeet.
- *LONG-TAILED GREEN PARRAKEET, VAR. A., *see* CUBAN CONURE.
- *LONG-TAILED GREEN PARROT, *see* ROSE-RINGED PARRAKEET.
- LONG-TAILED PARRAKEET, another commonly used name for the MALACCAN PARRAKEET.
- LONG-TAILED SCARLET LORY, *see* RED LORY.
- LONG-TOED GROUND PARRAKEET, the GROUND PARRAKEET.
- LORIKEET. Properly a long-tailed member of the family *Loriidae*, as opposed to the short-tailed LORIES, but not by any means always strictly used. Occasionally too in popular parlance the name is also applied to other Parrots not belonging to the *Loriidae* (see list). Another spelling is LORIQUET.
- The following is a list of English names, those not belonging to the family *Loriidae* being enclosed in brackets.
- BLACK-THROATED LORIKEET.
- BLUE-BELLIED LORIKEET, *see* SWAINSON'S LORIKEET.
- BLUE-FACED LORIKEET.
- BLUE-HEADED LORIKEET.
- BRUSH-TONGUED LORIKEETS, *see under* B.
- [CEYLONESE LORIQUET, *see* CEYLONESE HANGING PARRAKEET].
- [CRIMSON-RUMPED LORIKEET, an occasional dealers' name for the VERNAL HANGING PARRAKEET].

FORSTEN'S LORIKEET.

GREEN-NAPED LORIKEET.

[INDIAN LORIQUET. THE VERNAL HANGING PARRAKEET is sometimes thus designated].

LITTLE LORIKEET.

MASSENA'S LORIKEET.=*Trichoglossus Massena*.

MITCHELL'S LORIKEET.=*T. mitchelli*.

Musk Lorikeet, the MUSKY L.

MUSKY LORIKEET.

ORNAMENTAL LORIKEET.

ORNAMENTED LORIKEET.

ORNATE LORIKEET, *see* ORNAMENTAL L.

PALM LORIKEET.

PERFECT LORIKEET.=*Psittenteles euteles*.

PORPHYRY-CROWNED LORIKEET, *see* Purple-Crowned Lorikeet.

PURPLE CROWNED LORIKEET.=*Glossopsittacus porphyrocephalus*, called by Gould the PORPHYRY-CROWNED LORIKEET.

RED-COLLARED LORIKEET.=*Trichoglossus rubritorques*, a close ally of SWAINSON'S LORIKEET. Latham's *BLUE-BELLIED PARROT, VAR. C. may have meant this species.

RED-CROWNED LORIKEET, the VARIED LORIKEET.

[RED-RUMPED LORIKEET, an old name for, and sometimes still popularly applied to, the VERNAL HANGING PARRAKEET].

SCALY-BREASTED LORIKEET.

SWAINSON'S LORIKEET.

["SWIFT LORIKEET," Gould's name and Australian vernacular for the SWIFT PARRAKEET].

TAHITI LORIKEET.

VIOLET LORIKEET, *see under* RED LORY (7).

VARIED LORIKEET.=*Ptilosclera versicolor*; also called the RED-CROWNED LORIKEET.

WEBER'S LORIKEET.=*Psittenteles weberi*.

YELLOWISH-GREEN LORIKEET.=*Trichoglossus flavicans*.

LORILET, book name for a bird of the family *Cyclopsittacidae*, from New Guinea and neighbourhood. Also known as FIG-PARRAKEETS, and the native name for some species (of which about twenty are known), is "JOA." The names of the two Australian species are: BLUE-FACED LORILET, or COXEN'S FIG-PARRAKEET.=*Cyclopsittacus coxeni*.

RED-FACED LORILET, *C. maccoyi*; SIR WM. MACLEAY'S FIG-PARRAKEET.

LORIQUET. another spelling of LORIKEET.

"LORO," popular name in South America for the QUAKER PARRAKEET,

the RED-MASKED CONURE, and other green PARRAKEETS of that part of the world. (Cf. "LAURA," above).

LORY (occasional obsolete variants, *LURI, *LURY, *LOURY), a member of the family *Loriidae*, which contains 14 genera from New Guinea, Australia, and the Malay Islands. They are generally divided into LORIES and LORIKEETS, the former short-tailed, the latter long-tailed, but this distinction is not always strictly followed in their nomenclature.

(2) The name is also often (but incorrectly) popularly used for other kinds of Parrots; these are enclosed in brackets in the following list of English names:

[AUSTRALIAN LORY, an old name for PENNANT'S PARRAKEET].

[BEAUTIFUL LORY (Latham), *ditto*].

BLACK LORY.

*BLACK-CAPPED LORY, and *FIRST BLACK-CAPPED LORY, *see* THREE-COLOURED LORY.

*SECOND BLACK-CAPPED LORY, *see* PURPLE-CAPPED LORY.

["BLACK-TAILED LORY," *see* BLACK-TAILED PARRAKEET].

BLUE-BREASTED LORY. (1) An occasional book name for the BLUE-TAILED LORY; [(2) A name of Latham's ? = the female CERAM ECLECTUS].

BLUE-CHEEKED LORY.

BLUE-DIADEMED LORY, the BLUE-TAILED LORY, *see under* RED LORY (3).

*BLUE-FRINGED LORY, *see* RED LORY.

BLUE-NAPED LORY. = *Lorius cyanauchen*.

BLUE-NECKED LORY, the BLUE-STREAKED LORY.

BLUE-STREAKED LORY, *see under* RED LORY (2).

BLUE-STRIPED LORY, the BLUE-STREAKED LORY.

BLUE-TAILED LORY, *see under* B.

To be continued).

CORRESPONDENCE, NOTES, ETC.

BLUE - BONNET PLUCKED BARE.

Miss DRUMMOND writes:—

Dear Sir,—If you are able to help me as to curing a female Blue Bonnet Parrakeet of feather plucking, I shall be more than grateful. I have the bird in a cage, as in the aviary she was always tumbling about, and I thought she would kill herself. She is now exactly like a plucked bird ready for roasting, the skin very red: but she is as cheerful and full of fun and life as ever.

She has Fellowes' Syrup in her water always; no hemp in the seed mixture, but a *little* Sunflower seed, and also some sopped biscuit and water, in which I was advised to put a few drops of Cod Liver Oil, but that ended the sop, so I have put a little salt butter in it, which she *loves*, and a bit of butter on toast is a delight. Spray millet she likes, and she eats well, Sometimes a little powdered sulphur is dusted over her skin, but it does not seem to be beneficial.

The following reply has been sent to Miss Drummond:

I am afraid that there is no certain remedy for feather-plucking in parrots, It is generally brought about by dryness and irritation of the skin consequent upon indigestion due to incorrect feeding, though in a few instances it results from the presence of parasites.

Sometimes, if treated when it first starts and before it has become a habit, correct feeding and a little of Dinneford's Fluid Magnesia in the drinking-water for a few days have a beneficial result; as also turning the bird loose in a densely planted aviary where its attention is diverted to the destruction of trees and shrubs; but a parrot or parrakeet in a cage, having little to occupy its mind beyond its food, cannot be cured of a bad habit of this nature.

In his excellent work on the Parrakeets my friend Mr. Seth-Smith says of the Blue-Bonnets and their near relatives—"Canary-seed should be the staple food of these birds in captivity, and to this should be added millet, hemp and oats, the last two sparingly, and an abundance of green food during the summer months is essential. The present writer has kept three species for years, and is strongly opposed to soft food, such as bread and milk, egg and bread, and so on, as a food for these birds, except when there are young birds to be fed, when stale bread, soaked in cold water and squeezed nearly dry is undoubtedly most beneficial, and aids the parents very considerably in their task of feeding their young."

Butter is undoubtedly bad for all kinds of parrots. A. G. BUTLER.

THE KINGFISHER.

SIR,—I don't know if the small amount of experience I have had in keeping Kingfishers in captivity will prove of interest to your readers; for I am bound to say that I did not meet with a great amount of success. The first attempt was when I was at Eton. I procured a young hand-reared one which I kept in an ordinary Blackbird's cage. I used to feed him by hand on minnows which I partly caught myself and partly bought from Bembridge (the fishing-tackle man). I had him about three weeks, when my house-master strongly objected to the insanitary odour in my room, so I had to find other quarters for my bird. At that time I kept several terriers, white rats, and other small game at a cottage in Tangier Lane, Eton, which was out of bounds. It belonged to a man of the name of Jim Bailey, a stone-mason by trade (*when* he chose to work), who I afterwards started in a bird-shop in Eton. He took charge of the Kingfisher, and the bird lived in the Blackbird's cage in perfect health for nine months and

then suicided himself by poking his head through the bars and hanging himself. He was fed practically entirely on minnows and got through about twenty a day. No doubt he would have eaten a hundred, but twenty seemed to do him very well, probably owing to the sedentary life he led. Occasionally, when minnows were scarce, he had strips of raw beef cut into the size of a minnow and dipped in water. The bottom of the cage was covered with saw dust and he had a flower pot saucer full of water at one end. During the whole of this time he was *fed by hand*, and it is to *that* I believe that I owe the success in keeping him.

Since then I have more than once tried to keep Kingfishers in both cages and aviary: providing them with a vessel of water with live minnows in it. In each case the result was the same, viz., the bird killed himself by taking headers into the water after the fish. Unless the tank for the fish is deep enough this will always prove the stumbling block to keeping Kingfishers in captivity.

The last one I tried was an exceedingly tame young bird, which Mr. Galloway, of Caversham, hand-reared for me. This bird I put in one of my out-door aviaries with one end roofed in. Along the front I placed a zinc tank about 4ft. long, 18ins. wide and 5ins. deep. The bottom of this was covered with gravel and a number of minnows were kept in it. I arranged a small bough of a tree about a foot above the tank for the bird to sit on to catch his fish. This he would not do, but sat on another tree branch about 4ft. above the tank. From this he would watch the fish for a few moments and then take a violent header. In the end he broke his beak completely and died.

From my experience, such as it is, I have come to the conclusion that it is possible to keep a Kingfisher in confinement either in a cage or an aviary, *but* in case of a cage the bird would *always* have to be hand-fed (about 20 to 25 minnows a day). In an aviary a tank would have to be provided, and the correct depth of the water and the height above it for the branch would have to be discovered. In a tank like this, far more minnows must be provided, and there would always be the trouble of the bird clearing up the lot in a short space of time and then having too long a fast afterwards. On the whole, I believe the cage would be best as requiring less fish, and no chance of the bird killing himself by taking headers. At a pinch, a Kingfisher will do for a meal or two on strips of raw beef, and no doubt would do as well on any large *fresh water* fish cut up into small pieces and dipped in water as upon minnows.

All well, this summer I intend to have another attempt at keeping a Kingfisher, and hope to let the readers of the *Avicultural Magazine* know of my success or failure.

The old keeper of the Fish-house at the Zoo. has on several occasions tried to keep Kingfishers, but I believe none lived more than a few months. The last I saw was in the Waders' Aviary near the Lions' House. There was a comparatively small zinc trough fixed to the wirework inside the aviary, about 8ft. from the ground. At intervals, the keeper used to put a few minnows into the tin and the bird at once flew across, seized one and flew off to the bough of a tree

at the other end of the enclosure, where he banged it on the head and eat it. In this case there was no place from which the bird could take a header, as he could only settle on the tin and snatch the fish. The objection to this to my mind is the difficulty there would be with a Kingfisher to get him to find this small tin in a large aviary. In any case the bird *must* be *hand-reared*.

W. R. TEMPLE.

KINGFISHERS IN FREEDOM AND CAPTIVITY.

LADY WILLIAM CECIL (BARONESS AMHERST OF HACKNEY) writes :— I have been much interested to read in the January Magazine the correspondence about Trout and Kingfishers. We had so many of both at Didlington (Norfolk) in the old days. My father used to annually breed a large quantity of trout for many years. They were turned out in the decoy ponds, in the lake and in the river (Wissey). They did very well and grew and increased continually; we used constantly to catch them up to several pounds. The Kingfishers did not seem to interfere at all with the Trout, at least not to any appreciable extent. In the banks of the lake they nested yearly, sometimes in the bank not 200 yards from the house, and they fished constantly in the lake (where we could watch them from the windows) either from the branches of the trees overhanging the water, or whenever they could, from the mast of our little sailing boat, which was anchored a short distance from the shore.

We had a tame Kingfisher for some time, it had hurt its wing and so was caught. We kept it in a big Crystal Palace aviary, which it shared with some Cordon Bleus and various other little "foreigners." We gave it a bank of turf and a small stump to sit on, for, owing at first to its injured wing, it could not fly up to sit on the perches; however, it soon recovered and sat on the perches now and then, though generally preferring the stump. We kept a large earthenware basin of water in the cage and it was stocked with fish, about six or eight at a time three or four times a day. The dear little bird soon became very tame and would perch on the rim of the bowl the moment we put in his fish. We gave him all sorts of small fry, and I think if he had any preference it was for small gudgeon. He remained in perfect plumage and did not mope at all. I am sorry to say some one gave him an extra supply of fish one morning and he ate thirteen at a sitting and never recovered the fatal feast. I believe he would have comfortably digested double that number had he been at liberty, but he had so little exercise in the cage and his food was too easily caught, so that his greediness was the cause of his death. We never allowed any Kingfishers to be killed at Didlington, and any places on the banks of the lake or any stream where there were nests, were always left undisturbed until the nestlings were ready to fly.

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These were sent to the Editor from Egypt, *apparently* for publication in the Magazine. The writer of these notes protests that they were copied without his consent or knowledge, although a member of the Society, and also that no acknowledgment was made to the Editor of the Cairo Scientific Journal, in which publication the above notes originally appeared. The 'faux pas' was an innocent one on our part. We gladly give the kudos to the Editor of the C. S. J. regretting if we inadvertently trespassed on his private grass.

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THE NIGHTJAR
(*Caprimulgus europæus*).

THE
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BEING THE JOURNAL OF
THE AVICULTURAL SOCIETY.

Third Series.—Vol. VI.—No. 5.—*All rights reserved.*

MARCH, 1915.

THE NIGHTJAR.

(*Caprimulgus Europæus*).

By P. F. M. GALLOWAY.

This curious bird seldom arrives in England until the first week in May. I have generally noticed it about the second or third of the month and on a few occasions by the 30th of April. It loves to bask in the sunshine during daytime, and in its haunt on a common amongst scrub and furze, I have seen it on a bare piece of ground in the sun looking more like a small log of weather-beaten wood with the bark on, than a bird; and have been able to quietly walk up to within a few feet of it, when suddenly it darted up over my head and away over the common. During the fine warm summer evenings, I have spent several pleasant hours in the Nightjar's favourite haunt, sitting smoking my pipe and waiting for the bird to emerge from his hiding place, and as soon as the dusk came on, out he would come and glide past me silently backwards and forwards, then alight on a low bough, arrange himself lengthwise with the bough and at once commence his jarring notes. The flight of this species is for the most part silent. The male bird will fly off the bough and glide along without moving the wings, then suddenly with his tail twisted sideways and clapping his wings together rather sharply over his back, he will utter a note several times like Koip, Koip, Koip, and then perhaps alight again on a branch and carry on his peculiar jarring notes for some little time. They take their food (which consists of moths large and small, Cockchafers, Dorbeetles, and other night flying insects) on the wing. As soon as daylight approaches they hide away until

evening, although in the height of the breeding season the male bird may be seen on a bough jarring away for a time and even venture to hawk about on the wing. The bill is very small and the mouth enormous. One might say, without exaggerating, that when the mouth opens, the head is split in half. The tongue is very small, heart-shaped, and is situated a long way down the mouth. The eyes are very large and prominent, being quite as large as the round black head of an ordinary hat pin used by ladies. Legs, feet and toes very small. The female is much browner and paler in colour than the male and without the oval white spots on the flights and outer tail feathers. The young are generally hatched early in July, and I have also found them during the early part of August. The female, if flushed during the nesting season, will flutter along the ground for many yards, holding the head well up, often with mouth open and appearing as if one wing and both her legs were broken. If the observer returns to the spot where he first flushed her, there on a bare piece of ground, surrounded more or less by small bushes, he will see two oval eggs, which in colour look like veined marble, or resemble at first sight two nice shaped pebbles, or if there are young, he will have the satisfaction of looking upon two of the ugliest little creatures in bird life he could possibly find. The young at first have the skin of a dark purplish shade covered with greyish and straw-coloured hairy down, the head is flat on top, the eye-balls bulge out of their sockets and the nostrils greatly protrude. As the young grow they look very ugly until the soft downy feathers grow and fill up the cavity around the eyes and nostrils. As soon as the young begin to feather, they will run from the spot where they were hatched and may be found squatting on the ground about a couple of yards away. After a day or two they will run a few yards to another fresh bit of ground and so on until they are able to fly. There are six dark stiff bristles along the edge of the upper mandibles. These appear to act as a barrier to a struggling moth or other insect when captured. The Nightjar takes its food into its mouth and swallows it straight away, but supposing a large moth was captured at the side of the mouth, these bristles prevent the struggling insect from escaping, the bird will draw its head near to its breast, and the moment the insect

ceases to struggle the bird will instantly give a jerk and gulp the insect down, making quite a noise with the mouth.

I reared a Nightjar some years ago, taking it at the age of four or five days; it lived in perfect condition just over five years; was of course, being hand-reared, exceedingly tame, and was really a most interesting pet. The bird was allowed to fly about the room for a certain time during the evening. He would allow me to handle him freely without showing any fear. He took very little food* during the day, and spent most of his daylight in attending to his toilet and dozing. If I placed him in the sunshine, he would jump off his log (which served as a perch) and lie on the floor of his cage, spread his long wings out and bask in the heat. He never bathed, but would dust himself in sand like a fowl.

THE KINGFISHER AND SNIPE IN CAPTIVITY.

By GERALD E. RATTIGAN.

Having read Mr. Barnby Smith's letter on the Kingfisher in the current issue of the *Avicultural Magazine*, and noticing shortly afterwards the request of the Editor for copy, I am prompted to give my experiences, such as they have been, in the keeping of these birds, which I hope may be of some interest.

I bought my first Kingfisher and the only one with which I was at all successful in or about November, 1910. I kept it for the first three or four weeks that it was in my possession in a large cage specially constructed for it, with a small tank let into it in which minnows and other small fish could be placed. For the first few days it was fed solely on minnows, then finding this form of diet was a bit too expensive, "I was living in London at the time, where the supply of suitable small fish is limited and none too cheap what there is of it," so I tried desperately hard to get it on to some form of soft food. Every possible form of insectile mixture was offered it, as well as egg and bread and all kinds of other things, and to try and make them attractive I placed in the dishes

* We take it that Mr. Galloway fed his Nightjar on "Life," mealworms, moths, etc.—ED.

containing the various foods, both live minnows, minnows chopped in half, and minnows chopped up very small and mixed in with the food; nothing, however, proved of the slightest avail in inducing it even to *try* any of the mixtures. The live minnows and the minnows cut in half were carefully picked out and devoured, but the minced minnow was not touched.

At length I gave up the attempt in despair. However, I was more successful in another direction, for I succeeded eventually in getting my bird to partake of mealworms and he finally grew very partial to these invaluable insects, but curiously enough he would only eat them if placed with his allowance of fish in the water, and would take no notice of them if placed in the soft food dish or on the floor of his cage. After keeping it caged up for the period mentioned, I turned it out into an aviary.

I first of all intended having a small pond made for it, but finding this rather too expensive a business, I had perforce to be content with a large earthenware sink as a substitute. This I at first only half filled with water, fearing the tragedy that eventually overtook it. To be more explicit, what I feared was that, its wings being stiff from want of exercise for so long a time, it might after a plunge into the water be unable to circumvent the slippery sides of the sink, and so be drowned. Finding, however, that various other inmates of the aviary, notably a Shama, were beginning to take an unhealthy, "for my pocket," interest in the fish, and were robbing the unfortunate Kingfisher of practically all his lawful prey, I, in order to save him as much as possible from the effects of their ravages, took to filling up the sink to the brim, and by filling it almost to overflowing, I thought that if he did, as I feared, chance to fall in, he could easily get out again. All went well for a day or two, but one afternoon on entering the aviary to renew the supply of fish and mealworms, I found the Kingfisher floating quite dead on the surface of the water.

The water in the tank had been splashed out a bit, no doubt by the Kingfisher in his efforts to catch the fish, and had fallen to a depth of about an inch below the rim. All the fish had gone, so I imagine it was in effecting the capture of the last one that he met his fate. It is possible, of course, that he may have hit his head

on the bottom of the sink when plunging in after a fish, but this I think is hardly likely, and it is more probable that his plumage being saturated by frequent immersions in the water, he was at length unable to rise out of it, and failing to negotiate the inch or so of the slippery sides of the sink rising out of the water, he was at length drowned. I don't know when I have ever regretted the loss of any bird more; he had become so tame and was in every way a most intelligent and engaging creature. My two other subsequent attempts to keep this species were, I regret to say, failures; but this I think was more my fault than my misfortune, at all events in the second case it was my fault, the first can hardly count as an attempt at all, for the bird was as good as dead when I received it, and succumbed a few hours after its arrival. The second bird, however, arrived in fine condition and very much alive; too much so perhaps, for it was as wild as a hawk. Instead of caging it up as I should have done, and as on the former occasion gradually accustoming it to a life in captivity, I foolishly allowed it to fly loose in a large aviary with the natural result that it dashed itself about all over the aviary and against the wire netting. Thinking that it would gradually quieten down, I left it to its own devices after supplying it with a quantity of fish. Although it survived two or three days, the end was inevitable, as for one thing it hardly ate anything, if indeed it ate at all, and never ceased, so long as I watched it, from dashing against its prison bars. It was also probably on account of this wildness which disturbed the other birds, that it was unmercifully mobbed by the whole crowd; the Red-crested Cardinals I then had in the aviary as usual leading the attack (by the way, how anyone, as they frequently do, can affirm that these birds are quite harmless in a mixed series, passes my understanding). It is true enough that they will leave severely alone any bird which is strong and bold enough to stand up to them, but let that bird be worsted in a fight with one of its fellows or another species and be chased by the victor, and every Red-crested Cardinal will join in the pursuit and continue it till they have run down and battered the panic-stricken creature to death. Again, introduce a strange bird into their aviary and they will immediately make a demonstration against it, and should it display any signs of panic

at their manœuvres, fiercely attack it. Zebra Finches and other small birds they will relentlessly pursue and endeavour to catch them in the air. I am certain, in fact, that they are never really happy unless chasing something, and one can see by their every movement, by the excited raising of their crests and continual utterance of their call notes, for all the world like a pack of hounds in full cry, how keenly they are enjoying their chase. I have referred above particularly to the Red-crested variety, although in my experience, the Yellow-billed and Pope Cardinals are bad enough as regards chasing and injuring small Finches, though the mere spirit of the chase does not appear to enter into them in quite the same manner. The Virginian or Red Cardinals I have found the least dangerous, and with the exception of one old cock who, after leading a most exemplary existence, suddenly run amok and did a good deal of mischief, I have never had any trouble with them, and no bird to my knowledge has ever been injured in any way by them. The safest Cardinal in a mixed company after the Virginian, I have found to be the Green. This species always appears to me to bear much the same relationship to the other birds in the aviary that a stout and dignified policeman does to the small boy. They are invariably devoted to their mates and their young, and in this respect at all events, compare very favourably with many human parents, and interfere as little as possible in the affairs of their neighbours, "another quality that is very much lacking in many humans which they might with advantage cultivate," unless they themselves or their young are interfered with, when both parents will attack the aggressor with the utmost determination and pugnacity. It was, I think, because of their meddlesome ways, especially during the breeding season, when they are wont to drive all the other inmates of an aviary about and generally create a disturbance, without it is true doing any actual damage to life or limb, that all my Green Cardinals took such a violent dislike to all members of the *Hyphantornis* species of Weaver, that it became utterly impossible to keep the two species together in the same aviary. The whole family of Cardinals would mob and very soon, if given a chance, literally batter to pieces any Weaver of this species introduced into their aviary. These



A KINGFISHER (*Alcedo ispida*).

Photo by J. H. Symonds.

Cardinals simply will not tolerate any disturbance in their division, and in the event of any unseemly brawls or quarrels, constitute themselves into a kind of police force, part the combatants and punish with promptness and severity the bird they deem the offender. They are in fact without rival as keepers of the peace. At the same time, I have kept and bred them in an aviary containing the smallest Finches without having the least cause to regret my temerity. It must be understood that what I have written above refers only to staid old birds in their second or third season, and not to flighty young birds in their first season, who, it must be confessed, are often prone to do mischief out of pure exuberance of spirits and the joy of living. These youngsters are for this reason not altogether dependable or safe companions for small or defenceless species. I fear I have allowed myself to be carried very far away from the real subject of these notes. I should like, however, as I have touched on this subject, to give my experience, such as it is, of the behaviour of different species in a mixed series, and to indicate those which I have found dangerous or otherwise. This I will do hereafter, if our Editor thinks it will be of sufficient general interest.

In the meantime to return to the subject of the Kingfisher; from my first experience, I do not think it would be a difficult matter to keep them in captivity under suitable conditions. Of course, the method "par excellence" of keeping them, would be in an aviary with a small stream running through it. This stream could be blocked at its entrance to and exit from the aviary with fine gauze, through which the water could pass without letting out the minnows, etc., with which it would be an easy matter to stock it. If necessary, the stream could be dammed to form small pools and a fair-sized bank of sand or loose earth built up on one or both sides of it, in which it is more than likely the birds would go to nest. Failing these more or less ideal conditions, the most suitable plan I should think, would be to construct a fair-sized cement pool in the aviary with a deep and a shallow end. Before turning the birds into either description of aviary, it would be most necessary that they should have been made fairly tame, as otherwise the venture would be foredoomed to almost certain

disaster. Hand-reared birds would be, of course, the most suitable, and it might be possible to induce these to partake of some form of fish meal or insectile mixture. I doubt, however, from my own experience, whether an adult caught bird, however tame it might become, would ever take to this diet. I believe I am correct in stating that partial success has been met with at the Zoological Gardens, Regent's Park, in the breeding of the closely-allied Sacred Kingfisher, the birds, according to the information I received from one of the keepers, went to nest in a log nest box of the design generally constructed for the use of Parrakeets. I do not think that any young were actually hatched out, but perhaps Mr. Seth-Smith would kindly give us the details, which would certainly be of great interest. Should I succeed in obtaining a pair, I mean to have another try at keeping, and if possible, breeding these birds this year. I trust this correspondence may prompt other members who may have kept Kingfishers to give us the benefit of their experiences, for no more charming a bird could well grace an aviary.

I do not think they require the enormous amount of fish "per diem" that Mr. Barnby Smith seems to imply. My bird, at all events, was strictly limited to ten minnows in the morning and ten again after lunch, with roughly twenty or thirty mealworms added. If an unlimited supply of fish were given, I think it would harm rather than benefit the birds, as they are greedy creatures and would be sure to devour many more than was good for them. My bird, during the six or seven weeks he was in my possession, until his sudden death, never looked sick or sorry, so the treatment I gave him cannot have disagreed with him to any great extent.

The Snipe is yet another bird that appears to be badly neglected by aviculturists. Why this should be so, I cannot imagine, as it is a delightful bird for an aviary, and from the experience of it that I shall describe below, I should say not at all difficult to keep, even under seemingly most adverse conditions. I have nevertheless looked in vain to see a representative of the species even in the waders' aviary at Regent's Park, where the conditions for keeping them would be pretty nearly ideal, and where many of what I should imagine must be far more difficult subjects are kept in beautiful trim.

The subject of these notes was found by one of my dogs in a marsh about half-a-mile from this house, on the 20th May, 1914. It was evidently some days old when discovered, for it fluttered away from the dog and flew a distance of some forty or fifty yards when it collided with a railway arch and collapsed into the road, where I picked it up and brought it back home. I placed it in a large cage, almost a small aviary, 6ft. x 4ft. x 6ft., and supplied it with a diet of worms and mealworms. These I placed in a tin pan filled with moss and water. The little thing was very timid and shy for the first few days, but began to feed within an hour after it was placed in the cage, and when I saw it from my window eagerly probing away in the moss and fishing out the worms I felt that half the battle was won. And so it proved to be, for I never had any more anxiety concerning its welfare from then on, till it met with the accident that proved its undoing some three months later. After it had taken so readily to the worm (earth) and mealworm diet, I gradually got it on to a good insectile mixture, "Galloway's," which by the way I can thoroughly recommend to anyone on the look out for a first-rate food of this nature, by placing some of the worms in a dish containing the "soft" food. By this means it was very quickly induced to sample and form a liking for this artificial diet, and a fortnight or so after it was caught became so tame that it would take mealworms out of my fingers. When it had become thoroughly tame, I turned it into my large aviary, where though it unfortunately lost some of its tameness, it thrived exceedingly and waxed fat and prosperous looking. For fear that it might injure itself when first turned into the aviary, I had cut the flight feathers of one wing, but they must have grown again more rapidly than I expected, for on entering the aviary one morning, I found the poor little bird with one leg hanging and looking the picture of misery. I fear it must have essayed a nocturnal flight and have gone full tilt into the wire netting, probably getting its claws entangled in it and so have come to grief. I did all I could for it, but it was of no avail, and from that time forward it began to grow more and more mopy and listless, and when it finally died about ten days later, proved on examination to be nothing more than skin and bone. One rather

curious thing it used to do when supplied with its dish of "soft" food, was to take a portion of it in its bill and rush off with it to the water vessels, where it would moisten the food in the water before swallowing it. It would then carry water back in its bill and empty it into the "soft" food dish. This performance it would repeat several times till it had made the food into a very sloppy mess, when it would proceed to devour it with much gusto. I eventually was forced to supply it with a separate dish of "soft" food, as by these manœuvres it rendered the main supply quite unfit for my Landrails and other "soft" food eaters. It struck me, however, that the bird showed wonderful intelligence in the manner it obviously thought matters out, and having decided that the food was not prepared to its liking, gave a pleasing display of sound reasoning power in effecting a remedy. Another proof to my mind that birds are by no means so much guided by blind unreasoning instinct as some good people fondly imagine.

In conclusion, I would like to say that I think it is the greatest pity that two such charming species as the foregoing appear to have been so sadly neglected by aviculturists. In the case of the Kingfisher there is admittedly some excuse for this neglect, for unless one is conveniently near a river or lake where an unlimited supply of minnows or similar small fish can be obtained, it is, as I have good reason to know, a pretty expensive business to provide for its wants. In the case of the Snipe, however, this does not apply, and it requires no special conditions, as far as my experience goes, to keep it in perfect health. Even in my large aviary it had to be content with a grass run, and all through a pretty dry summer, all it was provided with in the shape of its natural surroundings, was a fair-sized earthenware dish filled with moss and water, and yet it thrived well. It used to get through a surprising amount of earthworms, and these, together with about twenty mealworms and the "soft" food mentioned, was all that I supplied it with in the way of food.

Whilst living in London, I kept a Sandpiper in a similar manner, which lived in my aviaries there for over two years, and was still in perfect health when it was set upon and killed by a cock Golden Pheasant. This was an adult caught bird which I

purchased from Mr. Frost, who had just received it at the time from one of his catchers. It was so wild when I received it that I had to clip the flights of one wing in order to prevent it dashing itself to bits against the sides of the aviary. However, it soon settled down and became fairly tame in a few weeks, and eventually so far overcame its natural shyness that it would take mealworms, etc., from my fingers with the greatest boldness. All of which goes to prove that some species, at all events, of the smaller waders, are by no means difficult to keep in captivity, and will thrive well even under conditions differing widely from those obtaining in their natural state.

THE KINGFISHER.

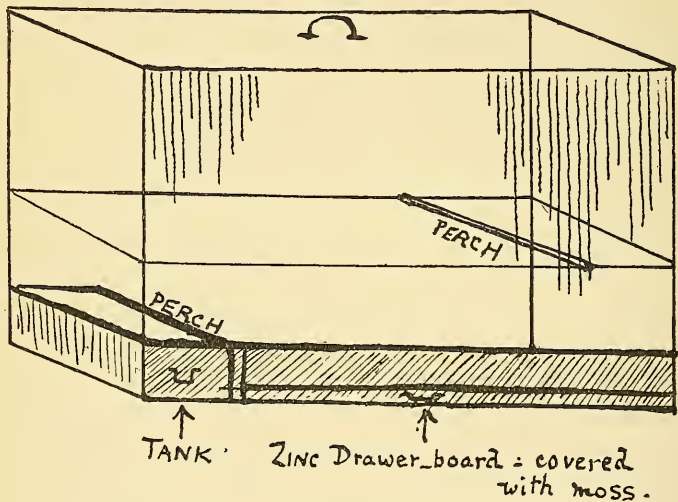
By P. F. M. GALLOWAY.

Having read the interesting notes on the Kingfisher by our Editor and others in the *Avicultural Magazine*, and also the letter from Mr. C. Barnby Smith, asking for information relating to keeping the Kingfisher in captivity, I should like to say I have kept this handsome bird in perfect health.

I have kept the adult Kingfisher for two years, and no doubt should have been able to keep it much longer, but for the fact that during a very severe spell of frost whilst I was away from home it died. I may say I left it in charge of a servant who, seeing that there were several small fish in its large water tin, thought things were all right, but it did not occur to her that the poor bird could not get at the fish, owing to the water tin being frozen over. My advice is never leave birds in charge of anyone, unless it is someone who takes the same amount of interest in them as you do yourself.

The Kingfisher is a very interesting bird to keep, but live fish it must have. I have also hand-reared it and kept it, but it is an exceedingly dirty bird in a cage, owing to the nature of its food; and if kept in a cage, the cage should be three feet long, fourteen inches deep and sixteen to eighteen inches high. At one end a vessel made of zinc, $2\frac{1}{2}$ inches deep, $3\frac{1}{2}$ inches wide, to hold live fish, should be made to slide into the cage and should be the width of the cage from back to front. Level with the top of this vessel a

perch should be placed and one near the other end of the cage. The bird will fly from the farthest perch and settle on the perch by the tank, thrust its head into the water and fetch out a fish, give it two or three sharp knocks on the perch to wake it up and bolt it headfirst; but supposing there was no perch level with the edge of the tank, the bird would fly straight into the tank and throw the water all over the place. I will just show a rough sketch of the cage I have mentioned.



The Kingfisher will thrive if fed upon minnows, small bleak or small roach, but minnows seem to be one of its favourite foods. When small live fish could not be obtained for a time, I found mine would eat whitebait; I used to get these from the fishmonger. Those that are burst and soft should be rejected and only the firmest fish used. I also used to try him with small narrow cut pieces of raw beef; he would eat these when hungry, but never seemed so fit and well as when fed upon live fish. If a Kingfisher was fed, say for a week, on dead fish or raw meat, he would begin to look soft and out of condition, but just give him a few minnows and they act like magic on him, in a very short space of time you would pull him round and he would be as bright and sleek as possible again.

It is a curious thing, that when this bird is out of health and

he jumps into his water vessel, he never seems to get properly dry. but when fit and well he could dive into a bucket of water and out again on the edge of the pail and look as if he had never been under water. Mine was very tame and I used to put a few minnows in a bucket occasionally and carry him on my finger and place him on the edge of the bucket, he would sit bobbing his head up and down for a time, and when he had a chance of getting a fish, he would shoot in under and out again like a flash and give himself a shake and was quite dry; sometimes he brought out a fish and sometimes missed it. It is of course natural for these birds to dive, and I am certain a tame Kingfisher requires this exercise.

I consider a Kingfisher is not a difficult bird to keep in health, so long as live fish can be got for it, but there are times, for instance when the river is in flood. when fish cannot be found; at other times brooks in winter may become frozen over, and in winter when the river is muddy it is almost impossible to find small fish. Then, again, in the close season the fish cannot be had, but there is a way of overcoming this difficulty of food supply, and this is the way I should advise anyone to proceed who wishes to keep a Kingfisher in perfect trim in captivity.

First of all, the ideal place for him would be to net over a small pond, but everyone is not blessed with a small pond on his premises. However, the next best thing is to make a pond 18 inches deep; it need not be wide, but it should be as long as the purse will admit, so that the bird can get a straight flight, and of course wired over. At one end a bank could be formed of earth and sand beaten firm, in this bank a hole should be scooped out about two feet through; outside the hole a dead bough could be fixed, where the bird could perch on before entering the hole, in which place it would be sure to roost. On the top of the bank an inch of concrete could be placed, and over this a thin coating of cement; this would allow the heavy rains to run off and keep the bank fairly dry, a few turfs could be put on top and hide the cement. A few feet from the bank some large branches could be fixed so as to hang over the artificial brook, and another set of branches arranged the same way the other end; better and more natural still would be to place the heads of small dead pollards in place of the boughs, but no other

perching places should be provided, the idea being to allow the bird to fly from one pollard to the other ; minnows and other small fish could be placed in the water.

A small round pond could be made, near a sloping piece of ground if possible, so that the surface water would run into it after a shower, a narrow gutter being dug out for the purpose. In this small pond fish could be stored, to be used at times when they could not be obtained, as previously mentioned. If it was desired, a few rushes could be placed here and there on the edges of this artificial brook, which would give a finishing touch and a pretty effect to the whole. In such an aviary a Kingfisher would undoubtedly thrive, and it is just possible that a pair might be induced to breed there.

A cage such as I have described would be kept to place the Kingfisher in during severe frosty weather, because the brook would freeze over, and when the weather became milder the bird could be put out into the brook aviary again.

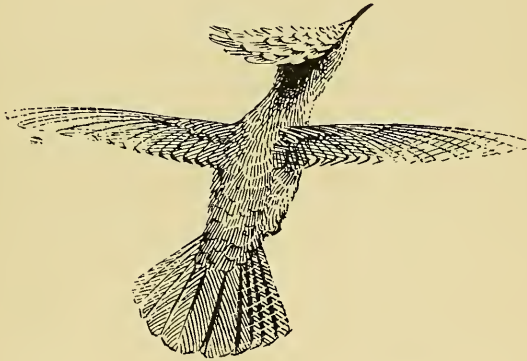
MY HUMMING BIRDS, AND HOW I OBTAINED THEM.

BY A FRENCH MEMBER OF THE SOCIETY.

(Concluded from page 109).

Soon after their arrival home, the Hummers were divided up amongst the cages and aviaries (indoors) described in my last article. I wished to learn by study which of the two modes of confinement better met their wants. Some three or four were therefore let out in several large cages, each lighted by a powerful electric lamp, which, on dark days, was kept burning from early morning to about seven p.m. Fires and a radiator kept the temperature up to 20° centigrade (*i.e.* 68° Fahrenheit) : and under these conditions most of the birds soon settled down to their new life and prospered. A fresh tail adorned the tiny Bellona exilis, and I noted with satisfaction that several of the Garnet-throated Humming Birds, whose beaks had been broken at the tip, were fast growing a new upper mandible. Next to the lamented Bellona, these latter were, and

are still, by far the most lively. *Eulampis holosericeus* appears to be, in captivity at least, rather a sluggish creature; too fond, when not actually engaged in fighting, of sitting for hours on the same favourite twig. But one forgot the sea-voyage, with all its miseries, when watching the Garnets and their marvellous flight, their evolutions in space, *backwards*, forwards, *sideways*, all occupied by that loud whirring noise which reminds me always of a miniature aeroplane. At first their activity seemed confined to the early morning



R. G.

Bellona exilis.

hours or late afternoons, when they were incessantly on the wing, circling round and round or hovering perfectly still in mid-air, suspended, as it were, by some invisible thread; but the periods of intensified energy gradually lengthened out, and now, except for a short spell towards noon, they all but live in the air. No doubt in their own land the tremendous mid-day heat enforces a protracted rest, and the natural instinct to seek repose until the hours of twilight needed those many months to adapt themselves to modified conditions.

To encourage hovering, I soon discarded all tin feeders for open glass ones. All very healthy Humming Birds prefer to take their food in this manner, buzzing over the little pot that contains

it, as in nature they do over flowers. Their diet is practically that of my Sunbirds: the usual mixture of Mellins' Food, honey and condensed milk, made perhaps a trifle weaker; then a variety of fruit, such as sweet grapes and oranges and *very soft*, ripe pears. Flowers I have not found yet to really suit their taste, though many have been tried. They scorned Madonna Lilies, Tiger Lilies and Tuberoses, after just probing the blossoms a few times; Honeysuckle was more appreciated, as well as some other flowers of the tubular type, provided they were not white: red seems to be a favourite shade and to at once arrest their attention. For many months it was impossible to get a single one of the Hummers to eat insects. I tried the most tempting green fly, and those tiny *Coleoptera* that abound in the spring amongst shrubs and in meadows, without the slightest success. It was, I think, last September, the windows being wide open in the bird-room on a sunny day, that I observed some of the Garnets in the aviary snapping at something in the air: and the act was repeated many times in a minute. Snap, snap, went the beak, as the bird hummed, whirred, twisted, and turned about in space, performing gnat-like, a veritable dance in the air, and each time the shining garnet-throat glistened and moved as for the operation of swallowing. So minute was the prey that it took me a long time to actually catch and study it: tiny insects called, I believe, September flies. I have not once seen my Hummers take insects in any other way except on the wing; and although all in my aviary would crowd round me, buzzing about my head and body like a swarm of bees, and feeding from the hand that held the syrup-pot, none ever consented to touch live prey if this were offered them, and not actually caught by themselves in the manner described. On this point my experience differs from Mr. Ezra's. The *Eulampis jugularis* he had from me, does not so far care for insects; but he has another species—a charming little bird obtained from Cuba—*Sporadinus ricordi*, whose portrait appeared in the February magazine as the coloured frontispiece, and this bird from the very first showed himself most eager for green fly, which he picks up anyhow and anywhere, from the plant, the bars or floor of his cage, or in the air, indifferently. However individuals and species may display their peculiarities,

that Hummers in nature are very largely insectivorous, while the nectar extracted from flowers acts either as a simple digestive, or as necessary complement to the more solid food, is a fact which, both from the general knowledge of those who studied them in the wild, and from my own much more restricted experience, remains no more open to doubt than is their amazing ability to fly in every conceivable direction or attitude, be it sideways or backwards, with as much ease and grace as they show when hovering, with tremulous wings, over an object they wish to probe.

Early last July the Hummers began to drop feathers and moult. They sat clumsily and laboriously engaged in the act of scratching, for a Hummer *cannot* rest on one leg, and it takes him all his time to keep his balance if he must use one foot for other purposes but that of clutching his support. The moult, as I expected, proved rather slow, only now can I fairly say, it is over at last (November); and the rich reflections of the birds' plumage showing up more brilliantly than ever, as well as their greater vivacity and slimmer, tighter shape, are sufficient signs that they suffered no ill-effects from that trying time. Only the tiny Bellona exilis succumbed after heroic efforts: the little fellow wanted ever so much to live the short spell allotted him by nature, and I cannot yet bear to think of his death.

It was just after the moult that the Hummers declared war on each other, and, in fact, on every bird in the room, thus proving that animal life is not, after all, so very unlike our own, which after evolving from its early stages, now seems inclined to revert to conditions apparently held as ideal by certain rulers and nations of the present day. Whether an increase of vitality, attributable to a successful dropping of the old garb and assuming of the new plumage brought out the old fighting instinct amongst the Humming Birds, which so far had only appeared at intervals, and so to speak lay dormant; or whether the season coincided with their breeding-time, it is not for me to decide, as I am wholly ignorant of their habits in the wild state; but it is quite certain that about the middle of October it became impossible to continue keeping the Hummers together or with any other birds whatever. All day they were "at it"! all day the furious "skrip, skrip," which seems their only call,

sounded through the room as an incessant war cry. Each Hummer wanted the whole of his own tree or branch. all the feeders, or rather, the whole of the two large aviaries, entirely to himself. Two of my little green Hummers I foolishly failed to catch and rescue in good time, and, although they had been the most pugnacious, they speedily died from worry, consequent upon the unnatural strain of a life wholly devoted to warfare. Soon the small Sunbirds sharing the aviary with the Hummers began to look less cheerful. *Ethopyga nepalensis* had to snatch hasty and miserable meals at moments when the foe's watch was slightly relaxed; *Ethopyga saturata* stopped his pretty warbles. Then I saw something must be done and without delay. In one single afternoon my two aviaries were torn down from walls they had adorned for over a year: an invasion of tables, stands, tripods, cages of all sizes filled the room, each single bird was captured and given a separate house all to himself, and peace at last reigned supreme.

It is difficult to describe a Hummer's fighting methods. He does not use his beak for such a purpose, nearly to the same extent as other birds, on account of its extreme fragility. His great plan is to knock down the enemy by violent and repeated assaults, darting at him again and again with the speed and force of a small catapult; indeed such is the impetus that the blow would be enough to stun if not to kill a bird much bigger than himself. Screaming, shaking their heads and bodies, with tails spread out in the shape of a fan, all are symptoms of rage and signals of imminent fighting. Matching is never considered: a Garnet-throated Humming Bird,—a creature about equal in size to the common Wren—thinks nothing at all of going for a Double-collared Sunbird, nor is the latter very likely to "stand up" to him. The fury of the attack, also the loud hizz of the wonderful wings, which these birds can and do intensify at will, generally succeed in cowing most occupants of the place, and even now this impish rage has not abated. Two of my strongest Garnets, who inhabit twin cages in close vicinity on the same shelf, spend their time in swearing and shaking at one another behind the bars, whirring and buzzing about with that peculiar flip-flap of the wing, which in their world is paramount to a challenge in ours.

To wind up,—now that an experience of nearly nine months with Humming Birds has at last proved them to be capable of thriving in Europe—just a few hints to aviculturists who may, I hope, feel tempted to obtain these charming little creatures of Tropical lands. People have asked me if there is a secret by means of which they can be persuaded to live in our bleak country. Indeed I know of no such thing, and, although we succeeded with a certain syrup and along certain lines in acclimatising some Humming Birds, it is no reason why equal or even greater success should not be achieved by different methods. But if the roads leading to the desired goal may be many, some are bound to spell failure. The following are a few hints: *Don't* crowd the birds together on the journey; above all don't let them become messed up with the fluid. Upon arrival at destination, beware of aviaries. No matter how large these may be, the Hummers will sooner or later set about making life intolerable for themselves and other inmates. Besides this, it is all but impossible in an aviary, while fairly easy in a cage, to prevent the Hummers from clinging to the wires, especially at bed-time; the result being a sad wreck of the lovely tail-feathers. *Don't* invest in enormous cages, the birds don't require them, so long as each is kept strictly alone. From his own particular mode of flight a Humming Bird will take and enjoy almost as much exercise in a restricted space as in a huge cage. A contrivance two feet long, two feet high, one foot and a half broad would comfortably accommodate any middle-sized Hummer. Let your birds of course have as much sun as possible, and be sure to spray them *daily* with tepid water, unless you provide them each with a small green plant, which, when wetted, they will use as a bath. *Don't* furnish the cages with twiggy branches, or the Hummers while buzzing in and out of them will fray the tips of their long wings. A few, a *very* few, natural perches of varying thickness are far more preferable. These need always to be thin, out of all proportion to the dimension of the occupant; for in the Humming Birds, after centuries of a life spent in the air, the legs and feet have become reduced to such minute size, weakened or atrophied, as it were, by lack of use (as in the Swifts) that they can actually not turn themselves about on a twig, or move along it, without the help of their wings. *Don't* let the temperature drop

below 17° centigrade or pneumonia may follow. Damp heat is the best. *Don't* wait for a bird to hide his head under the wing before you make up your mind he is ill and needs nursing. You might well wait for ever. A Hummer *cannot* indulge in that attitude be it to seek sleep or prepare for death.

* * * *

The following is a list of the various species of Sunbirds and Humming Birds now occupying my bird-room. Owing to lack of space, all hens have long ago been discarded as undesirables, as well as some Sugar-birds and Zosterops.

HUMMING BIRDS.

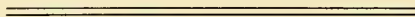
<i>Eulampis jugularis</i> ...	}	
<i>Eulampis holosericeus</i> ...	}	Guadeloupe.

SUNBIRDS.

<i>Æthopyga seheriæ</i> ...	}	
<i>A. nepalensis</i> ...	}	Himalayas.
<i>A. saturata</i> ...	}	Himalayas.
<i>Arachnechthra zeylonica</i> ...	}	
<i>A. asiatica</i> ...	}	India.
<i>Cinnyris chalybæus</i> ...	}	
<i>C. afer</i> ...	}	South Africa.
<i>C. amethystinus</i> ...	}	
<i>C. mariquensis</i> ...	}	Transvaal.
<i>Anthrobaphes violacea</i> ...	}	South Africa.
<i>Nectarinia famosa</i> ...	}	South Africa.

VARIOUS.

<i>Certhiola dominicana</i> ...		Guadeloupe.
<i>Ixulus flavicollis</i> ...		India.



MR. W. JAMRACH'S PAST IMPORTATIONS OF INDIAN PHEASANTS.

(Translated from the French by H. D. ASTLEY).

(Continued from page 128).

In 1881, I received 20 pairs of Impeyan Pheasants, 7 pairs of Tragopans (*Satyra*), 18 *Polyplectron chinquis*, 9 *Euplocamus erythrophthalmus*, 7 Argus and 2 hen Elliot's Pheasants. During the snowy season the number of the birds captured was very meagre, but on the other hand the voyage was very successful, for not one of the Impeyan Pheasants and Tragopans succumbed.

In 1882, I left Calcutta with 43 pairs of Impeyan Pheasants, 18 Tragopans (*Satyra*), one male Elliot Pheasant, six Vieillots' *Euplocamus*, four *E. ignitus*, three male *Polyplectron bicalcaratum*, one *Polyplectron chinquis*, three pairs of *Euplocamus pyronotus*. On the voyage I only lost four Impeyans, four Tragopans and the one *Polyplectron chinquis* (Peacock Pheasant). I sent my man into the Naga mountains, and he arrived in England two months after I did, with two males and 3 females of Blyth's Tragopan; later a fourth female arrived, which had been left ill at Calcutta. He also brought one pair of Cabot's Tragopan, of which only the male survived, and is at this moment (1882) in the London Zoological Gardens; by this same catcher I also received 13 pairs of *Polyplectron chinquis*, and one male and two female Argus Pheasants. As one can see from what I have already written, after the opening of the Suez Canal my importations were more successful. I need hardly say that we had absolutely given up the route viâ the Cape of Good Hope, which had ended in such poor results. All the birds I imported into Europe were sold, but at varying prices. For a large number of the Impeyan Pheasants (Monauls) I accepted £100 a pair, but for some of the species I obtained £130 a couple. The Tragopans often fetched more than £100 a pair.

Now (*ie.* 1882) it is very difficult to procure Impeyans and Tragopans in India, since the Government has forbidden their being captured or shot for a period of five years.

The capture of the birds is by no means an easy task, and furthermore it is difficult to bring them to Calcutta.

In fact, the birds, when captured, had to be carried on men's backs in baskets for at least nineteen days. (To-day—1882—the railroad has been extended further). The high prices that I obtained for the living birds might give the idea that I made a large profit during the nineteen years that I was importing them from India. As a matter of fact I pocketed nothing. On the contrary, I estimate that the importation of the Monauls and Tragopans left me with a loss of £3,000. This heavy loss however was happily covered by the profit accruing from other business matters in connection with trading in animals.

Without referring to the larger Mammals which I introduced, it is perhaps not out of the way if I mention that in 1871, out of 85 Viellot's Pheasant sent off, I received 35. Some of these were sold for £50 the pair, and others at £75, whilst in a preceding importation, the Zoological Gardens of Antwerp paid me up to £200 for two pairs. In addition to the Monauls and Tragopans which I have already mentioned, I have imported during the last seventeen years a great number of birds, the list of which I give further on.

I must mention that Blyth's, Hastings', and Cabot's Tragopans were, through my efforts, imported for the first time into Europe. It was I also who imported a male Sclater's Monaul for the Zoological Society of London. In 1879 I received the first pair of Elliot's Pheasant, which I sold for more than £120 to M. Rodocanachi, who has a large pheasantry, and is one of the members of the Société d'Acclimatation of Paris.

For five years I have zealously striven to import Elliot's Pheasants, and in order to succeed, I had to overcome difficulties which seemed insurmountable, and to lay out more than £400. I hope, however, to regain this outlay later on, thanks to my numerous clients.

I can assure you, dear Sir, that for these incessant voyages to India, made entirely for collecting valuable birds and animals, it is not sufficient to dwell only upon the hope of realizing a pecuniary profit, but one must above all have a real love for these animals, which you know I most truly possess.

I am, dear Sir, yours, etc.,

WILLIAM JAMRACH.

LIST OF IMPORTATIONS MADE BY MR. WILLIAM JAMRACH.

Year of Importation.	NAME OF BIRDS.	BIRDS SENT.	DIED ON VOYAGE	ARRIVED ALIVE.	OBSERVATIONS
1864	Impeyan Pheasants	20	13	7	} Viâ Cape of Good Hope By land
1865	and Tragopans	50	50	„	
1866	(<i>Satyra</i>)	117	117	„	
1867	—	300	289	11	
1868	—	285	285	„	
1869	—	100	60	40	
1870	—	80	64	16	
1871	—	120	104	16	
1872	—	40	36	4	
1873	—	80	68	12	
1874	—	40	9	31	
1875	—	80	10	70	
1876	—	65	7	58	
1877	—	150	„	150	
1678	—	120	6	114	
1879	—	190	„	190	
1880	—	340	58	282	
1881	—	54	„	54	
1882	—	112	9	103	
—	Elliot's Pheasants	15	„	15	} Viâ Suez
—	Wallich „	2	„	2	
—	Pucrasian „	64	7	57	
—	<i>Euplocamus vieilloti</i>	161	51	110	
—	„ <i>ignitus</i>	11	2	9	
—	„ <i>nobilis</i>	16	„	16	
—	„ <i>prælatus</i>	30	„	30	
—	„ <i>pyronotus</i>	17	„	17	
—	„ <i>andersoni</i>	2	„	2	
—	„ <i>lineatus</i>	40	„	40	
—	„ <i>erythrophthalmus</i>	29	„	29	
—	<i>Polyplect. bicalcaratum</i>	10	„	10	
—	„ <i>chinquis</i>	124	22	102	
—	<i>Cerionis blythi</i>	7	„	7	
—	„ <i>caboti</i>	2	1	1	
—	„ <i>hastingsii</i>	40	„	40	
—	Impeyan Pheasants				
—	<i>Sclateri</i>	1	„	1	
—	<i>Argus giganteus</i>	22	6	16	
	TOTALS ...	2936	1274	1662	

Writing in *The Field*, a fancier recorded the following:—

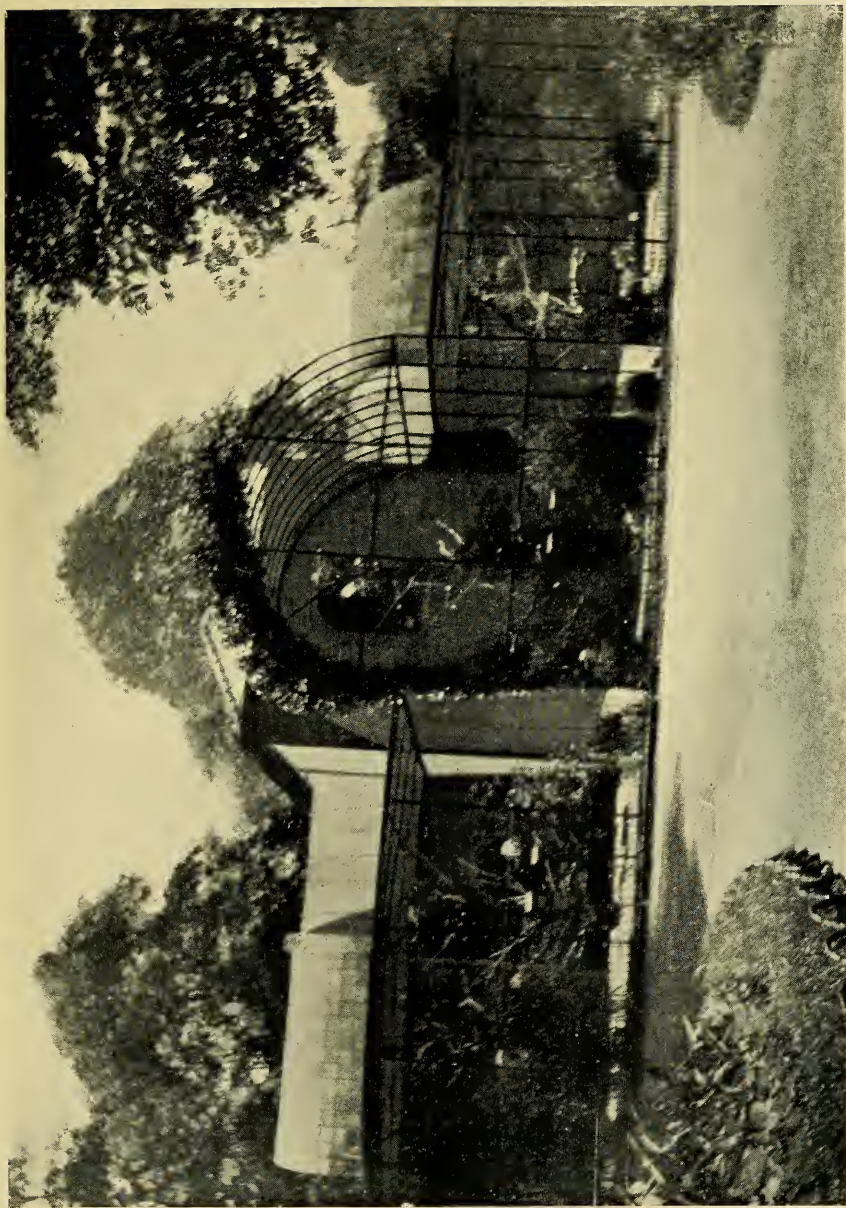
“ Soon after the arrival of this species (*Gallophasis elliotii*) in England, I purchased a pair, and another pair on the continent. I found them very hardy, and decidedly good breeders, but I was not prepared for the increasing number of eggs they now yearly lay, at first they laid but few. In 1888, out of those I bred I kept one hen, mating her with a cock also bred in this country; last year, that is before she was one year old, she commenced laying; the first setting, consisting of nine eggs, produced nine birds; the second of twelve eggs was not as good, total twenty-one. This year she laid about the middle of March as usual, and the first nine eggs produced eight birds, and one dead in the shell; the second twelve eggs produced only two, the rest were bad. I attribute it partly to the hen; and the third sitting has produced eight out of eight eggs, good strong birds, so she has laid twenty-nine eggs this year. This speaks well for this beautiful bird, and our best thanks are due to Mr. W. Jamrach, who first imported them.”—*The Field*, June, 1890.

RARE BIRDS IN CONTINENTAL ZOOS.

By GRAHAM RENSHAW M.D., F.R.S.E.

The great zoological collections of the Continent, though resembling our own in many features, often contain special exhibits of surpassing interest. The following species have come under the notice of the writer during the past fourteen years. A number of them have been exhibited in the Regent's Park collection, others do not seem to have appeared there, at any rate recently.

1. *Paradisæa minor* (Lesser Bird of Paradise). Apparently the only Paradise Bird which occurs at all in collections abroad, and even then the individuals are few and far between. One which the writer saw at Amsterdam in 1900 was figured in the *Avicultural Magazine* for March, 1914: this or a second example being mentioned in the letterpress accompanying the illustration. Some years ago there was a very good specimen in the Hamburg Zoological Garden, and another at Berlin. The writer saw a Paradise Bird,



AMSTERDAM ZOOLOGICAL GARDENS THE IBIS AVIARY.

Graham Renshaw photo.

probably referable to this species, in a small dealer's shop in Liverpool about twelve years ago; another which was brought over with it died on the voyage. The display of the Lesser Bird of Paradise is very beautiful, the trailing flank plumes being raised high by the bird, and a quivering movement imparted to them, much in the same way as the peacock shakes its train when expanded, thus giving the impression of a *shower* of eyes!

2 & 3. *Lamprolornis nitens* and *L. aurata* (Glossy Starlings). A fine collection of these in the old Bird House at Amsterdam included one with several white feathers on the breast—a partial albino.

4. *Prothemadera novæ-zealandiæ* (Parson Bird). This species is exceedingly rare in captivity, and in many years' experience of Zoological Gardens the writer has only seen one. This specimen—a fine healthy bird—was living at Amsterdam in May, 1899, being kept in a spacious outdoor flight well provided with growing shrubs. The full and beautifully varied song for which the Parson Bird is famous was not uttered during the writer's visit, but the bird emitted a few musical notes, followed by a harsh clanking sound.

5. *Schizorhis concolor* (Cape Lourie). One of these dull-coloured Touracos was living in the Antwerp collection in June, 1913. Its sombre plumage and sluggish demeanour rendered it an uninteresting exhibit, though if it had been kept in a roomy outdoor aviary it would probably have become active and noisy. To the writer it recalled some overgrown, over-sedate Mouse-bird (*Colius*), though Mouse-birds are only distantly related to Touracos.

6. *Prionotelus* (Cuban Trogon). The Berlin Zoological Garden possessed one specimen in June, 1909. In spite of its beauty this species is sluggish and uninteresting, to be prized only for its rarity; a stuffed Trogon is almost as attractive as a live one.

7. *Prionites ruficapillus* (Motmot). One specimen—also beautiful, yet sluggish—was shown in the pretty little Bird House of the Hamburg Zoo in June, 1909.

8. *Deroptyus accipitrinus* (Hawk-billed Parrot). One at Amsterdam in 1899.

9. *Pæcephalus gulielmi* (Jardine's Parrot). One at Amsterdam in 1902.

10. *Ketupa ceylonensis* (Indian Fish Owl). This species was

exhibited at Amsterdam in 1899. The writer does not remember having seen any other specimens.

11. *Syrnium torquatum* (Collared or Spectacle Owl). One at Amsterdam in 1902. This is one of the very quaintest of the owls, with its white head and face banded with black as if wearing a burglar's mask. The writer once had one of these "Spectacle Owls" in his possession and found it an amusing pet. As the bird approaches maturity the white head becomes chocolate-coloured.

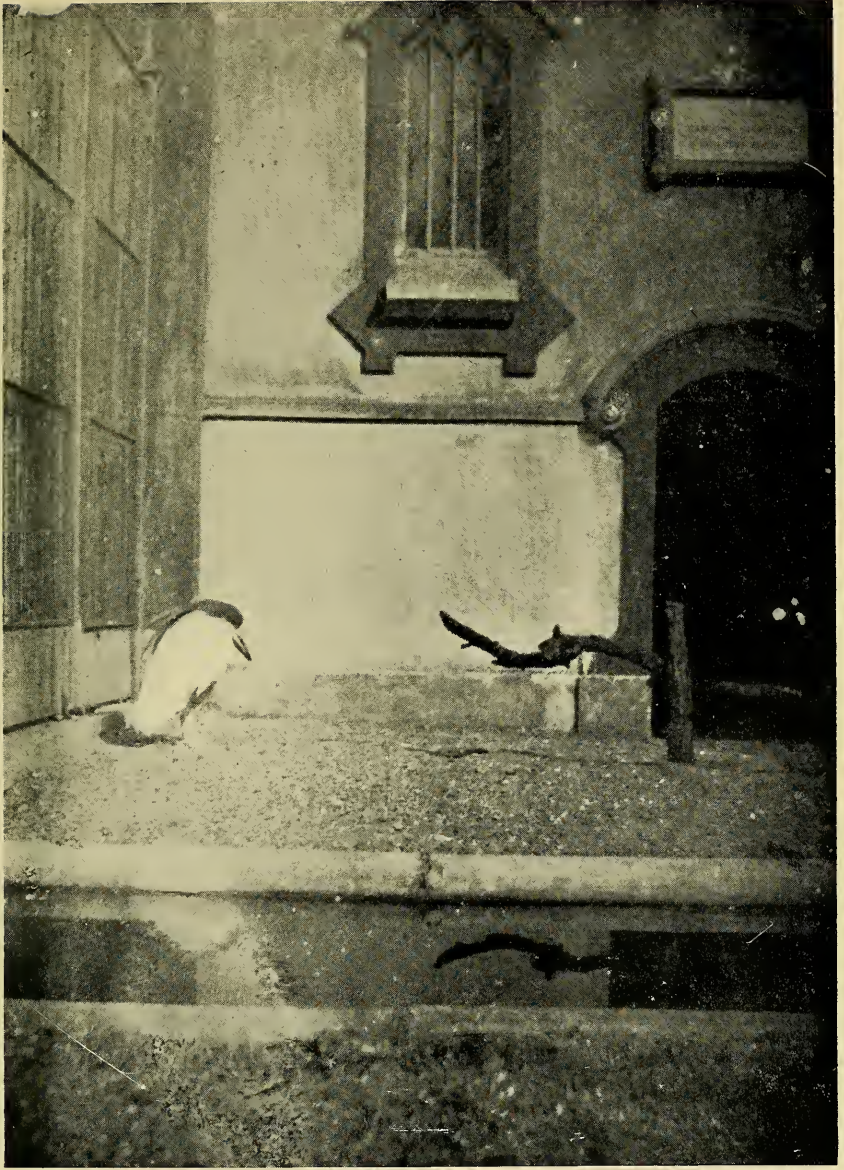
12. *Ardea goliath* (Goliath Heron.) This splendid bird was included in the rich series of herons and storks shown by the Amsterdam Zoological Society in 1899. Its reddish head and crest, blue-grey neck and long loose plumes render it one of the handsomest of its tribe.

13. *Canchroma cochlearia* (Boat Bill). This quaint, modified Night Heron remains sluggish and silent during daylight. Several specimens seen by the writer all stood stock still as if stuffed, more like images than living birds. Of two seen at Amsterdam in 1899, one bird had the feathers at the base of the bill lemon-yellow, while in the other they were white.

14. *Bernicla sandvicensis* (Sandwich Island Goose). The writer was pleased to note an example of this all but extinct bird amongst the swarming waterfowl in the Cologne Zoological Garden (June 23, 1909.) It was in fine condition and the plumage sleek and glossy. Another individual is figured in Heck's "Living Pictures of the Animal World," published in 1899 and illustrating the collection at Berlin. These are perhaps the last examples that will be seen alive in Europe, and in their solitary survival are but one remove from museum specimens. The Berlin bird was the only one that had been imported for ten years!

15. *Palamedea cornuta* (Horned Screamer). Very rare in collections. There was a fine healthy example at Hamburg in June, 1909.

16. *Myristicivora bicolor* (Nutmeg Pigeon). A beautiful specimen was living at Amsterdam in 1902, its snowy plumage tinged on the head with the faintest shade of yellow and the black wings and tail showing up in fine contrast.



Graham Renshaw photo.

AMSTERDAM ZOOLOGICAL GARDENS.

BOAT-BILLED HERON (*Cancroma cochlearia*).

17. *Megacephalum maleo* (Celebean maleo). The writer has only seen one of these very rare birds, which was living at Amsterdam in 1900. The crown of the head is *not* "covered with a large black casque," as stated in books, for in the living bird this helmet is bright blue. About the size of a small turkey, the maleo is dark brown above and beautiful salmon pink below: it is handsome and striking in appearance, and its absence from our aviaries is much to be regretted.

18. *Eurypyga helias* (Sun Bittern). These pretty creatures are expert fly-catchers, the long neck shooting out suddenly and the fly being caught in the forceps-like beak. When standing these birds sway slowly but continually from side to side, and this may in the wild state be protective, the mottled plumage simulating sedges swayed by the breeze. The Sun Bittern also has a curious habit of rubbing its bill against the ground, as if sharpening it. Towards evening these birds utter pleasing and oft-repeated whistles. A fine pair noticed by the writer had lived some eight years in the Jardin d'Acclimatation at Paris.

19. *Casuarus westermanni* (Westerman's Cassowary). This fine species is named after Dr. G. F. Westerman, the founder of the Amsterdam Zoological Society. The writer saw an example living at Antwerp in 1900.

20. *Apteryx mantelli* (Mantell's Apteryx). Several of these rare birds used to be exhibited in the Continental Zoos: at Amsterdam in 1899 they had both *A. mantelli* and *A. oweni*. These birds are exceedingly apathetic when roused in the daytime: if turned out of bed they stand stupidly still, and after a few seconds run heavily forwards and dive under their straw.

The difficult problem of outdoor labelling seems to have been solved at Amsterdam, the labels being inserted in glazed frames which are then sealed up, and protected from the rain by a projecting roof. One of these label stands is seen in the accompanying illustration, the bird perched upon it being a Temminck's Pied Hornbill.

REVIEW.

“ A LIST OF BRITISH BIRDS.”

The Committee of the British Ornithologists' Union has, with great pains and careful labour, compiled a fresh and most helpful list of British Birds, the number of which is recognised as 475 in all, of which 188 are regular breeding birds and 286 are non-breeding, and one is extinct, viz., the Great Auk.

The List is sub-divided into *Residents* (141).

Summer Visitors (47) and *Winter Visitors* (46).

Birds of Passage, i.e., those which are only found during the spring and autumn migration periods (30), and *Occasional Visitors*, i.e., birds which have occurred on more than twenty occasions (61).

We are glad to find much assistance and lucidity in the nomenclature, it having been the object of the Committee to use the oldest name for each genus and species, commencing from 1758, so that some of the more modern titles have been discarded. Trinomials (detestable things!) have been thrown aside as much as possible, although one wishes ornithologists could manage to style the British Bullfinch, *Pyrrhula pileata*, instead of *Pyrrhula pyrrhula pileata*; but that is one step better than *Pyrrhula pyrrhula pyrrhula*! The Song Thrush, too, is dubbed *Turdus musicus*, instead of *Turdus musicus musicus*, which latter sounds as if it was applied to a Thrush who was a sort of Caruso!

What, amongst other things, especially commends itself in this list, is the derivation of the names from the Latin and Greek; for instance, to many members of the Avicultural Society, individuals who have perhaps left their schoolroom and school days some way behind, and who might possibly be puzzled as to *Coccothraustes* (the generic name for the Hawfinches), we find that that jaw-breaking title = the kernel-breaker: from *Kokkos* and *Thrauo* (to put it in English lettering). And these derivations make quite an interesting study, so much so that in the future one fully expects members of the Society will no longer write in articles that the “Pine-Grosbeak” (for instance) has successfully reared young in captivity, but rather, “It may interest members to know that my pair of *Pinicola enucleator*” has successfully done so; since after

studying this list of British Birds, and having learnt that *Pinicola* is derived from *Pinus*=a pine-tree, and *colere*=to inhabit, and furthermore that *enucleator* conveys to one's mind a bird who takes out (e or ex) the kernel (nucleus), it will be just as easy to write of *Pinicola enucleator* as of Pine-Grosbeak; and this mode may possibly also increase our roll of members, for certain ornithologists who sit in Museums and who would *never* condescend to speak of Pine-Grosbeaks or Thrushes, and give tongue to other such vulgar parlance, would no doubt say, "Ho *ho*, this Magazine is worth *looking* at, these people seem to know what they're writing about," only let us be certain of our ground, not confusing terms and titles as a lady did, who, on walking round the garden of a friend, a real horticulturist, and hoping to please him, remarked on the beauty of his *Angina pectoris*—meaning *Anchusa*.

Well! there it is, this list, helping us very considerably to interpret what until now, may have been as an unknown tongue to many. And there are other advantages in it which lack of space prevents us from enlarging upon.

H. D. A.

[A LIST OF BRITISH BIRDS, compiled by a Committee of the British Ornithologists' Union. Second and revised edition. Published by the B.O.U. and sold by WILLIAM WESLEY and SON, 28, Essex Street, Strand, London, W.C.]

ENGLISH NAMES FOR THE PARROTS.

By Dr. E. HOPKINSON.

(Continued from page 133.)

BLUE-THIGHED LORY.=*Lorius tibialis*.

CERAM LORY, *see* CHATTERING LORY.

CHATTERING LORY.

CRIMSON LORY, *see* CHATTERING LORY. [(2) *See* CERAM ECLECTUS].

["ECLECTUS LORY," *see* ECLECTUS, GRAND].

[GRAND LORY, *see* ECLECTUS, GRAND].

GREEN-NAPED LORY, the GREEN-NAPED LORIKEET.

GREEN-TAILED LORY.=*Lorius Chlorocercus*.

*GUEBY LORY, *see* under RED LORY (1 and 7).

*GUEBY LORY, VAR. A., *see* under RED LORY (7).

*GUERY LORY, same as GUEBY.

*INDIAN LORY, the BLUE-TAILED LORY, *see under* RED LORY (3).

*INDIAN LORY, VAR. A., *ditto*.

*JARANCRE LORY, *see* RED-FRONTED LORY, *below*.

[KING LORY, the KING PARROT (1)].

KUHL'S LORY.

LADY LORY.

[LINNAEAN LORY].

LONG-TAILED LORIES, the LORIES as opposed to LORIKEETS.

LONG-TAILED SCARLET LORY, the RED LORY.

LOUISIADE LORY.=*Lorius hypaenochrous*.

MOLUCCA LORY, *see* RED LORY.

MUSK LORY, the MUSKY LORIKEET.

*PAPOUAN LORY, the PAPAUAN LORY.

PAPUAN LORY (*PAPAUAN LORY, Latham).=*Charmosyna papuensis*.

[*PARAGUAN LORY, *see* PESQUET'S PARROT].

PURPLE-BREASTED LORY, an occasional dealers' name for BLUE-TAILED LORY.

PURPLE-CAPPED LORY.

PURPLE-STREAKED LORY, a dealers' name for the VIOLET-NECKED LORY.

RAJAH LORY, one of Latham's names for the PURPLE-CAPPED L. RED LORY.

RED-FRONTED LORY.=*Chalcopsittacus scintillatus*. Other book names are: *Amber Parrot (Latham), *JARANCRE LORY, VIOLET-NECKED LORY, but the latter name properly belongs to another species, *Eos variegata*.

[RED-SIDED GREEN LORY, *see under* ECLECTUS].

[“RED-WINGED LORY,” Australian popular name for the CRIMSON-WINGED PARRAKEET].

Reticulated Lory, the BLUE-STREAKED LORY.

RUBY LORY, *see* KUHL'S LORY.

SAMOAN LORY.

SCALY-BREASTED LORY, the SCALY-BREASTED LORIKEET.

SCARLET LORY (1).=the CHATTERING LORY. (2) THE RED LORY.

SHORT-TAILED LORIES.=the LORIKEETS.

SOLITARY LORY.

“SOLOMON ISLANDS LORY,” a dealers' name for the CHATTERING LORY.

TALAUT LORY.=*Eos talautensis*.

THREE-COLOURED LORY.

VARIEGATED LORY, the VIOLET-NECKED LORY, *see under* RED LORY (11).

[VIOLET LORY, *see under* ECLECTUS, GRAND].

VIOLET-NECKED LORY (1).=*Eos variegata*; *see under* RED LORY (11). (2) Also occasionally used for the RED-FRONTED LORY, *see above*.

WALLACE'S LORY.

*LORY PARRAKEET, Edwards' name for the ORNAMENTAL LORIKEET.

LOUISIADE LORY.=*Lorius hypaenochrous*.

"LOURY," rare variant of LORY. Australian dealers' name for PENNANT'S PARRAKEET.

LOVEBIRD, a popular name for any member of the African *genus* *Agapornis*, and commonly extended to include the similarly shaped PASSERINE PARRAKEETS of South America, and the well known Australian BUDGERIGAR. Occasional book variants are LOVE-PARRAKEET, LOVE-PARROT. *INSEPARABLE, an old synonym. The following is a list of English names, those referring to other genera than *Agapornis* being included in brackets.

ABYSSINIAN LOVEBIRD.

[AMERICAN LOVEBIRDS, the PASSERINE PARRAKEETS (*Psittacula*)].

["AUSTRALIAN LOVEBIRD," the BUDGERIGAR].

To be continued).

CORRESPONDENCE, NOTES, ETC.

SIR,—Although Kingfishers will take little trout—and at trout-breeding places the fry have to be protected by wire netting—possibly they like better other kinds of fish. Many years ago (at Hever in Kent) they carried off all my goldfish, even some of the size one generally sees in glass-bowls, though these must have proved very hard to get down. I remember they used to hit them about a good deal before they tried to swallow them. But why I think they may prefer coarse fish is this. We have in the garden at home (Hampshire) a line of pools connected by a stream. One of these pools held only three trout (it held four, until one, a whopper, was taken by an otter who had his kennel in a reed bed below) but was full of sticklebacks and minnows. The Kingfishers used to come there then. There was a balcony opposite the pool and we could sit and watch the birds fishing there in the pool below. A favourite perch was a twig of pink thorn that hangs over the water, and another the branch of a rowan. Sometimes one of the Kingfishers would sit on the ground by the edge of the water and fish from there. I have never elsewhere seen one doing this. A Dabchick was also constantly there and was absurdly tame.

Well, this pool leaked—the water got away through the greensand rock—and in order to get the full quantity of water over the fall we had to run the pool empty and work at the leak. This proved to be a longish job, and for many

days, under a fierce sun. the pool lay dry—all but a muddy runnel—and every fish was lost. One trout of $3\frac{1}{2}$ lbs. threw himself on to the mud, and by the time I got him (to be accurate, *her*) into a bucket, was beyond all help, while two, although we moved them successfully into a tiny pool above, were not to be seen the next day, being probably taken by the otter that then was working the stream (judging by his “seal” or footprints, this otter used to execute a moonlight hornpipe on the mud of the emptied pool). Every minnow or stickleback that had not escaped down the sluice was dried up by the sun or choked in the thick water. The Kingfishers have not been there since (nor for that matter the Dabchick, though he does not properly come into the tale).

Some two hundred yards above this is another and a very much larger pool full of sizeable trout. It is connected with its spring by a tiny streamlet up which the trout run to spawn. They will very soon be there now (February), and presently this little thread of shallow water will harbour shoals of trout-fry. But though a Kingfisher may be seen going over it like an arrow, never in my observation will it stay to fish. So I have come to think that the Kingfishers like coarse fish best, and I should like to stock that garden pool with sticklebacks and minnows. But I do not know how to do it.

AUBYN TREVOR-BATYÉ.

“DO FIELD VOLES IF GIVEN TO BIRDS AS FOOD
CAUSE A WASTING DISEASE?”

SIR,—I have often thought of asking a question in the *Avicultural Magazine* that seemed a stupid one, but may not be so very stupid after all. The question is “Do field voles if given to birds as food cause a wasting disease?”

In this part of the country there is a prevalent idea that they do cause a wasting disease, and that cats that take to eating them soon get thin and die. I cannot get my aviary man to give voles to any birds, though he will give as many house mice as he can catch. If I point out that the Cranes catch and eat numbers of voles I am met by the reply, “Yes, but a Crane is not a Greater Bird of Paradise.” I asked one day what was wrong with a fat, healthy vole. The reply was “Weel, there will be a something in the head o’t, do ye no think sae yer s’el?” Now, this reply as to there being something in the head of the vole made me think there might be something in the argument that field voles cause a wasting disease.

It may be that these animals are often the host of tape or other intestinal worms, which, of course, would account for birds or cats wasting away if they became infested. Perhaps some scientific member of the Avicultural Society will reply to this suggestion and say whether field voles are safe food or not. It is curious that on two occasions, when I have killed voles and given them to birds the birds have died; just a lump of bones and feathers two or three weeks after. One bird was an Occipital Blue Pie, the other an Apoda (Paradise Bird).

Hoddam Castle.

E. J. BROOK.

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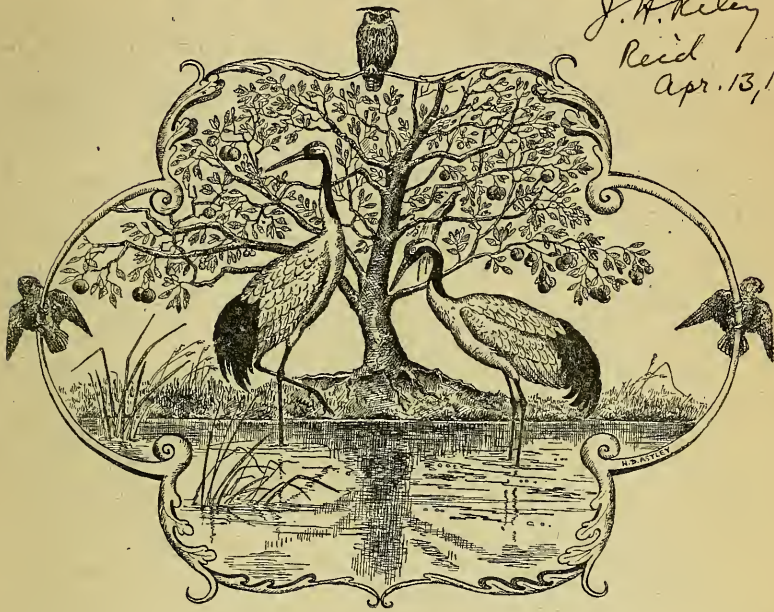
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APRIL, 1915.

THE RED-HEADED BULLFINCH.

Pyrrhula erythrocephala.

By HUBERT D. ASTLEY.

Not until 1914 was this very handsome Himalayan Bullfinch imported alive into Europe, when Mr. David Ezra sent over a few pairs to his brother Mr. A. Ezra from India, a male and female being most kindly given to me.

Most unfortunately, after keeping them in splendid condition all last summer and through the winter, I lost the hen bird in a tragic manner. Rather stupidly I had in my bird room a Pigmy Owl from Yucatan, scarcely larger than the bullfinches, whose cage hung in a corner on a wall, the bars being anything but wide apart, and there the little imp of a bird had been for months; glaring, it is true, at the other occupants of the room, but never being able to harm them, or at any rate so I thought, until one day to my horror and dismay I found the headless body of the female Red-headed Bullfinch lying on the floor beneath the Pigmy Owl's cage, the little wretch glaring more ferociously than ever because he felt cheated at having in his stomach only the head!

The poor bullfinch must have clung for a moment to the wires and been promptly seized, although how the owlet managed to pull the bird's head through, and only its head, was puzzling. I felt like treating that owl in the same way. It was all so unnecessary, for the vile creature had sparrows and mice to his heart's, or rather his stomach's content.

It certainly is disgusting when a thing like this happens which could have been avoided. Of course the stable door was locked after

the horse was stolen, and there was the disconsolate male bullfinch calling vociferously, and continued to do so for two or three days. The two were devoted to one another, and I had been looking forward to their nesting successfully this summer.

Like the British Bullfinch, this species is very tameable, the male also having a charming merry song, more resembling a Linnet's than that of our British bird's. The call note is loud and double, of a higher pitch, I think, than the British bullfinch's, but still having a family resemblance. It may be due to age that causes the colour of the male Red-headed Bullfinch to vary in intensity.

Some are only dull orange, others are bright orange-red; but much more orange than red, so that I think it misleading to have named this bird "Red-headed." Our British bird *is* red. To my eyes, the Himalayan bird is *not*! "Orange-headed Bullfinch" would have been a more appropriate name.

My male bird moulted out slightly brighter in colour than when he was first brought from India, but not nearly so vivid as are some of the skins in the Natural History Museum, in spite of his diet having consisted all through the summer of fresh chickweed, groundsel, flowering grsses, strawberries, etc., and later on of blackberries, elder berries, apple, plantain, and so on. Besides which the birds were often flying loose in the bird-room, with a pan of fresh water to wash in, which they took every and constant advantage of.

Gould (Birds of Asia, Vol. 5) writes:—"This fine species "possesses the general characteristics of the common Bullfinch of "Europe, except in the form of the tail, which is decidedly forked, "while in our bird it is even, and in the colour of the head, which "is bright rufous, inclining to scarlet, instead of being black as in "our native species. The occurrence of this bird in the collections "of Europe was formerly so rare that the single specimen belonging "to the Andersonian Museum at Glasgow, from which my original "figure and description in the Century of Birds were taken, was the "only one then known. Shortly afterwards two other examples "arrived in England, one of which was deposited in the British "Museum, the other in that of the Zoological Society of London, "and these three were all the specimens then in Europe."

“ During the interval which has elapsed between 1832, when the Century of Birds was published, and the date 1853 at which I now write, the great chain of the Himalayan and adjoining hills which extend towards the Peninsula (the native country of *P. erythrocephala*) has been traversed by men whose love for natural history has prompted to procure and send to Europe numerous collections of the productions of those districts; among them many examples of both sexes of this beautiful species have been sent; in order therefore to make known the female, I unhesitatingly give a new plate, comprising accurate representations of both sexes.”

Any detailed description of the colouring of the sexes of this Bullfinch is unnecessary with the extremely good coloured plate to refer to, which gives a very accurate idea not only of the plumage but also of the form. The picture is the result of studies from living birds.

The Red-headed Bullfinch is just about the same size as the British bird, but perhaps somewhat more slender in build.

SOME EXPERIENCES OF MEALY ROSELLAS.

By THE MARQUIS OF TAVISTOCK.

The popular name of *Platycercus pallidiceps* is undoubtedly open to objection, since the word ‘rosella’ is nothing more than a meaningless corruption of Rose-hill, a place which the bird in question does not, I believe, frequent. Still, if one were to mention a ‘pale-headed parakeet,’ I doubt if nine aviculturists out of ten would be much the wiser; so perhaps it is best after all to stick to the familiar title. Some people are disposed to crab the Mealy Rosella on account of the rather washy and undecided tints of his head and neck, but to my mind he is a very lovely bird—what Broadtail indeed is not?—and few more tasteful combinations of colour exist than the primrose and blue which adorn the greater part of his plumage. His disposition, alas! does not correspond to the beauty of his outward appearance; in fact, when fully adult and

in good health, he can only be described as a spiteful brute. His two pet aversions are the Blue-bonnet and his near relative the Red Rosella. Alone among the Playcercinæ he is often able to inspire with fear and respect, the pert irascible little monkey in brown and blue, while for the Red Rosella he shows a most unbounded contempt. Hybrids between *P. pallidiceps* and *P. eximius* have been produced in captivity and may also have occurred wild in Australia, but in my own experience I have never known the two species show any desire to associate except when quite young. Even when I have had odd birds of opposite sexes flying together at liberty for several months, they have never been seen to meet except on the most unfriendly terms.

In November, 1912, I obtained my first Mealy Rosellas—two adult pairs—and turned them into a warm aviary with some other parrakeets, who had little cause to regard their arrival as a blessing. One of the cocks was a rather lethargic bird, and I always thought there was something wrong with him and quite expected that he would die. However, he survived until the spring, when I cut the wings of all four and turned them into a grass enclosure. Here trouble began, for the stronger cock set upon his companion and would probably have killed him if I had not come to the rescue. It is nearly always the case that when two parrakeets have had their wings cut the weaker bird is unable to escape in the event of a serious fight. When he had recovered from his injuries, I placed the victim in another enclosure, where he was promptly attacked by a Red Rosella, and again had to be saved from an untimely end. As it was evident that the poor bird needed exercise and unlimited green food more than his oppressors, I shut up the first cock Mealy and obliged him, as a well-deserved penance, to watch from inside a cage the spectacle of his rival enjoying, in the society of the two hens, the amenities of a semi-free existence. The treatment answered well as far as the invalid was concerned, and by the end of the summer he had greatly improved, and was quite lively and even bumptious. During September one of the hens moulted and flew out of the enclosure, and as her mate in the cage was also able to fly he was allowed to join her at liberty. Not long afterwards the second cock made his exit, and as his wife was rather

slow in getting her new wing feathers, she was caged and put near a clump of tall evergreens, where her partner spent most of his time. He was very attentive to her and used often to feed her through the wire-netting, but one cold morning he was, to my disappointment, picked up dead, so all my care for him had been in vain; probably he had never had a very strong constitution.

The first pair, however, stayed and flourished, and by the end of October had established themselves in a nest-box I had put up in a tall oak tree. For some weeks we saw nothing of the hen. Then she began to make occasional appearances with her mate, and, in spite of the unfavourable weather [for it was now winter], I had great hopes of young being reared, but the day arrived—how well most of us know it—when the old birds went no more to their nest. With dreary forebodings a ladder was brought and placed against the tree. Out of the box were turned the mangled corpses of some baby Mealies, a black American squirrel, and a vast quantity of dry leaves and other household comforts which the latter had collected for his use. I sincerely trust that the night following his eviction was the coldest and most uncomfortable he spent in his life!

But the bereaved parents were not discouraged, and a few weeks later were nesting in another box at some distance from the scene of their first venture. After the hen had been absent for a month I noticed a sinister circumstance, her mate was accompanying the second hen (who had been released several weeks previously) and was feeding her and generally treating her as his espoused wife. Broadtail Parrakeets are, with individual exceptions, models of conjugal fidelity; so I was not surprised, on examination of the nest-box, to find that my worst fears were realized and that it was empty. Evidently the sitting bird had been killed, probably by an owl, as the entrance holes to the boxes were at that time far too large.

After a short time, the Mealy and his new wife were joined by a hen Brown's Parrakeet, who had fallen in love with him and made strenuous efforts latterly, I am sorry to say with some success, to monopolize his affections. But fate was still against me; the cock Mealy, like all his tribe, was an aggressive bird, and for many weeks his supremacy had been unchallenged in that part of the garden which he considered his particular domain. One afternoon,

a Bauer's Parrakeet turned up with his Barnard wife at the Mealy's favourite feeding tray. A battle followed, and next morning I found, to my disgust, that the Mealy had had his upper mandible bitten clean off at the root, so of course nothing remained but to catch the poor fellow and put an end to his sufferings. That was the last of the Bauer's misdeeds and he paid for it by forfeiting his liberty. He was a handsome bird and a model parent, but he dearly loved a row and his tactics were murderous. Only a few days before I caught him up, I was attracted by a tremendous whistling to a hollow tree in which a pair of Yellow-naped Parrakeets had shown an inclination to nest. On coming up I found the Bauer and Barnard and the two Yellow-napes having a most tremendous battle and apparently enjoying it hugely. They fought in the branches, and they fought in the air, and, finally, they fell to the ground to continue the conflict on terra-firma with undiminished zest. When I left them, for I could not wait to see the end, the two cocks were rolling over and over in a heap, while a few feet away their wives sparred savagely with each other for a favourable opening. No damage was done on this occasion, for the Yellow-napes were as skilful fighters as the Bauer, and ended, like he, in suffering the penalty of exile for beak-biting and murder.*

To return to the Mealies, of which only one now remained : deprived of her mate, she and the Brown's struck up a warm spinster friendship such as occurs not infrequently among birds of various orders. The couple even went so far as to explore nesting-holes together, the Brown's on these occasions playing the cock's part of preliminary investigator and appraiser of the premises under consideration. There are, by the way, few more amusing sights than that afforded by a pair of Broadtail Parrakeets house-hunting at liberty. The male bird always takes the lead, and after the most superficial and inadequate inspection of some cavity in a tree or building, will spend hours in proclaiming the surpassing excellence of his find, even though his wife has been well aware at the end of the first minute that the hole is for some obvious reason wholly im-

* One wonders whether this destructive warfare goes on in Australia, since Lord Tavistock's birds had all the advantages of the wild ones.—ED.

possible as a nesting-place. However, she is very patient and listens to him most dutifully for a long time, finally giving a little chuckle, as much as to say, "Yes, dear, I know it is a most beautiful hole, and a most wonderful hole, only unfortunately it is so small that I cannot get into it, and even if I could, there are quite six inches of water at the bottom, which would be bad for our eggs. Let us go and have a look somewhere else."

But the Brown's and Mealy never got as far as nesting, for one morning I noticed the latter looking ill, and a second glance showed that she had been injured in the same way as her mate, and had lost the upper half of her beak. Probably the Yellow-napes were the culprits as the Bauer had been shut up some weeks before. Thus ended my first attempt to acclimatize *P. pallidiceps*; there was nothing for it but to try again and hope for better luck.

Some weeks before the death of the last of the original importation, I had bought six young Mealies from a dealer, with which to replenish my vanishing stock. They were in poor condition on arrival and two died, but with warmth and good feeding I managed to pull the rest round. Although not, as I at first thought, Blue-cheeked Parrakeets (*P. amathusia*) the new birds, which were said to have come from North Australia, were rather different from typical "Moreton Bay" Mealies. They were considerably bluer on the neck and cheeks and some had a quantity of reddish feathers on the crown of the head, such as are rarely seen in birds from S. E. Queensland.

When summer arrived I turned them out with cut wings, together with a few typical *Pallidiceps* that I had obtained in April and May. A few were lost from chills, accidents, and straying, but on the whole I was fairly lucky, and by November two pairs and an odd hen were flying about the garden.

The paired birds came regularly to the feeding-trays, and spent a good deal of time examining holes in trees as if with a view to nesting; but as most adult Broadtails at liberty go house-hunting nearly the whole year round, I was not much disappointed when the weeks went by and nothing more happened. The odd hen, unlike her married kinsfolk, was a great wanderer, and in company with a young wild-bred Port Adelaide of her own sex, was often

absent from home for several weeks at a time. More than once we gave the couple up for lost, but sooner or later they would return, looking none the worse for their adventures and lack of artificial food. In March, the Adelaide found a mate of her own species, and the newly-wedded couple proceeded to make it extremely plain to the poor Mealy that honeymoons are intended for two and not three, and thenceforward she was compelled to lead a solitary existence. About the same time one of the cock Mealies mysteriously disappeared, and as I was afraid that the unmated hens would stray and get lost, I obtained two acclimatized male birds from the Zoological Gardens. One of these, a rather scrubby individual with a broken tail, behaved in an exemplary manner and took up with the widow at once. Less than twenty-four hours after his release, I saw him sitting on the branch of a dead oak, energetically wagging his one tail-feather and whistling to his bride in a hole beneath him. But the other cock—though a much finer bird—conducted himself in a foolish and “contrary” fashion. He would have nothing to do with the spinster, and after a few days he wandered off and was caught and returned to me in a starving condition. I let him out again, and again he strayed, so I gave him up as a bad job and cut his wing when I had managed to get him back. In April, further ill-luck arrived; the broken-tailed cock disappeared, and not long afterwards the odd hen was picked up dead of chill. It is curious how birds, which have spent the whole winter out of doors and are apparently in the pink of condition and as hard as nails, will sometimes catch cold and die during a spell of comparatively mild weather in spring, even though they are not moulting. But better things were in store; the best pair of Mealies had for some time been visiting a tree about a mile away from the garden, the cock was feeding the hen and every day we expected to see him appear alone. It often happens, however, that parakeets, after fussing round a hole for weeks, will tire of it at the last moment and go and settle down quickly in quite a different place. The Mealies were an illustration of this, for they suddenly decided that there was no place like home, and almost before we realized that they had deserted their favourite haunt we found that the hen was sitting in a hollow oak close to the lodge gates; the very same tree in fact in which the Bauer and Yellow-napes had

fought so desperately the year before. Her behaviour during incubation was not quite like that of other female *Platycerci* I have watched which have been fed by their mates at the entrance to the nest, and hardly seemed to leave it at all for some weeks. The Mealy, however, on hearing the cock's call note, would slip out and join him. He would then feed her and the pair would fly off together and remain away for some minutes. On their return, the hen would fly straight to the hole and dive in without waiting to look round, as though she feared that some harm might have overtaken her precious eggs during her absence. Fortunately her fears, if she had any, were never realized; everything went well, and in due course six fine young birds made their appearance and were well looked after by their father until able to take care of themselves. About ten days after the young had flown, the hen went to nest again in the same hole and a brood of four were successfully reared. Immature Mealies differ little in plumage from their parents, but their colours, especially the blues and creams, are less pure and vivid owing to a smoky greenish tinge, which is particularly noticeable on the head and neck. Their beaks also are of the peculiar shade which is seen in young Red Rosellas, as if bone or ivory had been stained with reddish earth. Birds which have red feathers on the crown when in adult plumage, show considerable traces of red at the time of leaving the nest.

The domestic career of the second hen Mealy—though less successful than that of the first—was rather curious. Being without a mate of her own species she paired with a Brown's Parrakeet and went to nest in a tree in the garden. For a time all went well, and from the behaviour of the old birds I am practically certain that young were hatched; but one unlucky day the Brown's discovered a brood of Red Rosellas in the roof of a building a long way from his own establishment. He was delighted with his find, drove off the unfortunate parents (who were so disgusted that they went clean away and were never seen again) and set to work to feed the enchanting babies himself. A few days later he introduced them to his wife and soon persuaded her to desert her home and devote herself entirely to his new charges. The Rosellas were reared—even one which left the nest prematurely and injured itself, being fed by

its foster parents through the bars of a cage until well and old enough to be released. Still I could not help feeling rather disgusted with the Brown's, for his officious meddling with his neighbour's affairs and neglect of his own had cost me a breeding pair of Rosellas and probably a nest of hybrids as well!

During the course of last summer, two new Mealies came into my possession—both, unfortunately, to die after a few weeks—which were interesting from a scientific point of view, and showed curious variations of plumage. The first, a hen, had the crown of the head thickly covered with strawberry-pink feathers, and showed besides, an unusual amount of blue on the cheeks and on the upper part of the neck. A tendency to erythrism, it may be noted, is characteristic of several species of Australian Parrakeets; individual Brown's, Rosellas, Yellow-bellies, and Many-colours often showing an abnormal amount of red in their plumage. The case of the Red-vented Blue-bonnet is very similar, and personally I do not consider *Psephotus hamatorrhous* as really a good species.

The second bird I received was a typical *P. amathusia*, the first I have ever seen alive. He was much paler in colour than the hen just mentioned, quite like an ordinary "Moreton Bay" Rosella in many respects, but he had a dark-blue patch on the lower cheek, not the circular patch one sees in a Pennant or Yellow-rump, which starts from the base of the lower mandible but a kind of half-moon lying low on the cheek and not reaching the beak at all. Although this blue cheek patch is a very noticeable feature, the general resemblance between *P. amathusia* and *P. pallidiceps* is so striking that one can hardly fail to regard them as local races of one variable species, and a series of skins obtained from different localities would probably show the complete gradation of one form into the other.

In describing the habits of my Mealy Rosellas there is one point I have forgotten to mention, viz., their playfulness. The *Platyercis* as a family are very serious-minded birds, and do not give themselves up to light-hearted antics. But here the Mealy is rather an exception, and I have sometimes seen my birds playing in true parrot fashion; turning somersaults, throwing bits of stick about, lying on their backs and hopping wildly round with spread tails. I once had a Barnard's Parrakeet who behaved in much the

same fashion, apparently from delight at the successful hatching of his first family (he was quite a young bird). But I have never known another of his species forget his dignity to such an extent, and the Mealy Rosella is the only true Broadtail that I have often seen play.

NOTES ON THE BREEDING OF THE SOUTH AFRICAN COLY.

By GERARD H. GURNEY, F.Z.S.

A pair of South African Colies (*Colius striatus*) nested and successfully reared two young ones last summer; and the following notes, though somewhat meagre, may be of interest, as I am not aware that this species has been previously bred in confinement. I see by my notes that it was during the latter half of November, 1913, that six South African Colies came into my possession; these birds in a wild state always go about in little parties of six to eight, so I was anxious to keep all mine alive, but all of them were in very poor condition when they arrived, and, in spite of every care, died off one by one, until only two were left. These however began to thrive, and after having been kept in a large cage all the winter, were turned into a big aviary with open flight and shelter, during May; here they very quickly made themselves at home, and were generally in the open, hanging, often head downwards, by their strong feet on to the wire sides of the flight, wherever they could get the most sun; or else climbing about in the thick undergrowth and bushes growing in their aviary.

In British East Africa, where Colies of two or three species are found, I used to see them very commonly, flying out from a bush singly one after the other, with their quick sharp flight, somewhat like a Parrakeet's; the natives used to say they were good to eat, but I never tried one. In confinement they are rather greedy birds, and are very apt to over-eat themselves, and become, unless care is taken to prevent it, enormously fat.

It was not until June 26th that I noticed one of the Colies

was missing, and presently discovered that she was sitting on a nest made on the top of a lid of a hamper, fixed up at the back of the shelter in the aviary; in fact, the identical lid on which the White-crested Touracous had nested in 1913.

The Coly and its nest were completely hidden from view by a thick bough of Scotch fir, and I did not dare take more than a momentary glance for fear of disturbing her. I feel convinced, and my bird-man is equally sure, that incubation can only just have begun on the 26th, if she had begun to sit before that we should have missed her sooner. Unfortunately I went abroad on July 4th, and up to that date there had been no change in the situation and I can only relate therefore subsequent events second-hand. Apparently the old bird sat extremely well, and when she came off to feed, the cock took her place; in any case, they were never seen in the flight together, one was always on the nest, though as the sexes are identical, the bird-man was not certain whether it was not the hen, and whether she may not have come off to feed when no one was there. He thinks the incubation period lasted about a fortnight, at any rate, on July 16th both old birds were out in the flight at the same time and he was able for the first time to look into the nest, which he describes as cup-shaped and untidily made with bits of hay and grass; inside he found two well-feathered young ones, evidently hatched some days; he says they were comical looking little objects, with their crests already quite long.

The old birds fed them assiduously, carrying small bits of soft banana to them, and on this food they were reared entirely. When I came home from abroad on August 1st, the young ones were flying about with their parents, from which even then they were difficult to tell apart, except that they were rather lighter in colour and their tail-feathers were not so long.

I shall be glad to hear whether any member knows of this species having been previously bred in confinement.*

* Mr. Gurney is probably entitled to a medal for being the first to breed the S. African Coly in England.—ED.

THE EFFECT OF MODERN HIGH EXPLOSIVES ON BIRDS.

By W. H. ST. QUINTIN.

The effect of modern high explosives has been brought home to all of us during the events of the past few months. It may be worth recording that the concussion, which has such a paralysing effect upon man, when the explosion takes place in his immediate neighbourhood, can, in the case of small living creatures, actually destroy life without any external injury being visible.

Mr. W. J. Clarke, the well-known naturalist of Scarborough, tells me that on Wednesday, the 16th of December, when the cowardly attack upon the defenceless town was at its height, a large shell fell in the garden of the next house to his own. Just inside his sitting-room window, and about a foot from the glass, was a cage in which Mr. Clarke kept a collection of small seed-eaters, all in good health, and many of which he had had for several years. Curiously enough not a pane of glass was cracked, perhaps because each window was open an inch or two at the top, although every sash cord in five windows was broken and a collection of cacti was thrown down off the window sill (inside). But the result was disastrous to the poor little cage birds. Shells were falling so thickly in that part of Scarborough that people left their homes and rushed out into the country. Mr. Clarke does not think that any birds were dead when he left the house with his wife, but when the German vessels had gone, and he returned some two hours later, two of the birds—a Common Waxbill and a Cordon Bleu—were dead, and the others were sitting moping about the cage, flying wildly about if disturbed. Next morning a Cutthroat was dead, and between that day and the following Monday he lost four more; altogether six birds succumbed out of eleven.

Mr. and Mrs. Clarke were rendered quite deaf by the concussion and remained so for several days. Under the circumstances it is not surprising that no special examination was made of the dead birds, otherwise it would have been interesting if the exact nature of the injury could have been ascertained.

A TAME RAVEN.

By REGINALD PHILLIPPS.

My garden here in London is covered over with wire-netting ; and in it for some years I had a Raven ; and the Raven's name was Grip.

Grip was quite a boy when he came to me, and, like other boys, had to learn his lessons.

Now Grip used to listen to all that was said to him with the greatest attention ; with his head on one side, he would sit like a statue till his lessons were over, taking in every word to the best of his ability.

After lessons, Grip would no longer sit still and mute. Having refreshed himself with a good shake, and satisfied himself that the coast was clear, he would carefully repeat over what he had heard. Thus the wise learn.

Solomon tells us that to every thing there is a season, and a time to every purpose under the heaven ; a time to laugh : a time to speak ; and so on for other matters. Grip gave this the consideration due to so great an authority, and arrived at the conclusion that, if there was one time more suitable than another for a good laugh and a good speak, the early morning was that time. He thought that, as none were about to see him, none would be near enough to hear him. For this reason he went through his performances while hidden away in a shed, Ostrich-like thinking that where he could not see he could not be seen. In the gray dawn, he would begin with a sepulchral *Halloo ! Halloo !* which, having been gone over to his entire satisfaction, would be followed by *Bow-wow, Bow-wow*, and then by fits of the most distressful coughing, worthy of the last man in the last stage of consumption. Then there would be an ogre-like *Haw, haw, haw*. Several other words and sounds would follow in course, but sooner or later there would come the cat. The music of the cat is not pleasing at three or four o'clock in the morning, even when it be that of a genuine She. But when the notes come thrilling forth from the throat of a Raven, in a shrill falsetto voice—well, the neighbours complained ; and Grip had to be shut up every night, an indignity he

so resented that he would seldom utter a word until let out again in the morning.

Grip, I remarked just now, used to cough; but coughing was not at any time a subject included in his school curriculum. I had a cough; and the cough went off, fortunately not taking me off with it; it was soon forgotten, so thankless are we when health returns—forgotten by all but Grip. A ring; the lady from next door is announced:—"What a dreadful cough your husband has! I wonder you allow him to go into the garden such weather as this. If *my* husband had such a cough, I should——." My wife opens her eyes. She had not noticed that her husband had a cough. *What want of feeling! Not worthy of such a husband!* "But you could not have heard him coughing now, for he is in the city." "O-O-O—Oh, he has been in the garden for the last half-hour, and has been coughing *so* dreadfully. Indeed, you really *should* take more care of him, or——." But it was only Grip.

Grip was always a very careful body. Did you offer him by hand more food than he required for his immediate wants, he would accept it all—trust him for that—and would stow away in his pouch what he did not swallow; and it was wonderful what a lot of food he did manage to stow away in that same pouch. All his superabundant food would be carefully hidden away in one or other of his many larders, and was ready to hand when required. Thus he was never in want.

Grip was very fond of water, externally and internally. He liked it fresh and clean, and would rush to his tub on the appearance of the water-can, and then what a splashing, and what a wetting for anyone standing near! Again and again he would look to you to re-fill it; and if you emptied the contents of the can over him he would only give utterance to a good-natured growl.

When Grip was grown up, he was allowed to have too much of his own way, and he became somewhat troublesome. He used to delight in flying about the aviary; and the flapping of his mighty wings would create a panic, and seemed to shake the place to its very foundations. On these occasions the other birds would scuttle off, hurry-skurry, to the nearest houses for shelter. A blow from one of Grip's wings was beyond a joke. I have myself been partially

stunned on more than one occasion. But Grip went further than this: he took intense pleasure in hurling large stones about the place; but it was sore work for his companions—and for my pockets when I found a large food- or water-basin smashed to pieces. Indeed, when Grip was in one of his merry humours, the aviary was not a comfortable residence for anyone or anything. Grip one cannot blame; the place was too small for him; and he had not enough to do. A few minutes' sojourn in Grip's aviary would have given one cause for much anxious thought for the safety of one's head.

But my readers will say that I must be drawing a long bow to talk of a bird throwing stones. Truly, stone-throwing is not a common accomplishment in a bird, even when that bird is a Raven, and that Raven a Grip. Grip used to pick up a few nice handy stones, about the size of a boy's fist, and balance them, with much painstaking, on one of the perches, some seven feet from the ground. These he would watch, with jealous eye and bristling feather, as an innocent-looking White Jackdaw, a wolf in sheep's clothing, would unconcernedly approach, with the intent, if he could get the chance, of dashing suddenly at the stones and knocking them down, a proposed movement which was almost invariably frustrated by Grip's wariness. If one put up one's hand towards the stones, Grip would growl and snarl like a savage watch-dog. Suddenly he would seize the nearest, dash off round and round the aviary like a possessed messenger from the lower regions, uttering hoarse and ominous croaks, but still retaining the stone in his beak—with a fine disregard for a certain fable, which tells of a croaking Crow and a piece of cheese, which the croaking Crow dropped into the mouth of a wily fox—who didn't like cheese by the way. In the midst of his noisy passage, the iron grip would be relaxed, and the stone, impelled onwards into space by the impetus of the bird's flight, would eventually come clattering down, striking terror and dismay into the hearts of the other inmates of the aviary.

Like many other birds, Grip was very human. Although a good-tempered old fellow, and fond of a game of romps, especially with boys, he was inclined to be revengeful if unfairly treated. Only from my hand would he receive punishment in a becoming spirit. He recognised me as his master, and me only. Between you and

me, I think this may have been because everybody else in the house was afraid of him. At one time my wife had a favourite Jay, which was "not all there," even the two sides of the cranium being visibly of different sizes. Perhaps this external irregularity did not materially affect the bird's mind, for there was nothing inside the brain-pan, excepting possibly a little turnip or mashed potato. This Jay went by the name of Squawker, because he was always squawking. He used persistently to hop into the Raven's house and help himself to his food, even taking tit-bits out of the Raven's own private larder; and this he did, not like a cunning thief of a Jay, but with the stupidity of the man who lights his pipe in a fiery coal-pit. One day Mrs. Phillipps unfortunately happened to be in the garden at a time when her pet went blundering in to partake of the Raven's food. Grip growled, and my wife—awfully afraid of him, but willing to risk her life for her Squawker, who was unconcernedly stuffing—injudiciously hit Grip with a stick, and rescued her darling out of the jaws of the Raven. The following day poor Squawker, who knew how to do only three things—to squawk, to stuff, to sleep—again flew into the Raven's house while the master was at home. Grip gave a gentle nip, such a gentle one, for nipping was not at all in his line:—but with what tears and lamentations was I received on my return home! Nevertheless Squawker still squawked, still stuffed, but mostly slept—for the crown of his head had been crushed in. I put the poor creature comfortably to bed in a basket, and the next morning found him stiff and cold, with his head under his wing; he had had his last squawk, and his last stuff. I cannot call to mind any other occasion of having found an adult bird dead with its head under its wing. Again, a carpenter, who was doing some work in the aviary, thought proper to tease Grip. Afterwards the carpenter, stepping backwards, came somewhat near to where Grip was sitting. Only one peck, on the arm this time; but it woke up that carpenter. How he took off his coat with haste, and bared his arm, and ruefully gazed on the wound! That carpenter had forgotten Grip once; he has never forgotten him since.

Grip had too much spare time on his beak; and the devil will always find some work for idle beaks to do. Grip took to plucking

his own feathers, and became hideous. So he had to go. This was sad for many reasons : it used to be told me that a Raven would live for one hundred years ; and I have lost my chance of proving this. But he was somewhat tiresome in a small London garden. There was a feeling of relief all through the establishment, especially the feathered part of it, on his departure. A friend, who I knew would be kind to him, took him off my hands. He wrote afterwards (I quote only a portion of what he said) :—“ The Raven is a most remarkable bird ! I never heard a Parrot talk as he does, it is really startling. My daughter went out into the garden the other day thinking I had called her ! it was Grippo ! He calls all the children by name, tells them to ‘ get out ’ or ‘ come along. ’ ‘ Hurry up Joey ’ is another expression he has picked up. He often causes our cook to run out by calling, ‘ Anne, come here, I want you, ’ in my daughter’s voice. He is an extraordinary creature. ” So you see Grip’s lessons were not thrown away upon him ; and his habit of paying attention to what he hears has become a life-habit. A Raven is a capital pet where there is plenty of accommodation. Grip would allow me to kiss, and stroke, and fondle him as any dog might do. With gentleness and firmness, a Raven may be kept in order without difficulty—if you are not afraid of him.

AN AVICULTURIST IN PORTUGAL.

By DOUGLAS R. URWICK.

Business took me to Portugal for the best fifteen years of my life, during which time I never met a Portuguese who cared for or knew anything of aviculture, though I was on friendly terms with many, and right good fellows amongst them.

Yet the annual Bird Show at the Crystal Palace at Oporto was always packed during the three days of its life, the exhibits being nearly entirely poultry and pigeons, plus a few ornamental waterfowl and some fine parrots of various sorts, and last, but not least, a few crowded cages of foreigners from a dealer in Lisbon ; I believe the only one in Portugal except for the usual market sheds of indigenous birds and Canaries.

The first time I saw these little foreigners I wanted them all and bought none; before the next Show, a year later, my aviary was built. I suppose the Portuguese are the most wonderful carpenters in Europe; it comes natural to the lowest of them to do the most intricate piece of work, yet they are hopelessly unpractical, and I really think my aviary was the least practical thing they ever made. Very small, octagonal, enormously high, with a miserable little excrescence on one side, which did duty for a shelter, it bore no resemblance to the plan I had drawn up; withal it was fearfully and wonderfully made in sections, and could be put up or taken down without even the use of a hammer. Of course, the unpracticability did not so much matter in such an ideal climate, and the inmates had as perfect a spot to live in as could well be found: on a hill outside Oporto, sheltered by orange trees and oleanders, yet looking out to the west over the bar of the river Douro across the Atlantic.

I went to the Show armed with a large rough cage, and proceeded to give that Lisbon dealer the time of his life, though to my surprise he would not be beaten down or bargained with after the manner of the country, but stuck out for Rs. 2,000 per pair for his cheapest birds—about six shillings at the then rate of exchange. I started with a few Red-faced Lovebirds (from the Portuguese Cocoa Island of S. Thomé, he said), then several pairs of Blue-breasted Waxbills, a Cardinal or two (these cost more), later on a mixture of Gold-breasted and Common Waxbills, and I finished with a pair of pretty little Green-winged Doves (whose correct name I never knew) and one or two odd cock Whydahs, Paradise and Pintailed; the last mentioned I soon got rid of, as I found them unpleasant and quarrelsome to a degree.

I went home in triumph and turned the lot into the aviary, except the Whydahs' tails, which stayed behind in the cage. I should have said before that I was not ignorant of their habits and feeding; I had kept most of them years before in England.

The next day I re-visited the Show and was greeted as a brother by the dealer, but I would have none of his blarney, though I nearly fell to a wonderfully tame Toucan—what I should have done with it Heaven knows—and refused to buy any more, nor

would I have done so had not my wife met me with the news that she had found in another part of the Show a cage of fourteen Bullfinches and a "Sunset" finch. The latter I persuaded its owner to sell, I never knew its right name, it was a gorgeous Weaver of sorts, but as Sunset finch it was known during the several years it lived with me.

The Bullfinches I greeted as old friends. I had loved them in England, but had never seen them in Portugal, though I had searched for them diligently in places where I had heard they were to be found. I bought the lot.

Afterwards I was generally in correspondence with my Lisbon friend. He had the weirdest names for his birds, and it was pure guesswork buying from him; he used to call them after their colour usually, or some habit they had. Once he wrote me he had some very nice Botafogos (botar=to throw, fogo=fire), Peitos Celestes (Eng. "Celestial breasts") and Ratinhos (Eng. "little mice"), so I chanced a few and received a cage full of Avadavats, Blue-breasted Waxbills and Bronze-wing Mannikins, as usual, beautifully packed, and minute instructions given to the guard for the long weary railway journey from Lisbon to Oporto.

He could get no Zebra Finches, so I got some from England and exchanged numbers of young with him; from England, too, I had the usual Gouldians, Grassfinches (Long-tailed and Masked), etc.

Considering the unsuitability and crowded condition of my aviary I was not so unsuccessful as I expected, though only the commoner birds actually reared young to maturity; Red-faced Lovebirds failed altogether, and though the Blue-breasted Waxbills hatched brood after brood, never a bird lived to leave the nest. Grassfinches, on the other hand, were uniformly successful.

My various Weavers never got beyond their wonderful nests, nor was I successful with Nonpareil or Indigo Buntings; the Nonpareil hens I bought turned out to be young cocks (I suppose it is easy to tell the difference, but I knew little of this species?) whilst my only Indigo hen was too busy having fits to think of nesting; she would writhe in the most horrible contortions for ten minutes and then stiffen out and apparently die, only to recover suddenly and rush to the seed tray. Unlike her mate, she would not touch

insects or soft food, and perhaps this may have been the cause of the trouble. After the fifth or sixth fit I took to letting her loose in the chance she might pick up some suitable food, and ultimately she disappeared after returning to the aviary many times; perhaps she is alive now, she would take a lot of killing!

I had one little bird—we always called her “Nannie,” who was worth her weight in gold to me—a widowed Bengalese, who devoted her life to the rearing of children, she was never fated to have any of her own. Some lazy Spice Birds used to lay and sit for a few days, and then their family instinct waned; but Nannie was there to rear brood after brood for them with unfailing success. She would visit, too, nest after nest of Zebras, Grassfinches, Manikins, etc., and never a fledgling went hungry. The different parents would quarrel handsomely with one another, but none of them had an evil word or peck for Nannie.

I know nothing about the finer points of mules, but I had what I am convinced was one of the most beautiful Goldfinch-Canary mules ever reared: pure white with the most delicate pink markings. I had to offer the owner a sovereign for it before he would part. Alas! I lost it with my “Sunset” finch and some Cardinals in one of my tragedies; a supplementary aviary, in which they were; being literally blown away in a heavy storm.

I had other tragedies; notably when the movements of some Quail in the aviary upset the generally perfect morals of one of my terriers, who dug his way inside and killed these ratty-looking things, and also my poor little doves. I never saw a dog more ashamed; he carried the corpses on a string round his neck for two days and absolutely refused food till they dropped off. But my terriers were always on the look out for the birds' natural enemies, and many a stray cat fell a prey to them. They used to watch at night in the bushes by the aviary, and a cat had little chance against two terriers and a great Dane—all three on the look out. They saved a Nightingale I kept in a cage, hung up in the thickest part of a fig-tree and fed by mounting a pair of steps. One day I left the steps by the cage and a tabby marauder crept up them; but the dogs were not so careless as their master, and next morning at four a.m. the Nightingale was singing his

paean, not far from the spot where the gardener had buried his tormenter.

I never kept the birds of the country to any extent. A few Jays and Magpies, one of the latter quite a fair talker and extraordinarily tame and amusing. Once a man brought me a young Solan Goose, picked up on the shore after a storm; a diabolically fierce brute, that I entrusted to my groom to feed on fresh sardines. He soon died, and "Victorino," the groom, explained his death by saying: "May it please your Excellency, I knew he could not live long, as every time I gave him a sardine he brought up two." Another time a friend wrote from the country that some Hobbies were building near his home (a wonderful old Franciscan Monastery in the wilds) and I asked him to send me a couple of young ones. Later I received a box containing seventeen Kestrels, which were duly set free.

I never kept the native bird, the Blue Thrush, which I think attracted me most of all, though a pair nested regularly within a stone's throw of one of our places in the Upper Douro district. It is not scarce, but chance prevented my ever being in the right place at the right time, and I dared not trust a Portuguese to get one for me.

The final tragedy came when I moved house and transferred my birds temporarily to an aviary I found ready in my new home: a square, rather shut-in affair that had been used for pigeons. In five days every one was dead. I attempt no explanation and cannot bear to dwell on it. After that for a year, until I came to live in England, my aviary was peopled by Malabar Squirrels: jolly little chaps, but these are not aviculture, nor are the Coatis and other vermin that shared my home.

The other day I had a deal with my Lisbon friend, who sent me a collection of birds by steamer, in a wonderful cage of his own invention; another chance shot, which ended as I deserved, in a lot of commoners, but all in perfect plumage, and not a casualty from Lisbon to Winchester.

OBITUARY.

LORD BRABOURNE (Grenadier Guards) was killed in action on the 13th of March. Although not a member of the Society, he had written articles on South American birds, and read the Magazine with great interest. He often corresponded with the Editor, and was especially interested upon the subject of Humming Birds in captivity, mentioning the fact that there are so many beautiful species which live at high altitudes, which ought not to need much artificial heat. Lord Brabourne's untimely death will be a great loss to the ornithological world.

He returned from South America where he was so busily and keenly collecting material for his great work on "The Birds of South America," which he was writing with Mr. Charles Chubb; returned to fight for King and country, only to give up his life. He was twenty-nine.

May he, with so many others, have happiness in a new life, and peace.

ENGLISH NAMES FOR THE PARROTS.

By Dr. E. HOPKINSON.

(Continued from page 167.)

[BLUE-WINGED LOVEBIRD, the common popular name for the PASSERINE PARRAKEET].

["BRAZILIAN LOVEBIRD," another popular name for the PASSERINE PARRAKEET].

GREY-HEADED LOVEBIRD, an alternative popular name for the MADAGASCAR LOVEBIRD.

MADAGASCAR LOVEBIRD.= *Agapornis cana*. Early names were GREY-HEADED PARRAKEET (Latham), and *MADAGASCAR INSEPARABLE. Other popular names are GREY-HEADED LOVEBIRD, WHITE-HEADED LOVEBIRD.

NYASSALAND LOVEBIRD.= *A. lilianae*.

"PEACH-FACED LOVEBIRD," the popular name most commonly used for the ROSY-FACED LOVEBIRD.

RED-FACED LOVEBIRD.= *A. pullaria*, also known as the RED-HEADED LOVEBIRD and WEST AFRICAN LOVEBIRD. Earlier names, *LITTLE RED-HEADED PARRAKEET (Edwards); *RED-HEADED GUINEA PARRAKEET (Latham); *RED-HEADED GUINEA PARROT

(authors); *GUINEY SPARROW (Edwards); *GUINEA PARROT, *ETHIOPIAN PARROT, *AFRICAN INSEPARABLE, *LOVEBIRD PARRAKEET.

RED-HEADED LOVEBIRD, the RED-FACED LOVEBIRD.

ROSY-FACED LOVEBIRD.=*A. roseicollis*; other names, ROSY-NECKED LOVEBIRD, ROSY-FACED PARRAKEET, *DOUBLE INSEPARABLE, "PEACH-FACED LOVEBIRD," the latter the name by which it is most commonly known among dealers.

ROSY-NECKED LOVEBIRD, the above.

SWINDERN'S LOVEBIRD.=*A. swinderiana*.

WEST AFRICAN LOVEBIRD, see RED-FACED LOVEBIRD above.

WHITE-HEADED LOVEBIRD, see Madagascar L., above.

LOVE-PARRAKEET, } See under LOVEBIRD.

LOVE-PARROT,

LUCH'S PARROT.=*Myopsittacus luchi*, ? the *BUENOS AYRES PARROT of Latham.

LUCIAN PARRAKEET.=*Palaeornis modesta*. BEARDED PARRAKEET of Latham, and ? his MOUSTACHOE PARRAKEET, VAR. A., RED-CHEEKED PARROT.

LUCIAN'S CONURE.=*Pyrhura luciana*.

*LURI, *LURY, obsolete variants of LORY.

LUZONIAN PARRAKEET, see under HANGING PARRAKEET, PHILIPPINE.

*MACAO, see MACAW.

*MACAULAY'S ISLAND, PARROQUET FROM, ?=*Cyanorhamphus cyanurus*.

MACAW, a long-tailed Parrot of the genera *Anodorhynchus*, *Ara* and *Cyanopsittacus*, all South American. Formerly sometimes extended to include other long-tailed American Parrots, for instance, PATAGONIAN MACAW. Various obsolete spellings were, *MACCAW, *MACKAW, *MOCKAW, *MACAO, *MACKER. Syn. *MACAW PARROT. English names for different species are :

*ANACAN MACAW, the SEVERE MACAW.

*BLEW MACAW, see BLUE AND YELLOW MACAW.

BLUE AND YELLOW MACAW.

*BLUE-CROWNED MACAW, Latham's name for the BLUE-CROWNED CONURE (q.v.).

BRAZILIAN GREEN MACAW, see SEVERE MACAW, below.

BROWN-FRONTED MACAW, see SEVERE MACAW, below.

GLAUCOUS MACAW.

GREAT GREEN MACAW, see MILITARY MACAW, below.

*GREAT MACAW, see BLUE AND YELLOW MACAW.

GREEN AND BLUE MACAW, the SEVERE MACAW.

GREEN MACAW, used for both the MILITARY and SEVERE MACAWS.

BRAZILIAN GREEN MACAW, the SEVERE MACAW.

SMALL GREEN MACAW, the NOBLE MACAW.

GREEN-WINGED MACAW.

HAHN'S MACAW.

HYACINTHINE MACAW.

ILLIGER'S MACAW.=*Ara maracana*.

LEAR'S MACAW.

MARAKANG MACAW.=*A. macavuana*, the *PARROT-MACAW of Latham, "ARARA-CATENGA" (Marcgrave). "MARAKANG" in Guiana.

MEXICAN MACAW, *see* MILITARY MACAW.

MILITARY MACAW.=*Ara militaris*, also often called the RED AND GREEN MACAW. Other names: GREAT GREEN MACAW (Edwards), GREEN MACAW, MEXICAN MACAW.

NOBLE MACAW.=*A. nobilis*, the *NOBLE PARROT of Latham and *NOBLE MACAW PARROT of other early writers. Sometimes known as the SMALL GREEN MACAW.

*PARROT MACAW, *see* MARAKANG MACAW *above*.

*PATAGONIAN MACAW, Latham's name for the LESSER PATAGONIAN CONURE, sometimes also called by earlier authors, *PATAGONIAN PARRAKEET-MACAW.

RED AND BLUE MACAW (1).=*A. macao*. Other names, RED AND YELLOW MACAW (Latham); *RED, YELLOW AND BLUE MACAW (Catesby), SCARLET AND BLUE MACAW. (2) The RED AND BLUE MACAW of Latham is *A. chloroptera*, the GREEN-WINGED MACAW.

RED AND GREEN MACAW, the MILITARY MACAW.

RED AND YELLOW MACAW. Has been used for both the RED AND BLUE and the GREEN-WINGED MACAWS.

*RED, YELLOW AND BLUE MACAW, *see* RED AND BLUE MACAW *above*.

SCARLET AND BLUE MACAW, *ditto*.

SEVERE MACAW.=*A. severa*, also known as the GREEN AND BLUE MACAW, GREEN MACAW, SMALL MACAW, BROWN-FRONTED MACAW,

*ANACAN MACAW, while Latham's name was the BRAZILIAN GREEN MACAW. Native names: "ANAKAN," "MARACANA."

SMALL GREEN MACAW, *see under* GREEN MACAW *above*.

SMALL MACAW, *see* SEVERE MACAW.

SPIX'S MACAW.=*Cyanopsittacus spixi*.

TRICOLOUR MACAW.=*A. tricolor* of Cuba, the *YELLOW-HEADED MACAW of Gosse's Birds of Jamaica.

*YELLOW-HEADED MACAW, *see* TRICOLOUR MACAW.

*MACAW-PARROT, a MACAW.

NOBLE MACAW-PARROT, *see list under* MACAW.

YELLOW MACAW-PARROT (Latham), the GOLDEN CONURE.

- *MACCAWLE-PARRAKEET, *see* CACTUS CONURE.
- *MACHEO, an obsolete spelling of MACAW.
- *MACKAW, *MACKER, obsolete spellings of MACAW.
- MACLEAY'S FIG-PARRAKEET, SIR WILLIAM. *See under* LORILET.
- *MADAGASCAR INSEPARABLE, the MADAGASCAR LOVEBIRD.
- MADAGASCAR LOVEBIRD, *see under* LOVEBIRD.
- "MADANGOUR TOTO," Hindu name for the MALABAR PARRAKEET.
- *MADUA BHOLA PARRAKEET, *see* MALACCAN PARRAKEET.
- MAFOOR PIGMY PARROT. = *Nasiterna maforensis*.
- *MAIN PARROT, *see* AMAZON, BLUE-FRONTED.
- MAITAKA PARROT, the RED-VENTED PARROT.
- "MAJOR MITCHELL," Australian vernacular for LEADBEATER'S COCKATOO.
- MALABAR PARRAKEET. = *Palaeornis peristerodes*; BLUE-WINGED PARRAKEET (Jerdon). "MADANGOUR TOTO" (Hindu).
- MALACCAN PARRAKEET. = *Palaeornis longicauda*, the MALAKKA PARRAKEET of Latham. Other names: MALAYAN RING-PARRAKEET, MALACCAN RING-PARRAKEET, LONG-TAILED PARRAKEET, LONG-TAILED ALEXANDRINE PARRAKEET, *MADUA BHOLA PARRAKEET. BLOSSOMED-CHEEKED PARRAKEET (Shaw), BLOSSOM-CHEEKED PARRAKEET, VAR. C. (Latham).
- MALACCA RING PARRAKEET.
- MALAKKA PARRAKEET, *see above*.
- MALAYAN PARROT, LITTLE. The BLUE-RUMPED PARRAKEET.
- MALAYAN RING-PARRAKEET, the MALACCAN PARRAKEET.
- *MANILA GREEN PARROT, *see* BLUE-CROWNED ECLECTUS.
- MANY-COLOURED PARRAKEET (Gould), *Psephotus multicolor*.
- VARIED PARROT (Latham); VARIED PARRAKEET (Gould).
- "Maracana," native name for the SEVERE MACAW, and also for some of the CONURES, as the GREEN C.
- "MARAKANG," MARAKANG MACAW, *see under* MACAW.
- *MARRON (?MAROON) SHINING PARROT, the TABUAN PARRAKEET.
- MASCARINE PARROT (*Extinct*). = *Mascarinus mascarinus*. Other names, *OBSCURE PARROT, *MASKED VAZA.
- MASKED PARRAKEET, *Pyrrhulopsis personata* of Fiji. Native names, "KAGULA," and "KAKA."
- *MASKED VAZA, *see* MASCARINE PARROT.
- MASSENA'S LORIKEET. = *Trichoglossus massenae*.
- MASTER'S PARRAKEET, *Platycercus mastesianus*, a specimen closely allied to the PENNANT, or perhaps only a variety of this. Also called RAMSAY'S PARRAKEET.
- MAURITIUS ALEXANDRINE PARRAKEET, *see next*.

To be continued).

CORRESPONDENCE, NOTES, ETC.

TO CONTRIBUTORS OF ARTICLES AND NOTES.

THE EDITOR hopes that any members who can write about birds, *in freedom* or captivity, will always kindly do so; and that if their articles are not published directly, they will not be under the impression that their labours were unnecessary, or unappreciated.

Articles that are accompanied by photographic illustrations cannot appear in some cases until after a certain lapse of time, owing to the expense of the illustrations, which have to be limited, whilst in the case of other copy, it is not always an easy task to fit in what the Editor would like to publish without delay, since the number of pages have to be limited, in the Magazine.

If therefore some members who are good enough to write, find that their literary contributions are pro. tem. pigeon-holed, the Editor hastens to assure them that such pen-fruit is none the less appreciated.

NIGHTJAR, SNIPE, AND PHALARAOPE.

SIR,—I have read the letters by Mr. Galloway and Mr. Rattigan in the March number of the Magazine with great interest, and should be glad if you can find room to add these few queries and notes in your next issue. Mr. Galloway does not say if his tame Nightjar ever learnt to feed itself. I caught a nearly full grown young one on August 1st last year (it could fly about 20 yards at a time), I put it into a cartridge bag, where it had to remain all day, and in the evening brought it home and stuffed it with moths, etc., it soon learnt to open its mouth (one can't call it anything else!) when it was hungry and I took to feeding it almost entirely on grasshoppers, a most unnatural diet, but it thrived very well on them. Of course I gave it some moths and butterflies as well. I kept it for a fortnight and then gave it to some friends near by, who still have it, but it has never learnt to feed itself and always has to be hand fed; it is now extraordinarily tame and likes to sit on a log by the fireside, it has had several narrow escapes from being trodden on, as it spends all the day loose in the schoolroom. It steadfastly refuses any "soft" food, and only has maggots, mealworms, and raw meat, and occasionally hard-boiled egg now that insects are impossible to get, but it is in perfect health and condition. Mr. Heatley Noble tells me that he knew of another tame Nightjar which never learnt to feed itself, and I should be glad if Mr. Galloway would let me know if his ever did so. The subject of these notes made a few half-hearted efforts to catch moths thrown up for it in the summer, but now it won't try at all!

Re Mr. Rattigan's article, I must differ from him where he says that the Snipe "is a delightful bird for an aviary."

The Snipe is most certainly a perfectly charming *cage* bird, but compared with other Waders *not* a good *aviary* bird. Kept in an aviary a Snipe *must* be

pinioned, and half the pleasure of keeping Waders is in watching their flight. They are nearly all of them exceedingly agile on the wing and very clever at avoiding obstacles, *i.e.*, the supports, sides and roof of the aviary: a Knot, Dunlin or Ruff will never knock itself about, but I would never put a full-winged Snipe, however tame, into an aviary for even one night. My old Snipe, mentioned in Mr. Barnby Smith's recent article, was so tame that I had no qualms about putting him into my pocket and taking him out and dumping him down by a pond or stream (although absolutely full-winged) and letting him probe for worms, etc., but I would never have left him in an aviary by himself—he always inhabited a large cage in my smoking room, for sometimes he had for companions another Snipe and a Woodcock. This second Snipe was very fairly tame, but I found him one morning with his right eye nearly smashed out of his head and his head fearfully bruised. He had obviously dashed against the top of the cage in the night, and had managed to get up sufficient impetus in quite a small space to nearly kill himself: had he been in an aviary where he would have had more room to "get going," he would certainly have done so. I don't believe it is fright that makes Snipe suddenly dash up at night (though, of course, the sudden advent of a cat or Owl on the roof of the aviary would be fatal) but they seem to forget the wire netting at night, and being very quick starters, hit the sides or roof of the aviary with tremendous force.

At different times I have kept five Snipe for various periods, the one great drawback to them is their enormous appetites, and they MUST have worms and more worms! Some of my Snipe have steadfastly refused any artificial food, even raw liver, chopped up, *and these are the ones that have lived longest*. My old bird, which I had for $2\frac{1}{2}$ years, never touched artificial food after he was a month old, though I did my best to make him. He loved maggots and fresh-water shrimps. I have always found that the ones which would eat soft food (and they get to love it) always suddenly went thin, but recovered if one stopped the soft food and only gave live food for a time. Lots of grit is essential—and water.

A short time ago I received a Snipe from Mr. St. Quintin, which had been picked up under a telegraph wire ten days before he sent it to me. It reached me thin, but otherwise sound I think; though Mr. St. Quintin told me that its left wing was badly bruised high up when it was found, but this is nearly right again now, and as its appetite is good I think it will soon be quite fit; it is an exceptionally large bird, and when it has got into really good order should be a beauty. He is sharing a cage with another gift I received from Mr. St. Quintin about two months ago which, next to my old Snipe, is about the most charming bird I ever had. A male Red-necked Phalarope. He was imported from Iceland by Mr. Barnby Smith in the summer of 1912, and had, until Mr. St. Quintin very kindly sent it to me, been at Scampston all the time. Mr. St. Quintin tells me that he had been fed on "Cecto," maggots, and mealworms, which are still his staple food, but out of curiosity I caught a lot of minnows, water beetles, boatmen, and

fresh-water shrimps and put them into his tray of water, and rather to my surprise he fell upon the minnows in grand style, and managed to swallow quite large ones and almost immediately became singularly adept in catching them. He was, as I had expected, delighted with the beetles, shrimps, etc., but I had not expected him to be so keen on the minnows. He is now in perfect condition and very tame. When I let him out of his cage and pick up his maggot tin he runs up to my feet and looks up, ready for me to drop maggots for him. He manages about sixteen comfortably at a meal, and will get through a hundred minnows in the 24 hours, besides maggots, beetles, soft food, etc. !

He was not at all pleased to see the new Snipe at first, and stood on tip-toe, pecked its head and "scolded !" but they are now perfectly friendly and sit about and feed side by side.

I have always thought that a Jack Snipe would make an ideal cage bird, though I have never possessed a healthy one. I have had two or three "winged" specimens, but they never lived long and always after death proved to have had a body wound as well, but I am certain that if one could catch an unhurt specimen it would do well, as I am sure they are partly vegetable eaters, and would not require so many worms as a full Snipe, which is their one drawback ! Moreover, they would very quickly tame and are among the most beautiful of British birds.

HUGH WORMALD.

DESTRUCTION OF BIRDS' NESTS AND EGGS.

SIR,—A countryman and a lover of birds and animals, I usually go at Easter time for a fortnight's roam through some of the most beautiful parts of rural Worcestershire, when I am horrified, each time, at the wholesale destruction of birds' nests and the wanton cruelty to bird life generally, perpetrated by school boys and the younger farm hands. Nests are destroyed and the eggs smashed wholesale and if, as is the case a little later, hatching has begun, young birds are taken from the nest and often heartlessly destroyed, being literally pulled to pieces limb from limb and left strewn about the roadsides or in the fields. Moreover, Sunday of all days is made the occasion for this horrible pursuit when young people band themselves together for the sole purpose of "birds-nesting" as they call it. On a Sunday afternoon, last year, I came across a number of boys and girls assembled in an orchard where, having robbed all the nests they could find in the fields round about, they were engaged in a sordid competition in which they vied with one another in hitting a tree selected for a mark, with the eggs collected. Such revolting sights as these harrow the feelings of every lover of nature and are such as to rouse the indignation of every right-minded person. I fear that what is the case in Worcestershire may be prevalent in other parts of the country as well. So that I feel that something really ought to be done to put an end to this form of youthful heartlessness and to the destruction of those creatures which add by their presence so much to the beauty of God's creation, and which are precious, at

least to all true lovers of nature. Certainly there are the somewhat belated police notices, setting forth the provisions and penalties of the "Protection of Wild Birds' Acts," but these do not usually appear until some time later in the season when a great deal of damage has already been done. For during March and April many of the commoner birds are already busy with their nests which, owing to the scanty foliage as yet grown upon hedge and tree, are more easily detected. And even when these notices do appear very little attention seems to be paid to them. Might not these bills which emanate, I presume, from the local police stations, be sent out and posted up earlier, say at the beginning of March, and might not the local police and others take more active steps to see that their restrictions are complied with and offenders proceeded against. If this were done, much of it I think would speedily cease. Then, too, could not the excellent Society which exists for the prevention of cruelty to animals take under its wing the cause of birds as well (perhaps it does, I do not know), and be styled "the Society for the Prevention of Cruelty to Birds and Animals." At any rate I feel that the Society should know of the prevalence of this particular kind of cruelty and that might with good effect take this matter up. Then, again, there are the village schools wherein considerable influence might be exerted if the masters and mistresses would deal definitely with this subject in the early spring with a view to inculcating in the minds of the young a love rather than a disregard for the beauties of nature, at the same time warning them against the wickedness of such wantonness. Quite apart from the desolating results to nature of this shameless conduct which is so distressing to see, surely the pursuit of this form of heartlessness, if left unchecked, must needs breed in the character of the young such habits of cruelty which may, in later years, be put into practice upon even broader and more serious lines. WILLIAM LAMBERT-BAKER.

NESTING OF QUAKER PARRAKEETS.

SIR,—In the autumn of 1912 I bought a pair of Quaker Parrakeets. These were confined until the end of 1913 in an aviary with various other Parrots, including two small kinds of Lovebirds, Pennants, Rosellas, as well as two Nepaulese Blue-pies. The gradual disappearance and death of the smaller Lovebirds caused me some apprehension. I feared rats, but could not discover means by which they had made their entry. The Lovebirds vanished one by one, only their two limbs being found on the floor of the aviary.

One day I found the Pie carrying round a half-dead Budgerigar, so fixed on them as the culprits and removed them to another aviary. This however had no effect, for the death roll continued to increase. About a month later, the gardener hearing sounds of fighting in the aviary ran to the spot and was in time to witness a savage attack made on a female Cockatiel by the two Quakers, and from the effects of which she subsequently died, one wing being almost torn off.

This was the only occasion any of us saw or heard anything, and I have come to the conclusion that in all cases the Quaker set upon the smaller Parrots

and the Blue Pies picked their bones. I at once returned the Blue Pies, there being now no small Parrots left, and separated the Quakers. A few weeks later they bit a hole in the wire netting and escaped. I recovered them, but they again escaped. For a few days they flew all over the locality, but finally commenced to build a nest in a pollard lime tree in front of the house. Here they stayed for about six weeks until the end of April of last year, when they removed to a large wistaria growing on the south side of the house and close to small copper beech. They literally denuded the beech of its twigs, with which they built a large nest about 30 inches long, two feet across, oval in shape, with an opening about two thirds from the top. It was extraordinarily large inside and was well constructed to withstand the rain, for it was neatly thatched, the twigs lying parallel and vertical and overhanging the entrance. At what time the hen bird commenced to lay, how long she incubated, or how many eggs there were I cannot say, for I was away from home for about a month at this period and was only informed that the male bird had been seen carrying food to the nest. On my return I made an examination, and could feel that it was tenanted by a young Parrot or perhaps more. This was about the end of the first week in June. Another examination a fortnight later, when I took out another young Parrot, perfectly white and covered with down. Had I not known what it was, I should have imagined it to be a young Hawk or Owl. After this I made only one more inspection of the nest, when I found the youngster much more grown, with the green feather beginning to show in the wings. The appetite of the family was now prodigious. The old birds came continually to feed into the little aviary, through the hole which they had made in the wire. About the beginning of July, the head of two young Parrakeets were to be seen continually in the opening of the nest, but they made no effort to fly for some little time, when they took to the wing and were escorted by the old birds down to the aviary. Four days later a third youngster made its appearance and finally, to my great delight, my wife discovered that the family consisted of four, for she noticed the six sitting together in a beech tree, where she pointed them out to me. They were continually to be heard in the wood, park and plantation, squeaking in a most lusty fashion and continually making me believe that I was back once more in the tropics with the wild figs and quondongs drawing their feathered host together.

R. A. DYOTT.

MEALWORM BREEDING AND STICK INSECTS.

SIR, — I am writing these notes, which are of quite an elementary nature, for the information of new aviculturists, remembering how helpful elementary help was to me when I first began to keep birds on a large scale, and in fact still is. One constantly sees enquiries about breeding mealworms. The bird expert knows all about it and succeeds, the novice has not the necessary experience and fails.

From my own experience I am inclined to think the failure to make a

mealworm box self-supporting is generally due either to keeping the box in too cold a place or using too small a box. For some years I had three mealworm boxes in three different aviaries. These boxes were about 16in. × 6in. × 12in. deep, and were placed a few inches above the heating pipes. They were warm enough when the pipes were warm, but too cold when the heating was off. A considerable number of worms were bred in these boxes, but they were not self-supporting and a good many worms had to be purchased.

About ten months ago I decided to put the contents of all three boxes into one large one. I purchased a large zinc corn bin which I half-filled with the usual sacking cork, leather, etc., and into this I bundled my stock of worms and beetles. The result has been most satisfactory. The mealworms had begun to increase rapidly just before the war began and all this winter my new box has given me an abundant supply. There may be a slight falling in supply for a time now as so many are turning into beetles, but I think I shall have sufficient coming on to supply all I want without buying. I think the reason for a larger bin doing so much better than a small box is that the greater amount of sacking and larger number of insects generates a heat inside the box independent of external warmth.

While writing this I have received the copy of *The Field* for February 27th, and in it I see that Mr. Seth-Smith mentions stick insects as food for birds and small animals. I was going to mention the excellence of these insects as a food, as I have used them for three or four years now. My stick insects are kept in a wooden case with fine wire gauzes at each end for ventilation and glass doors in front for inspection and manipulation. There is a fixed zinc tray about 2½in. deep with about 1½in. of silver sand in it. The insects are fed on bunches of privet in jars of water and these bunches are renewed about twice a week. At first the difficulty was how to change the privet without losing a lot of insects in handling them. But this is quite easy to do, for all that is necessary is to place the fresh bunches into the cage and the insects will soon transfer themselves. In summer time it is advisable to give the old privet bunches to the birds to pick over or there might be trouble if any stray insects found their way to choice bushes. I notice that Mr. Seth-Smith in the Notes I refer to mentions that a temperature of 80° is desirable for the breeding of stick insects, this however is not my experience. I keep my breeding case in a cage room where the temperature is kept at about 60°—65°, and sometimes when no birds have been in this room and the heating has been off, the thermometer has fallen to round about 50°. I find these insects extremely prolific and I use them in large numbers, especially for delicate birds and those that may be out of sorts, as they are more digestible than mealworms. The old insects die after laying their eggs, but the dead bodies cause no smell as they dry up directly. These are quite interesting creatures apart from their food value and they have an extraordinary power of changing their colour to match whatever they may be on. If they are on the wood work of their case they will turn brown, but on the privet they are green.

E. J. BROOK.

NOTICES TO MEMBERS—(Continued from page ii. of cover.)

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Photo by Mrs. Gregory.

TRUMPETER BIRD.
(*Psophia crepitans.*)

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MAY, 1915.

PATAGONIAN PLOVERS AND
TRUMPETER BIRDS.

By Mrs. GREGORY.

In the Spring of last year a friend living in Buenos Ayres sent me over a pair of Patagonian Lapwings, called in their native land "Téru-Téru," from their shrill cry, which is supposed to be like the word. Mr. Hudson describes these birds in his books on Patagonia, and in a letter from him, which I received last year, he tells me they are great favourites of his, and that he has "a hundred memories of their curious ways." He also told me he could not walk anywhere at any hour on the plains without having a number rising up and wheeling about his head, making a great outcry. He added he remembered an English lady saying she liked the country very well, but the Téru-Tèru spoilt her pleasure. She could never get away from them. They were always deafening her with their angry screams, and darting at her head with their spurs, but Mr. Hudson thinks it is different now, as the bird exterminators have been as busy in Buenos Ayres as in most places.

Well, I met my birds at Southampton docks, and received them from the cook on one of the Royal Mail boats. They did not seem very bold then; their feathers were draggled and they looked very miserable. I got them home quickly and put them into a large aviary and I thought they would never stop drinking from the deep pan of fresh water, so thirsty were they. Next day I let them loose in the garden, and it was pretty to see their delight and the way they ran over the lawn tapping for worms to come out. They

might have been here for years and showed no fear or shyness. But the hen bird remained weak for some time. Unlike most small birds they seemed to understand the boundaries of their domain and never hid in bushes or tried to escape, even if the gate stood open. In some ways they reminded me of Cranes [in miniature], for when not hunting for insects, or bathing, they stood in repose on one leg and always preferred to be close beside the large birds. Not eating the same food probably made them all more friendly together. Téro eat worms, slugs, and all kinds of insects; in addition I gave them twice a day a little raw beef cut very finely. After a few days they would eat from my hand and liked to stand close by me. They are intelligent and have no fear of strangers, but they are too small to keep comfortably in a garden; I feared cats and rats, but no doubt the presence of the big Cranes kept the former away.

These little Patagonian Lapwing are made much of in their own country, and the friend who sent them says almost everyone keeps them, for they act as watch dogs and run up and call loudly when anyone approaches the house. One thing I am sure of, they would not like to be in an aviary, however large.

They are not to be compared as pets to Trumpeter Birds [from the same country]. I wrote an article in the *Avicultural Magazine* for 1908 on a Trumpeter Bird I then had for just over a year. I am fortunate enough at the present time to possess another one, which I call "Penini," and well he answers to his name. I should like to say a little about him, for I do not think there are any birds so interesting, intelligent, and fond of human beings in general as the Trumpeters. My own bird never likes to be without the company of humans: birds he does not care for, and seems to be only interested in *them* when he helps me drive them into their houses at night, and very excited and fierce he is with them unless they obey instantly. He waits and watches for hours outside the windows for someone to come out and walk, when he follows up and down the paths like a dog, and indeed has been for some distance on the road with me, and is fond of coming after me into our Vicar's garden, where he makes himself quite at home. Now, it is not aviculture to write of monkeys, but I cannot help

saying I have a tiny "white-nosed" monkey from the Gold Coast the dearest little pet imaginable, with whom Penini plays. They are companions to each other, and in many ways there is a resemblance between them. Both are full of mischief, and if I am busy washing the leaves of a plant, they will snatch up the sponge and rush off with it, just for the fun of having a mad race round the garden: and then, what they don't like quite so well, is being seized and held until the sponge has to be rescued by main force! Both Trumpeter Bird and monkey sleep in the house and breakfast with us in the dining room. When there is no frost the Trumpeter flies out of the window afterwards, and should the monkey at any time be left in a conservatory or aviary [*empty, bien entendu*] the Trumpeter will stand beside the door to watch and keep him company. Then when Puck is allowed freedom, and swings and throws himself from one branch to another in the large trees, Penini will be found under an Arbutus tree, very often eating the bright red fruit that the monkey picks and throws down to him.

I have learnt much about keeping Trumpeters from my last experience, when I lost my poor bird through its feet getting frost bitten. Now, I know that they must *never* stand on frosty ground, though rain in moderation does not seem to hurt them, and both my birds bathed many times in the pond during the coldest winter months. Also, I know better now how to feed them; my present bird has much raw beef, with plenty of fat (which he likes best) fresh every morning, rice pudding in the afternoon, and grapes, banana, and little bits of cake occasionally, of which he is very fond; besides bits of bread, biscuit, and sometimes the head of a sole, the only part of the fish he cares for. I was told to feed my first bird on rice, boiled in water, (this one will not eat it) and vegetables, which neither bird would eat, also hard-boiled eggs, which they will not eat for long. Meat is what they require, in addition to insects they pick up, which are few in winter. My bird is in perfect health, and best of all, *plump* and full of spirit. He has never ailed a day since I bought him from Mr. Cross nearly two years ago, who told me he had been a fortnight in England, and had been the pet of a Brazilian lady who brought him over but could not keep him.

The difficulty with Trumpeter Birds is that they cannot sleep

in any outside shed in winter. Fortunately I have a small room indoors, which is slightly heated. In a recess, a thick natural perch is fixed across, on which Penini sleeps; a curtain over the window, and a screen to prevent his jumping down, till I fetch him in the morning, complete the arrangement for his and our comfort. At dusk he will walk in at the front door and solemnly proceed upstairs to bed. These birds, more than tame as they are, dislike being handled or carried, except when allowed to step on one's wrist. On the other hand, they will jump on to one's lap, and love to have the head and neck stroked and caressed. They are *most* affectionate, but differ from the monkey, who gives *all* his love to *me alone*.

Trumpeters will be friends with and make much of the merest strangers, and are interested in any human being who opens the gate, be he postman or dustman or errand boy. They will run up and welcome him with pretty twittering sounds, but the louder real trumpeting note is reserved usually for small children with bare legs. Unless they are old enough for stockings it is unwise to have them in the garden, and both my birds have attacked children's legs quite fiercely, tears being the consequence. Nothing seems to excite these birds more, except the sight of a dog or cat.

SPRING BIRD-NOTES FROM VARIOUS SCOTTISH ISLANDS.

By The DUCHESS OF BEDFORD.

The following notes have been made during two cruises round the north and west coasts of Scotland this summer, 1914.

My yachting season began with the usual spring visit to Fair Isle on the 29th April. The north-west wind, which favours landing on this often inaccessible island, is not the one which is most conducive to the arrival of migrant birds, and it was not until the 8th of May that any number of them appeared.

On that day, when the wind had been blowing strongly for

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some hours from the east and rain had fallen heavily, a Swallow flew slowly in at my window and settled on the window-sill, a welcome sight to one who had been tramping over the island for hours every day, seeing little but the resident birds.

A very short walk from my cottage revealed that a number of the common migrants had arrived, as well as many of the more local species, such as White Wagtails, Pied Flycatchers, etc., but the only birds worthy of special note were the Ortolan Buntings. It was difficult to estimate their number, for, as too often happens on Fair Isle, the weather which brings the birds makes the watching of them all but impossible; but every little patch of ploughed land held one or more, and I can only have seen a very small proportion of the arrivals. They remained on the island a few days in rapidly decreasing numbers.

On the 15th May, when steaming up the Moray Firth, I saw a small flock of about twelve to fifteen Brent Geese. At the Shiant Isles a very pretty Pied Puffin was observed.

On the 23rd May I visited St. Kilda. The most common birds inland at the time of my visit were Whimbrels, Wheatears, Twites, and White Wagtails. The Wimbrels were all over the island both on cultivated and uncultivated ground. Meadow-pipits, Rock-pipits, and Tree-sparrows were also common round the houses. There were a few Hooded Crows, but doubtless the greater number of the resident birds were away breeding on the cliffs. Several St. Kilda Wrens were noticed about the houses and "cleits," where the natives kept their fuel.

St. Kilda is well known as one of the principal resorts in Great Britain of the Fulmar. At the time of my visit the inhabitants were bringing in boat-loads which had been noosed on the cliffs. It would seem a short-sighted policy for a people which depends largely upon these birds for a living to kill them at this season of the year; but, judging from the numbers, the practice has apparently been carried on with impunity in the past. I was fortunate enough to obtain one of the rare "Blue Fulmars," the only one seen amongst thousands of others. The bill is not "blue" as described to Mr. Eagle Clarke (see *Studies in Bird Migration*, ii., p. 24), but appeared to be very like that of the Common Fulmar, though I had not the

two in my hand at the same time. The nostrils are dark slate and the rest of the bill greenish yellow, getting more horn-coloured towards the tip. If anything, the bill is less blue than that of the local form.

Having read of St. Kilda as the resort of myriads of sea-fowl—Kittiwakes, Razorbills, Guillemots, and Puffins—I was somewhat surprised to find that, with the exception of the last, they were by no means so plentiful as I had expected. I do not mean to say that there are not thousands breeding there, but, compared with such places as Handa and many of the other great cliff resorts, they are distinctly scattered, and one sees no great number in the sea.

On the whole, the cliffs do not seem to have the type of ledges they require for nesting. The greater part of them consists of small grass slopes and short precipitous rock faces, far better adapted to Fulmars and Puffins than to Guillemots and Razorbills. I have seen Kittiwakes nesting on similar cliffs, but possibly the atmosphere of Fulmar is too strong for them at St. Kilda.

There are more of the cliff-breeding birds on the south side of Dun than any other part of the islands that I visited, but I did not go round Soay.

The Herring Gull was the commonest of the Gulls round the yacht in the bay. Some twenty Lesser Black-backed Gulls followed us over from Loch Tabert—56 miles—and remained a short time, but I saw no others during the remainder of my visit. Though reported to have nested once (*Studies in Bird Migration*, ii., p. 238), it is probable that, when seen there on other occasions, they may have followed boats in the same way. It is astonishing the distance that Gulls will follow a boat. I noticed a Lesser Black-back with a broken leg, which accompanied my yacht from the Farne Islands for a distance of 117 miles, and possibly farther, as I was unable to watch it longer.

Two Arctic Terns were observed during my visit; also eight Turnstones, a Common Sandpiper, a Teal, Dunlin, Merlin, a few Oyster-catchers, several pairs of Eider Ducks, a number of Starlings, and a pair of Ravens.

I was fortunate enough to be able to go over to Stack Lii and Boreray in my launch, and, though there was rather a heavy swell,



STACK FROM THE N. W.

Photo. The Duchess of Bedford.

was able to go very close to both islands. At first we steamed along under the St. Kilda cliffs and thousands of Fulmars swooped round and over us on every side ; then, as we turned off towards Boreray, the Fulmars thinned off and the air was thick with Gannets. *Apropos* of the destruction of fish by these birds, which is now being investigated by a Committee appointed by the Fishery Board, it may be worth mentioning that a trawler which had been fishing round Stack Lii and Boreray had made such a big haul of fish that they took a rest in St. Kilda Bay from early Saturday afternoon to Monday morning before returning home. The mate supplied the information to my captain, and those who know anything of life on board these trawlers will be aware that only when the fishing has been exceptionally good can they afford themselves the luxury of a voluntary rest both night and day.

On my return from St. Kilda on 26th May, I visited Barra, an island that I know best under the influence of November gales. Seen at this time of the year, in brilliant sunshine and clothed with a carpet of Thrift, Primroses and Marsh Marigolds. it and the adjacent islands are hardly recognisable. Most of the Waders had left, but I saw a flock of twenty to thirty Bar-tailed Godwits. There were also a number of Great Northern Divers in many stages of plumage, and both Arctic and Common Terns were nesting there. Numbers of Gannets fished in the Sound every afternoon, and, as I have seen it stated (*The Gannet*, Gurney, p. 400) that they are unable to catch fish in a perfectly calm sea, it may be of interest to mention that I have frequently seen them fishing here, as also off the Mull of Cantyre, when there was not a ripple on the water.

On the 16th June a great number of Manx Shearwaters were observed off the Isles of the Sea, and again on the 17th between the Sound of Sleat and Eigg, some being seen as far north as Gairloch. Two Great Northern Divers were also noticed.

On the 19th June I visited the Stack of "Stack and Skerry." The island lies about 27 miles north of the north coast of Sunderland and $4\frac{1}{2}$ miles from the Sule Skerry. It is one of the principal breeding resorts of the Gannet. The Stack is divided into two almost equal portions, the sea running through a narrow cleft between the two islands. There was too much swell for landing at the time of my

visit, though, but for this cleft, I think I might have managed it on the south-east side.

As the estimate of the number of Gannets breeding there in the past varies from 8,000 (Gurney) to 50,000 (Seebohm), I made very careful observation on this point. We steamed round the Stack on one side at a distance not exceeding 150 yards. On the other my captain treated it with greater respect and we were rather farther off, but I afterwards rowed round in my dinghy within a few yards of the islands. I counted the birds before many of them rose on a portion of the rock which was most thickly occupied, and my opinion is that there were about 5000 at the time of my visit. If anything, this may be a little under the mark, but I should certainly say they were less than 6,000. I believe the over-estimation of the numbers is due to the difficulty of separating the Gannets with the eye from the multitude of Kittiwakes and Guillemots sitting amongst them. I asked one of my yacht's officers how many Gannets he thought there were, and, even after consideration, he suggested a million ! As none of the sitting birds rose, even when I was within a few yards of the rock in the dinghy, it was not possible to see whether any young were hatched. I presume that the population would be quite one-third more if counted before the young were able to fly.

Only the upper third of the northern part of the Skerry is occupied by nesting birds, and a very small point of rock, which cannot hold more than half a dozen nests, on the southern portion. At first sight the *whole* Stack appears to be covered in its upper half by nesting birds ; but a closer inspection reveals that quite one in six—but I think possibly even a larger proportion of those on the southern part—are immature birds, not all in the dark plumage, but still immature.

There were no Puffins, very few Razorbills, and a few Shags with young ; also a few Greater and Lesser Black-backed Gulls.

(To be continued).

JOTTINGS ON COMMON INDIAN BIRDS.

By AUBYN TREVOR-BATTYE.

When I look back at my visit to India, two pictures, for absolute charm, stand out I think from all the rest; and this, notwithstanding the fact that that time included experiences so interesting as a Kheddah in Nepal, a visit to Nepal's amazing cities and travels in the mountains of Sikhim. These two pictures are the heart of the Nepal jungle, when one rode out alone in early morning with Mahout, and that evening with the Sarus Cranes in the desert of Rajputana. Watching a rhinoceros as it worked its way slowly up a water-course formed an incident of the first; but that jungle experience owed not a little of its charm to the ways and the character of my own elephant, whose splendid personality never ceased to be for me a study of wonder and delight. The other day, in speaking with a wounded soldier in the hospital, the poor fellow said, "I don't seem to remember much about it, we seemed to be always marching." Well, when one has an Indian programme to get through it is pretty much that way. That I think is why the other picture is that of the jhil and the Sarus Cranes; it was almost the only time in India when I was able to have a really long and quiet look.

There are over 1,600 birds on the Indian list, and they are all scientifically and fully dwelt with in the standard works; and the habits of the majority have been described over and over again by writers who know their India well. There could therefore seem but small excuse for these random experiences of a tripper. But when we read the Editor's appeal for articles, each one of us, seeing the devotion of his Editorship and guessing what it must mean to have to find cargo for the ship month in and month out, feels strung up to do his best. Hence these jottings.

The ornithologist who has time on his hands—time to creep about and listen and speer—will hear and learn and recognise very many birds familiar in collections, but not to be seen in a hurry under natural conditions. Many may however be seen without looking for them, and those noticed here are some that were

recognised last winter as I worked my way through the more northerly part of India to join Mr. Elwes for a trip into Nepal.

Of course the Crow comes first—the Indian House Crow, *Corvus splendens* ('splendens,' I take it, because of its audacity—*Splendide audax*). This bird is equally at home in the country or the town, turning up as you eat your sandwich on the edge of the jungle, or keeping an eye on your toilette as you get ready for dinner. Should a pin or a stud be missed from your table the crow, more probably than the sweeper, has carried it off. Like the crows in Egypt these House Crows persistently worry the kites; nor are larger birds of prey secure from their attention. In the hilly suburb of Colombo, for instance [this was in the year before] many vultures came every evening to roost in the palms, and their fellow scavengers, the crows, roosted with them. The Vultures, as long as daylight lasted, had but little peace, for the Crows were always jumping on their backs and pecking them hard. A Crow would sidle along the palm-rib until it was about a foot from the vulture's tail. The vulture might look round suspiciously, but the Crow was only sitting there with an innocent expression, so there was nothing to be said. But as soon as the Vulture turned its head back again and was off its guard with one dart the crow was on its back and could just get in one dagger of a peck before the Vulture understood and jumped. Probably the crows were pecking at ticks, but it seemed to hurt just the same. Buffalo and cattle generally are grateful for such attention, but their skins are thicker.

The Indian Tree-pie (*Dendrocitta rufa*) with its dark and chestnut plumage is very noticeable. On the outskirts of the jungle one saw parties of these birds following one another from tree to tree.

One bird in this group, the White-headed Laughing Thrush (*Garrulus leucolophus*), takes us momentarily to Sikhim. As one rides along the narrow paths in that mountain country, one often hears coming from the trees or scrub on the mountain side on one hand a chorus of laughing chatter; and then a flock of birds with white heads will cross the path and follow one another down into the ravine on the other hand. They are very cheery birds and seem to keep themselves constantly amused. They belong to a very large natural group, mostly birds of the hills.

One constantly sees about the gardens and compounds several little grey-brown birds very busy on the ground beneath the trees. They have a way of flying off one behind the other, very much as our Long-tailed Tits do in England. I think it is these birds that are popularly called the 'seven sisters.' They are the Common Babbler (*Augya caudata*).

The Bulbuls have been so intimately woven into eastern tale and legend that we have come to imagine that their song must be the most beautiful thing in the world, more beautiful even than the song of the Nightingale. I know not how this may be; there may possibly be a Bulbul—they are a large family—that can outvie our own divine warbler, but I have not met it yet. But there is one dark-crested, bright-eyed, sweetly-singing little bird that would run the Black-cap close—the Red-vented Bulbul (*Malpaster hæmorrhous*). It is in every little garden; in the palms, the hibiscus, everywhere. The one little patch of bright colour is naturally not very prominent, but there it is.

Anyone familiar with South Africa will at once recognise old friends in the Fork-tailed Drongos. The Indian one most often seen is the Common Black Drongo or "King Crow" (*Dicrurus ater*). One sees it catching flies from the bungalow coping, from the dead arms of the aloe flowers, from telegraph wires as evening falls. In Sikhim, we saw on the very tip top of a tree, and in Nepal, a drongo that should be the Bronzed Drongo (*Chaptia aenea*). I do not know why I never noticed in India a bird seen several times in the jungle of Ceylon, but it is so general in India that we may take it as seen; this is the Racquet-tailed Drongo (*Dissemurus paradiseus*). A most remarkable bird, its incurved outer tail feathers reach to twenty inches in length (Oates). The colour is blue-black.

In Sikhim also (King Charles's head will not keep out of the story) in Sikhim, then, we once saw the lovely little Wall-Creeper (*Tichodromia muraria*). It was creeping about on the side of a rock by the river Tista, four days out of Darjeeling. Creeping thus in little jerks about a lichen-covered rock the bird would not be very easily seen, but that as it creeps it opens and closes its wings, bringing into view the beautiful crimson of the lesser wing-coverts,

primaries and secondaries. One can get quite close to the bird as it hunts about in its busy, pre-occupied way.

The Warblers shall be passed over, because here I feel on too uncertain ground, though members of this large group may be seen every day, from a Reed-warbler by a jhil to the little Green (*Prinia inornata*) that haunts the compound shrubs. The same may be said of the Shrikes, for though one often saw a Shrike perched on the telegraph wires or hawking from the top of the aloe stems or round about the jungle, I could seldom identify them with any certainty. One was certainly the Indian Great Grey Shrike (*Lanius lahtora*) and another most probably the Rufous-backed Shrike (*L. erythronotus*), and at that we must leave them.

Considering the brightness of the Orioles, they are not very noticeable in the sun-washed trees; only on one or two occasions I saw one singing on the top of a tree or bush. And I never remember to have seen a Grackle (*Eulabes*) in the wild state, though one commonly saw them in cages.

The Rose-coloured Starling (*Pastor rosaceus*) is often seen. It is one of those birds that comes to the Jains' feeding-towers in the city of Ahmadabad. The Indian Starling (*Sturnus menzbieri*) seemed to me to be almost exactly like our own and had just the same ways. This brings us to the Mynas, a group of birds which, with the Crows and Kites, are the most familiar birds in town and country. The Common Myna (*Acridotheres tristis*) is everywhere and always. Its specific name is most unfair, for it is one of the cheeriest birds that fly. This delightfully industrious and confident bird is not confined to the plains, it goes well up into the mountains; we saw it in Nepal. The Bank Myna (*A. ginginianus*) is much more local. I never saw it in large parties as one sees the former species. A pair frequented the lawn of a house where I was staying in Benares, and hunted carefully the grass when just mown by a large mowing-machine drawn by two splendid oxen; and there were always a few on the banks of the Ganges at the foot of the town. A third quite familiar bird is the Black-headed Myna (*Temenuchus pagodarum*). Its habits are much like those of the others.

I saw many Flycatchers in Sikhim, among them a lovely cobalt blue one, which was probably one of the *Niltava* genus.

But the only one I could identify was the Paradise Flycatcher (*Terpsiphone paradisi*). As I had seen this wonderful bird more than once in Ceylon I knew it instantly, though for that matter no one could possibly mistake it, as it is like nothing else in bird-kingdom. Anyone who has looked over a series of these birds in a collection must have been struck by their great differences in plumage. Oates gives us the change of plumage by which the male arrives at that of its fourth autumn, when the head is black but the body and tail white. As the body of the bird is but $4\frac{1}{2}$ inches in length, while the tail alone may measure $16\frac{1}{2}$ inches (Oates) it will easily be seen what a remarkable bird this is. We are speaking of course of the male, the female does not develop in this way. I shall never forget the first time I saw one on the wing. I was going along a road—it was in Ceylon—with dense jungle on either hand, when something white that hardly looked like a bird flew half way across the road and hung there in the air vibrating. Then it flew back and went up into a tree in a waving ripple due to its long tail. It seemed a very fairy of the jungle.

Although Chats and Redstarts were often seen in the Himalayas, and though I afterwards tried to identify some of these in the Calcutta Museum, I feel no certainty about them, and therefore pass on to a familiar bird, the Magpie Robin (*Copsychus saularis*). I have not noticed this bird in the wilder parts of the country, nor do I remember seeing it in the Himalayas, although it is said to ascend the mountain up to 5,000 feet (Oates), but almost everywhere else in the gardens. I think it was even more common in Ceylon than in India. It stands in about the same relationship to human life as the Red-breast, which its ways closely resemble. It shares with the Nightingale and the Grey-backed Warbler (*Aëdon*) the pretty habit of flirting up its tail at each stop in its movements, but does this more persistently than either of these birds.

In the compound of a dak bungalow in Benares a little group of grey-coloured Thrush-like birds were often seen in the early morning hunting among the fallen leaves of a pipel tree. They jerked the leaves over with the Blackbird's action. I think these must have been the Dusky Ground Thrush (*Merula unicolor*). The Blue Rock-Thrush (*Petrophila cyanus*) was seen and heard

several times in the Himalayas. We saw a Dipper on a tributary of the Tista in Sikhim.

Beyond question the most striking of the finches seen was the Scarlet Finch (or Grosbeak) (*Hæmatospiza sipali*), we saw it in Sikhim. For sheer brilliancy we have nothing like this in England. There was black about it when it flew, but sitting in a tree by the side of the precipitous mountain track it looked a spot of fire. The Indian House Sparrow (*Passer domesticus*) was as common and as impertinent as our own, and in the village of Churia in Nepal there were many Sparrows that were neither this nor the Tree Sparrow and were not identified.

The Indian Sand Martin (*Cotile siveensis*) was often about the rivers; I could not have distinguished it from our own, but it looked, as it is, a little smaller.

The Chimney-Swallow (*Hirundo rustica*) was abundant.

I do not know any bird much more difficult to detect in a tree than the Common Green Barbet (*Thereiceryx zeylonicus*), unless perhaps it be Meyer's Parrot in Africa. How often have I looked up into a dense-leaved tree for each of them, stepping forwards, backwards, and round and round, gazing till my neck was stiff. Though the Barbet had been calling until I came too close it was seldom seen, until it took flight and was off to another tree. It flies much like a Woodpecker. Its loud metallic call went on all day, and often as one turned in at night in the dak bungalow there was the Barbet still calling.

The Indian Roller (*Coracias indica*) seems to be in no way different in habits from our Mediterranean friend. It flies with the same Jay-like flight, it tumbles in the air, it catches insects from its watching place. In Ceylon, as I remember noticing, these birds are curiously local. In a long motor drive you shall not see one, and then for a mile or so on end they are sitting on the telegraph wires every here and there.

One often hears Woodpeckers and occasionally sees one flying, but their identification would entail more time and watching than I could afford, and even with that I should have certainly made mistakes.

There are no more delightful birds than the Bee-eaters. The

Indian Bee-eater (*Merops viridis*) is rather smaller in size and brighter than our familiar European bird, but behaves in just the same way. They may be classed among the telegraph-wire birds, but then they are merely little huddled up bunches of green feathers. It is when they are darting and floating about in the sun-filled air, in which they are as much at home as a Swallow or a Frigate-bird, that these most beautiful creatures really charm one; one is never tired of watching them.

You cannot be long by any water, whether river or jhil (lake) without seeing the Indian Pied Kingfisher (*Ceryle varia*), a conspicuously black and white bird about the size of our own Kingfisher. It hunts over the water like a Tern, and like a Tern sometimes hovers for a moment and then darts down. But the Common Kingfisher (*Alcedo ispida*), which fortunately is still fairly abundant in our own islands, is just as often seen and behaves in every respect like the bird we know here. I shall never forget a particular scene one evening in Ceylon. It was evening and the sky was crimson where the clouds were, but low down just along the line of the jungle it was flat and clear and tinted light green, the green of the sea where it swells over rocks awash. We were in a motor car in the hope of reaching Trincomali, a harbour that is a gem of the world. We had nearly arrived at Kantalai, celebrated for its great water-dam. I hurriedly pulled up the car as we suddenly came upon the white iron railings of a bridge that normally spanned a little river running through a flat of grass and rushes with jungle all about it. But now the whole thing was in flood, the water and the sky together making a great expanse of orange, crimson and red, only broken by the dark line of the jungle fringe. At the edge of the bushes a bunch of wild swine were rooting, their sides as red as umber from the dried mud of the wallow. On the railings of the bridge were a row of green-blue dots—Kingfishers. Not far from them sat two Brahminy Kites. I think the sound of the water must have drowned the noise of the car; but as I went on foot towards the bridge everything took life. The swine disappeared in the jungle, the Kites sailed off, and the Kingfishers darted away one after the other over the coloured flood, while a pair of Fishing Eagles (*Haliaeetus leucorhynchus*) followed over the

road. From the water itself rose a pair of white Egrets, while a lot of whistling ducks swam off in a line turning their heads sideways to look at the intruder. The scene behind this still remains to be filled in, for the sound of branches breaking or brushing made me turn my head, and across the road above the car swung Langur after Langur like gymnasts from a flying trapeze; and as I strolled back flock after flock of Paroquets, some high up, some lower, came round and round, apparently intent on roosting.

I saw Hornbills on several occasions in the northern forests, but they were always very high up or disappearing through the trees and I cannot say anything about them.

The Indian Swift (*Cypselus affinis*) were often noticed. Nightjars constantly played round the Dak bungalows in the dark, but I should not care to hazard or guess as to species.

Palæornis torquatus, the Rose-ringed Paroquet, is the commonest of the Paroquets, and is constantly seen about the houses. It flies very rapidly, and one often hears its harsh voice high overhead. This poor bird is commonly kept in most cruel metal cages (not wire but broad flat pieces of iron) and existence must be a torment to it in the hot sun. The Blossom-headed Paroquet (*P. cyanocephalus*) though not so often noticed, excepting on the wing (it is a bird of extremely rapid flight, and reminded me somehow of Sandgrouse when flying) was I believe one of the paroquets that came to the bird-trays in Ajmer.

The Owls of India are so many and so interesting that I am sorry to have to confess that the only Indian Owl I was able to identify was the Spotted Owl (*Athene brama*), which is common in the outskirts of villages. The habits are a mixture of those of the Little Owl and the Burrowing Owl.

Vultures of course are constantly seen in India. Unfortunately a photograph taken of a large collection of these birds—the majority were the Indian Griffon (*Gyps indicus*), but two or three were the Black Vulture (*Otogyps calvus*)—did not come out very well. They were sitting drying their wings after washing. This was near Udaipur. In Benares, as would be expected of that very native city, Vultures are very numerous. The Indian White-back Vulture (*Pseudogyps bengalensis*) and the Griffon are the commonest

there. I take it two Vultures seen near Chakrata were the Himalayan Griffon (*G. himalayensis*) but that is merely a guess; the birds were pretty high overhead. *Neophron gingiinianus*, which is only a rather smaller edition of the Egyptian Vulture (*N. percnopterus*) walks about the dirty villages like a fowl. We saw a good deal of the Lämmergeier. One day near Chakrata there were several on the wing at once, including one splendid old male in perfect plumage who came close over my head. Across the valley was a cliff where they or other Vultures evidently bred; we could not actually see an eyrie but could make out the ledges where nests probably were. The rocks have been literally whitewashed by the birds.

After watching Vultures in various countries, one wonders much at the old controversies about sight and smell. But though it is clearly sight that does it, there are sometimes conditions which show forcibly how amazingly acute that sight is. I shot a sambur stag one day in the depths of the Nepal jungle, and had scarcely had time to get down from my elephant before Vultures had arrived. Now they could not have seen that animal, unless at least one Vulture had happened to be directly above or looking down between the trees; for the trees were much too close together, and even then it was a remarkable evidence of their quickness of eye.

An Eagle, probably the Tawny Eagle (*Aquila vindneana*) was seen on several occasions from the train, sitting on posts or beating across the fields. This is not a very noble bird, but is Buzzard-like in its ways. A bird seen on the wing more than once was Palle's Fishing Eagle (*Haliaëtus leucoryphus*). I never saw it actually catch a fish. It is a striking-looking bird, as in harrier fashion it beats along the edges of the jhils.

Kites are almost inseparable from any memory of India. There are two, one for the water, one for the land. The first is the Brahminy Kite (*Haliastur indus*). As soon as you reach a port of India you are pretty sure to see them from the deck of the ship. It is a beautiful bird with its white head and neck and chestnut body. A pair had their nest in a palm tree by the great lake under the palace of Udaipur and added much to the interest of that beautiful scene. The second is the Common Pariah Kite (*Milvus govinda*). One might write much about the bird, but it has all

been written before, for they are an unfailing sense of interest in the streets, and indeed in the harbours, where they are more numerous than the other Kites.

Falcons—obviously “Peregrines”—of some sort, were occasionally seen on the wing, probably they were the Shâhin (*Falco peregrinator*) or the Laggar (*F. jugger*) or both. There seems very little to say about the raptorial birds of India that are so numerous in species from the great Lämmerguer to the tiny Falconet—of which by the way I saw one, species unknown, shot by a friend in Nepal Terai. But travelling as we did we had little chance of seeing these, many of which are strictly forest birds.

(*To be continued.*)

THE AUSTRALIAN PIPING CROW.

By B. THEO. STEWART.

The Piping Crow or Magpie of Australia figures so largely in prose and verse that everyone ought to be familiar with the bird.

I say ought to be, but apart from Aviculturists, I have found very few people who do not ask me the eternal question “What is that strange looking bird?” They appear no wiser when told, so now I leave them guessing.

Even in my nursery days the Piping Crow strongly appealed to me and I determined to possess one at the earliest opportunity.

I have had many since then.

Owing to the fact that the importation of this bird is now strictly prohibited, a heavy fine being the penalty, the price of Piping Crows has risen by leaps and bounds—anything up to £10 being asked by dealers, in fact, they are hardly to be procured at any price. Times change truly—my first Crow cost me just under a sovereign.

Writers speak of the “joyous whistle of the Piping Crow,” but there is little of a joyous nature about the Never-Never bird. His notes (that is—the wild caught bird) are powerful and mellow, but to my thinking, melancholy. As a mimic he is great, but his talking powers are somewhat overrated; many words are very clearly

emancipated but the vocabulary is strictly limited, and never, never will he learn to whistle the last notes of a tune.

The female of this species is not so accomplished as the male, though equally interesting and docile. She is smaller, the white and black of the plumage is less glossy than that of the male bird, and her beak is feebler. One female that I possessed was highly intelligent, you had only to show her a mouse trap and she would tell you what ought to be in it. An empty cotton reel made her very happy, and she would lie on her back holding the reel in her claws and play for hours like a kitten.

I cannot claim to have bred these birds, as unlike most aviculturists, I take no interest in breeding operations. All my birds are therefore celibates. Necessity knows no law and there are no quarrels in a feathered community of monks and nuns.

I have, at the present time, a remarkably fine Crow, just over four years of age, who is known in the family circle as "Poor Peter." He came to me as a nestling, in the dingy grey and muddy black dress worn by the infant Magpie. He was so extremely youthful that he could not eat correctly; as to water apparently he had never heard or seen it, for he swallowed it in drops out of a tea-spoon in fear and wonder.

Even now he is strangely abstemious and uses water for bathing only (really its proper purpose!) Perches he had no use for, preferring to roost on the cage bottom—a fad he still indulges in. Peter belongs to the white necked, black backed variety and is beautifully marked, the black being very black and the white very snowy. His beak which was black at first soon changed and is now quite a fine instrument, long and polished, greyish blue with a black tip.

Peter always answers to his name and will run from any part of the house or grounds, on being called, as obedient as a dog.

He is also a highly trained bird. For instance, he can fetch and carry a ball or piece of paper, deliver it up and wait for you to throw it. Will "shake hands" at command, sit on one's lap and allow his feathers to be stroked, etc. He has a really charming temperament, a trifle hasty sometimes, but as the cook said, a little present will quickly bring him round.

Peter can talk well, but he is somewhat chary of his words. He whistles well, but I fear his ear is a trifle defective. He reminds me of a character in "Diplomacy," he cannot tell the difference between "Pop goes the King" and "God save the Weasel." Crows live to a great age, and Peter will have eternity to learn "Pop goes, etc.," it has already taken two years to teach it him!! and he sings it in the most melancholy way as if he thought he was at a Band of Hope meeting and he wanted to burst into tears over it.

I think Lewis Carrol would have loved Peter. A spider's web waving on the ceiling distresses him. He thinks it looks so lonely! and he wails over a meal-worm in the most heart-broken way. I am sure he is genuinely sorry to have to put it to death. Yet is he a bird of fine courage and only afraid of two things—an umbrella and a nice red carrot. Why in the world he should be afraid of the latter article I *can't* think.

I read some time ago an article on the Piping Crow by Mr. Farrar. His views and mine are quite opposed. I quote some extracts—"They (Piping Crows) are very strong and mischievous "and require a big strong enclosure, to keep them in ordinary wire "netting is no good as they take a devilish delight in unwinding it "with their massive beaks, only strong iron rods can puzzle them. "They can even chisel through a good thick plank."

"They are smelly; bite confoundedly; and those who handle "them should wear leather gloves," etc.

So experienced an aviculturist as Mr. Farrar must, *of course*, be familiar with my old friend the Australian Magpie, but I confess his description of the bird swallowing a mouse *whole*, eating dog biscuit voraciously, almost devouring the plate, and so on, makes me rub my eyes and wonder what manner of birds he possessed to perform these feats.

My Crows eat mice, not whole, but bit by bit, raw meat is taken in quite tiny pieces, a dead Waxbill is devoured slowly and in fragments, etc. But, of course, my birds may have perfect table manners, still I think it would puzzle any Crow to swallow a mouse, full grown, at one gulp! At any rate I have never seen it done.

My birds are kept in large box cages (I have even kept one or

two in wicker cages) the box cages have wire fronts of the weakest description, a finger pressure would snap my bars, yet my Crows have never damaged these in any way and they have been in use for years.

As for being "smelly birds" that expression can never be applied to birds properly attended to, that is, cleaned out every day, well sanded tray, and lastly, given the very best fresh raw meat.

Many pet canaries that have been brought under my reluctant notice deserve the unpleasant expression "smelly" far more than the poor bird of prey. Personally, I never find it necessary to wear thick leather gloves in handling this or any other bird. If a clumsy handler gets bitten, I fear my only verdict would be "serve him right."

Now, I trust Mr. Farrar will forgive me for "having a bone to pick with him," I have tried to defend the bird's personal character, but the poets of his native land sing his praises best and sweetest.

"The Magpie midst the wattle-blooms
Is singing loud and long:
What fragrance in the scatter'd scent,
What magic in the song!"

* * *

"Among the stringy barks a crowd
Of dazing Parrakeets,
But high o'er all the Magpie loud
His joyous song repeats."

BIRD-FEEDING IN INDIA.

By AUBYN TREVOR-BATTYE.

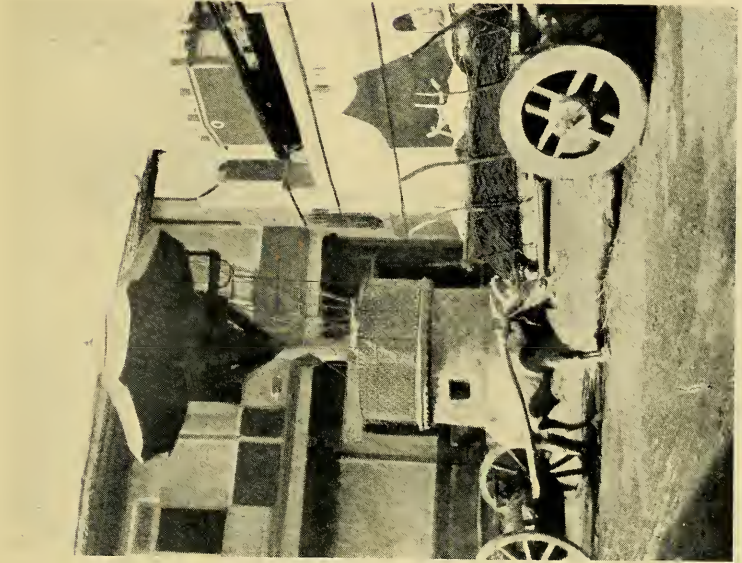
Before coming to the actual subject of these photographs, it may be as well to say something about the people who put up the bird-feeding structures shown. There is in the west of India a religious group of people who number about a million and a quarter and are called Jains. They are not—like the Sikhs—an offset from the Hindu faith, but were independently founded at about the same date as Buddhism, five hundred years or so before the Christian era. They are distinguished both from the Hindu and the Buddhist by several characteristics independently of their religion. They have,

for instance, an architecture which in certain essentials is different from the Indio-Aryan architecture of India generally; it includes a slight and beautiful pillar springing from a decorative base. Their principal city is Ahmadabad in Gujarat [Bombay Presidency].

The Jains protect all animals; no creature, even in extreme old age, is ever killed by them. In Ahmadabad is a place called the Pinjrapal, which is filled with yards, stalls, and cages. This place, which is supported by voluntary contributions, always contains a large collection of homeless and decrepit animals; they are said to number nearly one thousand. One sees there horses, donkeys, cattle, sheep, goats, dogs and monkeys. At the time of my visit there were also a Crane, a Stork, two Barn-Owls, Parrakeets and some fowls. There is an insect-house, but this I was not brave enough to visit: it is devoted to fleas and other personal insects. These are fed at intervals by the expedient of placing a dog or other unfortunate creature inside the room. I fear this must always have a balance against the poor dog.

In some of the smaller towns—in Ajmer for example—birds are fed by means of a large tray suspended overhead by wires stretched across the street, and a beautiful sight in the sun are the Rose-ringed Paroquets who crowd to the trays chattering and hanging on in amusing attitudes.

In Ahmadabad, trays are attached to trunks of the trees that border the roads, and these are kept filled with food for the little striped Ground-Squirrels that swarm everywhere; but the birds are fed by a more elaborate contrivance. These take the form of what for want of a better term I must call towers. They are built of wood, carved and coloured, are of light and admirable design, and no two are exactly alike. The base of each is of stone, usually carrying a railing, or in one case a beautifully wrought metal grille. The principle is a tall central post or wooden pillar from which struts of artistic shape fan out to support the floor which is really an immense tray for the birds' food. The woodwork is elaborately carved, All are covered with roofs of an ornamental character. The food-floor is approached by steps—by an iron or a wooden stairway. The water is placed in a large tray, which, as will be seen in one of the photographs, hangs independently from



BIRD-FEEDING TOWER, AHMEDABAD.



Photos by A. Trevor-Batye.
BIRD-FEEDING TOWER, AHMEDABAD.



wires. Many kinds of birds come to feed from these towers. Always there are pigeons coming and going—the Indian Blue Rock-Pigeon (*Columba intermedia*) and its many semi-domestic varieties which swarm all over India; they are sacred birds in Rajputana, where no one ever touches them. Rose-coloured Starlings, Doves, Parquets, and other birds are generally to be seen feeding there, and indeed Jains' bird-towers is one of the most interesting and delightful things to be seen in India.

REVIEW.

“BRITISH BIRDS.”

A book of birds illustrated in colour by Mr. Thorburn is sure to be an acquisition of value, in spite of the artist having to group on one sheet several different species, which must necessarily detract from facts in nature, but the grouping is so good, and the individual poses so life-like, that one's eyes can be focussed on each bird by itself. In the case of the small Warblers, it is really an advantage, for such puzzles to all but the expert ornithologist as the Willow Warbler, Wood Wren, Chiff-Chaff, etc., can be compared together, though even so, they are not easy to identify in wild life. Mr. Thorburn's touches of natural surroundings are charmingly and cleverly introduced, a splash of crimson thorn blossoms with the Shrikes; a gleam of *Gentiana acaulis* by the Alpine Accentor; a bunch of crocuses, yellow and white, where the Blackbird is searching for the early worm. Perhaps owing to a loss of colouring reproduction, the head of the Rock Thrush (*Petrocincla saxatilis*) is too heavy and leaden in tone, and the Chough seems too large in comparison with the Jay on the same sheet, especially as the latter appears to be more in the foreground, but these are minor criticisms which become minimized in one's admiration for the work as a whole.

It is in itself an 'edition de luxe,' for not everyone, especially in these days of warfare, can afford £6 6s. 0d., though we would hasten to encourage bird-lovers with the fact that for that sum, they have still three more volumes of a generous bulk to come, the

present review referring to the first volume, the only one as yet published.

Mr. Thorburn has himself written the text, in which he claims no originality for his observations on birds. Anyhow, enough is written about each one for the reader to understand something of the ways and habits of the birds, and those who are interested in them and who have not the good fortune to possess Lord Lilford's "Birds of the British Isles," with Mr. Thorburn's beautiful coloured plates, would do well, if their purse is full enough, to acquire the present publication. H. D. A.

[*British Birds*. Written and illustrated by A. THORBURN, F.Z.S. With eighty plates in colour, showing over four hundred species. In four volumes. LONGMANS, GREEN & CO., 37, Paternoster Row, London].

OBITUARY.

SIR ROLAND J. CORBET, BT.

The Editor has to record with sorrow, the death of his nephew Sir Roland Corbet, Lieut. Coldstream Guards, who was killed in action on the 15th of April. A member of our Society, he was a keen and ever-interested observer of wild birds, and wrote home that he had seen a Swallow flying over a canal at the front, as early as the 25th of March. From his boyhood he had collected books on British birds, nothing pleasing him more than to be given any new publication on the subject. Without guile, a pure and fine gentleman, valourous, yet shrinking with simplicity and diffidence from all praise as a soldier of the King, he has laid down his life in the service of his country. Wounded during the earlier stages of the war, he went out once again to do his duty, only to fall with many others. He was only twenty-two years old.

ENGLISH NAMES FOR THE PARROTS.

By Dr. E. HOPKINSON.

(Continued from page 194.)

- MAURITIUS RING-NECKED PARRAKEET.=*Palaeornis eques*, the *DOUBLE-RINGED PARRAKEET, *ROSE-RINGED PARRAKEET, VAR. B., and *ALEXANDRINE PARRAKEET, VAR. C., of Latham. Also known as the LITTLE ALEXANDRINE PARRAKEET and MAURITIUS ALEXANDRINE PARRAKEET.
- MAXIMILIAN'S PARROT.=*Pionus maximiliani*.
- MEALY AMAZON, *see under* AMAZON.
- MEALY GREEN PARROT, the MEALY AMAZON.
- "MEALY ROSELLA," common popular name for the PALE-HEADED PARRAKEET.
- MEXICAN CONURE.=*Conurus holochlorus*, sometimes called the MEXICAN PARRAKEET.
- MEXICAN MACAW, *see under* MACAW, MILITARY.
Mexican Parrakeet, the MEXICAN CONURE.
- MEXICAN YELLOW PARROT, *see* YELLOW CONURE.
- MEYER'S PARROT.=*Pooecocephalus meyeri*.
- MILE ROSELIA, *see* PALE-HEADED PARRAKEET.
- MILITARY MACAW, *see under* MACAW.
- MITCHELL'S LORIKEET.=*Trichoglossus mitchelli*.
- MITRED PARROT, *see* PILEATED PARROT.
- *MOCKAW, *see* MACAW.
- *MODEST PARROT, *see* ACTIVE AMAZON.
- MOLINA'S CONURE.=*Pyrrhura molinae*.
- MULOCOA LORY, *see* RED LORY.
- MONK, MONK PARRAKEET, the QUAKER PARRAKEET.
- MONTE VIDEO PARRAKEET, the QUAKER PARRAKEET.
- "MOON-DARK," *see* BROWN'S PARRAKEET.
- "MORETON BAY ROSEHILL," N.S.W. vernacular (Gould) for the PALE-HEADED PARRAKEET.
- "MORETON BAY ROSELLA," same as above.
- MOTMOT PARROT, a book name for a RACKET-TAILED PARROT (*Prioniturus*).
- MOUNTAIN KAKA, }
MOUNTAIN NESTOR, } *See* KEA.
- "MOUNTAIN PARROT," (1) New Zealand popular name of the KEA. (2) Australian vernacular for the BLACK-TAILED PARRAKEET.
- "MOUSTACHE PARRAKEET," "MOUSTACHE PARROT," occasional dealers' names for the JAVAN PARRAKEET.
- *MOUSTACHOE PARROT (Latham), and his VAR. B.=the BANDED PARRAKEET.

- *MOUSTACHOE PARRAKEET (Shaw). = the JAVAN PARRAKEET.
- *MOUSTACHOE PARRAKEET, VAR. A. ? = the LUCIAN PARRAKEET.
- MULLER'S ECLECTUS.
- MULLER'S GREAT-BILLED PARRAKEET, } See under ECLECTUS.
- MULLER'S PARRAKEET, }
- MULLER'S PARROT, }
- MUSK LORIKEET. } The MUSKY LORIKEET.
- MUSK LORY, }
- "MUSK-PARRAKEET." }
- MUSKY LORIKEET. = *Glossopsittacus concinnus*. Also known as MUSK LORIKEET, MUSK LORY, MUSKY PARRAKEET. Australian vernacular name, "MUSK-PARRAKEET." Early book names: *CRIMSON-FRONTED PARROT (Latham); *PACIFIC PARROT.
- "NANDAY."
- NANDAY CONURE. = *Conurus nanday*, also commonly known as the BLACK-HEADED CONURE, and sometimes as the BLACK-FACED CONURE. Other names: "NANDAY PARROT," "NANDAY PARRAKEET," *HOODED PARROT, VAR. A. Paraguayan name, "NANDAY."
- NANDAY PARRAKEET, NANDAY PARROT, see above.
- *NANODES, an obsolete book name for some of the GRASS-PARRAKEETS.
- *BLUE-BANDED NANODES, the BLUE-BANDED GRASS-PARRAKEET.
- *UNDULATED NANODES, the BUDGERIGAR.
- NATTERER'S AMAZON. = *A. nattereri*.
- *Nasicus Cockatoo, see SLENDER-BILLED COCKATOO.
- "NENDAYA," a native name for the GREEN CONURE.
- NEPALESE ALEXANDRINE PARRAKEET, see under ALEXANDRINE.
- NESTOR, a KAKA (q.v.).
- MOUNTAIN NESTOR, the KEA.
- NORTHERN NESTOR, see under KAKA (2).
- SOUTHERN NESTOR, the KAKA.
- *NEW CALEDONIAN PARROT, see YELLOW-BELLIED PARRAKEET.
- NEW GUINEA ECLECTUS,
- NEW GUINEA GREEN PARROT, } See under ECLECTUS, RED-
- NEW GUINEA PARROT, } SIDED.
- NEW GUINEA PIGMY PARROT. = *Nasiterna pygmaea*.
- NEW ZEALAND PARRAKEET. = *Cyanorhamphus novae-zealandiae*, also known as RED-FRONTED PARRAKEET. Latham's names were *PACIFIC PARROT, *PACIFIC PARROT, VAR. A., *PACIFIC PARRAKEET. Maori names, "KAKIRIKI," "KAKIRIKI." ROWLEY'S PARRAKEET (*C. rowleyi*), or LESSER RED-FRONTED PARRAKEET, and the AUCKLAND ISLAND PARRAKEET, are now included in this species.
- NEW ZEALAND PARRAKEET, GOLDEN-CROWNED, see GOLDEN-CROWNED P.

- NICOBAR PARRAKEET. = *Palaeornis nicobarica*. RED-CHEEKED PARRAKEET, RED-CHEEKED NICOBAR PAROQUET.
 BLYTH'S NICOBAR PAROQUET. = *P. modesta*.
 RED-CHEEKED NICOBAR PAROQUET, see NICOBAR PARRAKEET.
- NIGHT-PARRAKEET. = *Geopsittacus occidentalis* of Australia. SHORT-TOED GROUND-PARRAKEET, WESTERN GROUND-PARRAKEET.
- NIGHT-PARROT, the OWL-PARROT of New Zealand.
- NOBLE MACAW.
- NOBLE MACAW PARROT, }
 NOBLE PARROT, } See under MACAW.
- NONPARIEL, NONPARIEL PARROT, see ROSELLA PARRAKEET.
- NORTHERN NESTOR, see under KAKA (2).
- NYASSALAND LOVEBIRD.
- *NYMPHICUS, RED-CHEEKED, see COCKATIEL.
- *OBSCURE PARROT, see MASCARINE PARROT.
- ORANGE-BELLIED GRASS-PARRAKEET. = *Neophema chrysogastra*, the ORANGE-BELLIED PARROT of Latham.
- ORANGE-BREASTED PARRAKEET, see SWIFT PARRAKEET.
- *ORANGE-BREASTED PARROT (and VAR. A.), one of Latham's names for SWAINSON'S LORIKEET.
- ORANGE-CHINNED PARRAKEET, the TOVI PARRAKEET.
- ORANGE-FLANKED PARRAKEET, see ORANGE-WINGED PARRAKEET.
- ORANGE-FRONTED PARRAKEET, or ALPINE PARRAKEET. = *Cyanorhamphus malherbei*, one of the New Zealand Parrakeets.
- *ORANGE-HEADED PARROT, see CAROLINA CONURE.
- ORANGE-WINGED AMAZON.
- *ORANGE-WINGED LORIKEET, an incorrect and confusing name for the next.
- ORANGE-WINGED PARRAKEET. = *Brotogerys pyrropterus*, also known as the ORANGE-FLANKED PARRAKEET, the FIRE-WINGED PARRAKEET (rare), and ORANGE-WINGED LORIKEET (incorrectly). The CANARY-WINGED PARRAKEET (*B. chiriri*) is also sometimes known as the ORANGE-WINGED PARRAKEET.
- ORNAMENTAL LORIKEET. = *Trichoglossus ornatus*. Also called ORNATE LORIKEET and ORNAMENTED LORIKEET., The *LORY-PARRAKEET of Edwards.
- ORNAMENTED LORIKEET, } Variants of ORNAMENTAL
 ORNATE LORIKEET, } LORIKEET.
- "ORNARY HEN," Australian dealers' name for the COCKATIEL.
- *OTAHEITE PARRAKEET, VAR. A., }
 *OTAHEITIAN BLUE PARRAKEET, } See TAHITI LORIKEET.
- OWL-PARROT. = *Stringops habroptilus*, also commonly known as "NIGHT-PARROT," "GROUND-PARROT." Maori names, "KAKAPO," and "TARAPO."

*PACIFIC PARROT (1) an early name for the MUSKY LORIKEET. (2) A name used by Latham probably = the NEW ZEALAND PARRAKEET, but possibly the RED-BACKED PARROT.

*PACIFIC PARROT, VAR. A. (Latham), the NEW ZEALAND PARRAKEET.

*PACIFIC PARROT, VAR. C., the GOLDEN-CROWNED PARRAKEET.

PALE-HEADED BROADTAIL, the next.

PALE-HEADED PARRAKEET. = *Platycercus pallidiceps*, the "MEALY ROSELLA" and "BLUE ROSELLA" of dealers. "MORETON BAY ROSEHILL" in Australia (Gould); "MORETON BAY ROSELLA," "MILE ROSELLA" (Australian vernacular). ? = *BLUE-CHEEKED PARROT (Latham). Modern book names: PALE-HEADED BROADTAIL, PALE-HEADED ROSELLA.

PALM COCKATOO, see under COCKATOO, GREAT BLACK.

PALM LORIKEET. = *Hypocharmosyna palmarum*, the PALM PARROT (Latham) ? his *LINEATED PARROT, and *PEREGRINE PARRAKEET, the latter, a name of that writer's which is supposed to have referred to a young bird of this species.

*PALM PARROT, see PALM LORIKEET.

PANAMA AMAZON.

*PAPOUAN LORY, the next.

PAPUAN LORY, *Charmosyna papuensis*. *PAPOUAN LORY (Latham).

PARADISA PARRAKEET, a variant of PARADISE P.

PARADISE PARRAKEET, an alternative name for the BEAUTIFUL PARRAKEET, and (2) sometimes for the allied GOLDEN-SHOULDERED P.

*PARAGUAN LORY, a name of Latham's, ? = PESQUET'S PARROT.

PARAKEET,

*PARAKEETO,

*PARAKITO,

*PARAQUITA,

*PARAQUITO,

} See PARRAKEET.

*PARADISE PARROT, see under AMAZON, WHITE-FRONTED.

PARRAKEET (various spellings, PARAKEET, PAROQUET, PARROQUET,

*PERROQUET, *PARAQUET, *PARAQUITO, *PARAQUITA, *PARAKEETO,

*PARAKITA). A small Parrot, usually long-tailed, but not always so,

as birds like the LOVEBIRDS are frequently known as PARRAKEETS.

(2) The CAROLINA CONURE was commonly known as "PARRAKEET" in N. America.

Sub-divisions of the PARRAKEETS are :

ALEXANDRINE PARRAKEETS.

BROADTAIL PARRAKEETS, see BROADTAIL.

COCKATOO-PARRAKEET, the COCKATIEL.

DWARF-PARRAKEETS, the PASSERINE PARRAKEETS.

FIG-PARRAKEETS, the LORILETS.

GRASS-PARRAKEETS.

GROUND-PARRAKEETS (q.v.).

HANGING PARRAKEETS.

PASSERINE PARRAKEETS, the AMERICAN LOVEBIRDS, PARROTLETS, or DWARF PARRAKEETS (*Psittacula*).

RING-NECKED PARRAKEETS.

SMALL-BILLED PARRAKEETS, those of the *genus Brotogeris* of South America.

Other groups have special names, such as CONURE, LOVE-BIRD, etc.

PARRAKEET-COCKATOO, a book name for the COCKATIEL.

PAROQUET, }
PARROQUET, } See PARRAKEET.

PARROT, any member of the order *Psittaciformes*. An old book name for this order was the *CRACKERS.

English names for certain groups are :

AMAZON PARROTS.

ECLECTUS PARROTS.

GREEN PARROTS, a common popular name for the AMAZONS.

GREY PARROTS, the GREY and TIMNEH PARROTS.

HANGING PARROTS, the HANGING PARRAKEETS.

LOVE-PARROTS, the LOVEBIRDS (q.v.).

PIGMY PARROTS, the *Nasiterninae* ; also known as DWARF-COCKATOOS, and occasionally as SISKIN-PARROTS.

RACKET-TAILED PARROTS, *Prioniturus*.

SISKIN-PARROTS, the PIGMY PARROTS.

VAZA PARROTS.

Other groups have distinct names, such as MACAWS, COCKATOOS, etc.

PARROTLET, an occasional book name for any of the PASSERINE PARRAKEETS, for instance, the GUIANA PARROTLET.

*PARROT-MACCAW, Latham's name for the MARAKANG MACAW.

*PARTIBILLED PARROT, see under AMAZON, YELLOW-FRONTED.

PASSERINE PARRAKEET. = *Psittacula passerina*, commonly known as the "BLUE-WINGED LOVEBIRD," "BLUE-WING," "AMERICAN LOVEBIRD," "BRAZILIAN LOVEBIRD." Book names are : BLUE-WINGED PARROTLET, PASSERINE PARROTLET, *LEAST GREEN AND BLUE PARRAKEET (Edwards), *SHORT-TAILED YELLOWISH GREEN PARRAKEET, *VIRESCENT PARRAKEET (Latham) ; PASSERINE PARROT (Latham). (2) Also used as a name for any member of the *genus Psittacula*, which are also known as PARROTLETS, DWARF-PARRAKEETS, or "AMERICAN LOVEBIRDS." There are about 14 species, of which one other, the GUIANA PARROTLET, is sometimes imported.

PASSERINE PARROT.

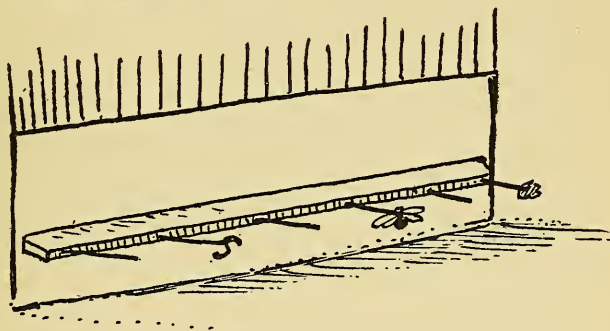
- PASSERINE PARROTLET, *see above*.
- *PATAGONIAN ARARA, *see next*.
- PATAGONIAN CONURE.=*Cyanolyseus patagonicus*, the LESSER PATAGONIAN CONURE. Popular name in the Argentine, "BANK PARROT." Old book names: *PATAGONIAN MACAW (Latham), *PATAGONIAN PARRAKEET-MACAW (Lear), *PATAGONIAN ARARA. The only other species of the genus is the GREATER PATAGONIAN CONURE, *C. byroni*, the *THECAU PARROT, of Latham.
- *PATAGONIAN MACAW.
- *PATAGONIAN PARRAKEET-MACAW, *see above*.
- "PAVOUANE," PAVOUANE PARRAKEET, *see GREEN CONURE*.
- *PAVOUANE PARROT, the GREEN CONURE.
- *PAVOUANE PARROT, VAR. A. (Latham).=HAHN'S MACAW.
- *PAVUAN PARRAKEET, *see GREEN CONURE*.
- "PEACH-FACED LOVEBIRD," *see under LOVEBIRD*.
- PEARL CONURE, *see below*.
- PEARLY CONURE (sometimes PEARL C.).=*Pyrrhura perlata*. Occasionally known as the BLUE-VENTED CONURE. ?=the *WAVE-HEADED PARRAKEET (Latham).
- "PEBBLE, ROCK," *see under R*.
- PEKIN CONURE, a misprint for PETZ'S C.
- "PENNANT," common popular abbreviation for PENNANT'S PARRAKEET.
- PENNANT'S BROADTAIL, PENNANT'S PARRAKEET.
- PENNANT'S PARRAKEET.=*Platycercus elegans*. Other names: PENNANT'S BROADTAIL, *PENNANTIAN BROADTAIL, *PENNANTIAN PARROT (Latham); *BEAUTIFUL LORY (Latham); occasionally AUSTRALIAN LORY. Popular names: "PENNANT" (English dealers), "LOURY" (Australia). Native names, "DULANG," "JULANG."
- *PENNANTIAN BROADTAIL, *see above*.
- *PENNANTIAN PARROT, *see above*.
- "PEPLAR, ROCK," *see under R*.
- *PEREGRINE PARRAKEET, *see PALM LORIKEET*.
- PERFECT LORIKEET.=*Psittuteles euteles*.
- *PERROQUET, *see PARRAKEET*.
- *PESQUET'S DASYPTILUS, an old name for PESQUET'S PARROT.
- PESQUET'S PARROT.=*Dasyptilus pesqueti* (?=*PARAGUAN LORY (Latham)); *PESQUET'S DASYPTILUS.
- PETZ'S CONURE=*Comurus canicularis*. *RED AND BLUE-HEADED PARROT (Latham). "RED-HEADED CONURE" of English dealers= this bird. An occasional advertisement of "PEKIN CONURES" is obviously a misprint.
- "PHEASANT PARROT," Australian vernacular for the ADELAIDE PARRAKEET.

To be continued).

CORRESPONDENCE, NOTES, ETC.

FEEDING A NIGHTJAR.

SIR,—In answer to Mr. Hugh Wormald with regard to his question as to my Nightjar, which I kept for five years, feeding itself, I write to say that it would *not* peck anything up, and seemed to have no idea of doing so. I succeeded in getting him to feed himself by having a narrow piece of wood, like a miniature shelf, fixed along the front of the cage, so that when the bird was on the floor of the cage, its head was level with the shelf, along the edge of which I firmly fixed in pins about three inches apart, snipping off the heads. On these I fixed moths, mealworms, cockchafers, pieces of insectivorous food ("Life") made into small pellets, etc.



When the Nightjar was hungry, he would run forward and pull the food off the pins and bolt it. There was not the slightest fear of the bird hurting his mouth with the headless pins, because he always ran up to them and took hold of the food only, pulling it off.

The eyesight of the Nightjar appears to be directed slightly upwards, for he would take no notice of any live food that was placed on the floor where he might have seen it moving, but directly food was raised level with his eyes, he would at once snap it up.

P. F. M. GALLOWAY.

STARLINGS ON THE BATTLEFIELD.

Mr. JAMES B. HOUSDEN writes:—"I have two sons fighting with their respective batteries—R.F.A. They mention about the Starlings that frequent the batteries and the tameness of these birds."

"My eldest son—a great observer of birds, as well as a keen soldier, wrote that in the battle of St. Eloi they were attacked by a large number of Bavarians about 5 p.m. (and fought all night), and that while they were firing, amidst all the noise and din, a flock of Starlings circled round our own guns for some time, and then suddenly disappeared. He wrote that it was a strange and interesting sight."

A LARGE BLACK AND YELLOW TROUPIAL.

SIR,—I see by the *Avicultural Magazine* that you are good enough to answer queries about members' birds. I have had offered me a large Yellow and Black Troupial, and wondered if it would live in my outside aviary with an Amber and Black Hangnest, pair of Afra Doves, Mandarin Starlings, Californian Quail, etc., also would it winter outside here? My aviary is a fair size and sheltered with glass shutters during the winter. F. BARLOW-MASSICHS.

The following reply has been sent to Miss Barlow-Massichs:—

By "a large yellow and black Troupial," as distinct from a Hangnest, I presume that you are speaking of a Cassique—probably either *Cassicus persicus* or *melanicterus*.

Although the Cassiques and Hangnests are regarded as purely fruit and insect-eaters, I am satisfied that both are predatory upon weaker and smaller animals; for one of my Common Hangnests, after catching a Gordon-bleu on the wires of its aviary, nearly tearing it to pieces and partly devouring its head, attempted the same thing with a Zebra-finch, which, however, escaped with the loss of two or three bunches of feathers. Later on the same bird killed and partially devoured a small mouse which entered its aviary.

Of *Cassicus persicus* we read that Schlechtendal turned one loose in a room with his African and Indian Starlings and it drove them about in the wildest terror and so mauled them that he was obliged to remove it to a cage. I should therefore not be inclined to trust one of these birds with anything less powerful or more timid than itself.

In a sheltered aviary a Cassique would probably be able to stand the winter: most Starlings are pretty hardy. A. G. BUTLER.

MIGRATION INSTINCT IN CAGE BIRDS.

SIR,—I send you a note on the migration instinct in case other members have noticed similar points. My male Blackcap, which is now two years old, began to sing at the beginning of January. Throughout February and half of March he was in fairly full song. He then began to slacken. About three weeks ago he practically stopped singing, and instead took to fluttering almost continuously by night. He then came gradually into song again, but still (20th April) flutters slightly, and is not yet singing properly. Evidently following the change of diet which he would experience by migration, he will now eat mealworms readily, though before this season and throughout the winter he could hardly be induced to interest himself in one. O. J. STONE.

[I remember having a Blackcap years ago, which always fluttered by night during the spring migration, although I do not recall that the bird did so in the Autumn. EDITOR.]

NOTICES TO MEMBERS—(Continued from page ii. of cover.)

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JUNE, 1915.

**SPRING BIRD-NOTES FROM VARIOUS
 SCOTTISH ISLANDS.**

By The DUCHESS OF BEDFORD.

(Concluded from page 208).

Leaving Stack, we steamed over to Bulgach Island, six miles south of Cape Wrath. Here the swell again prevented my landing, but gave me a very imposing view of the curious "Bellows" Cave at the north end, which is a feature of the island.

The north-west side of Bulgach is almost entirely occupied by Kittiwakes and a few Fulmars. On the south-west were great numbers of Kittiwakes, Razorbills, Guillemots, and some Shags. The visible population of these last was a little under one hundred, including young. The top of the island was covered with Puffins and Herring Gulls; and three Cormorants, a few Greater Black-backed Gulls and Black Guillemots, were also observed on it. We rowed over to Stack Buachaille, which is well worth seeing, but only one or two of the ledges were occupied by birds, and these were Fulmars and Razorbills.

All along the north coast of Sutherland, Fulmars are seen in small numbers. Whilst in this neighbourhood I saw a number of Black Fish, particularly between Loch Erriboll and North Rona.

On the 20th June I visited the Smoo Cave, near Durness, and found both the Grey and Pied Wagtails breeding in it; also Spotted Flycatchers.

The caves and stacks on the east side of the entrance to Loch Erriboll are also well worth visiting, not on account of the birds,

which are few in number, but for the great beauty of the caves themselves. The walls are a harmonious blending of colour—red, green, brown and yellow—and have been carved into a succession of pillars and arches by the Atlantic breakers, which too often render the caves unapproachable. No imaginary grotto of fairy legend could be more beautiful than these probably almost unknown examples of Nature's architecture.

The same day I landed on Garve Island. "The matrix, to quote Mr. J. A. Harvie Brown, "is limestone, and every inch of it is studded with fossils." The matrix had been "weathered out" by wind and wave, and the small fossil shells stand out so sharply defined that one has to be careful how one clutches the rock on landing. However, it provides a security of foothold for the somewhat precipitous ascent to the top, which it has not been my luck to find on many of these sea-girt islands. A polished surface of rock, covered with slippery seaweed, is the usual order of things; and this, combined with the Atlantic swell, renders them as a rule sanctuaries for the birds but inaccessible to the naturalist.

I had an unexpected find in the shape of a freshly dead mole on the island, brought there probably by the Gulls, as no mole could find a living in such a place.

Seven Eider Ducks' nests were found, one with five young in it; but, generally, there were only one or two eggs, several of which were on the point of hatching, showing I think, that they are probably robbed by the Gulls.

On the 21st June I landed for the fourth time on North Rona, not by any of the recognised landing-places, at all of which there was too much swell, but nearer the big cliff on the east side. By far the most abundant birds away from the cliffs are the Lesser Black-backed Gulls. They are nesting from one end of the island to the other; and at this season of the year, when the ground is thickly covered with Thrift, make a most charming contrast with their pink and green carpet. There are comparatively few Great Black-backed and Herring Gulls. Though there were hundreds of Fulmars on the island, there were far fewer nesting in the ruined houses than usual. I attribute this to the fact that two gentlemen had put up a shelter in one of the houses and spent a few days there

about three weeks before my visit. Tame as the Fulmars are, as a rule, they probably resented this interference with their domestic arrangements and the fumes of tobacco, which must have been very necessary to anyone sharing a house with them. (I found the remains of a cigar!) I detected a Petrel in the ruined walls but was unable to get at it, but at this date it was probably the Fork-tailed Petrel.

When lying on the grass, with Fulmars swooping all round and over me, I noticed one bird settle on an egg, between two slabs of rock at the top of the cliff, in what seemed to me rather an unusual site for a Fulmar's nest. I watched her for some time, and then went to look at the egg. She resented my intrusion, and only rose when I could almost touch her with my stick. I then found that she was sitting on a Herring Gull's egg! There was no doubt about it, as the egg reeked of Fulmar. She returned to it as soon as I walked away.

I saw a pair of Whimbrels on the high ground, but had not time to search for a nest.

There were four colonies of Arctic Terns, and many Eider Ducks nesting; and, in addition to the cliff-breeding birds, Wheat-ears and Starlings (nesting in the walls), Hooded Crows, Rock-pipits, and Oyster-catchers were seen. Amongst the Terns I noticed one in the rarely observed plumage of the year-old bird, *i.e.*, with the white forehead and mottled crown of head.

Leaving Rona, I again visited Stack, but though the sea was very smooth, there was far more swell than at my last visit, and landing was out of the question. However, I steamed close round the skerry and took another careful survey of the number of Gannets, and was quite satisfied with my former estimate of 5000. One or two birds were still carrying seaweed to the island.

I took the temperature of the water at 5 p.m.—52° at 10 feet, and 51° at 60 feet; and then steamed off towards the Pentland Firth.

Immediately after leaving the island we came across a number of Great Shearwaters and a few Fork-tailed Petrels. The yacht's engines were slowed down, and for two hours we were passing amongst the Shearwaters. It was difficult to estimate their numbers,

for though the sea had an oily surface, there was a rather heavy swell, which hid the birds just as one detected them. Many of them were sitting amongst the Guillemots, and, unless the white throat was turned towards me, it was not easy to see them at a distance. Often, however, six or eight were in sight at one moment. As they skim over the water away from one, they look very dark but slightly slimmer Fulmars, with a dark band across the tail and conspicuous white upper tail-coverts. A side view reveals the white cheeks, which seem to extend almost as a collar behind the nape. At times we glided within thirty or forty yards of one sitting on the water, and in bright sunlight it is seen that they are a lighter brown than they appear on the wing. A great deal of white shows above the water on the sides, and of course the breast, throat, and chin are white.

The Shearwater is rather a heavy and almost duck-like bird on the water, exclusive of the head, as the wings, which appear so long and pointed in flight, do not reach beyond the tail.

THE WINTER TREATMENT OF FOREIGN BIRDS.

By L. LOVELL-KEAYS, F.Z.S., &c.

The Chestnut buds were bursting. To me that meant good-bye to winter, but it is by no means a great sorrow, this parting. I regard the winter in the same light—or is it darkness?—that I do the tax collector or the uninvited guest. Had I lived 2000 years ago I should undoubtedly have raised many and expensive altars to the god of winter in the hope of keeping him mild in temper and gentle of mien. But in the year 1914 I thought I, at any rate, would flatter the goddess of Fortune and defy in a tentative sort of way the god of winter. Had not Fortune delivered into my hands some 400 birds and some twelve or fifteen bird rooms and aviaries. Here, indeed, was an opportunity to tempt Fortune still further, and incidentally to justify the experts. For surely the experts ought to know! Still it occurred to me I might link up my "Weavers' Aviary" with the hot-water system, and I had the heating arrangements of my Gouldian aviary and bird-rooms perfected. At the end of the

autumn I made up my mind I, at any rate, would not do one thing and that was to allow birds to go in and out of a warmed shelter at their own sweet will. It seemed to me that that was asking for trouble. But I must indulge in my incorrigible habit of digressing in order to bring my own line of thought in harmony with what I am going to write.

Late last summer I was talking to our member Dr. Hopkinson, when I made the following trite and seemingly ingenuous remark. It was, "Do you know, I believe birds live longer and are less liable to die in cages than in an aviary." His reply was even more trite—"I *know* they do," was all he said. Ever since I became seriously interested in aviculture I have been struck by the number of times I have come across all sorts of birds kept in draughty cages, fed very unscientifically in a vitiated and over-heated atmosphere, and yet some of these birds have lived for long periods, often exceeding a decade. Then my mind shifted automatically to the better-class dealers who tend their birds carefully, such as Mr. John Frostick, and I found their mortality could not be so very high, for month after month one saw the same birds advertised and birds that could not be duplicated. Then with kaleidoscopic change, one's mind harked back to one's own experiences, particularly with such bad livers as Pintail Parrot Finches and Fire-finches, and how even they lived so long as they were confined in a cage, but once outside the cage door they quickly joined the immortals. Dr. Hopkinson was particularly emphatic in his experience with Fire-finches, which coincided exactly with mine. All this was very unpleasant to think upon and created a feeling of evident avicultural indigestion. But facts are stubborn things, and although they may be ignored and passed over they insist upon rising up again and mocking you. In the 1913-14 winter I kept all my birds very carefully housed, and as regards the small birds in a heated bird-room. My losses were not heavy, and when at length the spring arrived I thought they had come to an end. But they had not, and all through the summer I had aggravating and disappointing losses. I was absolutely perplexed. Here were birds acclimatized and established dropping off in mid-summer, late summer and early autumn. At length the winter of 1914-15 approached, and the question of dealing with

one's birds became a pressing and serious matter. Roughly speaking I divided my birds into three main families, viz. :—

- (1) Those that had access to a suitable shelter, but were not obliged to use it by day or by night unless they liked.
- (2) Those that were driven in by night and only allowed out on suitable days.
- (3) Those that were shut in, and, owing to the structure of the bird-rooms, never allowed out at all.

Under heading No. 2 I could further sub-divide by adding

- (a) Those that had the advantage of heat, if and when necessary.
- (b) No heating under any circumstances.

In section 3 heat was used whenever the thermometer stood below 40° Fahr. or appeared likely to fall below 40° Fahr.

With 12-15 aviaries and some 400-450 birds it seemed one had a fairly good opportunity of testing the open-air-go-in-and-out-when-you-like theory.

The results and deductions were very soon and very easily arrived at. The losses varied from 5 to 50 per cent. In some cases an entire species was wiped out. And it all happened just as the man in the street would have expected, viz., the greater the liberty the birds had the higher the mortality. I cannot truthfully say I have had a single surprise. I hope and think I have been absolutely honest with myself and carried on the experiment in a truly open-minded scientific spirit. But I think perhaps the most instructive experiment was with regard to an aviary in category No. 1, which I shall deal with later on. The birds there consisted of Grassfinches, Singing Finches, Mannikins, Waxbills, and a pair of Scaly-crowned Finches. Many of them were aviary-bred last season. I found it quite impossible to drive these birds in at night time, so let them take their chance. I am sure that not five per cent. used the shelter unless they were going to die, and then I have often noticed they do. With regard to this shelter question, how many shelters are used voluntarily by most birds? Parrakeets will use a shelter, but I have yet to find the birds that will use a shelter or the shelter that most birds will use. This evening (March 25th) the birds were left out a little late, and in one aviary where the birds had slept in the shelter for over five months, not six out of perhaps fifty were roost-

ing inside. And yet this is the best shelter I have, and the mortality has been almost unappreciable, about 10 per cent. In my largest aviary, containing another 50-60 birds, the average number of inhabitants of the shelter would for the six winter months be a fraction of one. And this is the whole root of the evil. Birds will not roost in the shelters. No blandishments, no coercion, will tempt them to use the shelters regularly.* I must, after sad and bitter experience, totally disagree with many thoughtful and accurate observers with regard to the hardness of foreign birds; at any rate, as regards the more freely imported species. It is easy to find instances where single birds or even pairs have braved a winter and come through safely, but isolated cases are no criterion and afford no facts of scientific value. It is only by comparison of identical cases under different circumstances but under the same conditions of locality and weather that we obtain data that one can argue upon. Let me illustrate my point. Dr. Hopkinson has been out in the Gambia many years and has survived with but few ills. Is one to argue from that that the other 400 odd members of the Avicultural Society could live in the Gambia with impunity. The fact is that Dr. Hopkinson (I hope he will forgive me for citing his name so much) is one of the fortunate ones, and the Colonial Office forget to mention those of its officers who have never returned. The moral is, of course, obvious. A bird lives, and gives us joy when we see it, and everything we have done to that bird and for that bird strikes us as being right. But if only aviculturists would remember Pollonius' advice to his son: "To thine own self be true, &c., &c." and keep a record of their losses, I am sure their eyes would be opened, and the rosy tint with which they paint their avicultural experiences would give way to a mere utilitarian tint of man-o'-war grey. The extraordinary thing is that all aviculturists (or nearly all) deny indignantly that they have losses. They all (or nearly all) claim to breed innumerable birds, very few have birds to sell,—if we except Budgerigars, Silverbills, and such like—and yet their aviaries never get any fuller. It is strange, passing strange, and I understand it

* [I have electric light in the shelters, which is turned on all through the winter at dusk, and the birds go in to feed and remain there. The light is left on until about 8 p.m.—ED.]

not. Personally I am still looking for the elixir of bird-life; still seeking the key to the door of avicultural knowledge which will banish for ever my arch-enemy Death, the invidious and crafty one.

But to return to our subject, the treatment of birds in winter. Does it appeal to one as reasonable that birds that bask in the sunshine of North Africa, Brazil, India, or Australia, could thrive in the damp, inclement, misty, benighted climate of England? We are told that the reason Englishmen make such hardy colonists is because of our climate. If they can stand that they can stand anything.

I will analyse very briefly and roughly my results. I may say that all have ample shelters except one Parrakeet aviary, in which there is an abundance of eaves to take the place of a proper shelter.

Aviary I. Well-sheltered from N., E., and W. Open to S. and S.W. Birds consisting of Ruficauda Finches, Long-tailed and Masked Grassfinches, Alario Finches, Orange-cheeked Waxbills, Diamond Doves, Cordon Bleus, Fire Finches, Indigo Buntings. Scaly Crowned Finches, Tri-coloured Parrot Finches, Melba Finch, Violet-eared Waxbills, Necklace Tanagers, Lavender Finches, Green Avadavats, and Red Avadavats, were allowed to go in and out at will. Heat is provided, but, up to the time of catching the birds up, not used. *Result*: Losses were three Long-tailed and two Masked Grassfinches, both Melba Finches, both Scaly Crowned, two out of three Orange-cheeks, several Fire-finches (many aviary-bred), practically all the Cordon Bleus (most of them aviary-bred), one Tri-coloured Parrot Finch, two Lavender Finches, two Green Avadavats, three Red Avadavats, one hen Violet-eared Waxbill, and two Necklace Tanagers,—these last early in the autumn.

At the end of January, as I was picking up a bird nearly every day I caught up the rest, and since then I have not had a single death. Heat has been provided on several occasions since January.

Aviary II. Aviary rather exposed, but great abundance of natural cover. Inclined to be damp. Birds included Waders, several Weavers, Green Cardinals, Java Sparrows, Paradise Whydahs, Yellow Sparrows, Cuban Finches (12), Diamond Sparrows (a pair) Gorgetted Thrushes, and (to-day) a few British birds.

Results: Cuban Finches entirely wiped out. Hen Green

Cardinal, one Diamond Sparrow and three or four Weavers died. It is only fair to say that, in my opinion, most Weavers will stand practically anything, and that the losses in Weavers was not due to cold or damp.

Aviary III. The best protected aviary of the series. A regular sun-trap with a lofty brick-built shelter. An ideal aviary, except for the soil which is very sticky and badly drained. Birds don't do very well here in consequence, I fancy. The shelter has been heated perhaps eight or ten times this winter, but the temperature never allowed to get above 45-50°. It is very easy to drive the birds in at night as there is a large entrance high up and in the corner to the shelter. The birds housed here were as follows;—Two Golden-fronted Fruit-suckers, one pair Crested Cardinals and their young, one pair of Virginian Cardinals, one pair of Cuban Finches, half-a-dozen Weavers of sorts, eight or nine Zebra Finches, several Mexican Rose Finches, a pair of Jacarini Finches, Zebra Doves, Cape Doves, Orange-breasted, Pink-cheeked and Orange-cheeked Waxbills, three Pekin Robins, three Green Singing Finches, a crowd of Magpie and Bronze-wing Mannikins and two cock Parson Finches. Mention must be made of a very fine Silver-blue Tanager and a mongrel or two, which some people glorify by the name of "Hybrids." Truly a heterogeneous miscellany. These birds were only let out on fine days and always shut up at night. The Jacarini Finches were particularly expert at avoiding detection, and so were the Bronze-wing Mannikins, Orange-breasted and Pink-cheeked Waxbills. But, practically speaking, the Jacarinis alone were really successful in playing truant to any extent.

My losses here were peculiar. They were the hen Jacarini, one each of Pink-cheeked, Orange-cheeked and Orange-breasted Waxbills, a Bronze-winged Mannikin, and a couple of Zebra Finches which would nest in mid-winter; also the hen Cape and Zebra Doves and one Crested Cardinal. I do not think either the Zebra Finches, Crested Cardinal or two Doves were the result of the winter. I consider in this aviary the losses in most cases were due probably to old age; but the peculiar fact remains that a loss was recorded in all the species that "played truant" and would not go in. It is only right to say that my "aviary-boy" is un-

doubtedly a "thick-head," and after a day's work I have come home and found the birds out long after it had turned bitterly cold. Still the losses here, considering the species, were only normal, I think, when one considers my birds are not—like some people's—immortal.

Aviary IV. Another excellent aviary; well sheltered, well drained, and very sunny. The shelter is as well-lighted as a greenhouse, wooden-built on brick foundations. In many respects almost superior to Aviary III., but, owing to the amount of glass in the shelter, heat is required to maintain anything approaching a comfortable temperature throughout the winter. The birds here are, many of them, delicate, and include Fire Finches, Cordon Bleus, Gouldians, Green Avadavats, Red Avadavats, Lavender Finches, Grey, Zebra, and Orange-cheeked Waxbills, Alario Finches, Zebra Finches, and an odd bird or two. Early in the winter I lost two out of eight Gouldians, just at the time I began to shut up the birds at night, also a hen Aurora Finch, who was a "Blower." These and a couple of Waxbills (Grey and Orange-breasted) made up the total of my losses here. I need hardly say that the birds were allowed to fly in and out during really fine weather, but we were more particular than we were with Aviary No. III.

Aviary No. V. A completely shut-in winter aviary, containing Sugar Birds (3), Violet Tanagers (2), Parrot Finches (4), Zosterops (2), Blue-breasted Waxbills (2), Hooded Siskins (4), Violet-eared Waxbills (2), Black-cheeked Waxbills (3), Rainbow and Nonpareil Buntings (1 each), Chinese Painted Quail (2), Columbian Siskin (2), Dufresnes and Sydney Waxbills (1 each), and Zosterops (2).

I can truthfully say that the only bird that died that was healthy when put into the aviary was a cock Hooded Siskin. It was the bird that attracted so much attention at the L.C.B.A. Show at Westminster. It never seemed fit after the Show, and I had knocked off Inga seed, being assured it was bad for birds. I lost other birds in this aviary, but then birds were caught up in other aviaries and put into this one because they were ill. However, I will mention the losses, although they occurred within a day or two of being put into this aviary. They were a Blue-breasted Waxbill with deformed mandible, a cock Violet Tanager with an abscess on

the foot, a cock Nonpareil Bunting which had been taken from another aviary in a nearly dead condition. It picked up wonderfully, but died quite suddenly and unexpectedly about three weeks afterwards.

Several birds have been temporarily housed there and been completely restored to health. Eventually they have been returned to their respective aviaries.

It would be ridiculous to include one or two birds that were brought into this aviary in a moribund condition and died within twelve hours. At the same time it would not be conducive to maintaining the standard of health among its proper inmates.

I have taken just typical cases among the small birds, and of course omitted several aviaries for one reason or the other, but certainly not because they in any way either prove or disprove my contentions.

I will just say a word about parrakeets. I possess a good number, consisting of Red-faced, Peach-faced and Black-cheeked Love-birds; several species of *Platycercus*; one species (4 specimens) of *Psephotus*; several examples of Conures, *Palæornis* and *Brotogerys*, and the usual bevy of Budgerigars and Cockatiels. My large Parrakeet Aviaries are easily classed for the purposes of this paper, as in one there is a very small shelter but plenty of eaves. In this aviary it would be absolutely impossible to drive the birds in as the small shelter has no door nor could it contain half the birds.

The other aviary has a good shelter, can be warmed if necessary, and the birds are shut in at nights and on *very bad* days.

In the first aviary were Red Rosellas, Passerine Parrakeets (Blue-winged Lovebirds), Redrumps, Black-cheeked Lovebirds, All-Green, Tovi and Indian Ring-necked Parrakeets, Cactus and Half-moon Conures. Both Redrumps, both Passerine, the All-Green and Tovi Parrakeets died.

In the other aviary there are Red-faced Lovebirds (in a slip), All-Green (six), Canary-wing and Orange-flanked Parrakeets (in a slip), Pennant's (two), Mealy Rosella (one), Banded and Malabar and Plumhead (three), Parrakeets, Peach-faced Lovebirds, Speckled Conures and Passerine Parrakeets. There have been no losses here this winter at all.

I fear I have very greatly exceeded the limits of space that *ought* to be allowed to any one contributor, and yet I feel my experiments and observations are so interesting, and possibly, being all conducted at one and the same time and place, of some value to aviculture. I will summarize the results of my observations. They are as follows:—

1. Foreign birds if left to their own devices will not use a shelter.
2. If not properly sheltered during the winter losses among birds are very heavy.
3. If made to use a proper shelter during the night and bad days one's losses are greatly lessened.
4. Heat is *unnecessary* for the majority of foreign birds, but is undoubtedly an advantage especially in severe weather.
5. The heat if used should be moderate, not allowed to exceed 50° Fahr., and be kept as uniform as possible.
6. Excessive window area leads to excessive loss of heat.
7. Losses can never be entirely eliminated in any bird-family of any size, notwithstanding any theories of treatment to the contrary.
8. The average loss among small birds is probably at least 10 per cent.; among parrakeets very much less. Under good conditions of course.

Once more I apologise for taking up so much valuable space, but, Mr. Editor, it was you who tempted me. At any rate, I shall expect one cure to my credit.

NESTING OF JARDINE'S PIGMY OWL.

By Miss E. F. CHAWNER.

Early in the summer of last year, the Editor of the *Avicultural Magazine* wrote to me offering for sale a true pair of the rare South American Jardine's Pigmy Owl (*Glaucidium jardiinii*). Needless to say I secured them at once.

These tiny Owls are my especial weakness, and I had never even seen this species, much less owned a pair. They arrived in perfect condition, and from that day to this have enjoyed excellent

health and the best of appetites. Their size is about that of the Sparrow Owl, but they are taller and slimmer and less "round about." Their colouring is brighter, rufous-brown on the back and white streaked with chestnut in front. The sexes are alike. They twitch their tails from side to side when excited and are extremely quick and active in their movements.

My pair is remarkably silent; in fact, I have never heard them utter any sound whatever. They are not particular as to diet and eat sparrows, kittens, young rabbits, and mice, indiscriminately, though they certainly prefer the last named.

About the middle of March I hung up a nesting-box for them and furnished it with a layer of rotten wood; they soon took to it and spent much time going in and out of it. By the 12th of April the hen retired to a corner of the box and settled down to incubate her clutch of three eggs. They are of the usual type, round and white, rather large for the size of the bird. She sat very closely and her mate guarded her with great devotion, flying fiercely at intruders and doing all he could to drive them away.

On May 8th the first egg shells were thrown out and a young bird could be heard twittering. Both parents remained in the nest-box, the cock only leaving to fetch up provisions. Another nestling appeared on the 9th and the third on the 11th.

They are tiny creatures, covered with snowy white down, and unlike their parents are very vociferous. The first few days of their existence they are continually brooded by their mother, but afterwards can plainly be seen squatting beside her in the box. How they manage to retain their whiteness is a puzzle, for all food is carried up by the cock and lies about on the floor until consumed. Mice and kittens are accepted as suitable food for the babies, but I am rather surprised to find that small chickens and even a young Thrush, which a Rook had killed and which I thought would be just the thing, are consistently refused. Sparrows are readily accepted.

The Owlets grow rapidly and are active; they appear to be thriving and I hope presently to report that they have been successfully reared.*

* [Miss Chawner is to be congratulated. This is undoubtedly the first time that Jardine's *Glaucidium* has been bred in England.—ED.]

ARE BIRDS DECEITFUL ?

By Dr. A. G. BUTLER.

The answer to this question is, I think, that they are so when they have an object in view ; but not otherwise. Thus we know from many recorded and well authenticated instances, as well as from personal experience when we have tramped the country with our eyes open, that many birds will pretend to be crippled if one approaches their nests or young, or will dive into bushes or shrubs at some distance from the nest (passing quietly out on the other side) in order to deceive one as to its location.

In like manner a malicious or predacious bird will sit sleepily upon a branch until some weak and unsuspecting species settles within its reach when it will suddenly pounce upon it. As I have elsewhere recorded, I had several unpleasant proofs of this in the case of a Rose-headed Parrakeet which successively killed a Whinchat, Stonechat, and Skylark in this sly manner : in the case of the last-mentioned the parrakeet may have been scandalized to see a Skylark sitting on a branch, though I have frequently seen another example which I kept in a different aviary sitting on a branch in the daytime : at night it always roosted on the earth.

When, however, it is confidently asserted that birds deliberately disguise their nests with lichen, moss, bits of paper, &c., in order to render them inconspicuous, I am satisfied that those who make such assertions cannot have had much experience in searching for nests. It is quite true that such materials attached to the outside walls of nests do render them frequently less conspicuous than they would be otherwise, but they are not utilized by the builders with the object of deceiving, but because they are readily obtainable and perhaps appeal to the bird's æsthetic taste.

Nothing could be more conspicuous than the nest of a Long-tailed Tit or a Chaffinch covered with whitish lichen and stuck in the outside twigs of a roadside hedge : such nests are irresistible temptations to the mischievous clothhopper and are pretty certain to be torn out and pulled to pieces ; yet no end of fairy-tales have been told of the ingenuity of these and other birds in disguising their nests by such adornments. I believe one eager exponent of the well-known fact of protective assimilation mentioned having seen a

Chaffinch nest in a flowering fruit-tree which was dotted over with pieces of white paper in order to make it look like a cluster of blossom: unfortunately the genuine bloom would soon fade and drop away rendering the supposed disguise utterly futile.

Of course many birds do try to hide their nests, and I even on one occasion had that of the Skylark pointed out to me concealed by a piece of tangled water-weed loosely attached to one side, so that it fell over the eggs and hid them from sight when the mother was from home: the presence of this water-weed at some distance from a dyke caused me to stoop and examine it closely and thus I discovered the eggs: whether this was a wilful attempt to deceive on the part of the bird may be open to question.

As a rule, when a bird is anxious to conceal its nest, it places it in thick scrub, in dense undergrowth, among ivy or other close-growing creepers, or in a hole in a tree, bank, or wall; it does not artistically examine the surroundings and attempt to imitate them accurately. A Wren may decide to build its nest in a mass of moss overhanging a bank, and naturally uses the available material (which it has pulled out from the centre) in covering the outside of the nest; or if it builds in a mass of fallen and dead leaves in the midst of a bramble, it also uses the materials which are at hand; but although this renders the nest inconspicuous, I do not for a moment believe that the little architect is aware of the fact.

Many insects invariably settle for rest upon objects which best conceal them and are so well hidden that it requires either an entomologist or a hungry bird to discover them; but it need not therefore be assumed that everything which is difficult to distinguish from its surroundings must necessarily be designed for concealment.

It must also be remembered that man is not the only animal against which birds would desire to protect themselves; and when one considers that, in the case of birds which build open nests above the ground, the eggs are usually more or less conspicuously coloured, the advantage gained by a deceptive nest is greatly reduced. Perhaps this is why natural selection has not made the artificial concealment of nests by external ornamentation a rule: the advantage gained is so uncertain that the necessity for it has not been impressed upon the minds of birds and therefore has not become instinctive.

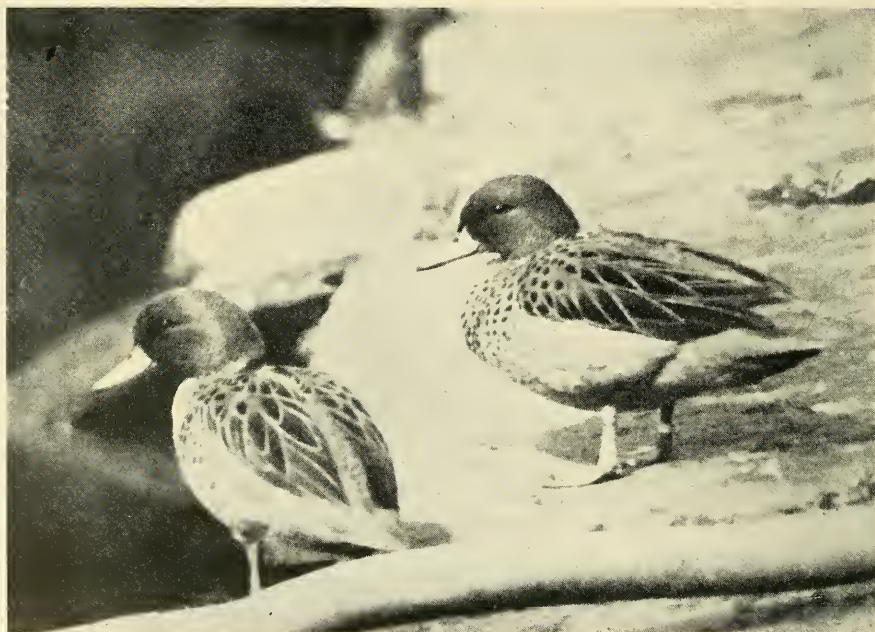
Eggs deposited in nests on or in the ground, or among pebbles or ground litter, are usually mimetic in colouring and extremely difficult to distinguish from their surroundings; but unhappily they are more liable than those built higher up to destruction by stoats and other ground-frequenting vermin.

It is extraordinary how men who become obsessed with a theory will try to strain every known fact into its service. The fact that the egg of our common Cuckoo not infrequently resembles the eggs of its foster-mother is assumed to be with the object of deceiving her; but when we know that by far the greater number of Cuckoo's eggs in no wise resemble the eggs among which they are deposited, this notion at once disproves itself. Nobody really knows why some Cuckoo's eggs are such admirable copies of those with which they are placed, but it has been suggested that if a Cuckoo is reared by a Hedge-Sparrow or any other bird, she will probably lay in the nest of that bird, and that similar feeding for many successive generations may affect the colouring of the eggs. I don't know; and that is about as far as most of us will ever get in explaining many of Nature's secrets: and if the truth is ever revealed, we shall discover that many of the explanations suggested are miles away from it.

Doubtless many of our members have observed, as I frequently have done, that, after a flight many birds did not return in a straight line to their nests: a Blackbird or Thrush, if its home is situated in ivy or thick scrub on one side of a wall or fence, usually flies straight over in a straight line past its nest, and at a little distance beyond it and then turns and slips quietly back under cover. A Lark descending from an aerial flight alights on the ground at a fair distance from its nest and wanders, apparently in an aimless fashion, among the herbage with many turns and twists, but always approaching more closely to its objective until within about a foot of it, and then attains it at a run: doubtless the object is to deceive the watcher; but probably this habit has become instinctive and the deception is unconscious, just as dogs descended from a wolf stock approach their masters in a wide half circle, as Darwin points out and as I have repeatedly noticed: the original purpose presumably was to avoid a frontal attack from an adversary.



BLUE WINGED TEAL.
(*Querquedula discors.*)



CHILIAN TEAL.
(*Nettion flavirostre.*)

Photos by Maurice Portal.

NOTES ON THE BLUE-WING TEAL.

(*Querquedula discors.*)

By M. PORTAL.

According to Sandford, in his book "The Waterfowl Family," this Teal has a very wide range for breeding, extending from Maine to B. Columbia, probably Texas, Mexico, and north to Labrador. He reports it as rare on the Pacific Coast.

Although the breeding range is considerable, he remarks that the birds are in no way partial to cold weather and "hurry along at the first frosts." It breeds most abundantly on the Northern Prairies of U.S.A. and in Manitoba. This being the case, it seems to be a great pity we cannot get more hand-reared birds in England, as without doubt the Blue-wing is one of the nicest of all the Teals and gets very tame.

With reference to frost, I notice that it does not mind it, as long as it has shelter from the wind. My pond—which is quite one of the worst imaginable for any waterfowl—stands 570 feet up, and in Northumberland, which is not famed for warmth or mild winters. I have had Blue-wing Teal here now for three years, having been given a pair by a kind friend as a start and reputed "hand-reared," and they nest each year, but so far malignant fate always spoils the nest before I lift the eggs, usually a rat has been the culprit, but once my foot was : as I trod on it. The nest is always well hidden and in and under a tuft of grass, and the female covers it up most carefully when she leaves it. To me it is always a source of uncertainty when to lift a nest found with five or six eggs in. You *know* she will lay probably nine or ten before she begins to sit, and you hope the odd dozen vermin traps you have got set about the pond will catch any rat before he finds her nest—and being naturally anxious for a full clutch you chance it—and fail.

So far I have only reared one young one from a dropped egg, and he got hurt by the hen at three weeks and pined. Up to that time there was little difference in it from common Teal, and, until hurt, fed well on ordinary duck meal, egg, duck weed and bread crumbs.

Personally, I think that to be really successful with Teal,

one should have a pond for Teal and Teal alone, and on it I would have 1 Blue-wing Teal, 2 Cinnamon Teal, 3 Ring-necked Teal, 4 Common Teal, 5 Versicolor Teal, 6 American Green-wing Teal, 7 Chili Teal and Cotton Teal if you can get them. I would exclude without doubt any of the larger variety of Teal, such as Brazil Teal who are nasty cross birds in breeding time. I am certain that the mixture of large surface feeding ducks and small ones is a mistake at nesting-time, and only tends to upset the peace of the pond (unless very large) and reduces the breeding chances. I have included Chili Teal in my list of nice Teal, but at the same time they are the worst tempered of all the Teal in spring time; however, they are small birds.

The plumage of female Blue-wing is dull always and is very similar to the Cinnamon female. The male, on the other hand, when he *is* in full plumage, is one of the most lovely of all the Teal who have an eclipse plumage. In full Spring dress his head is a sort of "plumbaceous" grey: a good broad white crescent in front of eyes; breast and flanks speckled reddish buff, a sort of pink-red colour; pale blue wing-coverts; back darkish-brown, a very white patch on each side of tail; the bill is lead black, and feet and legs a yellowish colour.

In courting, the male raises his head up and down, at much the same angle as a Shoveller, and gives a sort of three-note call, but only when swimming with or near the female, who responds by a bob of the head or a hoarse croak.

About the middle of June, the male starts to go into a complete moult of plumage, and it comes on very fast. Quoting from notes made in 1913:—

On June 16.—Still full plumage.

„ 20.—Started on flanks and by white tail spots.

„ 26.—Fast change on flanks and breast.

„ 29.—White tail patch now half brown and large brown mottled feathers in flanks and the usual white crescent on head now dusky white; sides of head now dull brown; black under tail now brown colour.

On July 4.—Change complete; hard to distinguish male from female at first sight. No call.



A PAIR OF BRITISH SHELDUCK.
(*Tadorna tadorna.*)



Photos by Oxley Grabham.

ARTIFICIAL BURROW FOR SHELDUCK'S NEST.

I find all Teal are fond of unhusked rice—known in the trade as “Paddy Rice” I believe—and they thrive on it with some wheat and a little barley. They are also fond of worms, machine-minced rabbit [raw], soaked dog biscuit or Spratt’s “Crissell,” but fondest of all of water-cress and water-weed, pulled out by the roots from a ditch with all the insects in it and put in shallow end of pond in early Spring.

Later in May-June you can skim duck-weed off some pond and throw it on, the more the better; or, failing duck-weed, then young lettuce thinnings. In the winter, old Brussel Sprout plants, tied on the edge of pond so that they are an inch in water, are esteemed.

Personally I feel convinced that if anyone kept these Teal in the West of England, where Spring is early and therefore more grass and nesting covert in April, they would be certain to breed freely, as would the other rarer Teal.

In conclusion, if you write to a dealer abroad for Blue-wing Teal you get Cinnamon Teal sent at once, unless you quote the Latin name and add American Blue-wing Teal; also sometimes a Blue-wing \times Cinnamon is sent by mistake.

THE BIRD MARKET OF CARACAS.

By ALBERT PAM.

Right in the centre of the City of Caracas is situated the “Mercado” (market), where every morning all the cooks of the town meet to purchase provisions of every kind, and almost more important, to chat and discuss the latest scandal; Martinique negresses, as black as soot, with gaily coloured turbans, and native women of every gradation of complexion to pure white. Adjoining the market is an open space of about 100 square yards, surrounded by palms and tropical trees and paved with patterned tiles. On weekdays this space is deserted, but on Sundays and Feast Days (of which there are many in the Venezuelan calendar) it is transformed into the “bird” market. Then the paving is covered by men and boys of all ages, squatting next to a cage—men from all

parts of the country—pure Indians, negroes, mulattos and whites, each with a bird or birds to sell. There are birds of all sizes and all colours, from Humming Birds to birds of prey, from Canaries to Parrots and Curassows. It is a mystery who buys or wants to buy any of this assortment, as it always seemed that, apart from Canaries—for which there appears to be a ready market—my brother and I were the only purchasers. Most of the sellers were “peons,” *i.e.*, labourers, who had come to spend the Sunday or “fiesta” in Caracas, and had brought birds, caught during the week, to sell and thus help to pay expenses. But there are two regular bird dealers, an Italian and a native half-caste; the former specializes in Canaries: the latter deals in anything he can pick up. The birds are brought into the market in small wicker cages, some of which are so full that the birds can hardly move; but Parrots mostly stroll about, sometimes attached to a stick by one leg, sometimes on the seller’s shoulder, and sometimes quite loose, and it is a usual thing for one to escape or climb up a tree unobserved—a great deal of shouting, stone-throwing, and the use of long canes is necessary before the truant is recaptured. Sometimes a small Finch or Tanager, locally worth perhaps a farthing, escapes from a cage, and then all the small half-naked urchins of the neighbourhood flock round and shout while the owner tries to approach the bird with a long stick covered at the point with bird lime. Also loose, and tied to a tree stump by a string round one leg, can be seen Guans, Curassows, Sun Bitterns, Screamers, Ducks, and on rare occasions an Orinoco Goose. The sellers, cages and loose birds absolutely cover the ground, and it is with the greatest difficulty that a visitor can pick his way through on a busy day without the fear of treading on something. The assortment in each cage is as varied as the whole collection, Humming Birds with Finches, Doves, Thrushes and Tanagers, all mixed up regardless of size—but as most of the birds are freshly caught, they are too wild to trouble about doing each other any harm. But the natives have found that Hang-nests are dangerous neighbours, and mostly keep these in cages by themselves.

Most, if not all, cages are provided with food and water for the birds, seed for the Finches and bananas for the others;

Humming Birds are given a solution of "papelon" (molasses sugar), on which they appear to be able to subsist for several days. The natives are kind to their animals in a general way, and although the condition of the cages would shock some Members of the Avicultural Society, the birds are really considered as far as the limited intellect of the uneducated peon allows; the cages are covered with banana leaves in the hot sun or transferred to a shady spot, and the birds are never left without food and water for any length of time.

The Venezuelan's only requirement of a cage bird is that it should sing—sing loudly and constantly all day long; they never understand why anyone should buy a bird that does not sing. Their first recommendation of any bird they offered us for sale was "it sings very well," regardless of the species. They have told us this of Turkey Buzzards, Guans and birds of prey, thinking that this would induce us to buy, and on our expressing any doubt as to the sweetness of the song, affirmed loudly that in a few days when the bird had settled down, we should be able to judge that they were truthful!

The individual value of the birds would be considered low by our Members—and after we had bought experience rather dearly, we got to know the real market value of most kinds. Most Tanagers and Finches can be bought for 1 franc, or less, the rarer kinds cost 2 to 5 francs, Hang-nests about 2 to 3 francs, unless very tame, when the price is up to 10 francs, all Thrushes about 2 francs, Guans 3 to 4 francs, Humming Birds from 1 to 2 francs, and larger birds up to 10 francs. But the price depends on the supply and season of the year, and as to whether one is prepared to buy a whole cage-full rather than pick and choose the birds one really wants. This latter system is by far the cheapest, but one is apt to acquire more birds than one can do with, and thus easily become overstocked. On the other hand, if one picked out a specially rare bird out of a cage containing 20 others, the price for the one would probably be higher than that of all, as the Venezuelan peon is a very shrewd business man, and would always charge very highly for any bird he thought we wanted badly.

Many a happy hour have I spent in the Bird Market, sometimes finding nothing of special interest, sometimes buying a dozen

or twenty birds; the cages containing these had then to be sent up to my house, and I would like to mention in regard to this, the absolute honesty of the Venezuelan peon, boy or man. We simply handed the cages containing valuable birds to any boy or man standing about, told him where to take them, and did not trouble further until he arrived at the house with the birds. These peons, although very poor and quite uneducated, do not know what dishonesty is, and can be trusted with anything valuable—gold, silver, coins, no matter what; they never fail to account for whatever has been entrusted to them, and I think that this delightful feature in their character is one that calls for special notice, as it is quite unique and contrary to what is generally supposed to be the case by people who do not know Venezuela.

Caracas lies 3,000 feet above sea level in a wide, fertile and sub-tropical valley, and is only about 6 miles from the coast as the crow flies. The valley is surrounded by hills beyond which are other valleys, some hotter, some cooler, and within comparatively short distances from the Capital are hot, low-lying plains, while the higher elevations have a temperate climate, with very cold nights. It is thus clear that the variety of birds from the immediate neighbourhood of Caracas is very great, and although I know South America from North to South and from East to West, no place that I know of is a better centre for a bird collector than the Capital of Venezuela. It will be some indication of this when I say that my brother and I have brought home to the Zoological Society in only 7 shipments altogether 130 species of birds, and if those that died on the way home, or the rarer ones which died before they were sent off, and those that we saw wild but could not catch and were not offered in the market—were added, the numbers would be enormously increased. Sometimes birds had to be kept by us for 6 months or more out there, before they could be taken home, and it is unavoidable that many should die during this time. The common ones could always be replaced, but the rare birds seldom came into the market, and when one died, its loss was serious.

It would be of little interest to give a complete list of the birds we collected and sent home from Caracas, but the following will give some idea of the variety of those which arrived. The

names are made out without regard to the correct sequence or affinity of species, and are only meant to show Aviculturists what lies in store for them if they ever venture on a journey to what I consider the richest and most beautiful country in South America:— Birds of prey, 8; Cardinals, 2; Curassows, 3; Ducks, 3; Finches and Sparrows, 17; Grosbæks, 2; Goose, 1; Guans, 2; Herons, 4; Hang-nests, 9; Humming Birds, 8; Jays, 3; Owls, 2; Parrots, etc., 5; Pigeons and Doves, 8; Saltator, 2; Sugar Birds, 3; Sun Bittern, 1; sundries, 3; Siskins, 3; Tanagers, 21; Thrushes, 4; Toucans, 4; Vultures, 4; Waders, 6; Woodpeckers, 2.

JOTTINGS ON COMMON INDIAN BIRDS.

By AUBYN TREVOR-BATTYE.

(Concluded from page 218).

Those who have seen Mr. Stuart Baker's book will see how many and varied are the Pigeons and Doves of India; but easy as we find it to identify all our birds of this Order on the wing, it is a very different matter when it is a case of birds with which one is not familiar, and both Pigeons and Doves are far more often noticed when flying than when at rest. I think the Green Pigeon seen so often in Ceylon, when it will fly in front of a motor car, often settling and then rising again as the car gets nearer, is the Southern Green Pigeon (*Crocopus chlorogaster*), and the one that behaved in exactly the same way in front of my pony in Sikhim may perhaps have been the Bengal Green Pigeon (*C. phænicopterus*), though Sikhim seems rather high for its range as given by Blandford. The Indian Blue Rock-Pigeon (*Columba intermedia*) was to be seen in every place visited in India proper. In Rajputana it really swarms and no one ever touches it; one sees it in the towns and in great flocks close to the fields. A delightful and confiding bird in gardens and generally about towns and villages is the Little Brown Dove (*Turtur cambayensis*).

A neighbour of mine has a Peacock (I, too, would have one also, or several, if they would leave my flowers alone) and his voice comes over the hanger, across the meadow land, and up to our hill.

I like to hear it as I sit in my study writing, and it brings back memories of a beautiful old walled and moated Kentish garden where they kept thirty-nine. (There was wire netting round the beds.) It seemed strange to hear that familiar call in the jungle of Nepal, and it required little effort of the fancy to be back in my chair at home, or in that sleepy ancient garden with the sun upon the hollyhocks and the lizards darting into the crannies of the walls. The Peacock is the national emblem of Nepal. But to see Peacocks in their numbers you must go into Rajputana, for the bird is sacred there. There are flocks of them about the fields as one passes in the train.

Jungle Fowl ought to be domestic, sometimes they pretend to be. I remember passing very early one morning through a sleeping Sinhalese village, and as I passed the outskirts poultry were searching a heap of straw dropped in the middle of the road. They were a mixed lot, and I did not pay much attention to them; one or two looked like "Indian Game." But as I came up three ran off and on reaching the ditch at the roadside spread their wings and flew into the jungle. They were the Ceylon Jungle-Fowl (*Gallus lafayettii*), only found in Ceylon. The other fowls went on with their scratching. One is constantly seeing Jungle-Fowl in Ceylon, and a cock, when the sun shines on him, is a beautiful sight in his gold and red. These birds are shy rather than wild, and if you follow them into the jungle, though they usually run, will sometimes fly up on to a branch and look at you. I saw very little of Jungle-Fowl in India. There are two, the Red Jungle-Fowl (*Gallus ferrugineus*) and Sonnerat's Jungle-Fowl (*G. sonnerati*). (We have them in the Zoo, but not, I think, the Sinhalese bird). I only saw the former and I saw them, I think, but three times. One day I was walking up the road from Khalsi to Chakrata and came to a corner where the road turned sharply to the right. On that hand was the wall and the descent, while on the left hand was the steep rocky jungle. Just at this point a hollow sloped down to the road. As I turned the corner I came right upon two Jungle-Fowl and two Cheer Pheasants who were busily engaged in hollowing out some root like a mangold wurzel, fallen from a cart in the road. They fled up the hollow and dispersed, the Jungle Fowl running with wings open, the Pheasants

running at first and then skimming into the scrub. The Cheer Pheasant (*Catreus wallichii*) is found chiefly in the high mountains (6,000 to 7,000 ft., Blanford) so this was rather low for them. A little further on the same day a Cheer Pheasant cock ran along the road by the cart in which I was seated and made several attempts to fly up the wall and into the scrub before it succeeded in doing so. I do not recollect seeing any other kind of Pheasants wild ; but the Maharaja of Nepal has in his aviaries at Khatmandu a fine lot of Monâl and Kalij Pheasants and Tragopans. The Kalij are of the black-crested Nepal species (*Gennæus leucomelanus*). Though one does not often see the Chukor (*Caccabis chukor*), excepting in cages, one often hears them calling in the evening. When shooting in the early morning in the Nepal Terai my elephant put up not infrequently a Common Francolin which would fly a little way and then drop into the bush, but however carefully I marked down the bird I never got it to rise a second time. It was just the right sort of country for them—short scrub, grasses and small streams ; we never saw them in the tree jungle.

The Moorhen (*Gallinula chloropus*) and the Coot (*Fulica atra*) were both seen. I saw neither the Common Crane (*Grus grus*) nor the Demoiselle (*Anthropoides Virgo*) on the ground, but an immense number of the latter were seen one day circling round in the air, and a V seen very high up in the air near Chakrata was probably composed of the former. I saw a good deal of the Sarus Crane (*Grus antigone*), and it was always a joy to me.

I remember particularly a certain evening in January when lying up for Geese. It was in Rajputana, and a fuller account of the jhil will be given when we come to the Geese. The Cranes kept coming in in pairs. They came from all directions ; some from behind one where the sky was relatively dull, and against it they looked white, some out of the coloured sky in front, when they looked quite dark. Some came in quite low, those that came in from greater distances were high up, but circled round getting lower and lower until they set their wings and skimmed down on a gradual slant, and throwing forward their long legs lit in the shallow water or upon the mud. They were quite unsuspecting ; I was hidden, but very imperfectly hidden, behind two barley sheaves

stuck up on end. A pair but a few yards in front of me must have seen me—for their eyes are sharp enough—but they only looked up now and then, occupying themselves in splashing and in moving their bills about in the water. I do not remember counting the number of Cranes at that jhil, there were doubtless many more in the distance that I could not see, but perhaps there were ten pairs within sight at once. They were all quiet for quite a long time. Then one of my pair suddenly opened its wings and lowering its head made a feint at its partner. Then it began dancing about her, and the other Cranes in different places began doing the same thing. About a hundred yards away on my left there was a wide open space among the reeds. One of the distant pairs got up and flew to this spot. Then mine left, and then other pairs. They went off to this playing ground and there they all went mad. I was not near enough to see the details of the performance, from where I was sitting it was all a confusion of waving wings and most extraordinary noises.

Few birds are more beautiful than the Jaçaná. There are two, the Bronze-winged Jaçaná (*Metopidius indicus*) and the Pheasant-tailed Jaçaná (*Hydrophasianus chirurgus*). I have only seen the latter in Ceylon. (I am afraid I always used to call the birds Jacánas—a dreadful mistake, for the book shows the accent on the last syllable and a sedilla under the c.) They have, as everyone knows, very long toes and long claws; the claw on the hind toe is relatively as long as the hind claw of the Lark, but is bent the other way. Not only can they run over water-lily leaves (the Moorhen can do that much) but just as the reindeer by pressing the moss together under its wide and hollow hooves, pass over soft bog that would engulf a cow, so the Jaçaná can walk where the water seems to be clear; their speed of foot being sufficient to support them on the weed-mass that is just hidden below the surface.

The first bird noticed in the family of the "Plovers," is the Red-wattled Lapwing (*Sarcogrammus indicus*). Wherever one goes and there is damp ground, one sees one or more of these gay-decked birds; the bright colour of the wattle, the black and white of the head and neck, and even the yellow legs make the bird very conspicuous. The Yellow-wattled Lapwing (*Sarciophorus malabaricus*) frequents drier ground and is not so often seen, though I saw it

several times in Ceylon. The Black-winged Stilt (*Himantopus candidus*) is quite common in the marshes and by the edges of jhils ; one sees flocks which must sometimes number many hundreds.

I do not intend to go into details of all the Waders seen, but must first mention this curious little happening : that one evening as Mr. Elwes and I were sitting on the verandah of the dak bungalow at Chakrata a Woodcock alighted on the gravel at the foot of the bungalow steps. A bird that was quite new to me was the Wood-Snipe (*Gallinago nemoricola*). I never saw one alive, but Mr. Rhys Williams shot one in the Nepal Terai, and I skinned it for him. He said it got up in some cover. It is very like the Common Snipe (*G. caelestis*) but is larger, and is without the rakish look of our sporting bird.

The Little Cormorant (*Phalacrocorax javanicus*) as also the Darter (*Plotus melanogaster*), was often seen. From the train one evening we saw an immense congregation of Little Cormorants preparing to roost. There had been a break in a dam and much of the country was flooded, and all along by the side of the line was a vast collection of birds, among them Glossy Ibis (*Plegadis falcinellus*), here and there a White Ibis (*Ibis melanocephala*), and of course many Herons and Egrets. Curiously enough I cannot remember seeing any Common Storks, but in the Nepal Terai the White-necked Stork (*Dissura episcopus*) was often seen. From observation of it there I should have said that it was far more of a wood than a plain bird. I do not, of course, mean that I ever saw it in a real forest, but it was always in pairs round about the jungle. It had a most beautiful eye. The name of the Painted Stork (*Pseudotantalus leucocephalus*) reminds me of a most delightful morning spent on the lake in Udaipur. Udaipur is one of the four original states of Rajputana, and is now, I suppose, the most mediæval state in Upper India. Its immense granite and marble palace hangs on a ridge above the lake to which its 100 ft. walls descend. (You may see—I did—three or four hundred wild swine come in from the jungle every evening to feed on maize thrown down for their supper). There are islands in the lake with white marble buildings on them ; it is all very beautiful. Unfortunately this lovely lake bids fair to become choked with a fast-spreading weed which has got into it. We ran the boat ashore on

an island and got out and explored. It was a breeding place of the Painted Storks, and, though the nesting season was apparently over, many were sitting in the old nests as well as all about on the trees and on the ground. They were in two states of plumage, the brown of the immature birds and the pure white and pink of the old one. The legs are very noticeable as they are a rosy flesh colour while the long curved bill and the forehead are buttercup colour. Beautiful as the birds looked on the trees they were still more striking when they rose and flew round above the water; for then one had the contrast of the shining black wings.

Every now and then when passing near wet tracts of ground one sees the splendid Large Egret (*Herodias alba*), a brilliant white streak against the dark marsh. But a far commoner bird is the Small Egret (*Herodias garzetta*), which often associates with "Paddy-birds" in the rice (or padhi) fields. In winter it would be impossible at a distance to distinguish this from a smaller ally the Cattle Egret (*Bubulcus coromandus*) which then is also white. I remember one winter evening, in Ceylon, standing on the great band (dam) of the tank of Kantalai, watching Pheasant-tailed Jaçanás. The water, I suppose, was low, for a great number of crocodiles had collected near the band. There was relatively little open water but a great stretch of marsh and weeds. A good many White Egrets were scattered about, and at first I did not discover that each was standing on a buffalo, for the buffaloes were nearly or entirely submerged. When a buffalo rolled over the Cattle Egrets would try to do just what the juggler does when he walks on a rolling barrel. Sometimes they succeeded, but often they had to open their wings or even to get down altogether till the rolling was finished.

What would India be without its Paddy-birds! The Pond Heron (*Ardeola grayi*) is a friend of every day, and often as not is a surprise and very invisible—it can stand so still. Then up it gets and seems to be quite another bird, for then its white wings and its white tail and body show sharply against the mud; then it drops and is again invisible.

In speaking of the Sarus Crane we have mentioned a jhil in Rajputana. To be precise it was Kafasin, south of Udaipur. We will now come back to the same jhil as our path has brought us

to the Geese. Without pretending to give the names of all the birds there were on or by the jhil, the following were certainly there. Grey-lag Geese (*Anser ferus*), Bar-headed Geese (*A. indicus*), Spotted Duck (*Anas pæcilorhyncha*), Shoveler (*Spatula clypeata*), Cotton Teal (*Nettopus coromandelianus*), Common Teal (*Nettion crecca*), Gargany Teal (*Querquedula circia*) and other Ducks not identified. Then there were Snipe (*Gallinago cælestis*), Red-wattled Lapwing (*Sarcogrammus indicus*), Black-winged Stilts (*Himantopus candidus*), various small Waders, Great White Egret (*Herodias alba*), smaller Egrets (either *H. intermedia* or *H. garzetta*), Glossy Ibis (*Plegadis falcinellus*), and a rather larger Ibis dark in colour, "with a red head" (my notes). This bird I took to be the Black Ibis (*Inocotis papillosus*). There were in reality many more kinds of birds than these, but it was a big jhil. It is the morning of the day on which we saw the Sarus Cranes.

We were three guns : a cousin, his wife and myself ; we had shot-guns, but the lady had her rifle, and with this she was a practised shot. My cousin, who was journeying on an annual inspection, was in camp by this jhil with his family, and with thirty camels, beside horses, cattle and tents (like Abraham), travelling from Udaipur. I joined him at about 11 o'clock on a hot morning. It was the 28th of January. "The jhil is about 1,000 yards long perhaps, and about of the same width ; shallow for a considerable distance out, but deep in the middle and by the band at the further end, and full of crocodiles. At the upper end is a strip of cultivated land with scant crops of barley, and their deep reed-beds." I ought to have said before that this place lies in a stony desert. (I had been interested to notice, by the way, that the camel that carried my luggage was able with the greatest ease to trot right away from the pair of fast ponies of the tonga in which I was seated).

The Geese which were the object of our attentions were out in the middle of the jhil ; I could not estimate their numbers—perhaps there were five hundred Grey-lags and two hundred Bar-headed. The two other guns went round to the further side while I was taken by two natives into the reed-beds. After a walk and a wade we came to the last fringe of reeds, beyond which there was a stretch of mud and creeks, and then the open water of the jhil. It

was very hot in the reeds, but I had a delightful time watching the birds. There were three Common Snipe on the mud close to me, and, as they had no idea I was peeping at them through the reeds, they went on feeding quite calmly, sticking their bills into the mud and turning over little bits of dead rush. There were Ducks also and Teal on the mud and in the water near it—but as this story may easily grow too long I must keep to the Geese. Well, we failed altogether with the Geese. Natives walked into the water as far as they dared, making a great splashing, the rifle was fired, but the jhil was too large; all the Geese did was to get up with a clamour of voices and roar of wings and settle again more in the middle than ever. This went on for quite a long time, and seeing it was hopeless I started round outside the reed beds to look out for Snipe on the grass, but all the wet places were dry, so to say. The grass sloped up to a road by a village, and on the slope women were washing clothes; standing by them and pulling at the grass was a flock of five Geese as tame as Geese could be. What was my astonishment as I got nearer to see that they were all Bar-headed Geese! As I walked quietly towards them, they put up their heads uneasily, but allowed me to get within, say, forty yards, when they rose up and flew for the lake, crossing me at about the same distance. I got one. Wild Geese know they are safe from natives, and, which is more curious, the next morning my cousin's little boy (aged seven?) walked right through the flock as they were on the grass, and had to "hurroosh" them out of his way. That evening I got one Grey-lag by lying up behind a barley sheaf.

Without giving the names of all the Ducks seen in India, most of which are known to us as ornamental waterfowl, I may just mention two. They were new to me, though the first will be well enough known to many of our readers and is certainly so to the Editor who has a collection of them at his beautiful home in Herefordshire. This is the Cotton Teal (*Nettopus coromandelianus*). I first saw it in Ceylon in the sort of water where one would expect to find the Whistling Teal (*Dendrocygna javanica*), indeed there was one of these birds sitting at the same time on a bough of a fallen and half-submerged tree. I saw it from the road. I was peeping through a hedge when I saw at some distance a little bird swimming



WINTER.



SPRING.

Photos by Oxley Grabham.

CEREOPSIS GEESE.
(*Cereopsis novæ-hollandiæ.*)

that in contrast with the Whistling Duck looked even smaller than it really is. The dark surroundings of trees and grasses showed up the white very brightly. And I remember thinking to myself, "Can I be looking at an out-of-plumage Smew?" This confession brings us to the end of these jottings with the Falcated Teal (*Eumetta falcata*). At one end of the maidan in the city of Khatmandu in Nepal is a large stone-sided tank. In the middle is a pretty little temple. There was always a flock of wildfowl on this tank. Mallard, Shoveler, Pintail, and Teal formed the greater proportion of the birds, but there was also a Scaup, and one bird that, with the aid of my glasses, I puzzled over for some time. It was a male bird of this species.

It may seem curious that a paper about birds seen in India should deal so largely with species familiar in Britain or at any rate in palæartic lands; it will be disappointing to find no account, for example, of lovely Sun-birds or of Flower-peckers nor of others that one associates in one's mind with a "tropical" land. There are several reasons for this. If we except a few of Ceylon, all those birds here described were seen north of a line drawn from Bombay to Calcutta; again, the season was winter, when many "half-hardy" birds go South; and further, a majority of the most gorgeous birds are yet the least noticeable in the dense foliage they often frequent, and demand more time and patient watching than is possible on a flying visit, when one is almost daily travelling on.

OBITUARY.

We greatly regret to have to record another loss in our roll of members, a victim of the war. Lieutenant ROWLAND E. NAYLOR, 1st Royal Welsh Fusiliers (killed in action on May 17), was the son of Mrs. John Naylor, Marrington Hall, Welshpool, and Elmwood, Wootton, Liverpool. Lieut. Naylor, who was twenty-one, was educated at Eton and Sandhurst. He obtained his commission in August and went out in September. Wounded by shrapnel in October he returned to the front in January. An all-round cricketer, he was wicket-keeper for the Eton Eleven and twice played at Lord's against Harrow. His three brothers are in the Service.

CORRESPONDENCE, NOTES, ETC.

A LETTER TO THE EDITOR FROM THE LATE LORD BRABOURNE
ON HUMMING BIRDS.

DEAR MR. ASTLEY,—I have two or three letters of yours to answer. I was interested to hear about those Humming Birds and hope they are still doing well.

I am very sceptical as to my ability to bring any home successfully, also as to bird-lime being the best means of capture. Could you not find out how Count de Ségur's were actually caught? Where I was up north, a Humming Bird (*Amazilia Amazali*) used to fly into my room frequently about twice a week, and the silly thing used to bash itself against the walls and ceiling, often till nearly stunned, when I used to catch it and let it out. In the house where I live here, one of the men has grown nasturtiums up his window box, and the southern form of the above (*A. Leucophaea*) almost daily comes to flutter around the flowers and sometimes comes right inside the room to feed on those that grow through the balustrades, but I am afraid I should meet considerable opposition if I attempted a capture of *that* fowl. This is right in the middle of Lima too. I have lately come across a magnificent Humming Bird at 7,800, one of the Petasophoræ (I think Anais). It is a huge bird for a Hummer (or seemed so till the day before yesterday, when I got my first Giant Hummer in the same place). This Petasophora is, as you probably know, vivid green, with the most iridescent sapphire throat and elongated feathers on the ear, and with a large splotch of sapphire on the lower belly. I got another fine Hummer there also, with a garnet throat. I haven't an idea what he is. The Giant Hummers are extraordinary to watch flying. Taczanowski says like a Swift, but they seem to me to skim and flit more like a bat. You also get the beautiful little Thaumastura Cora there, which is also the commonest of its family down here, but only in the summer.

Glad you liked the article. Some time ago I put together some notes for an article on Finches; but the trouble is that I have now got three more kinds from Matucana (7,800 feet), which I cannot so far identify, and shall have to send to Chubb. If I might suggest as to the plate for same, I should figure one of the following *Phrygilus Fruticeti*, *Catamenia Analoides*, *Pheucticus Chrysogaster*, or one of those that I can't name, a large bird with general buffish colouring underneath, and white throat and dark grey above. Perhaps some of these have been already figured. Anyhow, I will send some good skins to colour from.

Yes, I take in the *Avicultural Magazine*, but am not having it sent out here [Lima].

I am afraid I do not keep a diary that would be any use for publication. I have a large book in which I enter under its name (or a name I invent for it) each new bird that I come across and jot down any fact I notice about it, such as abundance, food, habits, where to be found, etc., etc.

Yours sincerely, BRABOURNE.

[And it is men like Lord Brabourne which this terrifically appalling war is depriving us of!!—ED.]

NOTICES TO MEMBERS—(Continued from page ii. of cover.)

NEW MEMBERS.

Mr. E. M. DOWSON, United University Club, Suffolk Street, London.

Mr. A. ST. GEORGE SARGEAUNT, Padstow, Cornwall.

Dr. V. G. L. VAN SOMEREN, Nairobi, B. E. Africa.

CANDIDATE FOR ELECTION.

Mr. PHILIP RECKMAN, Brookmead, Windsor Road, Bray, Berks.

Proposed by Dr. L. LOVELL-KEAYS.

BREEDING RESULTS.

DR. LOVELL-KEAYS has successfully bred *Zosterops viridis*, an account of which will appear in the July Magazine.

DR. M. AMSLER has bred *Phrygilus fruticeti* (a S. American finch) and also the Orchard Finch. All of these are, we believe, for the first time, and therefore medal winners, after a detailed account has appeared in the Magazine. It was Dr. Amsler who bred the Hooded Siskin for the first time, successfully.

MEMBERS' PRIVATE SALE AND EXCHANGE COLUMN.

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NOTICE!

Why do not members advertise their birds in this Magazine? There is an absurd idea that other periodicals answer better for this purpose. Of course they do, if advertisements are sent to them and not to the *Avicultural Magazine*.

The Editor advertised a pair of Couures (*euops*) last month, and sold them immediately.

Will not some Member take up this department?

Members should realise that the Editor is a Country Squire, decidedly in the heart of it, and cannot give up all his time to the side shows of editing, or to rushing round to see different members, especially when he would probably be voted a nuisance!

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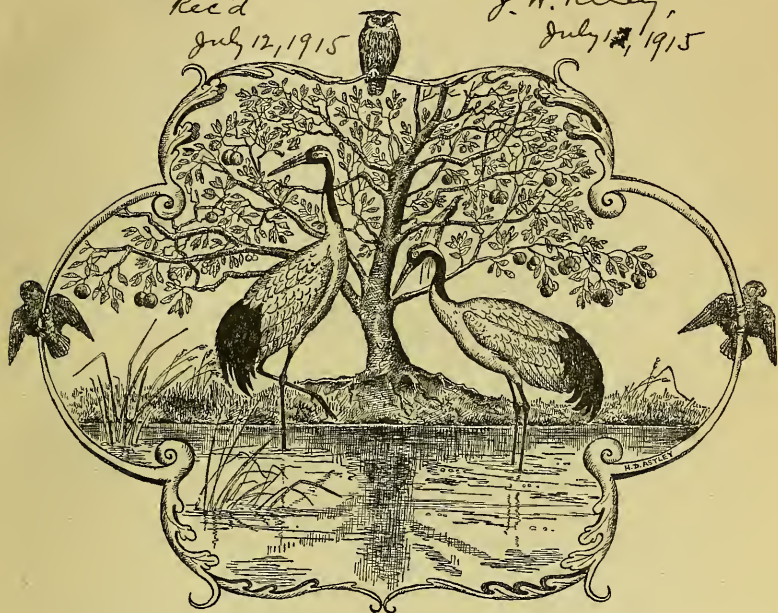
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Rec'd
July 12, 1915

J. H. Riley,
July 12, 1915



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All MSS. for publication in the Magazine, Books for Review, and Private Advertisements should be addressed to the Editor, HUBERT D. ASTLEY, Esq., Brinsop Court, Hereford.

All Queries respecting Birds (except *post mortem* cases) should be addressed to the Honorary Correspondence Secretary, Dr. A. G. BUTLER, 124, Beckenham Road, Beckenham, Kent. [Enclose stamp for reply].

All other correspondence, should be sent to the Honorary Business Secretary, Mr. T. H. NEWMAN, "Newlands," Harrowdene Road, Wembley, Middlesex. Any change of address should be at once notified to him.

Dead Birds for *post mortem* examination should be sent to Prof. G. H. WOOLDRIDGE, Zoological Society, Regent's Park, N.W.

Advice is given, by *post*, by members of the Council to members of the Society, upon the subjects connected with Foreign and British birds. All queries are to be addressed to the Hon. Correspondence Secretary and should contain a penny stamp. Those marked "private" will not be published.

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THE MIKADO PHEASANT (CALOPHAPHIS MIKADO).

Hab. : Formosa.

(From living birds in Mrs. Johnstone's aviaries.)

THE
AVICULTURAL MAGAZINE,
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THE AVICULTURAL SOCIETY.

Third Series.—Vol. VI.—No. 9.—*All rights reserved.*

JULY, 1915.

THE MIKADO PHEASANT.

(*Calophasis mikado*).

By Mrs. JOHNSTONE.

The first intimation of the existence of the Mikado Pheasant was announced by Mr. Walter Goodfellow on his return from an expedition to Formosa in 1910. During his stay there, in pursuit of live birds of all sorts, he entered into conversation with a friendly native, and noticed that the man was wearing in his hair a peculiar Pheasant tail-feather; he asked to be allowed to see it and the man immediately presented him with it.

He recognised that the feather belonged to no known species of Pheasant, and hearing the birds were to be found on Mount Arizan, he made an expedition there, hoping to obtain skins, at any rate. In this he was so far successful, that he secured an adult hen only; so the colouring of the male bird, with the exception of the tail-feather, still remained a mystery.

In 1911, the present Lord Rothschild sent Japanese collectors to Formosa, and they returned with several adult skins of both sexes, but no living specimen.

In January, 1912, Mr. Goodfellow started on another expedition, with the express purpose of obtaining living specimens, and in the following October returned with eight cocks and three hens. To obtain these birds he formed two camps on Mount Arizan at 7,000 feet and 8,000 feet respectively. He found the Pheasants very scarce, and, after some months of patient work, he and the natives succeeded in trapping thirteen living specimens. Two of

these were accidentally killed by a fall of a tree, and eleven ultimately reached England—eight males and three females.

They were installed in comfortable aviaries, and the following year a good many of both sexes were hatched and successfully reared.

The egg almost exactly resembles rather a small white hen's egg. The first batch of eggs I placed under sitting hens, and some were kindly reared for me by Mr. Seth-Smith at the Zoological Gardens. But this year I have allowed the Mikado to sit on her own eggs, and she is a very careful and devoted mother.

The food is not a difficulty, being the same as with other Pheasants, but they require more green food, of which they are very fond, and soon eat down a patch of growing grass. I give lettuce in addition.

Dryness, I am sure, is essential in winter; as, indeed, it is preferable for any Pheasant. Cold and damp rapidly produces liver troubles.

Several crosses were tried, but the only successful one up to the present has been with the female of the Elliott Pheasant. This cross produces a very large handsome bird; the marking partaking more of the Elliott than the Mikado; the tail feathers, however, resemble the Mikado.

Several true pairs of these birds are in various parts of England. One pair I presented to the Zoological Gardens; some are in the New York Zoological Gardens, and others have gone to France and Australia.

At the time of writing, I have two fine pairs, but both my hens are young home-bred birds and I have three very strong chicks hatched. I hope however to have more presently. I have found no difficulty in rearing the young birds, but have carefully avoided interbreeding, which is doubtless the main cause of delicacy in any breed.

ENGLISH BIRD DEALERS *VERSUS* GERMANS.

One has hitherto had to acknowledge that on the whole the German Bird dealers were in many points superior to the English. Let it be frankly said that they have been, with some exceptions of course amongst the English ones, more honest, more thorough in their care of the birds, more enterprising in obtaining rarities, more courteous to their clients. With those exceptions amongst our own people, one would wish to advise the recalcitrant to study in the future to climb higher, since their opportunity when the war is finished may truly come. And as war cleanses, purifies and uplifts, let it do so also to our bird-dealers; for surely one can never again, until the German people are also cleansed and purified and changed, have dealings with any one of them, however pleasant individually, since they are members of a nation which has proved itself by the action of its head and of its leaders, something so monstrously vile and venomous, so inhuman and devilish, so unthinkably cruel and murderous, that one must assuredly cut it off with all that appertaineth thereto, and cast it from one! And this in no mere spirit of revenge and spite, but just because in every way that is possible, a just punishment must be meted out. To continue to encourage Germans as we have done would be to play with dangerous explosives.

But as far as traffic in birds is concerned, the English dealers must set an example for good, remembering the old adage of the best policy being honesty. One has, before now, cut off from one's list, dealers who are not only dishonest, but who, without any provocation, will be impertinent and untrue even to their written word, which after all is what the world has cried out against in the case of the German leaders. One has entered shops in the past where the olfactory nerves are grossly offended, where the birds, accustomed by nature to pure air, food, and water, are cramped in foul and unwashed cages, many dying miserably in a miserable prison.

And therefore it is that more upright and humane dealers in 'Live Stock,' find it necessary to advertise their birds (and mammals)

as kept, not in shops, but in open aviaries and so on; an announcement, which, if there were no overcrowdings and neglect of sanitary arrangements in the trade, would be unnecessary.

Beautiful hand-reared Skylarks, singing gloriously, and larger than anybody else's Skylark, only costing two shillings, should disappear from the columns of British birds in Bird papers and journals, since the deception and the lie is manifest.

Nightingales* in full song for 7/6, which are for sale in April and May, when none have been advertised all through the previous autumn and winter; or if they have, their price has been very considerably larger; should not be permitted, since they are obviously wild-caught birds immediately after their arrival from Africa.

At any rate, would not aviculturists be far more inclined to purchase if the vendor honestly stated "Freshly-caught birds, and therefore not really tame."

But as the dealer in question might be overhauled by the authorities, he or she pretends they are nothing of the kind, and so it comes about that many a bird seller vies with another in tricks of the trade. And that trick too of advertising what is not in stock, never has been, and never will be as far as immediate purchase is concerned, is an obnoxious and dishonest one, which in time must detract from the dealer's good name.

There should be a union of those who wish to deal honestly, clubbing together to put down such detriments. Why should not birds of a feather, flock together? A trade's union to protect themselves from their worst foes, the ones of their own household. Why should they not meet once a year, say at the London Zoological Gardens, where aviculturists could also gather together, each seeking helpful advice and gaining mutual encouragement from the other?

H. D. A.

[* 'gales' as some persist in dubbing them! Why not 'rows' for sparrows, 'nets' for linnets, 'catchers' for flycatchers, etc. ?]

COTTON TEAL IN CAPTIVITY.

Nettapus coromandelianus.

By HUBERT D. ASTLEY.

There is not much doubt that this charming little duck can, if once acclimatized, be as easily kept in England as any other of its family. I have one male, I am referring to the Indian Cotton Teal, which has successfully passed through two winters on open water, as well as two males and four females which have now been in my possession for a year.

That I should have had four more of this species I do not doubt, had not a large rat dived under the wire netting of their enclosure and killed them, proving how persistent and destructive these horrible animals are, for there were only two or three inches of space *beneath* the water, where the wire hurdles did not actually touch the bottom.

The three surviving male Cotton Teal emerged from their eclipse plumage into full colour by the end of April, after which they were extremely handsome with their snow white cheeks and flanks, narrow black band from the shoulder and dark bottle-green backs. Moreover for the first time since I have had them, they commenced to utter calls in unison, a low sharp-sounding quacking, rather resembling the croak of green tree-frogs in the distance. I have not had leisure to observe any display on the part of the males, but I have seen them swim round the females, circling about, and trying to look important.

I am sure these ducks should not be kept where they cannot have open air and fresh water, on which they spend nearly all of their time. A pair had been put in the Fish House at the London Zoological Gardens, and the male failing to moult freely, succumbed. My birds have passed the winter where ice sometimes formed on the water, and are in magnificent condition and plumage. I placed branches of trees in the water, but have seldom, and of late never seen the Cotton Teal make use of them.

They can and do perch—as they did in the Zoological Gardens—but from the behaviour of my birds, it is evident that if they have sufficient water, they prefer that.

Their food consists of dari and hemp as well as watercress, etc., when in season, besides which they probably eat the fresh-water shrimps which are naturally in the pond.

So long as the water is fresh, etc., a confined space does not seem to matter, for their wire enclosure is only about fourteen feet square. Only one of my Cotton Teal is pinioned, as the enclosure is roofed with wire, but I wanted to see whether, contrary to what was told me, this species could stand the operation.

APROPOS OF PINK-CRESTED TOURACOS, AND A VISIT TO THE LIVE STOCK DEPARTMENT AT GAMAGE'S.

If Mr. Newmarsh, who is the manager of this department, goes on as he is doing, "Gamage's" in Holborn, (as all the world knows) should attract a goodly number of aviculturists. But what all the world does not know, at any rate I didn't, is that Mr Newmarsh started the live-stock with a few canaries and such like ordinary fry, and has worked it up to such rarities as Pink-crested Touracos, with lesser lights in the shape of Melba Finches, Rosy-faced Love Birds, etc. Members may say, "the Editor is very ignorant, *we* have known Gamage's live stock department for ages." I was written to by Mr. Newmarsh, who by the way is assisted by one who was a bird-keeper at Woburn Abbey, asking me whether I wanted Pink-crested Touracos.

Happening to be in London a few days afterwards, I went. On entering the emporium, that I believe is the correct word, there is no sign of Touracos or of any other bird; one passes through mowing-machines, wearing apparel, and numerous other commodities for supplying oneself with food and clothing, etc., until at the far end, seeing a notice directing you by a kind of downward subway to the Zoological Department, one finds oneself amongst incubators, poultry (I carried off five Silkies), pigeons, and so on; but for Touracos it is a case of "next compartment please," and there in an ante-chamber were the Touracos. One had thought the German

submarines in particular, and the war in general, had made people shy of importing birds, but here last April were four individuals of the most beautiful species of the family, besides a large cage full of Rosy-faced Lovebirds, and in other cages, quite a dozen Melba finches, if not more; all lately arrived from Africa. I began to wish I held shares in Gamage's. I must have helped to send them up, for I departed with the four Touracos, two pairs of Melba Finches and one true pair of Indigo birds, as well as an incubator and the five Silky Fowls, already mentioned.

Mr. Newmarsh is a great lover of birds, which just makes the whole difference to the birds and the purchasers thereof; furthermore, his father, grandfather, and great grandfather have been aviculturists before him.

Most of the birds are kept in a large and lofty room, looking well cared for. There was a small and rare Amazon, the species I was not sure of, but it may have been a White-fronted Amazon in immature plumage. There were other members of the Parrot family; really the young Rosy-faced Love Birds were a fine lot and a big lot. And mammals too. A small lemur, perhaps a "Bush-baby" from Africa, very tame and confiding, with slender fingers; some Ichneumons, etc.

To return to the subject of the Touracos, I may mention for the sake of those who have never seen them, that they are the same size, style and general colouring as in the case of the White-crested Touracos, which have an edging of white on the crest of the green head; but this other species has the whole crest of a beautiful rose-red, and still the white edging to it. The face and chin is greyish white; the whole upper body and tail, iridescent shining blue bottle green with blue and purplish lights, the tail being bluer than the rest, the lower body, dull green, the flight feathers as in some of the other Touracos, brilliant cardinal red; the bill, primrose yellow. I believe its Latin name is *Turacus erythrolophus*.

Touracos should be fed upon bananas, scalded dried figs and other fruits, cut up and mixed in some good insectivorous food. They need plenty of room, and a warm shelter in winter time. In due season they delight in grapes, strawberries, and so on, and are not averse to mealworms. They will become very tame, uttering

their loud croaking notes as a welcome. Furthermore they will nest in an aviary, but have a tiresome habit of not succeeding in rearing their young. Cf. Vol. VII. p. 350, 1908-1909. About the size of a Cuckoo, they are distinctly related to him I believe, and have the same formation of the feet, two toes in front and two at the back.

H. D. A.

THE BREEDING OF THE AFRICAN WHITE-EYE.

Zosterops viridis.

[By Dr. L. LOVELL-KEAYS.

May 1915 sees me a very happy man wanting to shake hands with myself. Come with me, I say, and I will show you why. Our path leads to a space enclosed with fine wire mesh and planted in it a large variety of shrubs—evergreen and flowering—a refreshing green sward, well-trodden gravel pathways and a most inviting bath for the birds. The growth is so dense in parts that one does not realise the space enclosed is nearly 30 feet by 20 feet, but that is the size in round numbers, and the size is an important factor in view of the highly interesting event that has taken place there lately. The scene on a sunny morning is enchanting. Vividly coloured Parrot Finches chasing one another for a time. Then one of them feels lonely, perches on the top of Rambler rose and filling his tiny lungs very full sends forth a defiant chirruping call. As we watch, loving little Grassfinches (*P. acuticauda*) flit about and with courtly bow and coaxing song, sing aloud the praises of their lady love. Their little gorgettes swell out with unmistakeable pride at the possession of so charming a bride. Leaving our Grassfinches we notice the dapper little Hooded Siskin chanting his song to Helios for his kindly warmth, reminding him of his sunny home in the far west. The brilliant orange red stands out against the tender May greens, but alack! his modestly attired spouse seems little interested in either him or his song. For certainly the song is lost in the more resonant notes of the gay Indigo Bunting sitting proudly on a pear tree and pouring forth his morning melody. But

as we look we notice a little creature nearly as small as our Siskin, as active as an ant, searching every nook and cranny, now hanging head down, now upside down, jumping, flitting, perching, flying, calling, singing, catching, prying, and everything so quickly that before you realise it is a bird you are looking at, it is gone or perhaps another has joined it. This is my little friend *Zosterops viridis*. He has made a long, long journey to make me happy, and I, in my turn, must endeavour to do to him as he has done to me. That is why I give him (*and* her too, for I have a pair of them) plenty of space, and a famous old plum tree that once disfigured the back of my house and harboured countless hordes of insects. I allowed to throw out the long shoots, and then "adveniente autumnno" the axe was laid to the root and the tree planted bodily in the aviary. An Evangeline rose now rambles over and lingers on the new stems that gave such promise for the forthcoming year.

Most of us know the *Zosterops*. That sweet, quaint little bird, full of life and activity, with its complete costume of yellowish green—self-colour the salesman would call it—and that characteristic white ring round the eye, which gives the bird the scientific name of *Zosterops*. I believe the derivation is Greek and means a girdle or circlet about the eye. In Africa it is sometimes called the "Spectacle Bird" or "White-eye." The eye is of course black, or apparently so, and it is only the palpebrae that are white. Still "white-eyes" is good enough and reminds one very pleasantly of "Goldie Locks" and other charming personages of our childhood's days. We notice our *Zosterops* has a small body with fine delicate legs, a sharp-pointed beak—obviously designed for getting into crevices—an eye which nothing escapes, and a fearlessness which we look for in an insectivorous bird, but seldom find in the average hardbill. Softbills trust in man and will learn to seek his aid in rearing their young, but with hardbills we have no part or lot in the matter.

I obtained my *Zosterops* early in 1914, and by the merest chance they turned out to be a true pair. The sex is one quite easy to tell in an aviary. The cock is, as Dr. Butler points out, much more snake-like and somewhat lighter in colour. He is also I found out less unselfish. I can tell my birds instantly, even when only

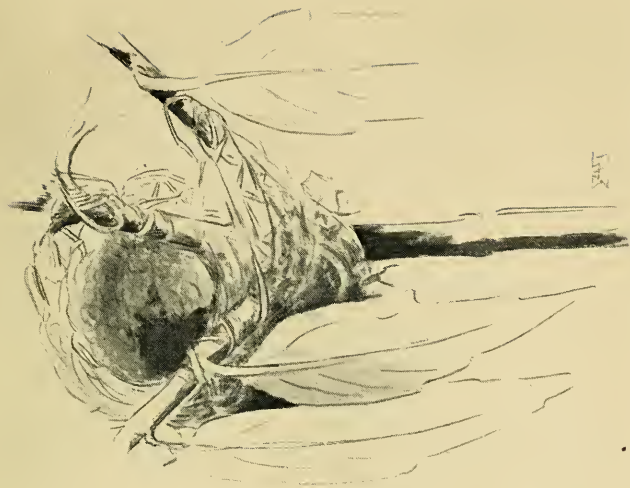
one is in view. They made a very good attempt at breeding in 1914 and built a nest of hay at the very top of the aviary and hidden in a *Retinospora*. There were two eggs of very pale greenish blue, somewhat elliptical in shape and large for so small a bird. This seems a characteristic of softbills, as far as my experience goes. Both eggs hatched out and the parents fed most assiduously, but I was the murderer I believe. I offered the parents gentles and black aphids from an elder tree. The young died the same day, aged about 5-6 days as far as I could determine.

They made no further attempt at nesting in 1914, and in November I gathered them up and put them with my most treasured feathered possessions in my best bird room, I didn't doubt the wintering-out-of-doors theory a little bit, but then you see I wasn't taking any risks with my favourites. Consequently they went through the winter living entirely on sop made of sponge cake and Swiss milk (mixed, of course, with hot water) and banana as their staple diet. Insectile mixture was offered to them and oranges and grapes occasionally. They seldom if ever took mealworms, for *Zosterops* don't like the ground at all. They suffered no appreciable moult, and never looked sad, sick, or sorry. They never bullied others nor tolerated interference themselves. They behaved themselves like perfect little gentle-folk.

About April 5th I noticed the cock bird carrying grass, which I had supplied to amuse the Parrot Finches to keep them from "chivvying" the other birds too much. So I decided to risk it and turn them out into my Grassfinches' aviary. They at once set about nest-building but seemed to lack something. I tried various things, but found that string well ravelled out, tow and horse-hair pleased them best. With this they constructed the most exquisite little cradle nest it has ever been my lot to see in an aviary. I am no draughtsman, so I got Mr. E. A. Jones, of East Hoathly, to make a drawing which is being reproduced for the purpose of illustrating this article. It was built in an *Aucuba* in a very well-sheltered corner and quite low down. I could watch every incident as it happened and I will quote from my diary as I noticed the events. The nest is singularly small for the size of bird, and measures but $1\frac{3}{4}$ inches in diameter and is two inches deep. It is quite globular and very



NEST OF ZOSTEROPS VIRIDIS BUILT IN THE AVIARIES OF
DR. L. LOVELL-KEAYS.



NEST SHOWING METHOD OF SUSPENSION AND
ATTACHMENT.

(Outer leaves removed.)

frail, but it served its purpose admirably. The cock did most of the nest-building, but the hen certainly did a great deal of the final touching up.

Finally, on April 18th the first egg was laid, and by its size one might have suspected the wrong bird had laid in the nest. It was, as already described, more elliptical than oval and of a very pale greenish blue colour. The hen began to sit as soon as the first egg was laid, and subsequent events proved the un wisdom of this. The birds took turns to sit and I don't remember ever seeing the cock feed the hen on the nest. I doubt if he ever did.*

On Thursday, April 22nd, there were three eggs, and this was the first time I had seen the nest untenanted, as the birds sat very tight.

Nothing of note happened until April 24th, when the hen bird looked very puffy and I feared I was going to lose her. However, it passed off and by April 27th she was well again, but one egg had disappeared. I don't think there are any mice there, and there are no reputed egg-eaters in the aviary.

Excitement was running high on April 29th, for I noticed the Zosterops were feeding, but I did not like to risk too close an inspection, besides which both birds never left the nest at the same time. However, on April 30th, I seized my opportunity and saw two whitish little birds, not a vestige of clothing on and with long necks which shot up and simply quivered with suppressed excitement and expectation. The young were obviously very vigorous and healthy. Even at this stage one young one appeared older than the other—about 24 hours I should say. The parents fed the young on small gnats, flies, etc., which fortunately abounded at the time. The weather was simply perfect. Not a drop of rain and bright hot sun all day. The Fates were propitious this time and I felt confident of their help.

The little birds grew rapidly until May 4th, when I noticed that the young were still flesh-coloured but with very dark-coloured feather tracts. Eyes not yet open.

On May 5th I had a very thorough examination, as a good

* When the birds nested again the cock bird did feed the hen on the nest, but not as a regular practice.

opportunity presented itself, and the birds began to leave the nest together frequently. One young bird was much bigger than the other, and was more forward in other ways. The general body colour was flesh-coloured with a little white down on the head. Well-marked dark-coloured feather tracts, especially on the older bird. The older bird was now about seven days old and the parents gave it its first mealworm. I had bred a few of these myself and carefully picked out very small worms about half-an-inch long and those with soft skins.

For the next few days the babies were brought up chiefly on small mealworms, and of course any wandering or misguided hymenoptera or diptera that might stray into the aviary.

On May 6th *Zosterops* No. 1 was just beginning to open its eyes, and there was a kind of hog's mane along the back and sides of its body. By May 7th the eyes of No. 1 were distinctly open.

The quills of the elder bird began to split on May 8th, and one could see that the quills were the precursors of feathers. The primaries were growing very fast by this time and the growth and development of the first bird was simply amazing. The "little brother" appeared to be quite two days behind it. Mealworms were taken very freely and this date is remarkable for the fact that small insects ceased to be the staple diet, but the birds gave the young sop for the first time and, I believe, banana.

On May 9th sop was frequently given to the young, and mealworms when they could get them. The feathers showed a distinct green tinge. The second young one now began to make up for lost time and made considerable progress, but obviously the parents preferred the first born; also the first born was very greedy. I find a note stating that the sun was very hot and the wind N.E.

By May 10th *Zosterops* No. 1 was fully feathered and he was looking very alert. No. 2 was just showing the quills.

On May 11th I was looking at the babies from quite a distance when No. 1 looked steadily and suspiciously at me, then suddenly with a loud cry left the nest. No. 2 caught the infection and blundered out after No. 1. I at length succeeded in catching both young birds and putting them back, but No. 1 was not to be denied his liberty, and finally got right away, but No. 2 I did persuade to remain at home a little longer.

On May 12th No. 1 was hopping freely about from twig to twig and getting all the tit-bits from his fond parents, but No. 2 was neither forgotten nor neglected and continued to grow apace, and to my chagrin I noticed that restless look in his eye.

May 13th was the worst day we have had for months. It rained incessantly for 36 hours, *i.e.* from May 12th to May 14th. I dare not go near the aviary, fearing lest I should disturb the young birds and make them forsake a sheltered position for an exposed one. However, the rain stopped on Friday, the 14th, and I had a good search for my young friends. No. 1 was easily found and was certainly "going strong," and I noticed that for the first time he didn't wait to be fed, but took it from the old birds, *i.e.* he pecked at it, and I take it that this was the first step towards catering for himself. The young at this time is quite unlike the parents, with a large gape which is *apparently* carried down as two yellow moustachial streaks down each side of the neck, giving it a very clown-like appearance. There is none of the roundness and nattiness about the young that one finds in the parents, and of course no white palpebral ring. The tail is quite short, fan-shaped, and looks like a series of short paint brushes stuck in the hind part.

As to Zosterops No. 2 I could find no trace of it, though once or twice I imagined the parents went to feed it. At any rate, I never saw a sign of the little bird again and I fear it must pass out of the picture for good and all.

On May 15th our young Zosterops first assumed the hanging posture so peculiar to the Tits and other insectivorous birds. This was evidently the next step in hunting for its prey. The hen bird was still mothering her first love and it was a charming sight to see her protecting her infant, now nearly full-grown, under the shadow of her outstretched wing.

By May 16th the young one was flying freely from tree to tree and I noticed that he deliberately preened each of his feathers, particularly the primaries and tail-feathers, himself; obviously he was equipping himself for the adventures of life. The old cock bird began to drive the hen to nest again and to construct a new nest in an Evangeline rose.

On May 17th I thought I could detect a very faint trace of a

white ring round the eye. The tail was growing rapidly and the little fellow rapidly becoming independent of its parents, taking flights on its own account. Parents no longer so anxious to feed their offspring; in fact the cock became quite an egoist. The hen only feeds the young one very occasionally and then he helps himself and is no longer crammed.

By May 18th both old birds actively building a new nest and the young bird flourishing in spite of continued and torrential rains.

May 22nd. A later note shows my young *Zosterops* searching for insects among the trees and shrubs. The hen bird has completely forsaken her child. The old birds have completed a new nest as beautiful as the old one, and already there is an egg in it. The cock however still gives the adolescent *Zosterops* an occasional tit-bit and they chum up together on cold days. The tail-feathers are nearly complete, but there is no mistaking the young bird for he looks quite unlike his parents. The white eye is now distinctly indicated. Since May 18th we have had more rain, but the young *Zosterops* is made of tough material and takes little notice of either rain or N.E. wind. Here we must leave our *Zosterops* and make preparations for the advent of another family, but not without wishing him a successful journey as he goes forth to the battle of life.

June 20th. On going to press I have to record another young *Zosterops* fully reared. Three were hatched. One disappeared soon after and another fell out of the nest when a week old. The third survived and is doing well. All four *Zosterops* are excellent friends and can be seen frequently cuddling up together. The first young one is almost indistinguishable from the old birds now, but is a distinct yellowish green and therefore much lighter in colour. His "white eye" is fully developed. Like Barabbas, however, he is a robber, and has been known to steal the new baby's mealworm not only from the parents but from the baby himself. Otherwise his behaviour is exemplary.

[The Indian *Zosterops* has been bred in England, but not *Z. viridis*, as far as we know. Dr. Lovell-Keays is therefore entitled to a medal.—ED.]

CUCKOOS' HABITS IN THE BREEDING SEASON.

By HUBERT D. ASTLEY.

On the 25th of May—such a gorgeous morning—I was awakened at 5.30 by the sonorous notes of a Cuckoo, which must have flown close past two of the open windows of my bedroom, and then I heard him still calling and evidently stationary within 60 yards of me.

I hurried out of my bed. Directed by the sound of his fine ringing voice, and really there is no sound more wonderful at such close quarters, I saw him perched on the top of the pergola which spans a flower-edged brick path between the moat, surrounding the house, and a pond. His long tail was pointing upwards, the feathers spread, and he was evidently in a state of excitement. Cuck-cuckoo-cuck-cuckoo ; his notes resounding. And then he flew down to the edge of the pond, whether to drink or not, I could'nt see, for the solid oak beams and uprights of the pergola hid him from view. At that moment my eye was attracted to a fluttering and struggling of wings just where some honeysuckle has grown up one of the oak uprights, and almost underneath where the cuckoo was perched. Seizing my field-glasses, I was greatly thrilled to find it was a female cuckoo, which was hanging on to the squared side of the timber, partly supporting herself by the growth of honeysuckle, and inserting her head into a smallish aperture in the wood, probably one cut out originally for the end of a transverse beam, when these old timbers formed part of the roof of a barn. She remained like that for at least six or eight minutes, constantly popping her head into and out of the hole. Once a male Chaffinch swooped at her, backwards and forwards, uttering a 'pink-pink' of alarm or indignation, and the Cuckoo, still hanging on to the upright beam and still fluttering her wings, turned up her head at the Chaffinch and opened her mouth so that I could plainly see her orange gape.

Then she returned to her business, popping her head into the hole again, as if she was either eating or arranging something. At last she flew off with clucking notes, and was immediately followed by the male. I heard his passionate cuck-cuckoo, cuck-cuckoo,

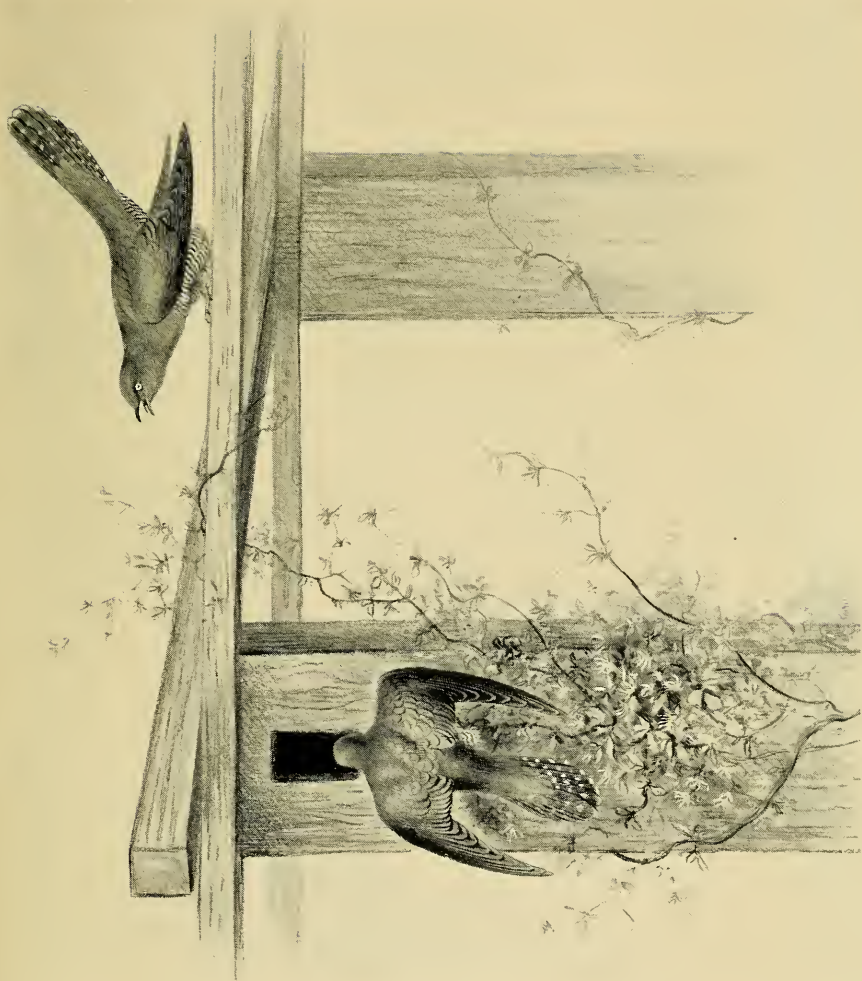
dying away as he disappeared round the corner of the house. Then I hurriedly dressed, took a light ladder, propped it up against the pergola and peered in. A Pied Wagtail's nest with two eggs, *and* a Cuckoo's! all most neatly arranged.

She must, after depositing the egg from her mouth in the nest, have been busily arranging things so that all should look well on the Wagtail's return. Of the latter I saw nothing. It was curious that a Chaffinch should have taken up the cudgels. It was an uncommon scene, which more than repaid one for being awoken at 5.30 a.m.

But I certainly did, when I saw how busy she was, begin to think is she "sucking little birds' eggs to make her voice clear." It looked so very like it. The egg was bluish, but speckled. Decidedly blue in comparison with the colour of the Wagtail's eggs, but still not really blue, but as I have said of a bluish tint. I left it, although I pity the fate of the poor baby Wagtails, which will inevitably be hoiked into the moat, for the upright beam is on the verge of it, the aperture in which the nest is built, facing it.

What doubles the interest of this episode of a May morning is that the male Cuckoo was quite evidently excited about it; although such a thing has before now been observed. Whether the female Cuckoo had just arrived with her mate, I don't know. I am inclined to think so: for even as I saw her she was a long time at the nest; which I may add is eight feet from the ground.

And then people talk of the instinct of the lower creatures as something that compels them to act, without possessing reasoning power! In the first place, the Cuckoo would have to watch the water-wagtails, for I cannot suppose she would search in places where she would have to cling on with evident difficulty in obtaining a foothold, unless she was sure there was a proper receptacle for her egg. And on seeing the Wagtails building, she would continue to watch. No human knew of the nest, although I for one constantly walked past it, and constantly saw the Wagtails in its near vicinity. Indeed I had gone so far as to wonder where they were building; for last year they reared three broods in a hole in an old stone wall, and this year the hole was vacant. Moreover the Cuckoo waits until one or two eggs are laid by the foster-parents of its future off-



CUCKOOS AND WAGTAIL'S NEST.

spring. Again, the bird must deliberately keep an eye on all that they are doing, for don't tell me that Cuckoos invariably come across nests by chance, in which the full complement of eggs is not yet laid; and do Cuckoos ever make mistakes, putting an egg in a nest where the other eggs may be ready to hatch. I don't think so?

My pair of Cuckoos arrived together, as far as I could make out, just as they departed together, and must have known beforehand of the Wagtails' nest, and that the moment had come for the egg to be deposited. All of which shows as much power of reasoning along its own particular line, as we ourselves possess in ours; an absolute result of forethought; just as those abominable Sparrows most deliberately watch House Martin's building their nests, and rush up with hay and feathers directly the poor Martins have so far completed the nest as to leave a sufficient space for the Sparrows to fill it in with their untidy gatherings of material. As far as I can see, when once the Martins have fully completed the nest, leaving only a small entrance under the eaves, the Sparrows cannot very easily enter. I have seen the little brutes sitting on a roof, quite evidently watching the Martins, and letting them diligently ply backwards and forwards with mouthfuls of mud, until the nest forms a solid platform for the Hun birds!

Why! they just make me *mad*! There was such a Martin's nest above one of my bedroom windows, which I could easily reach with a hand, and I daily, indeed twice daily, pulled out the hay and feathers that the Sparrows put in, yet still they went on, German Kaiser-like, bombarding other birds houses, when they might be content with their own.

Perhaps it would be best to let the little horrors build their nests and then one might seize on the bird and wring her interfering neck! Last year three pairs of Martins were building in the courtyard, much to our delight, and if three pairs of Sparrows didn't deliberately take possession just when the mud foundations were sufficiently advanced for them to do so: and the merry little Martins had to begin all over again somewhere else.

If Sparrows acted by so-called instinct, why don't they build their own untidy nests as they can do if they choose. Unfortunately they reason. "Here you are, a great deal of trouble saved; let

“those silly Martins, which haven’t the pluck to remain all through winter storms of stress and weather as *we* do, make the foundations, and then we’ll just finish it off.” *Oh!* I’ve no patience with them. Regular Germans! Ugly; common; and bullying! and moreover distinctly spies.

So are the Cuckoos for that matter, as far as espionage is concerned!

ECONOMY AND MICE.

By Dr. A. G. BUTLER.

Do what he may, the aviculturist as a general rule finds it almost impossible to keep mice out of his aviaries; and when these vermin have once established themselves, they will (unless circumvented) devour more food than the birds. A cemented concrete floor does not suffice to keep mice out of an aviary; for when three parts grown they can easily slip through half-inch wire netting.

As a slight illustration, I may mention that each week for years past I have twisted millet-sprays into the wire-netting of one of my aviaries for the benefit of my Gouldian* and other finches, and although (excepting when first renewed) I rarely see any finches upon them, the seed has usually wholly disappeared from them within three or four days. Concluding that mice were responsible for the rapid consumption of the seed, I tried suspending it at the end of a long wire from the roof of the aviary, with the result that it now lasts from two to three weeks without renewal.

In like manner seed-hoppers hung upon the wirework are rapidly cleared out, and open pans of seed, if placed upon the floor or upon a shelf, are not only freely plundered, but are liable to be fouled by the vermin and thus rendered a source of danger to delicate birds. To lay down poisoned food outside an aviary is risky, since there is no certainty that mice may not carry some of it inside and thus cause death to one’s pets. The much advertized mouse- and rat-virus used to be very satisfactory; whether it is now prepared with less care than it formerly was, or whether it is kept too long

* The last of these, a fine male *P. mirabilis*, born in Sept. 1905, died Jan. 19th, 1915.

by the chemists from whom one orders it I don't know, but it is certain that the last three tubes which I purchased were entirely ineffective.

Traps of various kinds are useful until the mice get accustomed to them, after which they become very uncertain. I believe I have tried most of those on the market with very varying results. In my youthful days the wood and wire clap-trap was considered quite satisfactory; now one may set a dozen of those and not a mouse enters one of them: there used to be a double trap, the bait for which was contained in a central depression with a perforated zinc cover: so far as I remember, for I have not seen one of these traps for some forty or fifty years, the entrances at each end were formed after the pattern of a lobster-pot.*

The wooden garrotting traps with two or three openings, encircled when set by wire nooses passed through slots and attached to powerful springs, seems to have gone out of fashion; they were a bother to set, as the nooses were held in place by cotton thread passed through small holes pierced at top and bottom of the trap. Behind these threads the bait—usually flour—was placed, and to get at it the mice had to bite through the cotton, which of course released the spring and promptly choked them. A somewhat similar, but better, German tin trap of circular shape with about eight holes round the sides, used to be obtainable; in that the spring nooses were held down by hooks after the pattern of the clap-trap. I have known the wooden type to catch three mice in a night and its German representative from two to four; but after a time the cunning little quadrupeds become suspicious and ignore them.

I have heard of, but never seen, a dead-fall trap; used, I am told, by the Sussex peasantry and stated to be very deadly; I believe it flattens its victims: the explanation of the mechanism of this trap was given to me by a Sussex-born bricklayer and was certainly not lucid. I fancy it must have been worked somewhat on the principle of the ancient brick trap for catching sparrows, only there was a tunnel through which the mouse ran, and in the middle of which the weight fell.

* I have a vague remembrance also of a domed wire-trap made with similar entrances.

Take them all round there is nothing to equal the break-backs for execution, although after a time one may have a dozen of these set in every corner most frequented by the vermin without catching one for several weeks in succession and then, without any apparent reason, you may secure one or two every night. The chief objection to the break-back trap is that it occasionally catches a mouse by the hind leg or tail and thus causes unsatisfactory suffering, although doubtless our conception of the pain is far greater than it actually is, since a mouse caught by the leg or tail will sometimes bite it off in order to escape.

One of the most ingenious and complex contrivances is the water-trap: I fear if I tried to explain the mechanism I should be unable to make it clear to my readers, but it can be bought at most oil-shops and ironmongers for one or two shillings. When I first began to keep birds I purchased one: and, when new, it used to entice from two to four mice to a watery grave every night; but after a time they refused to enter it and the tank rusted through. Years later I bought another, on the back of which was a heart-rending picture of two mice weeping into pocket-handkerchiefs, presumably over the death of near relatives.

I had this second water-trap set for months and not a mouse entered it, so I put it aside as useless. A month or two ago my gardener proposed to set it again and I told him that it was no use; he could not see why, nor could I; but, for a jest, I said to him—"Can you wonder that the mice fight shy of the trap with that terrible picture staring them in the face?" I don't know whether he thought there was anything in it, but he tore off the illustration, set the trap, and that night a young and foolish mouse was drowned, but that was the last for weeks; then he set it again and caught three in one night, but since then it is rarely of any use.

Of course the quickest way to demolish mice is to pour water down their holes and knock them over as they rush out, only they make so many holes and most of these are unoccupied and the water makes such a mess; besides it is not exactly pleasant work to knock over the little wretches with a thick stick, though it is perhaps as merciful a death as any other when it has to be done, I

generally get my gardener to execute ; he is quick and with moderate luck few escape him.

Now, although one must do all one can to reduce the numbers of these little pests ; it is, at the same time, best to continue to place food-pans out of their reach. Some years ago I had several contrivances made to suspend from wires hooked into the half-inch netting at the top of one of my aviaries : a saucer-like chinaware gas-cover with central hole had a short eye-bolt passed through it and tightened in place by a brass nut. It was attached above to the suspended wire and from below a short chain was attached, terminating in a hook on which a small metal cup with wire handles was hung : in the latter the seed was placed, and any mouse which had the temerity to descend the wire, was bound to slip off the polished surface of the saucer and fall about five feet to the cement floor.

This little scheme answered perfectly until the breeding season came round ; then Grey Singing-finches and Cherry-finches decided to utilize the metal cups as nesting-receptacles and consequently threw out most of the seed upon the floor, doubtless to the great delight of the mice : I therefore had to think out some other plan : I went to an ironmonger and asked him if he had anything in the way of heavy metal bases to support an upright standard with small platform on top. He got out some quaint-looking things which he said he sold to publicans, but he did not know what they were used for : I fancy they are rests for foaming beer-mugs, designed to keep the tables clean, as the centre is raised level with the outer rim and between the two is a shallow gutter.

Through the centre of these iron bases I had a threaded hole drilled, into which a smooth cylindrical steel rod about half a yard long was screwed, its upper extremity being screwed into a light circular brass disc. The base of the stand was about 7 inches and the platform at the top about 5 inches in diameter. Upon these an open flower-pot saucer about 9 inches in diameter and nearly filled with seed is placed ; and thus, for years past, the mice have only been able to get what the birds have thrown over ; still where Doves are present this is not a little, since they are of all birds the most wasteful ; they scatter the seed apparently for the mere pleasure of seeing it fly right and left, whereas Finches, ex-

cepting the Whydahs and Song-Sparrows, only do it in order to uncover their favourite article of diet. Parrakeets are the least wasteful feeders in my experience, but they drop all the husks in the pan until the seed becomes entirely hidden.

It has been asserted that waste may be prevented by having a separate hopper or pan for each kind of seed. Theoretically that looks all right, but I have tried it: I found that the finch who was looking for hemp and alighted on the canary hopper kept on stirring away until the entire contents were transferred to the floor, and the same is true of the open pan.

I thought out another plan for saving seed from mice, which I adopted in an outdoor aviary, the back of which was boarded and smooth. I had two square zinc pans made about three inches in depth, the back being made high and pierced in the centre by an inverted keyhole shaped opening. The rounded part of the keyhole was slipped over a screw, driven well into the woodwork at a good height from the floor in the covered part of the aviary, and then lowered through the slot of the keyhole on to the body of the screw, so that it could not slip off, and thus the pan was maintained at right angles to the back of the aviary. In the centre of this pan I placed a smaller and much shallower circular zinc pan which I filled with seed: thus all seed thrown over remained in the deeper outer pan; and, when the husks were blown off, could be mixed with the new supply. I believe Miss Alderson told me that she had adopted a somewhat similar plan in her own aviaries.

MY HUMMING BIRDS.

By A. EZRA.

How little Londoners realise as they walk down Mount Street on their way to Berkeley Square, or to Hyde Park, etc., or as they buzz past in taxi-cabs that they are passing a house in which two Humming birds are buzzing still more rapidly!

Our members will be interested to know that both of them are still alive and in perfect health, in spite of the London soots and the oft-time smoky atmosphere. The Garnet-throated Carib (*Eulampis jugularis*) I have had a little over fourteen months, and

the tiny green Ricord's hummer (*Sporadinus ricordi*) from Cuba, just over a year. The former went through his second moult with me in May and is in robust health, the latter had then just completed his moult, also for the second time since I have had him, and looks a real gem; indeed they are two of the healthiest and strongest birds I possess and look like living quite a long time.* They are kept in separate cages, but are given fuller freedom in a room for at least an hour every day, when they dart about, whirring and flying backwards and forwards at a high speed, the vibration of their wings being extraordinarily rapid. To this daily exercise I attribute my success in keeping them in such perfect health, in addition to scrupulous cleanliness. They are fed exactly the same as my Sunbirds, and do well on this liquid food, but both Humming Birds will eat aphids, when obtainable, although they will only take the insects when the latter are flying. They either do not care to pick them off the tray of the cage, or else it is not their nature to do so; the little Green Ricord's hummer buzzes along close to the bottom of his cage, thereby causing the aphidæ to fly up, when he quickly swallows one after another.

Not only in the summer time but also in winter the Humming Birds are sprayed every morning with tepid water, after which they complete their bathing by slipping in and out of the wetted leaves of a small plant placed in their cages.

They are more pugnacious than ever, especially the tiny one who is a demon for fighting, so they are never let out of their cages at the same time. Once they have had enough exercise, they will always go back into their own cage. The Ricordi has a song which sounds like the noise of the sparks of a wireless while working. Of all birds I have ever kept, I find Humming Birds the most fascinating and intelligent, and my two birds give me any amount of pleasure. I consider myself most fortunate to have had such success with these two birds, which were the first and only ones I have ever had.

My Indian Amethyst-rumped Sunbird has gone through his fifth moult with me and looks perfect now. Five years sounds a long time for a tiny bird like that to live in good condition.

* We touch wood.—ED.

ENGLISH NAMES FOR THE PARROTS.

By Dr. E. HOPKINSON.

*(Continued from page 230.)*PHILIP ISLAND PARROT, *see under* KAKA (2).*PHILIPPE PARROT, *see under* HANGING PARRAKEET, JAVAN.PHILIPPINE COCKATOO, *see* RED-VENTED COCKATOO.

PHILIPPINE HANGING PARRAKEET.

PHILIPPINE PARRAKEET, *see under* HANGING PARRAKEET, PHILIPPINE.PHILIPPINE PARRAKEET, VAR. A., *see* BLUE-CROWNED HANGING PARRAKEET.Pigmy, *see* Pygmy.PILEATED PARRAKEET.=*Porphyrocephalus spurius* of Australia.

Also known as the RED-CAPPED PARRAKEET, and in Australia as "BLUE PARROT," and sometimes as "KING PARROT."

PILEATED PARROT (Latham).=*Pionopsittacus pileatus*, of South America.Sometimes known as the *Red Pileated Parrot*. Another of Latham's names was *Mitred Parrot*.

"PINK COCKATOO," one of the popular names in Australia for LEAD-BEATER'S COCKATOO.

*PIONUS, a name sometimes formerly used for such birds as the RED-VENTED PARROT (*Pionus*), and less commonly for LEVAILLANT'S PARROT (*Poeocephalus*) and its allies.

PIONUS PARROT, same as PIONUS. "BRONZE PIONUS PARROT," a dealers' name for both the BRONZE-WINGED and DUSKY PARROTS.

"PLUMHEAD PARRAKEET," the BLOSSOM-HEADED PARRAKEET.

"POLL," "POLLY," "POLL-PARROT," common popular names for any Parrot, particularly for the GREY.

*POMPADOUR PARROT, an old name for the TABUAN PARRAKEET.

*POPINJAY, *POPINGAY, *POPINJAY-PARROT, old names for a Parrot.

PORPHYRY-CROWNED LORIKEET, Gould's name for the PURPLE-CROWNED LORIKEET.

"PORT LINCOLN," "PORT LINCOLN PARRAKEET," Australian popular name for BAUER'S PARRAKEET.

*PRASINE PARROT, *see* ALL-GREEN PARRAKEET.

PRASLIN PARROT, one of the VAZAS (q.v.).

PRINCE OF ESSLING'S PARROT, *see under* KAKA (2).

PRINCESS OF WALES' PARRAKEET, the ALEXANDRA PARRAKEET.

*PSITTACULE, obsolete book name for a HANGING PARRAKEET.

*PSITTAKE, an old name for a Parrot (*Psittacus* anglicised)."PURPLE-BREASTED LORY," a dealers' name which usually means the BLUE-TAILED LORY, *see under* RED LORY (3).

PURPLE-CAPPED LORY. Latham's name (now the one generally used) for *Lorius domicella*. The PURPLE-CAPPED LORY, VAR. A., and the *SECOND BLACK-CAPPED LORY of Edwards. *RAJAH LORY of Latham. Also sometimes known as the BLACK-BONNET LORY, or more rarely as the BLUE-HEADED LORY or LADY LORY.

The genus *Lorius* contains about a dozen species; those which have received English names are:

- (1) *L. hypaenochrous*, the LOUISIADE LORY.
- (2) *L. lory*, the THREE-COLOURED LORY (q.v.).
- (3) *L. cyanauchen*, the BLUE-NAPED LORY.
- (4) *L. domicella*, the PURPLE-CAPPED LORY. (See above).
- (5) *L. chlorocercus*, the GREEN-TAILED LORY.
- (6) *L. tibialis*, the BLUE-THIGHED LORY.
- (7) *L. garrulus*, the CHATTERING LORY (q.v.).
- (8) *L. flavopalliatu*s, the YELLOW-BACKED LORY.

PURPLE-CROWNED LORIKEET.

PURPLE-RINGED PARRAKEET, see BANDED PARRAKEET.

PURPLE-STREAKED LORY, see under RED LORY (II).

"PYGMY AMAZON," an occasional dealers' name; ?=SALLE'S A., see under AMAZON.

PYGMY PARRÓT. (1) A name under which Latham described *Hypocharmosyna pygmaea*, a close ally of the PALM LORIKEET. (2) A book name for the *Nasiterninae* of New Guinea, etc. They have also been called SISKIN-PARROTS and DWARF-COCKATOOS.

"QUAKER PARRAKEET," the popular and generally used name for *Myopsittacus monachus*, also known as the GREY-BREASTED PARRAKEET (Latham). Other names: QUAKER PARROT, MONK, MONK PARRAKEET, MONTE VIDEO PARRAKEET, *CHILI PARRAKEET (Latham), *WIDOW PARRAKEET (occasional). "LORO" in South America. The only other member of this genus is LUCH'S PARRAKEET (*M. luchi*).

QUAKER PARROT, see above.

QUEEN OF BAVARIA'S PARRAKEET, see GOLDEN CONURE.

"QUEEN PARROT," sometimes used as a popular name for the female KING PARROT.

RACKET-TAILED PARROT (Latham).=*Prioniturus platurus*, or any member of the genus. They are also occasionally known as MOTMOT PARROTS.

*RAJAH LORY, one of Latham's names for the PURPLE-CAPPED LORY.

RAMSAY'S PARRAKEET, same as MASTERS' PARRAKEET.

RAVEN COCKATOO, a book name for some of the BLACK COCKATOOS.

RED LORY (Latham), the common name for *Eos rubra*. Other names given by Latham were MOLUCCA LORY, *BLUE-TAILED LORY (this

now used for *E. histrio*), *BLUE-FRINGED LORY, *LONG-TAILED SCARLET LORY. The dealers' name, SCARLET LORY, should always mean this bird, but both the CHATTERING LORY, the KING PARROT, and some of the ECLECTI are often also thus designated.

The genus *Eos* contains about 15 species, the better known being :

1. *Eos cyanogenys*, the BLUE-CHEEKED LORY.
2. *E. reticulata*, the BLUE-STREAKED LORY, other names for which are BLUE-NECKED LORY (Latham), BLUE-STRIPED LORY, RETICULATED LORY.
3. *E. histrio*, BLUE-TAILED LORY, also BLUE-DIADEMED LORY and BLUE-BREASTED LORY. The *INDIAN LORY, and *INDIAN LORY, VAR. A., of Latham. "PURPLE-BREASTED LORY," a dealers' name, probably refers to this species.
4. *E. talautensis*, TALAUT LORY.
5. *E. rubra*, RED LORY, *see above*.
6. *E. wallacei*, WALLACE'S LORY, the *Gueby Lory of Latham. Occasionally mis-spelt "GUERY LORY."
7. *E. variegata*, the VIOLET-NECKED LORY, also often called the VARIEGATED LORY (Latham), *COCHIN-CHINA PARROT and *GUEBY LORY, VAR. A., of Latham ; ? = his GUEBY LORY. Usual dealers' name, "PURPLE-STREAKED LORY." ? = the "VIOLET LORIKEET" of advertisements.

*RED AND BLUE-HEADED PARRAKEET (Latham) = PETZ'S CONURE.

*RED AND BLUE-HEADED PARRAKEET, VAR. A. (Latham) = the GOLDEN-CROWNED CONURE.

RED AND BLUE MACAW (1) = *Ara macao*. (2) The name given by Latham to *A. chloroptera*, now commonly called the GREEN-WINGED MACAW. *See under* MACAW.

*RED AND GREEN INDIAN PARROT, *see under* HANGING PARRAKEET, CEYLONESE.

RED AND GREEN MACAW, the MILITARY MACAW.

*RED AND WHITE-FACED PARROT, *see under* AMAZON, BLUE-FACED.

*RED AND WHITE PARROT, *see* GREY PARROT.

RED AND YELLOW MACAW (1) The RED AND BLUE MACAW. (2) The GREEN-WINGED MACAW.

RED-BACKED PARRAKEET (1) *Cyanorhamphus erythronotus*, the RED-RUMPED PARROT of Latham, and ? his PACIFIC PARROT. Tahiti native name, "AA." (2) An alternative name for the RED-RUMPED PARRAKEET of Australia.

RED-BELLIED CONURE, used for both the BROWN-EARED and RED-EARED CONURES.

RED-BREASTED PARRAKEET. (1) Another name for the BANDED PARRAKEET. (2) *Edwards' name for the BLUE-FACED LORIKEET.

- *RED-BREASTED PARROT, name used by Latham for the BLUE-FACED LORIKEET, and also for the GREEN-NAPED LORIKEET.
- RED-CAPPED PARRAKEET, the PILEATED PARRAKEET.
- RED-CHEEKED ANDAMAN PAROQUET, the ANDAMAN PARRAKEET.
- RED-CHEEKED NICOBAR PAROQUET, the NICOBAR PARRAKEET.
- *RED-CHEEKED NYMPHICUS, *see* COCKATIEL.
- RED-CHEEKED PARRAKEET, applied to both the NICOBAR and the BEARDED PARRAKEETS.
- RED-COLLARED CONURE, an alternative name for the RED-THROATED CONURE.
- RED-COLLARED LORIKEET.
- RED-CRESTED COCKATOO, GREATER RED-CRESTED COCKATOO, *see* SALMON-CRESTED COCKATOO.
- RED-CROWNED LORIKEET, the VARIED LORIKEET, *see under* LORIKEET.
- *RED-CROWNED PARROT, *see* GANG-GANG COCKATOO.
- RED-EARED CONURE, applied to two species, *Pyrrhura cruentata*, also known as RED-BELLIED CONURE; the *SANGUINE PARROT of Latham. Native names, "GNIK-GNIK," "FURAMATO," "TIRIBA." (2) *P. haematotis*.
- RED-EARED PARRAKEET.=*Cyanorhamphus erythrotis*.
- RED-FACED LORILET.
- RED-FACED LOVEBIRD.
- RED-FACED PARROT (Latham).=*Geoffroyus personatus*. A yellow variety was the *Golden Parrot of Latham.
- RED-FACED WHITE COCKATOO, another name for the BLOOD-STAINED COCKATOO.
- RED-FRONTED AMAZON.=*A. vittata*.
- RED-FRONTED CONURE, an occasional name for the RED-MASKED C.
- RED-FRONTED HANGING PARRAKEET.
- RED-FRONTED LORY.
- RED-FRONTED PARRAKEET. (1) The NEW ZEALAND PARRAKEET. This species includes *C. rowleyi*, the Lesser Red-Fronted Parrakeet. (2) Latham's name for the GOLDEN-FRONTED PARRAKEET.
- *RED-HEADED BRAZILIAN PARROT, *see under* AMAZON, VINACEOUS.
- RED-HEADED CONURE, another name for the RED-MASKED CONURE.
- *RED-HEADED GUINEA PARRAKEET,
- *RED-HEADED GUINEA PARROT,
- RED-HEADED LOVEBIRD, } *see under* LOVEBIRD, RED-FACED
- *RED-HEADED PARRAKEET, LITTLE, }
- RED-MANTLED PARRAKEET.=*Platycercus erythropeplus*, the RED-BACKED ROSELLA.
- RED-MASKED AMAZON.
- RED-MASKED CONURE.=*Conurus rubrilarvatus*, also known as the RED-HEADED CONURE, occasionally as RED-FRONTED CONURE, and

popularly as the RED-MASKED PARRAKEET. Native names : " LORO " and " CATANICA."

RED-MASKED PARRAKEET, the RED-MASKED CONURE.

RED-NAPE HANGING PARRAKEET. ?=SCLATER'S HANGING PARRAKEET.

RED-PILEATED PARROT, the PILEATED PARROT.

" REDRUMP," the RED-RUMPED PARRAKEET.

*RED-RUMPED DWARF PARROT

*RED-RUMPED LORIKEET See under HANGING PARRAKEET, VERNAL

RED-RUMPED PARRAKEET. (1) Primarily=*Psephotus haematonotus*, also sometimes called RED-BACKED PARRAKEET. Its common popular names are " REDRUMP," " REDRUMP PARRAKEET," " BLOODRUMP," " BLOOD-RUMPED PARRAKEET." (2) Latham's name for the RED-BACKED PARRAKEET (*Cyanorhamphus erythronotus*) (q.v.). (3) An old book name for the CEYLONESE HANGING PARRAKEET see under HANGING PARRAKEET.

RED-SHINING PARRAKEET, see SHINING PARRAKEET.

RED-SHOULDERED GRASS-PARRAKEET, an occasional book name for the TURQUOISINE.

RED-SIDED ECLECTUS.

RED-SIDED GREEN LORY,

RED-SIDED PARROT.

} see under ECLECTUS.

" RED-TAILED AMAZON," see under AMAZON.

RED-TAILED BLACK COCKATOO, the WESTERN BLACK COCKATOO, see under COCKATOO.

RED-TAILED GREY PARROT, a descriptive name for the GREY PARROT.

" RED-TAILED LORIKEET," see under HANGING PARRAKEET, VERNAL.

RED-THROATED AMAZON.

RED-THROATED CONURE.=*Conurus rubritorques*, also known as the RED-COLLARED CONURE.

" RED-THROATED LORIKEET," see under HANGING PARRAKEET, VERNAL.

RED-THROATED PARROT, the RED-THROATED AMAZON, see under AMAZON.

RED-TOPPED AMAZON.=*A. rhodocorytha*.

RED-VENTED BLUE-BONNET PARRAKEET.

RED-VENTED COCKATOO.=*Cacatua haematopygia*; occasionally, PHILIPPINE COCKATOO. Native names : " ABACAY," " GALANGAI."

RED-VENTED PARRAKEET (Gould), the BLUE-BONNET PARRAKEET.

RED-VENTED PARROT. (1) *Pionus menstruus*, the *BLUE-HEADED PARROT of Edwards and Latham. The MAITAKA PARROT of some writers, and " PIONUS PARROT " occasionally as a popular name. (2) The BLUE-BONNET PARRAKEET sometimes thus designated.

To be continued).

CORRESPONDENCE, NOTES, ETC.

FOUR VARIETIES OF THE *PŒOCEPHALUS* FAMILY.

SIR,—It will perhaps interest you to know that I have now the four varieties of the *Pæocephalus* family, namely, the *Robustus* or Levaillant's, the Brown-necked or *Fuscicollis*, the Jardine's and the Senegal. Seen side by side there is a very distinct difference between Levaillant's and the Brown-necked Parrot, the tail of the latter being almost black, the tail-coverts quite a different shade, end of the bill black at extremity and front of the head red.

I have just mentioned this as I thought it would be of interest to you.

Aigburth, Liverpool.

W. CROSS.

JARDINE'S PIGMY OWLS AND YELLOW-WINGED SUGAR BIRDS.

SIR,—You will be pleased to hear that two young Jardines' Pigmy Owls are fully reared, the third disappeared when a few days old. The young are paler editions of their parents, (one is much less rufous than the other), the white less white and the brown not so warm in tint. When they leave the nest box of an evening, and all four sit together, one can see that the young have not yet attained the full stature of their parents. They feed themselves and talk a good deal over their food. By the way, their call is very like my Wax-wings, the same little trilling twitter, whereas the old birds persevere a stony silence at all times. They are shy and when they find themselves observed they crouch down with their backs towards the visitor and put their heads (seemingly) between their knees. But if one stands still they cannot resist bobbing up every now and then to take stock of the enemy. Probably they will soon become tame or at least indifferent.

My hopes and fears (chiefly the latter) are just now centred on my Yellow-winged Blue Sugar Birds who have built a lovely little nest in the inner part of the shelter. The hen has just begun to sit. If she should hatch and not throw out the young forthwith as did my Rufous-throated Sugar Bird, I wonder if green fly would be suitable food? She is very fond of it herself. The nest is built of tow and lined with those fine shavings of tissue paper which are used to pack chocolates in; it is a deep cup, but I have not dared to look at the eggs. The nest is high up near the roof. The cock sits near her when she is on the nest and follows her closely whenever she comes off. She became very spiteful towards a pair of Blue Sugar Birds just before beginning to build, and I had to move them out of the aviary lest from words she should proceed to deeds.

The cock Blue Sugar Bird is still in immature plumage, but I saw him this morning trying to feed the hen with sponge cake. She would have none of it, evidently "does not care for boys"! ETHEL F. CHAWNER.

NESTING OF THE LESSER WHITETHROAT.

SIR,—It may interest Members to know that on Thursday, April 29th, a Lesser Whitethroat appeared for the first time on a privet hedge in the grounds

of a country house belonging to my friend, Mr. Charles Row, of Long Melford. A nest was commenced on Friday, 30th, and on Tuesday, May 4th, the first egg was laid. In this there is nothing out of the way except that the same thing has occurred three years in succession in almost the identical site. Many typical nesting sites abound quite near, but have never been used, and the rapidity of the domestic arrangements has always been the same. ALLEN SILVER.

WINTER TREATMENT OF FOREIGN BIRDS.

SIR,—I was much interested in Dr. Lovell-Keays' paper on the Winter Treatment of Foreign Birds in this month's Magazine, but I do not entirely agree with all his contentions. He says "Foreign birds if left to their own devices will not use a shelter. This, in my experience, is only the case where the aviary contains a large amount of *natural cover*. Where the flight is simply furnished with branches of trees for perches my birds go inside at night, and they are doing it this hot weather, when one would think that they would be much more comfortable outside. Into two of my aviaries the birds were only introduced late in the Spring and no attempt has been made to *drive them inside*. With his other conclusions I am in agreement, but go still further and think that it is absolutely necessary that all young birds bred in the aviary should be taken indoors in the Autumn, and kept there until after the Spring moult.

You will be interested to hear that I have bred *Melopyrrha nigra* this Spring, after nearly succeeding last season. I also have now incubating pairs of *Chloris sinicus* and *Conurus ocellaris*. I believe that neither of these species have been bred in Great Britain. W. SHORE BAILY.

Boyers House, Westbury, June 8th.

ADVERTISEMENTS IN THE MAGAZINE.

SIR,—I note your remarks with respect to advertisements in the *Avicultural Magazine*.

I should like to say that I have over and over again urged on our Editors some different system of advertising so as to attract our members. By the present arrangement advertisements have to be posted on the 25th of each month; it has often happened that the Magazine has not reached us until a week after the opening of the month, you will at once see what a length of time elapses before being able to purchase or dispose of anything.

I have suggested, and do so again, that the advertisements should be on a separate slip of paper, to be inserted in the Magazine at the last moment before postage. There is *some* reason why members do *not* advertise, and this appears to me to be the one.

Your idea that some one should take up that department is an admirable one, would that I could do it, but I have 500 orphans who take up much of my life. ARTHUR P. BLATHWAYT.

Northwood Grange, R.S.O., Middlesex, 5th June.

TREATMENT OF MYNAH.

SIR,—May I venture to ask your advice *re proper* food for the Mynah. I brought it back from Burma over twelve months ago. On board ship it was fed on curry and rice, oranges and some beetles. For the last nine months my daughter has kept it in a big cage—2ft. by 18in. and 2ft. high—out of doors during the hot weather and in the kitchen during the winter. It may be the Lark food, the bread and butter and the roast beef, but it appears that it has had fits for some time past, and when my daughter told me I recommended her to get mealworms.

Thanking you in anticipation for your reply and apologising for the trouble I am giving.

F. MOERSHELL.

The following reply has been sent to Mr. Moerschell:—

The Hill Mynahs or Grackles require slightly different treatment from the more Starling-like Mynahs, and you do not say which group yours belongs to: but there is little doubt that the beef is chiefly to blame for the bird's condition.

None of the Mynahs should have much meat and the Hill-Mynahs are (I am satisfied) better without any. My Starling-like Mynahs had a little, minced fine, occasionally—perhaps once a fortnight: they delighted in cockroaches of which they would eat any amount, and I am sure they were the better for them: earthworms were also occasionally given and newly-born mice when obtainable.

The staple food consisted of Trower's Cekto mixed with double its bulk of bread-crumbs and either slightly damped with water or with potato crushed through a masher; to this a little hard-boiled egg or preserved egg-flake was added. Fruit of course was given daily.

The fits are due to overheated blood rushing to the head, and the quickest remedy is to plunge the bird's head into cold water for a second; but an aperient should be given, the best in my opinion is two drops of castor oil which can either be dropped into the back of the bird's mouth, or be administered by dipping a good-sized camel's-hair brush into the oil and inserting it in the open mouth.

A. G. BUTLER.

 BULLFINCHES AND MANNIKINS.

SIR, - What do Bullfinches eat? The R.S.P.C.A. says they only eat buds that contain insects. This has not been my experience.

A lady somewhere stated that hers ate invisible insects. I remember this but cannot trace it at the moment. How did she know it? A Bullfinch I have now eats mealworms and wireworms before the other birds can get at them. Is not this unusual? Books do not seem to refer to their taking animal food.

A Magpie Mannikin I bred last year has, during the winter, moulted practically all its white feathers and replaced them with black. Is this often done?

H. A. SOAMES.

The following reply has been sent to Mr. Soames:—

Bullfinches eat the fruit-buds of cherry, plum, apple, pear, gooseberry and currant without troubling as to whether they contain maggots or not; they do not eat leaf buds, seeming to prefer the stouter and more succulent fruit-buds. Possibly this indiscriminate pruning may strengthen the trees, but it is a source of great irritation to the fruit-grower.

In addition no doubt these birds eat many seeds of noxious weeds, as well as green fly, small caterpillars and, in the autumn, berries; they will possibly eat wireworms in a wild state when they get a chance to do so, as it is well-known that they and their allies like mealworms when captive.

I never heard of a Magpie Mannikin replacing its white feathers by black, but the Java Sparrow, after a fight in which the white face patches have been pulled out replaces them by black; this however only happens in the breeding season when fighting is prevalent amongst many birds (I had one instance in my own aviaries). Why white feathers should be replaced by black during the winter I don't understand.

A. G. BUTLER.

DESTRUCTIVE WARFARE AMONG PARROTS.

SIR,—In the interesting article by Lord Tavistock in the April, 1915, number of the *Avicultural Magazine*, the question is asked whether this destructive warfare goes on among parrots in Australia. Personally, in all my wanderings in this country, I have never seen a sample of it. The birds here have ample room, far more than they would have at Woburn Abbey, also hollows in trees are very much more plentiful than in the European trees, and therefore I do not think they would ever have to fight for the possession of a nesting-hole. Nesting parrots have their difficulties, but I do not think that is one of them.

D. LE SOUËF,

Director of Royal Zoological Society of Victoria.

SIR,—There has been a scandal in my aviary. A pair of Red-faced Lovebirds were a most loving couple (like all cock Lovebirds he was rather henpecked, but that they seem to expect). They were never more than a foot or so apart and generally squeezed tight against each other—an exemplary pair. Then I introduced a yellow hen Budgerigar because I had an odd cock one, but he died the next day I think, still there were others and she reared a family in which the Lovebird took a great interest, and when they left the nest he forsook his wife and took up with the yellow lady, and now he spends all the day gazing into the hole in her cocoa-nut, keeping strict guard and particularly savage with his wife if she comes near, yet oddly enough they sleep huddled together at night in the old way. There are young birds in the nest I think and I am anxious to see the result, though I fear I did not remove the other Budgerigars soon enough. Has a cross ever been reared I wonder? I am told Red-faced Lovebirds will not breed in outdoor aviaries; is it true?

A. A. THOM.

NOTICES TO MEMBERS—(Continued from page ii. of cover.)

NEW MEMBER.

Mr. PHILIP RECKMAN, Brookmead, Windsor Road, Bray, Berks.

CANDIDATE FOR ELECTION.

Mr. C. T. NEWMARCH at GAMAGE, LTD., Holborn, E.C.

Proposed by Mr. H. D. ASTLEY.

NOTICE.

The SUMMER MEETING of THE COUNCIL, will be held on **Thursday, the 8th of July, at 3 p.m.**, at the Superintendent's Office of the London Zoological Gardens.

Members of the Society are invited to Tea in the Fellows' enclosure. It is hoped that as many as possible will avail themselves of this opportunity of gathering together.

CHANGE OF ADDRESS.

Mr. ALLEN SILVER, The Laurels, 7, Bampton Road, Forest Hill, London, S.E.

BREEDING RESULTS.

N.B.—Through an oversight, it was stated that Dr. AMSLER had bred the Orchard finch and *Phrygulus fruticeti*, which is the same bird; it should have been the Orchard finch and the Lesser Saffron finch (*Sycalis minor*).

MEMBERS' PRIVATE SALE AND EXCHANGE COLUMN.

The charge for private advertisements is SIXPENCE FOR EIGHTEEN WORDS OR LESS, and one penny for every additional three words or less. TRADE ADVERTISEMENTS ARE NOT ALLOWED IN THIS COLUMN. Dealers who are members, wishing to advertise, should apply to the Publisher for terms. Advertisements must reach the EDITOR on or before the 26th of the month. The Council reserve the right of refusing any advertisement they may consider undesirable.

Cock Senegal Dove, 5/-; hen Dwarf Turtle, 12/6.

Miss ALDERSON, Park House, Worksop.

Doves: Pairs Bleeding Hearts, 50/-; Auritas, 15/-; Necklace, 10/-; also Rosella Parrakeets, 30/-.

WM. SHORE BAILY, Boyer's House, Westbury, Wilts.

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AVICULTURAL MAGAZINE.

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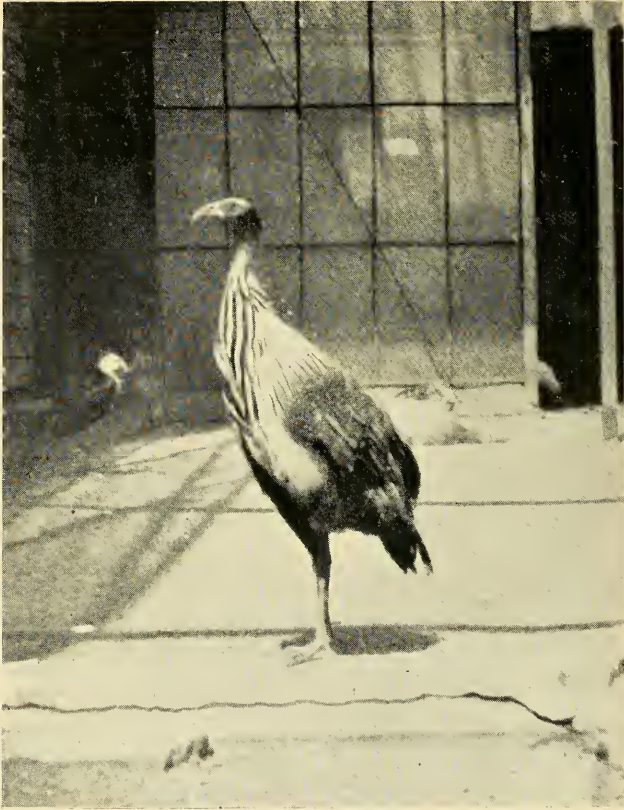


Photo by Dr. Graham Renshaw, M. D.

THE VULTURINE GUINEA FOWL.

THE
AVICULTURAL MAGAZINE,

BEING THE JOURNAL OF
 THE AVICULTURAL SOCIETY.

Third Series.—Vol. VI.—No. 10.—*All rights reserved.* **AUGUST, 1915.**

THE VULTURINE GUINEA-FOWL.

By GRAHAM RENSHAW, M.D.

“A great ornament to our poultry-yards.”—*Slater.*

We are indebted to some primitive aviculturist for our earliest knowledge of the handsome Vulturine Guinea-fowl. The first recorded specimen was brought from the West Coast by Captain Probyn, and had been kept in captivity, as its damaged wings and tail testified. The new bird was exhibited by Captain Stoddart at a meeting of the Zoological Society on June 23rd, 1834, and was afterwards deposited in the “Naval and Military Museum.” Although the specimen was imperfect, and had also died in moult, its unique character rendered it valuable: for many years it remained the only example in any collection. In 1861 it was purchased by the Trustees of the British Museum.

On May 26th, 1863, the Hamburg Zoological Gardens were opened: the Vulturine Guinea-fowls exhibited there were probably the first seen alive in Europe, several being shown in the menagerie during the first nine years of its existence. In 1870 Sir John Kirk sent to the London Zoo. a single female, which had been captured at Brava in Somaliland. This individual was in a very weak state, and very thin: it only lived about ten days. A companion shipped with it had died on the way to Marseilles. The Zoological Society made a special grant to Sir John Kirk, to enable him to obtain the Vulturine Guinea-fowl and other desirable birds. In June, 1872, he presented a fine pair to the same collection, and two more birds in January, 1874. In 1877, Mr. Gerald Walker deposited in the Zoo. several rare guinea-fowl, including two of the Vulturine species,

and gradually these most desirable birds became known to aviculture. To-day they can be seen in any Zoo. of any size, as they are frequently imported.

Mr. J. C. Parr was probably the first to breed the Vulturine Guinea-fowl. In August, 1884, a bird in his possession laid a clutch of six eggs, which she endeavoured to hatch, but died after sitting for a week. The eggs were put under a hen, and five nestlings resulted. One of these, which had died on October 15th, was exhibited by Dr. Sclater at a meeting of the Zoological Society; it is probably the specimen recorded in the British Museum Catalogue as having been received from Dr. Sclater. The Vulturine Guinea-fowl also breeds with the common species (*Numida meleagris*): a hybrid between these was presented to the Zoo, by Mr. J. M. Cornély on November 25th, 1878.

The head of a vulture on the body of a game bird would arrest the attention of the most unobservant; but in spite of its quaint appearance the present species is very beautiful. The small bare head is delicately set on the slender neck; the throat and shoulders are adorned with long pointed hackles; the tail is elongated and somewhat pointed. The bright scarlet eye is charmingly set off by the cobalt-blue neck; the plumage is black or blackish, minutely seeded over with white dots. The Vulturine Guinea-fowl is a peaceful inhabitant of the aviary, and easily acclimatised.

This species occasionally harbours parasites. The nematode worm (*Ascaris cornelyi*) was first known from an individual taken from the small intestine of one of these birds.

BIRDS IN FLANDERS.

By Dr. BERNARD E. POTTER
(*Field Ambulance B.E.F.*)

Although our unit has been here since January, I have received regularly each number of the *Avicultural Magazine*. In the April one, I think, was a note of swallows having been seen north of Ypres as early as the 25th of March. The place mentioned I believe was Lizerne. Like several other places mentioned in the official maps for our use in this campaign, Lizerne does not

appear to be recognised by the natives. However, while riding with my C. O., within half-a-mile of that place, I saw at a farm in Zuydschoote, two swallows on the 28th of March, only three days later than the above date. These were skimming close to the water, the usual pool which one finds near these Flemish farms. At that time one could go no further east for the French guns were posted in the vicinity. Since then the Germans broke through in the second famous attempt to possess Ypres.

Though this country is so small a distance from our own there appear to be many birds here which one does not see at home. Unfortunately, being without books of reference, I can only make drawings and mental notes and not give the names of new kinds whose notes I have learnt.

On arrival at Strazeele in January I was struck by the frequency of a bird resembling our own sparrow. The first thing noticed was a whitish ring round the neck, then a dark patch on the cheek. I know of the Mountain sparrow only from books, but do not remember the white collar. This white collar does not extend to the nape. The bird is smaller than our sparrow, its markings a lighter and more uniform brown. The sexes are similar. The note is softer. At a chateau at Herzeele, where our unit was at rest, I could watch a pair building a nest at the back of an opened shutter.

The blackcap warbler appears to be common in the woods over here, at least I have never seen so many before. The first I noticed was in the trees that adorn the walks upon the battlements which surround Ypres on all except its north side. This walk reveals beautiful scenery. Ypres is now a heap of ruins, but its splendid battlements will always remain to remind one of its antiquity and its wealth. The rampart is bounded by the ancient wall at least three feet in thickness, and outside and far below is the wide moat. I enjoyed listening to the blackcap, and felt annoyed when at one time it was chased away by a pugnacious robin.

In the moat are numerous moorhens, who paddle about quite oblivious to the sound of heavy guns. Indeed, even when German high explosives burst in the field only 200 yards away

searching for our well-concealed battery, the birds went on their own way. Kingfishers were also to be seen. On one occasion it was a curious contrast to hear a robin singing while the guns were firing and creating a great din. But one day, almost the last one permissible in that doomed city, I disturbed a cowering cock pheasant in the undergrowth, this bird had evidently flown from the country over the moat to escape the guns.

Nightingales are very common as with us round London, but perhaps I have had more leisure to observe them.

Blackbirds have sung lustily all the months we have been in Flanders : in one camp every morning above my tent I heard a persistent warbler, but like the Editor, who is surrounded by birds in the moat, I am not disturbed at night or early morning by their voices.

It has always seemed curious to me that I have hardly heard any thrushes at all in song ; whereas I have notes at home to prove that hardly a month of the year passes but they can be heard in Hyde Park.

Magpies are very numerous over here ; especially have I seen them along the now famous Ypres Canal on the way towards Boesinghe to the north. This broad canal has very high banks, along which is a fringe of lofty black poplars. In the heights of these trees the deeply made nests are plainly visible. One day in the trees I counted as many as eighteen birds, and near by on the ground twenty-four on another occasion. To see such numbers seems to me phenomenal, for one generally thinks of these birds as being solitary in habits rather than gregarious. Among the Flemish they have a bad name as noted pilferers. In the spring they arrive in large flocks and alight upon the fields to eat up the newly-sown grain. In the autumn they fly southward to escape the winter. In their flight the people tell me they form the shape of letter M with one bird in advance who is called the king. Perhaps if the war still lasts I may be able to verify this.

While in camp before Christmas at Maresfield Park, Sussex, I was greatly interested one day to observe black and grey birds which were new to me, but one recognised that they must be hooded crows. However, on reaching the neighbourhood of Ypres I at once found these birds to be quite numerous, and there have

been many opportunities of watching them as they are very tame. The hooded crows were nearly always seen with rooks, but not, as far as I could judge, with carrion crows.

While strolling one morning in a meadow, in front of the new asylum of Ypres, where the round shell holes could be counted by the dozen and enough pieces of the blue shell picked up to satisfy the greediest souvenir hunter, I thought myself lucky to see a pair of buntings alight on some rushes, both of a sandy-brown colour and the male with a black head and "bib."* I could get near enough to make a rapid sketch for future reference. In the same meadow a solitary green woodpecker appeared from time to time and seemed very tame. His laugh might be often heard. In that flat non-woody land he appeared quite out of place. In the Asylum grounds a small flock of goldfinches could be watched feeding generally on the flowering groundsel. These birds are by the French poetically called "*les favoris de la nature*" for their song and beautiful plumage.

Before the second bombardment of Ypres in April, Jackdaws might be seen about the ruined summit of St. Martin's Cathedral and the adjoining solitary pinnacle of the once great tower of the Cloth Hall. They seemed quite at home and the occasional shelling did not disturb them. Starlings are common enough everywhere, but I have not noticed them near the guns as has one observer who wrote in the magazine. However, my observations were necessarily cut short in April and early May by the excessive work with the wounded during that terrible time when the Germans got round our left. Twice was I shelled out of advanced dressing stations to the east of Ypres.

Now I must say a word about the chaffinch, so much sought after by the French and Belgians. Everywhere one can hear their joyous song with its cadence and finished ending. "*Gai comme un pierrot*," as is the French saying, is apt enough. But what words can describe the horror felt when I discovered the treatment that is meted out to these poor birds. It is long known that birds can be taught to sing better in the dark. Thus the bullfinch is taught to sing in the darkness when it can listen undisturbed to an air repeatedly ground out. Roller canaries are taught a soft note under

[* No doubt reed buntings.—ED.]

the same conditions by a clock-like machine. But the French, to attain this end, actually sear the chaffinch's eyes with a hot wire and pretend that they can then sing more loudly.* At Herzelee, north of Hazebrouck, I noticed three terribly mutilated in this way, and living in small dingy and dirty cages. It was marvellous how they could still exist. Their loud song was to me very pathetic as they answered one another and could at least enjoy full range of hearing. One bird I was told had gained prizes for its song. However, to a room full of friendly enough folk, I felt impelled to hold forth on the terrible cruelty, in the best French I could command.

Perhaps another digression will be permitted. One observes in the farms a very large proportion of cocks among the fowls. This puzzled me at first, till one Sunday I happened to visit an aged woman of 102 years at Hooggraaf, south of Poperinghe. Here I noticed in this out-of-the-way hamlet an unusual stir, then I saw a Flemish soldier adjusting artificial spurs quite two inches long over the natural ones of a powerful cock by binding them cleverly on with rubber. It was evident a *concours* was awaited, and this I was told would take but three minutes. This I found was true, though I did not witness it. This practice is *défendu* in Belgium, though not in France. The familiar and picturesque *garde champêtre* would not dare to suppress it!

I would like to add a few notes of other birds I have seen. Greenfinches and yellow-hammers are very common and sing all day. Willow wrens are heard in all the high trees of the woods, no bird's note was more welcome this spring with its gentle cadence. I have seen many pied wagtails, only one Ray's. Of the tits the great tit is much in evidence, but none of the others. Wrens are very numerous and sometimes seem to predominate as singers. So vociferous a song from so small a bird always seems extraordinary. Usually they sing at the end of a house-roof and their profile with the well-cocked tail is most comical. While shells were falling with regularity, yet I could not help noticing a wren in this typical pose on an estaminet at Potijze. We had established here an advanced dressing-station, one mile east of Ypres, and had shortly after to evacuate it as the Germans had the range. Nettle-creepers

[*The Italians do the same, but it is forbidden by law.—ED.]

are quite common, and their throaty voice and alarm note are always pleasant to hear. Of tree-creepers I have only seen two, but how fascinating they are to watch with their striped brown plumage! In England many bird-lovers have to record and regret the absence of swallows and house martins. Here it is refreshing to see so many making use of the well-sheltered eaves of the scattered Flemish homesteads, nor do they appear to be bullied by the sparrows as is so often the case in England. Cuckoos were heard frequently six weeks ago, and I managed to get close under one and watch its contortions unobserved at each vocal effort; later on I did not hear or see any. Larks are very numerous; one morning while riding out early I saw a strangely light-coloured bird, this turned out to be a lark, almost an albino.

I might have mentioned before that one of our men who had lain between our own and the German trenches dangerously wounded in the abdomen for some hours before he could be moved from such a perilous position, reported that he had noticed the birds flying about near by and even building their nests in the bushes; and that he also saw rabbits feeding. All these wild things had become quite used to the crack of rifles and explosion of shells.

MR. HEUMANN'S AVIARIES AT BEECROFT, N.S.W.

[*The Australian Naturalist* gave this account by Mr. G. D. STEAD, in the July number, 1914, of one of our member's aviaries and birds.]

Saturday, February, 1914.

Great interest was manifested by a large number of members of the Society, who had the privilege of seeing Mr. G. A. Heumann's rich collection of living Australian and exotic birds, in his fine aviaries at Beecroft. The great variety of seed-eating birds in this collection alone, would make a very remarkable assemblage; but what surprises the visitor most, is the unique collection of insectivorous, frugivorous, and other birds, many of which need so much attention, and necessitate the preparation of strange and special foods. I would fain touch upon the latter in some detail, but space

at present forbids, as I wish to deal mainly here with the kinds of Australian birds that were to be seen on this one occasion.

Among the exotic birds were gaudy Macaws from South America, the remarkable Kagu (Cagou) from New Caledonia, wonderful weavers of several species, the beautiful shining starlings from Africa, Californian quail (including a clutch of 10 young), and many others.

It is the birds of Australia that claim our attention, however, and as most of the species represented had never before been seen at close quarters in the living state by many of those present, I here append a full list, as at the date mentioned above:—

GRAIN-EATING BIRDS.

Brown Quail.	Diamond Sparrow
Nth'n. Territory Quail(Green egg).	Fire-tailed Finch.
Peaceful Dove.	Zebra Finch.
Diamond or Red-eyed Dove.	Plum-head Finch.
Little Green Pigeon.	Redhead.
Bronzewing Pigeon.	Gouldian, or Painted Finch.
Spinifex Pigeon (Sp.)	Picturella.
Squatter or Partridge Pigeon.	Masked Finch.
Blue Mountain Parrot.	Blood Finch.
Galah.	Blackthroat.
Crimson Parrot.	Red-billed, Long-tailed Grass Finch.
Moreton Bay Rosella.	Yellow-billed, Long-tailed Grass Finch.
Stanley Rosella.	Chestnut Finch.
Blue Bonnet Parrot.	Black-rumped Double-bar Finch.
Many-coloured Parrot.	White-rumped Double-bar Finch
Crimson Wing Parrot.	Yellow-rumped Finch (N. Territory).
Budgerigar.	
Budgerigar (Yellow var.)	

INSECTIVOROUS, FRUGIVOROUS, AND OTHER BIRDS.

Common Seagull or Silver Gull.	Coach-whip Bird.
Spurwing Plover.	Pitta.
Plain (Black-breasted) Plover.	Mountain Thrush.
Southern Stone Plover.	White-fronted Chat.
Australian Roller, or Dollar Bird.	Superb Warbler (Blue Wren).

Laughing Jackass.	Lambert, or Variegated Wren.
Willy Wagtail.	West Australian Red-winged
White-shouldered Caterpillar-eater	Wren.
Masked Wood Swallow.	White-browed Wood Swallow.
Dusky Wood Swallow.	Spinebill.
White-backed Magpie.	New Holland Honey-eater.
Black-throated Butcher Bird.	White-cheeked Honey-eater,
Crested Shrike Tit.	“White Whiskers.”
Rufous-breasted Whistler.	Spiny-cheeked Honey-eater.
Yellow Robin.	Yellow-throated Friar-bird.
Mistletoe Bird.	Satin Bower-bird.
White naped Honey-eater or	Regent-bird.
Black Cap.	Cat-bird.
Blood-bird.	

Many of the birds in the foregoing list are naturally shy in the extreme, and the observer who walks in Mr. Heumann's roomy aviaries will perhaps find himself puzzling over three things: (1) How it was possible to capture such birds: (2) How they are so readily tamed; and (3) How is it possible to satisfactorily feed, while in a state of captivity, such tender, wild things. Such birds as the glorious little Blood-bird, or Sanguineous honey eater, the dainty little mistletoe-bird and the handsome crested shrike-tit would appear to be particularly difficult to catch as well as to maintain alive after capture. These, and nearly all the others, are caught with bird-lime in their native haunts, usually at feeding or drinking-places, frequently after many hours of patient search and waiting. It is in the pursuit of such birds that the finest instincts of the bush-naturalist are developed, and where observations of habits are made that would never otherwise be recorded. As far as the taming process is concerned, I can personally testify in a small way, to what Mr. Heumann and other keepers of our wild birds have found, that when treated in an attentive and affectionate manner, while suitably housed, they become quite tame very rapidly indeed. In the present case Mr. Heumann has taught his feathered pets to love him, and it is a pretty sight, indeed, to see typical wild bush-birds, like the wood swallows and whistlers (Thickheads) coming, when

called, and perching on their friend's head, or flying past and swooping down to take the proffered grub or crumb.

One often hears it said that our Australian birds cannot be kept satisfactorily in captivity. The imposing list of "soft-billed" birds alone, given above, is a sufficient answer; but in the aviaries under discussion, the term captivity must be understood in quite a relative sense: so great is the freedom of the birds, that even the most sensitive objector to the caging of wild birds could find little to hurt his feelings here.

Space forbids that I should dwell more upon this subject, but I would like to refer to two observations made by Mr. Heumann—one relating to the olive-backed oriole, and the other to the satin bower-bird. It was noted that when the oriole was suffering from the fright of capture (whether by lime or net), the very pronounced red colour of the eyes was immediately lost, leaving a pallid white, which, of course, quite altered the appearance of the bird. Recently he caught a pair which he had and sent them to the Sydney Zoo. Upon capture the red colour disappeared, as when they were first captured: but this was immediately restored when they were put into the large enclosure at the Zoo. The satin bower birds are said to have a decided penchant for the colour of blue, both in the aviary and in a wild state, decorating their bowers or playgrounds with any fragments of blue cloth, paper, or china, etc., or flowers, if available. Mr. Heumann says he has invariably found the bowers in a state of Nature, decorated specially with one small blue flower. The *irides* of this bird are of a blue colour, and it is suggested that perhaps this preference, if such really exists throughout the species, is due to the fact that their mates' eyes are blue.

In this connection it is worthy of note that a bower, described by Leach in p. 185 of his "Australian Bird Book," was decorated with blue flowers from the school garden, pieces of blue paper, blue hair-ribbon, besides blue parrot's feathers. Campbell, in his "Nests and Eggs of Australian Birds," p. 193 (footnote), says: "Mr. I. W. De Lany informs me that he has only noticed blue feathers at bowers. His wife, by way of experiment, put out several pieces of coloured wools near the house, and only the blue ones were taken to the bower."



Photo by Mrs. R. Staples-Browne.

THE GEIRANGER FJORD, NORWAY.

A quotation which the same author makes from the MS. of Herman Law, in regard to the occurrence of the bird in Southern Queensland, seems to indicate that the habit is not quite universal, because bowers are there mentioned as being decorated with "Yellow and blue Lory Parrots' feathers," etc.

This bower-bird's liking for blue is evidently well established, however, and is worthy of attention.

BIRD NOTES FROM THE FJORDS.

By RICHARD STAPLES-BROWNE.

I have come across some rough notes on birds, scribbled in a Baedeker, during a cruise in the Fjords in August 1912. They are a pleasant reminder of the species which I happened to see during the few days I was in Norwegian waters. The country is, doubtless, well-known to a very large number of our members, and, since the Editor and Council appeal for "copy" even of a trivial nature, I venture to publish the notes in the hope that they may remind others of their own rambles.

A "yachting cruise de luxe," although a popular and enjoyable way of spending a few days in the summer, scarcely gives opportunities for learning much about the country, inhabitants, or fauna. In this case nine days only were spent in Norway, including one in the town of Bergen, and, as the steamer stopped at seventeen places, the time allowed at each was naturally very limited. I returned to England with a great desire to see Norway more thoroughly, which, up to the present I have been unable to gratify.

On the outward journey, from Leith to Aalesund, the North Sea was remarkable only for rough weather and a strong head wind which delayed us considerably. On the Bass Rock there were, as usual, a large quantity of gannets and a few herring gulls, the latter keeping together by themselves. The ship was followed by herring gulls, lesser black-backs, and kittiwakes, but only the herring gulls were visible during the second day of the voyage. On the return, from Sundal to Grimsby, we crossed the Dogger Bank, steaming through the fishing fleet. Here a shag accompanied us for some little distance, and herring gulls were visible all day.

As we neared Aalesund at noon on August 13th, several lesser black-backs and some guillemots were visible, and, at some little distance, I saw eight ducks, but I was not near enough to distinguish the species. In the afternoon we landed and climbed the Axla, a small hill with a very extensive view. Here we found several flocks of twites and a fine raven.

The next morning we found ourselves at Aandalsnaes on the Romsdalsfjord. Here the lesser black-backs and herring gulls were accompanied by several common gulls. After breakfast an excursion was made by carriage up the Romsdal Valley as far as Horgheim. The valley is extremely picturesque, and for the most part well wooded, and is flanked by several noble peaks, among them Romsdalshorn and Troldtinder. White wagtails were very numerous, especially at Horgheim, where I saw several young birds. The hooded crow was very conspicuous, and once I saw a raven. There were several swallows and blackbirds, and in a silver birch wood a noisy fieldfare attracted my attention. Bramblings were common in the valley, and at Horgheim I was pleased to see a siskin.

On rejoining the ship we returned to Molde where we arrived about six o'clock. Here we saw several common terns, also a dark skua, probably Richardson's. Fourteen diving ducks were visible at some distance. On landing we ascended to the Reckneshaugen, a wooded park, from which a most magnificent view of the Moldefjord is obtained. Several house martins were flying about the town.

At eight o'clock on the morning of the 15th we anchored at Oje at the head of the Norangfjord. Several gulls were flying round the ship, including the common gull. Our stay here was very brief, and, after leaving, we steamed through the Norangfjord, one of the most remarkable in Norway for the beauty of its mountain scenery. On the bank I saw a sandpiper. Curiously enough, with the exception of a heron, this was the only wading bird I caught sight of during the whole cruise. The Norangfjord leads into the Jorundfjord where we again enjoyed most superb scenery. In the afternoon we arrived at Hellesylt to pick up passengers who had driven overland from Oje, and then entered the Geirangerfjord, remarkable for its beautiful waterfalls, and at three o'clock anchored at Marok.

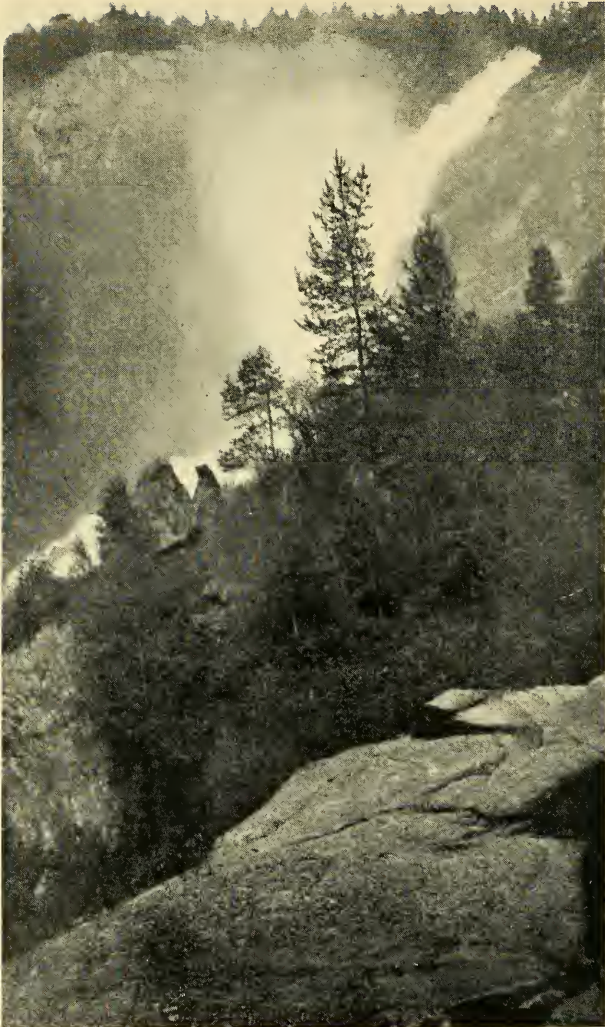


Photo by Mrs. R. Staples-Browne

THE LOTEFOS, NORWAY.

We landed here, and climbed, as far as time would permit, towards the Geiranger basin. Yellow-hammers and bramblings were common here, and we saw a fine ring ouzel; also a beautiful specimen of the blue-throated warbler, a bird common in Norway, but this was the only occasion on which I came across it.

We landed at Olden on the following morning and found carriols waiting to take us to the Olden Lake. These local conveyances are drawn by rough little cream-coloured ponies, on whose legs may often be seen zebra markings. Arrived at the lake we took a launch to Rustoen, whence other carriols took us to the famous Brigsdals Glacier. On the lake I saw three young widgeon, and later a pair of black-throated divers. On the return journey I saw a duck with five young. Unfortunately they dived before I could distinguish whether it was a red-breasted merganser or a goosander, and, although two of the young ones came up quite close to the boat, I never saw the old one again. At the glacier, hooded crows were much in evidence, also swallows and blackbirds. The extreme tameness of the white wagtail in Norway is very noticeable. It is present in every village street. The room in which we lunched at the Brigsdals-Gaarde swarmed with flies, and it was most amusing to watch the efforts of these birds to catch them through the glass of the sky-light.

As we approached Mundal the next morning three ducks swam quickly away. I landed and walked along the wooded banks of a small stream. Here I found fieldfares and blackbirds, also several bramblings and a good many whinchats. The swallow was common and also the Marsh tit, but whether the northern form or not I could not tell. The corn stacks attracted a large number of yellowhammers and some ortolans. Late in the afternoon we arrived at Balholmen and walked up the Essefjord. Here a Greater black-backed gull took possession of our ship, driving away all intruders, of whom there were very few. Some gannets flew over at a great height.

Early in the morning of the 18th we were in the Naerofjord, another most beautiful spot surrounded by mountains. We landed at Gudvangen, and drove up the wild valley of the Naerodal. Some fine salmon were visible in the river. At the end of the valley is

Stalheims-Klev, a steep rock about 800 feet high, up which we climbed by a zigzag path. Here I saw some young robins and a siskin, but the most remarkable feature of the bird-life of the cliff was the enormous quantity of magpies there. I counted seventeen visible at one time at the top, and we passed several others on the way up and down.

We spent the following day in Bergen, and on the morning of the 20th called at Tysse on our way to the well-known Hardangerfjord. In this fjord I saw five porpoises. Among birds I noticed a gannet, a Greater black-backed gull, some common terns and a skua. Also I saw three Red-throated divers at noon. The herring gulls here were remarkable for their large size. We touched at Norheimsund in the afternoon, and in the evening arrived at Sundal, where I noticed a heron.

Our last day in Norway was spent at Odda, whence we drove to the Lotefos, a grand waterfall. The road passed by Sandven Lake on which was a large flock of young Lesser black-backs. swallows and martins were present. There were several hooded crows and many magpies, but here I only counted six together at one time. Once I heard the note of a jay.

I must not conclude this account without a brief reference to the magnificent collection of Norwegian birds in the Museum at Bergen. The fine series of nutcrackers and waxwings attract the eye, also the eiders and King eiders. There are some nice specimens of the Snowy owl and the Ivory gull, also a beautiful series of Norwegian Game birds, including some interesting hybrids. Mention of Game birds reminds me that never during my stay in Norway did I see one alive. Possibly they were on the high fjeld with the Elk, which a local sportsman informed me are "always upstairs in August."

Photos by Mrs. Staples-Browne:—

1. In the Romsdal.
2. The Moldefjord.
3. The Geirangerfjord.
4. The Geiranger basin.
5. The Naerodal from Stalheims-Klev.
6. The Lotefos.

WINTER TREATMENT OF FOREIGN BIRDS.

By GERALD RATTIGAN.

I have just read Dr. Lovell-Keays' interesting article on the above subject and should like to offer a few remarks upon it.

To begin with, I must frankly state that I do not at all agree with his deductions; and his experience, as will appear hereafter, is utterly opposed to mine. His first contention, that birds do better and live longer in cages than in aviaries, is an extremely sweeping statement, to say the least of it, and one open to a good deal of criticism. In one respect no doubt it is true enough, that is to say, that if it were intended to exhibit a bird it would undoubtedly be the wisest and safest plan to cage it up separately, though at the same time I have personally successfully shown birds, both British and foreign, taken about a week or ten days before the Show straight from flying loose in an aviary.

There is of course always an element of danger to birds of a mixed series flying loose together in a limited space; but when suitable cover is provided and dangerous species and individuals are eliminated at once from the association of weaker species, this danger is not a very serious one.

The casualties that result in a carefully associated mixed collection are almost entirely confined to young birds that have just left the nest, a few such as this it is almost impossible to prevent, entirely owing to their own indiscretions and folly. They appear to have no sense of danger and will frequently fly bang into another bird's nest, promptly paying the penalty. Apart from these occasional accidents, however, I see no reason whatever why a bird should not live just as long in a well looked after aviary as in a cage. Certain species indeed, in my experience at all events, do far better and live much longer in large aviaries than in cages, in which latter they frequently soon succumb.

As an example of this type of bird, I will take the Parrot-finches. These are extremely nervous birds, and more often than not fret themselves to death in a cage within a few weeks or even days of their being placed in it, though they may have lived for

several months and even years in perfect health in an aviary. This I have more than once abundantly proved, as I have the fact that they will keep perfectly fit and well in all weathers and seasons in an open unheated aviary with merely an open shelter to retire into when so inclined. On the other hand, I quite admit that there are undoubtedly some species which do not do well in open aviaries, not only in the winter, however, but at any period of the year.

An example of these species is the "Cordon Bleu." These birds I have always found extremely delicate and almost impossible to bring safely through damp, wet winters (in an open aviary) such as we usually get, owing to the fact that they will persist in roosting out in the open, unless prevented from doing so. The consequence being that even in summer I have frequently picked up dead or half-dead cordon bleus after a severe thunderstorm during the night, the birds being literally almost drowned.

While it is not my intention to compile a list of those birds which *can* and those which *cannot* be left in an open unheated aviary throughout the year I will just mention a few examples of both species that occur to me at the moment.

BIRDS UNSUITABLE FOR OPEN OUTDOOR AVIARY:—

Cordon Bleus	Fire-finches
Paradise Whydahs	Pintail Nonpareils
Tanagers (<i>Calliste</i>)	Masked Grassfinches
Black-cheeked and Violet-eared Waxbills	Gouldians

LIST OF BIRDS SUITABLE FOR OPEN OUTDOOR AVIARIES:—

Weavers (<i>Hyphantornis</i> and similar species)	Pink-cheeked and Grey Waxbills
Cardinals of all varieties	Java Sparrows (White and Grey)
Parrot Finches	Budgerigars (both varieties)
Cuban Finches	Red-faced Love-birds
Red-vented Bulbuls	Saffron Finches
Red-billed Weavers	Madagascar Weavers
Pintail Whydahs (rather doubtful)	Nonpareil Buntings
Zebra Finches	Pekin Robins (Hill Tits)
	Tanagers (Palm, Scarlet, Blue, Magpie, and probably Black).

I transferred the birds—a list of which I will give later on—from my London aviaries to the aviary, (a description of which follows), about the middle of April, 1914.

The aviary in question was constructed for me locally by the village carpenter and was a very rough affair, yet, in so far as the health of the inmates was concerned, it answered admirably. The flight measured 20ft. by 20ft. by 7ft. and the shelter 8ft. by 4ft. by 7ft. The shelter, a roofed hut, as it were, has three entrances, one at each end, and one on one side. One end entrance has a door, with a square of glass in the upper part to let in the light. Opposite this, at the other end, there is a small wooden flap, which is kept closed during the winter, but open in spring and summer. Another entrance, on one side, is entirely open in summer, but in winter is covered, save for about a foot at the bottom, with tarred felt. There is no floor to the shelter and no heat whatever is supplied at any season.

In order to encourage the birds to use the shelter, two dishes of food—one containing seed and the other soft-food—are always placed inside the open side entrance just referred to. In this shelter I arrange each spring quantities of brushwood, in which I fix huge bundles of heather, bracken, ivy, etc. Another heap of brushwood furnished as before is placed just outside the shelter by the wooden flap and is sheltered from the rain partly by overhanging eaves, but the wire-netting above it is also covered over with tarpaulin wired to the top.

It is always most important to provide a perfectly dry place of some kind or other where the birds can and will go to roost. I am satisfied that it is the wetting they get at night through roosting out in the open that does all the damage. The shelter itself is not constructed with the idea of warmth so much as with the idea of keeping out wind and rain, especially the latter. Contrary to Dr. Lovell-Keays' experience, practically every bird in the aviary uses this shelter to roost in. Some only use it in rough weather, others use it habitually and even nest therein. At the present moment for instance (June) a pair of Virginian cardinals are incubating their second clutch in the shelter, and a pair of bullfinches have also nested and laid there, though incubation has not yet actually been

commenced. Last year, both Cuban and parrot finches nested in this shelter.

The only birds, of all those mentioned below, that did not to my knowledge use the shelter on any occasion were the red-billed weavers and the cordon bleus. Providing the shelter is made comfortable for the birds and food is placed in it to encourage them to use it, I do not believe there would ever be the slightest difficulty in inducing most species to use it, and those that did not could be easily caught up and placed either in cages or a closed-in shelter till the winter was past.

At Brockenhurst, where I was during 1914, the aviary contained no large shrubs of any kind, so that the birds were forced to either roost in the shelter or in the pile of brushwood, both of which were under cover. This year, however, chiefly for ornamental reasons, I put in some thick fir and other hardy shrubs. As an experiment I shall leave these in this winter, though I very much fear their presence will prove detrimental to the birds' welfare, owing to the fact that, though they afford practically no protection from a continuous damp spell, the birds, or many of them, seem to prefer roosting in them to roosting in the other and far safer places I have provided. Small shrubs, etc., in an aviary undoubtedly improve its appearance, and are moreover no doubt very much appreciated by the birds themselves; they may also increase the prospects of a successful nesting season, though, unless the aviary is converted into a small plantation, this I very much doubt; but although up till now I have had no opportunity of actually proving my theory, I most certainly, rightly or wrongly, attribute the heavy casualty lists that appear to occur with some regularity in many otherwise far more perfect and elaborate aviaries than mine has any claim to be, to the presence of these shrubs, which I believe to be veritable death traps during cold and inclement weather, especially to the smaller finches and waxbills.

I will conclude with a list of the birds I placed in the aviary I have described at Brockenhurst in April, 1914.

Breeding results, thanks to the activities of field mice, were poor, and all the young actually bred were either sold or exchanged for other birds, so are not entered on the list, nor are the few birds

purchased during the summer, as these being newly-imported, do not give a fair test.

LIST OF BIRDS, APRIL, 1914.

1 pair Bulbuls (Red-vented).	2 pairs Canaries.
1 pair Virginian Cardinals.	2 cock Cordon Bleus (sold 1 on the 8th & 1 on the 15th Sept.)
1 pair Nonpareil Buntings (cock an old bird, died 4th October, 1914).	1 Grey Waxbill.
1 pair Red-billed Weavers.	1 cock Madagascar Weaver.
1 pair White Javas (cock badly injured by cat, had to be destroyed).	1 cock Chaffinch.
1 pair Saffron Finches.	1 cock Greenfinch
2 pairs Cuban Finches.	1 pair Redpolls
1 pair and 1 odd cock Parrot Finches.	1 pair Bullfinches (caught locally during summer).
1 pair Orange-cheeked Waxbills (1 died or rather disappeared 7th December).	1 pair Red-faced Love Birds.
	1 pair Californian Quail.
	1 pair Common Quail.
	1 pair Landrails.
	1 Snipe (died of injuries sustained in flying against wire-netting).

When I can say that I left Brockenhurst on the last day of February, 1915, with every bird mentioned above except those bracketed as having been either sold or as having succumbed, I think this fact will form the best argument to Dr. Lovell-Keays' contentions.

During all this time, except once for a period of three days, the birds were fed and looked after solely by myself, and this fact may have something to do with my success in keeping them practically without a loss throughout the winter, which by the way was an extremely wet one.

On my arrival here I had many vexatious and costly losses whilst my aviary was being put up, owing to the fact I had nowhere to house the birds except a terribly draughty and not even rainproof conservatory. Then, as Dr. Lovell-Keays would say, it was a case of picking up two or three dead birds every morning, and, amongst others, I unhappily lost the following :—

1 pair Parrot Finches (my old original pair which I had possessed over 6 years).

2 pairs Cuban Finches.

Both the surviving Waxbills.

Cock Red-billed Weaver.

Hen Greenfinch.

And, lastly, the hen Nonpareil Bunting.

I lost all the above in the space of four or five days, which only shows that draughty unsuitable quarters will kill off almost at once even the most robust birds.

The Parrot finch and surviving white java were sold, and the birds actually placed in the aviary when it was erected again were :—

1 pair Bulbuls.

1 cock Chaffinch.

1 pair Virginian Cardinals.

1 cock Greenfinch.

1 pair Redpolls.

1 cock Goldfinch.

1 pair Saffron Finches (cock dead).

1 cock Madagascar Weaver.

1 pair Common Quail.

1 pair Bullfinches.

1 pair Landrails.

1 pair Red-faced Love Birds.

1 cock Lesser and 1 hen Common Black Tanagers (added since).

1 hen Red-billed Weaver.

1 cock and 4 hen Canaries (2 killed by Peach-faced Love-birds, since removed).

1 pair Californian Quail (now transferred to patched-up conservatory owing to the pugnacity of the cock).

The only losses so far have been the cock Saffron finch (killed I think by one of the bulbuls), a very old bird; he shared the distinction of being with the cock Madagascar weaver, one of my two first purchases on commencing to keep foreign birds: this was on 8th August, 1908. The other loss, the two hen canaries were both killed on their nests the same morning by the peach-faced love birds, a recent purchase.

I will furnish another account of any losses I may sustain this year, in 1916.

ENGLISH NAMES FOR THE PARROTS.

By Dr. E. HOPKINSON.

(Continued from page 292.)

"RED-WINGED LORY,"
 RED-WINGED PARRAKEET, } See CRIMSON-WINGED PARRAKEET.

RED, YELLOW AND BLUE MACAW, the RED AND BLUE MACAW.

RETICULATED LORY, book name for the BLUE-STREAKED LORY, *see under RED LORY* (2).

RIEDEL'S ECLECTUS. = *E. riedeli*.

RING-PARRAKEET, Edwards' name for the CINGALESE ALEXANDRINE PARRAKEET. Also, generally, = RING-NECKED PARRAKEET. ALEXANDRINE RING-PARRAKEET = the CINGALESE ALEXANDRINE. MALACCA RING-PARRAKEET = the MALACCAN PARRAKEET.

MALAYAN RING-PARRAKEET, *ditto*.

ROSE-HEADED RING-PARRAKEET, the BURMESE BLOSSOM-HEADED P.

"RINGNECK." (1) Popular abbreviation for "RING-NECKED PARRAKEET." (2) Australian vernacular name for the YELLOW-NAPED PARRAKEET.

RING-NECKED PARRAKEETS, the *genus Palaeornis*, other members of which are also known as ALEXANDRINE PARRAKEETS, BLOSSOM-HEADS, ROSE-RINGED PARRAKEETS, MALABAR, JAVAN, MALACCA, BANDED PARRAKEETS, etc. As a specific popular or dealers' name it is perhaps most commonly applied to the INDIAN RINGNECKED PARRAKEET, the ROSE-RINGED PARRAKEET.

AFRICAN RING-NECKED PARRAKEET (q.v.).

ALEXANDRINE RING-NECKED P. = the CINGALESE ALEXANDRINE P.

INDIAN RINGNECKED PARRAKEET, the ROSE-RINGED PARRAKEET.

MAURITIUS RING-NECKED PARRAKEET.

SEYCHELLE'S RING-NECKED PARRAKEET.

ROBUST PARROT, *see LEVAILLANT'S PARROT*.

ROCK CONURE. = *Pyrrhura rupicola*.

ROCK GRASS-PARRAKEET. = *Neophema petrophila*, the "ROCK-PARRAKEET" (Gould and Australian vernacular).

"ROCK-PARRAKEET." (1) *See above*. (2) One of the dealers' names for the ROSE-RINGED PARRAKEET.

"ROCK-PARROT," same as No. 2 above.

"ROCK PEBBLE," an occasional variant of "Rock Peplar."

"ROCK PEPLAR," "ROCK PEPLAR PARRAKEET," dealers' name for the BLACK-TAILED PARRAKEET. Occasionally "ROCK PEBBLE."

ROSA'S PARRAKEET, *see* BURMESE BLOSSOM-HEADED PARRAKEET, *under* BLOSSOM-HEADED.

"ROSE COCKATOO," a variant of ROSE-BREASTED COCKATOO.

ROSE PARRAKEET, an occasional book name for the ROSELLA P.

ROSEATE COCKATOO, the ROSE-BREASTED COCKATOO.

ROSE-BANDED PARRAKEET, *see under* ALEXANDRINE P., CINGALESE.

ROSE-BREASTED ALEXANDRINE PARRAKEET, *see* BANDED PARRAKEET.

ROSE-BREASTED COCKATOO.=*Cacatua roseicapilla*. Also, ROSE COCKATOO, ROSEATE COCKATOO, ROSY COCKATOO, ROSE-COLOURED COCKATOO, and (sometimes) ROSE-CRESTED COCKATOO. "GALAH," "GALAH COCKATOO," Australian vernacular names, the latter being a common English dealers' name as well, and nearly all the above are in frequent use as such.

ROSE-CRESTED COCKATOO. (1) The SALMON-CRESTED COCKATOO.

(2) Also sometimes used for the ROSE-BREASTED COCKATOO, but is a misnomer in this case.

ROSE-COLOURED COCKATOO, *see* ROSE-BREASTED COCKATOO.

ROSE-HEADED PARRAKEET, *see* BLOSSOM-HEADED PARRAKEET.

ROSE-HEADED RING-PARRAKEET, *see under* BLOSSOM-HEADED PARRAKEET, BURMESE.

ROSE-RINGED PARRAKEET (Latham). (1)=*Palaeornis torquata*, the commonly imported Indian species, which is also generally known as the INDIAN RING-NECKED PARRAKEET, and the "RINGNECK," "RINGNECKED PARRAKEET," "ROCK PARRAKEET," "ROCK PARROT," of dealers. Old names: *ALEXANDRINE PARRAKEET, and VAR. A. (Latham); *LONG-TAILED GREEN PARROT (Edwards and Latham), *SULPHUR PARROT (Shaw). Still earlier names for this, one of the Ear Parrots to be imported, *SPEAKE PARROT, *POPINJAY PARROT. (2) Also often used for the smaller AFRICAN RING-NECKED PARRAKEET.

*ROSE-RINGED PARRAKEET, VAR. A., the BANDED PARRAKEET.

*ROSE-RINGED PARRAKEET, VAR. B., the MAURITIUS RING-NECKED P.

"ROSEHILL," Australian vernacular for the ROSELLA PARRAKEET and some of its allies, such as the STANLEY PARRAKEET.

MORETON BAY ROSEHILL, the PALE-HEADED PARRAKEET.

ROSEHILL PARRAKEET, same as ROSELLA PARRAKEET.

"ROSELLA," dealers' abbreviation of ROSELLA PARRAKEET.

ROSELLA PARRAKEET.=*Platycercus eximius*. *NONPAREIL PARROT (Latham). Other names, ROSELLA BROADTAIL, ROSELLA PARROT, ROSEHILL PARRAKEET, ROSE-PARRAKEET (rare). Vernacular names: "ROSELLA"; "JOEY" (Australian dealers), *NONPAREIL (obsolete). "BLUE ROSELLA," dealers' name for the PALE-HEADED PARRAKEET or "MEALY ROSELLA."

"MEALY ROSELLA," see above.

MILE ROSELLA, an early popular name for the PALE-HEADED PARRAKEET, ? the original form of MEALY ROSELLA.

MORETON BAY ROSELLA, see PALE-HEADED PARRAKEET.

PALE-HEADED ROSELLA, the PALE-HEADED PARRAKEET.

RED-BACKED ROSELLA, the RED-MANTLED PARRAKEET.

In addition to these other ROSELLAS are the YELLOW-CHEEKED, the FIERY, and the YELLOW-MANTLED PARRAKEETS.

ROSELLA BROADTAIL.

ROSELLA PARROT, see ROSELLA PARRAKEET.

ROSY COCKATOO, the ROSE-BREASTED COCKATOO.

ROSY PARRAKEET, see under BLOSSOMHEAD, BURMESE.

ROSY-FACED LOVEBIRD.

ROSY-FACED PARRAKEET, see under LOVEBIRD.

ROSY-HEADED PARRAKEET, see under BLOSSOMHEAD, BURMESE.

ROSY-NECKED LOVEBIRD, see under LOVEBIRD, ROSY-FACED.

ROWLEY'S PARRAKEET, see NEW ZEALAND PARRAKEET.

*RUBY LORY, see KUHL'S LORY.

RUFF-NECKED PARROT, see HAWK-HEADED PARROT.

RUPPELL'S PARROT. = *Poocephalus rueppelli*.

ST. DOMINGO AMAZON, see under AMAZON, SALLE'S.

ST. THOMAS' CONURE. = *Conurus pertinax*, sometimes known as the YELLOW-CHEEKED CONURE. The *YELLOW-FACED PARRAKEET of Edwards and *ILLINOIS PARRAKEET of Latham.

SAISSET'S PARRAKEET. = *Cyanorhamphus saisseti*, the new Caledonia representative of *C. novae-zealandiae*, the NEW ZEALAND PARRAKEET.

SALLE'S AMAZON.

SALMON-CRESTED COCKATOO = *Cacatua moluccensis*. Other names

*GREATER COCKATOO (Edwards), GREATER RED-CRESTED C. (Latham); RED-CRESTED C., ROSE-CRESTED C.

SALVIN'S AMAZON.

SAMOAN LORY. = *Vinia australis*, the *BLUE-CRESTED PARRAKEET and *SPARROW PARRAKEET of Latham. The only other species in the genus is KUHL'S LORY, called by Latham the RUBY LORY.

*SANGUINE PARROT, see RED-EARED CONURE.

SAPPHIRE-CROWNED PARRAKEET, see BLUE-CROWNED HANGING PARRAKEET.

SAPPHIRE-CROWNED PSITTACULE, see BLUE-CROWNED HANGING PARRAKEET.

"SASSABE," sometimes "XAXABE," said to be native names for the RED-THROATED AMAZON, see under AMAZON.

SCALY-BREASTED LORIKEET. = *Psittenteles chlorolepidotus*. *SPOTTED PARROT (Latham). Other names, SCALY-BREASTED LORY, SCALY-BREASTED PARRAKEET.

SCALY-BREASTED LORY, the above.

SCALY-BREASTED PARRAKEET. (1) The SCALY-BREASTED LORIKEET.

(2) An old name (Latham's) for the BLUE-WINGED CONURE.

SCARLET LORY. (1) See RED LORY. (2) Also one of Latham's names for the CHATTERING LORY (*L. garrulus*).

LONG-TAILED SCARLET LORY, see RED LORY.

SCARLET AND BLUE MACAW, another name for the RED AND BLUE MACAW.

*SCARLET AND GREEN PARROT, see KING PARROT.

*SCARLET-BREASTED PARROT, Latham's name for BARRABAND'S PARRAKEET.

SCARLET-CHESTED GRASS-PARRAKEET, see under GRASS-PARRAKEET, SPLENDID.

SCHLECTENDAL'S HANGING PARRAKEET, see under HANGING PARRAKEET, SCLATER'S.

SCLATER'S HANGING PARRAKEET.

SCOLLOP PARROT,

SCOLOPED PARROT, } See BUDGERIGAR.

*SECOND BLACK-CAPPED LORY, Edwards' name for the PURPLE-CAPPED LORY.

SENEGAL PARROT.=*Poeocephalus senegalus*. *Grey-Headed Parrot (Swainson). "JOBO" and "DUMDUM," native names in Gambia.

SEVERE MACAW.

SHARP-TAILED CONURE.=*Conurus acuticaudus*, the *BLUE-CROWNED MACAW of Latham.

"SHELL-PARROT," see BUDGERIGAR.

SHINING PARRAKEET.=*Pyrrhulopsis splendens*. Also known as the SHINING PARROT, RED SHINING PARRAKEET, FIJI PARRAKEET. ?= TABUAN PARROT (Latham). "KUGULA," Fijian name.

MARRON SHINING PARRAKEET, see TABUAN PARRAKEET.

RED SHINING PARRAKEET, the SHINING PARRAKEET.

SHINING PARROT, the SHINING PARRAKEET.

SHORT-TAILED PARROT.=*Pachynus brachyurus*.

*SHORT-TAILED YELLOWISH-GREEN PARRAKEET, see PASSERINE PARRAKEET.

SHORT-TOED GROUND PARRAKEET, the NIGHT-PARRAKEET.

"SINGING PARRAKEET," see BUDGERIGAR.

"SINGLE-YELLOW-HEADED AMAZON," see under AMAZON, YELLOW-SHOULDERED.

SISKIN-PARROT, see under PYGMY PARROT (2).

SLATY-HEADED PARRAKEET.=*Palaeornis schisticeps*.

BURMESE SLATY-HEADED PARRAKEET.=*P. finschi*.

SLENDER-BILLED COCKATOO.=*Licmetis nasica*. The *LONG-NOSED COCKATOO of Latham. Other names, LONG-BILLED COCKATOO

(Gould), LONG-BILLED WHITE COCKATOO, *RED-VENTED COCKATOO, *NASICUS COCKATOO. Dealers' name, "CORELLA" (q.v.). The only other member of the *genus* is the WESTERN SLENDER-BILLED COCKATOO (*L. pastinator*), the WESTERN LONG-BILLED C. of Gould. DAMPIER COCKATOO.

SLIGHT-BILLED PARRAKEET, *Henicognathus leptorhynchus*, of Chili, where it is known as "CHOCOY."

SMALL COCKATOO, another name for the LESSER SULPHUR-CRESTED C.

SMALL GREEN MACAW, *see under* MACAW, NOBLE.

SMALL MACAW, *see under* MACAW, SEVERE.

*SMALL PARRAKEET (Latham), the LITTLE LORIKEET.

SMALL WHITE COCKATOO, *see under* SULPHUR-CRESTED COCKATOO.

SMALL-BILLED PARRAKEETS, book name for PARRAKEETS of the *genus* *Brotogerys*.

*SMALLEST GREEN AND RED INDIAN PARRAKEETS, *see* CEYLONESE HANGING PARRAKEET.

"SMUTTY PARRAKEET," "SMUTTY PARROT," Australian vernacular for BROWN'S PARRAKEET.

SOCIETY PARRAKEET.=*Cyanorhamphus ulietanus*, the SOCIETY PARROT of Latham.

SOCIETY PARROT, the above.

*SOLANDER'S COCKATOO, LEACH'S COCKATOO.

SOLITARY LORY, the SOLITARY PARROT of Latham, *Calliptilus solitarius*.
Fijian name, "KULA."

SOLITARY PARROT, the SOLITARY LORY.

*SOLSTITIAN PARRAKEET, an old book name for the YELLOW CONURE.

SEYCHELLES RING-NECKED PARRAKEET.=*Palaeornis wardi*.

"CATEAUVERT," the local name.

SORDID PARROT, the DUSKY PARROT.

SOUTHERN BROWN PARROT, the KAKA.

SOUTHERN NESTOR, *ditto*.

*SPARROW PARRAKEET, one of Latham's names for the SAMOAN LORY.

*SPEAKE PARROT, an old book name for any talking Parrot, originally given to the ROSE-RINGED PARRAKEET, the INDIAN RING-NECK.

"SPECTACLE AMAZON," *see under* AMAZON, WHITE-BROWED.

SPECTACLED COCKATOO.=*Cacatua gymnopsis*, also known as the BLUE-EYED COCKATOO.

"SPECTACLE PARROT," same as "SPECTACLED AMAZON."

SPIX'S MACAW.=*Cyanopsittacus spixi*.

SPLENDID GRASS-PARRAKEET, *see under* GRASS-PARRAKEET.

SPLENDID PARRAKEET. (1) Same as the above. (2) Gould's name for the YELLOW-MANTLED PARRAKEET (*Platycercus splendidus*).

*SPOTTED PARROT, *see* SCALY-BREASTED LORIKEET.

SPRING HANGING PARRAKEET, *see under* HANGING PARRAKEET, VERNAL.

STANLEY BROADTAIL, the next.

STANLEY PARRAKEET. = *Platycercus icterotis*, also known as the STANLEY BROADTAIL and YELLOW - CHEEKED PARRAKEET; the YELLOW-CHEEKED PARROT of Latham. "ROSEHILL," Australian vernacular.

*STELLATED GERINGORE, an obsolete book name for the WESTERN BLACK COCKATOO, *see under* BLACK C., *under* COCKATOO.

*SULPHUR PARROT, *see* ROSE-RINGED PARRAKEET.

SULPHUR-CRESTED COCKATOO. Two species known by this name, (1) The GREATER SULPHUR-CRESTED C. (*Cacatua galerita*); also known as the GREATER YELLOW-CRESTED COCKATOO, WHITE COCKATOO, CRESTED COCKATOO, *BROAD-CRESTED COCKATOO, and popularly as the SULPHUR-CRESTED COCKATOO, or more commonly (especially by dealers) as the "LEMON-CRESTED COCKATOO." "CAR-'AWAY," New South Wales vernacular. (2) LESSER SULPHUR-CRESTED COCKATOO, the "SMALL WHITE COCKATOO," and sometimes "JAVA COCKATOO" of dealers. Other names: SMALL COCKATOO, LESSER WHITE COCKATOO, *YELLOW-CRESTED COCKATOO.

*SULPHUR-HEADED PARROT, a name of Latham's which probably referred to the YELLOW-BELLIED PARRAKEET.

"SUNHEAD CONURE," a dealers' name for the GOLDEN-CROWNED CONURE.

"SWAMP PARRAKEET," *see* GROUND PARRAKEET (1).

SWAINSON'S LORIKEET, the usual book name for *Trichoglossus novae-hollandiae*, popularly known in England and Australia as the "BLUE MOUNTAIN LORY." Other names: BLUE-BELLIED LORIKEET (Gould), *BLUE-BELLIED PARROT (Latham); *ORANGE-BREASTED PARROT (Latham), and VAR. A.; *WHITE-COLLARED PARROT (Pennant, Latham). BLUE MOUNTAIN PARROT, an occasional book name. The dealers' name, "PURPLE-BREASTED LORY," ?=this species. Native Australian name, "WARRIN."

SWIFT LORIKEET, *see next*.

SWIFT PARRAKEET. = *Nanodes discolor*, of Australia, commonly called the "SWIFT LORIKEET" in its native country. Obsolete book names are, *RED-SHOULDERED PARRAKEET, and *ORANGE-BREASTED PARRAKEET.

SWINDERN'S LOVEBIRD. = *Agapornis swinderiana*, of Liberia.

TABUAN PARRAKEET, *Pyrrulopsis tabuensis*, the TABUAN PARROT of Latham. Other book names are: *POMPADOUR PARROT (Shaw), *MARRON (? MAROON) SHINING PARRAKEET, FIJI PARRAKEET. Fijian names, "KAKA," "VANGHA-VANGHA."

TABUAN PARROT, Latham's name for the TABUAN PARRAKEET, and perhaps also included the allied SHINING PARRAKEET (*P. splen-*

- dens*). By other early writers the name was occasionally used for *Aprosmictus insignissimus*, the Queensland form of the KING PARROT.
- TABUAN PARROT, VAR. A., Latham's name for the male KING PARROT.
- TABUAN PARROT, VAR. B., his name for the young female.
- TAHITI LORIKEET.=*Coriphilus taitanus*, the *VARIED PARROT, *OTAHEITIAN BLUE PARRAKEET, and *OTAHEITE PARRAKEET, VAR. A., of Latham.
- TALAUT LORY.=*Eos talautensis*. For allies, see under RED LORY.
- "TARAPO," see OWL-PARROT.
- TAVIUNI PARRAKEET.=*Pyrrhulopsis taviunensis*, a close ally of the TABUAN PARRAKEET.
- *THECAU PARROT, see under PATAGONIAN CONURE, GREATER.
- THOMAS' CONURE, ST., see under S.
- THREE-COLOURED LORY.=*Lorius Lory*, the *BLACK-CAPPED LORY of Latham, and *FIRST BLACK-CAPPED LORY of Edwards. ?=the *BLACK-CROWNED PARROT (Latham). Other occasional book names are, LADY LORY (also applied to the PURPLE-CAPPED LORY), and BLUE-TAILED LORY, but the latter properly belongs to *Eos histrio*, and also was one of Latham's names for the RED LORY.
- TIMNEH PARROT.=*Psittacus timneh*, the white-tailed form of the GREY PARROT.
- "TINTIS," Celebean name for the RED-FRONTED HANGING PARRAKEET.
- "TIRIBA," native name for the WHITE-EARED and RED-EARED CONURES, and no doubt for other species.
- *TISCHIH PARROT, see under CAIQUE, BLACK-HEADED.
- TOVI PARRAKEET.=*Brotogerys jugularis*, the *YELLOW-THROATED PARRAKEET of Latham. ORANGE-CHINNED PARRAKEET, an occasional book name.
- TRICOLOUR AMAZON, see under AMAZON, "TERRA DEL FUEGO."
- TRICOLOUR MACAW.
- *TRICOLOUR-CRESTED COCKATOO, obsolete book name for LEADBEATER'S COCKATOO.
- TRITON COCKATOO.=*Cacatua triton*.
- "TUI," native name for the
- TUI PARRAKEET.=*Brotogerys tui*, the GOLDEN-HEADED PARRAKEET of Latham. Native name, "TUI."
- "TUIPARA," TUIPARA PARRAKEET, see GOLDEN-CROWNED PARRAKEET.
- "TUI-TIRICA," native name for the ALL-GREEN PARRAKEET.
- "TUMIH-TUMIH," see BLUE-WINGED CONURE.

To be continued).

CORRESPONDENCE, NOTES, ETC.

WINTER TREATMENT OF FOREIGN BIRDS.

SIR,—I was interested to read Mr. Shore Bailey's remarks on my humble efforts at writing. He is, I know, quite right. It is the relative proportion of cover in the flight and shelter that determines a bird's choice of a roosting-place. I discovered that soon after writing the article. But so many aviculturists have found the same difficulty, and perhaps here is the solution, or partial solution, at any rate.

There is another point I should like to refer to and that is *apropos* of catching mice. Last winter and spring I caught very nearly 250, and to the best of my knowledge and belief entirely cleared some of my aviaries of mice. I used the ordinary break-neck traps baited with cheese and I have never experienced the smallest difficulty in catching them. To protect the traps I used to put a box over them with half an inch cut off two opposite ends so that mice could run in and out. Then place three or four traps under the box and where the mice run and you cannot help catching them. I have caught fifteen in one night, and for weeks I averaged six or eight. In a month's time I had for all intents and purposes exterminated the little beasts. I don't doubt I have a few now, but I am quite sure not many. If I see any signs I at once lay a trap and almost invariably succeed in catching my friend the first night. I had two disasters,—both due to insufficient care,—one was a cock firefinch and the other a hen reedling.

L. LOVELL-KEAYS.

P.S.—My *Zosterops viridis* are now feeding their *third* nest of young, 2nd July.

PARRAKEETS NESTING IN A STATE OF LIBERTY.

SIR,—In answer to Mr. Le Souëf, I should rather like to say that my parrakeets did not appear to fight for *nesting places*, as the majority of fatal battles took place at a distance from the most favoured breeding resort of the combatants; birds were sometimes killed out of the breeding season altogether. The fact that I kept birds together which may not meet in a wild state might have had something to do with it, for it used to be members of different species, not of the same species, which killed one another. I am also tempted to think that the birds were so quarrelsome, not because they were overcrowded, but for the opposite reason, because they were comparatively few. It certainly seems to be the case that members of certain pugnacious species of birds and beasts fight less savagely, when, from natural or artificial causes, they are compelled to see a great deal of their rivals, without, however, being in so confined a space that they are able to overtake and kill them. The mute swan, for example, is seldom satisfied with less than a mile of river or a whole lake when he and his mate are thinking of a nest and all rivals are either killed or driven away. But at Abbotsbury, where hundreds of swans are kept together, you may see them nesting within a few yards of each other in comparative amity.

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Owing to the War, parting with 2 cock golden pheasants, one silver, one gold-Amherst hybrid, pair mandarin ducks, Carolina drake and believed Japanese teal duck. All now moulting, but best time for removal. Offers wanted for the lot.

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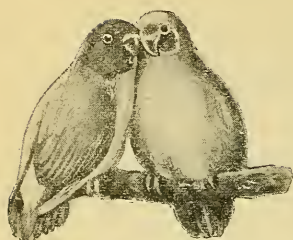
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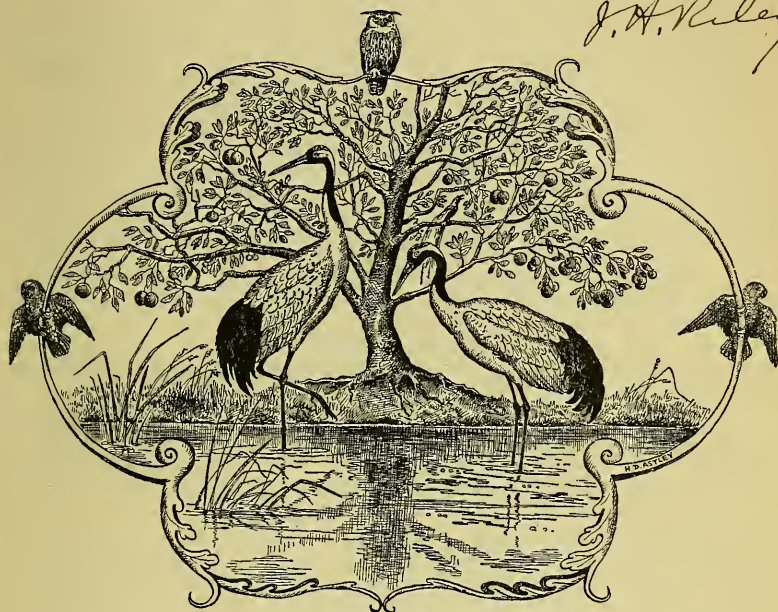
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J. A. Riley



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1



2



GREAT-CRESTED TOURACO. Two, three, and four months old.

Photo by Leslie M. Seth-Smith.

THE
AVICULTURAL MAGAZINE,

BEING THE JOURNAL OF
THE AVICULTURAL SOCIETY.

Third Series.—Vol. VI.—No. 11.—*All rights reserved.*

SEPT., 1915.

THE GREAT CRESTED TOURACO.

Corythæola cristata.

By LESLIE M. SETH-SMITH, F.Z.S.

This bird, probably one of the most beautiful of the touracos, is very common in the wooded parts of Uganda, and its resounding notes make the forest ring. It usually goes about in flocks of from eight to a dozen, always keeping in high trees. I have never seen one on the ground. Their running and jumping up branches of trees are very characteristic. When flying they go in a string with a considerable interval between the individuals. Their flights are never very prolonged as far as I have observed, just from one patch of forest to the next, say a quarter of a mile at the outside. The leader leaves the top of his tree and enters the next tree about half way up and then his running and jumping starts till he is at the top of this tree, whence he flies off again, the others following in turn.

Though I have never come across the nest, it is, I understand, usually not very high, like a pigeon's nest, and often in a single tree, not in forest. A friend of mine tells me that August is the month to expect to find them. If this is so it would appear that they have two nesting seasons, as a young one was brought to me, evidently having fallen from its nest, on February 23rd this year. I gave the boy a rupee for it and told him to go and look for the nest and bring the other one and I would give him another rupee; but he never went.

When the nestling arrived it was very small but covered with down, except the head which was quite bald; the tail was

very short, the wings and feathers were dark blue and well developed, the breast black, and the beak was very large. At a first glance, in the boy's hand, I thought it was a young porphyrio, as the boy said it had come from near the lake; however, on taking it in my hand I soon saw my mistake.

I fed it entirely on fruit, with now and then insects, larvæ, etc. At first it seemed particularly fond of a forest fruit, like a large damson; later these were difficult to get and I tried bananas, pine apple, pawpaw, but it did not care for any of these, then guavas came in and it quite liked these again, but they went off and I could find nothing it really liked, also I had to leave it to the tender mercies of a boy, only seeing it during week ends, till on the 25th of July it died, after having been kept for just five months.

It proved a most delightfully tame bird and would sit quite happily on my hand or shoulder, nibbling at my ear or hair while I walked about the garden. One thing that struck me was the length of time it took before it could fly, possibly it was weak from unsuitable food, but it could hop and climb long before it could fly and I came to the conclusion that these birds leave the nest some time before they can fly and keep among the thick leafy branches and so escape observation. Although so common around here, I never remember seeing any flying about except full-grown birds and my tame bird, when it died, at least six months old, was only about half-grown, with the colours just appearing on the underside. The crest had grown but was only composed of long black feathers, not the beautiful crest that the adult bird has.

The photographs show it at two months, three months, and four months old, presuming it was one month old when brought to me.

BREAKFAST GUESTS.

By KATHARINE CURREY.

Our little friend, the great tit, has now been our breakfast guest for some time and his friendship towards us has ripened into confidence, almost, but not quite, reaching the pitch at which the human hand is no longer an object of terror. Regularly every

morning, now at about six o'clock, there is a little scratching noise outside at the window, and on the blinds being raised "Little Peter," as we have named him, appears, fluttering against the panes, clinging to the framework and perching on the open window, uttering his little call note. There on the ilex tree sits the mate, and with her sometimes a blackcap, who appears intent on getting the nuts for himself without the trouble of going to the window for them, for he watches, and when Peter has caught up his nut (a most dexterous feat considering the size of his beak) the blackcap tit chases him across the lawn. Whether he succeeds in robbing him of the nut or not is not known, as we cannot follow. Meantime the mate flies shyly to the window, quietly takes her nut and enjoys it on the ilex tree, holding it in her claws like a crossbill holds a fir cone.

A few weeks ago she ceased coming, no doubt being occupied with her nesting duties. But though Peter now takes the nuts from the sill of a wide open window, with a human being standing there, he will not come on to the hand. Once only, on a very cold, frosty morning he ventured to seize a nut from my hand, but never since. He expostulates with a loud "Tweet! Tweet!" if I persist in holding them, and comes on to the sill a little way off, but not on to the hand nor even so far as the nuts held in the fingers. He rarely asks me for nuts during the day, they seem to be a breakfast relish. The blackcap tit has not been lately so Peter has the field to himself.

I have listened very carefully during the winter and early spring to Peter's notes, and so far as I can make out he has about seven different calls and the notes now are less clear and resonant than in winter and have a sort of tiny whistling sound as if the letter S were in them. I have wondered if perhaps he gets tired with helping to feed his young ones and it affects his voice.

There are several blue tits in the garden, and they shout to each other from the trees. One day a party of them flew on to an ancient rose-tree—a "Maiden Blush" rose, bearing hundreds of exquisite shell-like blooms in June—and the dash of blue-grey colour in the old tree was a lovely little picture.

EXPERIMENTS IN FEEDING HUMMING BIRDS DURING SEVEN SUMMERS.

By ALTHEA R. SHERMAN,

National, Iowa.

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The experiments herein described were begun without intending them to bear upon the question of the food naturally sought by the ruby-throated humming bird (*Archilochus colubris*); the original aim of the feeding was to attract the humming birds about the yard in the hope that some time they would remain to nest there. The experiments have been conducted on independent lines without knowledge of any similar work that was being done by others until the autumn of 1912, except in one instance, where special acknowledgments are due to Miss Caroline G. Soule, of Brookline, Mass, who in *Bird Lore* for October, 1900, described her success in feeding humming birds from a vial, which she had placed in the heart of an artificial trumpet flower made from Whatman paper and painted with water colours. This suggestion of using artificial flowers was taken, but more durable ones were made from white oilcloth, their edges were stiffened with one strand of wire taken from picture cord, and they were carefully painted with oil colours, the first to represent a nasturtium and the second a tiger lily.

In August of 1907 upon the appearance of a humming bird about our flowers the artificial nasturtium, tacked to a stick, was placed near a clump of blooming phlox, and its bottle was filled with a sirup made of granulated sugar dissolved in water. The next day a female rubythroat was seen searching the depths of tiger lilies that grew north of the house; as she flew to the east of the house she was instantly followed, and was seen drinking from the artificial flower for the space of about a minute, after which she flew to a rosebush, wiped her bill, and rested a brief time before flying away. This was about noon. She returned at intervals of about a half hour for the next three hours, then at 3.10 o'clock she came back to search quite thoroughly the phlox blossoms, this being the first time she had paid

any attention to them after finding the sirup. Ten minutes later she drank deeply from the bottle and was seen no more that day.

In this way began the feeding of the ruby-throated humming birds, which has been continued each summer since 1907 with a varying number of birds. The first season it appeared that but a single bird found the bottled sweets. Perhaps it was the same bird that came the following summer, and was not joined by a second humming bird until the latter part of August. In 1909 the number was gradually augmented until seven of these birds were present together. The following year there were days when again seven came at one time; since then four has been the largest number seen together.

The days and weeks are calm and quiet ones when a single bird has the bottles to herself. More or less fighting ensues as soon as another bird comes on the scene, and the tumult of battle increases with each new arrival until the presence of six or seven of these tiny belligerents makes the front yard appear like the staging of a ballet. With clashing sounds and continuous squeaking cries they chase each other about, often swinging back and forth in an arc of a circle with a sort of pendulum like motion. Sometimes they clinch and fall to the earth, where the struggle is continued for many seconds. So jealous are they lest others share the sirup that they seem more anxious to fight than to drink. When seven are present they are very difficult to count, and appear to be threefold that number. We have read accounts of 40 or 100 humming birds hovering about a tree or bush. That these numbers must clearly have been estimates, probably large ones, too, anyone must believe who has made sure that only seven birds have created the maze of wonderful and beautiful motion in which there seemed to be a dozen or a score of participants.

The number of bottles in use has been sufficient on most days to satisfy the needs of all the humming birds present. Each new bottle has been added by way of an experiment. The first one was placed in an artificial flower painted to imitate a nasturtium, mainly yellow in color; the second flower in form and color closely resembled a tiger lily. The experiment with the yellow and the red flowers was to test a supposedly erroneous theory which had been published

to the effect that humming birds show a preference for red flowers. In further proof of the fallacy of this statement the third flower, shaped like the nasturtium, was painted green, and was placed in a bed of green plants which at that time bore no blossoms. It was pronounced by other people to be "exactly the color of the surrounding foliage." It was staked out and filled on August 5, 1909, when no humming bird was in sight, but in about 10 minutes some of the species had come, and 15 minutes later one was drinking from the bottle in this green flower.

It was then suggested by my sister, Dr. E. Amelia Sherman, that I try a bottle without an encircling flower. The problem of supporting a bottle without an artificial flower was solved in this way: The bottle was incased in a piece of unbleached muslin, enough of the cloth extending beyond the bottom of the bottle to allow the tacking of it to a stick. The support of the bottle in a position slightly up from the horizontal was furnished by a piece of leather with a hole in it through which the bottle was thrust, and the leather was then nailed to the stick. In this arrangement the most vivid imagination can find no suggestion of a flower. It was put out on August 8, and in 43 minutes a humming bird was drinking from it. The bottle was then moved from proximity to the artificial nasturtium and tiger lily, and a humming bird found it in its new location in 32 minutes. This place about 8 feet from the artificial flowers has been its position in the four succeeding summers. In July, 1911, two more flowerless bottles were added to the group, making six in all. For convenience in referring to them the flowerless bottles will be called by numbers 4, 5, and 6.

Bottle No. 4 had not been long in use before it was noted that the humming birds showed preference for it, while the nasturtium was sought least of all. This seemed due to the deep inseting of the bottle in the flower, which caused the birds to brush against its lower leaves, an unpleasant experience when sticky sirup adhered to it. For this reason the filling of the nasturtium was sometimes omitted for several days, whereupon the humming birds soon ceased to visit it, although drinking regularly from the tiger lily a few inches away. When the filling was resumed the birds returned to it as they had been accustomed.

In the fourth season of experiments the bottle held by the green flower was put out when the others were, but was not filled for six weeks. During that time humming birds were present and drinking on 23 days. It is safe to say that they were seen drinking fully 400 times from the other bottles, but never once were they seen to approach the green flower. The first morning it was filled four of them were about the yard and one drank from this flower two minutes after the filling. The following year (1911) after dark on July 14 the green-flower bottle was set in its bed of green and was left empty for a few days. About noon on the 17th one of the ruby-throats visited it, thrusting in her bill; the bottle was then filled for the first time that year, and in a half minnte a bird was drinking from it. To this is added a transcript from my journal bearing date of July 17, 1912: "About 9 a.m. before I had put out any sirup a humming bird was dashing from bottle to bottle and tried the green-flower one. It was bent over in the green foliage, and certainly has had no sirup in it for six weeks or longer. I filled it after I saw the bird visit it, and she came again to drink."

The new bottles No. 5 and No. 6, covered like No. 4 with white muslin and nailed to a weather-beaten fence picket, were put out after dark on July 23, 1911, but neither was filled for one week. The next morning about 8 o'clock a humming bird was searching one of these bottles for suspected sweets; four such visits were noted in one day and on several other occasions. At the end of the week the filling of No. 5 began, but no sirup was put in No. 6 for two years. During these years a record was kept of each time a humming bird was seen to visit and search this unfilled bottle, and the total number was 15, in addition to those visits already mentioned.

Thus far this writing has been confined to a description of the things seen; no theories have been advanced, no deductions have been made, no hypotheses have been carried to their logical conclusion. The first deduction offered is that at the beginning of the experiments, in 1907, the artificial nasturtium may have led the humming bird to explore its depths, and, finding its contents to her taste, she returned to it. Other birds may have found the sirup there in the same way, yet it seems more likely that most of them were led to the bottles by seeing another drinking. This probably was the case with

the catbirds that have drunk from the bottles on several occasions, although they have found it an inconvenient performance. The same may be true of a pair of chickadees that drank as long as they remained with us. They clung to the stiff leaves of the tiger lily and found no difficulty in the way of drinking. Only one humming bird learned to perch on this flower and drink from it while standing. From the earlier experiments it was suspected that the humming birds found the sirup through some sense, rather than stumbling upon it by chance or through imitation, but several things disprove such a supposition. The principal one is that migrants passing through the yard in the spring, but more especially in the fall, fail to find the sirup. That these migrants can be recognized as such by their behaviour will be shown further on.

The 25 or more visits paid to bottles No. 5 and No. 6 before they were filled for the first time show that the birds recognized them as receptacles for their food, though they were new bottles occupying new locations. To make sure that the birds should not be attracted to them by seeing me stake the pickets out, this work was done after dark. The first summer that No. 6 was out, frequent pretenses of filling it were made in sight of the birds, but no response followed. The next summer no such pretenses were made, yet a humming bird was seen to search this unfilled bottle on May 12 and 31, twice on June 1, on July 21 and 26, on August 4, 7, 12, 23, and 26.

(To be Continued).

RED ROSELLAS AT LIBERTY.

By THE MARQUIS OF TAVISTOCK.

The red rosella shares with the peacock the ill fortune of being a surprisingly beautiful bird, whose merits are apt to be ignored simply because he is so common. If rosellas were as scarce in England as Queen Alexandra parrakeets, and peacocks as seldom seen as Mikado pheasants, what prices would be given for them and what eulogies would be written by the few who were fortunate enough to be their possessors!

Parrot-keeping has been a comparatively recent hobby of mine, and six years ago I do not think I could have named a single

Australian parrakeet, except a cockatiel and a budgerigar. Consequently the impression made by my first pair of rosellas is still fresh in my memory. I expected to receive something about budgerigar size, and my astonishment may be imagined when I found out my mistake and saw the splendid plumage of my new purchases. They were two fine birds, the cock being an especially perfect specimen, showing all the striking yet harmonious contrasts in colour, which I often think entitle the rosella to the first place in the lovely family to which it belongs. They were acclimatized (coming from a gentleman at Teddington, who never in my experience sells anything but first-rate stock at moderate prices—*O si sic omnes!*) and although it was winter I gave them their liberty together, after they had spent a few days in an aviary. This I afterwards learned was a very risky proceeding; I should at least have kept the hen caged until her mate had learned his way about, but by great good fortune I did not suffer for my rashness. For some months the rosellas stayed to delight me with their beauty; then, when April arrived and I began to count my unhatched chickens—two broods of six, that makes twelve, and the old pair, fourteen to start the winter with—they, well, they just vanished and no more was ever heard of them. At the time I suspected a human thief and went about with feelings of murder in my heart, but in the light of subsequent experience I think it is just as likely that they flew clean away out of pure cussedness, as is the habit of so many of their tribe.

“If you don’t at first succeed, try, try again!” is the only motto if one is to establish parrakeets at liberty, and that summer I bought eight more rosellas and turned them into a grass enclosure with cut wings. Most of this lot were young imported birds, but there was at least one old pair among them. They throve well enough but strayed badly after they were able to fly, and by the end of the winter only a solitary hen remained, who had attached herself to a pair of Pennants. The cock of this pair was exceedingly keen that his wife should choose a 40ft. perpendicular rain-pipe as a nesting place, and the rosella never lost an opportunity of gazing eagerly down the uninviting opening whenever the hen Pennant allowed her a chance. Finally, the Pennants decided it wasn’t good enough and migrated into the unknown. The rosella

stayed behind and I obtained her a mate of her own species, but a few weeks later she was picked up dead and the cock vanished soon after the tragedy.

In my next lot of rosellas I was more fortunate, as among them were two old cocks who had been on the show bench and were accustomed to captivity and the ways of mankind. They had, moreover, acquired enough sense to stay where they found they were well off. There was also a funny little tailless cock who was "finger-tame" (a finger-tame broadtail may be defined as one which will unhesitatingly come up to you and bite your finger severely), but a barn owl ended his career after he had only been with me about a month.

In the autumn I obtained a cock yellow-mantled parrakeet together with his mate, a sickly rosella, who did not survive long. *P. splendidus* is in reality only a local form of *P. eximius* with yellower wings and shoulders; but it is a very beautiful bird and its colours are wonderful. By December I was left with six rosellas (including the yellow-mantle) three being cocks and three hens. All were fully adult and in excellent condition and they soon turned their attention to selecting partners, their matrimonial affairs being most amusing to watch. Some writers declare that the rosella "dances" before the object of his affections, but after much observation I can only say that I consider this statement to be quite incorrect and a gross insult to a gentleman of refined tastes and behaviour. The cock is fully conscious of his beauty it is true, and knows well how to show off his fine plumage to its best advantage by depressing his shoulders and spreading his tail; he *may*, too, give an occasional hop forward to accentuate the general effect, but he has not the slightest intention of making himself either cheap or ridiculous and will seldom display to a lady whose affections he has reason to believe are engaged elsewhere. During the early stages of his courtship he appreciates a modest and retiring disposition on the part of the fair one, and sometimes enforces it by a spiteful peck should she appear too bold and take things too much for granted. I had an amusing instance of the rosella's innate dislike of a forward bride only a few weeks ago. At the end of the winter I was offered a cock yellow-mantle, and although I have now little time to devote

to aviculture the temptation proved too great to resist. He was in nice condition, and after spending some time in a big cage with a bath and a plentiful supply of green food and other luxuries, he began to display and bring up food from his crop, clearly showing that he wanted a mate. A hen mealy rosella was obtained and placed in a cage beside him, and for two or three weeks everything seemed to be going well. The mealy was filled with intense admiration for her companion and displayed to him with an energy and persistence I have never seen equalled. The yellow-mantle, though less extravagant in his demonstrations, showed great anxiety and distress if the mealy was taken out of his sight, joined with her in defiant tail-wagging and calling if a whistle in the street suggested the presence of a rival pair of parrakeets, and was obviously anxious to fight a cock mealy rosella I showed him one day, out of curiosity to see what he would do. When however the hen mealy was allowed to enter the yellow mantle's cage he fled from her in horror and all her blandishments were powerless to reassure him both on that day and on the many subsequent occasions when I tried them together. He continued to show uneasiness if she was altogether removed, but it was evident that, while unable to reconcile himself to the idea of a solitary existence, he could not make up his mind to accept as his wife a person of such abandoned manners. Of course his behaviour may be put down to cowardice and the natural antipathy which exists between mealy and red rosellas (this however is often overcome in confinement); but such an explanation does not account for his anxiety to attack the cock mealy; nor is it quite compatible with his fearless display of anger towards his former admirer when he had gladly accepted as his bride a little hen Stanley, half bare from feather plucking and generally the most unattractive object imaginable.

The three cock rosellas at liberty took a long time over the selection of their mates. After "walking out," so to speak, with a hen for a few weeks, they would decide she wasn't suitable and exchange her with a neighbour, a habit I have not noticed in any other broadtail. One of the cocks was a very vain bird, who considered himself too good for the society of any of his near relatives and so disgusted his would-be bride by his indifference that in the

end she left him and wandered away altogether. Her loss did not distress him at all, for some time before he had joined some red-collared lorikeets, of which at that time I possessed a small flock. Now a lorikeet, though a model of social virtues where its own kind are concerned, is most vicious and aggressive towards all other parrots and the snubs which the rosella received were many and severe. Nothing however could shake his faith in the idea that the unappreciative lorikeets would come to admire him some day, and when digestive troubles had reduced their number to one, he accompanied the survivor all through the winter until it, too, joined the majority. On the death of his companion the rosella vanished.

The rest were more fortunate. The *eximius* cock and his mate first attempted to nest in a chimney with the result that she made a sudden and unexpected descent into a room, arriving soot-begrimed and with a cut forehead. After this unpleasant experience she betook herself to a hollow elm where four young were successfully reared. A second attempt at nesting unhappily ended in disaster, for the hen disappeared a few weeks after she had begun to sit and must have met with some untimely end.

The yellow-mantle and his wife also nested and reared a solitary daughter.

Young rosellas are very like their parents, but they have much more green on the wing and less blue, and a green band runs from the nape of the neck right up on to the crown. By mid-winter it is fairly easy to distinguish the sexes, and they breed, like most other broadtails, when a year old, but full adult plumage is not assumed for about eighteen months.

The correct method of sexing rosellas has proved a subject of controversy. Personally I have no faith in the "green spot" test, and flatter myself that I can always distinguish a hen by the small size and ragged edging of the red bib. An observant aviculturist tells us that adult hens differ from cocks in having white spots on some of the flight feathers, but, if I am not mistaken, he also says that this test cannot be applied to young birds.

My rosellas, old and young, flourished until November when a tragedy occurred for which I was myself responsible. One morning I noticed the yellow-mantle on the feeding tray, looking, as I

thought, a trifle puffy. I deliberated for a time whether I should catch him up or not and finally decided to do so as he was a valuable bird I could ill afford to lose from an ordinary chill, so I pulled the string which closed the trap-tray. When I went up to him he seemed lively enough, but directly after I had transferred him to a cage he staggered, coughed, gave a shiver and fell forward—dead. A *post-mortem* showed that the falling sides of the tray had struck him a severe blow, a danger I had always feared, but up to that time had chanced successfully; there was nothing else the matter with him at all. My feelings can better be imagined than described.

After the death of the yellow-mantle, his widow joined the family party of rosellas and proceeded to make herself agreeable to the old cock. She was not popular with her prospective step-children, and was especially disliked by the young cock and by the old cock's favourite daughter, who for many weeks had been her father's chosen companion. A good deal of squabbling ensued, but the widow meant business and won the day, finally bearing off the old gentleman in triumph, while his family were left to their own devices. The favourite daughter, unable to endure the spectacle of her rival's triumph and exasperated by the insults of her brother, whom up to that time she had successfully bullied, took her departure. The young cock ended by pairing with the yellow-mantle's daughter and I bought, as a mate for the other young hen, a bird which was exactly intermediate in colour between a yellow-mantle and a typical rosella.

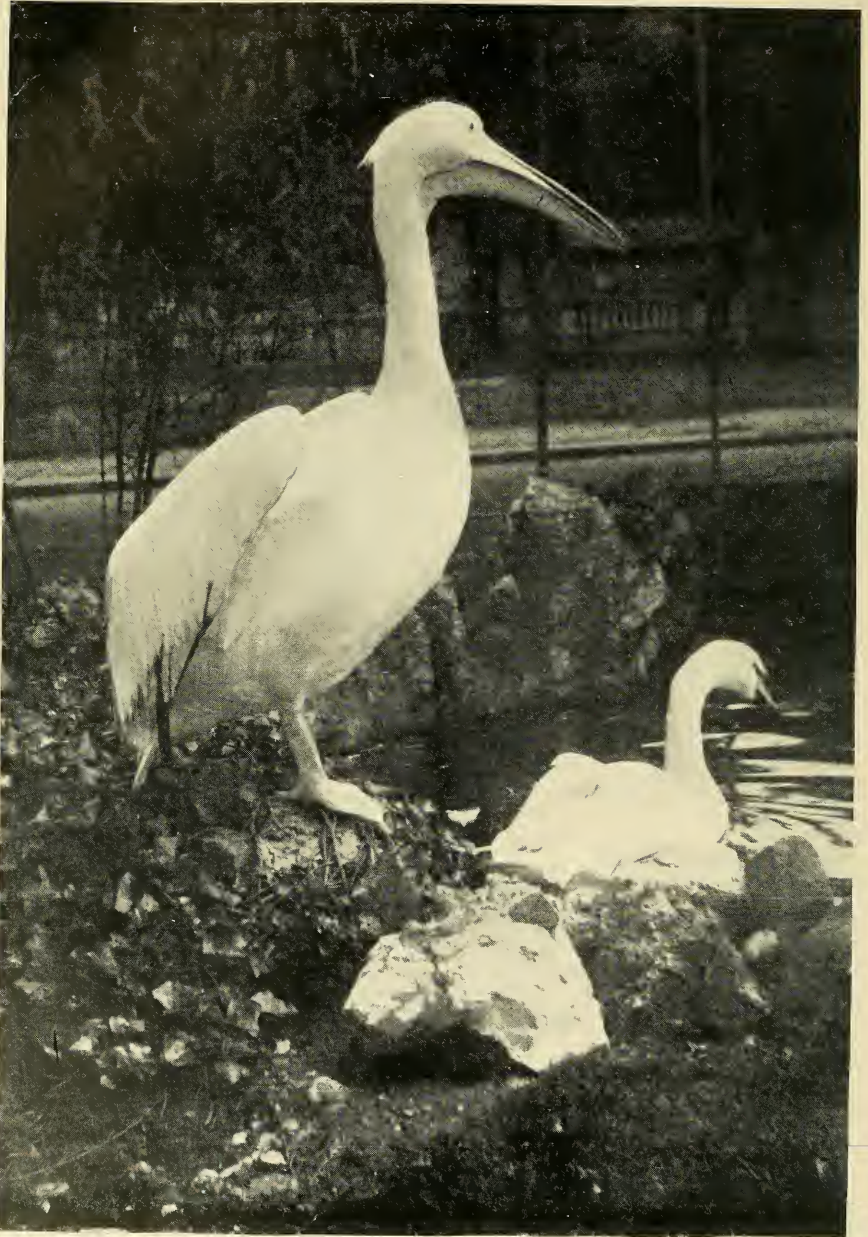
Towards the end of winter I had a spell of ill luck. The yellow-mantle's daughter was taken by an owl; later, the young hen rosella started to nest, became egg-bound, recovered, and then presumably had a second attack and died, anyhow she vanished completely. Her mate was found dead in a pond some time later. Then the old hen became egg-bound and I caught her and saved her by the hot room treatment, but her recovery was a matter of some weeks. When she was really well again I turned her out with a fresh mate and both went clean away at once. It was very disappointing, as when once a bird has grown really accustomed to a place it will usually induce a strange mate to stay also.

The symptoms of egg-binding in a parrakeet are a little

peculiar, a brief description of them may perhaps be helpful. The affected bird goes wrong rather suddenly and looks most miserable, often appearing, from the way she holds herself, to have received a blow across the middle of the back. She ruffles her feathers, droops her wings very much and sits with her head under her wing, occasionally shaking herself and stretching her neck in a peculiar way as though something had stuck in her throat. Great heat (80-85°) and the insertion of a little olive oil into the vent with a soft paint brush will usually effect a cure, but alas! owing to the almost universal habit parrots have of nesting in the recesses of a dark barrel or hollow tree, it often happens that a tragedy occurs before it can possibly be averted.

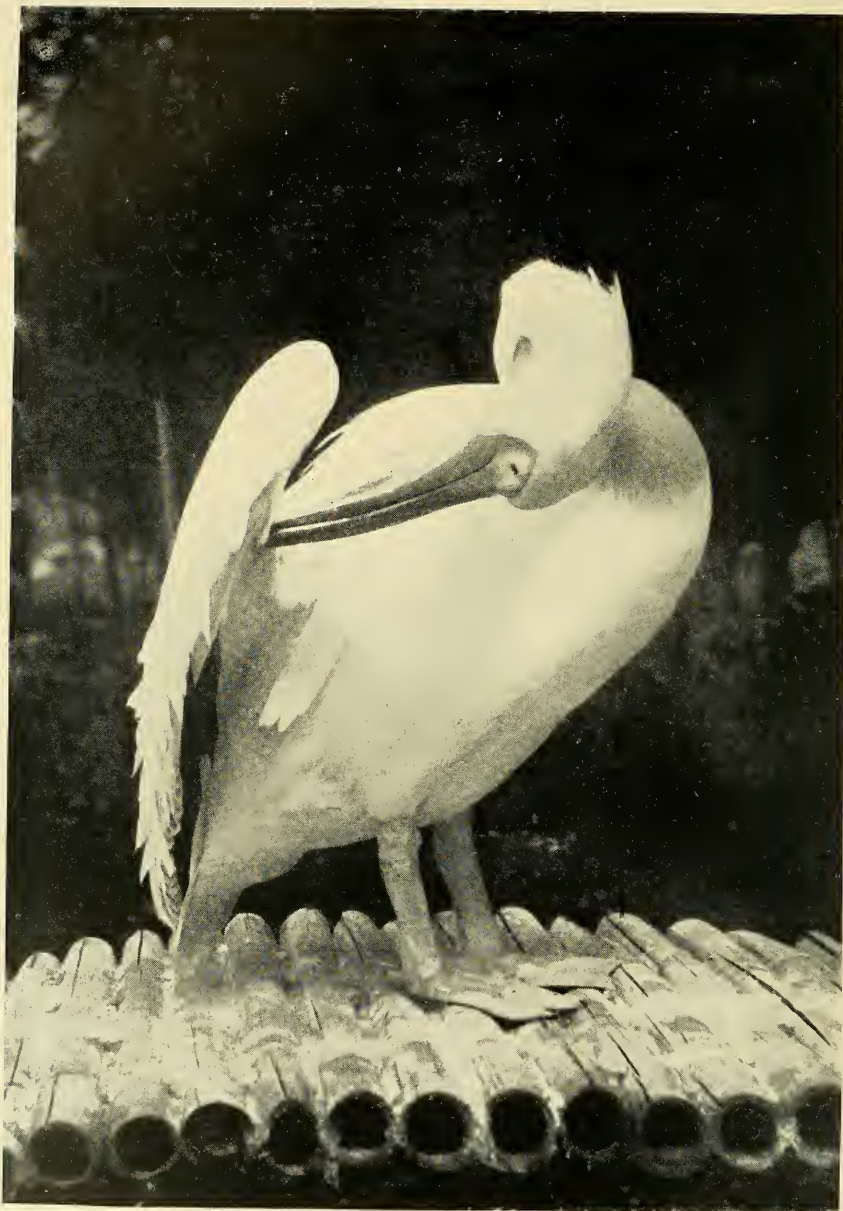
Some species are far more subject to egg-binding than others; some individuals belonging even to the most susceptible species may be immune, but it does not follow that their immunity will be transmitted to their offspring. Over-fat birds are more liable to become egg-bound than those in hard condition, but the most perfect condition and the most careful treatment often fail to ward off the danger. There is only one rule to be observed with birds in captivity. Never allow a valuable hen to breed except at a fairly high temperature, especially if she be a Stanley, a hooded, or a grass parrakeet. You may lose the chance of a nest or two through over-caution, but it is better to have the hen without the eggs than the eggs without the hen!

To return to the rosellas. About a fortnight before his mother's illness I had obtained a mate for the young cock. He soon discovered her and spent most of his time close to the aviary. Evidently he had fallen much in love with her, but unfortunately his father, now a grass widower, followed his example. When the lady was let out there *was* a scene. The old bird did his best to win her, but his son was too many for him; *he* was not going to be done out of the bride he had waited for so patiently and courted so long, and although the smaller, duller, and hitherto the weaker bird, he fairly ousted his parent and won the day. To console the old fellow I got a second hen, and in due time he took her off to the elm and a family were safely reared there the following summer. The young cock and his mate established themselves in a barrel under



THE PELICAN OF LOCARNO.

Photo by Miss A. Hutchinson.



THE PELICAN OF LOCARNO.

Photo by Miss A. Hutchinson.

the roof of the house. For a time all went well, but just when the young were about half-grown an officious Brown's parakeet and his mealy rosella wife insisted on adopting them, a proceeding which so disgusted the rightful parents that they left for good. The Brown's reared his foster-children, but I wish he had minded his own business all the same.

A DERELICT PELICAN.

By ALICE HUTCHINSON.

The pelican, whose portrait appears in this month's magazine, was a waif and stray, found by some boatmen two or three years ago, drifting about on Lago Maggiore, near Locarno. They captured him and brought him safely to shore and presented him to the townspeople who received him with open arms and gave him the "Freedom of the City."

The King of Italy on hearing about him was so interested that he sent a beautiful mate to Locarno to cheer the poor lonely alien, fearing he might mope and die in this strange land, away from all his belongings. But unfortunately the lady died and her hard-hearted widower lives a perfectly happy and contented life in his own house and grounds, in company with a few swans and fancy ducks, to whom (as long as they take no liberties) he is supremely indifferent—a threat with that big ugly beak teaches them to keep their distance, but on the whole he is not aggressive. Note the look of contempt and superiority cast on the swan by that wicked little eye.

His favourite place for standing to be admired is on the fancy bridge over the little piece of ornamental water, where my lord takes his bath. You will see him in the picture, having just come out and preening himself in the sun: he had not realised that he was being photographed, for he is so vain, that as soon as he sees a camera he begins to strike attitudes. A third picture showed him beginning to dance a tango, and looking very conscious, with his wings crossed over each other, but the effect is rather spoilt by his dancing at that critical moment for it has turned one of his elegant little feet into a frying pan. I took these photographs in June when his plumage was in great perfection.

HAS THE OBJECT OF THE AVICULTURAL MAGAZINE BEEN MISINTERPRETED ?

The magazine began life 21 years ago—*i.e.* in 1894—as a journal for aviculturists, naturally at all times a very limited community, who might indulge in the study of “British and foreign birds in freedom and captivity,” and to this study anyone possessing all the volumes will see that the Society has kept. That it ever became a purely scientific magazine is quite untrue, although some people directly they saw a Latin name which they were unable to interpret, were at once inclined to say, “Oh this is beyond us, this is scientific.” We certainly make use of titles of Latin and Greek derivation, but the Avicultural Society has never published a magazine the contents of which could not be understood and appreciated by any of its members, even though they may not have enjoyed the privileges of a public school and university education; the magazine has always and invariably kept to an instructive and plain treatise on British and foreign birds in freedom and captivity.

I say this, because it has undoubtedly been bruited about that the magazine is for scientific ornithologists rather than for every day homely and simple aviculturists, and what Mr. Fillmer wrote in “Bird Notes” [started I think some seven years after the “Avicultural Magazine,” *i.e.* in 1901] was really misleading (*cf.* B.N., Nov. 1901) in so far as he said that our society at that time claimed to be a scientific society. We leave the science of ornithology to more learned journals, notably the “Ibis,” *neither should we like to trespass on their ground.* Mr. Fillmer wrote: “As a “large proportion of the members of the Foreign Bird Club are also “members of the Avicultural Society, I should like to try to make “plain the attitude of the Club towards the Society. Some of our “members have expressed a fear that the Club will injure the “Society. I do not think it will, FOR THE REASON THAT ITS AIMS “AND OBJECTS ARE DIFFERENT. The Avicultural Society, what- “ever it may once have been, now claims to be a scientific society. [N.B. If any individual member did so, the Society itself *never* did! H.D.A.] “The Foreign Bird Club does not pretend to be in any “sense a scientific society, and aims at nothing more than the mutual

“help and encouragement of the members in their hobby of bird-keeping.” [It was evidently at that time not the intention of the Club to study birds in freedom!] “And the Club does all in its power to encourage shows. Having therefore different views and purposes, *the Club has no desire or intention of competing with the Avicultural Society, or of drawing members from it.* By all means let everyone belong to both the Club and the Avicultural Society, if they will. But while I feel obliged to insist upon the unscientific character of the Club, do not let us submit to the imputation of being *unscientific*. Nothing unscientific, in the sense of being inaccurate, or contrary to science, will be knowingly admitted into the pages of “Foreign Bird Notes.”

After all, that is all that our magazine has striven for, and against.

Why, if by 1901 Mr. Fillmer asserted that the Society “now claims to be a scientific society,” did he write in the “Avicultural Magazine” in 1900 as follows?—“I am very pleased to see the increase in the size of the ‘Avicultural Magazine,’ and hope it will be maintained. The magazine has been, and is, a great success, and I want it to become a still greater one.” He then goes on to suggest that the cult of canaries, foreign mammals, reptiles and fishes should be included in its pages. Mr. Reginald Phillipps, in answer to this suggestion, finished a letter thus—“If once the flood-gates were opened (*i.e.* mammals, reptiles, canaries, and so on), it would be difficult to withstand the inrush of the flood, and the consequent swamping of the British and foreign birds. When the ‘Avicultural Magazine’ was established in 1894, it helped to supply the want; and more and more it has done this, and more and more it will continue to do this—if we are true to ourselves.”

I maintain we have been, and *are*.

The year of 1900 to 1901 shows no difference in the style of the magazine, but contains just as many practical and simply-written articles on British and foreign birds as when Mr. Fillmer wrote to say it was so successful. If there have been a very few members who when at home are museum ornithologists by preference, all the better for the society, since they tend to keep the magazine from becoming unscientific according to Mr. Fillmer’s

interpretation, viz., inaccurate, but one of the most scientific members, Dr. Butler, who has done and still does so much for us, and to whom we should be very grateful, is at the same time as keen and ardent an aviculturist as anyone, rejoicing in his living birds, and quite content to call a spade a spade, or a bullfinch a bullfinch, instead of *Pyrrhula pyrrhula pyrrhula*. Is *that* the sort of thing that frightened people, or caused them to spread it abroad that our magazine was merely scientific? I wonder! and maintain that the Avicultural Society has never swerved from its original style and objects, that it should be just as helpful, as indeed it is, to lovers of birds in freedom or captivity, from England or from foreign climes, just as good a journal for advertising birds for sale or for acquiring birds that are wanted.

Let our members store up these points, not throwing off the old love in order to be on with a newer one, not crippling the journal that was first in the field on its own particular lines; not detracting from what was founded in the interest of aviculturists, who can ill-afford to place their eggs in more than one nest, in spite of any advice to the contrary. When the old bank keeps to its original ways of doing business, one does not leave it for a newer one.

HUBERT D. ASTLEY, *Ed.*

DIAMOND DOVES.

By Miss ALDERSON.

Amongst the smaller doves the diamond seems by far the most popular. It is deservedly a favourite, for it is both beautiful in colour and graceful in form. What is better still, it is a harmless, quiet bird in a mixed aviary, and this cannot be said of many of the dove family.

My first diamond dove—a hen—bought in 1899, cost me 10/6, but in 1911 they could be had for 10/- a pair. The last few years the price has again risen and a pair of birds fetch from 25/- to 30/-, the former price being a low one.

For some reason hens always seem scarcer than cocks, and are worth double the value of the latter, so that in buying birds singly you would expect to pay 20/- for a good hen and 10/- to 12/-

for a cock. In buying it is as well not to buy birds of the current year's breeding unless you get them from a good judge of the sexes, or from someone willing to make good any error, as the colour of a young bird is very like a hen, until it is fairly adult, and you may buy a young, or poorly coloured cock, in mistake for a hen.

Even those who have kept them for long may make a mistake when old and young birds are flying mixed together. At the end of last nesting season I was catching up about ten young birds to send away in pairs. Earlier on I had tied a piece of dark wool round one leg of each of the old birds to mark them, as I did not want to send away my favourite stock birds. But unnoticed by me one very good hen had lost the piece of wool off her leg, and this was only found out when the catching up was completed. Some of the young birds I had also marked (each aviary with a different colour) but not all, and which was my old hen I could not tell. At last I thought I had a brilliant idea, the hen had been sitting so much through the season that her tail was certain to be worn, so I picked out a bird with a very poor tail, and feeling sure I was right sent off the other ten birds with a quiet mind. But some time afterwards my supposed hen developed into a cock, much to my disappointment, as besides the loss of an especially good bird I had lost all chance of breeding diamonds in that house for the season—for hens cannot be had just when you happen to want them.

Of course, the best safeguard is to move your young ones early, but if other nesting is going on in the same aviary it is not always convenient, and the diamonds themselves have very short intervals between each nest. A good pair will have quite four or five nests during one season, and rear one or two young ones nearly every time. The greatest number of young birds I have bred from one pair during the season has been seven.

I suppose most of our readers have known and kept the diamond dove, but as there may be a few that have not done so it may be as well to give a very brief description of it. The length is about $7\frac{1}{2}$ inches, 4 inches comprising the slender shaft-like tail. The head, neck and upper breast are soft ash grey, the nape of the neck and back are mouse-brown, the under parts pure white. The upper parts of the wings are a darker grey than the head, and are dotted

over with tiny white spots which show up very distinctly on a good bird. The eye is bright ruby red, and the naked skin round is coral pink, though the colour varies in different specimens. The beak is olive brown, the legs and feet, flesh colour.

The above is the colouring of a cock bird, the hen may be told by the white spots on the wings being fewer and larger—and the general effect of her plumage is much more of a dun grey—not nearly so blue a grey as the cock; the eyes, too, are not such a vivid shade of red.

I find it best to keep only one pair of nesting diamond doves in each aviary. If you have more than one pair they do not seem to rear so many young ones. I found they built their nests too near together, and it ended in a general mix up, neither pair doing well.

I make little wicker baskets, about 4 inches across and rather deeper than a saucer and tie them up among the branches, putting in a few short bits of heather and leaving more on the ground for the birds to carry up. As a rule they lay two eggs, and bring up the young ones, when they nest in one of the baskets, but sometimes they are determined to make their own nest entirely themselves of heather, fir needles, and hay, It is a *far* smaller structure than the basket and generally I find only one young one is reared, sometimes only one egg is laid, or again if there are two eggs only one is hatched, somehow the birds seem to *know* that a nest of their own making will only comfortably hold one healthy young bird. I have almost given up expecting two where the nest is not in a basket.

Most of my nesting diamonds—I have six pairs—are steady sitters, and do not go off when I go into the aviaries, but even then it is as well not to go inside in a light dress (an old dark “aviary coat” is a most useful possession) and to avoid seeming to look up at the nest too much. Of course the fewer strangers that are brought into the aviary during the nesting season the better, and yet how many people think that any hour of the day, or time of the year, they may “see the birds.” I am turning hard hearted, but I *will not* have children to see my pets in the nesting season, even though the parents before hand tell me that it is to inculcate in their infant minds a love of live things.

I had once a case where a very steady pair of bronzewings,

that I thought were perfectly safe, were startled while sitting, by a little girl in a large white hat, and the birds never again sat well all the time I had them. There is one pleasing feature in the diamonds and that is their care for their young. I have found it almost an unknown thing for a young bird to die of neglect. The parents feed and brood them most carefully. When the young ones are too large to be brooded—and they grow very fast—they very wisely still stay in the nest. They stay so long that a day or so after leaving it they can generally fly quite well. I always put down a bed of hay under the nest when the young ones are a few days old. If they should happen to be frightened and fall out it makes it so much easier for them than if they fell on the hard cement floor. Once safely out of the nest I rear up a slanting board as a little shelter, and put the hay bed under it. The young ones can be guided under this protection at night, as they do not as a rule return to the nest, but stay on the ground or on some low ledge. These sunny days the shelter is much appreciated and the young ones make full use of it, nestling in the hay. An old box, turned on its side, would do nearly as well as a board. I also should add that I give no bath for the first few days for fear of accidents, and that I put a barrier of boards across the aviary, so that the young ones are under the glass roofed part and not out in the open flight, in case of a heavy shower. For even if they were only wet through it is the worst thing possible for a young bird to squat on damp earth, it is a sure cause of inflammation, and young doves *will* spend all their time squatting. nothing will stop them.

The young diamond doves are particularly pretty, and are easy to observe as they have a way of sitting almost rigidly when in the nest, and when they first come out, drawing their feathers close up to their little bodies, not moving till you almost touch them.

In this they are a great contrast to others of the dove family, especially young green-winged doves. I have lost numbers of these—fine young birds—through their extreme restlessness in the nest. I have tried all sorts of nest baskets, shallow and deep, but only succeeded in rearing three young birds. though many more were hatched.

In colour, the little diamonds are at first a study in drab. I

have made these notes from two fine young birds who have been out of the nest a few weeks, and the grey shade is still only beginning to show a little. These young ones can now fly very strongly, and are half as large as their parents. Crown of head drab, cheeks lighter: throat greyish, with very faint deeper markings, almost like bars going across: breast and flanks white; back drab; wings drab, with bars across of lighter shade; tail drab, the outer feathers white: beak drab, and feet drab-pink; the eyes are large, full, and dark, as yet there is no trace of the bare coral skin or the red eyes, nor the tiny white pink spots on the wings.

It is a pretty sight to see a cock making love to a hen. He will run up to her very fast, and then standing still will raise and spread his tail, the sharp-pointed feathers making a very pretty fan, he will then start to bob up and down, cooing rapidly all the time. The coo is quite a loud sound for so small a bird.

I have found the diamond doves very good-tempered birds, though of course they want looking after in the nesting season. They are generally anxious to nest very early in the year, and it is then that they need watching, or they may fight amongst themselves. These doves are very easy to please in the way of food. Canary seed and white millet form their chief diet, but as they are rather wasteful it is best to put the seed into a pot several inches deep and large enough across to more than hold the bird comfortably inside, if only a slight layer of seed is given there should be no waste.

I always think one great advantage in keeping doves is that they eat their seed *whole*. In tiny birds and in parrots the food pot gets full of husks, and blowing them out is not a pleasant occupation. In this way doves need less attention than other birds, and the aviary is far easier to keep tidy. In addition to the seed diet it is well to give the diamonds flowering grass or chickweed, though they will do well on seed alone. Like all other doves diamonds seem long lived and free from illness. I never remember to have had a hen egg-bound, but simple precautions such as plenty of grit, green food, and a little oil run on the surface of the drinking water, would, I think, be all that would be needed.

I look on the diamond dove as a fairly hardy bird. Indeed I think that many birds have more artificial heat than they really

need, for I have often noticed that the birds kept in my coldest aviaries look really better both in plumage and condition than those that are kept warmer, but of course the hardening process should be *gradual* and should be begun in the early summer.

I once tried to hand-rear a young diamond dove, and for some days it did well, growing very fast and taking food readily from a quill tooth-pick (cut into shape). I fed it chiefly on soaked white millet, just gently inserting the tip of the toothpick between the beak and pushing the seed in with my finger. I got quite fond of the little bird, for it was very tame, and loved to be near the fire, perching most contentedly on my finger. Unfortunately it got a chill, and this, and an accident combined, caused its death.

Diamond doves are not suitable for cage birds; their flight is too rapid and strong for such close confinement, and I find them very nervous if looked at from close quarters. they at once begin to flutter and get frightened.

Gould mentions that the natural food of the diamond dove in Australia is "the seeds of grasses and leguminous plants" and that the bird is more often seen on the ground than amongst trees. He notes how friendly it is to man and that it is not infrequently observed close to the huts of the stock-keepers, but Gould wrote long ago, and probably with the advance of civilization the little diamond has become shyer and rarer.

In conclusion, I may just note a strange friendship I once had between two cock birds, a parson finch (who was the bully of the aviary) and a diamond dove, whose wings were injured so that it could not fly. These two would sit together, nestling side by side, nearly all day long, the parson finch talking continually to the dove in a language that was evidently understood and appreciated.

Since writing the above notes, I have been able to examine the body of a *newly-hatched* diamond dove. I have often wished to see one, but my wish was granted under rather tragic circumstances. Diamond doves lay the eggs almost invariably at a sitting; the eggs are so small that I had often wondered what the young bird *could* be like when just out of the shell. Like most of the dove family the eggs are pure white, and in shape they are rather rounded at both ends.

A pair of diamond and a pair of necklace doves were both sitting well and quietly in the same aviary, being its sole occupants. There had been a little dislike shown by the latter birds to the hen diamond at the first, but it was so long ago and things had been so peaceable that I had forgotten all about it.

Then, suddenly, one rainy morning the poor little hen diamond was found murdered and wet through out in the flight, the cock in the shelter bravely still sitting on the nest. He sat all day and then left the eggs, and we moved both him and them. The necklace doves seemed to have no quarrel with the cock bird.

One egg was bad, the other I nearly threw away, though it was evidently good, but I ended in slipping the tiny thing under a barbary, already sitting on four eggs of their own. Next morning, greatly to my surprise, I found a very healthy little diamond dove hatched. Of course I took the barbary eggs away and hoped they might feed the little mite, deciding to hand-feed it in the afternoon if they had not started, for it is quite easy to hand-rear a baby dove. But the afternoon proved too late, for the nestling was dead. I think it had had no food. It was dead in a sitting posture and weighed only about *one 8th part of an ounce*. The body was covered with buffish down, it was especially thick on the breast, the feet and legs were leadish pink and each little claw was like a tip of crimson. The wings were the same colour as the feet and had no down on them; the beak had the dark spot on the tip very distinctly marked. As a rule my young doves are not pretty, but this little thing was so dainty and perfectly formed that I could not help feeling sorry that for once I had decided not to interfere and had left it till too late.

HOME NOTES.

By HUBERT D. ASTLEY.

If members would keep notes or diaries of their observations amongst birds in freedom or captivity, they might not infrequently supply the magazine with interesting copy.

As a matter of fact I, and probably others find the same, do not seem to have time for such note-making, and have to trust to memory. By-the-bye, the Curator of birds at the London Zoologi-

cal Gardens has not favoured us of late! "The Field," which has so large a scope, and which can expatiate on a hundred subjects, has opened its capacious maw to swallow up all his material! but if we do not all try to help, our humble journal might go under, especially in these war days.

And so it is that I take up my pen, in addition to my blue pencil—though it should be noted, very much oftener do I wield the former than the latter—to endeavour to set an example or to encourage. Not that I have much to say. I have reared some partridges; only three; for a monstrous Rhode Island red hen squashed five or six. The truth was, no bantam was broody at the time that the eggs, already partly incubated, were taken.

Yet this little trinity of plump partridges is decidedly better than none, for they are ridiculously tame, running about in the aviary yard along with juvenile silkies and Japanese bantams, the first to come to one's call, and really more trustful than the bantams.

They shake their short rufous tails, stand up and flap their wings, which as yet they never make use of for flight, and almost run over my feet.

Most jolly little birds, which will I hope remain where they are. They needed fresh ants' eggs when they were first hatched, but they soon learnt to devour flies, cocoons, and after that, insectivorous food and soaked melox: but this bill of fare was considerably added to by minute insects found by themselves in the grass. And now, with September come in, they are three well-grown partridges, safe from gun-shot.

Who was the calendar saint who kept a tame partridge? I forget. St. Girolamo, was it? One has seen old engravings, the saint at his desk perusing his parchment scroll, the partridge on the floor. Partridges, pheasants and quail will become very tame. I know a lady living in London who had, alas "had," a Douglas quail which is closely related to the better-known Californian quail, but the Douglas has an upright crest of rufous feathers, which have not bare shafts and do not curl over forwards as in the Californian. And this particular Douglas quail was so much a member of the family that he would be brought in by the butler, just as a child is sent for and is carried down by its nurse to the drawing room or

dining room; on the carpets on which the quail would walk, not getting out of people's way, but so at home that people had to be wary and careful for fear of treading on it.

An occasional visit to the country where he could have walked on dewy grass instead of a carpet in a London house might have prolonged his life. Fresh insects and country lettuce instead of cake might have had the same consequence, and now he's gone, and so much missed, that his tender-hearted owner refuses to put any other pet in his place. "Try a Californian quail," I suggested, only to receive as answer, quietly but firmly, "No! never again." "Why not a Pekingese?" I put in. But she shook her head and firmly renewed "No, nothing." And so the house is empty. Empty, that is, of pets; but full of kindness. And now I must return to *my* birds.

Amongst the many ducks I have two especial favourites, a pair of the lovely little ringed teal; favourites, not only because of their beauty, but also because of their tameness and intelligence.

We have our meals in fine weather in a loggia close to the moat, and the ringed teal always know when we are feeding and swim round to that particular spot. They can't see us owing to the stone parapet, but the little duck quickly lets us know they are there, uttering her curious mewling call.

The summer was passing along, and one day in July we said "if only there could be some baby ringed teal," but there seemed no signs of such an event. Then we went away for ten days, and on our return were rather alarmed, for during the first three or four days we never saw the little duck, only her mate. Then she appeared one evening; then the next evening, and the next. "Oh! eggs," we exclaimed, "it *must* mean eggs." And so I watched, but never saw her actually leaving any terrestrial spot, only she always appeared on the pond above the moat.

Now in the middle of that pond there is an islet consisting of just as much earth as will hold the roots of a very old willow whose branches are broken and bent and hollow, so that they lean out over the water in all directions. Finally I took ship, in the shape of a small and tipetty dinghy, from which I clambered on to an overhanging bough and thus on to this absurd islet. One can

overlook it with three glances; the first showing me the little ringed teal quietly slipping into the water, the second a hollow in a horizontal branch about a foot from the ground, the third a snug nest of down upon dry chips of wood within the hollow, in which reposed nine eggs! They much resembled bantam's eggs, but had a slight pinkish tint from the yolks within the shells; their size much the same too. To leave them would have been useless, for no ducklings survive brought out amongst a crowd of full grown ducks who eat up every available particle of natural food, and therefore I transferred them to a basket, carrying them off to a broody silky.*

One day in August a white-necked crane was missing, one out of three which hadn't been pinioned, and nowhere could that rare and stately bird be seen. Post cards were fired around to neighbours, the police were consulted and an advertisement put in the local paper, but none of these things took effect, for on the second day the crane was found a mile and a half away in a field of barley, chased over two other fields and captured by a boy of 17 in His Majesty's noble army, who was enjoying three days leave at home. In Herefordshire, herons are often called cranes, and one neighbour I wrote to answered by return saying that probably my bird would be found on a marshy spot not far off, "as there are usually some cranes there."

Fancy going out to bag a few Manchurians, and so on!

NOTES.

ARRIVAL OF RARE INDIAN BIRDS.

Mr. E. W. Harper landed last month in England with a small collection of choice birds from India, about which he has kindly promised to write some account.

Amongst them was a small babbler, the size of a wren, brown upper parts and ochreous under parts. This is probably the broad-tailed Reed-bird; *Schœnicola platyura*. Mr. Harper suggests the rufous-bellied babbler, *Dumetia hyperythra*. A small Zosterops-

* [Only one egg hatched, and the duckling is flourishing. The rest were clear.]

looking bird, *Egitha viridissima* (Iora)—bright yellowish green, with double white bars across the wings. There were two of these, one of which is in the possession of the Editor; the other unfortunately died at the London Zoological Gardens.

Another interesting bird (3) is the small black and white bushchat, closely related to the British stone-chat. It is black, with white tail-coverts and abdomen, and a white line along the shoulders—and is said to be a good songster.

The coral-billed bulbul was also brought (*Hypsipetes psaroides*)—dark grey, with a glossy crest; bright coral-red bill and feet, the tail somewhat forked.

The small babbler and the green Iora are imported to Europe for the first time.

H. D. A.

* * *

A COMBAT IN MUSIC.

Some while ago I heard a great scuffle and commotion going on in our orchard, and, at the same time, the most beautiful thrush melody, poured forth so loudly and vociferously that I felt sure something was very much the matter in the bird world. Hastening to the spot I discovered two young cock thrushes having a tremendous battle and literally shrieking with song as it went on. When I appeared, one flew into a quince tree and sang, the other into a may tree and sang, each as loud as he could. I chased them off in opposite directions, and as I left the scene of action I heard them beginning again. Many a thrush battle I have watched and wondered at the silly sight it presents, how they skirt round each other with heads lowered and necks elongated, wings shaking and tails spread out like fans. And then the attack and aerial battle, a confused mass of beating wings and snapping beaks, and then dropping to earth again, grovelling and repeating the same inane performance, sometimes springing up into the air and whistling; but I have never heard thrushes pour forth the fierce, weird music during their combats that I heard from those two in the orchard.

KATHARINE CURREY.

* * *

AN OWL HOOTING.

I have just watched an interesting little scene—a large wild tawny owl in the act of hooting to caged owls. I think the owl in

question must be a tame owl which, about two years ago, got out of its cage by accident, and if so it has been marvellously constant to its old mate, coming as soon as it is dusk on to a juniper tree opposite the owlery, or perching on the cage itself. When I saw the owl hooting I was in a room, the window of which looks west, and on the bough of an ancient walnut-tree that hangs down in front of the owlery I saw against the bright sky the form of a very large owl. It bent its head forward, and hunching its back, gave vent to several long hoots, looking as if it were shaking the sound out of its throat, repeated with an effort three or four times; the caged owl answering. When I went out on to the lawn it slowly flew up on to the roof of the owlery, where it was lost to sight among the branches of a yew-tree. KATHARINE CURREY.

ENGLISH NAMES FOR THE PARROTS.

By Dr. E. HOPKINSON.

(Continued from page 323.)

*TURCOISINE, obsolete spelling of Turquoise.

"TURQUOISINE," the popular abbreviation for TURQUOISINE GRASS-PARRAKEET.

TURQUOISINE GRASS-PARRAKEET.=*Neophema pulchella*, also commonly known as TURQUOISINE PARRAKEET. Other names, CHESTNUT-SHOULDERED GRASS-PARRAKEET (Gould), RED-SHOULDERED GRASS-PARRAKEET, and Turquoise Parrot. "KING PARRAKEET," an occasionally used dealers' name.

TURQUOISINE PARRAKEET.

TURQUOISINE PARROT, *see above*.

"TWENTY-EIGHT," "TWENTY-EIGHT PARRAKEET," "TWENTY-EIGHT PARROT," Australian vernacular for the YELLOW-NAPED PARRAKEET.

TYTLER'S PARRAKEET, the ANDAMAN PARRAKEET.

*UNDULATED GRASS-PARRAKEET,

*UNDULATED NANODES

*UNDULATED PARROT,

} Old names for the BUDGERIGAR.

UVAEAN PARRAKEET.=*Nymphicus uvaensis*. The only other member of the *genus* is the HORNED PARRAKEET (*N. cornutus*).

*VAN DIEMAN'S PARROT (and VAR. 4), *see* YELLOW-BELLIED PARRAKEET.

"VANGHA-VANGHA," *see* TABUAN PARRAKEET.

VARIED LORIKEET.=*Ptilosclera versicolor*, also known as the RED-CROWNED LORIKEET. Sometimes advertised by dealers as Australian RED-CROWNED OR VARIEGATED LORIKEET.

VARIED PARRAKEET, one of Gould's names for the MANY-COLOURED PARRAKEET.

*VARIED PARROT, a name of Latham's which he used for both the MANY-COLOURED PARRAKEET and the TAHITI LORIKEET.

*VARIED-WINGED PARROT, *see* BLUE-CROWNED ECLECTUS.

VARIEGATED LORIKEET, *see* VARIED LORIKEET.

VARIEGATED LORY (Latham), the VIOLET-NECKED LORY, *see under* RED LORY (7).

VASA, same as VAZA.

VAZA, a VAZA PARROT. Sometimes spelt VASA.

VAZA PARROT, a Parrot of the genus *Coracopsis*, of Madagascar and neighbouring islands. Specifically, Latham gave the name to *C. vaza*, the GREATER VAZA PARROT, which is also known as the GREAT VASA, or GRAND VAZA.

Other Vazas are: (1) The LESSER VAZA, the BLACK PARROT of Latham (*C. nigra*); ? his *BROWN PARROT, and *ASH-BROWN PARROT. (2) The COMORO VAZA PARROT (*C. comorensis*). (3) PRASLIN PARROT (*C. barklyi*).

*MASKED VAZA is an old book name for the extinct MASCARINE PARROT of Reunion.

*VENUST GRASS-PARRAKEET, *see* BLUE-BANDED GRASS-PARRAKEET.

VERNAL HANGING PARRAKEET, *see under* HANGING PARRAKEET.

VERNAL PARRAKEET.

VINACEOUS AMAZON.

"VIOLET AMAZON," occasional dealers' name for the BRONZE-WINGED PARROT.

"VIOLET LORY," *see under* RED LORY (7).

VIOLET-NECKED LORY, *see under* RED LORY (7).

"VIOLET PARROT," *see under* BRONZE-WINGED PARROT.

VIOLET-BELLIED PARROT, the AZURE-BELLIED PARROT.

VIOLET-NECKED LORY, *see under* RED LORY (7).

*VIRESCENT PARRAKEET, *see* PASSERINE PARRAKEET.

VULTURINE PARROT.=*Gypopsittacus vulturina*.

WAGLER'S CONURE.=*Conurus wagleri*.

WALLACE'S LORY, *see under* RED LORY (6).

WARBLING GRASS-PARRAKEET, *see* BUDGERIGAR.

"WARRIN," native name of SWAINSON'S LORIKEET.

*WAVED-BREASTED PARRAKEET, *see* BLUE-WINGED CONURE.

*WAVE-HEADED PARRAKEET, *see* PEARLY CONURE.

WEDDELL'S CONURE.=*Conurus weddelli*.

"WEE JUGGLER," Australian dealers' name for LEADBEATER'S COCK! TOO.

To be continued.

CORRESPONDENCE, NOTES, ETC.

THE BREEDING OF *ZOSTEROPS VIREUS*.

Dr. LOVELL-KEAYS writes that he believes the species of *Zosterops* which has successfully bred four times this season in his aviaries, is not *Z. viridis* but *Z. vireus*.

The error was due to Dr. Lovell-Keays being misinformed by "a practised aviculturist."

DECREASE OF HOUSE SPARROWS IN NORANCHES.

SIR,—A few weeks ago a friend wrote to me from Noranches, Normandy, asking if I could suggest any reason for the decided decrease of house sparrows in Noranches during this year. She also said that they had almost disappeared from Paris, where they are usually very noticeable. I could offer no suggestions, so thought I would write to ask if you, or any member of the Society, knowing France, had noticed the same thing since the war began, and had any idea as to the reason; if so, I should be much interested to hear.

F. BARLOW-MASSICKS.

THE WINTER TREATMENT OF BIRDS.

SIR,—The Avicultural Society is to be congratulated on having so many keen and observant aviculturists among its members. It is pleasing, too, to note the temperate manner in which they approach so very controversial a subject as the above. It is quite impossible for all of us to think alike, and moreover entirely undesirable. It is only by opening the doors of discussion that our hobby is ever likely to make progress. It is highly gratifying to be able to say that aviculture has made vast strides during the last decade. Fancy people breeding flocks of cordon bleus or firefinches a dozen or fifteen years ago, and yet such a thing as that is to-day a matter of actual occurrence. But "*revenons à nos moutons*." Mr. Rattigan has discovered one great truth, pointed out by Mr. Shore Bailey and confirmed by myself, that is that birds will use a shelter if they have no cover outside. He is also right in his surmising that it is the cold wet nights that play such havoc with birds that roost out. The winter nights being so much longer than the summer nights of course greatly aggravates the mischief, and hence one's losses are very much greater. In all this he and I are in absolute agreement, and I thank him most cordially for his support to what is, after all, a very common sense view of the matter. But here we come to the parting of the ways, and I fear that Mr. Rattigan is deducing arguments from too limited an experience as regards different classes of birds, different types of aviaries and different kinds of locality. I think one might almost take it as an axiom that the larger the aviaries and the more closely they conform to nature the better the breeding results. Mr. Teschemaker, one of our most brilliant breeders of difficult birds, could tell us of the infinite

trouble he takes to make an aviary natural. I doubt if he would ever raise a softbill in an aviary unless it was a naturally planted one.

Birds like grassfinches or parakeets will even breed in a good-sized cage, but not the rarer waxbills, softbills, weavers, or larger parakeets. Apart from considerations of breeding, a natural aviary is so extraordinarily fascinating and the birds enjoy their captivity so much more. Then growing plants purify the ground, and shutting the birds up for the winter gives the flight a good rest, a very important consideration.

With regard to showing. I may say that I went into my aviaries less than a week before I showed my birds and picked out a few convenient ones. I showed twice with 15 and 13 cages and obtained 18 and 16 awards respectively. So that the contention that birds do better in cages than in an aviary is certainly no contention of mine. My contention was that they are less likely to die in cages. I could myself name exceptions, of which most softbills are an example. But ask any dealer of repute, as I have actually done, and he will tell you that he would not dare trust his stock in an aviary. Dr. Hopkinson has just returned with a large number of quail finches (*O. atricollis*) and bar-breasted firefinches (*L. rufopicta*). In grossly overcrowded cages, and in one case it was impossible to clean it out, he did not lose a single bird. And yet of the former quail finches he brought over and deposited in various aviaries, but a remnant remain. He and others have proved time after time that birds like firefinches, cordon bleus, and pintail parrot-finches will live more or less indefinitely in cages, but die off as soon as ever they are put out. Zebra finches die off in aviaries too. If it were not so they would soon be as common as larks and linnets. They are extraordinarily prolific and are imported by the thousand. What happens to them all?

I only speak from experience, and, at the risk of being thought a bore, I will repeat my experiments and observations are based on a collection of at least 400—500 birds of all sorts and description, kept in aviaries with flights and without flights, heated and unheated, well lighted and ill lighted. I possess hardbills and softbills, hardy birds and delicate birds, and have in two years bred 32 different species of foreign birds and four species for the first time in captivity. This year I have already bred 78 young birds and 18 different species. I do not say this in any boastful spirit but merely to show my credentials. If Mr. Rattigan, or any other member, would care to come and see my aviaries, I should be most happy to show them to him and put him up for the night. Then he can judge for himself as to how the birds are looked after.

One last word. All my birds are fed indoors, except in mid-summer, when a proportion of the food is put outside for various reasons, chiefly perhaps to enable the young to find the food more easily.

In conclusion, I should like to tender Mr. Rattigan my sincerest sympathy in his unfortunate loss. To lose practically the cream of one's collection at one fell swoop would be enough to dishearten Hercules.

L. LOVELL-KEAYS.

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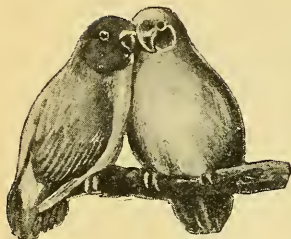
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AVICULTURAL MAGAZINE.

*J. H. Riley
Recd
Oct. 19, 1915.*



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THE RUDDY HEADED GOOSE.

(CHLOËPHAGA RUBIDICEPS).

Hab. : The Falkland Islands.

(From Mr. H. D. Astley's living birds.)

THE
AVICULTURAL MAGAZINE,
BEING THE JOURNAL OF
THE AVICULTURAL SOCIETY.

Third Series.—Vol. VI.—No. 12.—*All rights reserved.* OCTOBER, 1915.

THE RUDDY HEADED GOOSE.

Chloëphaga rubidiceps.

By HUBERT D. ASTLEY.

As Mr. F. E. Blaauw and I wrote about the Ruddy headed goose in our magazine of June, 1913 (3rd series, Vol. IV. No. 8) I will not do more than remind our members that this extremely handsome goose is the smallest of its genus (*Chloëphaga*=eater of grass), and has never been anything but rare in captivity. A native of the southern parts of South America and the Falkland Islands, it is a migrating species. It has been observed in flocks in Tierra del Fuego, and is a summer visitor in the country behind Punta Arenas, breeding on the rough land to the west of the town.

In captivity this goose is absolutely hardy and easy to keep, so long as it has a run of fresh grass.

It is also a free breeder, one of my two pairs having had three clutches of eggs one season, owing to my removing the eggs to be incubated by a hen. The goslings are easily reared on poultry meal and chopped clover, dandelion leaves, etc.

Mr. Blaauw notes that some of the adult males have a beautiful pearl-grey colour about the underparts instead of the bright fox-red. Although I have bred a fair number, I have never observed this myself.

In winter time I give my geese some melox, which they greatly appreciate.

THE BREEDING OF BEARDED TITS.

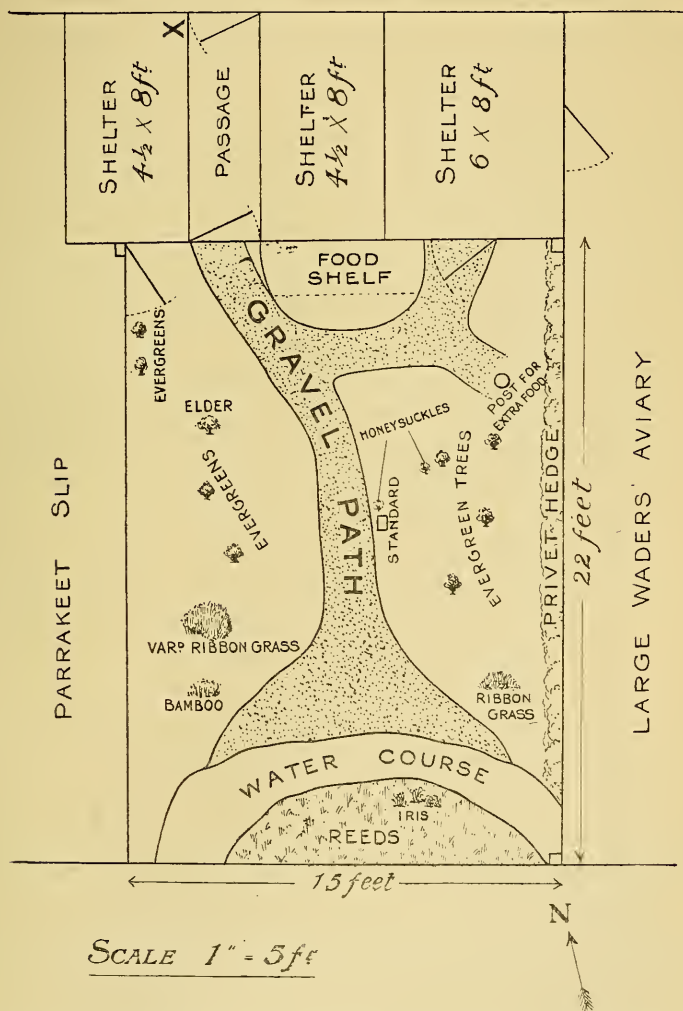
Panurus biarmicus.

By Dr. L. LOVELL-KEAYS.

My reedlings' aviary is fast becoming as famous as the Traitors' Gate or the stair beneath which the murdered princes are supposed to repose. There is really nothing very wonderful about it. The measurements are roughly 22 feet by 15 feet and the height is 8 feet. In this latter respect uniform with practically the entire series. Attached to the flight are three shelters; two of which are $4\frac{1}{2}$ feet by 8 feet and the third 6 feet by 8 feet. These face due south. I am drawing a rough plan of the aviary, as probably the way it was planted and arranged contributed very largely to my success, or shall I say, the little birds' success. It will be noticed that the flight is very thickly planted with evergreens, chiefly retinosporas, honeysuckles, and last, but not least, large clumps of variegated ribbon grass and the ordinary reeds found in overgrown ponds. The latter I got from a distance (7 miles) and brought a couple of pailfuls of the original mud and water. When planted they formed a conspicuous bank. I don't believe these reeds had the least to do with the birds' success. As to feeding the young on the flowering heads I believe that to be quite ridiculous. They are not in bloom at the time. My water-course, too, dried up about mid-June owing to the drought. But I was anxious to get a natural nest, and to some extent I was rewarded, for the bearded tits built a wonderful nest in the clump of ribbon grass, which I hope to describe presently. For a small aviary I have never seen a more natural one, nor more dense as regards cover; and the place is teeming with insects the whole summer.

The shelters are built entirely of match-boarding, two layers with felt between. Whitewashed inside and with a very ample supply of windows. The successful nest was situated in the corner of the shelter marked with a **X**. The entrance to this shelter was quite small, about 18 ins. square and quite high up. This prevented the young birds getting out too soon, for which I was extremely thankful. This shelter was fitted with what the Sussex folk call peaboughs, rush nests and one or two small square travelling cages. All the nesting receptacles were placed high up against the roof and as

far as possible in corners facing the light. In this instance a small branch of oak with leaves attached was nailed in front of the rush nest and the leaves acted as a partial screen to the birds. My



perching branches are always nailed to the roof. Experience has taught me that birds will roost as near the roof as possible. The third shelter on the right of the plan was closed to the reedlings' aviary all the summer. It should be mentioned that the shelters

sloped away from south to north, which of course allows very much more light and air to get in. I don't think the plan calls for much comment. The food is kept under a kind of small lean-to in front of the middle shelter during the breeding season, but when young birds are hatched out extra live food was placed on top of the post and on a shelf in the left-hand shelter. The aviary is an ideal summer aviary but a nasty damp place in the winter. The shelters are then only used as bird-rooms for quite hardy birds. It will be noticed that every aviary of this my "South Series" communicates with the next door one. The advantages of this are of course sufficiently obvious. The floor of the shelters is composed of 6 ins. of broken bricks, &c., covered with 3 ins. of fine sea sand. This last is called "gravel" in Sussex. So much for the aviary. Next we will take the inmates as they are of no little importance.

Last year (1914) I kept a mixed series here, consisting of reedlings (3 pairs), hooded siskins, cordon bleus, firefinches, and (I think) orange-breasted waxbills. The reedlings very nearly succeeded then, but the nearest approach fell out of the nest about two days before it could have flown out and so wrecked my hopes and its parents' happiness. Several other broods were reared up to ten days so I flatter myself that complete success was no mere fluke.

This year I had in this aviary five pairs of reedlings, some dull yellow birds, which a patient left with me and which I am told were canaries, a cross-bred goldfinch, and a pair of the most charming little long-tailed tits one could imagine. The stupid yellow birds did their best to risk extermination, and I only discovered in time to save the season why it was my reedlings were not nesting. Take away a canary's song and you have all that is dull and stupid epitomized in the self-same canary. Within a few days of banishing this "left luggage" my favourite pair of reedlings started to celebrate the year 1915 and the Park Lodge aviaries. By an odd coincidence it was the same pair that obtained the first prize at the Horticultural Hall last November, which reminds me that at a very second rate show at Hastings this pair was awarded an H.C. in a miserably weak class. So much for judge's judgment! As a matter of fact the hen was the most beautiful hen reedling I ever saw. I say "was," for, to my inexpressible grief, I have to sorrowfully record

her death. But her three children, who are all still living and doing well, take after her and bear the same likeness to adult reedlings that a fox cub does to an old fox. It is a remarkable fact that I have never found two hen reedlings sufficiently alike as to confuse them. They differ quite as much as the eggs of the Solan goose. With the cocks it is quite different and I am quite unable to tell "t'other from which." I don't remember ever seeing this fact noted before, but it is a fact for all that. My little hen was darker than most with distinct longitudinal dark brown streaks down the back of the head and back. Some hen reedlings get a kind of foxey look, but this one always preserved her sweet expression. The nest this pair built was composed entirely of fine grass, lined with a few odd bits of fluff, hair, and a small feather or two. It was built in a rush nest.

The natural nest resembles very closely that of the moorhen (*G. chloropus*). The way the leaves of the rushes are woven with the sides of the nest is simply wonderful. The nest in my aviary was built about 9-12 inches from the ground. It was open, shallow and cup shaped. The lining consisted of dead leaves from the reeds and fine grasses. The eggs—which number 5-6 in a clutch—are white and marked with fine wavy streaks and splashes of brown. These streaks vary considerably in intensity and are fairly polar in distribution. They are more distinct at the upper pole. The eggs are fairly oval and smaller at one end than the other, and are laid on successive days, or rather, I have noticed six eggs laid in six days, which comes to much the same thing. Occasionally, in an aviary at any rate, the hen starts incubating before the last egg is laid. Reedlings are at all times very gregarious and, contrary to what many aviculturists say, agree remarkably well. Occasionally you find an amorous cock rather a nuisance, but there is no malice in reedlings. I have kept five pairs in a double breeding cage without disaster. I have never known a reedling interfere with another bird, however young or however ill. They are expensive birds to keep, however, for they all get into the food saucers and scratch, throwing the food in all directions. Quite babies learn this naughty habit very early. With regard to this question of food, perhaps before we consider the period of incubation and so forth we might

pause over this momentous question for a few moments. Reedlings if kept properly have only one real enemy, as far as my experience goes, and that is pneumonia. They are by no means as "hard as nails" at any period of their captivity. Cold damp weather always takes a toll of one's reedlings, so I keep mine shut up on bad days especially in the winter. Their diet consists simply of the best Insectile mixture properly prepared with an admixture of finely divided Yorkshire cheese. This is prepared by squeezing it through an ordinary kitchen wire sieve—No. 17 gauge. Cheese seems to have fallen into desuetude of late. All my birds have it and I believe it is the finest substitute for live food imaginable. The Insectile food itself should be moistened with a very small quantity of *boiling* water. It should neither be disgustingly pappy nor provokingly chaffy. If you will put yourself in the birds' place for one moment you will appreciate the fact that you would not care for stodgy suet pudding or (if still moister) macerated pap, neither would you care for crumbled macaroon or bread a week old at the other extreme. Then my reedlings have mealworms, according to the state of their owner's exchequer, gentles, and *real live* ants' eggs. The latter are of course of the very utmost value, but ants' eggs of the best quality are very difficult to get. The ordinary garden ants' eggs are too small so one must get wood ants.

We left our reedlings with six eggs, as a clutch, in a nest built by both parents, but perhaps more by the cock than the hen. Incubation is also shared by both birds to a degree that varies with every pair of birds. In some the cock does nearly all the incubating and the hen practically only night duty. In others the cock does very little and only relieves when the hen goes a 'foraging. In the latter case he seems very anxious she should get back to her domestic duties as soon as possible and scolds his wife most vehemently. The cock never, as far as my observations go, feeds the hen on the nest. I don't think the cock ever incubates at night time. The incubation period is between ten and eleven days, sometimes one and sometimes the other. The chicks when first hatched are naked repulsive creatures and very soon acquire a look of mortification—a kind of shiny black writhing mass. No, baby reedlings are *not* beautiful with their squat serpent-like heads, bulging eyes,

as yet unopened, and enormous protruding intestines. For the first twenty-four hours the little birds required very little food and the parents fed them on small insects that they caught in the aviary, besides morsels from the insectile mixture.

My next observation of the young was on the fifth day, when they appeared just like bits of very old shiny overstretched black kid glove. The eyes open about 9th-10th day, for by the 11th day they are wide open. Up to this time the parents fed the young entirely on very small mealworms and some of the best fresh ants' eggs it has ever been my lot to come across, and it is small wonder the babies grew apace. At the 11th day, too, we find a dark stripe down the centre of the back, the general body colour is reddish brown. The quills of the primaries are quite distinct and almost black. The crown of the head is dark brown and we get a dark indication of the future tail.

By the 15th day our reedling is beginning to get less ugly but is still very ungainly. The feet and legs are then yellow and very large. The beak is flesh coloured and the gape, which is fairly large, is yellow. The crown of the head is dark fawn colour with a distinct dark stripe in the centre. The neck is dark fawn and the back is similar to it, only we have here a dark brown, almost black, stripe from the rest of the neck to the tail. The wings are dark brown and the body a pleasing reddish brown; the tail appears almost black and at fifteen days is of course very short, but grows rapidly, and in about a fortnight after the young leave the nest it is practically full grown.

All these events vary according to the weather and the amount of time one can give in attending to the wants of the old birds. I need hardly say that the more time you can give them the better.

In this particular instance the important events may be summarised as follows:—

Incubation lasted from June 17th to 27th.

Food consisted of small flies and other insects supplemented by small mealworms until July 4th. After that gentles were offered and given, also live ants' eggs. The latter were not obtainable until about July 3rd.

The young were first distinctly heard on July 3rd. They left the nest on July 10th and left the shelter—a difficult matter in this case—on July 19th. The most forward reedling was seen to help itself to live ants' eggs on July 18th for the first time.

Now but little remains to be told. Unfortunately a tragedy marred the triumph, for on July 16th I missed the little mother bird. It was an appalling night and she must have been disturbed and flown out, or perhaps frightened by an owl, for they are very common about here. At any rate, I did not find her body till almost past recognition. Thus she died faithful unto death, but the father bird cheated death of the three babies, and they live to-day (August 6th) and look exactly like their mother. They are far more beautiful than adult reedlings, with dark brown heads and very dark backs and wings. They no longer need their father's help; in fact, they find him far too slow. Of course they needed "meating off" and I did this by giving them first fine live ants' eggs and gradually replacing them with the usual insectile mixture. Now they get practically nothing else.

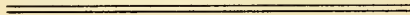
In conclusion, perhaps just a few remarks why I believe I succeeded would not be amiss. The personal factor is the one secret of success. Every detail was thought out. Every mealworm in the early stages was carefully chosen. A single day's absence from home, and I doubt if there would be any young reedlings to-day. One calls to mind those lines from *Æsops Fables* summarising the moral of the farmer and the young larks. They are as follows:—

*"Hoc erit tibi argumentum, semper in situ situm,
Ne quid expectes amicos, quod tute agere possies."*

This is my secret.

* * *

P.S.—Sept. 14th. The three baby reedlings are all alive and doing well and are undergoing a very heavy moult, as the old birds are doing. At present it is difficult to say what they will turn out to be, cocks or hens, dark or light birds.



WHAT IS SCIENCE ?

By Dr. A. G. BUTLER.

Our Editor says that we make no claim to be a Scientific Society, but that we strive not to be unscientific. I think there is a misconception in the minds of many, and especially in those of generally accepted scientific men, as to the real meaning of the term.

As all educated persons are well aware the word science comes from the Latin *scientia* derived from the verb *scio*, and it simply means knowledge: that being the case, every addition to knowledge is a scientific attainment and any Society which is the means of enlightenment by revealing new facts is in reality a Scientific Society.

The man who names and describes new species has far less claim to be called scientific than his brother who describes for the first time the whole process of nidification of a rare bird; indeed he is little better than the reporter who accurately describes the dresses at a wedding: he is a little better, because he has to look up and read over all the descriptions in various languages of other species in the same genus of which he does not possess named examples, in order to be sure that the animal before him actually is new; but, when he knows the names of the different parts of the body, the actual description can be made by anybody with an eye for form and colour.

Now breeding birds is by no means the only method in which our society has advanced science, although thereby interesting facts have been revealed which previously were unknown even when suspected. Much light has been thrown upon the fertility of hybrids by Mr. Bonhote and others, the eclipse plumages of birds have been studied and described, as well as seasonal changes in the colouring of the soft parts, with many other facts of far greater scientific value than quibbles over unsatisfactory problems touching the orthodox naming of a bird, or as to its claim to be accounted a species or subspecies. These points never will be satisfactorily settled in the minds of all zoologists alike so long as the world lasts.

Formerly students of Zoology were content with the binomial system and *Motacilla flava* for instance was considered sufficient for all the slightly varied local races of the Blue-headed Wagtail; but

nowadays every local race must have a third name to indicate which gradation it belongs to, and even if one race imperceptibly passes into the next, that is not held to be of importance: to my old-fashioned mind numerals added to the scientific name would answer the purpose equally well without cumbering our catalogues and adding to the labours of Museum students.

Can anything be more disheartening to a young and zealous worker who visits a large collection for the first time than to discover that all the names by which he has been taught to know our British animals, whether vertebrates or invertebrates, have been altered so as to have become utterly unrecognizable. If this is science we were better without it.

What used to annoy me, when engaged upon systematic work in zoology, was that some of the most enthusiastic worshippers of subspecies made no distinction between the variations of a species extending over a Continent and frequently linked by intergrades, and nearly related species separated one from the other by vast tracts of ocean often of enormous depths, and which consequently must have been accurately reproducing themselves unchanged for many thousands of years. In my opinion the first should have been called either varieties or local races, but the latter true species; and this is how I always regarded them. I am certain that a form which remains the same from one generation to another is entitled to be called a distinct species, not a sub-species; and that unquestionably will be the opinion of the coming generation of systematists, whose tendency already is certainly to split up and name as species all forms which appear to be constant, frequently I fear on insufficient evidence.

How is knowledge increased by (let us quote a case) calling a European bird *Corvus corax corax*, an African one *Corvus corax tingitanus*, one from the Canaries *C. c. canariensis*, and so on? This has been done in the case of the common raven, but things more absurd have been done in the case of butterflies which are widely separated geographically and show no tendency to grade into one another. To call such work scientific and the work of aviculturists unscientific is puerile. Work which adds nothing to our knowledge may seem clever to some, but it is science falsely so called.

Well I don't think most of our members will be much interested in these matters, so I will bring my remarks to a close; but in conclusion I must express the conviction that so long as we are bringing to light Nature's secrets, we must really be a Scientific Society, whatever our friends the systematic workers may think or say to the contrary.

BREEDING OF THE OCCIPITAL BLUE PIE.

Urocissa occipitalis.

By MAURICE AMSLER, M.B.

It is not often that the aviculturist has the luck to obtain a pair of comparatively rare birds in full breeding condition when the season is already in full swing. Such however was my good fortune this year, when I heard of a pair of blue pies who had made an attempt at breeding in a large cage. After some correspondence and a day or two of waiting, their advent at Eton was heralded one morning by loud and raucous cries.

I have never kept large predatory birds and I was inclined to expect at least one good bite in the handling of the new arrivals, but they had evidently been told by their former owner that they were to be transferred to a happier home and that they must therefore be on their best behaviour with their new owner. The male bird allowed me to handle him and to place a copper ring on one leg; he may have looked upon it as a form of marriage ceremony, but in reality I put it on in order to be able to distinguish the two birds more readily.

Books tell us that the female has a *much* more powerful bill, I cannot see any such difference in size; the colour however is quite distinct, being coral red in the male and orange in the female.

The aviary prepared for the pies is only a modest affair, some 18 feet long by 3 feet wide and 7 feet high; it has a shelter at one end with a partly glazed front. In this shelter I had prepared a beautiful nesting site of wire netting and broom branches, nicely hidden on every side except on that facing the glass front of the shelter. The birds would of course build here and I should be able

to inspect the goings on whenever I so pleased. It was this very inspection which upset the apple cart.

Before the birds had been with me many days I noticed the cock bird feeding the hen with any tit bits he could find, and I made notes of their favourite foods as a possible help in feeding young should any be hatched.

On June 2nd I found some twigs of privet, which the birds had pulled off a bush, laid at the bottom of my nest; in the meantime, Mr. B. T. Stewart, their late owner, had sent me a basket in which the birds had laid when in his possession, this I had hung up securely at the back of the shelter 5 feet from the ground.

No more building took place for a few days and I began to think that the birds would go no further, what really happened was that they had noticed my inquisitiveness and had transferred their choice to the basket in the more secluded position. Here I discovered that a foundation of thick sticks had been laid, mostly lying in one direction. Above these they placed a quantity of twigs of the yellow broom which I had provided; these were laid very cleverly in a circular arrangement, forming a solid cup which was finally lined with a few pieces of hay and cocoanut fibre.

While the building was proceeding the hen spent her nights in the nest, the cock roosting close by. On June 10th and 11th two eggs were laid, the third and last being laid on the night of the 14th. The blue pie's egg is about the size and shape of a domestic pigeon's, the ground colour is stone grey with a slight tinge of green; the whole profusely spotted with chocolate brown, especially at the broad end where the spots become confluent. I really believe that the clutch should have consisted of five eggs, as it frequently does in the wild state, but that something went wrong with the hen's internal economy. Incubation began on the 13th, but for the first few days the female was terribly unsteady.

This aviary is situated behind a greenhouse, the glass of which was "shaded," so that it was practically impossible for the birds to see inside the greenhouse. Periodically I would tip-toe to a certain peep-hole in the glass invariably to find the hen off, or just in the act of leaving her nest. Things did not improve much during the whole period of incubation, but on June 29th I suspected

the presence of young birds and found one chick obviously just hatched, it was flesh pink in colour and had no down; there was also one egg in the nest, the third egg having disappeared. On the following day the second chick hatched out; this would make the time of incubation about sixteen days.

It was many days before the male was allowed more than a peep at the precious chicks, which were carefully brooded by the mother. She willingly accepted the scores of mealworms brought by the male and promptly transferred them to her nestlings. All food was carefully torn up, swallowed and regurgitated.

On July 3rd both chicks showed feather tracts and were about equal in size. On the 4th there was only one chick in nest, but he was quite twice as large as on the previous day (my notes say "Has he swallowed his brother?") I believe that the dietary I was supplying was not sufficient and that the parents broke up one nestling to feed the other. Anyhow, from that day on, I economised my precious mealworms and supplied sparrows, frogs, and large earthworms, and all went well. All these various foods were dealt with entirely by the male, who, as I have said, swallowed the requisite amount, which after a time he transferred to the hen. I noticed that this food was often retained for 10-15 minutes before being given to the nestling, it was by that time partly digested and no doubt in a very assimilable state; anyhow the youngster thrived apace, and on July 10th he was like a huge grey slug, quills well grown, eyes still closed. On the 12th the resemblance to a porcupine was quite striking: general colour grey, quills black and two to three inches long, eyes open, bill large, flat, and horn-coloured; in size he was rather larger than a missel thrush.

At or about this date the male bird was first allowed to feed the chick and his duties now appear to have been doubled as he would first satisfy the young bird, next the hen, after which it was his duty to make provision for the next meal. This he did by establishing a number of *caches*; these would be under stones behind one of the feeding dishes, or perhaps on some ledge in the frame work of the aviary. When the selected spot was at all open, he would hide the tit-bit by covering it either with moss or a few leaves. Unlike many other examples of this habit, with which

most of us are familiar, the locality and existence of these larders were not forgotten.

On July 14th the body feathers of the chick were well grown and of a rusty grey colour: quills beginning to split; the white patch on the head, which gives these birds the prefix "occipital," was well marked, but, in the case of the young bird, the white began at the base of the bill not at the occiput; a few days later dark feathers made their appearance on the forehead (see photo.) and the patch more nearly resembled the colour arrangement in the adult bird. The tail was a mere stump of quills with a tip of white feathers; bill flesh pink.

July 20th found our friend sitting on the edge of the nest surveying the world and looking very wise but a trifle tired; in fact at one time I was rather shocked to find him thus with his head hanging straight down, I thought him dying, but he was in reality tired out and asleep. Later on I tried to get a snapshot of him, and in so doing disturbed him and caused him to fly the whole length of his 18ft. world. I again approached him with my camera and got a photograph which was considerably underexposed. During this time it must not be imagined that the parents were sitting quietly taking stock of the situation, far from it; I was several times attacked, especially by the male, who would fly over and give my hat (it was not my best hat) a good push with his feet as he passed. Later, when I was leaning down trying to snap the youngster on the ground, one of the parents deliberately perched on my back and pecked me; needless to say all this interference and the terrible din raised by the parents did not conduce to good photography.

It is said that two or three hundred of these birds will follow and mob a leopard. I am sorry for the poor leopard, one pair of pies can almost deafen you in about five minutes. You will say that all this chatter is perhaps interesting, but that the "Avicultural Magazine" takes no stock of the *Felidae* beyond the destruction of *Felis domesticus*, and I will therefore return to our young blue pie. At the age of three weeks, when he left the nest, he was very suggestive of a young magpie. Bill and legs flesh colour, head and bib grey black, the latter considerably less in extent than in the parents;



YOUNG OCCIPITAL BLUE PIE.
(*Urocissa occipitalis*.)

M. Amsler photo.

back, blue black; secondaries tipped with white; tail two inches long and white; breast and underparts dirty white.

If by any chance he misses his footing in flying on to a perch and finds himself hanging upside down he remains in that position howling pitifully like a small child, the frenzied parents dancing around and raising a din which can only be described as *infernal*. I see I have lapsed into the historic present, which, I am told, is bad form, but the early part of these notes dealt with past events whereas I am now writing of the immediate present.

The young bird is now beginning to feed and I shall discontinue this article until such time as I can report complete success or failure.

On July 25th I got a good photo. of the chick, now four weeks old, and I hope our Editor will see his way to allowing the portrait to be reproduced seeing that I have wasted several plates for his sake.

I have already mentioned that the old birds were in the habit of hiding spare food in the various parts of the aviary; their latest larder now appears to be the old nest. This last trick of theirs caused me some annoyance, for, I argued if they use the nest as a receptacle for food they are not likely to lay again as I had expected and my utmost triumph for 1915 can only be one blue pie.

Towards the end of July the hen was incessantly calling for food and the male would first satisfy her wants before feeding the young bird; I therefore had my suspicions and, on August 1st, inspected the nest and there sure enough were two eggs.

On August 2nd I looked to see whether a third egg had been laid and found the nest empty. I do not think the young bird would have had the instinct or power to destroy these eggs, and can only conclude that the male appropriated them to feed his wife and child. I now begin to suspect that the same culprit was responsible for the absence of eggs in the first clutch on June 12th and 13th, and also for the disappearance of one egg during the incubation of that clutch. As I was taking no risks I caught up and caged the youngster on August 2nd. He immediately began to squawk for his parents, but soon resigned himself to the fact that they were not there and that he must forage for himself. Small garden worms provided a ready

solace for his loneliness and a few captive mealworms, imprisoned under a watch-glass in the midst of his soft food, quickly taught him to pick up food which was not in motion:

I think the question of feeding has now been solved for good, and that I can claim to be the first person to have bred this species in captivity. The young bird is now quite equal in size to his parents, but gives one the idea of an immature bird owing to the shortness of the tail, which is only about six inches long at present. The colouring is still duller than that of the adult, the indigo blue only being really well developed in the wings; there is none in the tail, which is still white with one or two black marks, suggestive of the ocellation that is to come. The breast and abdomen are now pure white. The white occipital patch still extends considerably further forward than in the old birds, and the bill and legs show no trace of orange, being still flesh-coloured.

The old birds betrayed no emotion at the loss of their offspring, nor has the hen laid the remainder of her clutch. The nest is again used as a larder and much of the lining has been thrown out. I see many flight feathers lying about in the aviary, these remind one of Autumn and the end of the breeding season.

It is disappointing, but I have attained my goal; I must admit, however, that I should much have liked another nest, to enable me to hand-rear one or more blue pies. I do not think it would be any more difficult than the rearing of young jackdaws or magpies, and what a delightful sight one of these birds would make foraging about the garden and perhaps pulling up my best rock plants.

I hope later to send further notes on the colour changes of the young bird. I dare not hold over this long-promised article any longer lest it becomes too tedious and be rejected by our Editor.

* * *

LATER NOTES.—On returning from a short holiday on August 29th my man informed me that the pies had been sitting again for some ten days. I took an early opportunity of inspecting the nest and found three eggs laid in the basket with practically no foundation of sticks or hay. Two chicks eventually made their appearance,

these are now a fortnight old and I am intending to take them both to hand-rear.

The present owner of the first chick writes that the young bird is now moulting, and is at the same time developing the adult colouration on feet and bill.

[We could have done with more, especially as it is one of the most interesting records and accounts we have ever published.—ED.]

A WONDERFUL COLLECTION OF BIRDS FROM ECUADOR.

By H. D. ASTLEY.

On the 7th of September Mr. Ezra and I wended our way [it seemed almost as far as Tipperary!] to the Victoria docks in order to meet Mr. Goodfellow who had just arrived with a collection of birds, which are the property of Mr. E. J. Brook, of Hoddam Castle.

Mr. Goodfellow, assisted by Mr. Percy Parsons, has been collecting for the last two years in Western Ecuador, and has brought back some marvellous birds amongst about 300 specimens. As Mr. Ezra and I arrived on the wharf, the unloading of the cages had just commenced, a seemingly endless procession, and as here and there we lifted the canvas blinds, we could only reiterate "Oh! Oh! OH!!"

Tanagers galore of species never before seen in Europe. Tanagers blue and tanagers green, tanagers orange and tanagers with all the colours of precious stones; bedecked in turquoise, topaz, and tourmaline, in ruby, sapphire, and emerald, some in colours so subtle that it is difficult to give them a name, colours which change according to the light thrown on them or the posture of the bird.

And yet with all this, when I congratulated Mr. Goodfellow and envied Mr. Brook, the former said: "If I could have brought back all I had at one time, it *would* have been a wonderful collection," for one large lot was lost through having to bring the birds from high altitudes and long journeys into torrid heat, besides other vicissitudes.

I think Mr. Goodfellow is a wonder! and Mr. Parsons too, (of whose experiences more anon).

To mention only one contretemps, or rather catastrophe on the homeward voyage, imagine the ship tossing and rolling in a big storm. Mr. Goodfellow being woke up at 2 a.m., hurrying as far as it was possible to hurry, in mere pyjamas from his berth to the birds' cabin, where he found a marble slab had given way, precipitating piles of cages in hopeless confusion on to the floor, and on to the top of other cages, so that when he first looked upon the wreckage he thought he had lost everything. As it was, most were saved, but some beautiful tanagers, whose cage was broken open by the fall, escaped through the porthole and were seen no more, whilst a fine bittern had one wing and leg so shattered that it could not live. [Even one of the crew was dashed down, suffering a terrible compound fracture of a thigh bone]. So that is partly why I think Mr. Goodfellow is a wonder.

There is no space this month to tell how the birds finally arrived at the Zoological Gardens in Regent's Park, of how we helped to arrange and feed and clean; in the midst of which I busily took notes and names.

One's brain buzzed, and very grateful I was when Dr. Hopkinson appeared and helped me: and he it is who has completed the list and most kindly written it out in due order. We sat with books of reference about us in the library of the Zoological Society, we peered at the birds again and again, to return once more to the library, for this collection of Mr. Brook's has hardly anything that one knows or has seen before; neither can I vouch for the list being a complete one. I have, in one or two cases, added some further notes on colouring, etc.

Dr. Hopkinson writes: "The following is a list (as far as I can remember) of the birds brought from Ecuador by Mr. Goodfellow assisted by Mr. Parsons, which the Editor has asked me to compile. We met at the collection's arrival and hoped to have given a short description of each species, but their number and bewildering variety has made that an impossible task, so divided the work. My share takes the form of notes on those I could remember, with the addition of such references to notes and plates as I can find. How few these are is some indication of the extreme rarity of the greater part of the collection. I trust that fuller accounts of these

“rare and beautiful birds will shortly be forthcoming from more able pens, and these references are intended as a help in that direction.

“For most of the specific names we are indebted to Mr. Goodfellow, who seems to know every South American bird individually and collectively; but, in a few cases, I have indicated alternative names, where those he used referred (in the Hand List) to non-Ecuadorian species.

“The English names mostly come from Brabourne and Chubb’s List.

“I think most of the abbreviations used are sufficiently obvious, but it may be as well to explain a few.”

R.B.=Ridgway’s Birds of North and Middle America.

B. & C.=Brabourne and Chubb’s Birds of S. America, Vol. I., the List, all that is published, and now, alas, all that is likely to be.

B.M. Cat.=the Catalogue of the British Museum. This reference follows (in brackets) the specific name, the volume indicated by Roman, the page by modern figures. When such a reference consists of page figures only, it refers to the Tanager volume (XI.), to which family a large proportion of the birds belong.

H.L.=Hand-List of the British Museum. This classification is followed as a whole, though the species are not arranged in any correct order.

/.=“teste,” “on the authority of,”

thus /R.B.=on the authority of Ridgway’s Birds, etc.

Mr. Goodfellow has previously visited Ecuador for ornithological purposes, and it is to his description of this journey and the birds met with, in “An Ornithological Journey through Colombia and Ecuador” (*Ibis*) and in “A Naturalist’s Notes in Ecuador” (*Avic. Mag.*) that the entries, *Ibis*, 1901 and *Avic. Mag.* VI. refer.

Those marked with * especially beautiful.

Eleven different species of *Calospiza* and *Tanagrella* (late *Calliste*) arrived; four other species were obtained, but lost.

N.B. The *Calliste* family is known by the superb tanager amongst aviculturists.

TANAGRIDÆ.

- * *Calospiza rufigularis* (*rufigula*, B. & C). RUFIOUS-THROATED TANAGER.
Ibis, 1901, 460.
- * *C. aurulenta* (108). GOLDEN TANAGER. Ibis, 1901, 461.
Brilliant orange, black patch on ears, back striped longitudinally black and orange, wings and tail black, edged with orange.
- C. icterocephala* (110). SILVER-THROATED TANAGER.
PLATE. Sclater, Mon. *Calliste*, 37, pl. 17 (1857) /RB.
Ibis, 1901, 461. Avic. Mag. VI. p. 65.
- C. vitriolina* (111). VITRIOL-COLOURED TANAGER.
Ibis, 1901, 461.
- C. gyroloides* (117). LAFRESNAYE'S TANAGER.
PLATE. Scl. t. c. 57 pl. 26 (1857). /RB. Ibis, 1901, 461.
A brown-headed green-backed bird with a pale blue-breast. This lot appeared to be of a particularly quarrelsome disposition.
The range of *gyroloides*, as given in the Hand List, being Costa Rica to Panama, these examples (from Ecuador, like the great majority of the rest of this wonderful collection) probably=the *C. deleticia* of the H.L. i.e. *gyroloides* of B. & C.'s list.
- C. ruficervix* (129). RUFIOUS-NAPED TANAGER.
Ibis, 1901, 462.
- * *C. nigriviridis* (122). SQUAMULATED TANAGER.
Ibis, 1901, 462.
- * * *C. cyaneicollis* (127). BLUE-THROATED TANAGER.
Ibis, 1901, 463.
(? = *C. caeruleocephala*, the PERUVIAN BLUE-THROATED T.)
Brilliant turquoise head, violet mauve under bill. Black back and breast. Salmon-fawn shoulders and upper tail-coverts, showing silvery green in some lights, and old gold. Flanks, sapphire blue and violet.
- * * *C. cyanopygia* (128). PURPLE-BELLIED TANAGER.
Ibis, 1901, 464.
Whole head and upper tail coverts vivid turquoise: breast black going into sapphire blue.
- C. labradorides* "sic." (130). GREENISH-BLUE TANAGER.
Ibis, 1901, 463.
- * *C. lunigera* (133). SCLATER'S ORANGE-HEADED TANAGER.
PLATE. Sclater, Mon. *Calliste*, 65, pl. 70, fig. 2. B. & C,
Ibis, 1901, 463.
- C. argentea* (137). SILVERY-GREY TANAGER (may=the allied *C. fulvigula*).
Tanagrella cyanomelaena (88). BLUE AND BLACK TANAGER.
PLATE. Bird Notes, 1912, p. 4. plate 1.
From ordinary observation apparently the Tanager, usually known as the "Blue and Black," but as this species is a Brazilian one, these birds may be either *T. iridina* or *calophrys*, both of which inhabit Ecuador.

Procnias viridis (late *tersa*) (50). THE SWALLOW FRUIT-EATER (B. & C.)

A green bird, distinctly swallow-like in shape, which enjoys the distinction of forming a family of its own, the *Procniatidae*, placed between the Sugar-birds and Tanagers.

Ibis, 1901, 458.

Four species of VIOLET Tanager (*Euphonia*), [B.M. Cat., p. 58], three from Ecuador and one from Demarara, the ordinary VIOLET T., (*E. violacea*). The Ecuador species are probably :

E. saturata. THE ORANGE-CROWNED EUPHONIA.

PLATE. B.M. Cat., p. 70, pl. VIII. 2.

E. hypoxantha. YELLOW-HEADED EUPHONIA, and a third which we could not identify exactly.

* * *Chlorochrysa phoenicotis* (90). RED-EARED GREEN Tanager.

Ibis, 1901, 460.

A tanager of a most vivid emerald green, about the size of the average "Calliste," with small red ear-patches.

Procnopis vassori (93). VASSOR'S Tanager. Ibis, 1901, 460.

Bright blue, suggesting a glorified Indigo-bird; hen also blue, but duller.

Buthraupis cucullata (148). HOODED MOUNTAIN-Tanager.

PLATE. Jardine. Illust. Ornith. (n.s.) pl. 43. (1841). B. & C.

Ibis, 1901, 465.

One of the large, almost Jay-like Tanagers. A striking contrast of colours, black head, brilliant blue upper parts, and clear yellow breast and belly.

* *Poecilothraupis lunulata* (144). SCARLET-BELLIED MOUNTAIN Tanager.

Ibis, 1901, 465.

The Western Ecuador species is *atricrissa*. These birds (there are several) may belong to this species.

A handsome strong-looking black Tanager with scarlet belly, blue rump and wing-patches and red roughly crescentic ear-patches.

* * * *Compsocoma notabilis* (152). BLACK-CHINNED MOUNTAIN-Tanager.

Ibis, 1901, 466.

A thrush-sized Tanager with black head, bearing a yellow occipital patch, yellow breast, black wings and greenish back. The latter is now a beautiful shining grey-blue, not greenish, this being one of the Tanagers, in which Mr. Goodfellow pointed out the green changes to blue in captivity. The result is that the bird looks almost more beautiful on account of this cage-caused change than it was in freedom. A very different result to that which obtains with the many scarlet birds which lose their colour in captivity.

* * *Compsocoma sumptuosa* (151). THE BLUE-SHOULDERED MOUNTAIN-Tanager.

Ibis, 1901, 465.

A slightly smaller bird than the above with markings quite distinct from his, but with roughly the same colour scheme, except that the yellow is of a more sulphury shade.

Tanagra cana (156). SILVER-BLUE TANAGER.

PLATE. Swainson. Orn. Drawings (Bds, of Brazil) II., pl. 37 and pl. 41.
(= young). /RB.

Ibis, 1901, 466. Avic. Mag., VI., 71.

T. darwini (165). DARWIN'S TANAGER. Ibis, 1901, 467.

T. palmarum violilavata. VIOLET PALM-TANAGER.

B. & C. List, 4282. Ibis, 1901, 466.

Sporothraupis cyanocephala (162). BLUE-CAPPED OLIVE TANAGER.

An olive-backed grey-bellied Tanager with a "Tanagra-blue" head.

Rhamphocelus icteronotus (177). YELLOW-RUMPED TANAGER.

PLATE. Du Bus, Esquis, Orn., 1845, pl. 15. /RB. Ibis, 1901, 468.

A velvety black bird with lower back and upper tail-coverts sulphur yellow.

* *Psittospiza riefferi* (281). RIEFFER'S GRASS-GREEN TANAGER.

Ibis, 1901, 472. Avic. Mag., VI., 94.

A robust heavily-built bird of a brilliant *emerald* green with a maroon chestnut face, broad "orange" bill and legs. In several of these birds the green has changed (from captivity) to a lovely blue, changing the appearance greatly, so that one would think the cage contained two distinct species, or at any rate the two sexes of a species in which the cock and hen were markedly different.

One or two species of SALTATOR are included in the collection :

Buarremon, three species of this seed-eating genus, now removed from the TANAGRIDÆ and classed with the FRINGILLIDÆ and resembling buntings, *B. assimilis*. GREY-STRIPED BUARREMON. Ibis, 1901, 470.

A bird about the size of a red cardinal ; olive green above, white below, with a longitudinally striped black and ashy head and bold red eyes.

B. schistaceus (267). ASHY-BREADED BUARREMON. Ibis, 1901, 471.

Smaller than the above. A black and grey finch-like bird with chestnut cap.

B. spodionotus (264). ASHY-BACKED BUARREMON. Ibis, 1901, 471.

A yellow-bellied, grey-backed, chestnut-crowned tanager.

CÆREBIDÆ.

Diglossa personata (10). MASKED GUITGIT.

Ibis, 1901, 317. Avic. Mag., Vol. VI., pp. 225-226.

A lapis-lazuli blue bird with black mask and red eyes. Size of Garden warbler.

Iridophanes pulcherrima (24). YELLOW-COLLARED SUGAR-BIRD.

Ibis, 1901, 318. RB. II. 391.

Chlorophanes spiza (29). BLACK-HEADED SUGAR-BIRD.

A.G.B. For. Birds, I. 73. Russ 11, 414.

Two true pairs. The hen has no black head and seems to be of a much brighter and more grassy green than the cock.

FRINGILLIDÆ.

Pheucticus chrysogaster (XII. 52). YELLOW-BELLIED GROSBEAK.

Ibis, 1901, 473. Avic. Mag., I. 26. VI. 234.

A large grosbeak. Brilliant yellow head and underparts, black wings and tail, boldly spotted with white.

Another grosbeak (or finch), grey with a stout ochre-coloured beak and similarly coloured legs. (? species).

Two pairs of another 'finch,' the male brown above and lighter below and with grey heads, the females streaked with a lark or linnet like look.

A few SPERMOPHILÆ (small "seed-eaters") almost certainly new to aviculture

MIMIDÆ.

Three Mocking-birds, probably *Mimus longicaudata*. (B.M. Cat. VI. 342.)

LONG-TAILED MOCKING BIRD.

TURDIDÆ.

A small thrush, suggestive of the American Hermit Thrush, but with a more rufous breast, perhaps *Turdus swainsoni* (OLIVE-BACKED THRUSH).

ICTERIDÆ.

A pair of large Grackles (? species). Male black; female brown.

Two Yellow-headed Marsh-birds (345), *Agelaius icterocephalus*.

Two species of Hangnest (? species), one with more yellow than black, the other the reverse.

CORVIDÆ.

Two TURQUOISE JAYS, *Cyanolyca turcosa*.

PLATE. B.M. Cat. III. p. 135; p. 1. VII. Avic. Mag. VI. 226.

COTINGIDÆ (somewhat Trogon-like).

Two species of the Cotingidae. One lovely male of *Pipreola jucunda*. (Cat. XIV. 381), the YELLOW-VENTED COTINGA; and a pair of another species, probably *P. riefferi*. (XIV. 377). Ibis, 1901, 713.

PSITTACIDÆ. (PARROTS).

Amazona lilacina. LESSON'S AMAZON. B.M. Cat. XX. 301.

PLATE of head. Has been represented by one skin in the B.M.

Pionus menstruus. (XX. 322). RED-VENTED PARROT.

The blue head of this specimen is so much brighter than what one usually sees, that one cannot help thinking it may belong to a different species. (Can it be the *P. cobaltinus* of the foot-note, p. 325 of the Catalogue?)

P. corallinus. CORAL-BILLED PARROT. (XX. 326).

PLATE. Rowley, Orn. Misc. III. pl. page 1.

P. chalcopterus. (XX. 333). BRONZE-WINGED PARROT.

P. seniloides (330). MASSENA'S PARROT.

Pair of BLACK-HEADED CAIQUES.

Two species of Parrotlet, one (*coelestis*) from Ecuador, the other from Demerara, *Psittacula guianensis*. (XX. 251). *Coelestis* has a green grey nape contrasting with the general green of the body plumage, and the rich blue as in the flower of the blue *salvia*.

Conurus rubrilarvatus. RED-MASKED CONURE. (XX. 182).

PLATE. Seth-Smith. P'keets, pl. page 36.

Three or four species of BROTOGERYS. (XX. 253. *B. prrhopterus*. *Tui*, *Tovi*, etc. Some small ground doves, *Chamæpelia cruziana* (PERUVIAN GROUND DOVE).

A rare bittern, and still rarer owl, *Gisella harrisi* (HARRIS'S OWL). Face, lores and underparts, sandy chestnut. Top of head and upper parts rich mahogany brown with white spots on wings. Eyes mahogany brown, feet flesh colour and slender. Medium size.

An assortment of monkeys, squirrels, etc. complete the consignment, and with this (Dr. Hopkinson writes) I will end, instead of closing with the time-honoured sentence, "and in addition a large number of the more commonly imported species," which usually terminates accounts of recent arrivals. With this lot, however, there is nothing even approaching the 'common.' As living birds the great majority must be first arrivals, while many no doubt are rarities as skins.

HYBRID BUNTINGS.

By BERNARD C. THOMASSET.

This summer two interesting hybrids have been reared in my aviary. They were bred from a cock indigo and a hen nonpareil bunting. For two years the parents had been in different divisions of the aviary. This spring, as they seemed to be courting through the wire netting, I put them together.

Very soon they paired. The nonpareil built a neat open nest of twigs, coarse grass and wool. It was placed on a flat pine branch in the shelter shed. Three eggs were laid and two young ones were hatched. These were fed by the mother on ants' eggs, mealworms and gentles, and on the eleventh day they left the nest.

The nonpareil was a model parent, most tame and confiding, though before she went to nest she had always been a very shy bird.

As far as I could see, the young were never fed from the crop. All food was carried in the beak.

Until twelve days after they left the nest, live insects only seemed to be given. On the twelfth day I watched the nonpareil shelling hemp and canary seed, giving it to the young ones from her beak. It was not regurgitated. The indigo finch never fed the young, but spent most of his time chasing and fighting with some grassfinches which shared his quarters.

When fully fledged the hybrids resembled hen indigo buntings, with markings, I think, less defined. I hope that one at least may

be a male. When in full plumage he should be a gaily coloured bird.

The long-tailed grassfinches mentioned reared a brood and they have developed a taste for insect food. They now eat quite a number of gentles, earwigs, and, in fact, anything in the way of insects.

My old pair of gouldian finches have now (August) two broods out of the nest; eleven in all. With me these so-called "unsatisfactory" birds give no trouble at all. They are tame and hardy and most prolific.

I feel sure that more gouldians are killed by hard water than by any other cause. Here our only water supply is rain water and it suits birds very well.

EXPERIMENTS IN FEEDING HUMMING BIRDS DURING SEVEN SUMMERS.

By ALTHEA R. SHERMAN,

National, Iowa.

(Concluded from page 332).

One is led to wonder if the Homeric gods on high Olympus were more deeply stirred by the appearance among them of the youthful Ganymede bearing cups of nectar than are the humming birds at sight of their cupbearer. When several of them are present the wildest confusion reigns. Possibly not one of them is in sight when the door is passed, yet instantly the air seems filled with them: some swinging back and forth in the air, squeaking and fighting, or darting from bottle to bottle thrusting in their bills as they pass, while an overbold one will buzz about my head, sometimes coming under the porch in her zeal for the meeting; but the timorous ones fly from their perches into sight over the bottles, then back into a bush. Some one of these types of behavior marks the bird boarder from the migrant. The latter pays no attention to cupbearer or bottle, but diligently searches each bunch of blossoms. For two or three weeks after the drinking birds have left there is occasionally a migrant among the natural flowers. The bottles are full of syrup, but it passes them unheedfully.

Habits seem to change when steady drinking is practiced, but

in the case of the birds the habit does not appear to be a harmful one. At once she ceases to search the flowers and, like the typical summer boarder, she sits and waits for the food to be served. Each bird appears to have her favorite perch, a dead twig of syringa or lilac bushes on the north, or on the south in one of the snowball bushes; the telephone wires on either side of the street offer acceptable waiting places at times. Not infrequently I have been intent upon other duties about the yard and looking up have found a rubythroat perched directly overhead, her bright eyes seeming to say "I want to be fed." So complete appears the cessation of the search for other food that it led to the keeping of a full record for the past three years of every time one of these birds has been seen catching insects or searching the natural flowers for food. Most of these instances noted were, if the whole truth could be learned, probably, cases of strangers just arrived within our gates that had not yet acquired the drinking habit.

In 1911 the drinking birds were about our place on 43 days. During that time on only four occasions was a humming bird seen catching insects or probing the flowers. A large number of plants called "Star of Bethlehem" had been raised, these flowers in previous summers having proved a great attraction to the rubythroat in the yard of a friend living two miles distant; but our drinking birds were never seen to visit these flowers. After their departure strange humming birds searched them thoroughly, as well as the phlox, tiger lilies, sweet peas, nasturtiums, and clover. These strangers were present on 12 days. In 1912 the drinkers were with us on 77 days, and were seen but 10 times seeking other food than syrup. In 1913 for 49 days the drinking birds imbibed, and on nine occasions a humming bird was seen gathering food elsewhere. In the 169 days that make the grand total for the three summers, the rubythroats were seen drinking syrup between one and two thousand times; they were seen collecting food away from the bottles 23 times; but one can not be positive that insect food was always taken then. Never for an instant was one of these birds in captivity, and there was the utmost freedom for it in choice of food.

This choice of a sugar diet, together with the large amount consumed, caused surprise, and soon called forth the estimate that a

humming bird would eat a teaspoonful of sugar in one day. Some method of testing this estimate was sought, resulting in a plan for putting the bottles beyond the reach of the ants that swarmed about them. The stick that supported the artificial nasturtium and tiger lily was nailed to a block of wood which was submerged in a flower pot filled with water. For a short time this arrangement served very well, until leaves and flower petals fell in, forming rafts upon which the ants were able to cross. No myrmecologist was at hand to suggest a remedy, but at last the aversion of ants to kerosene was recalled, and the water was covered with a film of kerosene, which effectually debarred them. Nevertheless, one day the ants were found taking the syrup as of old. An examination of existing conditions showed that a grass stem had lodged against the supporting stick, forming a bridge over which these wise little creatures were busily passing to and fro. Except when the bottles were isolated in this manner ants of various sizes and different colors fed constantly on the syrup, often crowding a bottle to its very mouth, but this did not prevent the birds from drinking. I am not prepared to say that they never took an ant as food, but I have stood as closely as is possible to a bottle while a humming bird was drinking from it, and none was taken at such times. When a new bottle was placed, or the old ones were set out in the spring and filled, it took from one to two days for the ants to find the syrup. A small red species generally, if not always, was the ant to make the discovery, the fruits of which it enjoyed for a very brief season, a large black ant soon taking possession and holding the spoils for the rest of the summer.

The bottles, having been removed from the encroachments of the ants, were ready for the first test. One bird being the sole boarder at that time, a level teaspoonful of sugar dissolved in water was consumed by her daily. In time, two, three, four, and five humming birds having joined her, the quantity of sugar was increased accordingly, a spoonful or two being added to offset any possible waste. In this way more than a pound of sugar was eaten in 20 days, or, to be more exact, three cupfuls, weighing 9,252 grains, which made an average of 462 grains per day. This for the six birds frequently counted as present confirmed the first rough estimate of a teaspoonful of sugar daily for each bird.

Another method of estimating the amount eaten was devised. On several days the sugar and the water were carefully measured and weighed, then weighed and measured again, after which the syrup resulting from their combination was also measured and weighed, until I felt confident that in a dram of the thinnest syrup served there were 40 grains of sugar, or two-thirds of a gram to every drop. But the syrup usually used was considerably richer than this, easily containing a grain of sugar in every drop; but it seems best in giving the estimates to keep them to the weakest grade of syrup ever served.

In making the test a dram of syrup was measured in a glass graduate, and bottle No. 4 was filled. This was always done in the morning, when the bottle had been emptied by ants. A waiting humming bird came and took her breakfast, after which the residue of syrup was poured back into the graduate, the bottle being thoroughly drained. Possibly a drop still adhered to the bottle, but the number of minims now in the graduate subtracted from 60 must have given very nearly the amount drunk by the humming bird. In two summers a number of these tests were made. A bird took for her breakfast from 8 to 20 minims, the average being 15. Using the low estimate of two-thirds of a grain of sugar to each drop, the average breakfast held 10 grains of sugar. A better comprehension of the size of that meal may be gained by remembering that two large navy beans or one medium-sized lima bean also weigh 10 grains. Breakfast and supper were the rubythroats' heaviest meals, but there were many luncheons between them. By reckoning eight to nine such meals daily (and beyond doubt there were that number), we reach again the first estimate of 70 to 90 grains of sugar as the daily ration. About this amount of sugar is held by a common teaspoon when level full; such a spoon will hold from 110 to 120 minims of water, whereas one of those heirlooms, a grandmother's teaspoon, is the measure of the standard teaspoonful of 60 minims. Referring, then, to the standard measure, the bird would be said to eat two teaspoonfuls of sugar daily. An ordinary cube of loaf sugar contains the equivalent to this amount.

Reflecting upon the bulk consumed by so small a creature, one naturally desires to know the weight of a humming bird. A little

boy brought to us the body of a male that had been shut into a machine shed, where its death may have resulted from starvation. Its weight was 33 grains. Naturalists in early days were vexed by the same question, as is shown by a quotation given by Mr. Ridgway in his book on humming birds. It is from Philosophical Transactions, 1693, by Nehemiah Grew, who wrote: "I did weigh one (in those parts) as soon as ever it was killed whose weight was the tenth part of an ounce avoirdupois." From these weights one makes the deduction that our humming birds are accustomed to eat of sugar twice their own weight daily. If human adults ate of sugar proportional amounts there would be required nearly 300 pounds of this saccharine food daily for the average person.

No attempt has been made to tame the birds that came to drink, yet one, perhaps two of them, became bold enough to drink when a bottle was being filled; while she thrust her bill into the empty receptacle a spoonful of syrup was frequently held touching the mouth of the bottle, but she did not learn to drink from the spoon. While drinking the tongue was extended about a quarter of an inch beyond the tip of the bill, and two or three drops were sipped before the bill was withdrawn. Once 15 drops were taken with three insertions of the bill, and at another time the bird drank without the withdrawal of her bill for about the duration of a minute. At such times the bottle was free from ants; probably they were present when the drinking was done with numerous sips. Often a bird preferred to take her breakfast in courses, perching on a near-by dead twig for a minute or two between drinks.

During two of the seasons it was thought that some of the birds roosted on our place, appearing as they did very early, and making a long day for feasting and fighting. In other years the birds were seen to fly eastward at night and their morning arrivals were not so early. One June morning a bird was ready for her breakfast at 4 o'clock, and took her last drink at night just before the clock struck 8. On some August days there are records of their presence at break of day; in one case it was 38 minutes before sunrise. They usually lingered a short time after sundown, drinking long and deeply before taking their evening departure.

The conviction that the same birds were returning to us

summer after summer began to be felt at the beginning of the fourth season. On May 26 of that year the first humming bird appeared on the place. The next day the flowerless bottle No. 4 was put out, and in a few hours a bird was drinking from it. For the next three weeks she was seen drinking from this bottle on every day except two, but not in the middle of the day; then for two weeks she was missed, returning again on the 1st of July.

The history of the fifth season was similar. Humming birds having been seen on May 22, bottle No. 4 was staked out and filled for a few days. No bird coming to drink, the bottle filling had been discontinued, when on June 6 a humming bird on suspending wings was seen searching this bottle. Not finding syrup in it she flew to the spot always occupied by the flowerpot holding the artificial flowers when they were in place. Over this vacant spot she hovered an instant before flying away. On a few other June days a bird of this species was present and on the 17th one was seen drinking, but her steady summer boarding did not begin until July 9. In the sixth spring the species arrived earlier than usual. No bottles were out on May 7 when a humming bird was seen hovering over the customary place for the artificial flowers. As quickly as possible these flowers were put out, but before they could be filled the bird was thrusting her bill into the tiger lily. She came to drink on most of the days thereafter until June 9, also June 14, 15, and 24, and on July 1 and 2; but it was not until July 16 that she came for constant drinking.

These dry and dull details have been given in full because two theories were based on them. That the birds of former years have returned to be fed seems unquestionable from their searching at once flowerless bottle No. 4 and from the other evidences offered. That the birds came in May and at intervals in June and July before becoming steady boarders about the middle of July, seems to indicate that they nested two or three miles away, too far for daily trips after incubation began. The supposition that these nestings were in the woods is founded on the fact that in leaving the birds flew in that direction, also because they were never found about the trees of the four farmyards that intervene between our place and the woods. That in two summers a mother rubythroat returned with her daugh-

ter was suggested by seeing on several occasions two birds drinking together from one bottle, a phenomenon that needs explanation when we consider the pugnacious disposition usually exhibited by one drinker toward another.

In further confirmation of the foregoing is the history of the feeding in 1913. Bottles No. 4 and No. 6 were set out on April 30. For two months and a half no humming bird visited them. It chanced on July 14 that the stick support of No. 4 was lying on the ground, leaving only No. 6 in position, when my sister saw a humming bird thrusting her bill into it. She hastened to fill this bottle, which was the first time it had ever been filled, and it lacked but eight days of two full years since it was first set out. Six days later I was in the orchard a hundred feet or more distant from the bottles, when a humming bird flew towards me and buzzed about my head as do no other birds except those that are fed. With greatly accelerated pulse I hurried to the house and filled the bottles. In exactly two minutes the humming bird was drinking from one of them; this was the first drinking witnessed in that year. It was one of my most thrilling experiences in bird-study. Two marvellously long journeys of from one to two thousand miles each had this small sprite taken since last she had drunk from the bottles, yet she had not forgotten them, nor the one that fed her. She was quite prone to remind either of us when the bottles were empty by flying about our heads, wherever she chanced to find us, whether in the yard or in the street. Once having been long neglected she nearly flew into my face as I opened the barn door to step out.

The last experiment made was that of flavoring one of the bottles of syrup with vanilla, and later with extract of lemon, to see if the birds showed preference for the plain sirup or for the flavoured. Both kinds were served at the same time, and of both the birds drank, showing no choice that could be detected.

It may already have been surmised from the gender of the pronoun used that it is the female only of this species that has the "sweet tooth." Never once in the seven summers has a male ruby-throat been seen near a bottle. The drinking birds have been examined long and critically, with binocular and without, in order to detect on some of the birds the identification marks of the young

males, but without success; moreover, had young males been present they, too, would have been apt to return in later years. This absence of the males led to noting their scarcity in general, and to recording in notebook when and where a male at any time was seen. The entire number seen in the past five years has been six on our place and six elsewhere. It is impossible to do more than estimate the number of females that have been seen; but when it is remembered that on several days in two summers seven have been in sight at one time, it does not appear to be an overestimate to place their number at twelve or fifteen for each year or six times more of them than of the males.

The simple experiments herein described are such that they may be tried by anyone having a yard frequented by the rubythroat. If any one doubts that the female of this species will choose a saccharine diet, when it is available, let him continue the tests until convinced beyond cavil or a doubt. It is especially desirable that the experiments be made in proximity to the nesting birds in order to see if the mother will feed syrup to her nestlings. Sometimes our catbirds and brown thrashers have come into the porch to the cat's plate and taken his bread and milk for their nestlings. Upon this hint for needed aid I have put bread soaked in milk on the fence railing for them, and they have taken it also. It is reasonable to believe that in like manner sweet benefactions proffered to a hard-working humming bird mother might be acceptable to her and shared by her with her nestlings.

* * *

Miss Sherman most kindly sent her original article as published in the *Wilson Bulletin*, No. 85, with permission to reprint it. By mistake, the first portion was taken from the Smithsonian Institution version, which was not altogether as Miss Sherman originally wrote, and of which she did not approve.

The continued portion in this month's magazine is from Miss Sherman's article in the *Wilson Bulletin*, and we are very indebted to her for her kind permission to publish it, and also to Professor Lynde Jones, of Oberlin College, Ohio.

Miss Sherman wrote to the Editor: "From 'The Auk' I learned that you published in February an article, which related

“ Mr. A. Ezra’s experience in keeping humming birds alive in Eng-
“ land. You may be interested to hear of the humming bird
“ experiments in the past two summers: our home was closed last
“ year until August the 11th, when my sister returned. She put
“ out and filled the flowerless bottles, but no birds came to drink.
“ All this season I have had two flowerless bottles in position, and
“ have filled them when humming birds are about, but no attention
“ is paid to them. Evidently my drinking birds are dead or have
“ forgotten. The bottles in the artificial flowers have not been set
“ out for three summers. I expect to begin with them again next
“ summer, which will be the tenth.”

Yours sincerely, ALTHEA R. SHERMAN.

We most cordially thank Miss Sherman for writing and for
permitting such an interesting record to appear in the “Avicultural
Magazine.”

HAND-REARING LONG-TAILED TITS.

By HUGH WORMALD.

During the last week in March I noticed what appeared to be
a completed long-tailed tit’s nest, situated in the usual site, *i.e.* a tall
hawthorn hedge overgrown with brambles (ninety per cent. of the
long-tailed tits in this neighbourhood build in high hedges overgrown
with brambles). I left it for five weeks, when I thought there should
be fair sized young in it, but on feeling in I found there were still
only eggs; probably the nest was not so near completion as appeared
to be the case from the outside when I first found it. However, the
next time I examined it, a fortnight later, I found it full of nearly
fledged young, two of which with some difficulty I extracted, as I
was under the impression that they would make nice cage-birds. I
took them home and put them into the drying-off box of an incubator
which I filled with duck’s down, into which they burrowed out of
sight. For two days they sulked and refused to open their beaks,
so I had to stuff them. I fed them with mealworms, small green
caterpillars, spiders, etc., but as soon as they opened their beak I
added “Ceckto.” They could fly well in four days, and directly I
went into the room they would fly out of the top of the incubator

clamouring for food, and settle on anything that came handy, my moustache, pipe, nose, coat, etc. They did not begin to pick up for themselves until I had had them for about ten days, when they were no more trouble. They nearly died on the fourth day, I presume the change of diet disagreed. At this time their tails were about two inches long and growing fast, but the two days on which they were sick affected the growth, causing the quill to be very thin, at least the quarter inch or so of quill which developed during two days, so that when the tails were full-grown they both had a kink about $2\frac{1}{4}$ inches from the tip, which spoilt their appearance.

When I had had them for about six weeks one of them got out of his cage and was hopping about on the cage when my wife came in; she gave it some mealworms and tried to pick it up without first closing the window. The bird flew out of the window and then tried to come in at another window which was shut; he flew rather hard against the glass which frightened him and he went off into my garden, and though he was about for a day or two I could never catch him and he disappeared, probably joining up into another family party, of which there were several about just then. The remaining one is now very well and tame, and at the time of writing (July 29th), is fast getting his second plumage, his crooked tail has dropped out except two feathers and been replaced by a nice straight one, and the pink on the back is just beginning to show (the young in first plumage are plain black and white with red eyelids). One always sees the eye painted dark brown in illustrations, but in both my birds the iris was *very pale* pinkish brown, but the pupil is large, which gives the appearance of a dark eye, unless one looks very close.

My bird now, curiously enough, refuses spiders or flies, but is very fond of mealworms, and begins calling and hanging on to the front of his cage directly he hears me coming, as I usually give him a mealworm when I come into the room; he also eats green fly, wasp grubs and moths if I take the wings off first. He always beats mealworms, etc. against his perches before swallowing, and has no idea of holding food in his feet and pulling bits off as blue tits do.

Before I lost one of my birds they always huddled up against

each other at night, singing a low song (the only time of day they attempted a "song," though calling all day long), so when the one escaped I feared the other would mope, besides being chilly at night, so I put a fine cock white spotted blue-throat into the cage thinking that he would do for the tit to huddle up to at night; however, with a cry (I presume) of "You German!" he flung himself upon the blue-throat's back and proceeded to hammer his head, so I had to remove the blue-throat. The tit is very fond of my phalarope, whose cage he has always shared, and every evening he gets down to the ground and squats up against the phalarope, who at first resented this and swore at the tit, though he never offered to peck it; now, however, he has got used to it, and any evening one can see them sitting side by side on a piece of fresh turf in the corner of the cage, though the tit goes up to a perch a little later in the evening to roost, the phalarope spends his days out-of-doors in a large enclosure, and only comes in at night for fear of rats, when the tit greets him with cheerful twitters.

Both this tit and the one that escaped were fond of bathing, and took their first bath as soon as they could fly, and frequently washed quite late in the evening.

I found a very late nest with young in it in the first week of July and took four, thinking I should then have a good chance of getting two pairs. All went well for four days when I foolishly gave the four little tits a feed of rather unpleasant looking yellow flies, of which I found a great quantity in a hay field; from their numbers I might have guessed that they were bad for birds, but being short of live food I used these flies, with the result that I found all the tits dead the following morning, so that I have only my one bird left. I am certain it was the flies that killed them as they were all very well last thing at night when I fed them with the flies. If any of our members has a long-tailed tit to dispose of I should be very grateful if he or she would let me know, as these are very gregarious birds and I am sure two would do better than one, especially in the winter.

I have seen more long-tailed tits' nests this season than I ever remember before, but I didn't disturb any of the other nests, because up to the middle of June I had my two birds, and by then the other

nests were empty, though I saw a party of young which could only have left the nest two days at most on July 25th; these are the latest hatched I have ever noticed.

Wild-caught long-tailed tits as a rule do not do well, but I can thoroughly recommend hand-reared ones as cage birds; they are lively and cheerful, and, though their call-note is very penetrating, it does not become a nuisance. My bird is very tame and always ready to take food from my hand, but at present I have not the least idea of its sex.

NOTES.

ARRIVAL OF MORE HUMMING BIRDS IN PARIS.

A French member received nearly *thirty* humming birds from Venezuela in the latter part of August, including several species, many individuals in "show" condition.

One of the most lovely, of which there are about half a dozen, is the little "Ruby-topaz"—*Chrysolampis elatus*, or *moschitus*—the male having the whole crown and crest brilliant ruby red, the chin and throat resplendent topaz-yellow; upper surface dark velvety brown; tail, rich dark chestnut-red.

Agyrtria milleri—Miller's "Emerald"—is *minute* in size, with a turquoise blue head and neck. There are also some of the Lampornis "Mango" humming birds, as well as *Amazilia sophiæ*; *Leucippus fallax* (Buff-breasted Leucippus) and others.

After the war, if everyone isn't ruined, one may in the future expect to see various species of humming birds as an ordinary exhibit at shows. Who knows? They may even be bred in conservatories! Provided some species have sufficient heat, they are as easy to keep as sunbirds, and many inhabit high altitudes amongst the mountains of Ecuador, etc., and could withstand a good deal of cold.

H. D. A.

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Mr. ARTHUR W. HILL, Director, Royal Gardens, Kew.
Mr. GUY FALKNER, Westbourne House, Belton, Uppingham.

CANDIDATES FOR ELECTION.

Mr. A. E. JEAKINS, The Studio, Simla, India.
Proposed by Mr. E. W. HARPER.

THE SUPERINTENDENT OF DILKUSHA, Burdwan Raj, Burdwan, India.
Proposed by the HON. BUSINESS SEC.

OFFICERS FOR THE YEAR, 1915-1916.

The Council recommends the election of Dr. MAURICE AMSLER and Dr. L. LOVELL-KEAYS to succeed Mr. ALBERT PAM and Mr. C. BARNBY-SMITH, who retire by seniority; also that Mr. W. R. OGILVIE-GRANT be elected a Member of the Council so as to bring up the number to fifteen, according to Rule 3, and the appointment of Mr. BARNBY-SMITH as Auditor and Mr. PAM as Scrutineer.

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The following medals have been won for breeding these species for the first time in captivity in the British Isles.

Any member who does not wish to receive a medal is asked to kindly advise the Hon. Business Sec.

<i>Glaucidium jardini</i>	..	Miss E. F. CHAWNER.
JARDINE'S PIGMY OWL
CACTUS CONURES	..	Dr. L. LOVELL-KEAYS.
(If not hitherto bred).		
<i>Zosterops virens</i>	..	" " "
THE BEARDED REEDLING	..	" " "
(<i>Panurus biamnicus</i>)		
OCCIPITAL BLUE PIE	..	Dr. MAURICE AMSLER.

By an error in printing, the breeding by Dr. L. Lovell-Keays of ZOSTEROPS VIRENS, appeared as *Z. vireus*.

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