

Z
7991
Z27
NH

THE
ZOOLOGICAL RECORD

VOLUME THE FORTY-NINTH

BEING

RECORDS OF ZOOLOGICAL LITERATURE

RELATING CHIEFLY TO THE YEAR

1912

COMPILED BY THE REGIONAL BUREAUS OF THE INTERNATIONAL CATALOGUE OF
SCIENTIFIC LITERATURE;

SUPPLEMENTED AND ARRANGED FOR THE ZOOLOGICAL SOCIETY
OF LONDON

BY

D. SHARP, H. M. WOODCOCK, J. S. DUNKERLY, IGERNA B. J. SOLLAS, C. L. BOULENGER,
H. L. HAWKINS, F. W. EDWARDS, H. B. PRESTON, W. T. CALMAN,
C. T. REGAN, W. L. SCLATER, AND R. LYDEKKER

SUPERINTENDED BY

DAVID SHARP, M.A., F.R.S., F.Z.S., &c.

Explorate solum: sic fit via certior ultra.

LONDON:

PRINTED FOR THE SOCIETY;

SOLD AT THEIR HOUSE IN REGENT'S PARK

M.DCCCCXIII

Papers and Memoirs intended for this work should be addressed to "THE EDITOR of the Zoological Record, Zoological Society, Regent's Park, London, N.W." It is earnestly requested that in the case of separately-printed copies of papers so forwarded, the *original pagination* may be indicated.

(c) North Europe and Siberia.

Insecta.

Adlerz, 9; excursion to Öland.

Mjöberg, 1854; Gottland und Öland relikte Insektenfauna, insektengeograph. Fragen.

Navás, 1931; Ostsibirien, *Ephemeri- dae*, *Perlidae*, *Hemerobiidae*, *Dilaridae*, *Panorpidae* spp. n.

Sahlberg, 2400; Finland *Lathri- diidae*, *Aradidae* (Schwedisch).

Coleoptera.

Helliesen, 1217; Für Norwegen neue Arten (Norweg.).

Holdhaus, 1267; der Färöer.

Sahlberg, 2402; sp. n. *Cryptophagus* Finland.

Semenov, 2549; Küstengebiet, *Eoch- laenius* gen. n. sp. n.

Suvorov, 2738; Gouv. Tomsk. *Cur- culionidae* spp. n.

Weise, 2989; spp. n. *Donacia*, *Plateumaris*.

Wuorentaus; Zwei bemerkenswerte. (Finnisch) Medd. Soc. Fauna Fenn. 38.

Hymenoptera.

von Essen, 878; Finland Schlupf- wespen, novelties.

Forsius, 957; Finland Schlupf- wespen.

Johansson, 1409; Bienen Finland.

Kieffer, 1499; Norwegen, neue *Proc- totrypidae* &c.

Kieffer, 1500; Norwegen *Amblyas- pis* spp. n.

Nordenstrom, 1966; Sweden para- sitic *Hym.*

Räsänen, 2228; Ameisen Ostroboth- nia (Finnisch).

Rengel, 2272; Norwegen *Vespidae*.

Roman, 2340; Südfinnland Gezogene Ichneumoniden.

Skorikov, 2610; Alai-Gebirge, *Bom- bus* sp. n.

Stitz, 2668; Norwegen *Formicidae*.

Strand, 2701; Norwegen *Chalastogas- tra*.

Ulbricht, 2838; Norwegen *Pim- plinae*.

Lepidoptera.

Austaut, 73; Siberia *Oeneis* sp. n.

Chapman, 514; Vladivostock *Hydro- ecia* sp. n.

Fabritius; Bemerkenswerte, Finland; Medd. Soc. Fauna Fenn. 38 p. 79.

Korb & Püngeler, 1558; Ussuri, gen. n. *Noctuidae*.

Sahlberg, 240; *Stenoptilia* sp. n.

Sheldon, 2565; Norway trip.

Sheldon Entomologist 45 pp. 23 etc.; Lapland & Jemtland.

Wahlgren, 2942; Ångermanland Schweden.

Trichoptera.

Kolbe, 1554; Glazialzeitliche Relik- tenfauna im hohen Norden.

Diptera.

Enderlein, 863; Siberia *Tipulidae* spp. n.

Johansson; Medd. Soc. Fauna Fenn. 38 p. 40 and 209, *Merodon equestris*, Finland.

Hellén, 1207; Finnische *Chilosia*.

Ringdahl, 2312. *Anthomyidae*, new for Sweden and new localities.

Wahlgren, 2941; Swedish *Dolicho- podidae* and *Lonchopteridae*.

Aphaniptera.

Wahlgren, 2943; Sweden, new locali- ties.

Heteroptera.

Poppius, 2162; *Cimex* n. sp.

Schumacher, 2528; Norwegen *Hetero- ptera*.

Thysanoptera.

Poppius, 2160; *Physopus basicornis*.

Plecoptera, Odonata.

Klapálek, 1527; Plecoptera norvo- gica.

Bartenef, 132; Transbaikalien *Odo- nata* spp. n.

Ephemeroptera.

Bengtsson, 171; Schweden gen. n., 9 spp. n.

Orthoptera.

Wahlgren; *Sphingonotus cyanopterus*
Schweden.

Apterae Protura.

Reuter; Finland, *Eosentomon*, Medd.
Soc. Fauna Fenn. 38 p. 89.

(d) **British Islands.**

THE FAUNA AS A WHOLE.

Insecta.

Number of British species; Morley
p. 28 Entomologist 45.

Britain, origin of fauna; Wilson,
3210.

†Bolton, 265; coal measures, genn. n.

Coleoptera.

Summary for 1911; Beare, 153.

Localities of rare species; Nicholson,
Ent. Rec. 24 pp. 168 etc.

Notiophilus bigeminus Th. ?; Black
p. 185 Ent. Mag. 48.

Ophonus, revision, 2 spp. n.; Sharp,
2563.

Laccobius, the british; Edwards
p. 210 Ent. Mag. 48.

Oligota sp. n.; Sharp, 2561.

Gyrophæna sp. n.; Joy, 1445.

Lathrobium ripicola instead of *bo-
reale*; Newbery, 1951.

Planeustomus flavicollis, novelty;
Sharp p. 162 Ent. Mag. 48.

Claviger longicornis, novelty; Wal-
ker, 2947.

Catops montivagus novelty; Donis-
thorpe, 756.

Acritus minutus withdrawn; Ed-
wards p. 187 Ent. Mag. 48.

Carpophilus, occurrences in Britain;
Bayford, 150.

Carpophilus sexpustulatus; Corbett
p. 114 Ent. Mag. 48.

Henoticus germanicus novelty (nee
serratus) in London; Newbery p. 286
Ent. Mag. 48.

Adistemia watsoni and *Cartodere
elongata* var. introduced; Champion
p. 10 Ent. Mag. 48.

Thanasimus rufipes novelty; Beare,
152.

Eryx fairmairei novelty; Donis-
thorpe, 754.

Strophosomus curvipes, novelty;
Sharp, 2562; & Donisthorpe Tom. eod.
p. 197.

Orthochaetes insignis novelty; Joy,
1443.

Synonymy of british *Cerambycidae*;
Beare, p. 101 Ent. Mag. 48.

Chaetocnema conducta, novelty; Hor-
rell, 1296.

Longitarsus sp. n.; Dollman, 751.

Longitarsus, revision completed;
Tomlin & Sharp, 2783.

Hymenoptera.

Bombi, novelty; Sladen, 2612.

Anergates atratulus, novelty; Craw-
ley, 617.

Formicidae, races, nomenclature;
Donisthorpe p. 306 Ent. Rec. 24.

Mymaridae, 4 novelties, Scotland;
Cameron p. 132 Ann. Scott. Nat. Hist.
1912.

Mymar sp. n.; Enoch, 868.

Lepidoptera.

British butterflies; Stewart, 2659.

Food-plants etc.; Scorer, 2535.

Immigrant *Lep.*; Walker p. 197 Ent.
Mag. 48.

Pyrameis atalanta, immigration;
Tulloch, 2815.

Collecting & breeding, notes; New-
man Tr. City London Soc. 1911 pp. 28-
32.

Various localities, 1911; Colthrup
pp. 90-96 Ent. Rec. 24.

Scoparia revision; Chapman, 507.

Coleophora trigeminella, novelty;
Banks, 108.

Neuroptera.

Neuroptera in 1911; Lucas pp. 221-
223 Entomologist 45.

Diptera.

Ephelia sp. n.; Bergroth, 183.

Novelties, spp. n.; Verrall, 2871.

Oligotrophus and *Lestodiplosis*, novel-
ties ; Edwards, 812.

Syntemna morosa, novelty ; Adams
p. 67 Ent. Mag. 48.

Syntemna alpicola, novelty ; Jen-
kinson p. 67 Ent. Mag. 48.

Culicinae, revision, 1 novelty ; Ed-
wards, 811.

Phoridae notes ; Malloch, 1752a.

Telmatoscopus sp. n. ; Eaton, 800.

Phora spp. n. ; Wood, 3123.

Fannia, monograph ; Malloch, 1747.

Anthomyiidae, gen. n. ; Malloch,
1750.

Bothria subalpina and *Eudoromyia*
magnicornis withdrawn ; Wainwright
p. 241 Ent. Mag. 48.

Localities, *Thryptocera minutissima*
withdrawn ; Bloomfield p. 264 Ent.
Mag. 48.

Triogma trisulcata, novelty ; Carter,
488.

Heteroneura 3 spp. n. ; Collin, 580.

Aphaniptera.

Palaeopsylla kohauti, novelty ;
Rothschild p. 67 Ent. Mag. 48.

Hemiptera.

Psallus vitellinus, novelty ; Butler,
460.

Psylla albipes, novelty ; Edwards
p. 65 Ent. Mag. 48.

2 spp. n. ; Theobald, 2763.

Myzus sp. n. ; Theobald, 2760.

The *Aphididae* of the Hastings dis-
trict ; Theobald, 2761.

Thysanoptera.

Thysanoptera, novelties, spp. n. ;
Bagnall, 96.

Cephalothrips monilicornis novelty ;
Bagnall, 95.

Hoodia bagnalli sp. n. ; Karny,
1460.

Lipoptera (= *Mallophaga*).

Novelties ; Bagnall & Hall, 98.

Gen. n. ; Waterston, 2973.

Pseudoneuroptera (= *Odonata*).

Odonata in 1911 ; Lucas, 1712, and
Campion Entomologist Ent. 45 p. 173.

Odonata in 1911 ; Campion & Cam-
pion Entomologist 45 pp. 173-175.

Sympetrum sp. n. ; Lucas, 1712.

Orthoptera.

Orthoptera in 1911 ; Lucas, 1711.

Metrioptera roeselii ; Campion p. 117
Entomologist 45.

LOCAL LISTS.

Insecta, collectively.

Isle of Wight, novelties ; Taylor
p. 65 Ent. Rec. 24.

Hastings, Annual notes ; Bloom-
field, Hastings Nat. 2 1912 (1-7).

Ponder's End, glacial ; Waterhouse,
2971.

Suffolk, Victoria County History ;
cf. Entomologist 45 p. 152.

Oxford ; Walker, 2948.

Rugby 1912 ; Buxton and others
Rep. Rugby School. Soc. 46 pp. 63-
82.

Shropshire, notes ; Melvill Trans.
Caradoc Cl. 5 p. 261.

Yorkshire, additions in 1911 ; Cor-
bett and others, Naturalist 37 pp. 22-
24 ; Whitaker & Bayford t.c. pp. 55 &
56.

Dumfriesshire, destructive insects ;
Whellens, 3111.

St. Kilda ; Evans p. 262 Ann. Scott.
Nat. Hist. 1912.

Ulster notes ; Johnson pp. 131-133
Irish Natural. 21.

Clare island, Kane, 1447 ; Morley,
1882 ; Halbert, 1162 & 1163 ; Johnson
& Halbert, Balfour Browne, 101 ;
Carpenter, 4086.

Galway, Col. and Lep. ; Bonaparte-
Wyse, Irish Natural. 21 pp. 37-39.

Coleoptera.

Scilly islds. additions ; Joy & Tomlin
pp. 257 & 258 Ent. Mag. 48.—Scilly
islds., novelties ; Blair p. 11 Ent. Mag.
48.

Devonshire, novelties; de la Garde pp. 151 & 152 Ent. Mag. 48.

New Forest, *Mycetoporus forticornis* etc.; Dollman p. 25 Ent. Rec. 24.—New Forest rarities; Walker p. 213 Ent. Mag. 48.

Hastings catalogue *Staphylinidae*; Bennett, 175.

Camber, *Bledius crassicornis*; Bennett Hastings Natural. 2 p. 8.

Ditchling, long list; Dollman pp. 20-23 Ent. Rec. 24.

Guildford, *Lomechusa*; Champion p. 138 Ent. Mag. 48.

Oxshott, *Hypophloeus linearis* etc.; Dollman p. 24 Ent. Rec. 24.

Wellington College; White p. 90 Ent. Mag. 48.

London *Henoticus* and *Pentarthrum*; Blenkarn p. 263 Ent. Mag. 48.

Hackney, *Monochamus galloprovincialis*; Braithwaite p. 205 Entomologist 45.

Epping etc., *Atheta eremita*; Nicholson Ent. Rec. 24 p. 102.

Ealing, Kew, and Harrow; Dollman pp. 12 & 13 Ent. Mag. 48.

Oxford additions; Walker, 2949.—Oxford *Psylliodes luteola*; Walker p. 262 Ent. Mag. 48.

Cherwell; Collins p. 90 Ent. Mag. 48.

Leicester *Aleochara brunneipennis* etc.; Barrow p. 246 Ent. Rec. 24.

Wicken, *Parnus anglicanus*; Sharp p. 236 Ent. Mag. 48.

Staffordshire, additions; Tomlin and others Tr. N. Staffs. F. Club 46 pp. 103-109.

Delamere Forest; Hardy pp. 405 & 406 Lancash. Nat. 4 and Ellis op. cit. 5 p. 2.

Lincolnshire Catalogue; Thornley & Wallace, 2772.—Lincolnshire; Wallace pp. 237-244 Trans. Lincolnsh. Nat. Union 1911.

Yorkshire 2 novelties, Fordham p. 205 Naturalist 37; Bubwith *Dytiscus circumcinctus*, Id. l.c.

Lancash. and Cheshire, aquatic *Col.*; Hardy pp. 205-210 Lancash. Nat. 5.

Grange-over-Sands, brief list; Booth p. 412 Lancash. Nat. 4.

Cumberland novelties; Day p. 10 Ent. Mag. 48.—Cumberland, *Cryptohypnus sabulicola*; Id. p. 44 T.c.

Scotland *Tychus niger*; Evans p. 17 Ann. Scott. Nat. Hist. 1912.—Scotland *Cassida nobilis*; Evans Glasgow Nat. 3 1911 p. 96.

Eskdale *Phyllotreta sinuata*; Fowler p. 286 Ent. Mag. 48.

Dumfries *Carabidae*; M'Gowan, 1740.

Clyde, additions; Fergusson, 921.

Glasgow, *Galerucella fergussoni*; Fergusson Glasgow Nat. 3 1911 p. 36.

Monklands Lanarksh. list of aquatic *Col.*; M'Leod Glasgow Nat. 2 pp. 78-80.

Loch Lomond, *Hylecoetus*; Bagnall p. 191 Ent. Rec. 24.

Arran *D. laponicus* etc.; Fergusson, 922.

Isle of Eigg; Donisthorpe p. 13 Ent. Rec. 24.

Nothy Bridge *Lathrobium dilutum*; Beare p. 263 Ent. Mag. 48.

Dalwhinnie *Olophrum nicholsoni*; Joy p. 12 Ent. Mag. 48.

Loch Maree *Bembidium virens* etc.; Beare p. 212 Ent. Mag. 48.

North Scotland, list; Sharp Ann. Scott. Nat. Hist. 1912 pp. 86-88.

Ireland, novelties; Balfour-Browne, 101.—Ireland, *Liodes curta*; Johnson p. 287 Ent. Mag. 48.

Hymenoptera.

Glamorgan; Hallett, 1164.

Leith hill *Sirex noctilio*; Lucas p. lxi Proc. ent. Soc. London 1911.

Surrey, *Prosopis genalis*; Mortimer p. 91 Ent. Mag. 48.—Woking, *Prosopis genalis*; Morice p. 240 Ent. Mag. 48.

Goathland *L. acervorum*; Roebuck p. 252 Naturalist 37.

Forth area, catalogue of ants; Evans Ann. Scott. Nat. Hist. 1912.

N.E. Ireland *Ichneum.* and *Brac.*; Johnson Irish Natural. 21 pp. 77-79.

Clare island; Morley, 1884a.

Lepidoptera.

Guernsey, 1911; Lowe p. 263 Rep. Guernsey Soc. 1911.

- Cornwall; **Kershaw** p. 30 Entomologist 45.—Cornwall *P. livornica*; **Smith** p. 183 and p. 209 Entomologist 45.
- Torquay, list; **Lupton**, 1722.
- Tavistock *P. livornica*; **Enock** p. 100 Entomologist 45.
- North Devon; **Clutterbuck** pp. 36–39 Entomologist 45.
- Parkstone *P. livornica*; **Adams** p. 278 Entomologist 45.
- New Forest 1911 notes; **Lyle** Entomologist 45 pp. 126–130.—New Forest; **Corbin** pp. 103–303 Entomologist 45.
- Porchester Hants; **Robinson** p. 31 Entomologist 45.
- Sandown *Spil. urticae*; **Blenkarn** p. 209 Entomologist 45.
- Hastings *A. iris* and *V. antiopa*; **Bloomfield** p. 64 Ent. Mag. 48.
- Brighton *Zygaena hippocrepidis*; **Hodgson**, 1261a.
- Lewes *P. livornica*; **Vinall** p. 300 Entomologist 45.
- Dover *P. livornica*; **Abbott** p. 183 Entomologist 45.
- Kent *V. antiopa*; **Smith** p. 209 Entomologist 45.
- Wye; **Bird** pp. 53–58 Ent. Rec. 24.
- Ashford *D. nerii*; **Viggins** p. 209 Entomologist 45.
- Horsham 1912; **White** Rep. Christ's Hosp. Soc. 10 pp. 18–23.
- Surrey; **H. G. Champion** p. 45 Ent. Mag. 48.
- Burnham *P. livornica*; **Doidge** p. 300 Entomologist 45.
- Essex 1911 notes; **Mathew** p. 135 Entomologist 45.—Essex *P. machaon* introduced; **Meldola** p. 8 Entomologist 45.
- Chelmsford, old collection; **Raynor**, Ent. Rec. 24 p. 290.
- London district, Tineina; **Sich** p. 111 Ent. Rec. 24.—London; **Adkin** p. 91 Pr. S. London ent. Soc. 1911–12.—London, a garden; p. 91 Id. T.e.—Hyde Park *Dipterygia scabriuscula*; **Rothschild** p. 279 Entomologist 45.
- Northamptonshire, Notes; **Wallis** J. Northampton. Soc. 16 p. 297–299.
- Coventry, *D. livornica*; **Sills** p. 138 Ent. Mag. 48.
- Rugby, captures; **Whitley** pp. 43–61 Rep. Rugby School Soc. 45.—Rugby 1912; **Buxton** Rep. Rugby School Soc. 46 pp. 60–62.
- Breck district; **Nurse** pp. 260–232 Ent. Rec. 24.
- Norfolk trip; **Whittingham** Entomologist 45 pp. 289–296.—Norfolk *P. daplidice*; **Gurney** p. 278 T.c.—Norfolk *P. livornica*; **Barclay** p. 209 T.c.—Norfolk *Lithosia lutarella*; **Metcalfe** p. 279 T.c.—Norfolk *Plusia moneta*; **Smith** p. 207 T.c.—Norfolk *Lithostege griseata*; **Thornwill** p. 230 Ent. Rec. 24.
- Marlborough catalogue; **Meyrick** 1840.—Marlborough, phenology etc.; Rep. Marlborough Coll. Soc. 60 pp. 36–44.
- Gloucestershire novelties; **Clutterbuck** p. 101 Entomologist 45.
- Shropshire 1912; **Forrest** Rec. Caradoc. F. Cl. 22 p. 24.
- Herefordshire *V. antiopa*; **T.W.P.** Trans. Cardiff Soc. 44 p. 100.
- Yorkshire West Riding, *Xanthia aurago*; **Morley** p. 208 Naturalist 37.
- Lancash. *T. rubi*; **Western** p. 101 Lancash. Nat. 5.—Oldham Park; **Windle** pp. 237–245 T.c.
- Westmorland; **Littlewood** Entomologist 45 p. 158, p. 185, p. 210.
- Monmouthshire; **Smith** Ent. Rec. 24 pp. 133–138.
- S. Wales *L. exigua*; **Reid** p. 184 Entomologist 45.
- N. Wales *P. livornica*; **Jackson** p. 209 Entomologist 45.
- Kinfauns; **Wylie**, 3231.
- Braemar; **James** pp. 253–259 Ent. Rec. 24.
- Spean bridge *D. galii*; **Mathew** p. 278 Entomologist 45.
- Skye *M. margaritaria*; **Hoole** p. 279 Entomologist 45.
- Outer Hebrides *Acherontia*; **Ritchie** p. 165 Ann. Scott. Nat. Hist. 1912.
- Shetland *V. urticae*; **Kennar** p. 92 Ann. Scott. Nat. Hist. 1912.

Ireland novelty, *L. loreyi*; Halbert p. 245 Irish Nat. 21.

Fermanagh, *Eupithecia*; Allen p. 33 Ent. Rec. 24.

Cork *Diaphora mendica*; Stoneham p. 210 Entomologist 45.

Neuroptera.

North Scotland; Lucas p. 186 Ann. Scott. Nat. Hist. 1912.

Diptera.

Hertfordshire, *Nycteribia*; Oldham p. 290 Tr. Hertfordsh. Soc. 14.

Shropshire *Culicidae*; Burton Tr. Caradoc F. Club 5 pp. 200-202.

Scotland *Stratiomyidae*; Carter p. 117 Ann. Scott. Nat. Hist. 1912.

Clyde list; Henderson, 1221a.

Perthshire, *Triogma*; Carter p. 139 Ent. Mag. 48.—Perthshire, list of *Syrphidae*; Carter Tr. Perth Soc. 5 pp. 129-132.

Wester Ross, etc., catalogue; Yerbury pp. 226-232 and 271-276 Ann. Scott. Nat. Hist. 1912.

Clare Island; Grimshaw, 1127.

Hemiptera.

Studland *Salda*; Saunders p. 13 Ent. Mag. 48.

Kent *Aphidae*; Theobald p. 20 Entomologist 45.

Burnham beeches, *Psallus vitellinus*; Butler p. 240 Ent. Mag. 48.

Carmarthenshire; long list, novelties; Butler p. 108 etc. Ent. Mag. 48.

Linlithgowshire *Heteroptera*; Brock p. 17 Ann. Scott. Nat. Hist. 1912.

St. Kilda; Evans p. 93 Ann. Scott. Nat. Hist. 1912.

Forth, *Heteroptera* novelties; Id. p. 141 T.c.—Forth, *Cyllocoris* novelty; Id. p. 187 T.c.

Plecoptera.

Riv. Lark *Nemoura dubitans*; Nurse p. 93 Entomologist 45.

Pseudoneuroptera.

Dorset; Haines p. 201 Entomologist 45.

Christchurch; Sopp p. 149 Entomologist 45.

Rugby, list; Whitley p. 62 Rep. Rugby School Soc. 45.

Norfolk *Agrion armatum*; Porritt p. 163 Ent. Mag. 48.

Scotland, *Sympetrum fonscolombii*; Evans Ann. Scott. Nat. Hist. 1912 p. 12 and p. 14 Ent. Mag. 48.

Perthshire; Morton p. 264 Ent. Mag. 48.

North Scotland; Lucas p. 182 Ann. Scot. Nat. Hist. 1912.

Lipoptera.

Forth; Evans, 880.

Orthoptera.

Devon and Cornwall; Bracken p. 14 Ent. Mag. 48.

Essex *Metrioptera*; Harwood p. 207 Entomologist 45.

North Scotland; Lucas p. 45 Ann. Scott. Nat. Hist. 1912.

Aptera.

Midland plateau, *Thysanura* and *Collembola*; Collinge, 583.

(e) Central and Eastern Europe.

Insecta, collectively.

Denmark, numerous short records, in Flora og Fauna.

Ussing, 2845; observations from Jutland.

MacGillavry, 1742; Terschelling.

†Leriche, 1673; coal measures, gen. n.

Dahl, 647; Germany spp. n., *Aphid. Hym. par., Diptera.*

Dampf, 655; Neue Funde ostpreussischen.

Döderlein, 745; Geschichte der drohenden Ausrottung von *Mantis religiosa* und *Parnassius apollo* im Elsass.

Knörzer, 1548; Deutschlands wärmste Gegenden.

Möschler, 1863; von der Kurischen Nehrung.

Schille, 2439 & 2440; Thysanopteren und Collembolen Galiziens, spp. n.

Schille, 2443; Insektenfauna Galiziens.

Schmidt, 2461; Entomocecidien, Niederschlesischen.

Torka, 2784; Nachträge zu früheren Veröffentlichungen und neue Beobachtungen an Insekten.

Jacob Mitt. Schweiz. ent. Ges. 12 pp. 65 & 66; Quelques notes sur la faune du Jura.

Günter, 1148; Neuropteren und Trichopteren der steirischen Arten.

Baudyš, 142; Zoocecidien Unterösterreichs.

Dziędziewiczyk, 797; Westkarpaten Neuropteroiden.

Borcea, 275; galls of Roumania.

Redikorcev, 2240; Entomofauna des Urals (Russ. + franç.).

Coleoptera.

Johansen Köbenhavn Ent. Medd. 4 p. 332; Staphylinidae new for the Danish fauna or rare in Denmark.

Joy, 1444; France and Britain *Bradycellus* sp. n.

Everts, 884; 8tes Supplement zu den „Coleoptera Neerlandica“.

Rüschkamp, 2388; Holländisch Süd-Limburg.

Pionneau, Miscel. entom. 19 1911 p. 120; *Hydrocanthares* Belgique et Hollande.

Guillaume Ann. Soc. ent. Belgique 56 p. 268; Belgium 2 novelties.

Daehne, 646; Buprestiden Mitteldeutschlands.

Feuerstacke, 928; Verzeichnis Magdeburgs *Elateridae*.

Gerhardt; Neuheiten der schlesischen Koleopterenfauna; Breslau Jahresh. Ver. Insektenk. 5 pp. 5-6, and D. ent. Zs. 1912 p. 463.—Gerhardt; Neue Fundorte seltener schlesischer Coleopteren; Breslau Jahresh. Ver. Insektenk. 5 pp. 7-8.

Heinemann; Deutschland, *Bembidion nigricorne*; Ent. Bl. Berlin 8 p. 281.

Henker Chemnitz Ber. natw. Ges. 18 pp. 70-80; Verzeichnis der Laufkäfer der Umgegend von Chemnitz.

Hubenthal, 1330; Thüringer Käferfauna.

Kolbe; Beiträge zur schlesischen Käferfauna; Breslau Jahresh. Ver. Insektenk. 5 pp. 9-11.

Köster Jahresh. Ver. Münster 40 pp. 84-89; Laufkäfer Blomberg.

Kuhnt, 1589; Illustrierte Bestimmungstabellen der Käfer Deutschlands.

Pape; Notiz über die Cerambyciden der Umgegend von Westerheim; Ent. Bl. Berlin 8 pp. 316-317.

Patkiewicz; *Halicia* ut nonnullorum Europae coleopterorum patria nova; Ent. Bl. Berlin 8 pp. 166-167.

Roettgen, 2333; Rheinprovinz.

Scherdlin, 2435; Elsässischen.

Schmidt, 2460; Gallenbildenden Rüsselkäfer.

Varendorff, 2856; Ostseestrandfauna.

Breit, 330; neue *Anophthalmus* Südungarn.

Breit, 332; Sammelexkursion im Bihargebirge.

Csiki, 631; nova ex Hungaria.

Du Buysson, 767; Roumania *Elateridae* Catalogue.

Fleischer, 939; Radhošťberge.

Formánek, 965; *Meloe*. böhmischer Krone.

Fuchs, 1002; *Hylastinus* sp. n. Kroatia.

Jedlička, 1392; Bembidiinae Böhmens.

Jureček, 1446; *Pterostichus* and *Boreaphilus*, n. sp. Trientiner Alpen.

Prag Čas. České Spol. Entomolog. 7 1910 8 1911 9 1912 pp. ca. 60 disject; Bohemia.

Lokay, 1701; *Faronus* n. sp. Ungarn.

Lokay, 1701; Czarnahoragebiet.

Meixner, 1805; Stub- und Koralpe.

Meixner, 1806; Höhlenwanderungen in der Herzegowina.

Meixner, 1807; *Bythinus* und *Trechus* spp. n. Oesterreich-Ungarn.

Müller, 1908; Verzeichnis der Käfer Vorarlbergs.

- Penecke, 2056**; *Stenus* sp. n.
- Petri, 2080**; Siebenbürgens Käferfauna.
- Reitter, 2270**; *Silphidae* n. gen. Herzegowina.
- Roubal** Bull. Soc. Bucarest 18 pp. 131–136; Roumania *Staphylinidae* Catalogue.
- Sokolář, 2626**; *Carabus* sp. n.
- Stiller, 2665 & 2684**; kroatischen.
- Tyl, 2835**; Austria *Omius* sp. n.
- Wagner, 2933**; *Apion* spp. n.
- Wichmann, 3115**; *Trypophloeus* sp. n. Süd-Tirol.
- Zoufal**; Ausbeute aus Mostarsko-blato; Ent. Bl. Berlin 8 pp. 237–239.
- Zschokke, 3254**; Die Käferfauna der Karpathen als Zeuge für die tiergeographische Bedeutung der Eiszeit.
- Breit, 329**; neue *Phaenotherium* Südrussland.
- Diukin, 781**; Gouv. Pensa, Cerambyciden (Russ.).
- Ganglbauer, 1019**; *Malthodes* sp. n. Krim.
- Jacentkovskij, 1361**; Polen, *Ipidae* (Russ.).
- Jacentkovskij, 1362**; Bessarabien, *Staphylinidae* (Russ.).
- Jacentkovskij, 1363**; Staphyliniden des Russischen Reiches (Russ.).
- Kieseritzky, 1513**; Gebiet der Don-schen Kosaken.
- Lebedev, 1644**; Gouv. Kazan, *Aphodius* sp. n. (Russ.).
- Lučnik, 1671**; Bemerkungen über Cicindeliden und Carabiden der russischen Fauna (Russ.).
- Lučnik, 1717**; *Meloidae*, Gouv. Stavropol.
- Plaviliščikov, 2145**; Gouv. Kaluga, *Cerambycidae* (Russ.).
- Pliginskij, 2146**; Krim, *Carabidae* (Russ.).
- Pliginskij, 2147**; Krim, *Trechus* spp. n. (Russ. & Deutsch.).
- Sagovskij, 2399**; Wiborg, *Cerambycidae* (Russ.).
- Voroncovskij, 2915**; Cicindeliden und Silphiden, Orenburg (Russ.).
- Hymenoptera.*
- Enslin, 870**; *Tenthrediniden* Mitteleuropas.
- Nielsen, 1962**; *Lyda stellata* Denmark.
- Smits van Burgst, 2621**; Dutch *Ichneumonidae*.
- Bondroit** Ann. Soc. ent. Belgique 65 pp. 351 & 352; Fourmis des Hautes Fagnes.
- Alfken, 30**; Bienenfauna von Westpreussen.
- Friese, 981**; *Colletes* Zentral-Europa.
- Habermehl, 1156**; *Stylocryptus* spp. n.
- Kieffer, 1499**; Deutschland, neue *Proctotrypidae*.
- Kieffer, 1500**; Deutschland *Polygnotus* sp. n.
- Martin, 1770**; *Anagrus subfuscus*.
- Meyer, 1828**; Die Tenthrediniden Posen.
- Reichensperger, 2249**; Amois-fauna der Rheinprovinz.
- Schirmer, 2449**; Provinz Brandenburg.
- Scholz, 2472**; Raubwespen, ober-schlesischen Arten.
- Scholz**; Hymenoptera aculeata, Seltenere schlesische Vorkommnisse; Breslau Jahresh. Ver. Insektenk. 5 pp. 15–17.
- Strand, 2701**; Deutschland *Chalustogastra*.
- Taschenberg**; *Cynips coriaria* nicht von Halle; Zs. Natw. 83 p. 460.
- Ulbricht, 2838**; Deutschland *Pimplinae*.
- Frey-Genner, 974**; Valois Apides sociales.
- Frey-Gessner, 975**; Catalogue of *Apidae* of Switzerland.
- Graeffe, 1100**; Hummelarten der Alpen Steiermarks.
- Klapálek, 1523**; *Bombus* Böhmens.
- Kohl, 1551**; *Nysson* sp. n.
- Mocsáry** Ann. Mus. Hungar. 10 p. 300; *Oryssus unicolor* Hongrie.
- Ruschka, 2389**; Chaleididen, gen. n. 5 spp. n. Oesterreich,

Szépliget, 2751; Hungary *Banachus* sp. n.

Wettstein, 3004; Apidenfauna des Wiener botanischen Gartens.

Birula, 233; Kiev, *Sphecidae* sp. n.

Kurdjumov, 1596; Krim *Tetrastichus* sp. n.

Kurdjumov, 1600; Poltava etc. *H. parasitica* spp. n.

Kurdjumov, 1601; Poltava, Chalcididen aus *Eriococcus greeni*.

Lepidoptera.

Sibille Ann. Soc. ent. Belgique 1912 pp. 6-8; Belgium novelties.

Müllenberger; Luxemburg 1911; Bull. Men. Soc. 22 pp. 35-37.

Anon., 46; Gross-Schmetterlinge Erfurts.

Beer, 167; *Geometriden* des Erfurter Gebietes.

Bornemann, 290; Verzeichnis Magdeburg und des Harzgebietes.

Dadd, 645; *Acidalia* n. sp.

Dampf; Zür Fauna Ostpreussens; Königsberg Schr. physik. Ges. 52 pp. 262-263.

Denso; Phänologisches zum Sommer 1911; D. ent. Zs. Iris Berlin 26 1912 p. 101.

Dragoni-Rabenhorst; Calvarienberges *Parn. apollo*; Ent. Zs. Frankfurt 26 p. 60.

Gillmer; *Stegania trimaculata* in der Pfalz; Intern. ent. Zs. 6 p. 217.

Grauert, 1103; Die Grossschmetterlinge des anhalt. Kreises Zerbst.

Hellweg, 1218; Nachtrag Westfalens.

Hoffmann; *Parasemia plantaginis* Hochgebirge; Ent. Jahrb. Leipzig 22 p. 90.

Hoffmann; Sammelergebnis Tännengebirge; Ent. Zs. Frankfurt a. M. 26 pp. 73-74.

Jammerath, 1378; Verzeichnis, Osnabrück und Umgegend.

Kilian; *Araschnia levana* bei Stromberg Ent. Zs. Frankfurt 26 p. 30.

Martini, 1778; *Grapholitha* sp. n. Thüringen.

Osthelder, 2016; Südbayerns und Alpenländer.

Petry, 2081; *Bucculatrix* sp. n. Germany.

Reinecke; Nachträge zu dem „Verzeichnis der Grossschmetterlinge des nordöstlichen Harzrandes“; Intern. ent. Zs. Guben 6 p. 161.

Rüger, 2385; *Macrolepidopteren* Bad Kissingen und des Rhöngebirges.

Schmidt, 2462; *Mikrolepidopteren* Niederschlesiens.

Schopfer, 2474; *Mikrolepidopteren* Dresdener Gegend.

Schütz, 2496; Tagfalterfauna Oberlausitz, Böhmen und Leitmeritz.

Walther; Lichtfangergebnis Dresden; D. ent. Zs. Iris 26 pp. 211-215.

Warnecke, 2954; Verschwundene Falter der Niederelbe.

Zwecker; Würzburger Gegend; Ent. Zs. Frankfurt 25 p. 267.

Catalogue des *Lepidoptères* des environs de Genève. Rhopalocères; Appendice Bull. Soc. Lépidopt. Genève 2 1910 pp. vi + 30 1 Karte.

Curwen Ent. Rec. 24 pp. 287-290; Switzerland trip.

Favre, 902; Gorges de l'Arouse.

Lacaze, 1609; Hespérides de la Suisse.

Pearson, Ent. Rec. 24 pp. 265-267; Switzerland and Black forest.

Tetley Ent. Rec. pp. 112 & 113; Rhone Valley and Italian Lakes.

Vorbrodt, 2911; Schmetterlinge der Schweiz.

Wheeler p. 2 etc. Ent. Rec. 24; trip Switzerland.

Binder; *Macrolepidopteren* Nordböhmen; Intern. ent. Zs. Guben 6 p. 120.

Calvagni und Preisseecker, 1018; des niederösterreichischen Waldviertels.

Hafner, 1157; Verzeichnis Krain Grossschmetterlinge.

Hein, 1206; *Macrolepidopteren* Nordtirols.

Hellweger, 1219; Nordtirols *Heterocera*.

Geschichte der Lepidopterologie in Steiermark; Hoffmann, 1264.

Hoffmann; Styria Urlaubsreise; Ent. Rdsch. 29 pp. 36-38 43-45.

Kiefer; Nachtrag 1 zur Macrolepidopteren-Fauna des steirischen Ennstales; Intern. ent. Zs. Guben 5 1912 (314-316 328-329 336-337 344-345 352 362-363 375-376); 6 1912 (4 14 17 25-26 44-45 68-69 75 84 99-100 104-105).

Kitt, 1521; Oetztales.

Mitterberger, 1849; *Argyresthia*; Oberösterreich.

Pieszczek, 2140; Verbreitung *Colias myrmidone* Oesterreich-Ungarn.

Rebel, 2235; Herkulesbad und Orsova.

Rebel, 2237; Oesterreich-Ungarns neue Arten.

Schawerda, 2429; Bosnien und Herzegowina.

Schieferer & Meixner, 2437; Lepidopterenfauna Steiermarks.

Schindler, 2444; Tagebuch, Wien.

Schmidt, 2453; Hungary *Crambus* sp. n.

Skala, 2606 & 2607; Lepidopterenfauna Mährens.

Srdínko Prag Cas. Česká Spol. Entom. 7 1909 p. 32; Prag, am Laurenziberg.

Wagner, 1928; *Cucullia anthemidis* Oesterreich-Ungarn.

Zerny, 3248; Entwicklung und Zusammensetzung der Lepidopterenfauna Niederösterreichs.

Zerny, 3249; Bad Ratzes Südtirol.

Brunicki, 428; Verzeichnis, Bezirke Stryj (Polish).

Čugunov, 634; Gouv. Enisei. (Russ.)

Klemensiewicz, 1534; Galizischen Lepidopterenfauna (Polish).

Ksenžopoliskij, 1585; Südwest-Russland (Russ.).

Miller & Zubovskij, 1847; Bessarabien, Macrolepidopteren.

Voroncovskij, 2916; Lepidopteren des Kreises Tscheljabinsk (Russ.).

Trichoptera.

Petersen, 2076; The Danish Trichoptera (Danish).

Thienemann, 2768; *Rhyacophila laevis* Deutschland.

†Ulmer, 2839; amber *Trichoptera*.

Ulmer, 2841; Trichopteren-Fauna von Ostpreussen.

Dziędziewic, 796; Novae species Trichopterorum Montibus Carpaticis (Galicie).

Martynov, 1782; Bessarabien sp. n. (Russ.).

Neuroptera.

Schirmer, 2447; Mark Brandenburg. Planipennia.

Pongrácz, 2151; *Chrysopiden* Ungarns.

Diptera.

Böttcher, 252; *Sarcophaga* spp. n.

Kieffer, 1503; nouveaux *Tendipes*.

Lundbeck, 1720; Diptera-daniaea *Dolichopodidae*.

Petersen, 2074; Denmark 3 novelties.

Becker, 154; Belgium gen. n.

Goetghebuer, 1078; Belgium *Chironomidae* spp. n.

Andries, 41; *Microdon* sp. n.

Bandermann; *Selidopogon diadema* Röpzig bei Halle; Intern. ent. Zs. 6 p. 209, and Schirmer p. 230 T.c.

Enderlein, 861; Germany gen. n. *Scatopsidae*.

Kröber, 1580; *Drosophilinae* gen. n. Germany.

Landrock, 1627; *Bolitophila* spp. n.

Lassmann, 1634; Hallischen, Die *Syrphus*-Arten.

†Meunier, 1820; Amber ins.

Rübsaamen, 2383; Deutsche Gallmücken und Gallen.

Rübsaamen, 2384; Deutsche Gallmücken und Gallen.

Schroeder, 1492; Pommern.

Thienemann, 2767; Dipterenheft der Süßwasserfauna Deutschlands.

Galli-Valerio & Rochaz de Jongh, 1017; *Phlebotomus papatasi*, im Kanton Waadt.

Kieffer, 1511; Lugaer See, *Pelopia* sp. n.

Rougemont & Escher-Kündig, 2372; *Phytomyza* sp. n.

Böttcher, G., 253; *Sarcophaga* n. sp. Hungary.

Czižek, 642 & 644; *Tipula* sp. n. Mähren.

Landrock, 1628; *Mycetophilidae* Mährens.

Landrock, 1629; Mycetophiliden aus Mähren 6 spp. n.

Landrock, 1630; *Mycetophilidae* 4 spp. n.

Landrock, 1632; *Exechia* sp. n. Mähren.

Lundström, 1721; *Mycetophiliden* Ungarn, spp. n.

Oldenburg, 1994; Drei neue, Tirol.

Strobl, 2706; Die Dipteren von Steiermark, ii. Nachtrag.

Vimmer, 2895; *Diptera* Bohemiae.

Aphaniptera.

Dampf, 652; Westdeutschlands.

Dampf, 656; Estland *Aphaniptere*.

Jordan & Rothschild, 1440; Hungary *Ctenophthalmus* sp. n.

Wagner, 2938; Polar-Ural *Amphipsylla* sp. n.

Hemiptera.

Jensen-Haarup, 1393; Denmark, novelties, *Heteroptera* and *Cicadidae*.

Jensen-Haarup, 1394; Danish *Heteroptera* (Danish).

Goot, 1084; Verzeichnis der holländischen *Psyllidae*.

Goot, 1086; Verzeichnis der holländischen Cocciden.

Goot, 1087; Neue Niederländische *Aphididae*.

Gulde, 1153; Heteropteren-Fauna Deutschlands.

Haupt, 1188; Germany *Homopt.* 2 spp.

Hüeber, 1332; Deutsche *Plagiognatharia*.

Lindinger, 1692; *Aspidiotus* sp. n.

Meijere, 1801; *Hamamelistes* sp. n.

Schmidt, 2458; Pommern.

Schumacher, 2511; Mark Brandenburg; *Coreidae*.

Schumacher, 2512; sp. n. *Sciocoris*-Deutschland.

Schumacher, 2514; *Lygaeidae*, *Pyrrhocoridae* der Mark.

Schumacher, 2518; Zusammensetzung der Hemipteren-Fauna Nordwestdeutschland.

Schumacher, 2519; Ostfriesischen Inseln.

Schumacher, 2524; Homopteren, Oldenburg, Ostfriesland Insel Baltrum.

Schumacher, 2525; Oldenburg, Ostfriesland und Insel Baltrum.

Schumacher, 2527; Hemipteren Schlesiens.

Cholodkovskij, 534; Schweiz, Chermesiden (Russ.).

Sabransky, 2396; Hemipterenfauna Steiermarks.

Šulc, 2717; *Coccidae* Bohemiae.

Šulc, 2718; *Heliococcus* n. g. Böhmen.

Poppius, 2159; Krim *Systellonotus* sp. n.

Kiričenko, 1517; Kaluga, *Heteroptera* (Russ.).

Kiričenko, 1519; Krim, *Hemiptera-Heteroptera*.

Thysanoptera.

Karny, 1463; Austria *Haplothrix* sp. n.

Kurdiumov, 1602; *Anthothrips* sp. n.

Plecoptera.

le Roi, 1674; Plecopteren Rheinland-Westfalen.

Handlirsch, 1174; Permischen Kupferschiefern der Kargala-Steppe sp. n.

Pseudoneuroptera.

Leonhardt, 1671; Frankfurt a. M.

Leonhardt, 1672; Ober-Elsass.

Kleiber, Mitt. Schweiz. ent. Ges. 12 pp. 67 and 68; *Boyeria irene* am Vierwaldstättersee.

Bartenev, 135.; Krim, *Odonata* (Russ.).

Voroncovskij, 2914; Odonatenfauna der Umgebung von Orenburg.

Orthoptera.

- Döderlein, 746; Elsass Heuschrecken.
 La Baume, 1607; Dermaptera und Orthoptera Ostpreussens.
 Leonhardt; Deutschland, Mainzer Becken. *Stenobothrus nigromaculatus* u. *Sphingonotus coeruleans*; Ent. Zs. Frankfurt a. M. 26 p. 99.
 Schirmer, 2445; Mark Brandenburg.
 Schirmer, 2446; Einheimischer *Stenobothrus*.
 Schirmer, 2448; Berlin.
 Czižek, 643; *Paracaloptenus caloptenoides* Niederösterreich.
 †Handlirsch, 1173; Insekten aus dem mittleren Oberkarbon des Königreiches Sachsen; gen. n. 5 spp. n.
 Karny, 1453; Prenjgebiet *Platycleis*.
 Werner, 3000; Orthopteren-Faunistik Oesterreichs.
 Zottu, Bull. Soc. Bucarest 18 pp. 39-42; Roumania Orthopt. List.
 Šugurov, 2715; Grusien, *Oedipodidae* gen. n. sp. n.

Aptera.

- Absolon, 4; Gletscherflöhe in den niederösterreichischen Voralpen.
 †Olfers, 1995; Thysanur im Bernstein.
 Prell, 2177; *Eosentomon*, sp. n.
 †Silvestri, 2585; Thysanuren des baltischen Bernsteins; 2 n. spp.

(f) France.

Insecta, collectively.

- Picard, 2122; Coléoptères et Hyménoptères du midi.
 Loiseau, 1698; Deux nouveaux insectes Cécidogènes.

Coleoptera.

- Antessanty; Aube; Troyes Mém. soc. Acad. 75 p. 60.
 Barthe; nouvelle pour la faune française; Miscell. entom. 20 p. 17.
 Bedel, 166; Seine *Scarabaeidae*.
 Bourgeois, 300; Catalogue Vosges.

Buysson; Elatérides de Saône-et-Loire.

Caillol; Capture en Provence d'une espèce de Silphide nouvelle pour la France; Marseille Bul. soc. linn. pp. 173-178.

Caillol; Capture d'un Coléoptère nouveau pour la Provence; Marseille Bul. soc. linn. 4 pp. 201-202.

Deville, 705 & 706; Wimereux.

Deville, 709; *Amaurops* nouveau.

Falcoz, 890; Dévoluy Hautes-Alpes.

Falcoz; *Philonthus spermophili* et *Henoticus serratus*; Lyon Ann. soc. linn. 59 pp. 93-97.

Grouvelle, 1142; *Meligathes* nouveau.

Hustache, 1345; Deux Curculionides nouveaux.

Lienhart, 1685; Mares salées de Lorraine.

Pic, 2098; Catalogue Saône-et-Loire.

Pionneau; Note sur les Coléoptères intéressants du sud de la France; Miscell. entom. 20 p. 18.

Hymenoptera.

Lichtenstein; Feuille jeunes natural 42 p. 104.

Lepidoptera.

Ashby pp. 15-17 Ent. Rec. 24; France etc., trip.

Bethune-Baker, Ent. Rec. 24 pp. 67-71; Digne trip.

Bethune-Baker, Ent. Rec. 24 pp. 117-121; Cevennes trip.

Bethune-Baker Ent. Rec. 24 pp. 150 etc.; Gavarnic trip.

Duclos; Capture du *Lophopteryx carmelita*; Rouen Bul. soc. sci. nat. 46 1911 p. 29.

Gurney; Entomologist 45 p. 96 etc.; Digne *Rhopalocera*.

Hombert, 1280; *Acidalia* sp. n.

Joannis, 1398; Microlépidoptères cécidogènes 2 spp. n.

Pearson; Ent. Rec. 24 pp. 96-99; Alps, Dauphiné, trip.

Picard, 2123; France Teigne des pommes de terre.

Picquenard, 2125; Finistère.

Rowland-Brown, *Entomologist* 45 p. 333; *Erebia melampus*.

Rowland-Brown, *Entomologist* 45 pp. 56-62; Gavarnic *Rhopalocera*.

Rowland-Brown, *Entomologist* 45 pp. 14-17; Charente-inférieure *Rhopalocera*.

Neuroptera.

Lacroix, 1610 & 1611; Neuroptères de France.

Diptera.

Lesne; *Phlebotomus papatasi* en Bourgogne; Bull. soc. ent. France 1912 p. 410.

Hemiptera.

Lambertie, 1621.

Lambertie, 1622; Nouveaux ou rares de la Gironde.

Peneau, 2055; Notules.

Psocoptera.

Enderlein, 858; Neue Gattung.

Orthoptera.

Cadro; Mante religieuse dans le Pas-de-Calais; Feuille natural. Paris 42 1912 p. 24; Id. A. Gasser T.c. 35: Smits p. 52.

Chopard; Contribution à l'étude des Orthoptères de France; France Bull. soc. ent. 1912 pp. 384-386.

Hay, 1191; *Tetrix*.

(g) South Europe and Mediterranean Basin.

Insecta, collectively.

Navás, 1935; Granada 4 spp. n. *Baetis*, *Symphorobius*, *Aleuropteryx*, *Peripsocus*.

Cobelli; Trentino, *Biorrhiza* and *Bo-reus*; Zs. wiss. Insektenbiol. 8 p. 112.

Navas, 1924; Névroptères, s.l., de Corse.

(N-9210 j)

Morton, 1888; Bouches du Rhone and Sierra Albarracin.

Jeannel & Peyerimhoff, 1890; Maroc oriental.

Royer, 2374; Beni-Swassen.

Coleoptera.

Apfelbeck, 49a; Balkan penins. spp. n.

Bondroit, 268; *Stenus*, spp. n.

Wagner, 2932; *Apion* 2 spp. n.

Cameron, 471; Portugal *Vesperus*. sp. n.

Csiki, 632a; Balkans *Hylaia* sp. n.

Bolívar, 263; Spain *Broscus* sp. n.

Escalera, 875; Spain *Asida* 2 spp. n.

Fuente, 1004; Spain *Ochodaeus* sp. n.

Lauffer, 1637; *Dorcadion* of Spain 3 spp. n.

Pic; Un *Malachius* d'Espagne inconnu; Bull. Soc. ent. France 1912; p. 392.

Reitter, 2261; *Gastrallus* sp. n. Barcelona.

Bernhauer, 206; Sicily *Zyras* sp. n.

Bondroit, 269; Italy *Stenus* sp. n.

Della Beffa, 683; Coccinellidae italiani, revisione.

Della-Beffa, 684; Coleottori della Valle di Susa (Piemonte).

Della-Beffa, 685; Valle del Maira Piemonte.

Della Beffa e Gagliardi, 686; Toscana.

Eggers, 820; Sicilia *Scolytidae* 3 spp. n.

Fiori, 936; Italy *Malthodes* sp. n.

Fiori, 937; topografie italiane.

Mancini, 1756; *Anophthalmus* sp. n.

Ragusa, 2224; Sicilia.

Roubal, 2368; Sicily *Cryptocephalus* sp. n.

Vitale, 2903; Sicilia, *Cicindela*.

Vitale, 2903; Sicilia *Carabidae*.

Bedel, 163; *Liosoma* de Corse.

Sainte-Claire Deville, 710; Catalogue Corse.

Eggers, 818; Sardische Borkenkäfer.

Krausse, 1566; Sardinien.

Krausse-Heldrunge, 1570; Genargentugebirge Sardinien.

Reitter, 2254; Sardinia *Rhinosimus* n. sp.

Strohmeyer, 2708; Sardinien *Dryocoetes* sp. n.

Cameron, 470; Malta *Trogophloeus* sp. n.

Depoli, 696; *Dorcadion* Liburnia, spp. n.

Formánek, 962; *Torneuma* sp. n. Dalmatien.

Karaman e Novak, 1448; Dalmatia.

Matits, 1791; *Bembidium* n. sp. Serbien.

Reitter, 2264; *Bacanius* sp. n. Dalmatien.

Reitter, 2265; *Cryptophagus* sp. n. Dalmatien.

Reitter, 2269; *Raymondionymus* sp. n. Dalmatien.

Reitter, 2271; *Silphidae* n. gen. Bosnien.

Schatzmayr, 2424; Valle d'ospo.

Holdhaus, 1266; des Monte Gargano, der Adriatisfrage.

Gridelli, 1115; eseursioni Küstenland.

Müller, 1907; *Athous* der ostadriatischen Provinzen.

Meyer, 1827; Des Karstgebietes bei Fiume.

Heyrovský, 1250; *Oedemeridae* Bulgariens.

Penecke, 2057; *Mycetochara* und *Rhagonycha* spp. n. Bulgarien.

Reitter, 2268; *Athous* sp. n. Bulgarien.

Reitter, 2263; *Alophus rhodopensis* sp. n.

Müller, 1905; *Athous* Karstprovinzen Dalmatien.

Krekich-Strassoldo, 1572; *Anticidi* del litorale e della Dalmazia.

Cameron, 468; Turkey *Xantholinus* sp. n.

Wagner, 2934; *Stomodes* 2 spp. n. Rumänien and Griechenland.

Bickhardt, 229; Algier *Saprinus* sp. n.

Daniel, 659; deux nouveaux du nord de l'Afrique.

Grouvelle, 1140; *Cryptophagus* nouveaux d'Algérie.

Grouvelle, 1141; *Brachyleptus* nouveaux d'Algérie et de Tunisie.

Lesne et Orbigny, 1679; Mauritanie.

Normand, 1967; *Cephennium* du nord africain.

Normand, 1968; faune tunisienne *Stenichnus* spp. n.

Obenberger, 1977; N. Africa *Anthaxia* 2 spp. n.

Peyerimhoff, 2082; phytophages du nord africain 2 spp. n.

Pic, 2101; Maroc 2 spp. n.

Hustache, 1344; *Nargus* sp. n. Syria.

Reitter, 2258; *Otiorrhynchus* sp. n. Kleinasien.

Reitter, 2261; *Tanatophilus* sp. n. Russ. Armenien.

Hymenoptera.

Emery, 835; Der Wanderzug der Steppen- und Wüstenameisen von Zentral-Asien nach Süd-Europa und Nord-Afrika.

Mantero, 1762; Cinipidi di Liguria.

Mercet, 1812; Spain *Aphelinus* sp. n.

Mercet, 1813 & 1814; Spain *Prospaltella* sp. n.

Mercet, 1815; Spain *Mymaridae* 2 spp. n., gen. n.

De Stefani Perez, 700; Sicily *Cynips* sp. n.

Krausse, 1564; sardische Ameisen.

Du Buysson, 774; *Chrysidae* nouveaux Maroc.

Ferton, 927; nouveaux d'Algérie.

Karavajev, 1449; Formiciden Italien, Nord-Afrika.

Krausse, Wien. ent. Zeit. 31 p. 250; *Formica fusca glebaria* Sardinien.

Morley, 1884; Cyprus *Metopius* sp. n.

Pagnetti-Hummler, 2029; Apiden Coifu.

- Santschi, 2408; Nouvelles Fourmis de Tunisie.
- Santschi, 2409; Formieides l'Afrique mineure.
- Santschi, 2410; Mauritanie occidentale.
- Schmiedeknecht, 2465; gen. n. *Ichneum*. Tunis.
- Smits van Burgst, 2622; Tunesian Ichneumonidae, 5 spp. n.
- Stauder, 2646; algerischen Formieiden.
- Turner, 2827; Haut-Kharoum *Stizus* sp. n.—Turner, 2830; Mogador *Gorytes* sp. n.
- Pérez, 2059; Mellifères spp. n. Syrie.
- Strand, 2680; Syria *Iphiaulax* spp. n.
- Zavattari, 3243; Sardegna.
- Lepidoptera.*
- Rebel, 2238; *Piletocera aegimiusalis* Mediterrangebiet.
- Warren, 2958; *Leptosia* sp. n.
- Mendes, 1810; Portugal S. Fiel annotated list.
- Codina, Boll. soc. Aragon 10 pp. 113-117; Catalonia short annotated list.
- Fernández, 925; Sierra de Jaen list.
- Gervais d'Aldin, 1035; Andalousie.
- Ribbe, 2297; Andalusien.
- Wagner, 2927; Reise nach Andalusien.
- Woodward, Ent. Rec. 24 pp. 172-174; Gibraltar.
- Barrett, Entomologist 45 p. 231 etc.; Messina trip.
- Harrison, 1181; Italy *Ithysia* sp. n.
- Lepidotteri del Piemonte; Rocci, 2329.
- Rhopalocera* et *Sphinges* faunae romanae; Rostagno, 2346.
- Rostagno, 2347; Bombyces faunae romanae.
- Turati, 2817; Sicilia 7 spp. n.
- Turati & Verity, 2819; *Heterocera*, *Microlepidoptera*, *Rhopalocera* Alpi marittime.
- Turati, 2816; Sardinia 4 spp. n., *Noctuidae* and *Ocneria*.
- (N-9210 j)
- Rebel, 2236; Korfu.
- Rebel, 2233; Monto Maggiore Istrien.
- Schawerda, 2429; Bosniens und Herzégowina.
- Buxton, T. A. & Buxton, D. A. J., Ent. Rec. 24 pp. 59-63; Greece trip.
- Meyrick, 1835; Greece *Acrocercops* sp. n.
- Drenowsky, 760; höchsten Teiles des Zentral-Balkans.
- Graves, Ent. Rec. 24 pp. 293 & 294; Constantinople notes.
- Draudt, 759; neue Acidalien Aegypten.
- Emmerich-Hoegen, *Glottula pancratii* Tunis; Intern. ent. Zs. 6 p. 274.
- Herzog, 1237; Berichtigung Aegypten und Syrien.
- Holl, *Pierides* Notes; Alger Bul. soc. sci. nat. 4 p. 170-180.
- Holl, 1269; Microlepidoptères algériennes.
- Holl, 1270; Notes.
- Holl, 1271; *Zygaena* d'Alger.
- Le Cerf, 1647; Mauritanie.
- Oberthür, 1981; *Hybocampa* sp. n. algérien. Paris.
- Oberthür, 1982; Algeria *Augiades* sp. n.
- Rebel, 2232; Unter-Aegyptens spp. n.
- Rothschild, 2357; Algeria *Lambessa* sp. n.
- Rothschild, 2360; Algeria spp. n., *Lymantria*, *Noctuidae* and *Geometridae*.
- Turati, *Tæniocampa witzenmanni* en Algérie et en Sardaigne. Paris Bul. soc. ent. 1912 p. 414-417 av. fig.
- Bang-Haas, 106; Syria *Dalbina* sp. n.
- Chapman, 513; Lebanon *Agriades* sp. n.
- Culot, 637; Liban *Syntomis tricingula*.
- Meyrick, 1837; Asia minor and Algeria *Adelidae* spp. n.
- Meyrick, 1839; Asia minor spp. n.

Neuroptera.

- Andréu, 37; Spain *Boriomyia* sp. n.
 Lacroix, 1612; Algérie et Tunisie
 2 spp. n.
 Navás, 1915; Syria *Solter* sp. n.,
 Atlas *Neuroleon* etc., Egypt spp. n.
 Navás, 1916; genn. and spp. n.
 Navás, 1917; *Ohrysopa* sp. n.
 Navás, 1920; Egypt *Nesoleon* sp. n.
 Navás, 1926; Algérie spp. n.
 Navás, 1933; Algeria *Nelees* sp. n.
 Petersen, 2075; Corsica.

Diptera.

- Andréu, 38; Spain *Tipulidae*.
 Arias, 50; Spain *Asilus* sp. n.
 Arias, 51; Spain Additions.
 Becker, 158; Pyrenäen *Phoridae*
 gen. n.
 Escobet, 836; Spain, Catalogue.
 Villeneuve, 2886; *Sarcophaga* n. sp.
 Greece.
 Newstead, 1955; Malta *Phlebotomus*
 sp. n.
 Kertész, 1489; Creta gen. n. *Acaly-
 ptratae*.
 Alexander & Leonard, 27; Ile
 Djerba *Geranomyia* sp. n.
 Becker, 161; *Thereviden* gen. n.
 2 spp. n. Aegypten.
 Bezzi, 218; liste des Asilidés de la
 Tunisie.
 Weiss, 2993; Djerba *Phora chloro-
 gastra*.
 Kertész, 1490; *Glabellula* n. sp.
 Asia minor.

Aphaniptera.

- Jordan & Rothschild, 1439; Portugal
Palaeopsylla sp. n.
 Jordan & Rothschild, 1442; Algeria
 spp. n.
 Krausse-Heldrungen, 1571; Sardi-
 sche Flöhe.

Hemiptera.

- Bergevin; Biskra *Vibertiola cinerae*;
 Bull. Soc. Alger 1911 p. 126.
 Bueno Bol. Soc. Aragon 10 pp. 184-
 186 & 195-203; Spain list.—Bueno

op. cit. 11 pp. 169-174; Catalonia
 short list.

MacGillavry, 1741; *Heteroptera*
 Corsika.

Poppius, 2155; *Heteroptera* Alger.

Reuter & Poppius, 2288; Egypt
 and Aden *Termtophylidae* gen. n.

Schumacher, 2521; Rhynchoten von
 der Insel Cypern.

Trabut, 2797; Catalogue coche-
 nilles, Algérie.

Isoptera.

Silvestri, 2591; Tunis genn. & spp. n.

Pseudoneuroptera.

Bartenev, 133; Montenegro.

Orthoptera.

Ebner, 802; Griechenland.

Krauss, 1568; Sardinien.

Krausse-Heldrungen, 1569; Der-
 mapteren auf Sardinien.

Aptera.

Silvestri, 2592; Portici *Campodeidae*
 spp. n.

(h) Caucasus, West & Centr. Asia.

Insecta, collectively.

Zaicev, 3238; Spätherbstfauna von
 Abchasien (Russ.).

Coleoptera.

Demaison, 687; notes Asie mineure.

Fleischer, 938; *Dyschirius* sp. n.
 Taschkent.

Kerremans, 1482; Caucasus and
 Persia *Sphenoptera* sp. n.

Kožan ikov, 1562; Transcaspus,
Aphodiini spp. n.

Lamecre, 1625; Bagdad *Prionus*
 sp. n.

Ohaus, 1985; Arabia *Adoretini* sp. n.

Petri, 2078; *Lixus* n. sp. Turkestan.

Reitter, 2257; *Myiodes* sp. n.
 Transkaukasus.

Reitter, 2259; *Malegia* spp. n.

Reitter, 2260; *Neobaris* sp. n.
Transkaukasien.

Roubal, 2366; *Kaukasus Lesteva*
sp. n.

Roubal, 2367; spp. n. *Kaukasus*.

Sumakov, 2724; *Russisch-Mittel-*
asien.

Suvorov, 2737; *Alashan Neodorca-*
dion spp. n.

Hymenoptera.

Kokujev, 1552; *Turkestan, Ichneu-*
monidae spp. nn.

Kokujev, 1553; *Kreis-Aresch, Ves-*
pidae, Apidae, Fossores, Parasitica,
spp. n.

Mocsáry, 1858; *Caucasus Chrysis*
spp. n.

Mocsáry, 1858; *Arabia Chrysis*
sp. n.

Semenov, 2547; *Transcaucasia, Mon-*
golia, etc., Chrysididae spp. n.

Lepidoptera.

Burrows, 450; *Turkestan Hydroecia*
sp. n.

Čugunov, 633; *Kuznecki-Alatau*.

Jachontov, 1865; *Kaukasische Arc-*
tiiden.

Krulikovskij, 1583; *Centralasiens*.

Miller, 1846; *Lycaenidae* 2 spp. n.
Transkaukasien.

Pagenstecher, 2028; *Parnassius*
apollo, Kaukasien.

Prout, 2181; *Sokotra Eucrostes*
sp. n.

Neuroptera.

Navás, 1928; *W. Asia Myrmecae-*
lurus sp. n.

Navás, 1920; *Muscat*.

Navás, 1930; *Kaukasus gen. n.*
Panorpatae.

Diptera.

Becker & Stein, 160; *Persien* spp.
nn.

Aphaniptera.

Dampf, 657; *Kaukasus, Ischno-*
psyllus sp. n.

Hemiptera.

Kiričenko, 1520; *Turkestan, Bu-*
chara, Transcaspia Hemiptera-Hetero-
ptera spp. nn.

Poppius, 2163; *Neue Miriden*.

Pseudoneuroptera.

Bartenev, 137; *Odonaten des Tifiser*
Museums (Russ.).

Bartenev, 138; *Transkaukasien* spp.
n. (Russ.).

Orthoptera.

Burr, 441; *Kalocrania* sp. n.

Burr, 445; *Collecting, Caucasus and*
Transcaucasus.

Ebner, 801; *Mesopotomier* 2 spp. n.

Šugurov, 2716; *Pontische Küste*
des Kaukasus.

Uvarov, 2846; *Transcaspian*, spp.
n.

Uvarov, 2847; *Kaukasische Psoro-*
donotus sp. n.

Uvarov, 2848; *Turkestan, g. n.,*
Platycleis sp. n.

Africa.

Insecta, collectively.

Houard, 1313; *Zoocécidies du nord*
de l'Afrique.

Howard, 1324; *Mozambique*
injurious insects.

Schouteden, etc., 2485; spp. n.

Simpson, 2600; *S. Nigeria malevo-*
lent insects.

Coleoptera.

Alluaud, 32; *Carabomorphus* spp. n.

Aurivillius, 69; *Abyssinie et l'Afri-*
que orientale Curculionidae spp. n.

Bernhauer, 208; *Staphyliniden.—*
Bernhauer, 213; Neue Staphyliniden.

Bickhardt, 229; *Histeridae* spp. n.

Bolkay, 264; *Anisognathus* sp. n.

Boppe, 272; *Ce rambycides nouveaux*
l'Afrique et de Madagascar.

Cameron, 469; Red Sea *Bledius* sp. n.—Cameron, 472; Massowah *Scopaeus* sp. n.

Chatanay, 519; *Lichenum* du Sénégal.—Chatanay, 521; genre nouveau *Caediaires*.

Clavareau, 542; *Criocerides* spp. n.—Clavareau, 544; *Corynodes* spp. n.

Dupuis, 784; *Cyclosomus* sp. n.

Eichelbaum, 823; Kilimandjaro zwei *Philonthus* spp. n.

Fleutiaux, 941; *Eucnemidae* spp. n.

Gebien, 1023; *Tenebrionidae*.—Gebien, 1024; *Tenebrionidae* spp. n.

Gestro, 1038; Uganda *Hispidae* spp. n.—Gestro, 1040; Uganda *Ichthyurus* spp. n.—Gestro, 1042; Somali *Paussus* sp. n.

Grouvelle, 1137; Congo *Nitidulidae* and *Colydiidae* spp. n.—Grouvelle, 1139; *Aphanocephalus* sp. n.

Hagedorn, 1158; Ipiden 3 spp. n.—Hagedorn, 1159; Neue Borkenkäfergattungen und Arten.—Hagedorn, 1160; *Scolytidae* spp. n.

Hintz, 1255; *Crossotidae* spp. n.—Hintz, 1256; *Cerambyciden* spp. n.

Horn, 1294; *Cicindelinae*.

Janson, 1383; *Cetoniidae* spp. n.

Jeannel, 1387; *Carabomorphus* sp. n.

Jordan, 1434; *Anthribidae* list, *Deuterocrates* sp. n., *Litotropis* sp. n.—Jordan, 1438; *Cylindroides* sp. n.

Kerremans, 1482; *Buprestidae* 2 spp. n.—Kerremans, 1483; *Buprestidae* spp. n.—Kerremans, 1485; *Buprestidae*.

Kolbe, 1553; *Phaeochroinen* sp. n.

Kuntzen, Heinrich, 1591; *Nerissini* spp. n.—Kuntzen, 1592; *Uhelia* sp. n.—Kuntzen, 1594; *Enmodius* sp. n.

Lesne, 1675; *Bostrychopsis* sp. n.

Marshall, 1768; 3 spp. n., *Azya* and *Cryptognatha*.—Marshall, 1769; *Curculionidae* gen. n.

Möllenkamp, 1861; *Metopodontus* sp. n.

Lewin, 1681; *Blepharida* sp. n.

Lewis, 1682; *Histeridae* 3 spp. n.

Moser, 1892; *Cetoniden* spp. n.

Ohaus, 1985; *Adoretini* spp. n.—Ohaus, 1988; abessynische Ruteliden spp. n.—Ohaus, 1990; *Popillia* sp. n.

d'Orchymont, 2006; *Neohydrophilus* sp. n.

Petri, 2079; *Gasteroclisus* spp. n.

Pic, 2107; *Idgia* sp. n.

Prell, 2173; Africa *Cyphonistes* spp. n.—Prell, 2174; *Dynastini* spp. n.

Sampson, 2404; Uganda *Xyleborus* 2 spp. n.

Schmidt, 2451; *Coprini* spp. n.

Sicard, 2575; Sicard, 2577; *Coccinellidy* spp. n.—Sicard, 2578; *Coccinellidae* spp. n.—Sicard, 2580; *Coccinellidae* spp. n.—Sicard, 2581; 2 spp. n. *Chilocorus* and *Caria*.

Spaeth, 2631; Ostafrikanische Cassiden.—Spaeth, 2632; *Cassidae* spp. n.

Strohmeyer, 2707; *Periommatius* 13 spp. n.—Strohmeyer, 2709; Neue Platypodiden.

Wagner, 2931; *Apion* spp. n.

Wasmann, 2961; Myrmekophilen spp. n.—Wasmann, 2966; *Mimonomma* neuer Dorylinengast.—Wasmann, 2967; Myrmekophilen spp. n.

Weise, 2989; *Chrysomelidae* spp. n.—Weise, 2991; *Coccinellidae* spp. n.—Weise, 2992; *Chrysomelidae* spp. n.

Hymenoptera.

Andrieu & Vuillet, 42; *Vipio* sp. n.

Bingham, 231; *Fossoria* spp. n.—Bingham, 231; spp. n., *Notogonia*, *Odynerus*, *Prosopis*, *Halictus*, *Ceratina*.

Brauns, 315; Zusätze und Berichtigungen zu Dr. H. Frieses „Die Bienen Afrikas“.—Brauns, 316; Bienen Afrikas.

Cameron, 473; Congo many spp. n.

Crawford, 615; *Anastatus* sp. n.—Crawford, 616; *Chalcididae* spp. n.

De Stefani Perez, 701; *Chalcididae* gen. n.

Emery, 827; *Myrmicinae* spp. n.—Emery, 833; *Formicidae*.

Enderlein, 839; *Spathiinae* spp. n.—Enderlein, 840; *Eubadizon* sp. n.—Enderlein, 841; *Alysia* sp. n.—Enderlein, 845; *Evania* sp. n.

- Enslin, 873; *Tenthredinidae* spp. n.
 Friese, H., 979; Bienen Süd-Afrikas.
 —Friese, 982; *Trigona* sp. n.
 Ghigi, 1044; *Osprynchotus* spp. n.
 Hedicke, 1193; *Cynipiden* gen. n.
 Kieffer, 1501; *Cynipides* et *Béthylides* de l'Afrique du Sud.—Kieffer, 1502; deux nouveaux *Chalcidides*.
 Maidl, 1745; *Xylocopa* 6 spp. n.
 Meade-Waldo, 1797; *Megachile* 3 spp. n.
 Mocsáry, 1857 & 1858; *Chrysis* spp. n.
 Morley, 1884; *Ichneumonidae* spp. n.
 Santschi, 2411; *Formicidae* spp. n.—Santschi, 2413; *Carebara* spp. n.—Santschi, 2414; *Crematogaster* 2 spp. n.
 Schulthess Rechberg, 2497; *Vespidae* 2 spp. n.—Schulthess-Rechberg, 2498; *Belonogaster* nov. sp.
 Strand, 2673; Neue afrikanische *Sphécodes* und *Ceratina* spp. n.
 Strand, 2678; Betr. H. Friese.—Strand, 2688; 2 neue *Nomia*. Strand, 2690; Süd-Kamerun und Spanisch-Guinea, *Trigonalidae* genn. n.—Strand, 2691; Kamerun und Spanisch-Guinea Bienen spp. n.—Strand, 2692; *Nomia* spp. n.—Strand, 2702; Neue und *Eriades*, *Steganomus* und *Prosopis*, spp. n.
 Szabó, 2749; *Epitritus* sp. n.
 Turner, 2825; *Elis* spp. n.—Turner, 2827; *Stizus* 5 spp. n.—Turner, 2828 & 2830; *Fossoria* spp. n.—
- Lepidoptera.*
- Sokotra vide W. Asia *Lepidoptera*.
 Aurivillius, 70; *Diestogyna* spp. n.
 Druce, 761; *Parnara* sp. n.—Druce, 762; *Mimacrea* 2 spp. n.—Druce, 763; *Lycaenidae* 2 spp. n., gen. n.—Druce, 765; *Ophiuinae* 5 spp. n.—Druce, 766; Cameroons *Ommatolixis* sp. n.
 Eltringham, 826; *Acraea* monograph, 2 spp. n.
 Grünberg, 1146; *Rhopalocera* spp. n.
 Hampson, 1167; *Pyraustinae* spp. n.—Hampson, 1168; *Agaristidae* 4 spp. n.—Hampson, 1169; *Noctuidae* spp. n.
 Le Cerf, 1649; Afrique orientale spp. n.—Le Cerf, 1652; Afrique orientale gen. n. *Ageriidae*.—Le Cerf, 1655; *Papilio* sp. n.
 Mendes, 1811; list.
 Meyrick, 1833; *Microlepidoptera* 45 spp. n.—Meyrick, 1839; spp. n., genn. n.
 Neave, 1938; *Pseudacraea* sp. n.
 Neustetter, 1949; *Cymothoe* sp. n.
 Prout, 2180; Rhodesia *Zamarada* spp. n.—Prout, 2181; *Hemitheinae* spp. n.
 Rebel, 2234; *Usta* sp. n.
 Rothschild, 2358; *Balacra* spp. n.—Rothschild, 2362; *Lithosianae* spp. n.
 Rothschild & Jordan, 2364; *Sphingidae* spp. n.
 Schouteden, 2482; *Cymothoe* sp. n.
 Schultze, 2499; neue *Lipteniden*.—Schultze, 2500; Fünf neue *Mimacraea*-Formen.—Schultze, 2501; *Rhopaloceren* spp. n.
 Standfuss, 2642; *Taeniocampa* n. sp. Algier.
 Strand, 2670; Kamerun spp. n.—Strand, 2674; Tagfalter und Schwärmer, Abessinien.—Strand, 2675; *Bunaea* sp. n.—Strand, 2676; Westafrikanische *Danaidae*, *Satyridae*, *Nymphalidae*, *Notodontidae* und *Drepanidae*.—Strand, 2677; Mkatta und Morogoro Deutsch Ost-Afrika, spp. n.—Strand, 2679; *Glyphodes* spp. n.—Strand, 2681; Süd-Kamerun und Spanisch-Guinea, *Saturniidae*, *Brahmaeidae*, *Striphnopterygidae*, *Sphingidae*, *Notodontidae*, *Syntomidae*, *Hypsidae* und *Agaristinae* spp. n.—Strand, 2682; Süd-Kamerun und Spanisch-Guinea *Lasiocampidae* genn. & spp. n.—Strand, 2683; *Lithosiinae* spp. n.—Strand, 2684; Novitäten *Lasiocampidae* und *Lymantriidae*.—Strand, 2685; Süd-Kamerun und Spanisch-Guinea, spp. n.—Strand, 2687; sp. n. *Lobobunaea*.
 Strand, 2689; neue *Notodontiden*-gattung.—Strand, 2693; *Eustrotia* sp. n. Gross-Namaland.—Strand, 2695; Zur Kenntnis *Rigema* spp. n.
 Trimen, 2800; *Neptis* sp. n.
 Zerny, 3247.

Trichoptera.

Ulmer, 2842; *Trichopteren.*

Neuroptera.

Klapalek, 1530; Ägyptischen Sudan und Nord-Uganda 2 spp. nn.

Navás, 1915; spp. n. *Ascalaphides Myrmeleonides.*

Navás, 1916; genn. et spp. n.

Navás, 1917; *Chrysopidae* and *Hemeroptera* spp. n.

Navás, 1920; *Myrmeleonidae* many spp. n.; 1922. 3 spp. n.

Navás, 1925; Névroptères nouveaux ou critiques.

Navás, 1928; spp. n.

Navás, 1932; spp. n. *Ascalaphidae, Myrmeleonidae, Chrysopidae.*

Navás, 1933; *Myrmeleonidae* spp. n.

Navás, 1934; spp. n.

Petersen, 2078; 2 spp. n.

Soldanski, 2629; Süd-Kamerun und Spanisch-Guinea *Ascalaphiden.*

Stitz, 2666; *Palpares* spp. n.

Diptera.

Alexander, 18; *Tipulidae* 2 spp. n.

Austen, 75, 76, 77, 78; *Tabanidae* spp. n.—Austen, 79; E. Africa *Stygeromyia* sp. n.—Austen, 80; *Ceratopogoninae* spp. n.—Austen, 81; *Tabanidae* 11 spp. n.—Austen, 82; *Hippobosca* sp. n.

Becker, 155; *Chloropidae*, Monographie gen. et spp. n.

Bezzi, 220; *Syrphidae* spp. n.—

Bezzi, 223; *Bombyliidae* spp. n. gen. n.—Bezzi, 225; *Museidae Tachinidae* 8 spp. n.

Carter, 489; *Tabanus* 3 spp. n.

Edwards, 806; *Kelloggina* sp. n.—Edwards, 808; *Culicidae* revision, spp. n.

Enderlein, 838; *Sciarinae* gen. n.—

Enderlein, 853; spp. n. *Phoridae.*—

Enderlein, 863; Transvaal *Limonia* sp. n.—Enderlein; *Loxoneurinen* und *Ortalininen.*—Enderlein, 867; *Psilocephala* sp. n. Transvaal.

Gedoelst, 1027; *Oestridae* 2 spp. n.

Grünberg, 1144; *Glossina* sp. n.

Hendel, 1220; 2 spp. n., *Trigonometopus* and *Meracanthomyia.*

Kieffer, 1506; *Cecidomyiidae* 2 genn. n.

Kröber, 1577; *Therevidae* spp. n.

Malloch, 1749; *Phoridae* sp. n.

Meunier, 1822; Zanzibar copal *Chironomus* spp. n.—Meunier, 1824; *Chironomidae* Copal de Zanzibar et de Madagascar.

Neave, 1937; blood-sucking, annotated list.

Newstead, 1953; *Glossina* sp. n.—Newstead, 1954; *Phlebotomus* 2 spp. n.

Pittaluga, 2144; *Oecacta* sp. n.

Rodhain & Bequaert, 2330; *Oestridae* 2 spp. n.

Roubaud, 2370; *Stomoxys.*

Simpson, 2599; Nigeria, blood-sucking *Diptera.*

Speiser, 2637; *Chrysops* sp. n.

Surcouf, 2733; *Tabanides* de la Sangha.

Theobald, 2759; *Culicidae* spp. n.

Ziemann, 3251; Verbreitung der blutsaugenden Tiere in Kamerun.

Aphaniptera.

Watertson, 2976; *Ctenophthalmus* sp. n.

Hemiptera.

Aulmann, 65; *Psylliden* spp. n.—Aulmann, 66; *Chlorita* n. sp.

Bergroth, 179; 9 spp. n.—Bergroth, 180; *Coreidae* spp. n.—Bergroth, 181; *Tingitidae* 2 spp. n.—Bergroth, 185; *Cenaeus* spp. n. Guinea.

Brain, 309; Cape Town, *Pseudococcus* spp. n.

Breddin, 319; *Henicocephalus* sp. n., *Reduviidae* gen. n.

Distant, 724; *Cicadidae* spp. n.—Distant, 725; 6 spp. n. *Pentatomidae* and *Reduviidae.*—Distant, 727; *Bathycoelia* 2 spp. n.—Distant, 728; *Liberia Platypleura* sp. n.

Horvath, 1299; *Tingitidae* 2 spp. n., gen. n.

Jacobi, 1370; *Homoptera* spp. n., genn. n.

Jeannel, 1388; Réduvide troglophile nouveau de l'Afrique orientale.—Jean-
nel, 1389; Nouveau *Macrospogus*,
Mozambique.

Jordan, 1428; *Polyetenidae* gen. n.

Jordan & Rothschild, 1441; 1 gen. n.
Clinocoridae.

Lallemand, 1618; *Cercopidae* spp. n.

Melichar, 1808; *Delphacinarum* n.g.
n. sp.

Montandon, 1869; *Macrocoris* spp. n.

Montandon, 1870; *Laccotrephes* 2
spp. n.

Morstatt, 1886; *Ploiariola* sp. n.

Newstead, 1957; African Coccidae
spp. n.

Reuter, 2286; Fernando Po *Redu-
violus* sp. n.

Rothschild, 2352; gen. n. *Cimicidae*.

Schmidt, 2454; *Falgoridae* spp. n.—
Schmidt, 2455; Zwei neue Tettigo-
metriden-Gattungen.—Schmidt, 2457;
Fulgoridae spp. n. genn. n.—Schmidt,
2459; *Cercopidae* spp. n.

Schouteden, 2478; *Coreidae* spp. n.—
Schouteden, 2479; *Antestia* 2 spp.
n.—Schouteden, 2483; *Coreidae* spp. n.
—Schouteden, 2486; spp. n.

Schumacher, 2515; Neue Gattung
der Graphosominen.—Schumacher,
2516; Kamerungebirge spp. n.—Schu-
macher, 2523; Ledrinen 2 genn. n.
5 spp. n.—Schumacher, 2529; *Lacetas*
spp. n.

Spooner, 2638; *Delphacidae* spp. n.

Vayssière, 2867; Deux nouveaux de
l'Afrique occidentale.

Elliptera (= *Anoplura*).

Harms, 480; *Haematopinus* sp. n.

Thysanoptera.

Karny, 1455; 2 spp. n.—Karny,
1454; Tubuliferen.

Karny, 1465; gen. n.

Trybom, 2809; Natal und Zululand,
Verzeichnis, genn. and spp. n.—
Trybom, 2810; Britt. Ostafrika 1 gen. n.
sp. n.

Psocoptera.

Enderlein, 859; gen. n.

Lipoptera (= *Mallophaga*).

Watertson, 2974; *Mackayia* sp. n.

Isoptera.

Holmgren, 1279; spp. and genn. n.

Silvestri, 2584 & 2586; spp. n.

Sjöstedt, 2603; Afrikanische Termiten
9 spp. n.

Wasmann, 2967; *Mirotermes* sp. n.

Wasmann und Werner, 2969; Ägyptischen
Südan und Nord-Uganda Termiten
und *Embidaria*.

Embioptera.

Enderlein, 837; spp. n.

Plecoptera.

Klapálek, 1525; *Plecoptera*.

Ephemeroptera.

Eaton, 799; *Oligoneuria* sp. n.

Navás, 1932; gen. n.

Paraneuroptera.

Martin, 1775; Sikasso 4 spp. n.—
Martin, 1776; Gomphines spp. n.

Ris, 2314; spp. n.—Ris, 2317;
Ägyptischen Südan und Nord-Uganda
1 sp. n.

Orthoptera.

Bolivar, 260; Congo 50 spp. n.

Burr, 441 & 446; *Dermaptera*.—
Burr, 449; *Blandex* n. gen.

Giglio-Tos 1051; *Mantidae* spp. n.—
Giglio-Tos, 1053; Specie nuove di
Fasmidi Nuova Guinea.

Griffini, 1119; *Eremus* sp. n.—
Griffini, 1123; Del K. K. Naturhist
Hofmuseum di Vienna, *Gryllacridi*
2 spp. n.

Rehn, 2242; African *Mantidae* and
Phasmidae spp. n.—Rehn, 2243 African
Eumastacinae 2 spp. n.—Rehn, 2245;
Mantidae and *Phasmidae* spp. n.

Shelford, 2572; *Blattidae*.

Sjöstedt, 2604; Kamerungebirges
1 gen. n. 4 spp. n. Sjöstedt, 2605;
Brit. Ostafrika genn. n. spp. n.

Werner, 2998; Mantodeenfauna Nor-
dostafrikas.

Collembola.

Börner, 249; Collemboles, *Dicranocentrus* sp. n.

Carpenter, 484; Nigeria *Isotoma* sp. n.

Madagascar and Mascarene Islands.

Coleoptera.

Arrow, 54; Mauritius *Phytalus* sp. n.—Arrow, 55; *Hexodon* 3 spp. n.

Boppe, 273; *Closterus* sp. n.—Boppe, 274; Genre nouveau de Cérambycides.

Borchmann, 276; *Lagriiden*, *Alleculiden* und *Meloiden* spp. n.

Chatanay, 520; Asidide nouveau.—Chatanay, 523; Nouveaux Asidides.

Fleutiaux, 942; Comores *Élateridae* spp. n.

Lamberton, 1623; Genre curieux.

Moser, 1892; *Pygora* sp. n.

Ohaus, 1985; *Adoretini* spp. n.

Scott, 2537; Seychelles, *Adephaga* & *Lamellicornia*.

Sicard, ; Coccinellides spp. n.—Sicard, Seychelles *Coccinellidae*.

Théry, 2765; *Buprestidae* spp. n.

Vuillet, 2922; *Olivina* sp. n.

Hymenoptera.

Bordage, 979; Notes biologiques recueillies à l'île de la Réunion.

Cockerell, ; Seychelles spp. n.

Emery, 827; *Myrmecinae* gen. n.

Enderlein, 839; gen. n. *Doryctinae*.—Enderlein, 840; *Braconidae* gen. n.

Forel, ; Seychelles spp. n.

Kieffer, ; Seychelles Proctotrupeidae gen. and spp. n.

Kohl, 1550; *Passaloecus* sp. n.

Meade-Waldo, 1798; Seychelles *Diploptera*.

Morley, 1883; Seychelles *Ichneumonidae* spp. n.

Morley, 1884; *Henicospilus*, sp. n.

Roman, 2341; Madagascar *Pimpla* and *Ipobracon* n. sp.

Santschi, 2411; *Formicidae* spp. n.

Lepidoptera.

Druce, 765; *Achaea* sp. n.

Fryer, 1001; Seychelles and Aldabra spp. n.

Hampson, 1167; Seychelles *Marsmia* sp. n., Madag. *Bocchoris* sp. n.

Joannis, 1399; *Catocolinae* gen. n.

Le Cerf, 1650; *Sesia* sp. n.

Meyrick, 1839; spp. n. genn. n.

Prout, 2181; *Gelasma* sp. n.

Neuroptera.

Navás, 1915; *Sogra* spp. n.—Navás, 1917; *Leucochrysa* and *Chrysopa* spp. n.

Diptera.

Austen, 75; Madagascar, Rodriguez, Astove I., *Tabanidae* spp. n.

Collin, 581; *Limosina* sp. n.: 582; *Phoridae* spp. n.

Edwards, 813; Seychelles *Tipulidae*.

Enderlein, 838; Seychelles *Mycetophilidae* spp. n.—Enderlein, 846; Seychelles *Sciaridae* spp. n.—Enderlein, 848; *Campylocera* sp. n.—Enderlein, 861; Seychelles gen. n. *Scatopsidae*.—Enderlein, 863; *Tipulidae* sp. n.—Enderlein, 864; *Sule* sp. n.

Hendel, 1220; Seychelles and Madagascar *Acalyptratae* spp. n.

Kertész, 1492; Seychelles *Stratiomyiidae* genn. n. 2 spp. n.

Lamb, 1620; Seychelles *Acalyptratae*.

Meunier, 1822; copal, *Chironomus* and *Ceratopogon* spp. n.

Theobald, 2764; Seychelles *Culicidae* spp. n.

Hemiptera.

Bergroth, 180; spp. n. *Coreidae* and *Neididae*.—Bergroth, 185; Comoro *Odontopus* sp. n.

Distant, 724; gen. n. *Cicadidae*.—Distant, 729; Seychelles *Yanga* sp. n.

Lallemand, 1618; Madagascar and Mahé *Cercopidae* spp. n.

Schouteden, 2480; *Amberiana* sp. n.

Psocoptera.

Enderlein, 859; Seychelles and Madag. gen. n.

Paraneuroptera.

Ris, 2314; spp. n.

Orthoptera.

Bolivar, 261; Seychelles spp. n.

Burr, 441; *Prolabia* sp. n.—Burr, 448; *Anisolabis* sp. n. Comoren.

Giglio-Tos, 1051; *Tarachomantis* sp. n., Comoro *Polyspilotra* sp. n.

Griffini, 1120; *Spizaphilus* sp. n.—Griffini, 1122; *Gryllacris*.—Griffini, 1126; *Carcinopsis* sp. n.

Shelford, 2571; Madagascar *Eutheganopteryx*, *Heminauphoeta* spp. n.

Asia, Tropical & Eastern,

Including Japan, Biluchistan, Afghanistan.

For West and Central Asia *vide* Palaearctic (*b*); for North Asia *vide* Palaearctic (*c*).

Insecta, collectively.

Annandale, 44; Bengal.

Buttel-Reepen, 461; Reisebrief aus Ceylon's Bergen.

Coleoptera.

Arrow, 53; Sikkim *Anomala* 11 spp. n.—Arrow, 56; Burma *Anomala* spp. n.

Bickhardt, 227; *Histeriden* Formosa.

Blair, 240; India etc. *Pyrochroidae* spp. n.

Borchmann, 278; *Lagriidae*, *Alleculidae*, *Cantharidae*, spp. n. Formosa.

Boucomont, 292; Genre nouveau et espèces nouvelles de *Coprophages*, Yunnan.

Dupuis, 780; Formosa *Carabidae* spp. n.

Eggers, 819; India *Hylastes* sp. n.

Fleutiaux, 941; India *Dicladus* sp. n.—Fleutiaux, 944; Rangoon *Scopulifer*.

Fowler, 968; India, *Cicindelidae*, *Paussidae* and *Rhysodidae*.

Gestro, 1037; India *Hispidae* spp. n.—Gestro, 1041; India and Formosa *Ichthyurus* spp. n.

Grouvelle, 1138; Annam and Formosa *Psammoecus* spp.—Grouvelle, 1139; *Aphanocephalus* spp. n.

Hauser, 1189; *Coptolabrus* sp. n. China.

Heikertinger, 1202; *Mantura* sp. n. Japan.

Horn, 1293; Formosa *Cicindelinae*.

Houlbert, 1317; Yunnan *Lucanide* genre nouveau.

Jordan, 1433; Assam and Burma *Zygaenodes* 2 spp. n.—Jordan, 1435; India *Anthribidae* spp. n.—Jordan, 1436; Formosa *Anthribidae* spp. n.

Kerremans, 1481; Formosa *Buprestiden*, spp. n.

Kožančikov, 1562; *Aphodius* sp. n.

Lameere, 1625; China *Prionus* spp. n.

Lesne, 1678; Psoien indien.

Lewis, 1682; Burma *Hololepta* sp. n.

Möllenkamp, 1860; Formosa *Lucanidae*.—Möllenkamp, 1861; India *Neolucanus* sp. n.

Moser, 1890; India and Tonkin *Hopliiden* spp. n.—Moser, 1889; *Holotrichia* spp. n.

Ohaus, 1985; *Adoretini* spp. n.

Olivier, 1996; Formosa *Lampyridae* spp. n.—Olivier, 2004; *Lampyrides* de l'Indo-Chine.

Petri, 2079; *Gasteroclisus* spp. n.

Pic, 2119; Longicornes de Chine.—Pic, 2104; *Pyrochroa* de Malacca.

Raffray, 2222; Formosa *Pselaphidae* spp. n.

Roeschke, 2332; Formosa *Carabus* sp. n.

Sampson, 2404; Ceylon, Burma, Singapore, 3 spp. n., *Xyleborus* and *Crossotarsus*.

Schenkling, 2434; Formosa *Cleridae* spp. n.

Schilder, Ent. Bl. 8 p. 96; *Cicindelinenfauna* des chinesis. u. japan.

Schmidt, 2451; *Aphodiinae*, *Orphninae* und *Hybosorinae*, spp. n.

Schönfelt, Deutsche ent. Nationalbild. 2 pp. 189 & 190; Formosa *Brenthidae*.

Sicard, 2575; Formosa *Coelophora* sp. n.

Strohmeyer, 2711; Formosa *Ipidae* 3 spp. n.

Vuillet, 2919; Indo-Chine *Euschizomerus* sp. n.

Wasmann, 2963; Formosa *Paussidae* 2 spp. n.—Wasmann, 2967; India *Thorictus* sp. n., *Dinusa* sp. n.

Weise, 2989; Chrysomeliden.

Wellman, 2996; Japan, Formosa, Tibet, *Lyttidae* spp. n.

Hymenoptera.

Cameron, 474; Hongkong *Anomalon* sp. n.

Cockerell, 556; India *Nomia* sp. n.—Cockerell, 566; Formosa *Nomia* spp. n.

Crawford, 615; *Chalcididae* and *Proctotrypidae*, spp. n.

Enderlein, 839; *Spathiinae* spp. n.—Enderlein, 841; Ceylon *Braconiden* spp. n.—Enderlein, 843; *Chalcididen* Ceylons.—Enderlein, 844; Formosa *Braconidae*, *Proctotrupidae* and *Evaniiidae*.—Enderlein, 845; Ceylon 2 spp. n., *Pseudofoenus* and *Stephanus*.—Enderlein, 855; India *Paniscus* sp. n., Formosa gen. n.

Forel, 949; Japan *Camponotus* sp. n.—Forel, 955; Formosa *Formicidae* spp. n.—Forel, 960; India genn. n. & spp. n. *Formicidae*.—Forel, 961; India etc. neue Ameisenformen.

Hedicke, 1192; Formosa *Cynipidae*.

Kertész, 1489; China *Ptilona* sp. n.

Krieger, 1573; Hinterindien *Pristomerus* spp. n.

Maidl, 1745; *Xylocopa* spp. n. India and Annam.

Meade-Waldo, 1797; India *Megachile* sp. n.

Mocsáry, 1857; Formosa *Chrysis* spp. n.—Mocsáry, 1858; *Chrysis* spp. n.

Morley, 1884; *Ichneumonidae* spp. n.

Paiva, 2048; Abor Expedition.

Perkins, 2062; *Chalcidae* spp. n.—Perkins, 2063; *Dryinidae* spp. n.

China.—Perkins, 2065; China *Nesoprotopis* sp. n., *Megachile*.

Rohwer, 2338; *Tenthredinidae* spp. n.

Strand, 2680; *Evania*, *Iphiaulax*, spp. n.

Szabó, 2749; Singapore *Epitritus* sp. n.

Turner, 2827; Ceylon *Stizus* sp. n.—Turner, 2830; *Fossoria* spp. n.—Turner, 2832; The genus *Cerceris* monograph British India.

Viereck, 2881; India *Braconidae* and *Ichneumonidae* spp. n.—Viereck, 2882; *Ichneumonidae* and *Braconidae* spp. n.—Viereck, 2883; Japan *Parasitica* spp. n.

Zavattari, 3242; Kashmir *Odynerus* sp. n.

Lepidoptera.

Dekhi Philipe, 675; India *Lethe kansa* and *Dophla patula*.

Evans, 881; List of Indian butterflies.—Evans, 882; India *Rhopalocera*.

Fernández, 925; Hunan brief list.

Fruhstorfer, 990; *Lycaenidae*, *Yasoda* and *Suasa*, spp. n.—Fruhstorfer, 998; *Nymphalidae* subspp. n.

Green, 1112; Ceylon butterflies.

Hampson, 1167; *Pyraustinae* spp. n.—Hampson, 1170; The moths of India, spp. n.—Hampson, 1169; *Nocuidae* spp. n.

Hannington, 1176; Distribution of *Lethe kansa* and *Dophla patula*.

Joannis, 1397; Trois nouvelles espèces de hétérocères Cochinchine.—Joannis, 1399; Tonkin *Enmonodia* sp. n.

Jordan, 1426; *Agaristidae* spp. n.

Le Cerf, 1650; Tonkin *Aschistophleps* sp. n.

Meyrick, E., 1832; India *Microlepidoptera* many spp. n.—Meyrick, 1835; India and Ceylon *Gracilariidae* spp. n.—Meyrick, 1837; India *Nemotois* spp. n.—Meyrick, 1839; spp. n., genn. n.

Prout, 2181; India etc., *Hemithinae* spp. n.

Rothschild, 2362; *Lithosianae* spp. n.

Rothschild & Jordan, 2364; Malay Penins. *Marumba* sp. n.

Swinhoe, 2748; India etc. *Lycaenidae* and *Hesperidae* spp. n.

Warren, 2958; India, Japan, etc., *Noctuidae* spp. n.

Wileman, 3119; Formosa *Geometridae* spp. n.—Wileman, 3200; Formosa *Noctuidae* spp. n.—Wileman, 3201; Formosa *Geometridae* spp. n.

Wileman, 3202; Formosa 6 spp. n., *Phalera*, *Trachea* and *Geometridae*.

Neuroptera.

Nagano, 1913; Japan *Lymantria* sp. n., *Epicopeia* sp. n.

Nakahara, 1914; *Climaciella* sp. n.

Navás, 1915; India, China, etc., spp. n.—Navás, 1916; spp. n., gen.—Navás, 1917; *Chrysopidae* and *Hemero-biidae* spp. n.—Navás, 1928; Baluchistan *Palpares* sp. n., Burma *Dimares* and *Nesoleon* sp. n.—Navás, 1929; Formosa gen. n., Piu-fa sp. n., Tshifu gen. & sp. n. *Myrmelconidarum*.

Petersen, 2072; Formosa *Panorpa*, *Micromus*, 2 n. spp.—Petersen, 2073; Ceylon *Macronemurus* sp. n.

Diptera.

Alcock, 12; Malaya *Anopheles* sp. n.

Annandale, 45; *Phoridae* associated with ants.

Becker, 155; *Chloropidae*, Monographie, gen. & spp. n.

Bezzi, 219; *Rhagionidae* et *Empididae* Formosa spp. n.

Böttcher, 254; Formosa *Sarcophaga* spp. n.

Brunetti, 422; *Nematocera* general work.—Brunetti, 423; oriental *Culicidae*.—Brunetti, 424; *Aphiochaeta* sp. n.—Brunetti, 425; India many spp. n.—Brunetti, 427; *Simulium* Ceylon sp. n.

Christophers, 541; Andamans *Culicidae*.

Daniels, 660; Malay States *Culicidae* 2 spp. n.

Davys, 671; Anophelines Quetta.

Enderlein, 838; Japan *Sciara* sp. n.—Enderlein, 856; Ephydriden nov. gen.—Enderlein, 863; Formosa *Tipu-*

lidae spp. n.—Enderlein, 865; Ortalininen und Loxoneurinen.—Enderlein, 866; Formosa *Dolichopidae* spp. n.

Fry, 1000; Anophelines of Chota Nagpur.

Hendel, 1221; Formosa *Dacus* spp. n.

Hendel, 1220; Indien and Formosa, *Acalyptratae* 3 spp. n.

Kertész, 1488; *Dorylidae* spp. n. Formosa.

Kieffer, 1508; Formosa *Chironomidae* spp. n.—Kieffer, 1509; Ceylan nouveaux *Chironomides*.—Kieffer, 1510; *Cecidomyies* de Ceylan.

Kröber, 1577; Formosa *Therevidae*.—Kröber, 1578; *Thereviden* der indo-australischen Region.—Kröber, 1582; Formosa *Thereviden*, *Omphraliden*.

Leicester, 1662; Malay States *Culicidae* many spp. & genn. n.

Lichtwardt, 1684; Formosa *Nycterimyia* spp. n.

Paiva, 2047; Calcutta *Culicidae*.

Patton & Cragg, 2045; India *Philaeatomyia* sp. n.

Riedel, 2306; Formosa *Nematocera* polyneura.

Schmitz, 2466; Bengalen *Chonocephalus* nov. sp.

Stanton, 2645; Malaya *Anopheles*.

Hemiptera.

Bredden, 320; spp. n., *Pentatomidae* and *Homocercus*.—Bredden, 322; India *Indra* sp. n.

Cholodkovskij, 531; Himalaya, *Pemphigidae* spp. n.

Crawford, 613; India *Psyllidae* spp. n.

Distant, 723; *Cicadidae* and *Fulgoridae* spp. n., gen. n.—Distant, 724; India *Cicadidae* and *Fulgoridae* spp. n.—Distant, 726; India etc., spp. n., *Cicadidae*, *Jassidae*.—Distant, 727; India gen. n. near *Piezodorus*, *Jassidae* spp. n.—Distant, 729; Tonkin *Cosmopsaltria* sp. n.

Green, 1107; India *Margarodes* sp. n.

Horváth, 1302; Japan etc., *Stephanitis* spp. n.—Horváth, 1305; Tonkin *Pocilocoris* sp. n.

Jordan & Rothschild, 1441; *Cacodmus* sp. n.

Lallemand, 1618; India *Leptataspis* sp. n.

Matsumura, 1792; Cicadinen Japans.—Matsumura, 1793; Acocephalinen und Bythoscopinen Japan.

Montandon, 1869; Annam *Gestroiella* sp. n.

Poppius, 2153; Malacca *Kosmimiris* sp. n.—Poppius, 2154; Formosa *Lygus* sp. n.—Poppius, 2164; India and Ceylon *Bryocorinae* spp. n.

Reuter & Poppius, 2288; *Termtophyliden* spp. n.

Rothschild, 2354; India *Clinocoris* sp. n.

Schmidt, 2459; *Leptataspis* sp. n. Malacca.

Schumacher, 2522; *Cyphostethus* sp. n. China.

Thysanoptera.

Bagnall, 93; India *Panurothrips* sp. n.—Bagnall, 97; India gen. n.

Isoptera.

Bugnion, 486; Ceylan *Entermes* n. sp.

Holmgren, 1277; India sp. n.—Holmgren, 1279; spp. & genn. n.

Embioptera.

Enderlein, 837; spp. n.

Psocoptera.

Enderlein, 851; Orientalische.

Plecoptera.

Klapálek, 1522.—Klapálek, 1524; Formosa gen. n.—Klapálek, 1529; *Kamimuria* 12 spp. n. China, Japan.

Ephemeroptera.

Ulmer, 2840; Formosa.

Paraneuroptera.

Ris, 2314; spp. n.—Ris, 2316; Formosa, Südchina, Tonkin, spp. n.

Orthoptera.

Burr, 441; Formosa *Pyge* sp. n.—Burr, 448; *Anechura* sp. n. Nordinien.—Burr, 449; *Chelisoches* sp. n. Formosa.

Hancock, 1171; *Tetriginae* spp. n.

Thysanura and *Collembola*.

Imms, 1355; India etc., 27 spp. n., gen. n.

Silvestri, 2589; *Machilidarum* species novae.

Asiatic Archipelago.

Java to New Guinea, incl. Philippines.

Insecta, collectively.

Mjöberg, 1855; Mallophagen und Amopluren Java.

Moulton, 1896; Borneo trip, *Pentatomidae* 2 spp. n.

Coleoptera.

Bernhauer, 211; Philippinen *Staphyliniden* spp. n.

Bickhardt, 230; *Histeridae* spp. n.

Blair, 240; *Pyrochroidae* spp. n.

Clavareau, 543; N. Guinea *Aesernia* 2 spp. n.

Felsche, 904; Philippinen *Lucaniden* spp. n.

Fleutiaux, 941; *Eucnemidae* spp. n.—Fleutiaux, 944; *Eucnemidae* spp. n.

Gahan Proc. ent. Soc. London 1911 p. lxxix; Borneo *Daphisia* sp. n.

Gebien, 1024; *Tenebrionidae* spp. n.

Gestro, 1039; Sumatra *Ichthyurus* sp. n.

Grouvelle, 1138; Java *Psammoecus* spp. n.—Grouvelle, 1139; *Aphancephalus* spp. n.

Hagedorn, 1159; New Guinea gen. n. *Scolytidae*.

Heller, 1209; Lamollicornier Deutsch-Neuguinea.—Heller, 1210; N. Guinea, *Cerambycidae* genn. & spp. n.—Heller, 1212; Celebes 2 spp. n., *Chrysochroa* and *Celebia*.—Heller, 1213; Luzon *Discolomidae* gen. n.—Heller, 1214; Philippinische Rüsselkäfer.—Heller, 1215; *Chalcocrates* sp. n. N. Guinea.

Horn, etc., 1295; New Guinea spp. n.

Janson, 1384; Borneo *Cetoniidae* 5 spp. n.

Jordan, 1438; Neue Anthribiden.—
Jordan, 1433; *Anthribidae* 4 spp. n.

Kerremans, 1484; Borneo *Buprestidae* spp. n.

Lewis, 1682; *Histeridae* 3 spp. n.
Java, Batchian and New Guinea.

Möllenkamp, 1861; Borneo *Aegus*
sp. n.—Möllenkamp, 1862; *Lucanidae*.

Moser, 1889; *Holotrichia* spp. n.—

Moser, 1890; *Hopliiden* spp. n.—

Moser, 1892; *Cetoniidae* spp. n.

Moulton, 1900; Bornean *Buprestidae*.

Ohaus, 1985; Djampea *Trigonostomum*
sp. n.—Ohaus, 1992; Ruteliden.

Petri, 2079; Sumatra *Gasteroclisus*
sp. n.

Pic, 2103; Pyrochroides de Java
et de Sumatra.—Pic, 2107; *Idgia* sp. n.
Java.

Pierce, 2135; Philippines gen. n.
Curculionidae.

Prell, 2174; *Dynastini* spp. n.

Raffray, 2221; Java *Batrisocenus*
3 n. spp.

Ritsema, 2318; Borneo *Cryptoderma*
sp. n.—Ritsema, 2319; *Euchitonia*
sp. n. Sumatra.—Ritsema, 2320; Su-
matra *Aulacochilus* sp. n.—Ritsema,
2321; *Metopodontus* sp. n. Sumatra.

Sampson, 2404; Borneo *Crossotarsus*
sp. n.

Sicard, 2578; Philippines *Caria* sp. n.

Spaeth, 2633; Borneo *Cassidae* spp.
n., gen. n.

Vuillet, 2920; *Dasyllinda* sp. n.

Wagner, 2937; sp. n. *Apion* Luzon.

Wasmann, 2962; Paussiden, etc.,
3 spp. n. Java.

Weise, 2989; *Chrysomelidae* spp. n.

Hymenoptera.

Cameron, 479; Two new *Ichneu-*
monidae Aru.—Cameron, 480; Sarā-
wak spp. n.

Crawford, 615; Philippine Is. *Sym-*
piesis sp. n.

Enderlein, 839; *Spathiinae* spp. n.—
Enderlein, 840; Sumatra *Eubadizon*
sp. n.—Enderlein, 841; Sumatra *Bra-*
conidae spp. n.—Enderlein, 855; *Pani-*

scinae gen. n. spp. n.—Enderlein, 859;
Ophioninae gen. n. Sumatra.

Enslin, 872; *Tenthredinoidea* Java.

Forel, 958; Ameisen Java.—Forel,
960; Sumatra genn. n. spp. n. *For-*
micidae.—Forel, 961; neue Ameisen-
formen Sumatra etc.

Friese, 983; Bienenfauna von Neu-
Guinea und Oceanien 2 spp. n.

Krieger, 1573; *Pristomerus* spp. n.

Maidl, 1745; Philippines 4 spp. n.

Meade-Waldo, 1796; New Guinea,
Scaria spp. n.

Moscáry, 1857; Sumbawa *Chrysis*
sp. n.

Morley, 1884; *Ichneumonidae* spp. n.

Perkins, 2061; Amboina, *Abispa*
and *Odynerus*, sp. n., N. Guinea,
Palaeorhiza sp. n.—Perkins, 2063;
Java *Dryinidae* spp. n.

Rohwer, 2338; *Tenthredinidae* spp.
n.

Stitz, 2667; Ameisen Ceram und
Neu-Guinea.

Strand, 2680; *Evania*, *Iphiaulax*,
spp. n.

Turner, 2826; New Guinea spp. n.
Fossoria.—Turner, 2829; Amboina
Dasyproctus sp. n.—Turner, 2831;
New Guinea *Thynnidae* spp. n.

Viehmeyer, 2878; Ameisen Deutsch-
Neuguinea.

Lepidoptera.

Chapman, 512; Borneo *Notarthrinus*
sp. n.

Courvoisier, 609; Javanische Lycae-
niden.

Druce, 761; *Hesperiidae* 4 spp. n.,
gen. n.

Eecke, 814; *Thestias* sp. n.

Friehstorfer, 991; Sula Mangoli
Hypolimnas sp. n.

Fruhstorfer, 998; *Nymphalidae* sub-
spp. n.

Hampson, 1167; *Pyraustinae* spp.
n.—Hampson, 1169; *Noctuidae* spp. n.

Jordan, 1426; *Agaristidae* spp. n.—
Jordan, 1429; New Guinea *Delias*
spp. n.—Jordan, 1430; 3 spp. n.,
Abisara and *Dicallaneura*.—Jordan,

1431; New Guinea *Eubordeta* 4 spp. n.
—Jordan, 1437; *Zygaenidae* spp. n.

Kendrick, 1477; New Guinea *Pyrallidae* spp. n.

Klunder van Gigen, 1537; *Neptis* sp. n.—Klunder van Gijen, 1539; Microlepidoptera von Java und Kei-Inseln 9 spp. n.

Martin, 1771; *Papilio* sp. n. Celebes.—Martin, 1773; *Euploea* Celebes.—Martin, 1774; *Delias* 2 spp. n. Celebes.

Meyrick, 1837; Celebes *Nemotois* sp. n.—Meyrick, 1839; spp. n. genn. n.

Moulton, 1898; Borneo *Lycaenidae* revision.—Moulton, 1899; Borneo *Delias* sp. n.

Prout, 2181; *Hemitheinae* spp. n.

Rebel, 2239; *Ogyris* sp. n. Neu-Guinea.

Rothschild, 2359; Borneo spp. n. *Aegeriidae* and *Syntomidae*.—Rothschild, 2362; *Lithosianae* spp. n.

Rothschild & Jordan, 2364; New Guinea *Macroglossum* sp. n.

Strand, 2675; New Guinea *Charagia* sp. n.

Warren, 2958; *Noctuidae* spp. n.—Warren, 2959; New Guinea *Geometridae* spp. n.

Neuroptera.

Enderlein, 852; *Panorpata* Java 2 spp. n.

Navás, 1915; spp. n.—Navás, 1917; N. Guinea *Chrysocerca* sp. n.—Navás, 1928; N. Guinea *Myrmeleon* sp. n.

Diptera.

Enderlein, 838; *Mycetophilidae* spp. n.—Enderlein, 863; *Tipuliden* spp. n.—Enderlein, 865; Ortalinen und Loxoneurinen.—Enderlein, 866; Dolichopodiden *Psilopodini* spp. n.

Kieffer & Leeuwen, 1512; Java *Cecidomyiidae* spp. n.

Kröber, 1578; *Therevidae* genn. & spp. n.

Malloch, 1749; *Phoridae* spp. n.—Malloch, 1750; Philippines *Limosina* sp. n.

Meijere, 1800; *Puliciphora* neue Arten.

Muir, 1909; *Ascodipteron* sp. n.

Hemiptera.

Ashton, 62; *Maua* sp. n.

Aulmann, 67; *Psylliden* Neu-Guinea, gen. n.

Bergroth, 180; *Coreidae* spp. n.

Breddie, 320; spp. n., *Pentatomidae* and *Oncopeltus*.—Breddie, 322; Borneo *Indra* sp. n.—Breddie, 327; Ceylon *Reduviidae* spp. n.

Distant, 726; Borneo *Haranga* sp. n.—Distant, 729; *Cicadinae* 4 spp. n.—Distant, 730; New Guinea 10 spp. n., genn. n.

Goot, 1088; Zwei neue javanische Aphiden, Verzeichniss der bekannten indischen Blattläuse.

Green, 1109; *Coccidae* Java 2 spp. n.

Horváth, 1300; Java 4 spp. n.—Horváth, 1302; Java, N. Guinea, *Stephanitis* spp. n.—Horváth, 1303; N. Guinea *Caridophthalmus* sp. n.

Lallemand, 1618; New Guinea *Cercopidae* 2 spp. n.

Montandon, 1869; *Naucoridae* 2 spp. n., gen. n.

Moulton, 1897; Borneo list of *Cicadidae* spp. n.

Poppius, 2153; *Capsidae* genn. n.—Poppius, 2156; *Araspus* 4 spp. n. Neu Guinea.—Poppius, 2164; *Bryocorinen* spp. n.

Reuter, 2286; Luzon *Campylomma* sp. n.

Schmidt, 2456; *Maua* sp. n. Sumatra.—Schmidt, 2457; *Bythopsyrna* sp. n. Nias.—Schmidt, 2458; Sumba *Sciuroptera* sp. n.—Schmidt, 2459; Sumatra *Cercopidae* gen. n.

Thysanoptera.

Bagnall, 93; Philippines *Mecynothrips* sp. n.

Karny, 1461; Gallenbewohnende Java.—Karny, 1462; Zwei neue javanische Genera.

Embioptera.

Silvestri, 2588; *Oligotoma* sp. n.

Isoptera.

Holmgren, 1279; spp. & genn. n.

Plecoptera.

Klapálek, 1526; *Nemura* sp. n. Java.

Paraneuroptera.

Laidlaw, 1615; Borneo *Orogomphus* sp. n.—Laidlaw, 1616; Borneo spp. n.—Laidlaw, 1617; Borneo gen. n.

Ris, 2314; spp. n.—Ris, 2315; Java und Krakatau.—Ris, 2316; spp. n. Philippinen.

Orthoptera.

Burr, 447; *Dermaptera* Java and Sumatra.—Burr, 442; Java *Ariscenia* sp. n.—Burr, 449; New Guinea *Anisolabis* sp. n.

Giglio-Tos, 1051; Mantidae spp. n.—Giglio-Tos, 1052; *Pulchriphyllium* n. sp. New Guinea.—Giglio-Tos, 1054; Neu-Guinea, *Aphroptera* sp. n.

Griffini, 1119; Lombok *Gryllacris* sp. n.—Griffini, 1121; Borneo *Gryllacris* sp. n.—Griffini, 1125; *Gryllacridae* of Borneo.

Hancock, 1171; *Saussurella* spp. n.

Jacobson, 1372; *Myrmecophaga americana* Java.

Karny, 1452; genn. & spp. n. *Locustoidea* Neu-Guinea.

Shelford, 2566; New Blattidae New-Guinea.—Shelford, 2570; *Prosoplecta* spp. n.

Thysanura.

Silvestri, 2589; Java gen. n. *Machilidae*.

Protura.

Berlese, 199; sp. n.

Australia and Tasmania.

Insecta, collectively.

Michaelsen, 1844; S.W. Australia.

Dodd, 743; Trip.

Coleoptera.

Blackburn, 237; *Melolonthini* spp. n.

Blair, 240; *Lemodes* 2 spp. n.

Ferguson, 920; *Amycterides*.
(N-9210 j)

Fleutiaux, 941; *Eucnemidae* 2 spp. n.

Goudie, 1090; Water-beetles, Victoria.—Goudie, 1091; North-Western Victoria *Pselaphidae*, *Paussidae*, *Scydmaenidae*.

Grouvelle, 1139; *Aphanocephalus* sp. n.

Lea, 1640; many spp. n.—Lea, 1641; *Rhytiphora* n. sp.—Lea, 1642; New.

Mjöberg, 1853; *Eucurtia* gen. & sp. n. S. Australia, termitophilous.

Moser, 1892; *Chlorobapta* sp. n.

Ohaus, 1988; Anoplognathiden spp. n.

d'Orchymont, 2006; *Neosternolophus* sp. n.

Pic, 2102; Hylophilides.

Schmidt, 2451; *Aphodius* sp. n.

Hymenoptera.

Bingham, 231; spp. n., *Cerceris*, *Gorytes*, *Odynerus*, *Rhynchium*, *Alastor*.

Cameron, 477 & 478; New Parasitic.

Cockerell, 550; 10 spp. n. *Prosopeinae*.—Cockerell, 551, 552, 556, 567; *Apidae* spp. n.—Crawford, 615; *Podagrion* sp. n.

Forel, 961; *Rhopalothrix* sp. n.

Girault, 1065, 1066, 1067; spp. n., genn. n.—Girault, 1072; *Melittobia* Queensland sp. n.

Mocsáry, 1858; *Chrysis*; sp. n.

Morley, 1884; *Ichneumonidae* spp. n.

Perkins, 2061; spp. n., genn. n., *Apidae* and *Fumenidae*.

Turner, 2825; *Anthobosca* sp. n.—

Turner, 2829; *Fossoria* spp. n.—

Turner, 2831; *Thynnidae* spp. n.—

Turner, 2833; *Cerceris*.

Lepidoptera.

Hampson, 1169; *Noctuidae* spp. n.

Meyrick, 742; *Cyclotorna* spp. n.—

Meyrick, 1835; *Gracilariidae* spp. n.—

Meyrick, 1837; *Nemotois* 2 spp. n.—

Meyrick, 1839; spp. n.

Strand, 2671; *Synemon* spp. n.

Turner, 2820; *Cirphis* sp. n.

Warren, 2958; *Noctuidae* spp. n.

Waterhouse & Lyell, 2972; New *Hesperiidae*.

Neuroptera.

Navás, 1917; *Berotha* sp. n.

Petersen, 2073; *Acanthaclisis* sp. n.

Diptera.

Austen, 75; *Pangonia* sp. n.

Hermann, 1225; *Asilidae* spp. n.

Kröber, 1579; *Therevidae* genn. & spp. n.—Kröber, 1579; *Thereviden* 2 genn. n.—Lichtwardt, 1684; *Nycterimyia* sp. n.

Malloch, 1749; *Phoridae* sp. n.

Muir, 1909; *Ascodipteron* sp. n.

Ricardo, 2299; *Asilidae* spp. n.

Summers, 2725; *Tabanidae* spp. n.

Taylor, 2756; *Culicidae* 4 spp. n.

Hemiptera.

Ashton, 57, 58, 59, 60, 61; New *Cicadidae*.

Bergroth, 187; *Pentatomidae* spp. n.

Distant, 726; *Cicadidae* 2 spp. n.

Poppius, 2164; *Bryocorinae* spp. n.

Schouteden, 2480; 2 spp. n. *Deroploa* and *Neomenistheus*.

Isoptera.

Holmgren, 1278; *Porotermes* sp. n.

Paraneuroptera.

Tillyard, 2775; *Diphlebia* life-histories spp. n.

Orthoptera.

Werner, 2999; *Mantodea* und *Phasmodea* gen. n.

North America.

Insecta, collectively.

Faunal zones, map; *Canad. Ent.* 44 p. 129.

Banks; At the *Ceanothus* in Virginia; *Ent. News* 23 p. 102-110.

Cockerell, 570; The Miocene fauna of Florissant.

Gibson, 1048; Canada, captures 1910 & 1911.

Hunter; Some notes on insect abundance in Texas in 1911, *Proc. Ent. Soc. Washington* 14 p. 62-65.

Hunter, Pratt, & Mitchell, 1343; Cactus insects.

Hyslop, 1346; Pacific northwest.

Lehmann, 1660.

Visher, 2902; South Dakota. A partial list of the insects collected.

Slosson; Collecting, Pennsylvania *Ent. News* 23 p. 171-173.

Trotter, 2808a; Galls of N. America, *Andricus* sp. n.

Coleoptera.

Angell, 43; *Necrophorus* spp. n.

Baker, 99; Bernhauer; *Staphylinidae* spp. n. beach at Laguna.

Bernhauer, 204; *Staphylinidae* spp. n.

Blatchley, 242; 4 spp. n., *Coelambus*, *Aphodius*, *Hymenorus* and *Andrimus*.—Blatchley, 243; *Dicaelus* sp. n.

Casey, 491; American *Byrrhidae*.—Casey, 493; *Longicornia* spp. n.

Davis, 667; Distribution of tiger beetles.

Dury, 786; *Symbiotes* spp. n.—Dury, 786a; *Cychrus*, New Mexico sp. n.

Fall, 891; 10 spp. n.—Fall, 892; new *Tetropium*, *Bruchides*.—Fall, 893; *Collops* spp. n.—Fall, 894; Four new myrmecophilous.

Fisher & Kirk; *Cerambycidae* from Harrisburg, with notes; *Ent. News* 23 p. 308-316.

Frost, 989; *Agrilus* spp. n.—Frost, *Canad. Ent.* 44 pp. 304-308; Maine, collecting in.

Kraus, 1563; *Lasconotus* spp. n.

Lameere, 1625; *Prionus* 2 spp. n.

Leng, 1666; Distribution of *Cicindelidae* in eastern North America.—Leng, 1667; Salt meadow beetles.—Leng; *Soronia decumana* Alabama, *J. New York Ent. Soc.* 20 p. 134.

Matheson, 1789; *Haliphidae* spp. n.

Möllenkamp, 1861; *Platycerus* sp. n.

Nunenmacher, 1975; *Coccinellidae* spp. n.

Ohaus, 1991; *Byrsopolis* sp. n.

Olivier, 2002; *Lampyridae* spp. n.

Pierce, 2135; *Curculionidae* spp. n.

Schaeffer, 2421; *Hister* 3 spp. n.—

Schaeffer, 2422; *Collops* spp. n.—

Schaeffer; *Coccinella undecimpunctata* Massachusetts, *Psyche* 19 p. 104.

Swaine, 2740; *Ipidae* 5 spp. n.

Wagner, 2936; *Apion* spp. n.

Walton, 2952; *Symbiotes* sp. n.

Wellman, 2996; *Lyttidae* spp. n.

Westcott, 3003; *Anatis* sp. n.

† Wickham, 3116; Fossil, Florissant.

Wickham & Wolcott, 3117; *Cleridae*.

Wolcott, 3218; *Saprinus* sp. n. and *Bruchus* sp. n.

Hymenoptera.

Banks, 109; *Cerceris* spp. n.—
Banks, 110; *Fossoria* spp. n.

Bartlett, 140; North American *Scoliinae*.

Cockerell, 556; *Epeolus* sp. n.—
Cockerell, 559; *Coelioxys* 5 spp. n.—
Cockerell, 560; *Chelynia* sp. n.—
Cockerell, 562; Canada 4 spp. n., *Megachile* and *Osmia*.—Cockerell, 574; *Eucerinae* list of spp.

Crawford, 614; 2 spp. n., *Perdita* and *Phileremulus*.—Crawford, 616; *Chalcidae* spp. n.

Davidson, 663; *Bombus* spp., California.

Fernald, 924; *Chlorion* spp. n.

Fullaway, 1010; Gall-fly parasites California, spp. n.

Gahan, 1013; Two new genera parasitic Hymenoptera.

Girault, 1057; U.S. and Canada, *Chalcididae* spp. n. etc.—Girault, 1058; *Trichaporus* sp. n.—Girault, 1059; *Aphelinoidea* sp. n.—Girault, 1071; *Stephanodes* sp. n.—Girault, 1074; *Polynema* sp. n.—Girault, *Canad. Ent.* 44 p. 88; *Anaphes pratensis*.

Hooker, 1286; *Ophionini* spp. n.

Leonard, 1669; Honey ants Point Loma.

(N-9210 j)

Macgillivray, 1739; *Xyelidae* and *Lydidae* spp. n.

Matheson & Crosby, 1790; *Chalcidae* gen. n.

Mitchell & Pierce, 1848; Ants Victoria county, Texas.

Morley, 1884; *Ichneumonidae* spp. n.

Rohwer, 2334; *Chalastogastra* Boulder county.—Rohwer, 2336; *Eumenidae* and *Fossoria*, spp. n.—
Rohwer, 2337; *Oryssus* spp. n.—
Rohwer, 2338; *Tenthredinidae* spp. n.—Rohwer, *Canad. Ent.* 44 p. 276; Canada, *Tenthredinidae* short list.

Strickland, 2705; *Pezomachinae* spp. n.

Trotter, 2808a; *Andricus* sp. n.

Viereck, 2881; *Braconidae* and *Ichneumonidae* spp. n.—Viereck, 2882; *Braconidae* and *Ichneumonidae* spp. n.—Viereck, 2883; spp. n., *Ichneumonidae* and *Braconidae*.—Wheeler, 3008; *Pseudococcus* sp. n.—Wheeler, 3009; *Myrmecocystus* sp. n.

Lepidoptera.

Barnes & McDunnough, 119; *Noctuidae* spp. n.—Barnes & McDunnough, 120; *Noctuidae* 3 spp. n.—Barnes & McDunnough, 122; Revision of the *Megathymidae*.—Barnes & McDunnough, 123; Illustrations of rare and typical.—Barnes & McDunnough, 124; Fifty new species and varieties.—Barnes & McDunnough, 125; *Alpheias* spp. n.—Barnes & McDunnough, 127; *Givira* sp. n.—Barnes & McDunnough, 128; New *Microlepidoptera*.

Braun, 312; *Nepticula* spp. n.

Busck, 451; *Microlepidoptera* spp. n. Laguna beach.—Busck, 452; *Epicallima* sp. n.—Busck, 454; *Epicallima* sp. n.—Busck, 456; *Acrolophus* spp. n.

Dyar, 790; Laguna beach, *Pyralidae* spp. n.—Dyar, 793; *Noctuidae* 3 novelties.—Dyar, 794; *Noctuidae* 2 spp. n.

Grinnell, 1129; Additions and corrections to the list of southern California.

Grossbeck, 1134; *Geometridae* spp. n.

Hampson, 1167; Arizona *Glyphodes* sp. n.

- Knetzler; St. Louis; Ent. News 23 p. 203-207.
- Meyrick, 1839; *Heliodines* sp. n.
- Newcomer, Ent. News 23 p. 81; Notes on western U.S. Lepidoptera.
- Pearsall, 2052; *Geometridae* spp. n.—Pearsall, 2053; *Eupithecia* sp. n.
- Perrin & Russell, 2067; Nova Scotia catalogue.
- Prout, 2181; *Hemitheinae* spp. n.
- Swett, 2743; *Hydriomena* 2 spp. n.
- Watson & Coleman; *Iphiclides ajax* and *Eurymus interior* from the summit of Mt. Marcy; Bull. Brooklyn Ent. Soc. 8 p. 4-6.
- Winn, Canad. Ent. 44 pp. 213-216; Yukon list.
- Wormsbacher, 3225; Catocalen Vereinigten Staaten.
- Wright, 3227; *Rhopalocera*.
- Trichoptera.*
- Hill-Griffin, 1251; New, Oregon.
- Neuroptera.*
- Banks, 112; *Mantispilla* spp. n.
- †Cockerell, 563; *Raphidia*, Colorado Miocène.
- Navás, 1918; *Malacomyza*, *Chrysopa*, *Symphorobius*, spp. n.
- Petersen, 2073; *Drepanicus* sp. n.
- Diptera.*
- Aldrich, 15; *Ephydra* sp. n.
- Alexander, 20; Fulton county *Tipulidae*.—Alexander, 23; *Brachypremna* sp. n.—Alexander, 24; *Adelphomyia* 2 spp. n.—Alexander, 26; New *Tipulidae*.
- Becker, 155; *Chloropidae*, Monographie, gen. & spp. n.
- Cole, 579; *Diptera* Laguna beach.
- Cresson, 620; *Pipunculus* spp. n.
- Doane, 733; *Tipula* spp. n.
- Dyar, 791; Distribution of mosquitoes.
- Felt, 908; *Diarthronomyia* sp. n. California.—Felt, 911; *Cecidomyiidae* spp. n.—Felt, 912; *Arthrocnodax* sp. n.—Felt, 913; *Cecidomyiidae* spp. n.—Felt, 914; *Cecidomyiidae* spp. n.—Felt, 915; *Itonididae* spp. n.
- Hermann, 1225; *Asilidae* spp. n.
- Hine, 1254; *Tabanidae* 5 spp. n.
- Hooker; *Cecidomyia foliora*; Ent. News Philadelphia 23 p. 472.
- Johannsen, 1404; *Mycetophilidae*.—†Johannsen, 1407; *Mycomya* sp. n. Colorado Mioceno.
- Johnson, 1412; spp. n.—Johnson, 1413; notes.—Johnson, 1414; *Chrysopilus* sp. n.—Johnson, 1415; spp. n. *Mydidae* and *Asilidae*.—Johnson, 1416; *Haematopota* sp. n.
- Kröber, 1581; Thereviden.
- Malloch, 1748; *Pipunculidae* spp. n.—Malloch, 1749; *Phoridae* spp. n.—Malloch, 1750; spp. n.
- Malloch & Knab, 1753; *Limosina*.
- Smith, 2616; spp. n.
- Townsend, 2791; *Tachinidae* spp. n.
- Walton, 2951; 2 spp. n., *Agromyza* and *Miersdon*.
- Welch, 2995; *Psychoda* sp. n.
- Hemiptera.*
- Abbott, 1; gen. n. *Corixidae*.
- Banks, 111; *Ploiariodes* sp. n.
- Barber, 115; Distribution of Hemiptera.
- †Cockerell, 558; *Fulgoridae* gen. n.
- Cockerell, 561; *Phenacoccus* sp. n.
- Davidson, 664; *Aphidae*, spp. n. California.
- Davis, 665; *Aphididae* of Nebraska.—Davis, 666; *Cicada* sp. n.—Davis, 670; *Pseliopus* sp. n.
- Essig, 879; *Aphididae* of southern California.
- Gee, 1030; list, South Carolina.
- Herrick, 1230; Mississippi, notes.
- Horváth, 1298; Faunes hémiptérologiques de l'Europe et de l'Amérique du Nord.—Horváth, 1301; *Cimicidae*.
- Montandon, 1871; *Hydrocorisae* 5 spp. n.
- Olson, 2005; Annotated list Long Island.

Patch, 2039; *Aphidae* spp. n.—
Patch, 2041; *Psyllidae* spp. n.—
Patch, 2044; *Livia* sp. n.

Phillips & Davis, 2092; *Toxoptera*
sp. n.

Reuter, 2286; 2 spp. n., *Plagiog-
nathus* and *Microphyllellus*.

Reuter & Poppius, 2288; *Termito-
phylidae* gen. n.

Sasscer, 2417; *Fiorinia*.

Torre Bueno, 2785; *Corizus* sp. n.—
Torre Bueno, Ent. News 23 pp. 316-318;
Nezara viridula.—Torre Bueno; Records
of Heteroptera from Brownsville, Texas,
T.c. p. 120-122.—Bueno, Canad. Ent. 44
pp. 209-213; Long island, long list.

Tothill, 2786; *Winthemia* sp. n.

Van Duzee, 2852; spp. n.—Van
Duzee, Ottawa Natural. 26 pp. 68-70;
Canada, trip.

Wilson, 3211; spp. n.—Wilson,
3212; *Lachnus* sp. n.

Zimmer, 3253; The *Pentatomidae*
of Nebraska.

Thysanoptera.

Hood, 1281; 2 spp. n.—Hood, 1282;
n. gen. 3 spp. n.—Hood, 1283;
spp. n.—Hood, 1284; *Phloeothripidae*
3 spp. n.—Hood, 1285; New gen. &
spp.

Jones, 1425; California and Georgia
spp. n.

Parrott; *Euthrips pyri* in New York.

Russell; Notes; Washington Proc.
Ent. Soc. 14 p. 128.

Lipoptera.

Kellogg & Mann, 1474; From Alaskan
birds.

McGregor, 1743; *Colpocephalum* sp.
n.

Paine, 2030; Mallophaga from birds
at Laguna beach.—Paine, 2031; *Hetero-
doxus* sp. n.—Paine, 2032; *Tricho-
dectes* spp. n.

Plecoptera.

Klapálek, 1522; spp. n.

Paraneuroptera.

Root, Canad. Ent. 44 p. 208; Ontario
list.

Walker, 2944; Canada list, *Coen-
agrion* sp. n.

Williamson, 3205; *Argia* n. sp.—
Williamson; Indiana *Somatochlora*;
Ent. News 23 pp. 152-155.

Wilson, 3207; Cumberland valley
Kentucky and Tennessee.

Orthoptera.

Davis, 668; *Belocephalus* 3 spp. n.
Florida.—Davis; *Dendrotettix quercus*
New Jersey; Ent. News Philadelphia
23 1912 p. 2.

Fox, 969; Two *Xiphidium* spp. n.

Rehn, 2244; Santa Rita mountains,
Arizona.—Rehn & Hebard, 2247; *Gryl-
lidae* gen. n.—Rehn & Hebard, 2248;
Southern Florida, *Atlanticus* sp. n.

Walker, Canad. Ent. 44 pp. 171 &
172; The *Blattidae* of Ontario.

Thysanura.

Silvestri, 2590; *Campodeidae* spp. n.

Central America.

Coleoptera.

Casey, 491; Panama *Byrrhidae*
gen. n.—Casey, 492; Revision, *Asidini*.
—Casey, 493; *Longicornia* spp. n.

Dupuis, 779; *Omophron* 2 spp. n.

Fleutiaux, 941; *Eucnemidae* spp. n.

Kraus, 1563; *Lasconotus* spp. n.
Mexico.

Lesne, 1677; *Lyctides nouveaux du*
Mexique.

Ohäus, 1991; *Rutelini* spp. n.

Sicard, 2575; *Harmonia, Exoplectra*,
spp. n.

Wagner, 2929 & 2930 *Apion* spp. n.

Wickham & Wolcott, 3117; Notes,
Cleridae.

Hymenoptera.

Bartlett, 140; Mexico *Scolia* sp. n.

Cameron, 475; Costa Rica *Megacan-
thopus* and *Odynerus*, spp. n.

Cockerell, 553; *Apidae* spp. n.—
Cockerell, 554; *Apidae* spp. n.—

Cockerell, 555; *Apidae* spp. n.—
Cockerell, 564; *Eustypira* sp. n.
Guatemala.—Cockerell, 565; *Apidae*
spp. n.—Cockerell, 572; Guatemala
Apidae spp. n.

Cockerell, W. P., 575; Guatemala
Apidae short list.

Crawford, 616; *Chalcidae* spp. n.

Enderlein, 840; Brit. Honduras
Eubadizon sp. n.—Enderlein, 655;
Mexico *Paniscus* spp. n.

Fernald, 924; *Chlorion* spp. n.

Forel, 948; Nicaragua *Eciton* sp. n.—
Forel, 950; *Myrmicinae*.—Forel, 953;
Azteca spp. n.

Hooker, 1286; *Ophionini* spp. n.

Maidl, 1745; *Xylocopa* sp. n.
Mexiko.

Mocsáry, 1858; *Chrysis* spp. n.

Morley, 1884; *Ichneumonidae* spp. n.

Perkins, 2062; *Chalcidae* spp. n.

Rohwer, 2336; *Fossoria* spp. n.—
Rohwer, 2338; *Tenthredinidae*, Mexico
spp. n.—Rohwer, 2339; Panama,
Tenthredinidae genn. n.

Viereck, 2880; Panama gen. n.
Braconidae: 2883; *Parasitica* spp. n.

Zavattari, 3241; *Eumenidae* spp. n.

Lepidoptera.

Busck, 455; New *Microlepidoptera*
Mexico.—Busck, 457; New genera
and species of *Microlepidoptera*,
Panama.

Davis & Gibbs P. ent. Soc. London
1912 pp. xlv-xlviii; Honduras and
Guatemala *Rhopalocera* list.

Draudt, 758; *Taygetis* sp. n. Mexiko.

Dyar, 789; Mexico spp. n.—Dyar,
795; chiefly Mexico, many spp. n.

Ehrmann, 822; Honduras *Papilio*
sp. n.

Hampson, 1167; *Pyraustinae* spp. n.
—Hampson, 1169; *Noctuidae* spp. n.

Rothschild, 2361; *Syntomidae* spp. n.
—Rothschild, 2362; *Lithosianae* 2
spp. n.

Schaus, 2425 & 2426; Costa Rica
many spp. n.

Walsingham, 2950; *Tineidae* genn.
and spp. n.

Trichoptera.

Felber, 903; *Helicopsyche* Mexico.

Neuroptera.

Navás, 1915; Guatemala *Episper-*
ches sp. n.—Navás, 1928; Panama
Balaga sp. n.

Diptera.

Alexander, 16; *Tipulinae* spp. n.—
Alexander, 17; *Rhipidia* spp. n.—
Alexander, 19; *Furcomyia* spp. n.—
Alexander, 21; Costa Rica. *Mongoma*
sp. n.

Becker, 155; *Chloropidae*, Mono-
graphie, gen. et spp. nn.

Enderlein, 838; *Mycetophilidae* spp. n.
—Enderlein, 853; Costa Rica *Aphio-*
chaeta sp. n.—Enderlein, 861; Costa
Rica *Psectrosiara* sp. n.—Enderlein,
863; *Tipulidae* spp. n.—Enderlein,
866; Costa Rica *Psilopus* sp. n.

Felt, 913 & 914; *Cecidomyiidae* sp. n.

Knab, 1544; *Anisopus* spp. n.

Knab & Malloch, 1545; *Limosina*
sp. n.

Kröber, 1581; Mexico *Therevidae*
spp. n.

Malloch, 1748; Nicaragua *Pipun-*
culus sp. n.—Malloch, 1749; *Phoridae*
spp. n.—Malloch, 1751; Panama,
spp. n.—Malloch, 1752; *Pipunculus*
spp. n.

Townsend, 2787; Lower California
short annotated list.

Hemiptera.

Montandon, 1871; Mexico *Ambry-*
sus sp. n.

Schmidt, 2457; Costa Rica *Gaetulia*
sp. n.

Lipoptera.

Kellogg & Mann, 1475; Islands off
Lower California.

Embioptera.

Enderlein, 837; *Oligotoma* sp. n.

Paraneuroptera.

Calvert, 465; *Erpetogomphus* sp. n.
Costa Rica.

Orthoptera.

Burr, 449; *Spongovostox* sp. n. Panama.

Rehn & Hebard, 2247; *Mogoplistii*, Panama, spp. n.

Thysanura.

Silvestri, 2590; Mexico *Campodeidae*, spp. n.—Silvestri, 2595; *Thysanura*, Mexico 23 spp., 2 spp. n.

Antilles.

Incl. Bermudas; excl. Trinidad.

Coleoptera.

Arrow, 54; *Phytalus* sp. n.

Bickhardt, 230; Barbados *Acritus* sp. n.

Casey, 493; Cuba *Stenodontes* sp. n.

Olivier, 1998; *Photinus* sp. n.—Olivier, 2003; *Lampyrides*.

Hymenoptera.

Bartlett, 140; Cuba *Scolia* sp. n.

Cockerell, 550; S. Domingo *Centris* sp. n.—Cockerell, 556; Jamaica *Apidae* spp. n.

Enderlein, 855; Cuba *Paniscus* sp. n.

Forel, 948; *Formicidae*.—Forel, 956; Cuba *Pheidole* sp. n.

Hooker, 1286; *Ophionini* spp. n.

Morley, 1884; *Ichneumonidae* spp. n.

Zavattari, 3241; *Eumeniden*, Cuba spp. n.

Lepidoptera.

Hampson, 1167; *Pyraustinae* spp. n.—Hampson, 1169; *Noctuidae* spp. n.

Prout, 2181; Bahamas *Racheospila* sp. n., Antigua *Synchlora* sp. n.

Rothschild, 2361; *Syntomidae* spp. n.

Skinner, 2608; Cuba *Mesosemia* sp. n.

Walsingham, 2950; Jamaica gen. n. *Oecophoridae*.

Diptera.

Alexander, 17; *Rhipidia* spp. n.—Alexander, 19; Cuba *Furcomyia* sp. n.—Alexander, 25; Porto Rico gen. n. *Tipulidae*.

Felt, 907; St. Vincent *Lasiopteryx* sp. n.—Felt, 909; *Cecidomyiidae* spp. n.—Felt, 910; *Ulella* sp. n. St. Vincent.

Hemiptera.

Back, 88; Cuba *Aleyrodes* 2 spp. n.

Distant, 724; Cuba gen. n. *Cicadidae*.

Reuter, 2286; Porto Rico *Pycnoderes* sp. n.

Reuter & Poppius, 2288; Jamaica *Termatophyliden* sp. n.

Scott, 2536; Dominica *Microvelia* sp. n.

Van Duzee, 2852; Jamaica *Xestocephalus* sp. n.

Paraneuroptera.

Wilson, 3206; Jamaica.

Orthoptera.

Caudell, 500; *Gonatista* sp. n. San Domingo.

Rehn & Hebard, 2247; *Gryllidae* spp. n.

South America, including Trinidad.

Insecta, collectively.

Navás, 1918; *Ephemeroptera*, *Psoptera*, *Neuroptera*, spp. n.

Scott, 2536; Trinidad bromeliaecolous insects.

Coleoptera.

Bernhauer, 207; *Staphyliniden*, spp. n.—Bernhauer, 210; *Staphyliniden* 3 n. genn. 20 spp. n.—Bernhauer, 212; *Staphyliniden* spp. n., gen. n.

Bickhardt, 230; *Hypobletus* sp. n.

Borchmann, 277; Neue Hetercmeren, Argentinien.

Bourgeois, 301; Bahia *Gymnetis* sp. n.

Bowditch, 305; *Diabrotica* spp. n.

Brêthes, 334; *Eustilbus* sp. n.—
Brêthes, 335; *Pandeleiteius* sp. n.

Bruch, 410; *Oxycorynus* sp. n.—
Bruch, 411; Argentina *Cerambycidae*
spp. n.—Bruch, 412; Argentina *Ceram-*
bycidae catalogue.

Casey, 492; Revision, *Asidini*.—
Casey, 493; *Cerambycidae*, spp. n.

Flautiaux, 941; *Eucnemidae* spp. n.—
Flautiaux, 943; *Elateridae*, gen. n.

Gebien, 1024; *Tenebrionidae* spp. n.

Heller, 1208; *Metamasiopsis*, spp. n.

Kuntzen, 1593; *Dercylus*, spp. n.

Lesne, 1676; *Aseutotheca*, sp. n.

Lewis, 1682; *Histeridae* 3 spp. n.

Mann; Brazil, List, *Histeridae* and
Buprestidae.

Möllenkamp, 1862; *Lucanidae* spp. n.

Moser, 1892; *Gymnetis* sp. n.

Ohaus, 1984; *Aclopus* sp. n.—Ohaus,
1986; *Hoplognathus* n. sp.—Ohaus,
1991; *Ruteliden* spp. n.

Nunemacher, 1976; *Coccinellidae*,
Brazil 2 spp. n.

Olivier, 1997; *Diaphanes* and *Luci-*
dota sp. n.—Olivier, 2002; *Lampyridae*
spp. n.

Pic, 2095; spp. n., *Malacodermidae*
Anobiidae and *Anthicidae*.—Pic, 2099;
Discodon spp. n.—Pic, 2115; Deux
nouveaux *Discodon*.

Prell, 2172; *Heterogomphus* spp. n.—
Prell, 2174; *Dynastinen* spp. n.—Prell,
2175; *Dynastinen* gen. n.

Raffray, 2220; *Prelaphidae* spp. n.

Rothkirch & Panten, 2351; Neue
Stigmoderidae.

Sampson, 2404; Trinidad, 2 spp. n.,
Amphicranus and *Xyleborus*.

Schaeffer, 2423; Brazil spp. n.

Schmidt, 2451; *Coprini* spp. n.

Sicard, 2575; *Coccinellides* spp. n.—

Sicard, 2576; *Coccinellides* Bolivie
spp. n.

Spaeth, 2634; Neue *Cassiden*.

Szombáthy, 2751a; *Semiotus* spp. n.

Wagner, 2929, 2936, 2930; *Apion*
spp. n.

Wasmann, 2967; *Staphylinidae*
gen. n.

Waterhouse, 2970; *Conognatha*
spp. n.

Wolcott, 3219; *Cleridae* Brazil,
spp. n.

Hymenoptera.

Alexander, 16; *Tipulinae* spp. n.

Bertoni, 215; 2 spp. n., *Xanthog-*
nalos and *Trimeria*.

Brues, 413; Brazilian *Ichneumoni-*
dae and *Braconidae* spp. n.

Cameron, 475 & 476; *Aculeata*
many spp. n.

Cockerell, 556; Peru *Megachile* sp. n.—
Cockerell, 568; Peru 2 spp. n.,
Megachile and *Xenoglossa*.—Cockerell,
571; Brazil *Apidae* spp. n.

Crawford, 616; *Chalcidae* spp. n.

Du Buysson, 775; *Oryssus* sp. n.
Chrysidae gen. n.

Ducke, 776; Die natürlichen Bien-
engenera, spp. n.

Enderlein, 839; *Spathiinen* spp. n.—
Enderlein, 840; Colombia *Eubadizon*
sp. n.—Enderlein, 855; *Paniscinae*
spp. n.—Enderlein, 859; *Ophioninae*
spp. n.

Forel, 948; *Formicidae* spp. n.—
Forel, 950; *Myrmicinae* spp. n.—
Forel, 951; *Pheidole* and *Cremasto-*
gaster spp. n.—Forel, 952; *Myrmi-*
cinæ spp. n.—Forel, 953; *Delicho-*
derinae spp. n.—Forel, 954; *Campono-*
tinae spp. n.

Friese, 980; *Apidae* spp. n.—Friese,
984; Argentinien *Colletes* 2 spp. n.

Girault, 1056; Paraguay *Chalcidi-*
dae spp. n.

Hooker, 1286; *Ophionini* spp. n.

Jörgensen, 1400; *Chrysididae* and
Aculeata enumeration.—Jörgensen,
1401; spp. n. Apiden Mendoza.—
Jörgensen, 1402; Berichtigungen und
Ergänzungen Apiden.

Jörgensen, Schrottky, 1403; *Megalo-*
pta sp. n.

Kieffer, 1506; Chile and Patagonia
Proctotrypidae 2 spp. n.

- Maidl, 1745; *Xylocopa* spp. n.
 Mocsáry, 1858; *Chrysis* spp. n.
 Morley, 1884; *Ichneumonidae* spp. n.
 Rohwer, 2335; Brazil *Tenthredinidae* gen. n.—Rohwer, 2336; *Fossoria* spp. n.
 Santschi, 2412; *Carebara* sp. n.—Santschi, 2415; Fourmis.
 Schulz, 2504; *Hoplitalysia* sp. n.
 Strand, 2680; *Evania*, *Macrojoppa* spp. n.—Strand, 2703; Beiträge zur Kenntnis der *Hymenopteren* Paraguay Biologica bes. Nester.
 Turner, 2825; *Elis* 2 spp. n.
 Viereck, 2882; *Ichneumonidae* and *Braconidae* spp. n.—Viereck, 2883; Trinidad *Chelonus* sp. n.
 Zavattari, 3241; Neotropischen Eumeniden.
- Lepidoptera*.
- Brabant, 306; *Pseudacontia* sp. n.
 Dognin, 749; Macro-Heterocera and *Pyralidae* many spp. n.—Dognin, 750; Hétérocères nouveaux.
 Druce, 763; *Thecla* and *Hesperiidae* spp. n.—Druce, 765; Peru *Ophisma* sp. n.—Druce, 766; Peru *Atteria* sp. n.
 Dyar, 974; Trinidad *Noctuidae* gen. n.—Dyar, 795; Brazil *Semyra* sp. n.
 Fassl, 898; Neue *Heliconius*-formen, Kolumbien.—Fassl, 899; *Papilio* sp. n.
 Fruhstorfer, 993; Nymphaliden.—Fruhstorfer, 996; Pieriden.
 Hampson, 1167; *Pyraustinae* many spp. n.—Hampson, 1169; *Noctuidae* spp. n.
 Jones, 1442; *Thecla* spp. n.—Jones, 1423; Brazil spp. n.
 Jordan, 1893; *Protoparce* sp. n.—Jordan, 1432; *Nyceryx* sp. n.
 Lathy & Rosenberg, 1636; *Catantacta* spp. n.
 Lehr, 1661; Schmetterlingsfauna der Pampas.
 Meyrick, 1838; *Microlep.* 97 spp. n., 9 genn. n.—Meyrick, 1839; spp. n.
 Neustetter, 1950; Neue *Heliconius*.
 Prout, 2181; *Hemitheinae* spp. n.
 Rébel, 2239; *Callithea* sp. n. Peru.
 Rothschild, 2361; *Syntomidae* spp. n.—Rothschild, 2362; *Lithosianae* spp. n.
 Schaus, 2427; *Mesoscia* sp. n.—Schaus, 2428; *Noctuidae* spp. n. French Guiana.
 Schrottky, 2493; Zwei Syntomiden Argentinien.
 Strand, 2675 & 2686; spp. n.—Strand, 2698; Neue Satyriden Roraima.
 Walsingham, 2950; *Tineidae* spp. n.
 Zerny, 3247; *Heterocera* spp. n.
- Trichoptera*.
- Martynov, 1781; Peru spp. n.
- Neuroptera*.
- Navás, 1915; spp. n.—Navás, 1916; gen. n. *Myrmeleonidae*.—Navás, 1917; *Allochrysa* sp. n.—Navás, 1919; *Ascalaphidae*.—Navás, 1920; Brazil gen. n. *Myrmeleonidae*.
 Petersen, 2073; 2 spp. n.
- Diptera*.
- Alexander, 17; *Rhiphidiidae* spp. n.—Alexander, 19; *Furcomyia* sp. n.—Alexander, 22; *Gonomyia* sp. n.
 Becker, 155; *Chloropidae*, Monographie, gen. et spp. n.
 Brêthes, 337; *Chironomidae* gen. n.
 Cresson, 619; *Acalyptratae* spp. n.
 Edwards, 807; Trinidad *Lygistorrhina* sp. n.
 Enderlein, 838; *Mycetophilidae* spp. n.—Enderlein, 842; Richardiinen, n. gg. et spp.—Enderlein, 847; Phoriden Süd-Brasiliens.—Enderlein, 848; *Pterocallinae* gen. n.—Enderlein, 853; *Phoridae* spp. n.—Enderlein, 854; Neue Chironomiden Brasilien.—Enderlein, 861.—Enderlein, 862; *Pantophthalmidae* spp. n.—Enderlein, 866; *Dolichopidae* spp. n.—Enderlein, 863; *Tipulidae* genn. n.
 Felt, 914; *Karschomyia* sp. n. Peru.
 Hendel, 1220; *Acalyptratae* 5 spp. n.
 Hermann, 1225; Chile, Peru and Bolivia, genn. et spp. n. *Asilidae*.
 Lahille, 1614; *Anopheles* sp. n.
 Lutz & Neiva, 1725; *Phlebotomus* spp. n.

Malloch, 1750; *Simulium* spp. n.

Summers, 2726; *Phlebotomus* sp. n.

Surcouf & Gonzalez-Rincones, 2734; Diptères piqueurs et suceurs de sang Vénézuéla.

Townsend, 2794; Muscoid from the Andean and Pacific coast.

Aphaniptera.

Enderlein, 860; gen. n.

Hemiptera.

Bergroth, 180; Argentina *Coreidae* spp. n.—Bergroth, 182; Argentina gen. n. *Myodochidae*.

Bredden, 323; *Calamocoris*.—Bredden, 325; Pentatomiden 2 genn. n.—Bredden, 326; spp. n. *Oncodochilus*, *Mormidea* and *Spiloslethus*.

Brêthes, 338; gen. n.

Distant, 724; *Cicadidae* spp. n.

Goot, 1085; *Aphis* sp. n. Chile.

Horváth, 1301; *Cimicidae*.

Lallemand, 1618; *Cercopidae* spp. n.

Montandon, 1869; Brazil *Limnecoris* sp. n.—Montandon, 1870; 2 spp. n., *Ranatra* and *Curicta*.

Petersen, 2071; New Ephemerida from Argentine.

Poppius, 2153; *Capsidae* gen. n.

Reuter, 2286; spp. n.

Schumacher, 2517; Neue Asopinen.

Thysanoptera.

Bagnall, 93; *Docessissophothrips* sp. n.

Karny, 1460; *Liothrips* sp. n.—Karny, 1463; Argentina *Hoplothrips* sp. n.

Embioptera.

Enderlein, 837; genn. n.

Lipoptera.

Paine, 2032; *Gyropus* sp. n.

Psocoptera.

Townsend, 2788; *Vulturops* gen. n.

Paraneuroptera.

Ris, 2313; *Gomphinae* spp. n.—Ris, 2314; spp. n.

Orthoptera.

Borelli, 287; *Forficulidae* gen. n.—Borelli, 288; Argentina *Doru* sp. n.

Bruner, 421; *Acridoidea*, many spp. n.

Burr, 441; *Psalis* sp. n.—Burr, 448; *Forficulidae* 4 spp. n.—Burr, 449; *Spongovostox* spp. n.

Caudell, 499; *Epigrypa* sp. n. Peru.

Chopard, 538; Guyane française spp. n., *Mantidae* and *Phasmidae*.

Gahan, 1014; Amazons *Prisopus* sp. n.

Griffini, 1126; Patagonia *Heteromallus* sp. n.

Shelford, 2571; spp. n.—Shelford, 2573; *Blattidae* Central Peru.

III.—SYSTEMATIC.

Fourth list of generic names for the "Official list of zoological names," provided for by the Graz Congress, STILES Ent. News 23 pp. 229-232 & Wien ent. Zeit. 31 pp. 157-158.

Einige Gedanken über Typen, Stammformen Varietäten, Subspezies, Rassen und Aberrationen, COURVOISIER Ent. Mitt. Berlin 1 pp. 354-363.

Ueber den eingebürgerten Missbrauch bei Benützung von entomologischen Typen, REITTER Wien ent. Zeit. 31 pp. 21-26.

Ist es für die Wissenschaft wirklich von Interesse, dass alle Formen der Insekten beschrieben und lateinisch benannt werden? EMERY Ent. Mitt. Berlin 1 pp. 161-163.

Beiträge zur Kenntnis der Proturen. Anamerentoma und Holomerentoma, eine neue Einteilung der Hexapoden; PRELL Zool. Anz. Leipzig 39 pp. 357-365.

List of insects named and described by Fabricius in the Glasgow collection, KERR Glasgow Nat. 2 1910 pp. 101-111.

Insects and spiders in Spanish moss, some additional data, ROSENFELD J. Econ. Ent. Concord N.H. 5 pp. 338-339.

COLEOPTERA.

Coleopterorum, Catalogus, Pars 37-47, *vide* SCHENKLING in Titles.

Introduction to Coleopterology, FOWLER pp. 1-218 Faun. Brit. Ind. Cicind.

The male genitalia of *Coleoptera*, SHARP & MUIR Tr. ent. Soc. London 1912 pp. 477-642 pls. xlii-lxxviii.

Sur la morphologie et la structure histologique des tubes de Malpighi des Insectes et principalement des Coléoptères, BORDAS Paris C. R. ass. anatomistes 14 pp. 69-71.

Corrections to the european Catalogue 1906, FUENTE Bol. Soc. Aragon. 11 pp. 44 etc. etc.

Notes synonymiques, espèces de G. A. Olivier, OLIVIER *Insecta* 2 pp. 37-42.

Analecta coleopterologica xvii, SEMENOV Rev. russ. ent. 12 pp. 497-502.

Verzeichnis der Käfer Vorarlbergs, MÜLLER Jahrber. Ver. Bregenz 48 pp. 1-203.

Erster Beitrag zur Kenntnis der Coleopteren-Fauna des Karstgebietes bei Fiume, MEYER Bol. Soc. Adriat. 26 2 pp. 81-95.

Coleopteren des Gebiets der Don'sehen Kosaken (Russ.), KIERITZKY Rev. russ. ent. 12 pp. 81-94.

Coleopteren von Mittelasien (Russ. + deutsch. Rés.), SUMAKOV Rev. russ. ent. 12 pp. 423-433.

Catalogue of Australian Coleoptera described by Blackburn, LEA Tr. R. Soc. S. Australia 36 pp. xiii-xl.

Käferlarven und Käferpuppen aus Deutsch-Ost-afrika. [Forts.], EICHELBAUM Zs. wiss. Insektenbiol. Berlin 8 1912 pp. 266-268 320-323 374-376.

Coleoptera bred from cow manure, PRATT pp. 183 & 184 Canad. Ent. 44.

CICINDELIDÆ.

The geographical distribution of *Cicindelidae* in eastern North America, LENG J. New York Ent. Soc. 20 pp. 1-17.

Notes on the distribution of several species of tiger beetles, DAVIS J. New York Ent. Soc. 20 pp. 17-20.

Cicindeliden der Krim (Russ.), PLIGINSKIJ Bull. Soc. nat. Crimée 1 pp. 112-113.

Cicindelidae der Umgebung von Orenburg (Russ.), VORONCOVSKIJ Izv. Orenb. otd. russ. geogr. Obšč. 23 pp. 115-116.

Cicindelinae, HORN Wiss. Ergebnisse D. Zentral-Afrika-Exp. 3 12 pp. 461-467.

The *Cicindelidae* of India, FOWLER pp. 218-443 Faun. Brit. Ind. Cicind.

Cicindelogisches Pêlo-Mêle, SCHILDER Ent. Bl. Berlin 8 pp. 235-237.

Biologische Notizen zu unseren Cicindelinen, SCHILDER Ent. Bl. 8 pp. 13-17 & 53-57.

Male genitalia, SHARP & MUIR p. 486 pl. xlvii Tr. ent. Soc. London 1912.

Contribution à l'étude des larves des Cicindélides, HOULBERT *Insecta* Rennes 2 1912 pp. 230-241.

Cicindela germanica var. n., PASQUET Bul. soc. sci. méd. Rennes 18 1909 p. 165.—*C. hybrida* f. n. *pseudomarina*, Lengerken p. 24 Berlin ent. Zeitschr. 57.—*C. asiatica* var. n. *opaca*, ŠTĚRBAY p. 14 Čas. České Spol Entomolog. Prag 7 1910.—*C. melancholica* var. n. *seychellensis*, SCOTT p. 244 Tr. Linn. Soc. London 15.—*C. calligrammae* var. n. *confluens* p. 414, *striolata* var. n. *parvamaculata* p. 421' FOWLER Faun. Brit. India Cicind.—*C. fasciapolunctata*, SCHILDER Deutsche ent. Zs. 1912 p. 465.—*C. biramosa*, larve, HOULBERT *Insecta* 2 pp. 169-182 fig.—*C. senilis*, hibernation, BLAISDELL Ent. News 23 p. 156 fig.—*C. rudolfbennigseni* sp. n. Neu Guinea, HORN p. 306 Ent. Mitt. Berlin 1.—*C. sauteri* p. 134, *cylindriformis* p. 135, spp. n., *C. elisae* subsp. n. *reductelineata* p. 137, *C. cancellata* subsp. n. *subtilesulpta* p. 138, *C. psammodroma* subsp. n. *reductescripta* p. 139 Formosa, HORN Ent. Bl. 8.

Collyris sauteri p. 131; *albocyanescens* p. 132, spp. n., Formosa, HORN Ent. Bl. 8.

Megacephala regalis subsp. n. *citernii*, HORN p. 461 Ann. Mus. Genova 45.—*M. senegalensis*, larva, HOULBERT Insecta 2 pp. 1–15 fig.

Neocollyris bonelli diversipes n. n. p. 250, *nilgirica* sp. n. India p. 260, FOWLER Faun. Brit. Ind. Cicind.

Tetracha brasiliensis, larve, HOULBERT Insecta 2 pp. 89–105 fig.

Therates obliquefasciata sp. n., *frahstorferi* subsp. n. *sauteri*, Formosa, HORN p. 133 Ent. Bl. 8.

CARABIDAE.

Carabidi fitofagi, MAINARDI Zs. wiss. Insektenbiol. 8 p. 327.

Carabiden der Krim (Russ.), PLIGINSKIJ Bull. Soc. nat. Crimée 1 pp. 113–143.

Male genitalia, SHARP & MUIR pp. 487–490 pl. xlvii Tr. ent. Soc. London 1912.

Agonum muelleri ab. n. *amethystinum*, PETRI p. 38 Siebenbürg. Käfer.

Allocinopus smithi p. 391, *castaneus*, *augustus*, p. 392, spp. n., N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Amara similata, Larve, KEMNER Ark. Zool. 7 No. 31 p. 4 Taf. 1.—*A. oculata* sp. n. Norway, HELLIESEN p. 3 Stavanger Mus. Aarsb. 22 No. 2.

†*A. cockerelli* sp. n. p. 7 pl. i f. 1 Colorado Miocene, WICKHAM Bull. Univ. Iowa 6 No. 3.

Anillus sp. Seychelles, SCOTT p. 252 Tr. Linn. Soc. London 15.

Anophthalmus briani sp. n. Genova, MANCINI Ann. Mus. Genova 45 p. 333.—*A. scopoli* subsp. n. *weingaertneri* p. 246, *schaumi* subspp. n. *knirschi* p. 247, *hochetlingeri* and *flachi* p. 248, WINKLER Ent. Bl. Berlin 8.—*A. gracilis* sp. n. Kerzer gebirge, PETRI p. 21 Siebenbürg. Käf.—*A. taxianus* sp. n. Ungarn, BREIT p. 210 Ent. Bl. Berlin 8.—*A. bielzi meliki* n. var., *bokori gelidus* n. var., *hirtus kerteszi* n. var., *horvathi* sp. n., *hungaricus szilicrensis* n. var., *schmidti soosi* n. var., *scopoli bastkoi*, *szilagyii* n. var., *szalayi* sp. n. Hungaria, CSIKI Ann. Mus. Hung. 10 pp. 509–512 537–538.—*A. (Duvalius)*

kautianus p. 642, *maglajensis*, A. (A.) *pfeiferi* p. 643, *noesskei* p. 644, spp. n., Bosnia Herzegovina, APFELBECK Wiss. Mitt. Bosn. 12.

Antarctia rimosa sp. n. Falklands-Inseln, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 9.

Armatocillenus subg. n. vide *Cillenus*.

Bembidiinae Böhmens, JEDLIČKA Čas. České Spol. Entomolog. Prag 7 1910 pp. 60–90.

Bembidium kosti sp. n. Serbien, MATITS p. 202 Zeitschr. wiss. Insektbiol. 8.—*B. milleri* [ab. n.] *brunneum* p. 16, *assimile* [var. n.] *fasciatum* p. 18, PETRI Siebenbürg. Käf.—*B. atrocoeruleum* Verbreitung, NETOLITZKY Ent. Bl. Berlin 8.—*B. tibiale* Verbreitung, NETOLITZKY Ent. Bl. 8 Beilage 2 S. u. 1 Karte.—*B. tibiale ruficolle* Verbreitungskarte, NETOLITZKY Ent. Bl. Berlin 8 p. 278.

Bradycellus sharpi sp. n. England and France, JOY p. 257 Ent. Mag. 48.

Brosicus uhagoni sp. n. Toledo, BOLÍVAR p. 374 Bol. Soc. españ. 12.

Calathus melanocephalus and *mollis*, Artwert, GRIDELLI Boll. Soc. Adriat. 26 2 p. 45.

Callistus lunatus var. n. *bifasciatus*, REITTER Wien Ent. Ztg. 31 p. 285.

Calosoma calidum, parasitized by *Biomyia georgiae*, FELT J. New York Ent. Soc. 20 p. 292.

Carabomorphus alluaudi p. 279, *masaicus* p. 282, *joannae*, *jeanneli*, p. 283, spp. n. Africa, ALLUAUD Bull. Soc. ent. France 1912.

Carabus; Fortpfl. Eibildung, KERN Zool. Anz. Leipzig 40 pp. 345–351.—Flügelrudimente, SCHULZE Zool. Anz. 40 pp. 188–194.—Phylogénie, LAPOUGE Rennes Bul. soc. sci. méd. 18 1909 pp. 188–204; 19 1910 pp. 212–232.—Chromologie, SOKOLÁŘ Zs. wiss. Insektenbiol. 8 pp. 261–266.—Variétés, BLEUSE Bul. soc. ent. France 1912 p. 360 & LE MOULT T.c. p. 391.

Carabus auronitens, coloration, FRENNET p. 269 Ann. Soc. ent. Belgique 56; *auronitens farinesi*, BORN Ent. Bl. 8 p. 110; *auronitens* var. *ignifer*, KESSENHEIMER Ent. Rdsch. 29 p. 79.

Carabus cancellatus, Nominalform, HUBENTHAL Ent. Bl. Berlin 8 pp. 70-78; Rassen, SOKOLÁŘ Ent. Rdsch. 29 pp. 97-100; *Goniocarabus cancellatus*, BARTHE Miscell. entom. 20 p. 1; subspp. n. *spaneyi*, *bavaricus*, *saxonicus*, *transitivus*, *thuringianus*, *rauterbergi*, *progressivus*, *subcarinatus*, *marchicus*, *adelphus*, *amitinus*, *avunculus*, *fallax*, *tuberculatus*, *brevituberculatus*, Deutshl., KOLBE pp. 27-29 Ent. Rdsch. 29; *brevituberculatus*, *tuberculatus*, *ungensis*, *pseudograniger*, *C. wankae* sp. n. Sil. mer. & Gal. occ., SOKOLÁŘ Čas. České Spol. Entomolog. Prag 8 1911 pp. 23-31.

Carabus catenulatus Scop. ?, SOKOLÁŘ Soc. entomol. 27 p. 13; *fabricii* × *irregularis*, *depressus* × *fabricii*, *Carabus creutzeri*, Rassen, var. n. *longellipticus* Krain, BERNAU Wien ent. Zeit. 31 p. 161.

C. genci, Phylogenie, KRAUSSE Zs. wiss. Insektenbiol. 8 p. 295.

Carabus glabratus, Verbreitung, DEVILLE Ent. Bl. 8 Beilage, & HEINEMANN Ent. Bl. Berlin 8 pp. 279-180 & MANZEK l.c., & BICKHARDT Ent. Bl. Berlin 8 p. 187; Harz und Thüringen, PETRY Ent. Bl. Berlin 8 p. 147; *irregularis* × *creutzeri*, *monilis* × *ullrichi*, *violaceus* × *coriaceus*, *simulator* Kreuzung von *monilis* × *ullrichi*, SOKOLÁŘ Verh. z.-b. Ges. Wien 62 pp. (233)-(238).

C. hispanus auzati n. var. p. 42, LE MOULT Miscell. entom. 20.—*C. hookeri*, LESNE Paris Bul. soc. ent. 1912 p. 80.—*C. hortensis* subspp. n. *starygradensis* and *ostariensis* p. 252, *cancellatus* subsp. n. *schatzmayri* p. 253, Insel Pajo, BORN Ent. Bl. Berlin 8.—*C. splendens*, varr., LE MOULT Miscell. entom. 20 pp. 42-57.—*C. ullrichi* Rassen, SOKOLÁŘ Ent. Bl. Berlin 8 pp. 133-138 164-166.—*C. violaceus* f. n. *pygmaeus* p. 3, var. n. *macilentus* p. 4, *scabriusculus* var. [n. ?] *costulatus*, *linnei* var. n. *5-costatus*, p. 8, *glabratus* var. n. *angustatus* p. 9, PETRI Siebenbürg. Käf.

Carabus sauteri sp. n. Formosa, ROESCHKE p. 4 Suppl. ent. Berlin 1.

Chlaenius tristis var. n. *rufipes*, ŠTĚRBA p. 15 Čas. České Spol. Entomolog. Prag 7 1910.—*C. variegatus*

var. n. *cupreus* Sardinia, KRAUSSE p. 149 Ent. Rdsch. 29.

Chrysocarabus, BARTHE Miscell. entom. 20 pp. 32-36.

Cillenius (*Armatocillenius* subg. n.) *formosanus* sp. n. Formosa, DUPUIS p. 334 Ann. Soc. ent. Belgique 56.

Clivina carinata sp. n. p. 42, Madagascar, VUILLET Insecta 2.—*C. fossor* and *collaris*, GERHARDT D. ent. Zs. 1912 p. 464.

Coptodera formosana sp. n. Formosa, DUPUIS p. 328 Ann. Soc. ent. Belgique 56.

Coptolabrus margaritophorus sp. n. China, HAUSER p. 361 Deutsche ent. Zeitschr. 1912.—*C. elysii* varr. *connectens* p. 546, and *kiangsiensis* p. 551, *rothschildi* v. *croesus* p. 552, *lafosseii* abb. *chlorothyreus*, *euprepes*, p. 557, and *fuscoviolaceus* p. 558, [? varr. n.], HAUSER T.c.

Crator; ist aufrecht zu erhalten, SEMENOV T. Š. Rev. russ. ent. 12 p. 501.

Ctenognathus simmondsi sp. n. p. 386 New Zealand, BROWN Trans. N. Zeal. Inst. 44.

Cyclosomus rousseaui sp. n. Congo, DUPUIS p. 385 Rev. zool. Afric. 1.

Deltomerus bosnicus sp. n. Sarajevo, APFELBECK p. 650 Wiss. Mitt. Bosn. 12.

Dercylus ohausi p. 577, *chaudoiri* für *ater* Chd., *convexus* Brasilia, *bolivianus* Bolivia, p. 579, *heynei* p. 580 Peru, *alternans* p. 583 Columbia, *puritanus* p. 584 Amazonas, *opacus* Venezuela, *steinbachi* Bolivia, p. 585, *catenatus* p. 586 Peru, spp. n., KUNTZEN Deutsche ent. Zeitschr. 1912.

Desera (*Dendrocellus*) *gilsoni* sp. n. Formosa, DUPUIS p. 319 Ann. Soc. ent. Belgique 56.

Dicaelus ocellatus sp. n. Arkansas, BLATCHLEY Ent News 23 pp. 77-78.

Dioryche formosana sp. n. Formosa, DUPUIS p. 324 Ann. Soc. ent. Belgique 56.

Dromius opacicolor, Synonymie, REITTER p. 286 Wien. ent. Ztg. 31.

Dyschirius lgoeckii sp. n. Taschkent, *nitidus* ab. n. *niger*, FLEISCHER Wien. ent. Zeit. 31 p. 103.

Dormeyeria gen. n., typus *D. audouini*, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 10 f. 1.

Eochlaenius gen. n., *suvorovi* sp. n. Küstengebiet, SEMENOV Rev. Russ. ent. 12 p. 601.

Eurymelanius caucasicus, LUŐNIK Rev. russ. ent. 12 p. 605.

Euschizomerus vitalisi sp. n. Cambodia p. 18 fig., VUILLET *Insecta* 2.

Hexagonia sauteri sp. n. Formosa, DUPUIS p. 308 Ann. Soc. ent. Belgique 56.

Leistus rufescens ab. n. *pulchellus*, HÄNEL p. 91 Ent. Bl. 8.

Licinodercylus subg. n. zu *Dercylus*, KUNTZEN p. 586 Deutsche ent. Zeitschr. 1912.

Lissopterus quadrinotatus varr. *binotatus*, *piceus* varr. n. Falklands-Inseln, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 8.

Mastax ochraceonstatum sp. n. p. 2, PIC Mel. exot. 2.—*M. formosanus* sp. n. Formosa, DUPUIS p. 282 Ann. Soc. ent. Belgique 56.

Mecodema oconnori p. 382, *bryobium* p. 383, *laevicolle*, *quoinense*, p. 384, *arcuatum* p. 385, spp. n., New Zealand, BROWN Trans. N. Zeal. Inst. 44.

Nebria livida, Kubangebiet (Russ.), LUŐNIK Rev. russ. ent. 12 p. 604.

Notiophilinae, DUPUIS Gen. ins 134 7 pp. 1 pl.

Omophron baenningeri p. 60, *mexicanum* p. 61, spp. n. Mexico, DUPUIS Ann. Soc. ent. Belgique 56.

Oöpterus laevigatus sp. n. p. 389 N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Ophionea, sp. Seychelles, SCOTT p. 245 Tr. Linn. Soc. London 15.

Ophonus; british species pp. 181 etc., *rupicoloides* p. 208, *championi* p. 209, spp. n., England, SHARP Ent. Mag. 48.

Opisthius, DUPUIS Gen. ins. fasc. 126.

Pentagonica biangulata p. 312, *semisuturalis* p. 314, *formosana* p. 316, spp. n., Formosa, DUPUIS Ann. Soc. ent. Belgique 56.

Pheropsophus fuscicollis var. n. *formosanus*, DUPUIS p. 322 T.c.

Philophlaeus myrmecophilus sp. n. Tasmania, LEA p. 32 Proc. R. Soc. Vict. 25.

Platyderus; studi, LEONI Riv. colcotter. ital. 10 pp. 110–127.

Platysma barbarum fies Canaries, LESNE Paris Bul. soc. ent. 1912 p. 61.—*P. macrum* var. n. *obscuricolor*, BREIT p. 199 Ent. Mitt. Berlin 1.—*P. punctulatum* var. *similis* synonym von *Pl. punctulatum*, *aterrimum* Stavropol, LUŐNIK Rev. russ. ent. 12 p. 605.

Poecilus; neue Formen, Synonymie etc. (Russ. + lat. diagn.), LUŐNIK Rev. russ. ent. 12 pp. 409–413.

Psydrus piceus, DUPUIS Gen. ins. 123.

Pterodercylus subg. n. zu *Dercylus*, KUNTZEN p. 585 Deutsche ent. Zeitschr. 1912.

Pterostichus fossulatus var. n. *marginalis*, PETRI p. 36 Siebenbürg. Käfer.—*P. speluncarius stefani* sp. n. Trientiner Alpen, JUREŐEK pp. 1–2 Čas. České Spol. Entomolog. Prag 7 1910.—*P. hamiltoni* sp. n. p. 390 N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Tachys seychellarum sp. n. Seychelles, SCOTT p. 250 pl. xii f. 13 Tr. Linn. Soc. London 15.—*T. scutellaris* var. n. *laticollis* p. 18, *sexstriatus* var. n. *politus* p. 19, PETRI Siebenbürg. Käfer.

Tarastethus amplipennis p. 386, *phyllocharis* p. 387, *lewisi*, *cordipennis*, p. 388, spp. n., N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Thyreopterus (Peripristus) schenklingi sp. n. Formosa, DUPUIS p. 288 Ann. Soc. ent. Belgique 56.

Trechus biharicus sp. n. Ungarn, *grandis* subsp. n. *longicollis*, *acutangulus* Apfb. Zugehörigkeit zu *alpicola*, MEIXNER Wien ent. Zeit. 31 pp. 187–193.—*T. (Duvalius) schatzmayri* sp. n. Dalmatien, *dalmatinus dinaricus*, *paganettii meixneri*, *schmidti insignis*, *novaki giromettae*, subspp. n., MÜLLER p. 297 Wien ent. Ztg. 31.—*T. tauricus* p. 504, *jakobsoni* p. 505, spp. n. Höhlen der Krim (Russ. + Deutsch.), PLIGINSKIJ Rev. russ. ent. 12.

Trechus limacodes jucundus n. var., CSIKI Ann. Mus. Hung. 10 p. 509.—*T. jezerensis* p. 647, *torrentialis* p. 648, *chionobatus* p. 649, spp. n., Bosnia, AP-

FELBECK *Wiss. Mitt. Bosn.* 12.—*T. ferdinandi-koburgi* sp. n. Rhodope-Gebirge, BREIT p. 199 *Ent. Mitt.* Berlin 1.

†*T. fractus* sp. n. p. 6 pl. iii f. 1 Colorado Miocene, WICKHAM *Bull. Univ. Iowa* 6 No. 3.

Trichilicinus gen. n. für *Derostichus setosus*, POPPIUS *Rev. russ. ent.* 12 p. 108.

Trichosternus wallacei sp. n. p. 390 N. Zealand, BROWN *Trans. N. Zeal. Inst.* 44.

Zabronothus major p. 393, *aphelus* p. 394, spp. n., N. Zealand, BROWN *T.c.*

PAUSSIDAE.

Paussidae Phylogenie, WASMANN *Tijdschr. Ent.* 55 pp. 257–260.

Male genitalia, SHARP & MUIR *Tr. ent. Soc. London* 1912 p. 490 pl. xlix.

The *Paussidae* of India, FOWLER pp. 444–500 *Faun. Brit. India Cicind.*

†*Paussopsis secunda* sp. n. p. 10 pl. i ff. 8 & 9 Colorado Miocene, WICKHAM *Bull. Univ. Iowa* 6 No. 3.

Paussus citernii sp. n. Somalia, GESTRO *Ann. Mus. Genova* 45 p. 460.—*P. desneuxi* Ceylon p. 475, *adamsoni* Burma p. 481, *fletcheri* Ceylon p. 483, *testaceus* Tonasserim p. 487, spp. n., *quadricornis* var. n. *castanea* p. 493, FOWLER *Faun. Brit. Ind. Cicind.*—*P. sauteri* p. 1, *formosus* p. 3, spp. n., Formosa, WASMANN *Suppl. ent. Berlin* 1.—*P. tristis* sp. n. Java, WASMANN *Tijdschr. Ent.* 55 p. 260.

Platyrhopalopsis badgleyi sp. n. Assam, FOWLER *Faun. Brit. Ind. Cicind.* p. 469.

Platyrhopalus mandersi sp. n. Burma, FOWLER p. 464 *T.c.*

Protopaussus javanus sp. n. Java, WASMANN *Tijdschr. Ent.* 55 p. 256.

HALIPLIDAE and PELOBIIDAE.

Male genitalia, SHARP & MUIR p. 491 *Tr. ent. Soc. London* 1912 p. 491 pl. xlviii & xlix.

Haliplus; respiration, BROCHER p. 178 *Ann. Biol. lac.* 5.—*H. connexus* Nova Scotia p. 164, *deceptus* Texas p. 166, *vancouverensis* British Columbia, *mimeticus* New York, p. 168, spp. n.,

MATHESON *J. New York Ent. Soc.* 20.—*H. albinus* var. n. *muelleri*, REITTER p. 277 *Wien ent. Ztg.* 31.

Neohaliplus subg. n. for *H. lineaticollis*, NETOLITZKY *Deutsche ent. Z.* 1911 p. 273.

Peltodytes floridensis Florida p. 177, *litoralis* Texas p. 178, spp. n., MATHESON *J. New York Ent. Soc.* 20.

DYTISCIDAE.

Morphology and physiology of tarsus, ♂ *Dytiscus*, BLUNCK *Zeitschr. wiss. Zool.* 100 pp. 459–492.

Male genitalia, SHARP & MUIR p. 492 pl. xlviii *Tr. ent. Soc. London* 1912.

†*Agabus charon* sp. n. p. 8 pl. iv f. 1 Colorado Miocene, WICKHAM *Bull. Univ. Iowa* 6 No. 3.

Aglymbus bromeliarum sp. n. Trinidad, SCOTT p. 433 pl. x f. 3 *Ann. Nat. Hist.* 10.

Bidessus farquharensis sp. n. Farquhar Atoll p. 255 pl. xii f. 15, *capitatus* f. 15, SCOTT *Tr. Linn. Soc. London* 15.

Coelambus marginipennis sp. n. Florida, BLATCHLEY p. 330 *Canad. Ent.* 44.

†*Coelambus miocenensis* sp. n. p. 7 pl. ii ff. 1–6 Colorado Miocene, WICKHAM *Bull. Univ. Iowa* 6 No. 3.

Copelatus gardineri p. 257, *pandanorum* p. 258 pl. xii f. 16, Seychelles, spp. n., SCOTT *Tr. Linn. Soc. London* 15.

Cybister; respiration, BROCHER *Ann. Biol. lac.* 5.—*C. laterimarginalis* ab. n. *marginiventris*, FLEISCHER *Wien. ent. Zeit.* 31 p. 250.

Dytiscus marginalis Embryology, KORSCHÉLT *Zool. Jahrb. Suppl.* 15 Bd 2 pp. 499–532; Blutgefäßsystem, OBERLE *Diss. Marburg* 1912 p. 43; Respirationssystem, ALT *Zs. wiss. Zool.* 99 pp. 357–443; Geschlechtsapparat, DEMANDT *Zs. wiss. Zool.* 103 pp. 171–299; Begattung, BLUNCK *Zs. wiss. Zool.* 102 pp. 169–248; Die Schreckdrüsen des *Dytiscus* und ihr Secret, BLUNCK *Zs. wiss. Zool.* 100 pp. 493–508; Die Haftscheiben, *Id. op. cit.* pp. 459–492; Die Schorgane der Larve und Imago, GÜNTHER *Zs. wiss. Zool.* 100 pp. 60–115; Hautsinnesorgane, HOCHREÜTHNER *Zs. wiss. Zool.* 103 pp. 1–114.

Eunectes stictiens, fig., NOUROJEE Mem. Dept. Agric. Ind. Ent. Ser. 2 No. 9.

Hydroporus ellypticus sp. n. Siebenbürgen, PETRI p. 44 Siebenbürg. Käf.—*H. bosnicus* sp. n. Bosnia, APFELBECK p. 656 Wiss. Mitt. Bosn. 12.—*H. sumakovi* sp. n. Novaja-Zemlja, POPPIUS Rev. russ. ent. 12 p. 107.

Hyphoporus aper, fig., NOUROJEE Mem. Dept. Agric. Ind. Ent. Ser. 2 No. 9.

Hyphydrus renardi, fig., NOUROJEE T.c.

Ilybius subaeneus var. n. *borealis*, HELLIESEN p. 4 No. 2 Stavanger Mus. Aarsb. 22.

Lancetes flavoscutatus sp. n. Falklands-Inseln, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 11 pl. i f. 5.

GYRINIDAE.

Male genitalia, SHARP & MUIR p. 493 pl. xlix Tr. ent. Soc. London 1912.

Dineutes unidentatus, fig., NOUROJEE Mem. Dept. Agric. Ind. Ent. Ser. 2 No. 9.

Gyrinus natator, habits, DALGLEISH Zoologist 1912 pp. 64-71.

HYDROPHILIDAE.

Stridulation of *Hydrophilidae*, BROCHER Ann. biol. lac. 5 pp. 215-217.

Male genitalia, SHARP & MUIR p. 495 pl. xlix Tr. ent. Soc. London 1912.

Cyclonotum urichi sp. n. Trinidad, SCOTT p. 435 Ann. Nat. Hist. 10.

Hydrena (*Haenhydra*) *ganglbaueri* p. 658, *homogyna*, *H. pachyptera*, p. 659, spp. n., Balkan penins., APFELBECK Wiss. Mitt. Bosn. 12.

Hydrophilus piceus, anatomy, BROCHER Ann. Biol. lac. 5 pp. 220-258; food-habits, PUJIOLA Bol. Soc. Aragon. 10 1911 pp. 122-124.—*H. spinicollis*, *rufiventris* and *wencki*, D'ORCHYMONT p. 331 Rev. zool. Afric. 1.—*H. angolensis* = (*Sternolophus eomoriensis* Fairm.), D'ORCHYMONT p. 45 Rev. zool. afric. 2.—*H. mundus* Boh. to *Sternolophus* classification of *Hydrophilus* with subg. n. *Neohydrophilus* p. 59, *H. (N.) deplanatus* sp. n. E. Africa

p. 68, D'ORCHYMONT Mem. Soc. ent. Belgique 19.

Hydrous marginatus, D'ORCHYMONT p. 329 T.c.—*H. pallidipalpis*, *fuscipalpis*, *bilineatus*, Mael., synonymy, D'ORCHYMONT p. 70 Mem. Soc. ent. Belgique 19.

Laccobius; table of british, EDWARDS p. 210 Ent. Mag. 48.

Neohydrophilus subg. n. vide *Hydrophilus*.

Neosternolophus; characters p. 55, *immarginatus* sp. n. Australia p. 56, D'ORCHYMONT Mem. Soc. ent. Belgique 19.

Sphaeridium bipustulatum, New Jersey New York, SCHAEFFER J. New York Ent. Soc. 20 p. 68.—*S. scarabaeoides* Colorado, COCKERELL Ent. News 23 p. 82.

STAPHYLINIDAE.

Staphyliniden des russischen Fauna, Verbreitung (Russ.), JACENTKOVSKIJ Rev. russ. ent. 12 pp. 452-467.

Staphyliniden von Bessarabien (Russ.), JACENTKOVSKIJ Kišinev Trd. Obšč. jest. 2 pp. 149-164.

Male genitalia, SHARP & MUIR pp. 496-502 pls. lii-liv Tr. ent. Soc. London 1912.

Acalophaena argentina sp. n. Argentinien, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26-48.

Acrolocha pliginskii sp. n. Krim, BERNHAUER p. 259 Ent. Zeitschr. 25.

Acylophorus richteri, *bruchi*, spp. n., Argentina, BERNHAUER pp. 177-178 Ent. Bl. Berlin 8.

Aenictonia vosseleri sp. n. O.-Africa, WASMANN p. 42 Ent. Rdsch. 29.

Aleochara salsipotens sp. n. Süd-Afr., BERNHAUER p. 209 Ent. Mitt. Berlin 1.—*A. philippina* sp. n. p. 254 Philippine Is., BERNHAUER Philippine J. Sci. D. 7.—*A. richteri* sp. n. Argentinien, BERNHAUER Wien ent. Zeit. 31 pp. 68-82.—*A. rufitarsis* v. *fortepunctata* v. n., ROUBAL Čas. České Spol. Entomolog. Prag 8 1911 p. 17.

Amichrotus merritti sp. n. p. 253 Philippine Is., BERNHAUER Philippine J. Sci. D. 7.

Anthobium orientale p. 678, *fenyesi* p. 679, U.S., spp. n., BERNHAUER Pomona Coll. J. Ent. 4.

Anthophagus dinaricus sp. n. Bosnia, APFELBECK p. 662 Wiss. Mitt. Bosn. 12.—*A. hummleri* sp. n. Spanien, BERNHAUER p. 259 Ent. Zeitschr. 25.

Antrogastra subg. n. vide *Ophioglossa*.

Aphytopus porosus p. 394, *granifer*, *guinnessi*, p. 395, spp. n., N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Artochia californica sp. n. California p. 679, BERNHAUER Pomona Coll. J. Ent. 4.

Astenus martinezi, FUENTE p. 358 Bol. Soc. españ. 12.—*A. filiformis* ab. [n. ?] *laticeps*, PETRI p. 64 Siebenbürg. Käfer.—*A. flavicollis* sp. n. Uruguay, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26–48.

Astilbus canaliculatus, biologie, MARIÉ Paris Bul. soc. ent. 1912 p. 218.—*A. kamerunensis* sp. n. Kamerun, BERNHAUER p. 208 Ent. Mitt. Berlin 1.

Atheta lgoeckii Ost-Sibirien, *singularis* Klein-Asien, spp. n., BERNHAUER p. 263 Ent. Zeitschr. 25.—*A. (Atheta) bruchi*, *A. (Microdota) carhuensis*, *A. (Datomica) myrmecophila*, *A. (Parameotica) bruchiana*, *grandiceps*, spp. n., Argentinien, BERNHAUER Wien. ent. Zeit. 31 pp. 68–82.—*A. hungarica* Bernh., HUBENTHAL Ent. Bl. 8 p. 28.

Belonuchus-tremolerasi sp. n. Uruguay, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26–48.—*B. bruchi* sp. n. Argentina, BERNHAUER p. 175 Ent. Bl. Berlin 8.

Bledius-terebrans = (*campi* Bondr.), CAMERON p. 90 Ent. Mag. 48.—*B. arenarius* var. n. *fergussoni*, JOY p. 44 Ent. Mag. 48 and *B. arenarius fergussoni* = var. *minor* Rey, NEWBERRY p. 64 T.c.—*B. subniger* Schneider = (*secerdendus* Joy), BONDROIT p. 450 Ann. Soc. ent. Belgique 56.—*B. pallipes* and allies p. 63, *terebrans* = (*campi* Bondr.) p. 65, *nigricans* = (*simpliciventris* Apf.), *doderoi*, p. 66, *devillei* p. 67, *secessus* p. 68, spp. n., Mediterranean, BONDROIT T.c.—*B. (Belidus) bernhaueri* sp. n. Red Sea, CAMERON p. 28 Ent. Mag. 48.—*B. convexicollis* sp. n. Transkaspien, BERNHAUER p. 259 Ent. Zeitschr. 25.—*B. compressicollis* p. 247, *philippinus* (N-9210 j)

p. 248, spp. n., Philippine Is., BERNHAUER Philippine J. Sci. D. 7.—*B. albidipennis* sp. n. p. 171 California, BERNHAUER Rep. Laguna Mar. Lab. 1.—*B. argentinus*, *bonariensis*, spp. n., Argentina, BERNHAUER pp. 167–168 Ent. Bl. Berlin 8.—*B. bidentifrons* sp. n. p. 401 N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Bolitobius californicus p. 680, *arizonensis*, *elefas*, p. 681, *nepigonensis* p. 682, N. America, spp. n., BERNHAUER Pomona Coll. J. Ent. 4.

Boreaphilus melichari sp. n. Tricintiner Alpen, JURČÓEK pp. 3–4 Čas. Česk. Spol. Entomolog. Prag 7 1910.

Calodera wallacei, *fultoni*, p. 396, spp. n., N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Caloderella gen. n. *Hygronomini*, *argentina*, *fraterna*, spp. n., Argentinien, BERNHAUER Wien. ent. Zeit. 31 pp. 68–82.

Cephalochetus africanus sp. n. O.-Afrika, BERNHAUER p. 475 Ergebn. D. Zentr.-Afrik. Exp. 3 L. 12.

Conosoma lateripenne sp. n. Victoria, LEA p. 40 Proc. R. Soc. Vict. 25.

Coproporus substrigellus, *platensis*, *alutipennis*, spp. n., Argentina, BERNHAUER pp. 178–179 Ent. Bl. Berlin 8.—*C. tenuicornis* Kamerun, *usambarae* Usambara, spp. n., BERNHAUER p. 207 Ent. Mitt. Berlin 1.

Creophilus maxillosus, Larve, KEMNER Ark. Zool. 7 No. 31 p. 16 Taf. 3.

Cryptobium silvaticum p. 476, *schubotzi*, *methneri*, p. 477, *fraternum* p. 478, spp. n., Afrika, BERNHAUER Ergebn. D. Zentr.-Afrik. Exp. 3 L. 12.—*C. banksi* sp. n. p. 252 Philippine Is., BERNHAUER Philippine J. Sci. D. 7.

†*Deleaster grandiceps* sp. n. p. 12 pl. i f. 3 Colorado Miocene, WICKHAM Bull. Univ. Iowa 6 No. 3.

Delopsis africana sp. n. Kamerun, BERNHAUER p. 179 Ent. Mitt. Berlin 1.

Demera methneri sp. n. O.-Afrika, BERNHAUER p. 485 Ergebn. D. Zentr.-Afrik. Exp. 3 L. 12.—*D. linearis cordicalis*, spp. n., O.-Africa, WASMANN pp. 42–43 Ent. Rdsch. 29.

Dimerus whitehorni sp. n. p. 400 N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Dinusa santschii Tunis, *heimi* Vorder-Indien, spp. n., WASMANN p. 97 Zeitschr. wiss. Zool. 101.

Drepanopora bruchi sp. n. Argentinien, BERNHAUER Wien. ent. Zeit. 31 pp. 68-82.

Ecoptolonthus subsg. n. zu *Philonthus*, BERNHAUER p. 206 Ent. Mitt. Berlin 1.

Echiaster bonariensis, *argentinus*, spp. n., Argentine, BERNHAUER p. 172 Ent. Bl. Berlin 8.

Eleusis usambarae, *kamerunensis*, spp. n., Afrika, BERNHAUER p. 177 Ent. Mitt. Berlin 1.—*E. puncticeps* sp. n. Columbia, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26-48.

Emus hirtus, Larve, KEMNER Ark. Zool. 7 No. 31 p. 9 Taf. 2.

Ephelinus arizonensis sp. n. Arizona p. 680, BERNHAUER Pomona Coll. J. Ent. 4.

Eulissus guineensis sp. n. Guinea, BERNHAUER p. 183 Ent. Mitt. Berlin 1.

Euryalea murina demaisoni var. n., ROUBAL Čas. České Spol. Entomolog. Prag 7 1910 p. 100.

Falagria; its relatives, FENYES J. New York Ent. Soc. 20 pp. 20-27.

Gampsonycha gen. n. für *Aleuonota pallens* Muls. et Rey, BERNHAUER p. 109 Ent. Bl. 8.—*G. argentina* sp. n. Argentinien, BERNHAUER Wien ent. Zeit. 31 pp. 68-82.

Gastrisus venezolanus sp. n. Venezuela, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26-48.

Gnypeta; notes and synonymy, FENYES Canad. Ent. 44 pp. 105-112.

Gyronycha Csy. critical, FENYES Ent. News 23 pp. 123-125.

Gyrophaena convexicollis sp. n. England, characters of british, JOY p. 149 Ent. Mag. 48 fig.

Heterothops formicetorum sp. n. Argentinien, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26-48.

Holotrochus setigerus sp. n. p. 401 N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Homalota trigonae N.S.W. p. 38, *curvicauda* Tasmania p. 39, *myrmeciae* Vict. p. 40, spp. n., LEA Proc. R. Soc. Vict. 25.

Idiogaster gen. n. *Aleocharini*, *escherichi* sp. n. Erythraea, WASMANN pp. 89-90 Zeitschr. wiss. Zool. 101.

Itheringocantharus gen. n. ex aff. *Tachyporus*, *ypiranganus* sp. n. S. Paulo, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26-48.

Ischnoderus bruchi sp. n. Argentinien, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26-48.

Lathrimaeum roubali laterale (Luze) sp. n., Kaukasus, ROUBAL Čas. České Spol. Entomolog. Prag Jg. p. 2.

Lathrobium leonhardi sp. n. Bulgaria, BREIT p. 200 Ent. Mitt. Berlin 1.—*L. ripicola* and allies, NEWBERY p. 125 Ent. Mag. 48.—*L. fovulum* etc., synonymy, NEWBERY p. 259 Ent. Rec. 24.

Leiporaphes subgen. n. vide *Medon*.

Leistostrophus murinus, Larve, KEMNER Ark. Zool. 7 No. 31 p. 22 Taf. 4.

Leptacinus linearis, distincte Species, Verbreitung (Russ.), JACENTKOVSKIJ Rev. russ. ent. 12 p. 461.

Leptochirus alticola, *columbicus*, *L. (Mesochirus) montanus*, spp. n., Columbia, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26-48.

Leptusa monachorum sp. n. Macedonia, BERNHAUER p. 263 Ent. Zeitschr. 25.—*L. subnivalis* sp. n. Kaukasus, ROUBAL Čas. České Spol. Entomolog. Prag 8 1911 p. 13.

Lesteva zolotarevi sp. n. Kaukasus, ROUBAL Čas. České Spol. Entomolog. Prag 7 1910 p. 99.

Lithocharis camponoti sp. n. N.S.W., LEA p. 41 Proc. R. Soc. Vict. 25.—*L. longipennis* p. 399 sp. n. N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Longipeltina gen. n., *bakeri* sp. n. California, p. 682, BERNHAUER Pomona Coll. J. Ent. 4.

Medon myrmecophilus, *M.* (subg. n. *Leiporaphes*) *attarum*, spp. n., Argentinien, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26-48.—*M. philippinus* sp. n. p. 250 Philippine Is., BERNHAUER Philippine J. Sci. D. 7.

Microglossa marginalis var. n. *obscura*, JOY p. 115 Ent. Mag. 48.

Mimanomma gen. n. *Aleocharina*, *spectrum* sp. n. Kamerun, WASMANN p. 473 Zool. Anz. 39.

Mycetoporus baudueri var. n. *puncticollis*, PÉTRI p. 81 Siebenbürg Käfer.—*M. doderoi* sp. n. Kaukasus, ROUBAL Čas. České Spol. Entomolog. Prag 8 1911 p. 11.

Myrmecomedon gen. n. ex aff. *Medon*, *bruchii* sp. n. Argentinien, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26–48.

Myrmecopora funesta p. 397, *granulata* p. 398, spp. n., N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Myrmedonia reicherti sp. n. Orange-Staat, WASMANN p. 94 Zeitsehr. wiss. Zool. 101.

Neobisnius parcepunctatus sp. n. Argentina, BERNHAUER p. 176 Ent. Bl. Berlin 8.

Nordenskjoldella gen. n. *Aleocharinae* p. 65, *flavitaris* sp. n. p. 66 pl. i f. 7, textf. 14–17, Feuerland, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3.

Notothecta (subg. n. *Notothectina*) *attae*, *neotropica*, spp. n., Argentinien. BERNHAUER Wien ent. Zeit. 31 pp. 68–82.

Notothectina subg. n. vide *Notothecta*.

Nudobius africanus sp. n. Central-Afr., BERNHAUER p. 479 Ergebn. D. Zentr.-Afrik. Exp. 3 L. 12.

Ocyusa leonhardi sp. n. Griechenland, BERNHAUER p. 263 Ent. Zeitsehr. 25.

Edichirus geniculatus sp. n. Victoria, LEA Proc. Linn. Soc. N.S. Wales 56 p. 426.

Oligota ylenensis sp. n. England, SHARP p. 124 Ent. Mag. 48.

Ophioglossabruchii, *O.* (subgen. n. *Antrogastra*) *bruchiana*, n. spp., Argentinien, BERNHAUER Wien. ent. zeit. 31 pp. 68–82.

Osorius sexpunctatus sp. n. Argentine, BERNHAUER p. 168 Ent. Bl. Berlin 8.

Othius jadowigae sp. n. Kaukasus, ROUBAL Čas. České Spol. Entomolog. Prag. 8 1911 p. 5.

Oxytelus spectabilis sp. n. Kamerun, BERNHAUER p. 179 Ent. Mitt. Berlin 1.—*O. awakubiensis* sp. n. Central-Afrika, BERNHAUER p. 469 Ergebn. D. Zentr.-Afrik. Exp. 3 L. 12.—*O. megaceros flavicollis* var. n. p. 247 Philippine Is., BERNHAUER Philippine J. Sci. D. 7.

(N-9210 j)

Paederina; Einteilung in Subtribus (Russ.), JACENTKOVSKIJ Rev. russ. ent. 12 pp. 459–460.

Paederopsis gen. n. near *Haematodes*, *myrmecophila* sp. n. Brasilia, WASMANN pp. 98–99 Zeitsehr. wiss. Zool. 101.

Paederus puncticollis p. 471, *methneri* p. 472, *tropicus*, *ugandae*, p. 473, *superbus*, *magnificus*, p. 474, *nobilis*, *rufocyanus*, p. 475, spp. n., O.-Afrika, BERNHAUER Ergebn. D. Zentr.-Afrik. Exp. 3 L. 12.—*P. junodi* sp. n. Delagoa Bay, BERNHAUER p. 181 Ent. Mitt. Berlin 1.—*P. philippinus* sp. n. p. 250, Philippine Is., BERNHAUER Philippine J. Sci. D. 7.—*P. republicanus*, *uruguayensis*, Uruguay, spp. n., BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26–48.

Palaminus brevipennis sp. n. Argentinien, BERNHAUER l.e.

Pedinolinus subviridipennis sp. n. Usambara, BERNHAUER p. 203 Ent. Mitt. Berlin 1.

Philonthus; thoracae sculpture, BEVINS pp. 111–114 Ent. Mag. 48.—*Philonthus formaneki* sp. n. Kaukasus *incompletus* v.n., ROUBAL Čas. České Spol. Entomolog. Prag 8 1911 p. 6.—*P. conradti* sp. n. Kamerun, BERNHAUER p. 206 Ent. Mitt. Berlin 1.—*P. silvicola* sp. n. Central-Afrika, BERNHAUER p. 479 Ergebn. D. Zentr.-Afrik. Exp. 3 L. 12.—*P. schroederi*, *parchmontanus*, spp. n., O.-Afr., EICHELBAUM p. 174 Berlin ent. Zs. 56.—*P. convexus* sp. n. p. 253 Philippine Is., BERNHAUER Philippine J. Sci. D. 7.—*P. argentinus*, *cribriventris*, *flavicornis*, *hosmanni*, *P. (Chroaptomus) richteri*, *P. jenseni*, Argentinien, spp. n., BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26–48.

Philorinum africanum sp. n., Usambara, BERNHAUER p. 178 Ent. Mitt. Berlin 1.

Phyllodrepa bonariensis sp. n. Argentinien, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26–48.

Physetops transcaspicus = *tataricus* Pall., *tataricus* Bernh. = ♀ *giganteus*, SEMENOV Rev. russ. ent. 1912 p. 497.

Pinophilus stuhlmanni sp. n. Central-Afrika, BERNHAUER p. 470 Ergebn. D. Zentr.-Afrik. Exp. 3 L. 12.

d 29—2

Planeustomus flavicollis, SHARP p. 162 Ent. Mag. 48.

Platysthetus oblongopunctatus sp. n. Kaukasus, ROUBAL Čas. České Spol. Entomolog. Prag 8 1911 p. 2.

Polylobinus argentinus sp. n. Argentinien, BERNHAUER Wien. ent. Zeit. 31 pp. 68-82.

Polylobus piceosobrinus Victoria p. 34, *brachypterus*, *tenuis*, Tasmania etc., p. 35, *quadratipennis*, *apianus*, N.S.W., p. 36, *apiciniger* N.S.W. p. 37, spp. n., LEA Proc. R. Soc. Vict. 25.

Pontomalota bakeri sp. n. p. 170 California, BERNHAUER Rep. Laguna Mar. Lab. 1.

Priochirus (Plastus) philippinus p. 245, *currani* p. 246, *schultzei* p. 246, *manitensis* p. 247, spp. n., Philippine Is., BERNHAUER Philippine J. Sci. D. 7.

Proteinus densipennis sp. n. California p. 768, BERNHAUER Pomona Coll. J. Ent. 4.

Pseudodinusa gen. n. ex. aff. *Dinussella*, *richteri* n. sp. Argentina, BERNHAUER Wien. ent. Zeit. 31 pp. 68-82.

Quedius punctatellus rufipennis ab.n., *lgockii* sp. n. Kaukasus, ROUBAL Čas. České Spol. Entomolog. Prag 8 1911 p. 9.—*Q. auricomus*, Verbreitung, DEVILLE Ent. Bl. Berlin 1912 Beilage pp. 1-4.—*Q. boops* ab.n. *coloratus* p. 12, *Q. fulvicollis* ab. n. *nigricollis* p. 13, KOLBE Jahresh. Ver. Breslau 5.—*Q. vexans* var. n. *langenhani*, HUBENTHAL p. 72 Deutsche ent. Zeitschr. 1912.—*Q. amplissimus* sp. n. Krim, BERNHAUER p. 262 Ent. Zeitschr. 25.—*Q. compransor* sp. n. Kansas, FALL p. 40 Canad. Ent. 44.—*Q. picipiformis* sp. n. Argentina, BERNHAUER p. 177 Ent. Bl. Berlin 8.—*Q. eruensis* p. 398, *xenophaenus* p. 399, spp. n., N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

†*Quedius mortuus* sp. n. p. 11 pl. i f. 2 Colorado Miocene, WICKHAM Bull. Univ. Iowa 6 No. 3.

Rhopalogastrum gen. n. *Bolitocharini*, *claviventre* sp. n. Argentinien, BERNHAUER Wien. ent. Zeit. 31 pp. 68-82.

Scopaeus sharpi sp. n. Massowah, CAMERON p. 102 Ent. Mag. 48.—*S. montalbanensis* sp. n. p. 251 Philippine

Is., BERNHAUER Philippine J. Sci. D. 7.

S. interocularis sp. n. N.S.W., LEA p. 41 Proc. R. Soc. Vict. 25.

Scymbalopsis grandiceps, Synonymie, REITTER p. 286 Wien ent. Ztg. 31.

Sipalia bernhaueri sp. n. Dobrudscha, BREIT p. 201 Ent. Mitt. Berlin 1.

Staphylinus kamerunensis Kamerun p. 204, *goliathus* Senegal p. 205, spp. n., BERNHAUER Ent. Mitt. Berlin 1.

Stenus leprieuri, SAINTE-CLAIRE DEVILLE Ent. Bl. Berlin 8 Beilage 4 o. Pag.—*S. longipes* var. [n. ?] *carinifrons* PETRI p. 60 Siebenbürg. Käf.—*S. brachanti* Brussels, *doderoi* Macedonia, p. 261, *azarias* Italy p. 262, *anantias* N. Italy p. 263, *misael* Piedmont p. 264, *florii* Lazio p. 265, spp. n., BONDROIT Ann. Soc. ent. Belgique 56.—*S. scrupulus* Sardinia, *benicki*, p. 415, *salamandra* p. 416, Italy, *turbulentus* Macedonia p. 417, spp. n., *nigritulus* var. n. *corcyranus*, BONDROIT T.c.—*S. ignifusa* sp. n. Pavia, BONDROIT p. 450 T. c.—*S. latiplaga* sp. n. Czernowitz, PENECKE Wien. ent. Zeit. 31 p. 235.—*S. weisei* Japan p. 259, *turcicus* Türkei p. 260, spp. n., BERNHAUER Ent. Zeitschr. 25.—*S. montalbanensis philippinus*, p. 249, spp. n., Philippine Is., BERNHAUER Philippine J. Sci. D. 7.—*S. senegalensis* Senegal, *argentifer* Gabun p. 180, *madagascariensis* Madagascar p. 181, spp. n., BERNHAUER Ent. Mitt. Berlin 1.—*S. submarginatus*, *crassipes*, p. 169, *parcepunctatus* p. 170, *bonariensis*, *bruchi*, p. 171, spp. n., Argentina, BERNHAUER Ent. Bl. Berlin 8.

Stilicus chalceipennis sp. n. Gabun, BERNHAUER p. 182 Ent. Mitt. Berlin 1.

Tachyusa gratiosa sp. n. Argentinien, BERNHAUER Wien. ent. Zeit. 31 pp. 68-82.

Termitodiscus braunsi sp. n. Orange-Staat, WASMANN p. 93 Zeitschr. wiss. Zool. 101.

Termitopulex natalensis sp. n. Natal, WASMANN p. 87 T.c.

Termitoquedius gen. n. *Quediini*, *iheringi* sp. n. Rio de Janeiro, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26-48.

Termitotecna gen. n. *Aleocharini*, *braunsi* sp. n. Orange-Staat, WASMANN pp. 88-89 Zeitschr. wiss. Zool. 101.

Thinobius delicatulus var. *bernhaueri* n., RAMBOUSEK Čas. České Spol. Entomolog. Prag 7 1910 p. 97.—*T. richteri* Argentinien, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26–48.

Thyrecephalus philippinus sp. n. p. 252 Philippine Is., BERNHAUER Philippine J. Sci. D. 7.

Tolmerus opacus sp. n. Kamerun, BERNHAUER p. 206 Ent. Mitt. Berlin 1.

Tomoglossa luteicornis var. n. *eppelsheimi*, CAMERON p. 79 Ent. Mag. 48.

Trigonopselaphus modestus sp. n. Uruguay, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26–48.

Trogophloeus transferred to *Omaliini*, BONDROIT p. 450 Ann. Soc. ent. Belgique 56.—*T. championi* sp. n. Malta, CAMERON p. 49 Ent. Mag. 48.—*T. championi* Chile, *tenuipunctus* Argentinien, *tremolerasi* Uruguay, spp. n., BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26–48.—*T. pruinus* sp. n. Kapland, BERNHAUER p. 178 Ent. Mitt. Berlin 1.

Tropidera apocelloides sp. n. Argentinien, BERNHAUER Wien. ent. Zeit. 31 pp. 68–82.

Tympanophorus schenklingi sp. n. Kamerun, BERNHAUER p. 204 Ent. Mitt. Berlin 1.

Xanthodermus gen. n. ex aff. *Belonuchus*, BERNHAUER Verh. z.-b. Ges. Wien 62 pp. 26–48.

Xantholinus validus sp. n. Siebenbürgen, PETRI p. 68 Siebenbürg Käf.—*X. (Vulda) ottomanus* sp. n. Turkey, CAMERON Ent. Mag. 48 p. 1.—*X. bruchi* p. 173, *mendozanus*, *lynchi*, p. 174; *richteri*, *attarum* p. 175, spp. n., Argentina, BERNHAUER Ent. Bl. Berlin 8.

Xenomedon gen. n. p. 11, *formicaria* sp. n. California p. 12, FALL Psyche 19.

Zyras leonhardi sp. n. Sicilia, BERNHAUER p. 110 Ent. Bl. 8.—*Z. diluticornis* p. 481, *magnificus*, *clavispinosus*, p. 482, *ruandae* p. 483, *silvestris*, *miriventris*, p. 484, Afrika, spp. n., BERNHAUER Ergebn. D. Zentr.-Afrik. Exp. 3 L.12.—*Z. eurythorax* sp. n. Argentinien, BERNHAUER Wien. ent. Zeit. 31 pp. 68–82.

PSELAPHIDAE.

Male genitalia, SHARP & MUIR p. 509 pl. li Tr. ent. Soc. London 1912.

Amaurops simoni sp. n. p. 222 fig. France, SAINTE-CLAIRE DEVILLE Bull. Soc. ent. France 1912.

Ancystrocercus irregularis sp. n. p. 646, RAFFRAY Ann. Soc. ent. France 80.

Articerodes punctipennis sp. n. p. 449, RAFFRAY T.c.

Articerus griffithi sp. n. S. Austr., LEA p. 53 Proc. R. Soc. Vict. 25.

Atenisodus gracilicornis sp. n. Formosa, RAFFRAY p. 107 Ent. Mitt. 1.

Batrisocenus sauteri, *schenklingi*, spp. n., Formosa, RAFFRAY p. 105 Ent. Mitt. 1.—*B. parvidens*, *exaratus*, *javanicus*, spp. n., Java, RAFFRAY pp. 127–128 Arch. Naturges. 78 A.—*B. fasciculatus* p. 428 fig., *quinquearticulatus* p. 429, *punctipennis* p. 430, spp. n., RAFFRAY Ann. Soc. ent. France 80.

Batrisodes semipunctatus sp. n. Formosa, RAFFRAY p. 104 Ent. Mitt. 1.—*B. sculpticollis*, *laticollis*, N.S.W., *macrocephalus* Gayndah, *bifoveiceps* Brisbane, spp. n., LEA Proc. Linn. Soc. N.S. Wales 36 pp. 431–435.—*B. aphaenogastri* sp. n. Idaho p. 11, FALL Psyche 19.

Bibloporus pallidus sp. n. p. 426, RAFFRAY Ann. Soc. ent. France 80.

Bryaxis rhyssarthra sp. n. p. 413 N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Bythinoplectus formicetorum sp. n. Argentina, RAFFRAY An. Mus. Buenos Aires 22 p. 447.

Bythinus oreophilus sp. n. Steiermark, MEIXNER Wien. ent. Zeit. 31 pp. 187–193.—*B. disciger* sp. n. Kaukasus, ROUBAL Čas. České Spol. Entomolog. Prag 7 1910 p. 143.

Centrophthalmus brevicarina, *elegans*, sp. n. p. 440, RAFFRAY Ann. Soc. ent. France 80.

Cercoceroides pectoralis sp. n. p. 446, RAFFRAY T.c.

Clavigerodes raffrayi, *escherichi*, *Erythraea*, spp. n., WASMANN p. 104 Zeitschr. wiss. Zool. 101.

Collacerothorax gen. n., *sculticeps* N.S.W. sp. n., LEA Proc. Linn. Soc. N.S.W. 36 p. 451.

- Comatopselaphus semipunctatus* sp. n. p. 431, RAFFRAY Ann. Soc. ent. France 80.
- Ctenisophus sublongicornis* sp. n. Victoria, LEA Proc. Linn. Soc. N.S. Wales 36 p. 446.—*C. nigropiceus* sp. n. Victoria, LEA p. 43 Proc. R. Soc. Vict. 25.
- Cyathiger simulator* sp. n. N.S.W., LEA p. 49 T.c.
- Daveyia* gen. n. near *Tmesiphorus*, *mira* sp. n. Victoria, LEA p. 45 Proc. R. Soc. Victoria 25.
- Dalmodes infossus* p. 434, *pullus* p. 435, spp. n., RAFFRAY Ann. Soc. ent. France 80.
- Decarthron nigricans* p. 432 fig., *bruchii* p. 433, spp. n., RAFFRAY T.c.
- Diaugis plagiata* sp. n. Formosa, RAFFRAY p. 103 Ent. Mitt. 1.
- Euglyptus foveicollis* p. 403, *longicornis* p. 404, spp. n., N. Zealand, BROUN Trans. N. Zeal. Inst. 44.
- Eupines flavoterminalis*, Tasm., *alcyone* Townsville, *innubis* N.S.W., *implumis* Cairns, *concolor* and v. *adelaidensis* S.A., *hirticeps* N.S.W., spp. n., LEA Proc. Linn. Soc. N. S. Wales 36 pp. 436–440.
- Euplectops ectatommae* sp. n. N.S.W., LEA p. 50 Proc. R. Soc. Vict. 25.
- Euplectopsis schizocnemis* p. 406, *carinatus antennalis*, p. 407, *eruensis* p. 408, *heterarthrus* p. 409, *biimpressus* p. 140, spp. n., N. Zealand, BROUN Trans. N. Zeal. Inst. 44.
- Euplectus cavifrons* sp. n. Siebenbürgen, PETRI p. 104 Siebenbürg. Käfer.—*E. nubigena* subsp. n. *caucasicus*, ROUBAL Čas. České Spol. Entomolog. Prag 7 1910 p. 141.
- Eurhexius abdominalis* sp. n. p. 426, *cavifrons* p. 427. spp. n., RAFFRAY Ann. Soc. ent. France 80.
- Faronus raffrayi* sp. n. Ungarn, LOKAY Čas. České Spol. Entomolog. Prag 7 1910 p. 94.
- Fustigerinus* gen. n. *Clavigerini*, *kohli*, *hirsutus*, Kongo, spp. n., WASMANN pp. 105–106 Zeitschr. wiss. Zool. 101.
- Gerallus decipiens* sp. n. Victoria, LEA Proc. Linn. Soc. N. S. Wales 36 p. 447.
- Hamotocellus* gen. n. *Tyrini* p. 444, *hirsutus* sp. n. p. 445 fig., RAFFRAY Ann. Soc. ent. France 80.
- Hamotoides punctulatus* sp. n. Argentina, RAFFRAY An. Mus. Buenos Aires 22 p. 450.
- Hamotopsis metasternalis* sp. n. S.A., LEA Proc. Linn. Soc. N.S.W. 36 p. 454.
- Hamotus iheringi* sp. n. p. 444, RAFFRAY Ann. Soc. ent. France 80.
- Iniocyphus* gen. n. *Tychini* p. 435, *iheringi* sp. n. p. 436 fig., RAFFRAY T.c.
- Limoniates camponoti* sp. n. N.S.W., LEA p. 52 Proc. R. Soc. Vict. 25.
- Lioplectus myrmecophilus* sp. n. Argentina, RAFFRAY An. Mus. Buenos Aires 22 p. 448.
- Melba longicollis* sp. n. Argentina, RAFFRAY An. Mus. Buenos Aires 2 p. 447.—*M. impressifrons* sp. n. p. 425, RAFFRAY Ann. Soc. ent. France 80.
- Narcodes ectatommae* sp. n. Tasmania, LEA p. 42 Proc. R. Soc. Vict. 25.
- Palimboldus mamillatus* sp. n. Tasmania, LEA Proc. Linn. Soc. N. S. Wales 36 p. 449.
- Plectomorphus optandus*, *longipes*, p. 412, spp. n., N. Zealand, BROUN Trans. N. Zeal. Inst. 44.
- Plectusodes pubescens* N.S.W., *cavifrons* Tasmania, spp. n., LEA p. 51 Proc. R. Soc. Vict. 25.
- Poroderus indus* sp. n. p. 440, RAFFRAY Ann. Soc. ent. France 80.
- Pselaphellus bicolor* sp. n. p. 437, RAFFRAY T.c.
- Pselaphocompsus* gen. n. p. 447, *Tyrini*, *punctatus* sp. n. p. 448 fig., RAFFRAY T.c.
- Pselaphus fergusonii*, *subsquamosus*, N. S. W., spp. n., LEA Proc. Linn. Soc. N. S. Wales 36 pp. 445–446.
- Pselaptus tuberculifer* sp. n. Argentina, RAFFRAY An. Mus. Buenos Aires 22 p. 449.
- Reichenbachia coelestis*, *implicita*, spp. n., Formosa, RAFFRAY p. 108 Ent. Mitt. 1.
- Rybaxis macleayi*, *metasternalis*, N.S.W., *sanguinipennis* Tasmania,

foveicollis N. S. W., spp. n., LEA Proc. Linn. Soc. N.S.Wales 36 pp. 441-444.—*R. ectatommae*, *villosa*, spp. n., N.S.W., LEA p. 47 Proc. R. Soc. Vict. 25.

Rytus insignicornis sp. n. N. S. Wales, LEA Proc. Linn. Soc. N. S. Wales 36 p. 453 pl. xvii f. 5.

Sagola australiae sp. n. N.S.W., LEA Proc. Linn. Soc. N. S. Wales 36 p. 431.—*S. carinata* p. 622, *ventralis* p. 623, *occipitalis* p. 624, *longula* p. 625, *pallidula* p. 626, *spiniventris* p. 627, *grata* p. 628, *bifoveiceps* p. 629, *bimpressa* p. 630, *clavatella* p. 631, *lawsoni* p. 632, *latula* p. 633, spp. n., New Zealand, BROUN Ann. Nat. Hist. 10.—*S. monticola* sp. n. p. 402 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Tmesiphorus foveilateris sp. n. Queensland, LEA Proc. Linn. Soc. N. S. Wales 36 p. 448.—*T. hoplocephalus* sp. n. N.S.W., LEA p. 44 Proc. R. Soc. Vict. 25.—*T. iyeri* sp. n. p. 441, RAFFRAY Ann. Soc. ent. France 80.

Tyromorphus flavimanus sp. n. N.S.W., LEA Proc. Linn. Soc. N. S. Wales 36 p. 452.

Tyrus indus, *sinensis*, spp. n., p. 442, RAFFRAY Ann. Soc. ent. France 80.

Vidamus calcaratus p. 411 sp. n. N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

SCYDMAENIDAE.

Male genitalia, SHARP & MUIR p. 508 pl. li Tr. ent. Soc. London 1912.

Cephennium (*Geodytes*) *perspectum* p. 201 fig. 1, *C. (Phennecium) scabrum* p. 203 fig. 2, *C. theryanum conflexum* n. var. p. 204 fig. 3, *punicum* p. 206 fig. 5, *rugulatum* p. 208 fig. 9, spp. n., NORMAND Bull. Soc. Alger. 4.

Heterognathus myrmecophilus sp. n. Tasm., LEA p. 60 Proc. R. Soc. Vict. 25.

Lophoderus ovipennis sp. n. Idaho p. 10, FALL Psyche 19.

Phennecium n. nom. pro *Geodytes* Reitter nec Saulcy, NORMAND p. 199 Bull. Soc. Alger. 4.

Scydmaenus kingensis n. n. for *kingi*, LEA Proc. Linn. Soc. N.S.W. 36 p. 450.—*S. impavidus* S. Austr., *bifasciculatus* Vict., *incerticornis* N.S.W., *insigni-*

ventris Tasm., spp. n., LEA Proc. R. Soc. Vict. 25.

Stenichnus circassicus v. *doderoi* n., ROUBAL Čas. České Spol. Entomolog, Prag 7 1910 p. 145.—*S. pectoralis* p. 81, *laniger* p. 82, *punicus* p. 83, spp. n. Tunis, NORMAND Bull. Soc. ent. France 1912.

SILPHIDAE and CLAMBIDAE.

Silphidae der Umgebung von Orenburg (Russ.), VORONCOVSKIJ Izv. Orenb. otd. russ. geogr. Obsč. 23 p. 116.

Male genitalia, SHARP & MUIR pp. 502-505 pls. xlix & l Tr. ent. Soc. London 1912.

Agathidium mequignoni sp. n. Kaukasus, ROUBAL Čas. České Spol. Entomolog. Prag 8 1911 p. 49.

Anisotoma wiburdi, *micropunctata*, N.S.W., *bicoloriclava*, *ammophila*, Tasm. spp. n., LEA Proc. Linn. Soc. N.S.W. 36 pp. 459-461.

Antroherpon bokori sp. n. Hungaria, CSIKI Ann. Mus. Hung. 10 p. 512.—*A. matzenhaueri* sp. n. Montenegro, *hoermanni hypsophilum*, and *cylindricolle thoracicum* subspp. n., p. 645, APFELBECK Wiss. Mitt. Bosn. 12.

Antrosedes gen. n. ex aff. *Haplotropidius*, *speluncarius* sp. n. Herzegovina, REITTER p. 326 Wien. ent. Ztg. 31.

Apholeuonus v. n. *setniki* (Artname fehlt, REITTER p. 254 Ent. Bl. Berlin 8.—*A. (Haplotropidius) bokori* sp. n. Hungaria, CSIKI Ann. Mus. Hung. 10 p. 512.

Bathyscia (subg. n. *Hoffmannella*) *makarensis* sp. n. Dalmatien, MÜLLER Wien. ent. Ztg. 31.

Camiarus estriatus sp. n. p. 415 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Charonites zoppae sp. n. Sarajevo, MÜLLER p. 297 Wien. ent. Ztg. 31.

Choleva biharica, FLEISCHER Wien. ent. Zeit. 31 p. 170.—*C. caeca* p. 414, *castanea* p. 415, spp. n., N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Clambus flavipes, *pubiventris*, *latens*, *rufocastaneus*, *corylophoides*, Tasm., spp. n., LEA Proc. Linn. Soc. N. S. Wales 36 pp. 456-458.

Hoffmannella subg. n. vide *Bathyscia*.

Icharonia gen. n. *Bathysciini*, *leonhardiana* sp. n. Südbosnien, REITTER p. 334 Wien. ent. Ztg. 31.

Leptoderushohenwarti Formen, BACHOFEN Boll. Soc. Adriat. 26 2 pp. 27-31.

† *Miosilpha* gen. n., *necrophiloides* sp. n. p. 9 pl. i ff. 4-6 Colorado Miocene, WICKHAM Bull. Univ. Iowa 6 No. 3.

Nargus albanicus p. 655, *balcanicus* p. 656, spp. n., Balkan penins., APFELBECK Wiss. Mitt. Bosn. 12.—*N. armatus* sp. n. Beyrout, HUSTACHE p. 347 Bull. Soc. ent. France 1912.

Necrophorus vestigator ab. n. *postbimaculatus*, FLEISCHER Wien. ent. Zeit. 31 p. 250; *N. vestigator* Biologie, Larve und Nymphe; BENICK Ent. Bl. Berlin 8 pp. 197-203.—*N. mysticalis* Arizona, *grandior* California, spp. n., ANGELL Ent. News 23 p. 307.

Orostygia gen. n., *Bathysciinae*, *moczarskii* sp. n. Venet. Alpen, MÜLLER p. 297 Wien. ent. Ztg. 31.

Parapropus peiferi sp. n. Bosnia, APFELBECK p. 646 Wiss. Mitt. Bosn. 12.

Pholeuon bihariense, *P. (Trenellum) frivaldozkyi* spp. n., Hungaria, CSIKI Ann. Mus. Hung. 10 p. 359.

Pholeuonopsis grabowskii sp. n. Herzegowina, APFELBECK p. 646 Wiss. Mitt. Bosn. 12.

Phosphuga atrata Nahrung, und die einiger anderen Silphini, FRIEDERICH'S Zs. wiss. Insektenbiol. 8 pp. 348-352.

Silphotelus obliquus sp. n. p. 416 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Tanatophilus armeniacus sp. n. Russ. Armenien, REITTER Wien. ent. Zeit. 31 p. 104.

LEPTINIDAE and PLATYPSYLLIDAE.

Male genitalia, SHARP & MUIR p. 506 pl. li & lxxvii Tr. ent. Soc. London 1912.

TRICHOPTERYGIDAE.

Male genitalia, SHARP & MUIR p. 507 f. 231 Tr. ent. Soc. London 1912.

Rodwayia hirsuta sp. n. N.S.W., LEA p. 61 Proc. R. Soc. Vict. 25.

SCAPHIDIIDAE.

Male genitalia, SHARP & MUIR Tr. ent. Soc. London 1912 p. 506 pl. liv.

HISTERIDAE.

Bemerkungen über paläarktische Histeriden; BICKHARDT Ent. Bl. 8 pp. 87-91.

Male genitalia, SHARP & MUIR p. 512 pl. lv Tr. ent. Soc. London 1912; *Synteliidae*, *Sphaeritidae*, *Niponiidae* p. 511 pl. lv T.c.

Acritus strigipennis sp. n. Barbados, BICKHARDT Tijdschr. Ent. 55 p. 230.

Apobletes planidorsum sp. n. Borneo, BICKHARDT Tijdschr. Ent. 55 p. 219.

Bacanius medvidovici sp. n. Dalmatien, REITTER Wien. ent. Zeit. 31 p. 251.—*B. camerunus* sp. n. Kamerun, BICKHARDT p. 293 Ent. Mitt. Berlin 1.

Carcinops geministriata sp. n. O.-Afr., BICKHARDT p. 292 Ent. Mitt. Berlin 1.

Chlamydopsis tuberculata, *cavicollis*, *ectatommae*, *latipennis*, *epipleuralis*, var. *mastersi*, *pseudocephala*, *granulata*, *opaca*, spp. n., Australia and Tasmania, LEA Proc. R. Soc. Vict. 25 pp. 31-78.

Discocelis curvata sp. n. Brazil, LEWIS p. 260 Ann. Nat. Hist. 10.

Eblisia bennigseni sp. n. Neu Guinea, BICKHARDT p. 307 Ent. Mitt. Berlin 1.

Eucurtia gen. n. near *Chlamydopsis* p. 121, *paradoxa* sp. n. p. 122 S. Australia, MjöBERG Entomol. Tidskr. Stockholm 33 figs.

Hister 4-maculatus, variation, FUENTE pp. 358-360 Bol. Soc. españ. 12.—*H. distinctus* Verbreitung BICKHARDT Ent. Bl. 8 Beil.—*H. marginisternus* p. 289, *alienigena*, spp. n., O.-Afr., *falli* n. n. für *gagates* Fall p. 290, *graecus* subsp. n. *horni*, *falsus* v. n. *fraudator*, p. 291, BICKHARDT Ent. Mitt. Berlin 1.—*H. puncticollis* West Virginia, *carinifrons* Florida, p. 26, *fungicola* New Jersey p. 27, spp. n., SCHAEFFER Bull. Brooklyn Ent. Soc. 8.

Hololepta umbratilis Argentina p. 253, *vagata* Java p. 254, *cavata* Burma p. 255, spp. n., LEWIS Ann. Nat. Hist. 10.—*H. atrovirens* sp. n. Sumatra, BICKHARDT Tijdschr. Ent. 55 p. 217.

Hypobletus vethi p. 220, *imitator* p. 221, spp. n. Surinam, BICKHARDT T.c.

Idister exortiva, to *Eblisia*, LEWIS p. 258 Ann. Nat. Hist. 10.

Lewisister gen. n. near *Idister* p. 222, *excellens* sp. n. Java p. 223, BICKHARDT Tijdschr. Ent. 55.

Nicotikis sumatrana sp. n. Sumatra, BICKHARDT Tijdschr. Ent. 55 p. 228.

Notodoma formosanum sp. n. Formosa, BICKHARDT p. 126 Ent. Bl. 8.

Pachycraerus baconi sp. n. Abyssinia, LEWIS p. 258 Ann. Nat. Hist. 10.

Paratropus picinus sp. n. Sumatra, BICKHARDT Tijdschr. Ent. 55 p. 230.

Paromalus sauteri sp. n. Formosa, BICKHARDT p. 125 Ent. Bl. 8.

Pelorurus fraudator Beira, *densistriatus* Abyssinia, spp. n., LEWIS p. 259 Ann. Nat. Hist. 10.

Plaesius acutidens sp. n. Batchian, LEWIS p. 256 T.c.

Platylister habitus sp. n. New Guinea LEWIS p. 257 T.c.

Platysoma cerylonoides p. 123, *unicum*, *sauteri*, p. 124, spp. n., Formosa, BICKHARDT Ent. Bl. 8.

Saprinus vethi sp. n. Algier, BICKHARDT p. 294 Ent. Mitt. Berlin 1.—*S. illinoensis* sp. n. N. America, WOLCOTT p. 161 Canad. Ent. 44.

Satrapister gen. n. near *Saprinus* p. 231, *nitens* sp. n. p. 232, BICKHARDT Tijdschr. Ent. 55.

Terapus mnizechi, syn. *Melanetaerius infernalis* Fall, BICKHARDT Psyche 19 p. 97.

Teretriosoma paratum sp. n. Goyas p. 256, *stebbingi* ♀ = (*crisatum* Lew.) p. 256, LEWIS Ann. Nat. Hist. 10.

Trypanaeus ensifer, ♂ structures, MUIR p. 252 f. 3 Ann. Nat. Hist. 10.

Trypeticus fagi, ♂ structures, MUIR p. 251 figs. 1 & 2 T.c.—*T. rostripygus* sp. n. Java, BICKHARDT Tijdschr. Ent. 55 p. 218.

PHALACRIDAE.

Male genitalia, SHARP & MUIR p. 514 pl. lvi Tr. ent. Soc. London 1912.

Eustilbus gossypii sp. n. Buenos Aires p. 87, BRÈTHES Physis 1,

NITIDULIDAE, MONOTOMIDAE.

Male genitalia, SHARP & MUIR p. 515 pl. lvi Tr. ent. Soc. London 1912.

†*Amartus petrefactus* sp. n. p. 15 pl. ii ff. 12 & 13 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Amphicrossus parallelus sp. n. Congo, GROUVELLE p. 16 Ann. Soc. ent. Belgique 56.

Brachyleptus papaveris p. 96, *algericus* p. 97, spp. n., N. Africa, GROUVELLE Bull. Soc. ent. France 1912.

Brachypeplus castanescens sp. n. Congo, GROUVELLE p. 9 Ann. Soc. ent. Belgique 56.—*B. inquilinus* sp. n. N.S.W., LEA p. 73 Proc. R. Soc. Vict. 25.

Carpophilus kolleri p. 10, *longior* p. 11, spp. n., Congo, GROUVELLE Ann. Soc. ent. Belgique 56.

Eपुरaea sinuatipes sp. n. Congo, GROUVELLE p. 13 T.c.

Meligethes devillei sp. n. p. 168 France, GROUVELLE Bull. Soc. ent. France 1912.—*M. transsylvanicus* sp. n. Siebenbürgen, PETRI p. 154 Siebenbürg. Kafer.

Pria convexa sp. n. Congo, GROUVELLE p. 14 Ann. Soc. ent. Belgique 56.

HELOTIDAE.

Male genitalia, SHARP & MUIR p. 521 pl. lx Tr. ent. Soc. London 1912.

TROGOSITIDAE.

Male genitalia, SHARP & MUIR p. 516 figs. 89 & 90 Tr. ent. Soc. London 1912.

Lophocateres pusillus, CHITTENDEN U. S. Dept. Agric. Ent. Bull. 96 pt. 1 1911 pp. 14–18 f. 2.

Tenebroides subcostata, *vittata*, p. 148, spp. n., Brazil, SCHAEFFER Psyche 19.

Trogosita virescens nyenta var. n. p. 71, Dow J. New York Ent. Soc. 20 p. 70.

COLYDIIDAE.

Male genitalia, SHARP & MUIR p. 516 figs. 91–95 Tr. ent. Soc. London 1912.

Bitoma maura sp. n. p. 420 N. Zealand BROWN Trans. N. Zeal. Inst. 44.

Bothrideres diversus sp. n. p. 422
N. Zealand, BROUN T.c.

Cerylon apicale sp. n. Congo, GROU-
VELLE p. 17 Ann. Soc. ent. Belgique
56.

Langelandia (*Agelandia*) *terricola*
Korfu, *L. excavata*, *L. (Fleischerella)*
leonhardi, *L. gjonovici* Süddalmation,
karamani Spalato, *reflexipennis* Süd-
dalmation, *viennensis* Wien, spp. n.,
REITTER Wien. Ent. Ztg. 31 p. 279
etc.

Lasconotus; revision; spp. n., *mexi-*
canus Mexico, *flexuosus*, p. 35, *intricatus*
p. 36, *schwarzi* p. 38, *planipennis* p. 39,
subcostulatus p. 40, *tuberculatus* p. 35,
fiskei p. 39, *bitomoides* p. 40, U.S.,
KRAUS Proc. Ent. Soc. Washington 14.

Notoulus demissus sp. n. p. 419
N. Zealand, BROWN Trans. N. Zeal.
Inst. 44.

†*Phlaeonemites* gen. n. p. 13, *miocenus*
sp. n. p. 14 pl. ii. ff. 9-11 Colorado
Miocene, WICKHAM Bull. Univ. Iowa
Lab. 6 No. 3.

Pycnomerus terebrans Habitudo myr-
mécophiles, BUYSSON pp. 88-92 Lyon
Ann. soc. linn. 59.—*P. reversus*, *candidus*,
p. 421. spp. n., N. Zealand, BROUN
Trans. N. Zeal. Inst. 44.

Syncalus explanatus sp. n. p. 417
N. Zealand, BROUN T.c.

Tarphiomimus tuberculatus sp. n.
p. 417 N. Zealand, BROUN T.c.

Ulonotus uropterus p. 418, *wallacei*
p. 419, spp. n. N. Zealand, BROUN
Trans. N. Zeal. Inst. 44.

DISOOLOMIDAE.

Male genitalia, SHARP & MUIR p. 524
f. 109 Tr. ent. Soc. London 1912.

Parmaschema gen. n. p. 106, *nodi-*
margo sp. n. Luzon p. 107 f. 1, HELLER
Philippine J. Sci. D. 7.

RHYSODIDAE.

Male genitalia, SHARP & MUIR p. 490
pl. xlviii. Tr. ent. Soc. London 1912.

The *Rhysodidae* of India, FOWLER
pp. 501-512 Faun. Brit. Ind. Cicind.

CUCUJIDAE.

Male genitalia, SHARP & MUIR
pp. 518-521 figs. 96-101 Tr. ent.
Soc. London 1912.

Psammoecus stultus, p. 81, *x-notatus*,
p. 84, Formosa, *major* p. 87, *blandus*
p. 89, Java, *amoenus* Annam p. 92,
spp. n. GROUVELLE Notes Mus. Leiden
34.

Silvanolomus, nom. n. fur *Silvanopsis*,
REITTER p. 286 Wien. ent. Ztg. 31.

Silvanus bidentatus = (*Cryptomorpha*
lateritia Broun), WALKER p. 90 Ent.
Mag. 48.

CRYPTOPHAGIDAE.

Male genitalia, SHARP & MUIR p. 522
f. 105 Tr. ent. Soc. London 1912.

Cryptophagus trapezoidalis sp. n.
Finland, SAHLBERG Medd. Soc. Fauna
Fenn 38 p. 92.—*C. schroetteri* sp. n.
Dalmatien, REITTER Wien. ent. Zeit.
31 p. 252.—*C. vaulogeri* p. 44, *amplus*
p. 46, spp. n., Algérie, GROUVELLE
Bull. Soc. ent. France 1912.

C. amoenus sp. n. p. 423 N. Zealand,
BROUN Trans. N. Zeal. Inst. 44.

Pharaxonotha kirschi, CHITTENDEN
U. S. Dept. Agric. Ent. Bull. 96
Pt. 1 pp. 8-13 f. 1.

LATHRIDIIDAE.

Male genitalia, SHARP & MUIR Tr.
ent. Soc. London 1912 p. 527 pl. lxi.

Corticaria fuscicollis sp. n. p. 423 N.
Zealand, BROUN Trans. N. Zeal. Inst.
44.

Lathridius bergrothi, early stages,
POPPIUS Medd. Soc. Fauna. Fenn. 38
pp. 21-23.

MYCETAEIDAE.

Male genitalia, SHARP & MUIR p. 526
f. 115 Tr. ent. Soc. London 1912.

MYCETOPHAGIDAE.

Male genitalia, SHARP & MUIR p. 529
Tr. ent. Soc. London 1912.

DERMESTIDAE.

Male genitalia, SHARP & MUIR p. 529
f. 121 Tr. ent. Soc. London 1912.

Anthrenus verbasci, larva, hairs,
BOFILL Mem. Ac. Barcelona 8 No. 26.

†*Dermestes tertiarius* sp. n. p. 14
pl. v. ff. 1 & 2 Colorado Miocene,
WICKHAM Bull. Univ. Iowa Lab. 6
No. 3.

Ignotus aenigmaticus = ♀ *Thelydrius contractus*, SEMENOV T. Š. Rev. russ. ent. 12 p. 497.

†*Orphilus dubius* sp. n. p. 15 pl. i. f. 7 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Thelydriinae subfam. n. Diagnose, SEMENOV Rev. russ. ent. 12 p. 498.

Trogoderma tarsale life history, WODSEDALEK Ann. Ent. Soc. Amer. 5 pp. 367-381 pl. xxvii.

THORICTIDAE.

Thorictus reicherti p. 107 Cap-Kolonie, *braminus* p. 108, spp. n., *heimi* subsp. n. *wroughtoni*, WASMANN Zeitschr. wiss. Zool. 101.

BYTURIDAE.

Male genitalia, SHARP & MUIR p. 515 f. 86 Tr. ent. Soc. London 1912.

BYRRHIDAE.

Descriptive catalogue of the American *Byrrhidae*, CASEY Memoirs No. 3 pp. 1-69.

Male genitalia, SHARP & MUIR p. 530 f. 122 Tr. ent. Soc. London 1912.

Amphicyrta spp. n. and subspp. n., *chrysomelina oblonga* p. 64, *c. parvuliceps*, *elongata*, p. 65, *gentilis*, *g. ventricosa nevadensis*, p. 66, N. America, CASEY Mem. Col. 3.

Byrrhus spp. n., subspp. n. *brunnescens* p. 21, *americanus neglectus*, *a. manitobae*, *imperitus*, *angustulus*, p. 22, *concolor pacificus*, p. 23, *perditus* p. 24, *criddlei* p. 24, *torpidus*, *callidus*, p. 25, *laramienseis*, *rigens*, p. 26, *canterius*, *centralis*, *explicatus*, p. 27, *fulvovestitus*, *stolidus*, p. 28, *difficilis*, *egenus*, p. 29, *vajer*, p. 30, *wickhami*, *consuetus*, p. 31, N. America, CASEY T.c.

Chalciosphaerium gen. n. p. 12, *solor* sp. n. p. 13 pl. ii. f. 16 u. Textf. 2, Falklands-Inseln, ENDERLEIN Stockholm Vet.-Ak. Handel 48 No. 3.

Curimopsis brevicollis sp. n. Washington p. 35, CASEY Mem. Col. 3.

Cytilus subspp. n. and sp. n., *alternatus mimicus* California, *a. longulus* p. 18, *nigrans* Newfoundland p. 19, CASEY T.c.

Eulimnichus subspp. n. and sp. n. *analisis rugiceps*, *a. coloradensis*, p. 47, *evanescens* California p. 49, *nitidulus sculpticeps* p. 50, CASEY Mem. Col. 3.

Eusomalia gen. n. type *Pedilophorus lecontei* p. 13, CASEY T.c.

Limnichalia gen. n., *colonica* sp. n. Panama p. 52, CASEY T.c.

Limnichites spp. n. *densissimus* p. 41, *virginicus*, *austinianus*, p. 42, *foraminosus* p. 43, *huronicus* p. 44, spp. n., U.S., CASEY T.c.

Limnichoderus pulvereus p. 54, *floridanus* p. 55, *lanosus* p. 56, spp. n., U.S., CASEY T.c.

Lioligus gen. n. p. 60, spp. n. *striolatus*, *keeni*, p. 61, *aequabilis*, *pallidus*, p. 62, spp. n. N. America, CASEY T.c.

Lioon gen. n. p. 67, *speculare* p. 68, *puncticeps* p. 69, spp. n., N. America, CASEY T.c.

Listemus gen. n. p. 11, *formosus* p. 12, *satelles* p. 13, spp. n. California, CASEY T.c.

Microchaetes bryophilus sp. n. Tasm., LEA Proc. Linn. Soc. N. S. Wales 36 p. 462.

Morychus insulsus sp. n. British Columbia p. 8, CASEY Mem. Col. 3.

Pedilophorus opaculus sp. n. p. 424 N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Porcinolus crescentifer p. 32, *hystrix* p. 33, spp. n. U.S., CASEY Mem. Col. 3.

Simplocaria columbica British Columbia p. 15, *subnuda* Colorado p. 16, spp. n., CASEY T.c.

Tylicus gen. n. type *Pedilophorus subcanus* p. 10, CASEY T.c.

GEORYSSIDAE, CYATHOCERIDAE.

Male genitalia, SHARP & MUIR p. 530 figs. 123 & 124 Tr. ent. Soc. London 1912.

PARNIDAE = DRYOPIDAE.

Male genitalia, SHARP & MUIR p. 531 figs. 126 & 127 Tr. ent. Soc. London 1912.

†*Dryops tenuior* sp. n. p. 16 pl. iii f. 4 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Elmis and *Stenelmis*, respiration, BROOKER pp. 136-177 Ann. Biol. lac. 5.

†*Lutrochites* gen. n., *lecontei* sp. n. p. 16 pl. v f. 4 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

HETEROGERIDAE.

Male genitalia, SHARP & MUIR p. 531 f. 125 Tr. ent. Soc. London 1912.

LUCANIDAE.

Anatomie de l'appareil digestif, BORDAS Rennes Bul. soc. sci. med. 21 p. 101-105.

Male genitalia, *Lamprimidae*, *Sinodendronidae*, MUIR & SHARP Tr. ent. Soc. London 1912 pp. 573-576 pls. xlii and xliii.

Aegus bison sp. n. Borneo, MÖLLENKAMP p. 301 Internat. ent. Zeitschr. 5.—*Ae. currani* sp. n. p. 98 pl. i f. 2 Philippine Is., FELSCHÉ Philippine J. Sci. D. 7.

Cladophyllus n. gen. p. 138 voisin de *Prismognathus*, *oberthuri* sp. n. Yunnan p. 139 figs., HOULBERT Insecta 2.

Cyclommatus scutellaris sp. n. Formosa, MÖLLENKAMP p. 7 Ent. Mitt. Berlin 1.

Diphyllostoma nigricollis sp. n. California, FALL p. 42 Canad. Ent. 44.

Figulus seychellensis sp. n. Seychelles, SCOTT p. 222 Tr. Linn. Soc. London 15.

Lucanus cervus, überwintern, ROUBAL Zs. wiss. Insektenbiol. 8 p. 386; *L. cervus* überwintern?, MUZIK Zs. wiss. Insektenbiol. 8 p. 189.—*L. montivagus*, *validus*, spp. n. Borneo, MÖLLENKAMP p. 128 Int. ent. Zs. 6.

Metopodontus spectabilis sp. n. W. Sumatra, RITSEMA Notes Mus. Leiden 84 p. 183.—*M. flavomaculatus* sp. n. Kongo, MÖLLENKAMP p. 302 Int. ent. zs. 5.

Neolucanus apricans sp. n. Brahma-putra, MÖLLENKAMP p. 302 Int. ent. Zeitschr. 5.—*N. bifoveolatus* sp. n., MÖLLENKAMP p. 128 Int. ent. Zs. 6.—*N. tarranti* p. 183 figs. 1-10, *maximus* p. 193 figs., spp. n., HOULBERT Insecta 2,

Platycerus pedicellaris sp. n. California, MÖLLENKAMP p. 302 Internat. ent. Zeitschr. 5.

Prosopocoilus palawanicus sp. n. p. 97 pl. i f. 1 Philippine Is., FELSCHÉ Philippine J. Sci. D. 7.—*P. hasterti* sp. n. p. 111 fig., BORLEAU Bull. Soc. ent. France 1912.

Rhaetulus sauteri sp. n. Formosa, MÖLLENKAMP p. 6 Ent. Mitt. Berlin 1.

Scortizus dentifer, *sulcicollis*, spp. n. Brasilia, MÖLLENKAMP p. 301 Internat. ent. Zeitschr. 5.

Sphenognathus alticollis sp. n. Peru, MÖLLENKAMP p. 302 T.c.

PASSALIDAE.

Taxonomical notes, GRAVELY J. Asiat. Soc. Bengal 8 pp. 403-407.

Die Lautapparate der Passaliden *Proculus* und *Pentalobus*, SCHULZE Zool. Anz. 40 pp. 209-216.

Male genitalia, SHARP & MUIR p. 579 pl. xlv Tr. ent. Soc. London 1912.

SCARABAEIDAE.

Male genitalia, *Trogidae* distinct fam., SHARP & MUIR pp. 577-600 pls. xlii-xlvii Tr. ent. Soc. London 1912.

Coprini.

Vierter Beitrag zur Kenntnis der *Aphodiini*, KOŽANČIKOV Rev. russ. ent. 12 pp. 511-523 f. 1-6.

Amidorinus subg. n. gen. *Aphodii*, KOŽANČIKOV Rev. russ. ent. 12 p. 519.

Aphodius latusulcus ab. n. *secundus*, ROUBAL Čas. České Spol. Entomolog. Prag. 8 p. 103.—*A. ivanovi* sp. n. Kazan, LEBEDEV Rev. russ. ent. 12 p. 348.—*A. consobrinus*, ZAICEV Rev. russ. ent. 12 p. 360.

A. scuticollis ingenticollis subsp. n. Barnaul p. 520 fig. 5, *kukunorensis adumbratus* subsp. n. West China p. 521, *petiolatus* subsp. n. Tibet p. 522-6, KOŽANČIKOV Rev. russ. ent. 12.—*Aphodius angulatus* nom. n. = *discolor* p. 513, *jakovlevi* sp. n. Caucasus pp. 514-515 f. 1, *subsericeus* Beschreibung p. 575, *haroldi orinus* var. n. Himalaya p. 516 f. 2, *falcispinis* Chin. Turkestan p. 517 f. 3, *rosti* Himalaya p. 519, *equitis* Damascus p. 519, spp. n., KOŽANČIKOV Rev. russ. ent. 12.—*A. ceylonensis* Ceylon.

longus O.-Afr., p. 196, *neglectus* Australia p. 197, spp. n., SCHMIDT Arch. Naturges 78 A.—*A. campestris* sp. n. Florida, BLATCHLEY p. 330 Canad. Ent. 44.—*Aphodius*-Arten als Fäulnisbewohner, FRIEDERICHS Zs. wiss. Insektenbiol 8 p. 326.

†*Aphodius aboriginalis* p. 22 pl. vi f. 1, *restructus* p. 22 f. 2, *shoshonis* p. 23 f. 3, Colorado Miocene, spp. n., WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Araeotanytus striatus sp. n. O.-Afrika, SCHMIDT p. 201 Arch. Naturges. 78 A.

Ataenius lodsiccae sp. n. Seychelles, SCOTT p. 225 pl. xii f. 2 Tr. Linn. Soc. London 15.—*A. coriarius*, *granocostatus* p. 198, W. Afr., *modestus* Chile, *ceylonensis* Ceylon, p. 199, spp. n., SCHMIDT Arch. Naturges. 78 A.

Ateuchus variolosus, Mœurs, Evolution, CROS Alger. Bul. soc. 1911 pp. 26–31, 35–41, 85–88.

Cnemargulus, genus distinctum, SEMENOV Rev. russ. ent. 12 p. 499.

Drepanocerus rex sp. n. p. 277 Yunnan, BOUCOMONT Bull. Soc. ent. France 1912.

Geotrypes fauveli n.n. pro *obscurus* Fauvel, BEDEL Faune Col. Seine Scarab.—*G. vernalis* abb. n. *cyanicollis* and *thoracalis*, DEPOLI Wien. ent. Zeit. 31 p. 101.

Yakobsonia gen. n. *Aphodiinorum*, *georgi* sp. n. Transcaspien p. 511, KOŽANŌIKOV Rev. russ. ent. 12.

Liparochrus dolium, sp. n. New Guinea, HELLER p. 109 Ent. Mitt. 1.

Neagolius subg. n. gen. *Aphodii*, KOŽANŌIKOV Rev. russ. ent. 12 p. 517.

Ochodaeus jatahyensis sp. n. p. 243 fig. 1, BENDERITTER Bull. Soc. ent. France 1912.—*O. montanus* sp. n. Spain, FUENTE p. 366 Bol. Soc. españ. 12.

Onthophagus taurus saharæ var. n. p. 29, BEDEL Faune Col. Seine Scarab.—*O. sutleiensis* var. n. *marxi*, SPLICHAL p. 467 Deutsche ent. Zeitschr. 1912.—*O. (Proagoderus) yunnanus* sp. n. p. 278, BOUCOMONT Bull. Soc. ent. France 1912.

Onychothecus gen. n. p. 275 voisin des *Coptorhina*, *atenchoides* sp. n. p. 276 Yunnan fig. 1–2, BOUCOMONT T.c.

Orphnus arrowi fig 2, *brunneus* fig. 3, p. 244, spp. n., BENDERITTER Bull. Soc. ent. France 1912.—*O. bifidus* O.-Afr., *felschei*, p. 200, *declivis* p. 201, Congo, SCHMIDT Arch. Naturges. 78 A.

Oxyomus palmarum sp. n. Seychelles, SCOTT p. 224 pl. xii f. 1 Tr. Linn. Soc. London 15.

Phaeocroides juvenilis sp. n. Betschuanaland, KOLBE p. 155 Ent. Rdseh. 29.

Phaeochroops curtulus sp. n. Khasis, SCHMIDT p. 202 Arch. Naturges. 78 A.

Prodaliscus; Charakteristik, KOŽANŌIKOV Rev. russ. ent. 12 p. 513.

Saphobius lepidus sp. n. p. 425 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Melolonthini.

Melolonthinae; catalogue pt. iii, DALLA TORRE Berlin 1912 pp. 135–290.

Bemerkungen zu einigen Nonfriedschen Arten, MOSER D. ent. Zs. Berlin 1912 p. 325.

Aclopus wuenschei sp. n. Saõ Paulo, ORAUS p. 82 Deutsche ent. Zeitschr. 1912.

Aneucomides hirticollis sp. n. W. Australia, BLACKBURN p. 44 Tr. R. Soc. S. Austral. 36.

Apogonia; supplementary list; *moseri* nom. n. for *lobata* Kolbe, RITSEMA Notes Mus. Leiden 34 p. 128.

Atholerus; sp., BLACKBURN p. 43 Tr. R. Soc. S. Austral 36.

Costleya simmondsi sp. n. p. 427 N. Zealand, BROUN Trans N. Zeal. Inst. 44.

†*Diplotaxis* (?) *simplicipes* sp. n. p. 25 pl. vi f. 9 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Ectinoplia indica, *sinuaticollis*, India, p. 305, *tonkinensis* p. 306, *hieroglyphica* p. 307, Tonkin, spp. n., MOSER Deutsche ent. Zeitschr. 1912.

Heteronyx excisa sp. n. New Guinea, HELLER p. 111 Ent. Mitt. 1.—*H. cribripennis* p. 45, *johannis* p. 46, *difficilis* p. 47, spp. n., Australia, BLACKBURN Tr. R. Soc. S. Austral. 36.

Holotrichia ciliaticollis Tonkin p. 420, *costipennis* China p. 421, *latipalpis* Java p. 422, *serraticollis* India, *ceylonensis* Ceylon, p. 423, *bicuspis* Cochin China p. 424, *opacipennis* Tonkin p. 425, *seticollis* India p. 426, *sulana* Sula, *moana* Moa islands, p. 427, *yunnana* Yunnan p. 428, *montana* p. 430, *rufula* p. 431, *sororia* p. 432, Tonkin, *rufina*, *rufescens*, p. 433, *simillina* p. 434, *convexopyga* p. 435, China, *sauteri* Formosa p. 436, *setiventris* Tonkin p. 437, *keyensis* Key islands p. 438, *laosana* Tonkin p. 439, *saigonensis* Cochin China p. 440, *malaccensis* Malacca, *waterstradti* Borneo, p. 441, *longula* Cochin China p. 442, *diversiceps* Kurseong p. 445, *sus* Cochin China p. 443, *hybrida* p. 444, *egregia* p. 445, Assam, *luangia* Tonkin p. 448, *unguicularis* Borneo p. 449, spp. n., MOSER Ann. Soc. ent. Belgique 56.

Hoplia herminiana p. 651, *stenolepsis*, *auriventris*, p. 652, spp. n., Balkan penins., APFELBECK Wiss. Mitt. Bosn. 12.—*H. coerulea nigricollis* n. ab. p. 141, *farinosa gagates* n. var. p. 146, BEDEL Faune Col. Seine Scarab.—*H. nigromaculata*, *fulvofemorata*, p. 308, *fulvipennis* p. 309, *flavomaculata*, *indica*, p. 310, *tuberculicollis* p. 311, *albomaculata*, *viridisignata*, p. 312, *grisea* p. 313, *hirsuta*, India, *bituberculata* Borneo, p. 314, *pulchella* Sumatra p. 315, *signata*, *setifera*, Borneo, p. 316, *javana* Java, *moultoni* Borneo p. 317, *sulcicollis* Sumatra, *malaccensis* Malakka, p. 318, *waterstradti* p. 319, *imparilis* p. 320, *convexicollis* p. 321, *borneensis*, Borneo, *medana* p. 322 Sumatra, *niasana* Nias p. 323, *bimaculata* p. 324, *fissipes* p. 325, Borneo, spp. n., *H. ventricosa* var. n. *suturata* p. 314, MOSER Deutsche ent. Zeitschr. 1912.

Lachnosterna carolina sp. n. U.S., FALL p. 43 Canad. Ent. 44.—*L.*; early swarm, Kansas, WEBSTER Bull. Brooklyn Ent. Soc. 8 p. 23.

Lepidiota bovilli, *koebeleri*, p. 54, *rubrior* p. 55, *suavior*, *perkinsi*, p. 56, *leai* p. 57, *frenchi* p. 58, *deceptrix* p. 59, *caudata* p. 60, *townsvillensis* p. 61, *gilesi* p. 62, *negatoria* p. 63, spp. n., Australia, BLACKBURN Tr. R. Soc. S. Austral. 36.

Liparetrus confusus sp. n. Victoria, BLACKBURN p. 43 T.c.

Liparochrus hackeri sp. n. Queensland p. 40, *geminatus* variation p. 41, BLACKBURN Tr. R. Soc. S. Austral. 36.

†*Macroductylus pluto* p. 24 pl. vi ff. 7 & 8, *propheticus* p. 25, spp. n., Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Melolontha afflicta, Schaden in Turkestan (Russ.), PLOTNIKOV Taškent 1912 p. 15 f. 6.—*M. hippocastani* ab. n. *sefcaki*, *M. pectoralis*, Biologische, FLEISCHER p. 278 Wien. ent. Ztg. 31.—*M. vulgaris*, Farbe, BORN Soc. entomol. 27 p. 83.

Nesohoplia gen. n. p. 230, *senecionis* sp. n. Seychelles p. 231 pl. xii figs. 3–9 SCOTT Tr. Linn. Soc. London 15.

Odontria nitidula p. 425, *monticola* p. 426, *similis* p. 427, spp. n., N. Zealand, BROWN Trans. N. Zeal. Inst. 44.

Paralepidiota lepidoptera sp. n. Queensland, BLACKBURN Tr. R. Soc. S. Austral. 36 p. 51.

Pentelia crinifrons Borneo p. 445, *malaccensis* Malacca p. 446, spp. n., MOSER Ann. Soc. ent. Belgique 56.

Perissosoma grande sp. n. Seychelles, SCOTT p. 234 Tr. Linn. Soc. London 15.

Phytalus smithi sp. n. Mauritius and Antilles, ARROW p. 455 Ann. Nat. Hist. 9, life-history, D'EMMEREZ Report, &c. 34 pp. pls.

Podoserica gen. n. near *Trishoserica*, *reitteri* sp. n. Tibet, BREIT p. 202 Ent. Mitt. Berlin 1.

Polyphylla adspersa, Verwandlung, Lebensweise (Russ.), SCHREINER Selisk. choz. i lesov. 71 pp. 444–448; Schaden, &c. (Russ.), PLOTNIKOV Taškent 1912 p. 15 f. 1.

Prochelyna heterodoxa, *rubella*, BLACKBURN p. 42 Tr. R. Soc. S. Austral. 36.

†*Serica antediluviana* sp. n. p. 23 pl. vi f. 6 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Stethaspis sternalis sp. n. Victoria, BLACKBURN p. 48 Tr. R. Soc. S. Austral. 36.

Zietzia, referred to *Pachypodides*, BLACKBURN p. 65 T.c.

Rutclini.

Revision der Adoretini; OHAUS D. ent. Zs. 1912 p. 141, &c.

Über einige mit Kulturpflanzen verschleppte Adoretiden, OHAUS Ent. Bl. Berlin 8, pp. 218–227.

Acrobolbia gen. n.; *macrophylla* sp. n. Peru, OHAUS p. 316–317 Stettin. ent. Zeit. 73.

Adoretus abyssinicus sp. n. Abessinien, OHAUS p. 116 Ent. Rdsch. 29.—*A. goudoti* p. 628, *aculeatus* p. 642 Madagaskar, *nossibeicus* p. 638 Nossibé, *mauritanus* p. 640 Isle de France. spp. n., OHAUS Deutsche ent. Zeitschr. 1912.

A. semperi sp. n. p. 268 Philippine Is., OHAUS Philippine J. Sci. D. 7.

Anisoplia aetolica p. 662, *imitatrix*, *bulgarica*, p. 663, spp. n., Balkans, *lata* subsp. n. *lamiensis* and *macedonica*, p. 664, APFELBECK Wiss. Mitt. Bosn. 12.—*A. austriaca*, Bau, Metamorphose, Eiablage, Nahrung des Larven (Russ.), BRAGINA Choziajstro 7 pp. 303–310, 357–364 figs. 1–18.

Anomala flavofasciata p. 72, *flavonotata* p. 73, *flaviventris* p. 74, *flavopicta* p. 75, *anthracina* p. 76, *propinqua* p. 77, *marginipennis* p. 78, *angusta* p. 79, *protea* p. 80, *pusilla* p. 82, *A. (Callistethus) tumidicauda* p. 82, spp. n., Sikkim, ARROW Ann. Nat. Hist. 9.—*A. (Spinanomala) pallidospila* p. 327, *A. bruchomorpha* p. 328, *bilobata* p. 329, *fissilabris* p. 331, *latipes* p. 332, *seminsta* p. 333, *erosa* p. 334, *dorsopicta* p. 335, *auripennis* p. 336, *aurora* p. 337, *puella* p. 338, *A. (Euchlora) laniventris* p. 339, *chlorochelys* p. 340, spp. n., Burma, ARROW Ann. Nat. Hist. 10.—*A. hesychastria*, *kristenseni*, *rothschildi*, spp. n., Abessinien, OHAUS pp. 115–116 Ent. Rdsch. 29.—*A. (Heteroplia) sanchezi* p. 255, *A. (Euchlora) cladera* p. 257, *maculifemorata* p. 258, *seticrus* p. 259 f. 1, *ceramopyga* p. 261 f. 2, *trigonopyga* p. 263 f. 5, spp. n., Philippine Is., OHAUS Philippine J. Sci. D. 7.

Byrsopolis cribricollis p. 312 Brasil, *arizonae* 313 Ariz., *nigroaenea* p. 314 Mexico, spp. n., OHAUS Stettin. ent. Zeit. 73.

Calloodes frenchi sp. n. Queensland, OHAUS p. 112 Ent. Rdsch. 29.

Cestradoretus gen. n. *Adoretini* p. 416, *tenuirostris* p. 417 Madagaskar, *acomys* p. 641 O.-Afr., spp. n., OHAUS Deutsche ent. Zeitschr. 1912.

Chlorota chibchana p. 283, *specularis* p. 284, *rugans* p. 285, Columbia, *lesnei* p. 294 Guyana, spp. n., *terminata* subsp. n. *guatemalensis* p. 288, *chiriquina* p. 289, *panamensis*, *columbica*, *boliviana*, p. 290, *paulistana* p. 291, *espiritosantensis*, *surinama*, p. 292, *cinclis* subsp. n. *meridionalis* p. 294, OHAUS Stettin. ent. Zeit. 73.

Cnemida ephippiata sp. n. Amazonas, OHAUS p. 295 T.c.

Cyrtolophus viduus p. 153, *limbicollis* p. 154, spp. n., Madagaskar, OHAUS Deutsche ent. Zeitschr. 1912.

Dorystethus castanipennis v. n. *unicolor*, *virens* subsp. n. *subandinus*, p. 275, *specularis* sp. n. p. 276 Brasil, OHAUS Stettin ent. Zeit. 73.

Epadoretus reitteri, Diagnosis, SEMENOV Rev. russ. ent. 12 p. 501.

Eremadoretus gen. n. pro *Pseudadoreto valido*, SEMENOV Rev. russ. ent. 12 p. 500.

Heteropelidnota gen. n., *kuhnti* sp. n. Paraguay, OHAUS pp. 309–310 Stettin. ent. Zeit. 73.

Hoplognathus bahianus sp. n. Brasilia, OHAUS p. 650 Deutsche ent. Zeitschr. 1912.

Hoplopus; caracteres sexuels, *bleusei* var. n. *nigropunctatus*, BLEUSE Bul. Soc. Ent. France 1912 p. 375 figs.

Lagochile cachetiva subsp. n. *fusciventris*, OHAUS p. 273 Stettin. ent. Zeit. 73.

Orrodoretus subgen. n. zu *Prodoretus*, OHAUS p. 277 Deutsche ent. Zeitschr. 1912.

Pachyrhinadoretus gen. n. p. 509, *rugipennis*, *costatus*, p. 511, *deccanus* p. 512, spp. n., Brit. India, OHAUS Deutsche ent. Zeitschr. 1912.

Pelidnota pennata p. 299, *egana* p. 300, *instabilis* p. 302, *discicollis* p. 303, *seriatopauclata*, Brazil, *plusiotina* Mexico, p. 304, spp. n., OHAUS Stettin. ent. Zeit. 73.—*P. hoefti* sp. n. Peru, OHAUS p. 318 T.c.

Plusiotis wolffi p. 305 Ecuador, *diversa* p. 306 Mexico, spp. n., OHAUS T.c.

Popillia cornelii sp. n. O-Afr., OHAUS p. 130 T.c.

Pristadoretus fallax Mundorgane, SEMENOV Rev. russ. ent. 12 p. 500.

Prodoretus rhodesianus Rhodesia, *winkleri* O-Afr., p. 272, *bombayanus* Bombay p. 273, *malabariensis* Malabar p. 274, *guineensis* Goldküste, p. 276, *unguicularis* p. 277, *torolabris* p. 278, W.-Afr., *magdaliasae* Transvaal p. 279, spp. n., OHAUS Deutsche ent. Zeitschr. 1912.

Pseudadoretus; genus distinctum, SEMENOV Rev. russ. ent. 12 p. 500.

Pseudomacraspis cayennensis v. n. *carbonaria*, *imitatrix* v. n. *variicollis*, OHAUS p. 274 Stettin. ent. Zeit. 73.

Pseudomalaia whitheadi sp. n. p. 267 f. 7, Philippine Is., OHAUS Philippine J. Sci. D. 7.

Pseudomesystoechus gen. n. p. 155, *deserticola* Somaliland p. 156, *monticola* O.-Afr. p. 268, spp. n., OHAUS Deutsche ent. Zeitschr. 1912.

Rhamphadoretus gen. n. *Adoretini* p. 418, *simplex* p. 420, *erlangeri* p. 421, N.-O.-Africa, *sorex* Ceylon p. 424, *ehrenbergi* Arabia p. 425, spp. n., OHAUS T.c.

Scaphorhinadoretus gen. n. *Adoretini* p. 426, *bimaculatus* sp. n. p. 509 Madras, OHAUS T.c.

Schizognathus mesosternalis sp. n. Queensland, OHAUS p. 112 Ent. Rdsch. 29.

Strumadoretus gen. n. *Adoretini* p. 413, *smithi* p. 414, *suspectus* p. 415, Somali, spp. n., OHAUS Deutsche ent. Zeitschr. 1912.

Thyridium buchwaldi p. 278, *feyeri* p. 279, Ecuador, *deplanatum* p. 281 Colombia, *diversipes* p. 282 Bolivia, spp. n., OHAUS Stettin. ent. Zeit. 73.

Trigonostomum djampeanum sp. n. Djampea, OHAUS p. 411 Deutsche ent. Zeitschr. 1912.

Dynastini.

Dynastini; taxonomy, BLACKBURN pp. 67-72 Tr. R. Soc. S. Austral. 36.

Amblyphileurus tmetoplus Brasilia p. 180, *oedipus* Peru p. 181, spp. n., PRELL Ent. Bl. 8.

Anoplogomphus subg. n. vide *Heterogomphus*.

Archophanes canorus sp. n. Dahomey, PRELL p. 185 Ent. Bl. 8.

Cerocyphonistes subg. n. zu *Cyphonistes*, PRELL p. 430 Deutsche ent. Zeitschr. 1912.

Chalcocrates uniformis sp. n. Neu Guinea, HELLER Tijdschr. Ent. 55 p. 307.

Ctenocyphonistes subg. n. zu *Cyphonistes*, PRELL p. 430 Deutsche ent. Zeitschr. 1912.

Cyphonistes vallatus subspp. n. *deserti*, *nyansae* and *septentrionis*, *C. gasanus*, p. 433, *arrowi* p. 435, *bracti* p. 439, *sternbergi* p. 441, Afrika, spp. n., PRELL T.c.

Dineterogomphus subg. n. vide *Heterogomphus*.

Eucopidocaulus gen. n. near *Papua* p. 231, *platypygus* St. Aignan p. 233 sp. n., *lansbergei* subp. n. *badius* p. 234, PRELL Ent. Bl. 8.

Heterogomphidium subg. n. vide *Heterogomphus*.

Heterogomphus; revision with the following spp. n.; *H. (Ortheterogomphus* subg. n. p. 103) *curtipennis* p. 104, *H. (Heterogomphidium* subg. n.) *gracilicornis* p. 105, *H. polynices* p. 110, *punctipennis*, *binodosus*, p. 114, *laticollis* p. 115, with subspp. *melancholicus* p. 116 and *politus* p. 117, *cribricollis* p. 118, *H. (Syneterogomphus* subg. n. p. 128) *sternbergi* p. 129, *H. (Dineterogomphus* subg. n. p. 129) *mirabilis* p. 136, *rugicollis* p. 137 with subsp. *ohausi* p. 138, *hirticollis* p. 189, *H. (Psileterogomphus* subg. n. p. 141) *arrowi* p. 143, *rubripennis* p. 144, *H. (Neobaryxenus* subg. n. p. 148) *curvicornis* p. 148, *H. (Anoplogomphus* subg. n. p. 149) *incornutus* p. 150, *H. (Notheterogomphus* subg. n. p. 156) *depressus* p. 159, *coriaceus* p. 160, *H. (Tracheterogomphus* subg. n. p. 161) *consors* p. 165, *hirtus* p. 166, spp. n., S. America; also the following subspp. n., *pauson consanguineus* p. 121, *chevrolati punctatissimus* and *insignis* p. 135, *mnizechi kolbei* p. 155, *hopei excavatus*

p. 159; PRELL Mem Soc. ent. Belgique 20.

Hexodon patella p. 598, *latissimum* p. 599, *unicostatum* p. 600, spp. n., Madagascar, male characters, ARROW Ann. Nat. Hist. 9.

Hoplitogomphus subg. n. of *Heterogomphus* p. 123, *aidoneus* subspp. n. *affinis* and *piliger* p. 127, PRELL Mem. Soc. ent. Belgique 20.

Microphileurus subulo sp. n. Peru, PRELL p. 162 Ent. Bl. 8.

Ncobaryxenus subg. n. vide *Heterogomphus*.

Notheterogomphus subg. n. vide *Heterogomphus*.

Ortheterogomphus subg. n. vide *Heterogomphus*.

Oryctes rhinoceros, larva and pupa, pp. 200–202 figs., GHOSH Mem. Dept. Agric. Ind. Ent. Ser. 2 No. 10; natural history, JEPSON Bull. 3 Dep. Agric. Fiji 24 pp. 7 pls.

Papuana splendens Neu-Guinea p. 228, *inermis* Salomo-Ins. p. 229, *trinodosa* Neu-Guinea, *uninodis* [patr. inc.] p. 230, spp. n., PRELL Ent. Bl. 8.

Phileurus valgus subsp. n. *antillarum*, PRELL p. 179 T.c.

Prionoryctes laticollis Uganda p. 184, *intermedius* Liberia p. 185, spp. n., PRELL T.c.

Pseudohomonys palavanus sp. n. Palawan, PRELL p. 186 T.c.

Psileterogomphus subg. n. vide *Heterogomphus*.

Syneterogomphus subg. n. zu *Heterogomphus* p. 53, *sternbergi* sp. n. p. 55 S.-Amer.?, PRELL Stettin. ent. Zeit. 73.

Tracheterogomphus subg. n. vide *Heterogomphus*.

Trionychus mucronatus var. n. *laevicollis*, PRELL p. 183 Ent. Bl. 8.

Cetoniini.

Cetoniidae from Victoria-Nyansa, descriptions and figures, CSIKI Archiv. Zool. 1 1909 pp. 17–22 pl. i.

Anatonochilus rugosus, *angulicollis*, spp. n., Africa, JANSON Ann. Mus. Genova 45 p. 266.

(N-9210 j)

Anelaphinis nyansana sp. n. Africa, CSIKI p. 21 Arch. Zool. 1 1909.

Chiriquiba insignis, femelle, BOURGOIN Bull. soc. ent. France 1912 p. 44.

Chlorobapta tibialis Qld. sp. n., LEA Proc. Linn. Soc. N. S. Wales 36 p. 464.—*C. tibialis* sp. n. Queensland, MOSER p. 566 Deutsche ent. Zeitschr. 1912.

Coelorrhina preissi sp. n. O.-Afr., MOSER p. 560 T.c.—*C. (Pseudoneptunides* subg. n.) *szalayii* sp. n. Victoria Nyansa, CSIKI p. 18 Archiv. Zool. 1 1909.

Coenochilus bayoni, *tuberculatus*, p. 267, *carinatus* p. 268, spp. n., Africa, JANSON Ann. Mus. Genova 45.—*C. tuberculicollis* p. 569 Sululand, *togoensis* p. 570 Togo, MOSER Deutsche ent. Zeitschr. 1912.

Compscephalus adustus sp. n. p. 114, BOURGOIN Bull. Soc. ent. France 1912.

Cosmesthes flavosparsa sp. n. Angola, MOSER p. 569 Deutsche ent. Zeitschr. 1912.

Cosmovalgus ferranti sp. n. Congo, MOSER p. 574 T.c.

Cremastochilus quadratus sp. n. Arizona, FALL p. 43 Canad. Ent. 44.

Cyclidiosoma gen. n., *anomalum* sp. n. Victoria Nyansa, JANSON Ann. Mus. Genova 45 p. 269.

Diaphonia frenchi Cairns sp. n., LEA Proc. Linn. Soc. N. S. Wales 36 p. 463.

Enoptotarsus deserticola bedeli n. var. p. 127, BLEUSE Bull. Soc. ent. France 1912.

Eudicella smithi var. n. *castanoptera*, JANSON p. 257 Ann. Mus. Genova 45.

Glycyphana quadrinotata sp. n. St. Aignan, MOSER p. 567 Deutsche ent. Zeitschr. 1912.

Glyptothea moultoni, *excavata*, spp. n., Borneo, JANSON p. 78 Ent. Mag. 48.

Gnathocera trivittata variation, JANSON p. 260 Ann. Mus. Genova 45.

Gnorimus decempunctatus rufipennis n. var. p. 150, BEDEL Faune Col. Seine Scarab.—*G. nobilis* ab. n. *purpureus*, DEPOLI Wien ent. Zeit. 31 p. 101.

d 30

Gymnetis aureotorquata sp. n. Bahia p. 42, BOURGOIN Bull. Soc. ent. France 1912.—*G. bouvieri* sp. n. p. 127, BOURGOIN T.c.—*G. peruana* sp. n. Peru, MOSER p. 562 Deutsche ent. Zeitschr. 1912.

Ischiopsopha castanea Neu Guinea, *purpureitarsis* Neu Pommern, spp. n., MOSER p. 563 T.c.

Lomaptera satanas v. n. *bicolorata*, MOSER p. 564 T.c.

Macronota longiuscula sp. n. Celebes, MOSER p. 565 T.c.

Oncosterna friederici var. *vittata* n. var., *celebensis toradja* subsp. n. p. 171, HELLER Notes Mus. Leiden 34.

Pachnoda petei p. 19, *katonae*, *madaraszi*, p. 20, *elegantissima* p. 21, spp. n., Africa, CSIKI Arch. Zool. 1 1909.

Plaesiorrhina ugandensis var. n. *decepta*, JANSON p. 260 Ann. Mus. Genova 45.

Polystalactica conspergata sp. n. Africa, CSIKI p. 22 Arch. Zool. 1 1909.

Pseudochalcothea chelfordi, *compacta*, p. 76, *macrophylla* p. 77, spp. n., Borneo, JANSON Ent. Mag. 48.

Pseudoneptunides subg. n. vide *Coelorrhina*.

Pygora simillima sp. n. Madagascar, MOSER p. 566 Deutsche ent. Zeitschr. 1912.

Rhomborrhina fulvopilosa subsp. n. *formosana*, MOSER T.c.

Trichius fasciatus f. n. *illunaris*, SCHULZE Berliner ent. Zs. 57 p. 38.

Xenogenius angolensis p. 571 Angola, *striatipennis* p. 572 Congo, *punctipennis* p. 573 Gabun, spp. n., MOSER Deutsche ent. Zeitschr. 1912.

BUPRESTIDAE.

Die Buprestiden Mitteldeutschlands, DAHNE Halle Mitt. ent. Ges. H. 3-4 pp. 35-52.

Buprestidae of Borneo, MOULTON J. Sarawak Mus. 1 No. 2 pp. 83-85.

Male genitalia, SHARP & MUIR p. 547 pl. lxxvii Tr. ent. Soc. London 1912.

Acmaeodera bequaerti sp. n. Congo, KERREMANS p. 3 Rev. Zool. Afric. 2.

†*Acmaeodera schaefferi* p. 18 pl. iii f. 7, *abyssa* p. 19 pl. iy f. 2 Colorado

Miocene, spp. n., WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Actenodes lemoulti sp. n. Madagascar, THÉRY p. 116 Ann. Soc. ent. Belgique 56.

Agrilus kolleri p. 8, *maynaei*, *schoutedeni*, p. 9, *lameerei*, *vacuus*, p. 10, *folognei*, *canus*, p. 11, spp. n., Africa, KERREMANS Rev. Zool. Afric. 2.—*A. mayeti* sp. n. Madagascar, THÉRY p. 122 Ann. Soc. ent. Belgique 56.—*A. minusculus*, *hewitti*, p. 74, *corneensis*, *amatus*, *viator*, p. 75, *crucifrons*, *myrmido*, *neglectus*, *desuetus*, p. 76, *dignus*, *pravus*, *sagax*, *potens*, p. 77, *mustus*, *velatus*, *cruciatus*, *illautus*, *convexusculus*, p. 78, *moultoni*, *pexus*, *diligens*, p. 79, spp. n., Borneo, KERREMANS J. Sarawak Mus. 1 No. 2.—*A. insulicola*, *formosanus*, p. 205, *nigricinctus*, *sauteri*, *hornianus*, p. 206, *ajax*, *mentor*, *priamus*, p. 207, *auropicus*, *obnotatus*, *myrmido*, p. 208, spp. n., Formosa, KERREMANS Arch. Naturges. 78 A.

A. champlaini p. 245, *crataegi* p. 247, *auricomus* p. 250, spp. n., U. S., *cephalicus* and *puncticeps* Lec. p. 249, FROST Canad. Ent. 44.—*A. strigicollis* sp. n. Arizona, FALL p. 41 Canad. Ent. 44.

Amorphosoma moultoni sp. n. Borneo, KERREMANS p. 74 J. Sarawak Mus. 1 No. 2.

Ankareus ruficornis sp. n. Madagascar, THÉRY p. 132 Ann. Soc. ent. Belgique 56.

Anthaxia carthaginiensis Tunis, *per-superba* Algier, spp. n., OBENBERGER Wien ent. Zeit. 31 p. 161.—*A. bicolor veselyi* ab. n., *grammica cyanifulgens* ab. n., *grabowskii* Herzegovina, *kanaanita* Syrien, *rambouseki* Bulgarien, spp. n., OBENBERGER Čas. České Spol. Entomolog. Prag 9 pp. 3-20.—*A. tricolor* sp. n. Borneo, KERREMANS p. 69 J. Sarawak Mus. 1 No. 2.

Aphanisticus maynaei, *lembanus*, spp. n., Congo, KERREMANS Rev. Zool. Afric. 2 p. 12.—*A. rollei* p. 124, *angustifrons* p. 125, *tondui* p. 126, *rotundicollis* p. 127, *denticulatus*, *grandidieri*, p. 128, spp. n., Madagascar, *mayeti* = (*bilobiceps* Fairm.), THÉRY Ann. Soc. ent. Belgique 56.—*A. ocularis* p. 79, *hewitti*, *moultoni*, p. 80, spp. n., Borneo, KERREMANS J. Sarawak Mus. 1 No. 2.

Belgaumia brooksi sp. n. Borneo, KERREMANS p. 73 T.c.

Brachys ovata, habits, LENG J. New York Ent. Soc. 20 p. 193.

Buprestis Solier = *Ancylochira* Eschsch. et. *Melanophila* Eschsch., JACOBSON Rev. russ. ent. 12 p. 135.—*B. salomoni* = (*wawari* Nonfr.), MOSER p. 325 Deutsche ent. Zeitschr. 1912.

Chalcogenia elongata sp. n. Congo, KERREMANS p. 6 Rev. zool. Afric. 2.

Chalcophora Solier = *Buprestis* L., Eschscholtz, JACOBSON Rev. russ. ent. 12 p. 135.

Chryaspis auricauda = (*Chryso-dema splendens* Nonfr.), MOSER p. 325 Deutsche ent. Zeitschr. 1912.

Chrysobothris matangana sp. n. Borneo, KERREMANS p. 70 J. Sarawak Mus. 1 No. 2.—*C. sauteri, infranitens*, spp. n., Formosa, KERREMANS p. 204 Arch. Naturges. 78A.

Chrysochroa aurora sp. n. Celebes, HELLER Notes Mus. Leiden 34 p. 173.

Conognatha excellens = (*staudingeri* Nonfr.), MOSER p. 325 Deutsche ent. Zeitschr. 1912.—*C. inornata, quadripunctata*, spp. n., Guyana, ROTHKIRCH p. 589 Deutsche ent. Zeitschr. 1912.—*C. splendens, leachi* p. 59, *ornata, abdominalis*, p. 60, *rufiventris* p. 61, *apicalis, nigropurpurea*, p. 62, spp. n., S. America, WATERHOUSE Ann. Nat. Hist. 9.

Coroebus lampsanæ bicolor ab. n., OBENBERGER Čas. České Spol. Entomolog. Prag. 9 p. 20.—*C. undatus*, MOLLANDIN DE BOISSY Toulon Ann. soc. hist. nat. 1911 p. 143–146.—*C. moulloni, inornatus, auriventris*, p. 71, *hewitti, sarawacensis, borneensis*, p. 72, spp. n., Borneo, KERREMANS J. Sarawak Mus. 1 No. 2.—*C. sauteri, insulicola* sp. n. Formosa, KERREMANS p. 205 Arch. Naturges. 78 A.

Diplolophotus sicardi sp. n. Madagascar, THÉRY p. 121 Ann. Soc. ent. Belgique 56.

Discoderes apicalis sp. n. Borneo, KERREMANS p. 70 J. Sarawak Mus. 1 No. 2.

Endelus sauteri sp. n. Formosa, KERREMANS p. 209 Arch. Naturges. 78 A.

(N 9210 j)

Epimacha borneensis sp. n. Borneo, KERREMANS p. 73 J. Sarawak Mus. 1 No. 2.

Germanica casuarinae, BLACKBURN p. 74 Tr. R. Soc. S. Austral. 36.

Habroloma velutina sp. n. Madagascar, THÉRY p. 129 Ann. Soc. ent. Belgique 56.

Lampra cupreosplendens sp. n. Formosa, KERREMANS Arch. Naturges. 78A.

Megactenodes cupriventris sp. n. Africa, KERREMANS p. 7 Rev. zool. afric. 2.

†*Melanophila cockerellae* pl. iii f. 5, *handlirschi*, p. 17, pl. iii f. 6, spp. n., Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. Nat. Hist. 6 No. 3.

Melibæus purpurifrons sp. n. Borneo, KERREMANS p. 73 J. Sarawak Mus. 1 No. 2.

Neospades, diagnosis, BLACKBURN p. 72 Tr. R. Soc. S. Austral. 36.

Paradora sicardi sp. n. Madagascar, THÉRY p. 118 Ann. Soc. ent. Belgique 56.

Philanthaxia auricollis p. 68, *viridifrons* p. 69, spp. n., Borneo, KERREMANS J. Sarawak Mus. 1 No. 2.

Pithiscus bicolor p. 589 Brasilia, *moseri* p. 590 Argentina, *gibbulus, similis* p. 591, *plebejus, nitidus*, Brasilia, *cruentata* Mexico, p. 592, spp. n., *excellens* v. n. *schreiberti* p. 590, ROTHKIRCH Deutsche ent. Zeitschr. 1912.

Polybothris auberti p. 108, *surcoufi* p. 109, *madoni* p. 110, *staudingeri* p. 111, *renardi* p. 112, *regalis* p. 113, *darwini* p. 114, *faucherei, inedita*, p. 115, *subpropinqua, cribripennis*, p. 116, spp. n., Madagascar, *zivetta* var. n. *imbellia* p. 110, *coquereli* var. n. *purpurea* p. 108, THÉRY Ann. Soc. ent. Belgique 56.

Psiloptera guningi sp. n. Transvaal, KERREMANS p. 652 Mon. Bupr. 5.

Sambus hewitti sp. n. Borneo, KERREMANS p. 73 J. Sarawak Mus. 1 No. 2.

Sicardia opaca p. 133, *rufitarsis* p. 134, *micrastoides* p. 135, spp. n., Madagascar, THÉRY Ann. Soc. ent. Belgique 56.

Sphenoptera obsti nom. n. für *Sph. aliena, bengalensis* n. n. für *cupriventris, impressicollis* Motsch = *karelini, macra* = *inermis*, p. 135, *tunctana* nom. n. für *sculpticollis, anlacophora*, nom. n. für

sulcata, p. 136, JACOBSON Rev. russ. ent. 12.—*S. gastonis* (Théry) Africa or. p. 19, *oporina* (Jak.) Caucasus p. 71, *ixion* p. 74, *confusa* p. 104, Persia, *ajax* Caucasus p. 137, spp. n., *foveithoracica* n. n. for *luctusoa* Jak. p. 116, *castelnauadi* n. n. for *inaequalis* Cast. p. 162, *marseuli* n. n. for *corrugata* Cast. p. 170, KERREMANS Mon. Bupr. 6.—*S. laplumei* sp. n. Congo, KERREMANS p. 6 Rev. zool. afric. 2.—*S. gossypii*, VUILLET *Insecta* 2 p. 149.

Suarezia gen. n. p. 119 near *Paradora*, *albicollis* sp. n. Madagascar p. 120, THÉRY Ann. Soc. ent. Belgique 56.

Trachys auberti p. 130 *pigra* p. 131, spp. n., Madagascar, THÉRY Ann. Soc. ent. Belgique 56.—*T. lembana* p. 12, *bequaerti*, *lameerei*, p. 13, *schoutedeni*, *folognei*, p. 14, spp. n., Congo, KERREMANS Rev. zool. afric. 2.—*T. alberti* sp. n. Congo, KERREMANS p. 77 Rev. zool. afric. 2.—*T. albolineata*, *hewitti*, p. 80, *thoracica*, *moultoni*, *auropicta*, *discalis*, *mirabilis*, p. 81, *discophorus* p. 82, spp. n., Borneo, KERREMANS J. Sarawak Mus. 1 No. 2.

T. sauteri, *formosana* spp. n., Formosa, KERREMANS p. 209 Arch. Naturges. 78 A.

EUONEMIDAE (= MELASIDAE)
and THROSCIDAE.

Male genitalia, SHARP & MUIR p. 546 pl. xvii Tr. ent. Soc. London 1912.

Curtocephalus gen. n. near *Phlegon* p. 303, *angustus* sp. n. New Guinea p. 304, FLEUTIAUX Ann. Soc. ent. Belgique 56.

Dendrocharis jansoni p. 326 Borneo, *rouyeri* p. 327 Java, spp. n., FLEUTIAUX Bull. Soc. ent. France 1912.

Dicladus favrei India p. 296, *melanocoleoides* Fiji islds. p. 297, spp. n., FLEUTIAUX Ann. Soc. ent. Belgique 56.

Dromaeolus gracilicornis sp. n. Caucasus, ROUBAL Čas. České Spol. Entomolog. Prag. 9 1911 p. 124.

Eucalodemus bonvouloiri Chontales p. 300, *dohertyi*, *brevicollis*, New Guinea, p. 301, spp. n., FLEUTIAUX Ann. Soc. ent. Belgique 56.

Euryostus bonvouloiri sp. n. p. 328 N. Guinea, FLEUTIAUX Bull. Soc. ent. France 1912.

Gagatellus gen. n. p. 299 near *Plesiofornax*, *baeri* sp. n. Peru p. 300, FLEUTIAUX Ann. Soc. ent. Belgique 56.

Henecosoma brasiliense sp. n. Blumenau, FLEUTIAUX p. 303 Ann. Soc. ent. Belgique 56.

Macroscytho balabakensis Borneo, *pascoei* Australia, spp. n., p. 302, FLEUTIAUX Ann. Soc. ent. Belgique 56.

Mesogenus conradti p. 297, *lineicollis* p. 298, spp. n., W. Africa, FLEUTIAUX Ann. Soc. ent. Belgique 56.

Phyllocerus diversicornis, mâle, ZÜRCHER Paris Bull. soc. ent. 1912 p. 85.

Plesiofornax javanus Java p. 298, *frenchii* Australia p. 299, spp. n., FLEUTIAUX Ann. Soc. ent. Belgique 56.

Pterotarsus jansoni sp. n. Ecuador, FLEUTIAUX p. 296 Ann. Soc. ent. Belgique 56.

Scopulifer atkinsoni sp. n. p. 328 Rangoon, FLEUTIAUX Bull. Soc. ent. France 1912.

Semnoderma convexicollis sp. n. Borneo, FLEUTIAUX p. 297 Ann. Soc. ent. Belgique 56.

Talerax dorsalis sp. n. p. 428 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Temnillus alius sp. n. p. 325 N. Guinea, FLEUTIAUX Bull. Soc. ent. France 1912.

ELATERIDAE.

Mœurs et métamorphoses des Elatérides, XAMBEU Lyon Ann. soc. linn. 59 p. 111-161.

Verzeichnis der in der Umgebung Magdeburgs aufgefundenen Elateridae, FEUERSTACKE Halle Mitt. ent. Ges. H. 3-4 p. 53-58.

Elaterides du Catalogue analytique et raisonné des Coléoptères de Saône-et-Loire; BUYSSON Miscellanea entomologica 19 p. 107 & 20 p. 25-27.

Danish larvæ of the *Elateridæ*, Danish with English summary, HENRIKSEN København Ent. Medd. 4 p. 225-331 78 figg.

Male genitalia, SHARP & MUIR p. 545 pl. lxvi Tr. ent. Soc. London 1912.

Agriotes siciliensis n. n. pro *buyssoni* Ragusa, PIC Bull. Soc. ent. France 1912.

Anchastus disrui-seauxi, *humbloti*. spp. n., p. 477, Ins. Comores, FLEUTIAUX Ann. Soc. ent. France 1911.

Athous; synonymy, S. european; MÜLLER Wien. ent. Zeit. p. 41 & 42.—*Athous*, Revision, der ostadriatischen Provinzen; MÜLLER Boll. Soc. Adriat. 26 2 pp. 97–143.—*A. cavatus* = *Elater flavescens*, JACOBSON rev. russ. ent. 12 p. 136.—*A. (Stenagostus) robustus* Stierl. p. 141, *A. (H.) mollis* Reitt. p. 142, DU BUYSSON Bull. Soc. Bucharest 21.—*A. hilfi* sp. n. Bulgarien, REITTER p. 317 Wien. ent. Ztg. 31.

Cardiophorus shusteri p. 128, *nigrocyaneus* p. 129, spp. n., DU BUYSSON Bull. Soc. ent. France 1912.—*C. ovipennis* var. n. *mimicus*, DU BUYSSON p. 167 Rev. ent. franc. 28 1910; *C. hoploderus* of Pic, synonymy, Id. p. 168 T.c.—*Cardiophorus* de M. Pic; DU BUYSSON Rev. ent. Caen 28 1911 p. 168–171.—*C. asellus*, larva fig., SHARP p. 189 Entomologist 45.

Chrosis dubitans sp. n. p. 429 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Corymbites fulvescens p. 429, *vitticollis*, *approximans*, p. 430, *sternalis* p. 431, spp. n., N. Zealand, BROUN T.c.

Cryptohypnus ivanovi nom. n. für *atomarius*, JACOBSON Rev. russ. ent. 12 p. 136.

Diacanthus aeneus, KLEINE Intern. ent. Zs. 6 p. 131.

Ectamenogonus; limits and synonymy, DU BUYSSON p. 138 & p. 140 fig. Bull. Soc. Bucharest 21.

Elater megerlei montandoni, DU BUYSSON Miscell. entom. 20 p. 17.—*E. bicoloratus* sp. n. p. 130, DU BUYSSON Bull. Soc. ent. France 1912.

Megapenthes usurpatus n. n. pro *umbilicatus* Candèze, *pupieri*, p. 476, *comoriensis* p. 477, spp. n., Ins. Comores, FLEUTIAUX Ann. Soc. ent. France 1911.

Melanotus maculicornis sp. n. p. 130, DU BUYSSON Bull. Soc. ent. France 1912.

Paracrepidomenus; notes, BLACKBURN p. 74 Tr. R. Soc. S. Austral. 36.

Proloboderus gen. n. voisin de *Loboderus*, *crassipes* sp. n. Argentina p. 264; FLEUTIAUX Bull. Soc. ent. France 1912.

Protelater diversus sp. n. p. 428 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Semiotus horvathi p. 23, *fleutiauxi* p. 24, Peru, *anthracinus* Venezuela p. 25, spp. n., *imperialis* varr. n. *subtilis* and *schenklingi* p. 23, SZOMBÁTHY Archiv. zool. 1 1909.

CEBRIONIDAE. RHIPICERIDAE.

The genera of *Cebrionidae* with lists of the species, DALLA TORRE Gen. ins. 127 17 pp. 1 pl.

Male genitalia, SHARP & MUIR p. 545 f. 153 Tr. ent. Soc. London 1912.

Callirhipis glaber sp. n. p. 5, PIC Mel. exot. 2.

Cebrio; larva, BLAIR p. lxxii P. ent. Soc. London 1912.

Cebriognathus = *Analestes*, *C. desertorum* = *An. testacea*, JACOBSON Rev. russ. ent. 12 p. 136.

DASCILLIDAE. CYPHONIDAE.

Larva allied to *Helodes* inhabiting *Tillandsia*, SCOTT p. 431 Ann. Nat. Hist. 10.

Male genitalia, SHARP & MUIR pp. 542–544 pls. lxvi & lxxi Tr. ent. Soc. London 1912.

Atopida basalis sp. n. p. 431 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Cyphon pachymerus sp. n. p. 432 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Dascillus cervinus, Moorigesensschädling; HEROLD Centralbl. Bakt. Abt. 2 33 p. 438–442 Taf.

Mesocyphon mandibularis sp. n. p. 432 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Scirtes grandis, fig., life-history NOUROJEE Mem. Dept. Agric. Ind. Ent. Ser. 2 No. 9.

MALACODERMIDAE.

Révision des *Lampyrides*; OLIVIER Rev. sci. Bourbon 24 1911 p. 24–27 39 63–85 98–112 av. fig.

Bemerkungen an dem Lampyriden-Teil des Coleopterorum Catalogus; KUNTZEN Ent. Rdsch. 29 p. 86-87.

Luminosity of N. American *Lampyridae*; McDERMOTT pp. 309-311 Canad. Ent. 44.

Corrections re light of American *Lampyridae*, McDERMOTT p. 73 Canad. Ent. 44.

Les Lampyrides de l'Indo-Chine, OLIVIER Rev. sci. Bourbon 25 p. 88-92.

Male genitalia, SHARP & MUIR p. 535-541 pls. lxiv & lxv Tr. ent. Soc. London 1912.

Aethra flavipennis, lauta, operosa, spp. n., p. 55, OLIVIER Rev. Sci. Bour. 24.

Amydetes gorhami n. n. für *justigiata* Gorh., KUNTZEN p. 87 Ent. Rdsch. 29.

Anthocomus sicardi sp. n. p. 175, PIC Bull. Soc. ent. France 1912.—*A. rufus*, Entwicklungsgang, Lebensweise, URBAN Ent. Mitt. Berlin p. 331-337.

Arthracanthus foveicollis sp. n. p. 433 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Aspisoma insperatum sp. n. p. 22 Antilles, OLIVIER Rev. sci. Bourbon. 25.

Attalus kuluensis sp. n. p. 37, PIC Bull. Soc. Autun 23.

Calyptocephalus picturatus sp. n. p. 46, OLIVIER Rev. Sci. Bourbon. 24.

Cantharis pulicaria var. n. *liburnica*, DEPOLI Wien. ent. Zeit. 31 p. 101.

Catapiestus bourgoini sp. n. p. 176, PIC Bull. Soc. ent. France 1912.—*C. minutus* sp. n. p. 7, PIC Mel. exot. 2.

Chauliognathus bogotensis, limbathorax, infernalis, semilimbatus, caeruleonotatus, atricolor, binotaticollis, itatyanus, p. 148, spp. n., PIC Bull. Soc. zool. France 37.

Collops nigritus, parvus, p. 185, *femoratus, scutellatus, tibialis*, p. 186, *similis, sublimbatus*, p. 187, spp. n., U. S., SCHAEFFER Canad. Ent. 44.—*C. granellus* p. 265, *versatilis* p. 273, *vicarius* p. 258, *dux* p. 259, *marginicollis claricollis* p. 260, *hirtellus lucens, discretus* Colorado, p. 261, *subtropicus*

p. 262, *subaeneus* p. 262, *necopinus* p. 267, N. America, spp. n. and varr. n., FALL J. New York Ent. Soc. 20.

Cratomorphus rectus p. 75, *cinctipennis, gorhami*, p. 76, spp. n., OLIVIER Rev. Sci. Bourbon, 24.

Danacaea reissi sp. n. Kaukasus, ROUBAL Čas. České Spol. Entomolog. Prag 8 1911 p. 101.

Dasytes tasmanicus pro *bourgeoisi* Lea, *elderi* pro *helmsi* Black., *rufithorax* pro *ruficollis* Lec., 1876, nn. n., PIC Mél. exot. 2.

Diaphanes abyssinus sp. n. Abyssinie, OLIVIER Ann. Mus. Genova 45 p. 209.—*D. citrinus* sp. n. Formosa, OLIVIER p. 147 Ann. Mus. Genova 45.—*D. spichali* sp. n. p. 172, OLIVIER Bull. Soc. ent. France 1912.

Dilophotes longipennis sp. n. p. 175, PIC Bull. Soc. ent. France 1912.

Dilychnia cavicollis sp. n. p. 171, OLIVIER Bull. Soc. ent. France 1912.

Discodon anceyi, blumenausum, p. 305, *suapinum* p. 306, spp. n., S. America, PIC Ann. Soc. ent. Belgique 56.—*D. bisbiluteovittatum* p. 457, *misionense* p. 458, spp. n., Argentina, PIC An. Mus. Buenos Aires 22.—*D. subobscuriceps* p. 76, *semidiscoidale* p. 77, spp. n., PIC Bull. Soc. ent. France 1912.—*D. subannulicorne* sp. n. p. 4, PIC Mel. exot. 2.—*D. chiriquense, podabroides*, spp. n., p. 15, PIC T.c.

Dodacles plumosus var. n. *immaculatus*, OLIVIER p. 25 Ann. Soc. ent. Belgique 56.—*D. interfusus*, sp. n., *dubitans* var. n. *fuscicollis*, p. 170, OLIVIER Bull. Soc. ent. France 1912.—*D. remixtus* sp. n. p. 53, OLIVIER Rev. Sci. Bourbon. 24.

Drilosilis parallelus, costatus, armittugi, rouyeri, nitidior, borneensis, p. 13, *fruhstorferi, ruficollis*, p. 14, spp. n., PIC Mél. exot. 2.

Dromanthus ruficeps sp. n. Argentina, PIC p. 457 An. Mus. Buenos Aires 22.

Dryptelytra fulvipennis sp. n. Paraguay, OLIVIER p. 25 Ann. Soc. ent. Belgique 56.—*D. fulvibasis* sp. n. p. 53, OLIVIER Rev. Sci. Bourbon 24.

Dysmorphocerus pallidithorax sp. n. p. 5, PIC Mél. exot. 2.

†*Eudasytites* gen. n., *listriiformis* sp. n. p. 19 pl. ii f. 14 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Hyas-externa sp. n. p. 173, OLIVIER Bull. Soc. ent. France 1912.

Ichthyurus; list of species, GESTRO pp. 58-63 Ann. Mus. Genova 45.—*Ichthyurus modiglianii* sp. n. Sumatra, GESTRO p. 42 T.c.—*I. andrewesei* p. 44, *longicornis* p. 47, *vittipennis* p. 48, India, *sauteri* Formosa p. 50, spp. n., GESTRO T.c.—*I. carolinae* p. 53 Uganda, *inconspicuus* p. 56 Bayon a Bussie, spp. n., GESTRO T.c.

Idgia tripartita Africa p. 300, *notaticeps* Java p. 301, spp. n., *setifrons* n. var. *dohertyi* p. 300, PIC Bull. Soc. ent. France 1912.

Lamprocera alacris, *pictipennis*, spp. n., p. 45, OLIVIER Rev. Sci. Bourbon. 24.

Lampyrus noctilluca and artificial lights, ELMHIRST Zoologist 1912 pp. 190-192; larva, VOGEL Zool. Anz. 39 pp. 515-519.

Lucernuta and *Pyrocaelia*, distinguished, OLIVIER p. 145 Ann. Mus. Genova 45.

Lucidota insignita sp. n. Brésil, OLIVIER p. 209 T.c.—*L. monacha*, *tenuecincta*, *severa*, p. 73, *L. (Platylampis) delicata*, *L. (Dilychnia) disparilis*, p. 74, spp. n., OLIVIER Rev. Sci. Bourbon. 24.

Lucio diversa Peru p. 24, *maerens* Cayenne p. 25, spp. n., OLIVIER Ann. Soc. ent. Belgique 56.—*L. oblectata*, *heterobasis*, spp. n., *splendens bisignata* var. n., p. 49, OLIVIER Rev. Sci. Bourbon. 24.

Luciola cerata sp. n. Formosa, OLIVIER p. 147 Ann. Mus. Genova 45.

Lyropaeus gorhami sp. n. p. 16, PIC Mél. exot. 1.

Malachus porni n. n. pro *spinipennis* Horn, PIC Mél. exot. 2.

Malthodes rangonii sp. n. Appennino Modenese; FIORI Riv. coleotter. ital. 10 p. 37 fig.—*M. moczarskii* sp. n. Krim, GANGLBAUER Verh. z.-b. Ges. Wien 62 p. (181).

Microphotus abbreviatus, *fragilis*, spp. n., Arizona, OLIVIER p. 26 Ann. Soc.

ent. Belgique 56.—*M. robustus* sp. n. p. 80, OLIVIER Rev. Sci. Bourbon. 24.—*M. rinconis* p. 44, *octarthrus* with var. *pecosensis*, *decarthrus*, p. 45, spp. n., U.S.; FALL Canad. Ent. 44.

Oontelus reticulatus testaceiceps var. n. p. 4, PIC Mél. exot. 2.

Ophoclis gen. n. p. 47 voisin de *Phaenolis*, *nitidus*, *impurus*, p. 48, spp. n., OLIVIER Rev. Sci. Bourbon. 24.

Phaenolis apicipennis sp. n. p. 47, OLIVIER T.c.

Photinus triangularis sp. n. Antilles, OLIVIER p. 25 Ann. Soc. ent. Belgique 56.—*P. marginellus* and *castus*, distinctions, McDERMOTT p. 312 Canad. Ent. 44.

Photuris signatipennis sp. n. Peru, OLIVIER p. 27 Ann. Soc. ent. Belgique 56.—*P. signatipennis* sp. n. p. 106, OLIVIER Rev. Sci. Bourbon. 24.

Pygolampis bipartitus p. 24, *nefarius* p. 25, *nanus* p. 29, *infernus* p. 31, spp. n., Antilles, OLIVIER Rev. Sci. Bourbon. 25.

Pyrocaelia sanguiniventer p. 145, *formosana* p. 146, spp. n., Formosa, OLIVIER Ann. Mus. Genova 45.—*P. practexta* sp. n. p. 66, OLIVIER Rev. Sci. Bourbon. 24.

Pyrogaster telephorinus varr. n. *auricollis* and *intermedius*, *malepictus*, p. 104, *ambulans*, *infelix*, p. 105, spp. n., OLIVIER T.c.

Pyropyga incognita sp. n. p. 21 Antilles, OLIVIER Rev. Sci. Bourbon. 25.

†*Pyropyga prima* sp. n. p. 19 pl. v f. 3 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Rhagonycha deubeli sp. n. Siebenbürgen, PETRI p. 139 Siebenbürg. Käfer.—*R. netolitzkyi* sp. n. Bulgarien, PENECKE Wien. ent. Zeit. 31 pp. 240-244.—*R. herbea pallidithorax* n. var. p. 37, PIC Bull. Soc. Autun 23.

Rhagophthalmus filiformis p. 470; *subcicollis*, *confusus*, *xanthogonus*, p. 471, *motschulskyi* p. 472, spp. n., OLIVIER Ann. Soc. ent. France 1911

Rileyä subg. n. in *Lucidota* p. 71, *Lampyrus atra* Ol., OLIVIER Rev. Sci. Bourbon. 24.

Schistura gen. n. p. 51, type *disjuncta* Ol. 1896 (nov. Zool.), OLIVIER Rev. Sci. Bourbon. 24.

Tenaspis figurata sp. n. p. 171, OLIVIER Bull. Soc. ent. France 1912.—*T. auricolor, cauta*, spp. n., p. 67, OLIVIER Rev. Sci. Bourbon. 24.

†*Trichochrous miocenus* sp. n. p. 20 pl. v f. 5 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Troglops infurcatus sp. n. W. Africa p. 219, PIC Bull. Mus. Paris 1912.

CLERIDAE.

Male genitalia, SHARP & MUIR p. 541 pl. lxxv Tr. ent. Soc. London 1912.

Allochotes sauteri, violaceipennis, spp. n., Formosa, SCHENKLING p. 328 Ent. Mitt. Berlin 1.

Callimerus duodecimpustulatus sp. n. Formosa, SCHENKLING p. 323 T.c.

Cladiscus sauteri, terminalis, spp. n., Formosa, SCHENKLING p. 322 T.c.

Enoclerus lugubris pl. vi f. 1, *inimicus* sp. n. p. 72 f. 2, *deliciolus* p. 73 Brazil, WOLCOTT Psyche 19.—*E. thoracicus pallipes* var. n. p. 55, WOLCOTT Bull. Univ. Iowa Lab. 6 No. 3.

Epiphloeus bakeri pl. vi f. 5, *iracundus* pl. vii f. 1, p. 74, Brazil, spp. n., WOLCOTT Psyche 19.

Hydnocera dubia sp. n. North Dakota p. 60, *subfasciata fraterna* var. n. p. 61, *lecontei* nom. n. pro *subaenea* Lec. p. 62, *singularis* sp. n. North Carolina, *pygmaea* sp. n. California, p. 63, WOLCOTT Bull. Univ. Iowa Lab. 6 No. 3.

Ichnea marginella pl. vii f. 2, *sericea* f. 3, p. 75, *humeralis irrita* var. n. p. 76 f. 4, Brazil, WOLCOTT Psyche 19.

Necrobia ruficollis ab. n. *knochei*, KOLBE p. 11 Jahresh. Ver. Breslau 5.

Ommadius bennigseni sp. n. Neu Guinea, SCHENKLING p. 308 Ent. Mitt. Berlin 1.—*O. pectoralis* sp. n. Formosa, SCHENKLING p. 326 T.c.

Opilo formosanus, difficilis, spp. n., Formosa, SCHENKLING p. 324 T.c.

Orthrius prolongatus sp. n. Formosa, SCHENKLING p. 325 T.c.

Parmius violaceus sp. n. p. 434 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Pelonium mundum, formosanus, lividipenne, spp. n., Formosa, SCHENKLING pp. 329 & 330 Ent. Mitt. Berlin 1.

Phyllobaenus manni sp. n. p. 73 pl. vi f. 4 Brazil, WOLCOTT Psyche 19.

Phymatophaea griseipennis sp. n. p. 433 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Pyticera flavicollis p. 76 pl. vii f. 5, WOLCOTT Psyche 19.

Tenerus formosanus sp. n. Formosa, SCHENKLING p. 329 Ent. Mitt. Berlin 1.

Tillus elongatus var. n. *comma*, PETRI p. 146 Siebenbürg. Käfer.

Trichodes umbellatarum, Cros Alger Bul. soc. 1911 pp. 111–115 135–140 142–149 av. fig.

Xenorthrius umbratus sp. n. Formosa, SCHENKLING p. 325 Ent. Mitt. Berlin 1.

LYMEXYLONIDAE.

Bau und Bedeutung der Kopfgliedmassen Lymexyloniden; GERMER & STECHE Ent. Mitt. Berlin 1 pp. 295–300 Taf.

Male genitalia, SHARP & MUIR p. 542 pl. lxxvi Tr. ent. Soc. London 1912.

Untersuchungen über den Bau und die Lebensweise der Lymexyloniden, speziell des *Hylecoetus dermestoides*; GERMER Zs. wiss. Zool. 101 pp. 682–735 2 Taf.

Hylecoetus fuscipennis N.S.W., *vigilans* Qld., spp. n., LEA Proc. Linn. Soc. N. S. Wales 36 pp. 466–467 pl. xvii f. 7–8.

CUPESIDAE and OMMADIDAE.

Male genitalia, SHARP & MUIR p. 521 pl. lix Tr. ent. Soc. London 1912.

PTINIDAE.

Anobiide Catalogus, PIC 1912 pp. 1–92.

Ptinidae and *Ectrephidae*, male genitalia, SHARP & MUIR p. 534 pl. lxxiv Tr. ent. Soc. London 1912.

Renseignements bibliographiques et synonymiques sur divers Anobiides, PIC Bull. soc. ent. France 1912 p. 265.

Anobium pertinax, MANTZ Feuille natural. 42 p. 36.—*A. variegatum* = *Pachnophorus tessellatus* (*Chrysomeli-*

darum), JACOBSON Rev. russ. ent. 12 p. 358.—*A. inaequale* p. 434, *niticolle* p. 435, spp. n., N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Aseutotheca pubiventris sp. n. p. 141 fig. 1, LESNE Bull. Mus. Paris 1912.

Dorcatoma flavicornis and *chryso-melina*, distinguished, CHAMPION p. 263 Ent. Mag. 48.

Dryophilus rufithorax sp. n. p. 3, PIC M \acute{e} l. exot. 2.

Eupactus bruchi sp. n. Argentina, PIC p. 455 An. Mus. Buenos Aires 22.

Gastrallus rollei sp. n. Barcelona, REITTER Wien. ent. Zeit. 31 p. 104.—Richtigstellung in *bollei*, REITTER p. 286 T.c.

Niptodes atricornis sp. n. p. 219 N. Africa, PIC Bull. Mus. Paris 1912.

Pausoptinus aolichognathus sp. n. E. Austr., LEA p. 76 Proc. R. Soc. Vict. 25.

Polyplocotes castaneus sp. n. N.-W. Austr., LEA p. 75 Proc. R. Soc. Vict. 25.

Priobium auct. (non Motsch.) = *Grynobius*, *Priobium carpini* = *castaneum* Motsch. (non Fabr.) = *brunneum* Motsch. (non A. Oliv.), JACOBSON Rev. russ. ent. 12 p. 358.

Ptilinus truncaticeps sp. n. p. 3, PIC M \acute{e} l. exot. 2.

Ptinus medioglaber Victoria, *gloriosus*, *anchoralis*, W.A., *cupreoniger* Tasm., *albohumeralis* N.S.W., *microscopicus* W.A., *niveonotatus* Qld., spp. n., LEA Proc. Linn. Soc. N. S. Wales 36 pp. 468-473.—*P. unifasciatus* sp. n. p. 2, PIC M \acute{e} l. exot. 2.

Sitodrepa = *Artobium* = *Stegobium*, JACOBSON Rev. russ. ent. 12 p. 358.

Theca; PIC Bul. soc. ent. France 1912 p. 347.

Trypopylys = *Priobium*, JACOBSON Rev. russ. ent. 12 p. 358.

BOSTRYCHIDAE. LYCTIDAE.

Male genitalia, SHARP & MUIR p. 353 figs. 131 & 132 Tr. ent. Soc. London 1912.

Bostrychopsis bozasi sp. n. Somalie, LESNE Ann. Mus. Genova 45 p. 473.

Lyctus modestus p. 534 fig., *villosus* p. 537 fig., spp. n., Mexico, LESNE Bull. Mus. Paris 1911.

†*Protapate* gen. n., *contorta* sp. n. p. 20 pl. ii f. 15 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Psoidia gen. n., *pexicollis* sp. n. India, p. 377, LESNE Bull. Soc. ent. France 1912.

Sinoxylon basilare, wing color pattern, ROBINSON J. New York Ent. Soc. 20 p. 292.

†*Xylobiops lacustre* sp. n. p. 21 pl. v f. 6 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

CICOIDAE.

Male genitalia, SHARP & MUIR p. 532 figs. 129 & 130 Tr. ent. Soc. London 1912.

Cis bituberculatus sp. n. Kaukasus ROUBAL Čas. České Spol. Entomolog. Prag 9 1912 p. 25.

TENEBRIONIDAE and
RHYSOPAUSSIDAE.

A revision of the American genera of the tenebrionid tribe *Asidini*, CASEY Mem. Col. 3 pp. 70-214.

Male genitalia, *Tenebrionidae* and *Rhysopaussidae*, SHARP & MUIR p. 548 pl. lxxviii Tr. ent. Soc. London 1912.

Tretothoracidae syn. of *Rhysopaussidae*, GESTRO Ann. Mus. Genova 45 p. 1.

Eine gefährliche Auslegung der Nomenklaturgesetze. Über den Namen der Tenebrioniden-Gattung *Uloma*; GERIEN D. ent. Zs. 1912 pp. 357-360.

Adelium complicatum sp. n. p. 437 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Ammodonus granosus sp. n. Arizona, FALL p. 47 Canad. Ent. 44.

Anaedus expansicollis sp. n. Albert-See, GEBIEN p. 70 Ergebn. D. Zentr.-Afrik. Exp. 4 L. 5.

Andrempiopsis gen. n. p. 406, *costata* sp. n. p. 407 fig., Madagascar, CHATANAY Bull. Soc. ent. France 1912.

Andrempius planatus sp. n. Madagascar p. 262 figs. 1-3, CHATANAY Bull. Soc.

ent. France 1912.—*A. latus* p. 404 fig. 1, *parallelus* p. 405 fig. 2, spp. n., Madagascar, CHATANAY Bull. Soc. ent. France 1912.

Asidina gen. n. p. 169, spp. n., *teres liberta*, Arizona, p. 171, CASEY Mem. Col. 3.

Asidopsis gen. n. p. 185, spp. n. & subspp. n., *eximia* p. 188, *cochisensis*, *gracilipes*, p. 189, *suavis*, *pinalica*, p. 190, *consentanea* p. 192, *polita subopaca* p. 193, *futilis* p. 194, *collega* p. 198, *dolosa* p. 194, *obsidiana* p. 193, *tensa* p. 197, *servilis* p. 199, U.S., *durangoensis* Mexico p. 201, *nitidula* p. 196, *woodgatei* p. 197, *abbreviata* p. 198, *immunda* p. 199, *coenosa* p. 200, U.S., CASEY T.c.

Astrotus alveolatus sp. n. Texas p. 83, CASEY T.c.

Barlacus gen. n. *Rhysopaussidae*, recorded in Zool. Rec. 1900 as *Bariacus* which name has to be deleted,

Barlacus corporali sp. n. Sumatra, WASMANN Tijdschr. Ent. 55 p. 261.

Bothrasida gen. n. p. 122, *baroni* sp. n. Mexico p. 124, CASEY Mem. Col. 3.

Cerodolus curvellus sp. n. p. 437 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Chirocharis intermedius sp. n. Afr. centr., GEBIEN p. 72 Ergebn. D. zentr.-Afrik. Exp. 4 L. 5.

Coripera adamsi sp. n. Tasm., LEA Proc. Linn. Soc. N. S. Wales 36 p. 476.

Darwinella gen. n., *amaroides* sp. n. Falklands-Inseln, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 14 pl. i f. 10.

Diaperis maculata var. n. *floridana*, BLATCHLEY p. 332 Canad. Ent. 44.

Ecoptosoma gen. n. [ohne Beschreibung], GEBIEN p. 70 Ergebn. D. Zentr.-Afrik. Exp. 4 L. 5.

Eleodes letcheri vandykei p. 78 ff. 23-26, *pimelioides* p. 80 f. 27, HYSLOP U. S. Dept. Agric. Ent. Bull. 95 (Pt. 5) pp. 73-87 ff. 22-27.

Euglyptonotus escherichi sp. n. Erythraea, WASMANN p. 83 Zeitschr. wiss. Zool. 101.—*E. magrettii* p. 7 fig., GESTRO Ann. Mus. Genova 45.

Euschides spp. n. and subspp. n. U.S. *pollens*, *p. proximus*, *brevimargo*, p. 134, *rusticus*, *sponsor*, p. 135, *implicans* p. 136, *procurrens*, *caliginosus*, p. 137, *satiatus*, *rugatus*, p. 138, *rudis*, *rimatus subplanatus*, p. 139, *semirufus* p. 140, *directa* p. 141, *corrugans* p. 143, *vigens* p. 159, *obovatus nitidipennis* p. 160, *o. gliscans*, *consuetus* p. 161, *huachucae* p. 162, *papagoanus*, *strigosulus*, p. 163, *congruens lubricus* p. 164, *marginatus duplicans* p. 136, *m. esuriens* p. 137, *spurcans* p. 145, *evanescens*, *neutralis*, p. 146, *maritimus*, *m. imulus*, p. 151, *subelegans*, *tularensis*, p. 152, *ampliocollis*, *integer*, p. 153, *crassus*, *deceptor*, p. 154, *gravidipes* p. 153, *cribratus*, *subcruentus*, p. 140, *severus* p. 144, *inhabilis* p. 156, *fastidiosus* p. 157, *socialis*, *consors*, p. 162, *congruens* p. 164, *inhabilis retusus* p. 157, *gracilior* p. 160, *facilis* p. 165, *advena* p. 143, *crinitus* p. 148, *tetricus* p. 149, *globicollis* p. 158, CASEY Mem. Col. 3.

Glabrasida uhagoni sp. n. Spain, ESCALERA p. 166 Bol. Soc. españ. 12.

Glyptasida gen. n. p. 95, subspp. n. and spp. n. *sordida porcatula*, *parvicollis*, Arizona, p. 97, *subpubescens* New Mexico, *turgescens* Kansas, p. 98, *t. obesa* Kansas p. 99, *t. furtiva*, *procrustes*, p. 99, *strigipennis*, *costipennis fulvisetis*, p. 100, *turbulenta* p. 101, *aegra pigra*, *a. plena*, *a. imperfecta*, p. 102, *heres*, *crenicollis*, p. 103, *syco-phanta* p. 104, U.S., CASEY Mem. Col. 3.

Gonasida gen. n. p. 117, spp. n. and subspp. n., *compar* p. 120, *elata reducta*, *e. prolixa*, p. 121, *inferna* p. 119, *alaticollis* p. 122, *gravida* p. 119, *aucta* p. 122, U.S., CASEY T.c.

Goniadera ampliata p. 238 Brasilia, *coracina* p. 239 Paraguay, spp. n., GEBIEN Jahrb. Ver. Wiesbaden 65.

Gonocephalum longulum sp. n. Afrika, GEBIEN p. 64 Ergebn. D. Zentr.-Afrik. Exp. 4 L. 5.

Heterasida gen. n. p. 165, spp. n. Lower California, *tantilla* p. 167, *exilis* p. 168, CASEY Mem. Col. 3.

Heterotarsus, tarsal structure, CHATANAY Bull. soc. ent. France 1912 p. 324.

Hoplonyx evanescens var. n. *rusticus*, GEBIEN p. 75 Ergebn. D. Zentr.-Afrik. Exp. 4 L. 5.

Leichenium chissadoni sp. n. p. 131 figs. 1-2, CHATANAY Bull. Soc. ent. France 1912.

Litasida gen. n. p. 184, *townsendi* sp. n. Mexico p. 185, CASEY Mem. Col. 3.

Megasida gen. n. type *Asida obliterated* p. 202, CASEY T.c.

Menephilus orientalis sp. n. Java, GEBIEN p. 237 Jahrb. Ver. Wiesbaden 65.—*M. trifasciatus* sp. n. Afr. centr., GEBIEN p. 67 Ergebn. D. Zentr.-Afrik. Exp. 4 L. 5.

Menimus lineatus sp. n. p. 436 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Notiasida gen. n. p. 124, spp. n. Mexico, *abstrusa* p. 125, *evertissima* p. 126, CASEY Mem. Col. 3.

Opatrum sabulosum Lebensweise, Schaden (RUSS.), SACHAROV Sad. ogor. i bachča 6 pp. 708-710.

Pactostoma anastomosis salebrosa subsp. n., spp. n. *breviuscula* Mexico and Arizona, *exoleta*, p. 87, *monticola* p. 88, *sigillata* p. 89, New Mexico; *luteotecta* p. 88, *obtecta* p. 89, U.S., CASEY Mem. Col. 3.

Parasida gen. n. p. 126, spp. n., *laciniata* Arizona and Mexico, *bibasalis*, p. 128, *planatula* p. 129, *tolucana* p. 130, CASEY T.c.

Pelecyphorus subsp. n. and spp. n., U.S., *corporalis*, p. 107, *reptans*, *socer*, p. 108, *abscissus* p. 109, *morbillosus sobrius*, *m. pacatus*, *parvus*, p. 110, *piceus*, *p. crudelis*, *snowi*, p. 111, *subtenuis* p. 112, *adversus* p. 114, *aegrotus limbatus* p. 107, *quadripennis* p. 113, *fumosus* p. 109, *sophistes* p. 113, *reflexus* p. 114, *opimus*, *haruspex*, p. 115, *h. ellipsipennis*, *pantex*, p. 116, *corrosus* p. 117, CASEY T.c.

Phymatestes monstrosus p. 241, *opacus* p. 242, spp. n., Peru, GEBIEN Jahrb. Ver. Wiesbaden 65.

Pimelia rugulosa subsp. n. *pelagosana*, MÜLLER p. 291 Ent. Bl. Berlin 8.

Planasida candidoi sp. n. Huclva, ESCALERA p. 167 Bol. Soc. españ. 12.

Platasida gen. n. type *Asida embaphionides* p. 182, CASEY Mem. Col. 3.

Platydemia coracinum sp. n. Afrika centr., GEBIEN p. 64 Ergebn. D. Zentr.-Afrik. Exp. 4 L. 5.

†*Platydemia antiquorum* sp. n. p. 32 pl. iv f. 4 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Praogena calcarata p. 243, *haematopus* p. 244, *auricoma* p. 245, *cameruna* p. 247, spp. n., Kamerun, GEBIEN Jahrb. Ver. Wiesbaden 65.

Psammodes pilosiusculus sp. n. Kiwu-Sce, GEBIEN p. 60 Ergebn. D. Zentr.-Afrik. Exp. 4 L. 5.

Pycnonotida gen. n. p. 89, spp. n. and subspp. n. *laxicollis* p. 91, *inaequalis diversa*, *araneoides*, p. 92, *impar* p. 93, California, CASEY Mem. Col. 3.

Raynalius gen. n. p. 297 voisin de *Cædius*, *hispidus* sp. n. p. 299 figs. 1-3 Africa, CHATANAY Bull. Soc. ent. France 1912.

Rhytidonota metallica sp. n. Victoria-Nyansa, GEBIEN p. 58 Ergebn. D. Zentr.-Afrik. Exp. 4 L. 5.

Selinus interioris sp. n. Afrika, GEBIEN p. 62 T.c.

Stenosis brentoides subsp. n. *pelagosana*, MÜLLER p. 290 Ent. Bl. Berlin 8.

Stethasida gen. n. p. 203, spp. n. and subspp. n. U.S., *obsoleta expansa*, *o. opacella*, p. 205, *brevipes*, *torpida*, p. 206, *discreta*, *longula*, *convergens*, p. 207, *adumbrata*, *tarsalis*, p. 208, *unica* p. 209, *stricta* p. 210, *pertinax*, *muricutala languida*, p. 211, *socors* p. 212, *angustula inepta*, *tenax*, p. 213, *vegrandis* p. 214, *occulta* p. 208, CASEY Mem. Col. 3.

Strongylium clavigerum sp. n. Albert-Sec, GEBIEN p. 77 Ergebn. D. Zentr.-Afrik. Exp. 4 L. 5.

Syrphetodes truncatus sp. n. p. 435 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Tenebrio nitidulus sp. n. Afrika, GEBIEN p. 68 Ergebn. D. Zentr.-Afrik. Exp. 4 L. 5.—*T. molitor* subsp. n. *codinae*, REITTER p. 310 Wien. ent. Ztg. 31.

Trichiasida gen. n. p. 172, spp. n. U.S., *tenella* p. 177, *ignava*, *impotens*, p. 180, *duplex* p. 178, *lineatopilosa* p. 175, CASEY Mem. Col. 3.

Typhluloma gen. n., *inops* sp. n. Qld., LEA Proc. Linn. Soc. N. S. Wales 36 p. 475.

Uloma thoracica p. 232, *javana* p. 234, Java, *heynei* p. 236 loc. ?, spp. n., GEBIEN Jahrb. Ver. Wiesbaden 65.

CISTELIDAE (OR ALLEOULIDAE).

Male genitalia, SHARP & MUIR p. 350 figs. 170 & 171 Tr. ent. Soc. London 1912.

Andrimus confusus sp. n. Florida, BLATCHLEY p. 331 Canad. Ent. 44.

Hymenorus granulatus sp. n. Florida, BLATCHLEY p. 331 T.c.

Lystronychus impressipennis sp. n. Argentina, BOSCHMANN p. 388 Deutsche ent. Zeitschr. 1912.

Mycetochara (Ernocharis) netolitzkyi sp. n. Sophia, PENNECKE Wien. ent. Zeit. 31 pp. 240-244.

MELANDRYIDAE.

Male genitalia, SHARP & MUIR p. 552 pl. lxxix Tr. ent. Soc. London 1912.

Hylobia plagiata, guinnessi, p. 439, spp. n., N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Melandria coerulescens sp. n. Siebenbürgen, PETRI p. 230 Siebenbürg. Käfer.

Phloeotrya scabra sp. n. Siebenbürgen, PETRI p. 228 Siebenbürg. Käfer.

Wanachia n. n. pro *Caridina* Seidlitz, SCHULZE Intern. ent. Zs. 6 p. 11.

LAGRIIDAE.

Male genitalia, SHARP & MUIR p. 551 Tr. ent. Soc. London 1912.

Disoma monstrosipes, inlateralis, nigroapicalus, spp. n., p. 10, PIC MÉL. exot. 1.

Lagria sobrina p. 5, *varicolor* p. 6, *clavicornis* p. 7, *insignicollis* p. 8, *inflata* p. 9, spp. n., D.-O.-Afr., BOSCHMANN Ergebn. Zentr.-Afrik. Exp. 4 L. 1.—*L. formosensis* p. 6, *ruficollis* p. 7, spp. n., Formosa, BOSCHMANN Suppl. ent. Berlin 1.

Lagriola gibbipennis sp. n. p. 11, PIC MÉL. exot. 1.

Nemostira occipitalis p. 8, *rufipennis* p. 9, *abnormipennis* p. 10, *cognata* p. 11, spp. n., Formosa, BOSCHMANN Suppl. ent. Berlin 1.—*N. quadrimaculata, ribbei*, p. 118, *foveifrons* p. 119, spp. n.,

PIC Bull. Soc. ent. France 1912.—*N. borneensis, mentewaiensis*, p. 5, *kannegicteri, sulcaticeps, atricolor*, p. 6, *bipartita, viridimetallica, sinuaticeps*, p. 7, *distincticornis, batangana, pouillonii, nigriceps*, p. 8, spp. n., PIC MÉL. exot. 1.—*N. semirufescens, cinctipennis*, p. 8, *obscura, caeruleipennis, nitidissima*, p. 9, *maxima* p. 10, spp. n., PIC MÉL. exot. 2.

Ronyerus gen. n. voisin de *Uroplatopsis, bimaculatus* sp. n. p. 3, PIC MÉL. exot. 1.

Sphragidophorus basipes sp. n. p. 11, PIC T.c.

Staius nigricolor sp. n. p. 11, PIC T.c.

Statiropsis gen. n. near *Statira, aenea* sp. n. Argentina, BOSCHMANN p. 389 Deutsche ent. Zeitschr. 1912.

Uroplatopsis inimpressa, lemoulti, peruviana, p. 9, spp. n., PIC MÉL. exot. 1.

ANTHICIDAE, PEDILIDAE, XYLOPHILIDAE

Anthicidae della Dalmazia, KREKICH-STRASSOLDO Boll. Soc. Adriat. 26 pp. 63-79 1 pl.

Male genitalia, SHARP & MUIR p. 553 p. 180 Tr. ent. Soc. London 1912.

Amblyderus obscuripennis sp. n. Uganda, PIC p. 157 Ann. Mus. Genova 45.

Anthicus ugandanus p. 158, *bayoni* p. 159, spp. n., Uganda, PIC Ann. Mus. Genova 45.—*A. formosanus* sp. n. p. 11, PIC MÉL. exot. 1.—*A. parvus* var. n. *atratus*, PIC p. 456 An. Mus. Buenos Aires 22.

Cotes insignis sp. n. p. 438 N. Zealand, BROUN Trans. N. Zeal. Inst. 44.

Hylophilus arcuaticeps, walesianus, major, cribricollis, spp. n., Australia, PIC p. 48 Bull. Soc. Ent. France 1912.—*H. pilicornis* sp. n. p. 39, PIC Bull. Soc. Autun 23. *H. ocularis* sp. n. p. 13, PIC MÉL. exot. 1.

Formicomus sauteri p. 6, *longispinus* p. 7, spp. n., PIC MÉL. exot. 2.

Notoxus argentinus sp. n. Mendoza, PIC p. 456 An. Mus. Buenos Aires 22.

Syzeton semitestaceus sp. n. p. 48 Australia, PIC Bull. Soc. ent. France 1912.

Syzetonellus subelongatus sp. n. p. 13, PIC Mél. exot. 1.

MORDELLIDAE. RHIPIDORIDAE.

Male genitalia, SHARP & MUIR p. 555 pl. lxxi Tr. ent. Soc. London 1912.

Anaspis regimbarti var. n. *fraudulenta*, JOY p. 115 Ent. Mag. 48.

Metoecus paradoxus, young larva, CHAPMAN p. 31 pls. ii & iii Ent. Mag. 48.

Mordellistena parvula var. n. *roubali* n. n. für *rectangula* Roub., HUBENTHAL p. 95 Ent. Bl. 8.—*M. lateralis klickai* ab. n., ROUBAL Čas. České Spol. Entomolog. 7 1909 p. 18.

†*Mordellistena florissantensis* sp. n. p. 33 pl. ii f. 16 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Myiodes babadjanidesi sp. n. Transkaukasus, REITTER Wien. ent. Zeit. 31 p. 43.

CANTHARIDAE (OR MELOIDAE).

Contribution à la biologie des Méloïdes algériens; CROS Feuille jeunes natural. 42 p. 131.

Larves inédites et Coléoptères nouveaux de la famille des Vésicants; CROS Alger Bul. soc. 1911 pp. 115-116.

Male genitalia, SHARP & MUIR p. 556 f. 193 Tr. ent. Soc. London 1912.

Les mâles des *Oenas* et *Lydus*; BEDEL Bul. soc. ent. France 1910 p. 83.

Calospasta imperialis sp. n. p. 37, California, WELLMAN Ent. News 23.

Ceroctis madibirensis sp. n. Madibira, BOSCHMANN p. 14 Ergebn. Zentr.-Afrik. Exp. 4 L. 1.

Coryna apicicornis v. n. *deletifascia*, BOSCHMANN p. 17 T.c.

Cyaneolytta purpureovillata (Kolbe i. l.) O.-Afr., sp. n. BOSCHMANN p. 17 T.c.

Decatoma caligifer sp. n. O.-Afr., BOSCHMANN p. 15 T.c.

Eletica rufa grandiceps p. 30, *bicolor juamboensis* p. 31, var. n., WELLMAN Ent. News 23.

Epicauta formosensis sp. n. Formosa, Japan p. 31, *insularis montalbana*

var. n. p. 32, WELLMAN T.c.—*E. cinerea*, mating, p. 465, GIRAULT Ent. News 23.

Lydus algiricus mœurs, larve primaire; CROS Feuille natural. 42 pp. 78-86.

Lytta bieti Thibet p. 33, *arborea* p. 34, *hoppingi* p. 35, *nunenmacheri* p. 36, California, spp. n., WELLMAN Ent. News 23.

Meloe, Ländern böhmischer Krone, FORMÁNEK Věstn. Klubu Přír. Prostějov 13 1910 pp. 5-15.—*M. mayalis*, mœurs et évolution, CROS Alger Bul. soc. sci. nat. 4 pp. 45-48 70-72 93-96 154-161 180-190 209-215 fig.—*M. scabriusculus* ab. n. *tarsalis*, DEPOLI Wien. ent. Zeit. 31 p. 101.

Nemognatha bridwelli sp. n. p. 36 California, WELLMAN Ent. News 23.—*N. chrysomelina*, variétés, évolution, CROS Zs. wiss. Insektenbiol. 8 p. 137 and Alger Bul. soc. sci. nat. 4 p. 9.

†*Nemognatha exsecta* sp. n. p. 34 pl. v f. 10 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Pseudomeloe bruchi p. 386, *sanguinipennis* p. 387, spp. n., Argentina, BOSCHMANN Deutsche ent. Zeitschr. 1912.

Sitaris muralis, young larva, CHAPMAN p. 29 pl. i Ent. Mag. 48.

Tricrania sanguinipennis, FROST Psyche 19 p. 208.

Zonabris graueri var. n. p. 12, *Z. marschalli* sp. n. p. 13 O.-Afr., BOSCHMANN Ergebn. Zentr.-Afrik. Exp. 4 L. 1.—*Z. (Coryna) ornata*, *latebijuncta* and *berytensis* var. n. p. 177, PIC Bull. Soc. ent. France 1912.—*Z. (Coryna) postbioculata* sp. n. p. 7, PIC Mél. exot. 2.

OEDEMERIDAE.

Male genitalia, SHARP & MUIR p. 554 pl. lxx Tr. ent. Soc. London 1912.

Asclera carinaticollis, *brasiliensis*, spp. n., p. 12, PIC Mél. exot. 1.

Fissilamoncodes gen. n. voisin d'*Anoncodes*, *maculicollis* sp. n., p. 4, PIC T.c.

Oedemera nobilis larve, RABAUD Paris Bul. soc. ent. 1912 p. 99.—*O. abdominalis* var. n. *obscuriceps* p. 220, PIC Bull. Mus. Paris 1912.

Pseudolycus nigricolor, maculaticeps, spp. n., p. 12, PIC M \acute{e} l. exot. 1.

PYTHIDAE.

Male genitalia, SHARP & MUIR p. 553 f. 178 Tr. ent. Soc. London 1912.

Rhinosimus tapiroides sp. n. Sardinia, REITTER p. 196 Ent. Bl. Berlin 8.

PYROCHROIDAE.

Male genitalia, SHARP & MUIR p. 553 f. 179 Tr. ent. Soc. London 1912.

Dendroides assamensis Sumatra p. p. 531, *magnificus* Burma p. 532, spp. n., BLAIR Ann. Nat. Hist. 9.

Ischalia apicalis Siam, *suturalis* Assam, spp. n., BLAIR p. 532 T.c.—*T. apicalis* sp. n. p. 6, PIC M \acute{e} l. exot. 2. *T. patagiata* var. n. *luteolineatus* p. 142, PIC Bull. Mus. Paris 1912.

Lemodes caeruleiventris, tumidipennis, spp. n., Australia, BLAIR p. 533 Ann. Nat. Hist. 9.

Pyrochroa melanocephala, rufipes, p. 527, *nilgiriensis*, India, *antennalis*, p. 528, *bifoveata, diversicornis*, Burma, *fulvipennis*, p. 529, *apicipennis*, Borneo, *ruficollis, nebulosa*, Java, *dimidiata* Sumatra, p. 530, spp. n., BLAIR T.c.—*P. gibbiceps* p. 62, *kannegiateri* p. 63, spp. n., PIC Bull. Soc. ent. France 1912.—*P. maculata, inapicalis*, p. 98, spp. n., Malacca, PIC T.c.—*P. coccinea*, Larve, HARTWIG Arch. Naturg. 78 Abt. A pp. 123–160 2 Taf. and Diss. Berlin (G. Nauck) 1912 p. 63.

Schizotus dohertyi sp. n. p. 63, PIC Bull. Soc. ent. France 1912.—*S. rotundicollis* sp. n. p. 5, PIC M \acute{e} l. exot. 2.

TRICTENOTOMIDAE.

Male genitalia, SHARP & MUIR p. 557 f. 194 Tr. ent. Soc. London 1912.

Autocrates vitalisi sp. n. p. 297 fig. 1, VUILLET *Insecta* 2.

CURCULIONIDAE.

Generationsfragen, FUCHS Natw. Zs. Landw. 10 p. 43–54.

Faunistische und systematische Notizen über Rüsselkäfer; HELLER Ent. Mitt. 1 pp. 364–365.

Some recent weevil determinations; SWEZEY Proc. Hawaiian Ent. Soc. 2 pp. 167–168.

Notes on Mexican barids, CHAMPION Ent. News. 23 p. 364.

Male genitalia, SHARP & MUIR p. 570 pl. lxxvi Tr. ent. Soc. London 1912.

The following 93 new names for groups of *Otiorrhynchus* are proposed by REITTER:—*Acalorrhynchus, Acunotus, Advenardus, Aleutinops, Amosilnus, Arammichnasus, Aranikus, Asphaerorrhynchus, Besobarvus, Bytosmesus, Cerdelus, Choilisanus, Cirorrhynchus, Delhandus, Dibredus, Dostacasbus, Ecestomus, Edelengus, Egydelenus, Elechranus, Elvandrinus, Ephrahenus, Ergiferanus, Eunihus, Fondajenus, Haniobotus, Harpinorrhynchus, Holomrasus, Jelenantus, Lacocnesus, Limatogaster, Lolatismus, Majetnecus, Melasemnus, Meriplodius, Mesaniomus, Metopiorrhynchus, Misenatus, Mitadileus, Mitarodes, Mitomiris, Namertanus, Nehrodistus, Neobudemus, Nihus, Nilepolemis, Normotionus, Nubidanus, Obrasilus, Obvoderus, Odopadus, Osmobodes, Otio-mimus, Otismotilus, Padilehus, Pandorosemus, Petalorrhynchus, Phalantorhynchus, Pinduclus, Piopisidus, Pirostopedus, Pliadonus, Pocodalemes, Pocusogetus, Podomincus, Podonebistus, Podoropelmus, Postaremus, Postupatus, Prilivanus, Prodeminus, Proremus, Provadilus, Rimenostolus, Rosvalestus, Rusnepranus, Satnalistus, Spodocellinus, Stupamacus, Tecutinus, Thalycrynchus, Udonedus, Udosellus, Ulozenus, Urorrhynchus, Vedopranus, Vicoranius, Viroprius, Zadrehus, Zariededus, Zavodesus, Zelotomelus, Zustalestus; REITTER Wien. ent. Zeit. 31 pp. 45–67.*

Acelles [al. *Acalles*] *ovalipennis* sp. n. Siebenbürgen, PETRI p. 322 Siebenbürg. Käfer.

Acentroides gen. n. near *Acentrus*, *conspersus* sp. n. Macedonia, LEONHARD p. 341 Ent. Mitt. Berlin 1.

Alcides quinguesignatus sp. n. Africa p. 367, AURIVILLIUS Bull. Mus. Paris 1912.

Alexiola gen. n., *kaldzhirica* Schwarzer Irtysh p. 469, *aranea* Mujun-Kum-Wüste p. 471, spp. n., SUVOROV Rev. russ. ent. 12.

Alophus rhodopensis sp. n. Rhodope Geb., REITTER Wien ent. Zeit. 31 p. 169.

Amalus leucogaster, habits, respiration, BROCHER Ann. Biol. lac. 5 p. 180.

Anchonocranus gen. n., *oleae* sp. n. South Africa, MARSHALL Boll. Lab Portici 6 p. 2.

Anoplus plantaris and *roboris*, distinguished, TOMLIN p. 263 Ent. Mag. 48.

Anthonomus varians, GERHARDT D. ent. Zs. 1912 p. 464; *A. varians* f. n. *raspennis*, GERHARDT Jahresh. Ver. Breslau 5.—*A. vestitus*, parasites, Peru, TOWNSEND J. Econ. Ent. 5 pp. 252–256.—*A. grandis* enemies, PIERCE, CUSHMAN & HOOD U. S. Dept. Agric. Ent. Bull. 100 pp. 1–99 pls. i–iii ff. 1–26.—*A. pomorum*, parassiti, CATONI Boll. Lab. Portici 6 p. 148.—*A. miaeponus* sp. n. North Carolina p. 167, PIERCE Proc. U. S. Nation. Mus. 42.

Apiomorphus gen. n. near *Apion* p. 33, *cyaneus* sp. n. S. Africa pl. iv f. 1 p. 34, WAGNER Mem. Soc. ent. Belgique 19.

The genera of *Apioninae*, with catalogue of the species and 7 plates, WAGNER Gen. ins. 130.

Apion; synonymy, &c., WAGNER pp. 30–32 Mem. Soc. ent. Belgique 19.—*A. annulipes* etc., food-plant, WALKER p. 237 Ent. Mag. 48, and DOLLMAN p. 271 Ent. Rec. 24.—*A. atomarium* Note, CAILLOL & COTTE, Marseille Bul. Soc. Linn. p. 207.—*A. burdigalense*, CAILLOL Marseille Bul. soc. linn. Marseille 3 1911 pp. 153–162.—*A. linderi*, WAGNER Ent. Mitt. 1 p. 112.—*A. minimum* auf *Salix aurita* p. 143, *amethystinum* auf *Trifolium pratense* p. 144, *seniculum* auf *Vicia cracca* p. 146, BAUDYŠ Čas. České Spol. Entomolog. Prag 9 pp. 143–147.—*A. pisi* var. n. *sulciferum*, HUBENTHAL p. 74 Deutsche ent. Zeitschr. 1912.—*A. trifolii* und *apricaus* Schaden, Biologie, Metamorphose, Parasiten (Russ.), SOPOCIKO Tula 1912 pp. 1–37.

Apion hilfi Turkei p. 17, *winkleri* Insel Kephallenia p. 19, spp. n., WAGNER Ent. Mitt. Berlin 1.—*A. (Phrissotrichium) delphinense* sp. n. France p. 408, HUSTACHE Bull. Soc.

ent. France 1912.—*A. margelanicum* Margelan, *A. (Metapion) lepidopterum* Tetschen, spp. n., *A. persicum* subsp. n. *araxicola*, *A. pseudelegantulum* Turkestau, *A. (Taeniapion) reitterianum* Aegypten sp. n., *rufescens* var. n. *notatum*, *rufulum* varr. n. *rolphi* and *A. (Exapion) fasciolatum* Süd-Frankreich; *zoufali*, WAGNER Wien ent. Zeit. 31 pp. 83–91.

Apion (Pseudopiezotrachelus) schultzei sp. n. Luzon p. 101 f. 1, WAGNER Philippine J. Sci. 7.

Apion auriferum p. 100, *godmani* p. 101, *asellum* p. 102, *aurichalumce* p. 103, *spiculiferum* p. 104, *hadromerum* p. 105, *imitator* p. 106, *alticola*, *perpilosum*, p' 107, *brachycephalum* p. 109, *managuense* p. 110, *chalybaeum*, *guatemalense* p. 111, Amer. centr., *suffusum* Brasil, *auronitidum*, *Guatemala*, p. 113, *mexicanum* p. 114, *aestimabile* p. 115, *fulvotibiale*, *sallei*, Mexico, spp. n., *A. chiriquense* var. n. *curvinasus* p. 118, *brachyspinosum* p. 120, *omissum* p. 121, *brunneotibiale* p. 122, Mexico, *auropilosum* p. 123, *subferrugineum* p. 124, *luteinasus* p. 125, *tomentosum*, *costari-cense*, p. 126, Guatemala, etc.; *elliptipenne* p. 128 Peru, *circipenne* Chile, *coeruleamicans* Peru, p. 129, *brachypterum* p. 130, *coeruleosquamosum* p. 131, *rubronigrum* p. 132, *dentinasus* p. 133, *convexirostre* p. 135, Brasilia, spp. n., WAGNER Arch. Naturges. 78 A.

Apion nunemacheri California p. 97, *haplopus* Arizona p. 99, *foveipenne* p. 100, *germaini* p. 101, *stenotherium* p. 102, *otidicephaloides* p. 104, Bolivia, *febrigi* p. 105, Paraguay, *longicorne* Amazons p. 107, *ancistrotarse* p. 108, *cyanopterum* p. 109, *ochropterum*, *acanthopus*, p. 110, *brachyrhynchum* p. 111, Bolivia, *callanganum* Peru p. 113, *dentitarse*, *brachypus*, p. 114, *tomentiferum* p. 115, Bolivia, *yatahyanum* Brazil p. 116, spp. n., WAGNER Nov. Zool. 19.

Apion (Aplemonus) cupreomicans p. 36, *A. flavicoxale* p. 37, *rufotestaceum* p. 38, *albolineatum* p. 39, *excisum*, *xanthostylum*, p. 40, *generosum*, *varendorffi*, p. 41, *A. (Pseudopiezotrachelus) anthrax* p. 42, *A. (Rhinapion) recurvum* p. 43, *A. (Piezotrachelus) umbratum* p. 44, *magambense* pl. v f. 2, *diversipunctum* f. 6, p. 45, *luctuosum* f. 3, *angolanum* f. 4, p. 46, *hildebrandti* p. 48 f. 5, *residuum* p. v f. 6, *fuscipes* f. 7, *bayoni* p. 49

pl. iv f. 3, *ugandanum* p. 50 f. 4, spp. n. Africa, *spadiceum* var. n. *villosulum* p. 39, *varium* subsp. n. *occidentale* p. 44, WAGNER Mem. Soc. ent. Belgique 19.

Apion (*Coelopterapion* subg. n. p. 2) *testaceum* p. 3 pl. 1 f. 1, *fryi* p. 4, *cionoides* p. 5 pl. i f. 2, *globulum* p. 6 f. 3, *fuscipenne* p. 7 f. 4, *A.* (*Bothryopterum* subg. n. p. 8) *balzani* p. 9 f. 5, *binodosum* p. 10 f. 6, *steinbachi*, *A. undulipenne* pl. iii f. 1 p. 11, *longipenne* f. 2, *rubrirostre*, p. 13, *brasilianum*, *wingelmuelleri*, p. 14, S. America, *seminudum* p. 15, *hirtum* p. 16, *setifrons* p. 17, *spinitarse* p. 18, *consanguineum*, *nicaraguanum*, p. 19, Centr. America, *A.* (*Stenapion* subg. n. p. 20) *brevinasus* p. 20, *divergens*, *A. subnudum* pl. ii f. 2 p. 21, S. America, *persulcatum* Guatemala p. 22 f. 3, *fusconitidum* p. 23, *luridipes* p. 24 f. 5 *brevipes* pl. iii f. 3 p. 25, *gilvirostre* f. 4, p. 26, *xanthorhynchum* f. 5 p. 27, *convergens*, *retusipenne* f. 6, p. 28, *pygmaeum*, *fulvicorne*, p. 29, S. America, spp. n., *segnipes morrisoni* subsp. n. p. 17, WAGNER Mem. Soc. ent. Belgique 19.

Apion fuegianum sp. n. Feuerland, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 81.

Apoderus coryli var. n. *nigrifrons*, DELLA-BECCA Boll. Mus. Torino 27 No. 650; *A. coryli* var. n. *nigrifrons*, BECCA Boll. Mus. Torino 27 No. 650.

Arammichnus vide *Otiorrhynchus*.

Argoptochus leonhardi sp. n. Macedonia, SCHILSKY in Küster Käf. Eur. No. 10.

Artapocyrtus subgen. n. of *Metapocyrtus* p. 338, Philippine Islands, HELLER Philippine J. Sci. D. 7.

Bagous claudicans, Biologie, DE MEYERE Tijdschr. Ent. 55 p. 213.

Baris latevittata sp. n. Africa p. 368, AURIVILLIUS Bull. Mus. Paris 1912.

Blosyrus rugulosus, *abyssinicus*, spp. n. p. 382, Africa, AURIVILLIUS Bull. Mus. Paris 1912.

Bothryopterum subg. n. vide *Apion*.

Bothynoderes punctiventris, Auftreten, Eiablage, Metamorphose, POSPÉLOV Věstn. sacharn. promyšl. 13 pp. 161-165.

Brachycerus rothschildi, *rudolphi*, spp. n., p. 351, Africa, AURIVILLIUS Bull. Mus. Paris 1912.

Bradybatus seriesetosus sp. n. Siebenbürgen, PETRI p. 332 Siebenbürg. Käfer.

Caenopsis formaneki sp. n. Portugal, LEONHARD p. 338 Ent. Mitt. Berlin 1.

Calandra oryza, GEE Agric. Exp. Sta. South Carolina No. 170 pp. 1-21 ff. 1-2.

Catapionus fausti sp. n. Turkestan, SCHILSKY in Küster Käf. Eur. No. 68.

Caulomorphus reitteri sp. n. Triester Karst, MÜLLER p. 297 Wien. ent. Ztg. 31.

Celebia brevicostata sp. n. Celebes, HELLER Notes Mus. Leiden 34 p. 173.

Ceutorrhynchus sulcicollis, Biologie, LASSMANN Halle, Mitt. ent. Ges. H. 3-4 p. 58-59.—*C. (Thamiocolus) devillei* sp. n. France p. 409, HUSTSCHÉ Bull. Soc. ent. France 1912.

Chalcocybeus bennigseni p. 310, *helleri* p. 312, spp. n., Neu Guinea, WAGNER Ent. Mitt. Berlin 1.

Chionanthobius gen. n., *schwarzi* sp. n. Maryland p. 168, PIERCE Proc. U. S. Nation. Mus. 42.

Chloëbius turkestanicus sp. n. Turkestan, SCHILSKY in Küster Käf. Eur. No. 72.

Coelopterapion subg. n. vide *Apion*.

Coniocleonus crinipes var. n. *uniformis*, FUENTE p. 363 Bol. Soc. españ. 12.

Conorrhynchus luigionii and *Lixus junci dannosi* alla barbabetola, ROSSI.

Conotrachelus nenuphar, QUAINANCE and JENNE U.S. Dept. Agric. Ent. Bull. 103 pp. 1-250 pls. i-xx ff. 1-36; *C. nenuphar* death feigning, GEE and LATHROP Ann. Ent. Soc. Amer. 5 pp. 391-399 f. 1.

Cryptoderma plicatipenne sp. n. Borneo, RITSEMA Notes Mus. Leiden 34 p. 95.

Deporaus betulae, an amerikanischen Eichen, MEYERE Tijdschr. Ent. 55 p. liv.

Diglossotrox tibetanus sp. n. Fl. Dja-tshu, SUVOROV Rev. russ. ent. 12 p. 482.

†*Docirhynchus ibis* sp. n. p. 34 pl. viii f. 1 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Dryophthorus corticalis, Habitudo myrmecophiles, BUYSSON Lyon Ann. soc. linn. 59 p. 89.

Ecthetopyga gen. n. p. 158, *gossypii* sp. n. Philippine Is. p. 159, PIERCE Proc. U.S. Nation. Mus. 42.

Epiphaneus heydeni sp. n. Kaukasus, SCHILSKY in Küster Käf. Eur. No. 46.

Eupachyrrhynchus gen. n. p. 324, *superbus* sp. n. p. 325 pl. ii f. 8 Philippine Islands, HELLER Philippine J. Sci. D. 7.

Eusomus claviger Ost.-Sibirien, *maroccanus* Marocco, *burchanensis* Borkum, *stierlini* Rumänien, spp. n., SCHILSKY in Küster Käf. Eur. No. 51, 56, 60, 65.—*E. mirabilis* sp. n. Kaukasus, FORMÁNEK p. 311 Wien. ent. Ztg. 31.

Gasteroclisus, Übersicht und spp. n.: *aethiopicus*, Nyassa-See, *arcurostris*, Ostindien, *bicostalis*; Cap, *circumscriptus*, Sumatra, *costipennis*, Brit.-Ost-Afrika, *fastigatus*, *fissirostris*, *hortmanni*, Uganda, *papei* Usambara, *papillifer* Neu-Guinea, *pinguinatus* Victoria-Nyanza, *pinguirostris* Kamerun, *rhombifer* Ost-Afrika, *rhynchaenus*, *rudiculus*, Nyassa-See, *rugulicollis* Togo, *scissifrons* Ostindien, *staudingeri* Kamerun, *subcostatus* Kongo, *submucronatus* Transvaal, *subpruinatus* Ost-Afrika, *triangulifer* Erythrea, *vultur* Ostindien, PETRI Ann. Mus. Hung. 10 pp. 340–374.

Gerstaeckeria tessellata Wyoming p. 162, *alternata* Arizona p. 163, *opuntiae* Texas p. 165, *fasciata* Florida, *cactophaga* Texas, p. 166, spp. n.; G. subgen. n. *Xenosomina* and *Opuntiaphila* p. 161, PIERCE Proc. U.S. Nation. Mus. 42.

Gymnetron lusitanicum sp. n. Portugal, LEONHARD p. 340 Ent. Mitt. Berlin 1.—*G. erinaceum*, Cécidie, BEDEL Bul. soc. ent. France 1912 p. 390.

Heilipus lauri, BARBER Proc. Ent. Soc. Washington 14 p. 181 pl. ix.

Hypera pusilla sp. n. Siebenbürgen, PETRI p. 315 Siebenbürg. Käfer.—*H. cos* sp. n. Semiretshje p. 477, var. *pruinosis*, *svorori kopalensis* subsp. n. Semiretshje p. 478, *przewalskii* sp. n. Tian-Shan p. 478 f. 3, SUVOROV Rev. russ. ent. 12.

Ischnobrotus nebulosus sp. n. p. 360 Africa, AURIVILLIUS Bull. Mus. Paris 1912.

(N-9210 j)

Larinus abyssinicus sp. n. p. 364, AURIVILLIUS Bull. Mus. Paris 1912.—*L. microlonchi* N. Africa sp. n. p. 302, PEYERIMHOFF Ann. Soc. ent. France 80.—*L. vittatus* et sa larve, RABAUD Feuille natural 42 pp. 56–60.—*L. vulpes* var. n. *orientalis*, PETRI p. 310 Siebenb. Käfer.

Lecanophora gen. n. p. 362 voisin de *Sympiezorrhynchus*, *bifoveata* sp. n. p. 363 Africa, AURIVILLIUS Bull. Mus. Paris 1912.

Liometophilus gen. n. p. 9, *manni* sp. n. Arizona p. 10 pl. 3, FALL Psyche 19.

Liophlocus laevifrons sp. n., *gibbus* var. n. *sulcifrons*, Siebenbürgen, PETRI p. 306 Siebenbürg. Käfer.

Liosoma devillei sp. n. p. 149 Corsica, BEDEL Bull. Soc. ent. France 1912.

Lissorhoptrus simplex, TUCKER Circ. 152 U.S. Dep. Agric. Ent.

Lixus ventriculus sp. n. Turkestan, PETRI Ann. Mus. Hung. 10 pp. 277–280.—*Lixus concavus*, WEISS J. Econ. Ent. 5 pp. 434–436; *L. concavus*, oviposition, WEBSTER, Ent. News 23 p. 474.

Lixus rothschildi sp. n. p. 365 Africa, AURIVILLIUS Bull. Mus. Paris 1912.

Macrocyrtus gen. n. type *nigrans* Pasc., *nigrans castanopterus* var. n. p. 351, spp. n., *subcostatus* p. 332 pl. ii f. 5, *negrito* p. 333, Philippine Islands, HELLER Philippine J. Sci. D. 7.

Macrotarsus kozlovi südl. Ala-shan p. 472 f. 1, *chamisanus* Provinz Chami p. 474, *iliensis* Dzsharkent p. 475 f. 1b, spp. n., *bartelsi* Beschreibung p. 476 f. 2, SUVOROV Rev. russ. ent. 12.

Metamasiopsis lojanus sp. n. p. 391, *transatlanticus* var. n. *maculicollis* p. 390, Ecuador, HELLER Deutsche ent. Zeitschr. 1912.

Metapocyrtus gen. n. p. 337, (*Artapocyrtus*) spp. n. *derasocobaltinus* p. 339, *humeralis* p. 340, *paradalis* p. 341, *M. (Sphenomorphaidea)* spp. n. 14-*punctatus* p. 343, *mimicus* p. 344, *M. (Sclerocyrtus) asper* sp. n. p. 345, Philippine Islands, HELLER Philippine J. Sci. D. 7.

Miarus afer sp. n. p. 151, DANIEL Bull. Soc. ent. France 1912.—*M. campanulae* var. n. *monticola*, PETRI p. 337 Siebenb. Käfer.

Molytes germanus, food-plant, SMITH p. 11 Ent. Mag. 48.

Mylacus turkestanicus Turkestan, *seidlitzii* Ungarn, spp. n., SCHILSKY in Küster Käf. Eur. No. 6 & 7.

Myllocerus tessellatus, *niger*, *viridis*, spp. n., Africa, AURIVILLIUS Bull. Mus. Paris 1912.

Nanophyes nessaeae sp. n. Kamerun, RUEBSAAMEN Marcellia 9 1910 p. 28 fig.—*N. hemispharicus* et *annulatus*, DU BUYSSON Miscell. entom. 20 p. 67–69; *N. hemisphaericus* var. n. *bivittatus*, FUENTE p. 43 Bol. Soc. Aragon 11.

Nastus amoebaeus Tashkent p. 479, *tesselatus* Dzarkent p. 481, spp. n., SUVOROV Rev. russ. ent. 12.

Neobaris globicollis sp. n. Transkaukasien, REITTER Wien ent. Zeit. 31 p. 98.

Neoxystoma nom. n. pro *Oxystoma* parte, BEDEL p. 274 Bull. Soc. ent. France 1912.

Nothapocyrthus gen. n. p. 334, spp. n. *translucidus* p. 335, *erythromerus*, *cylindricollis*, p. 336, Philippine Islands, pl. ii f. 6, HELLER Philippine J. Sci. D. 7.

Ocladius tricarinatus sp. n. Africa p. 368, AURIVILLIUS Bull. Mus. Paris 1912.

Omius formaneki sp. n. Austria, TYL p. 131 Ent. Bl. 8.

Omius hanaki var. n. *montanus*, PETRI p. 303 Siebenbürg. Käfer.

Opuntiaphila subg. n. vide *Gerstaeckeria*.

Orthochaetes subsetosus sp. n. Siebenbürgen; PETRI p. 320 Siebenbürg. Käfer.

Otiorrhynchus; Uebersicht der Untergattungen und Artgruppen, REITTER Wien. ent. Zeit. 31 p. 45–67; for new names vide supra.

Otiorrhynchus (*Arammichnus*) *abnormicollis* Kaukasus, *atricolor* Turkestan, *championi* Greece, *cirrorrhynchoides* Bulgarien, *confluens* Sibirien, *crassiceps* Turkestan, *curvimanus* Mongolia, *densicollis* Araxes, *duplopilosus* Semiretschie, *falsarius* Attica, *hellerianus* Fundort?, *histrioides* Armenien, *hospitus* Bulgarien, *inhabilis* Wernyi Asien, *jar-pachlinus* Araxes, *kairuanus* Tunis,

ludovici Herzegowina, *matutinus* Abruzzen, *microcabris* Tunis, *mongolicus* Mongolia bor., *nevesinjensis* Bosnien, *ocellifer* Sizilien, *perlucens* Buchara, *rhilicola* Bulgarien, *scintillus* Altai-Gebirge, *subegues* Armenien, *supremus* Altai-Gebirge, *tardipes* Aulie-Ata, *tritonis* Korfu, *umbilicatoides* Sizilien, *phrygius* Anatolia, spp. n., REITTER Wien. ent. Zeit. 31 p. 109–154.

O. (*Tournieria*) *juglandiformis* Bulgaria p. 61, *O.* (*Arammichnus*) *laminirostris* Kleinasien, p. 66, spp. n., REITTER Wien. ent. Zeit. 1912.

O. *comatus* p. 290, *albensis* p. 292, spp. n., *granicollis* ab. [n.?] *pictus*, and var. n. *paringii*, p. 295, *asplenii* var. [n.] *seriepunctatus* p. 296, PETRI Siebenbürg. Käfer.—*O.* *kapaonicensis* p. 653, *O.* (*Tournieria*) *veluchianus* p. 654, spp. n., Balkan penins., APFELBECK Wiss. Mitt. Bosn. 12.

Oxycorynus helleri sp. n. Catamarca, BRUCH An. Mus. Buenos Aires 23 p. 266.

†*Pachybaris rudis* sp. n. p. 35 pl. ii f. 17 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Pachyrrhynchus spp. n., var. n. *ochroplagiatus* p. 311 pl. ii f. 11, *eques* p. 312, *nobilis* p. 313 f. 9, *semperi* p. 314, *tristis* p. 315, *lacunosus* p. 316, *psittacinus* p. 317 pl. i f. 16, *morio*, *viridans*, p. 318, *sanchezi* p. 319 pl. ii f. 10, *stellio* p. 320, *chevolati jagori* p. 321, *monilifer stellulifer* p. 322, *circulatus* p. 322 pl. i f. 12, *anellifer* nom. n. for *annulatus* p. 324, Philippine Islands, HELLER Philippine J. Sci. D. 7.

Pandeteius platensis sp. n. Buenos Aires p. 192, BRÈTHES Physis 1.

Pantomorus viridis, CHITTENDEN Proc. Ent. Soc. Washington 14 p. 106 f. 1.

Pantorhytes 6-pustulatus sp. n. Neu Guinea, HELLER p. 309 Ent. Mitt. Berlin 1.

Philopuntia subgen. n. of *Gerstaeckeria* p. 163, PIERCE Proc. U.S. Nation. Mus. 42.

Pholicodes vittatus, *heydeni*, *oculatus*, Syria, *rosti* Abhasia, *altaicus* Alta, spp. n., SCHILSKY in Küster Käf. Eur. No. 30, 32, 35, 36, 39.

Phytobius velatus, habits, respiration, BROCHER Ann. Biol. lac. 5 p. 180.

Phytonomus posticus, WEBSTER U.S. Dept. Agric. Ent. Bull. 112 pp. 1-47 pls. i-xiii ff. 1-27.

Polydrosus bulgaricus sp. n. Bulgarien p. 339, *coruscus* var. n. *setiger* p. 340, LEONARD Ent. Mitt. Berlin 1.—*P. longiceps* Tibet, *rhodiacus* Rhodus, spp. n., SCHILSKY in Küster Käf. Eur. No. 15-17.—*P. chrysomela*, premiers états, HOULBERT Insecta, Rennes 2 p. 249-258 av. fig.; *P. murinus*, Cécidies, COTTE Marseille, Bul. soc. linn. 3 p. 146.

P. subalpinus sp. n. Siebenbürgen, PETRI p. 300 Siebenbürg. Käfer.

Psalidium maxillosum, Entwicklung des schwarzen Pigments, Schaden, Verbreitung (Russ.), VASILJEV Věstn. sacharn. promyšl. 13 pp. 824-826.

Pseudapocyrtus gen. n. p. 326, spp. n. *schadenbergi* pl. ii f. 3, *formicarius*, p. 327 pl. ii f. 1, *exsectus* p. 323, *imitator* p. 329 pl. ii f. 2, *productus* p. 330, Philippine Islands, HELLER Philippine J. Sci. D. 7.

Raymondionymus (Ubichia) ganglbaueri sp. n. Dalmatien, REITTER Wien. ent. Ztg. 31 p. 318.

Reichertia gen. n., typus *Listroderes exsculpticollis*, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 32.

Rhadinocyba bennigseni sp. n. Neu Guinea, WAGNER p. 314 Ent. Mitt. Berlin 1.

Rhynchites p. auxillus, Entwicklung, Lebensweise, Parasiten (Russ.), JANATA Simferopoli Trd. jest. muz. 1 pp. 65-77.—*R. ruber*, biologia, SILVESTRI Boll. Lab. Portici 6 p. 151-170 13 figs.—*R. bicolor wickhami* var. n. p. 82, COCKERELL Ent. News. 23.

Rhynchitinae Europas, FORMÁNEK Čas. České Spol. Entomolog. Prag 8 1911 pp. 60-95 taf. 1.

Rhyncholus (Stereocorynes) winkleri sp. n. Krim, FORMÁNEK p. 311 Wien. ent. Ztg. 31.

Rhynchophorus ferrugineus, larva and pupa, pp. 212-216 fig., GHOSH Mem. Dept. Agric. Ind. Ent. Ser. 2 No. 10.

Sciaphilus helenae sp. n. Asia Minor, SCHILSKY in Küster Käf. Eur. No. 27.

Sciaphobus paliuri sp. n. Montenegro, APFELBECK p. 654 Wiss. Mitt. Bosn. 12.

(N-9210 j)

Sclerocyrtus subgen. n. of *Metapocyrtus* p. 345, HELLER Philippine J. Sci. D. 7.

Sibinia molitor sp. n. Turkestan, SCHILSKY in Küster Käf. Eur. No. 79

Sitona sulcifrons ab. [n.] *pictus*, PETRI p. 304 Siebenb. Käfer.

Sphenomorphoidea subgen. n. (*Metapocyrtus*) p. 342, HELLER Philippine J. Sci. D. 7.

Sphenophorus callosus, SMITH Agric. Exp. Sta. North Carolina Rep. 34 pp. 51-61 ff. 6-12.—*S. callosus*, WEBSTER U. S. Dept. Agric. Ent. Bull. 95 Pt. 4 pp. 53-71 pls. vi-ix.

Stenapion, subg. n. vide *Apion*.

Stephanocleonus isochromus, Tshujskaja-Steppe p. 483 *glaucinus* Nordwest-Mongolei p. 484, *plumbeus* Nordwest-Mongolei, *roddi* Tshujskaja-Steppe, p. 485, *verestshagini* Gouv. Tomsk. p. 436, *tshuicus* Tshujskaja-Steppe p. 488, *improcerus* Schwarzer Irtysh p. 489, *leucostis* Gobi p. 489, spp. n., SUVOROV Rev. russ. ent. 12.

Stomodes; Revision, *ganglbaueri* Rumänien, *leonhardi* Griechenland, spp. n., WAGNER Wien. ent. Ztg. 31 p. 257.

Strophosomus caervipes, SHARP p. 150 Ent. Mag. 48.

Systates bituberosus p. 353, *rothschildi* p. 354, *vittatus*, *opacus*, p. 355, *striolatus* p. 356, *assimilis* p. 357, *variegatus*, *depressus*, p. 358, *densepunctatus* p. 359, spp. n. Africa, AURIVILLIUS Bull. Mus. Paris 1912.

Talaurinus tenebricosus Victoria, *panduriformis* N. Qld., *apicihirtus* Toowoomba with *haemorrhoidalis* n. v., *septentrionalis* Qld., *carpentariae* Carpentaria, *parvus* Gayndah, *clavicornis* Glen Innes, *sulciventris* Roma, *megalongensis* N.S.W., *inconspicuus* Brisbane, *variegatus darlingensis* n. var., *acromialis* Brisbane, *scapularis*, *angularis*, *vermicollis*, Mudgee, *illidgei* Brisbane, and *gayndahensis* Gayndah, spp. n., FERGUSON Proc. Linn. Soc. N. S. Wales 37 pp. 100-131 pls. ii & iii.

Torneuma karamani sp. n. Dalmatien, FORMÁNEK Wien. ent. Zeit. 31 p. 232.

Trichapion subg. n. zu *Apion*, WAGNER p. 99 Arch. Naturges. 78 A.

Tychius 5-punctatus var. n. *ininterruptus*, FUENTE p. 364 Bol. Soc. españ. 12.

Tyloides cladotrichis sp. n. Texas p. 169, PIERCE Proc. U. S. Nation. Mus. 42.

Xenosomina subgen. n. vide *Gerstaeckeria*.

Zaisania gen. n., *arachnoidea* sp. n. Schwarzter Irtysh, SUVOROV Rev. russ. ent. 12 pp. 468-469.

SCOLYTIDAE OR IPIDAE.

Über ein neues System der heimischen Borkenkäfer auf phylogenetischer Basis. NÜSSLIN Verh. Ges. D. Natf. 83 II. 1 pp. 425-436.

Phylogenie und System der Borkenkäfer, NÜSSLIN Zs. wiss. Insektenbiol. 7 pp. 1-5 etc. etc.

Zur Phylogenie und Systematik der einheimischen Hylesinen, Die Gattungen., NÜSSLIN Natw. Zs. Landw. 10 pp. 267-290.

Studien über die natürliche Systematik der Borkenkäfer, Die Gattung *Lymantor* Lövy., NÜSSLIN Ent. Bl. 8 pp. 99-108.

Die geographische Verbreitung der Ipiden, KLEINE Ent. Bl. Berlin 8 pp. 92 etc.

Ipidae von Polen (Russ.), JACENTKOVSKIJ Rev. russ. ent. 12 pp. 284-293.

Canadian *Scolytidae*, notes; SWAINE Ottawa Nat. 25 pp. 141-145 and 26 p. 110.

Stridulationsapparates, WICHMANN Ent. Bl. 8 pp. 8-10.

Male genitalia, SHARP & MUIR p. 572 pl. lxxvii Tr. ent. Soc. London 1912.

Allarthrum gen. n. *Hylocurin*, *kolbei* sp. n. Neu Guinea, HAGEDORN p. 355 Deutsche ent. Zeitschr. 1912.

Amphicranus theobroma sp. n. Trinidad, SAMPSON p. 245 Ann. Nat. Hist. 10.

Chaetophorus gen. n. für *Pteleobius vestitus* Rey, FUCHS p. 46 Morphol. Stud.

Cryphalus aspericollis, PEYERIMHOFF Paris Bul. soc. ent. 1912 pp. 173-174 fig.

Crossotarsus fragmentus Singapore, *fractus* Borneo, spp. n., SAMPSON p. 249 Ann. Nat. Hist. 10.—*C. flavomaculatus*,

formosanus, spp. n. Formosa, STROHMMEYER pp. 40-41 Ent. Mitt. Berlin 1.—*C. spinulosus* p. 80, *schenklingi* p. 81, *rufescens* p. 82, *angustatus* p. 83, Kamerun, *impressus* p. 82, *castaneus* p. 84, *flavescens* p. 85, *tenuis* p. 86, O.-Afr., spp. n., STROHMMEYER Ent. Bl. 8.

Ctonoxylon amanicum sp. n. O.-Afrika, HAGEDORN p. 42 Ent. Bl. 8.

Cyclorhipidion gen. n. *Xyleborini* p. 355, *pelliculosum* sp. n. p. 356 Kamerun, HAGEDORN Deutsche ent. Zeitschr. 1912.

Cylindropalpus affinis sp. n. Usambara STROHMMEYER p. 80 Ent. Bl. 8.

Dactylipalpus floccosus sp. n. Kamerun, HAGEDORN p. 351 Deutsche ent. Zeitschr. 1912.

Dryocoetes sardus sp. n. Sardinia, STROHMMEYER p. 57 Ent. Bl. 8.—*D. minor* sp. n. Sicilia p. 122, EGGERS Nat. sicil. 20.—*D. leonhardi* sp. n. Bulgaria, EGGERS p. 49 Ent. Bl. Berlin 8.—*D. pubescens* p. 350, *confusus* p. 351, *minutus* p. 352, spp. n., Colorado, SWAINE Canad. Ent. 44.

Eccoptogaster demaisonii sp. n. Sicilia etc. p. 47, *loevendali* Dania p. 203, *sahlbergi* Sibiria or. p. 204, *triarmatus* patr. inc. p. 205, spp. n., EGGERS Ent. Bl. Berlin 8.

Hapalogenius gen. n. *Hylesinid.*, *globosus* sp. n. Pondo-Land, HAGEDORN p. 352 Deutsche ent. Zeitschr. 1912.

Hylastes horridus sp. n. India, EGGERS p. 206 Ent. Bl. Berlin 8.

Hylastinus kroaticus sp. n. Kroatien, FUCHS p. 49 Morphol. Stud.

Hypothenemus tuberculosus sp. n. Congo, HAGEDORN p. 339 Rev. zool. afric. 1.

Ips pilifrons sp. n. Colorado, SWAINE p. 353 Canad. Ent. 44.

Mesoplatypus gen. n. near *Platypus*, *grandiclava* sp. n. Kongo, STROHMMEYER pp. 78-79 Ent. Bl. 8.

Minulus gen. n. *Diamerini*, *barbatus* sp. n. Creta, EGGERS p. 206 Ent. Bl. Berlin 8.

Myelophilus piniperda, *minor*, Anzeichen des Vermehrung (Russ.), BORODAJEVSKIJ Lësoprom. věstn. 14 pp. 497-499.—*M. minor*, Biologie

(Russ.), VORONCOV Zap. Iěsn. Suvalksk. okr. 5 5-6 (3-10) 7-8 (12-16).

Ozopemon tuberculatus sp. n. Formosa, STROHMMEYER p. 38 Ent. Mitt. Berlin 1.

Periommatius bispinus, *major*, *camerunus*, *similis*, *substriatus*, *nitidicollis*, *gracilis*, *piceus*, *signatus*, *mkusii*, *excisus*, *severini*, *inermis*, spp. n. Afrika, STROHMMEYER pp. 19-26 Ent. Bl. 8.

Pityogenes austriacus und *elongatus* Verbreitung, EGGERS Ent. Bl. Berlin 8 Beilage pp. 1-4.—*P. monacensis* Fuchs und *irkutensis* Eggers, FUCHS Ent. Bl. Berlin 8 p. 308.

Polygraphus; SEDLACZEK Zentralbl. Forstwes. 38 pp. 305-310.

Pseudothamnurgus gen. n., *Thamnurgus scrutator* Pandellé, EGGERS p. 115 Ent. Bl. Berlin 8.

Stephanoderes aulmanni sp. n. O.-Afrika, HAGEDORN p. 41 Ent. Bl. 8.—*S. congonus* p. 337, *heveae* p. 338, spp. n., Congo, HAGEDORN Rev. zool. afric. 1.

Taphrorychus siculus sp. n. Sicilia p. 121, EGGERS Nat. Sicil. 20.—Gänge des *T. villifrons* etc., SPESIIWZEFF Ent. Bl. Berlin 8 p. 271.—*T. hirtellus* Frassbilder, WICHMANN Ent. Bl. 8 pp. 138-140.

Thamnurgus sardus Sardinia p. 114, *siculus* Sicilia p. 115, spp. n., EGGERS Ent. Bl. Berlin 8.—*T. robustus* sp. n. Sicilia p. 122, EGGERS Nat. sicil. 20.

Trigonogenius gen. n. *Ipinarum*, *fallax* sp. n. Ost.-Afr., HAGEDORN p. 354 Deutsche ent. Zeitschr. 1912.

Trypophloeus corsicus sp. n. Corsica, EGGERS p. 113 Ent. Bl. Berlin 8.—*T. holdhausi* sp. n. Campo grosso, WICHMANN Wien. ent. Zeit. 31 p. 186.—*T. nitidus* sp. n. N. America, SWAINE p. 349 Canad. Ent. 44.

Xestips gen. n. *Ipinarum*, *marginatus* sp. n. Ost.-Afr., HAGEDORN p. 353 Deutsche ent. Zeitschr. 1912.

Xyleborus morstatti sp. n. O.-Africa, HAGEDORN p. 37 Ent. Bl. 8.—*X. ambasius* sp. n. Congo p. 342, *spathi-pennis* var. n. *ohausi* p. 345, HAGEDORN Rev. zool. afric. 1.—*X. urichi* Trinidad p. 245, *arquatus* Ceylon p. 246, *niger* Burma, *sphenos*, p. 247, *industrius* p. 248, Uganda, spp. n., SAMPSON Ann. Nat. Hist. 18.

BRENTHIDAE.

Male genitalia, SHARP & MUIR p. 573 f. 227 Tr. ent. Soc. London 1912.

Anisognathus csikii sp. n. E. Africa, BOLKAY p. 182 Arch. Zool. 1.

ANTHRIBIDAE.

Male genitalia, SHARP & MUIR p. 570 f. 225 Tr. ent. Soc. London 1912.

Acorynus anchis sp. n. Formosa, JORDAN p. 137 Nov. zool. 19.—*A. dicyrthus* sp. n. Java, JORDAN Tijdschr. Ent. 55 p. 128.

Apatenia infans sp. n. Formosa, JORDAN p. 141 Nov. zool. 19.—*A. parvula* sp. n. Java, JORDAN Tijdschr. Ent. 55 p. 132.

Apolecta paraplesia sp. n. Formosa, JORDAN p. 145 Nov. zool. 19.

Caccorhinus oculatus formosanus subsp. n., JORDAN p. 144 Nov. zool. 19.

Cylindroides tessellatus sp. n. Congo, JORDAN Tijdschr. Ent. 55 p. 141.

Deuterocrates armatus sp. n. Congo, JORDAN p. 65 Nov. zool. 19.

Directarius phodinus sp. n. Java, JORDAN Tijdschr. Ent. 55 p. 134.

Disphaerona verrucella sp. n. India, JORDAN p. 89 Nov. zool. 19.

Eugigas childreni pilosus subsp. n., JORDAN p. 601 Nov. zool. 18.

Habrissus molitor sp. n. India, *andrewesi* n. n. for *sellifer* Jord. 1906, JORDAN p. 90 Nov. zool. 19.

Habrissus longipes formosanus subsp. n., JORDAN p. 143 Nov. zool. 19.

Hucus ovinus sp. n. Sumatra, JORDAN Tijdschr. Ent. 55 p. 131

Hypseus cyrtus sp. n. Java, JORDAN Tijdschr. Ent. 55 p. 131.

Litocerus hamearis, *taeniatulus*, spp. n., India, JORDAN p. 88 Nov. zool. 19.—*Litocerus dysallus*, *bicuspis*, p. 138, *communis* p. 139, spp. n., Formosa, JORDAN T.c.—*Litocerus jacobsoni* sp. n. Java, JORDAN Tijdschr. Ent. 55 p. 129.

Litotropis afer sp. n. Congo, JORDAN p. 67 Nov. zool. 19.

Mucronianus triodes p. 140, *repandus* p. 141, spp. n., Formosa, JORDAN Nov. zool. 19.

Nerthomma aplota sp. n. Formosa, JORDAN p. 142 Nov. zool. 19.

Nessiara olivacea sp. n. India, JORDAN p. 89 Nov. zool. 19.

Nessiara longicollis Borneo, *cethis* Celebes, spp. n., JORDAN p. 601 Nov. zool. 18.

Ormiscus alienus sp. n. Java, JORDAN Tijdschr. Ent. 55 p. 137.

Paraphloeobius gen. n., *tricolor* sp. n. Sumbawa, JORDAN p. 603 Nov. zool. 18.—*P. brevis* sp. n. Formosa, JORDAN p. 145 op. cit. 19.

Phaenotherium knirschi sp. n. Süd-Russland, BREIT p. 151 Ent. Bl. Berlin 8.

Phaulimia priva nigrina subsp. n., JORDAN p. 89 Nov. zool. 19.—*P. grammica* sp. n. Formosa, JORDAN p. 142 T.c.

Phloeobius lepticornis sp. n. Java, JORDAN Tijdschr. Ent. 55 p. 141.

Phloeotragus heros and *poliopras* distinguished, JORDAN p. 64 Nov. zool. 19.

Phloiopterus sulcirostris russus subsp. n., JORDAN p. 88 T.c.

Physopterus callocerus sp. n. India, JORDAN p. 87 T.c.—*P. pardalis* sp. n. Borneo, JORDAN Tijdschr. Ent. 55 p. 127.

Pseudochoragus gen. n. near *Choragus*, *brachycerus* sp. n. Siebenbürgen, PETRI p. x Siebenbürg. Käf.

Rawasia porcina sp. n. Java, JORDAN Tijdschr. Ent. 55 p. 139.

Sinthor vethi sp. n. Java, JORDAN p. 138 T.c.

Tropideres sricula sp. n. Sumatra, JORDAN p. 130 T.c.—*T. signellus* sp. n. Formosa p. 140, *pelofsi poecilus* subsp. n. p. 139, JORDAN Nov. zool. 19.

Urodon maurus sp. n. p. 150, DANIEL Bull. Soc. ent. France 1912.—*U. schusteri* Österreich, *korbi* Anatolien, *ciliatus* Buchara, *arisi* Transkaspien, spp. n., SCHILSKY in Küster. Käf. Eur. Nr. 85 91 95 & 97.

Xylinades impressus stibinus subsp. n., *japonicus* Shp., *phycus* sp. n. Formosa p. 144, JORDAN p. 143 Nov. zool. 19.

Zygaenodes lituratus Java, *latipes* Pegu, *antiallus* Assam, spp. n., JORDAN

p. 602 Nov. zool. 18.—*Z. cristatus* sp. n. Java, JORDAN Tijdschr. Ent. 55 p. 135.

CERAMBYCIDAE.

Matériaux pour servir à l'étude des Longicornes, PIC (8e cahier) 2e Partie 1912 24 pp.

Studies in the Longicornia of America, CASEY Mem. Col. 3 pp. 215-376.

Catalogue of argentinian *Cerambycidae*, BRUCH Rev. Mus. La Plata 18 pp. 179-226.

A preliminary synopsis of cerambycid larvae, WEBB U. S. Dept. Agric. Ent. Techn. 20 Pt. 5 pp. 149-155 pl. xxvii.

Male genitalia, SHARP & MUIR p. 568 pls. lxxv & lxxvi Tr. ent. Soc. London 1912.

Agallissus floridanus sp. n. Florida p. 376, CASEY Mem. Col. 3.

Amphionthe dejeani sp. n. p. 115 fig., GOUNELLE Bull. Soc. ent. France 1912.

Anaglyptus rosti sp. n. p. 15, PIC Mat. Longicornes 8 1.

Aneftomorpha gen. n. p. 293, spp. n., *seminuda* Texas, *longipennis* California, p. 294, *unispinosa* Mexico p. 295, CASEY Mem. Col. 3.

Aneflus cochisensis sp. n. Arizona p. 296, CASEY Mem. Col. 3.

Anepsyra gen. n. type *Elaphidion tenue* p. 293, CASEY Mem. Col. 3.

Anocomis gen. n. p. 271, spp. n. and subsp. n. *lignea parvicollis* p. 272, *ampla*, *a. angusta*, p. 273, *terminata* p. 274, U.S., CASEY Mem. Col. 3.

Antennalia subgen. n. *Prionus* p. 249, CASEY Mem. Col. 3.

Apheniastus sesensis Sese-Ins., *ruber* Span. Guinea, spp. n., HINTZ p. 648 Deutsche ent. Zeitschr. 1912.

Aplagiognathus guatemalensis sp. n. Guatemala p. 227, CASEY Mem. Col. 3.

Argentinoeme gen. n. *Oemidarum* p. 164, *schulzi* sp. n. Argentina p. 165, BRUCH Rev. Mus. La Plata 18.

Arrhythmus mylenae sp. n. p. 96, BOPPE Bull. Soc. ent. France 1912.

Aseum gracilicorne, curtipenne, ebenum, p. 258, *amputatum* p. 259, *parvicorne, fulvipenne, costulatum*, p. 260, *pugetanum, brevicorne*, p. 261, spp. n., N. America, CASEY Mem. Col. 3.

Astathes guerryi, apicalis, spp. n., p. 20, PIC Mat. Longicornes 8 1.

Batyle seclusa p. 327, *punctipennis, acomana*, p. 328, *oblonga* p. 329, spp. n., New Mexico, CASEY Mem. Col. 3.

Batyleoma gen. n. p. 329, *fontinalis* sp. n. New Mexico p. 330, CASEY Mem. Col. 3.

Belodera genei Abchasiën (Russ.), ZAICEV Rev. russ. ent. 12 p. 360.

Bisalles spegazzinii sp. n. Argentina, BRUCH p. 175 Rev. Mus. La Plata 18.

Callichroma smaragdina Texas, *compressipes* Guatemala, p. 314, *regalis* Mexico p. 315, spp. n., CASEY Mem. Col. 3.—*C. japonica* v. nov. *achardi* p. 19, PIC Mat. Longicornes 8 1.

Callidium spp. n. and subsp. n., *antennatum hesperum* p. 288, *californicum, frigidum, lacustre*, p. 289, N. America, CASEY Mem. Col. 3.

Callimus longicollis p. 310, *opacipennis* p. 311, *variipes* p. 311, *dehiscens* p. 312, spp. n. California, CASEY T.c.

Calloides biformis, coloradensis, muliebris, p. 358, spp. n., U.S., CASEY T.c.

Caloclytus comptus gilanus n. var. p. 6, PIC Mat. Longicornes 8 1.

Calopus serraticornis, ROUBAL Zs. wiss. Insektenbiol. 8 p. 386.

Centrocerum richteri sp. n. Argentina, BRUCH p. 167 Rev. Mus. La Plata 18.

Chariesthes argentea sp. n. Kongo, HINTZ p. 647 Deutsche ent. Zs. 1912.

Chreonomia atritarsis, nigronotata, spp. n., p. 21, PIC Mater. 8.

Closterus depressicornis, jordani, p. 94, *simplicicornis, layi, elongatus, intermedius*, p. 95, spp. n., BOPPE Bull. Soc. ent. France 1912.—*C. rothschildi* sp. n. Madagascar p. 261, BOPPE T.c.

Clytanthus catulus sp. n. Wisconsin p. 370, CASEY Mem. Col. 3.

Clytoleptus n. gen., *gracilicornis*, p. 371, *tristis* p. 372, spp. n., U.S., CASEY T.c.

Clytopsis nimbata sp. n. Mexico p. 373, CASEY T.c.

Clytus carolinensis sp. n. North Carolina p. 372, CASEY T.c.

Coelosterna scabrata, fig., IYER Calcutta For. Bulletin No. 11 1912.

Coenoptera kiesewetteri angorensis var. n. p. 3, PIC Mater. 8.

Compsomera; table, synonymy, *ansorgei* var. n. *vestita* p. 75, ACHARD Ann. Soc. ent. Belgique 56.

Conizonia aumontiana pygidialis n. var. p. 9, PIC Mat. Longicornes 8 1.

Criocephalus honduranus Honduras p. 265, *flitarsis, cavicollis*, p. 266, *lacustrinus, cervinus*, p. 267, U.S., spp. n., CASEY Mem. Col. 3.—*C. ferus*, size-variation, CHAMPION p. 237 Ent. Mag. 48.—*C. productus* p. 101, HYSLOP Proc. Ent. Soc. Washington 14.—*C. rusticus* Dégâts, HOULBERT Insecta 2 pp. 302-310 fig.

Crioprotopus sp. n. and subsp. n., Mexico, *praestans, semiplicatus*, p. 320, CASEY Mem. Col. 3.

Crossidius spp. n. and subsp. n., *plagiatus* p. 336, *maculicollis, wickhami*, p. 337, *truncatellus* p. 338, *pulchellus retractus, p. sinuosus, p. vagasensis, debilis, lanaticollis*, p. 339, *sayi, bilenticulatus*, p. 340, *submetallicus* p. 341, U.S., CASEY T.c.

Crossotides subg. n. zu *Crossotus*, HINTZ p. 193 Deutsche ent. Zeitschr. 1912.

Crossotofrea gen. n. für *Crossotus virgatus* Quedf., HINTZ p. 198 T.c.

Crossotus plumicornis subsp. n. *damarensis* p. 192, *C. seriemaculatus* O.-Afr., *meridionalis* S.-W.-Afr., p. 193, *lateralis* Abessinien, *argenteus* O.-Afr., *obtusus* Senegal, p. 194, *oculatus* Betschuanaland, *erlangeri* Somali, *sennaariensis* Sennaar, p. 195, spp. n., HINTZ T.c.

Cylindrepomus laetus var., GAHAN p. lxxix Proc. ent. Soc. London 1911.

Cyllene spp. n. and subsp. n. *andesiana* Ecuador p. 352, *snowi* Arizona, *zuniana* New Mexico p. 353, *angulifera* Kansas p. 354, *chara kansana, c. solida, c. genitiva*, p. 355, *reducta* p. 351, *filicornis* p. 352, Texas, CASEY Mem. Col. 3.

Daphisia clytoides sp. n. Borneo, GAHAN p. lxxix Proc. ent. Soc. London 1911.

Dasyllinda javanica sp. n. p. 20 figs., VUILLET, *Insecta* 2.—*D. vitalisi* sp. n. p. 300 fig., VUILLET *Insecta* 2.

Dendrobias penisularis Lower California, *reductus* California, p. 316, *debilicollis* New Mexico, *virens* Texas, p. 316, spp. n., CASEY Mem. Col. 3.

Dichostates albidus p. 195, *trilineatus*, Ost-Afr., *quadrisignatus*, *kuntzeni*, p. 196, *flavomaculatus*, *flavoguttatus*, *hauseri*, p. 197, *fulvomaculatus* p. 198, West-Afr., spp. n., HINTZ Deutsche ent. Zeitschr. 1912.

Dictator mirabilis, sexes, characters, HELLER p. 274 fig. Ann. Soc. ent. Belgique 56.

Dorcadion turdetanum p. 25, *palestinum* p. 27, *consanguineum* p. 40, spp. n., Spain, also many varr. n., and synonymy, LAUFFER Bol. Soc. Arragon 10 1911.—*D. istriatum*, *liburnicum*, *muelleri*, Kroatische Küste, spp. n., DEPOLI Boll. Soc. Adriat. 26 2 pp. 33-44.—*D. ferruginipes subfuscopubens* var. n. p. 7, PIC Mat. Longicornes 8 1.

Entomosterna unicastata sp. n. Mexico p. 332, CASEY Mem. Col. 3.

Euchitonia menzelii sp. n. Sumatra, RITSEMA Notes Mus. Leiden 34 p. 123.

Euryphagus ustulatus sp. n. p. 220, ACHARD Bull. Soc. ent. France 1912.

Evodinus variabilis instriolata n. var. p. 2, PIC Mater. 8.

Frea circumscripta S.-W.-Africa, *maculata*, *fasciata* W.-Afr., p. 201, *zambesiana* Zambesi p. 202, spp. n., HINTZ Deutsche ent. Zeitschr. 1912.

Freopsis gen. n., *albomaculata* sp. n. Congo, HINTZ p. 200 T.c.

Geropa gen. n. p. 305, *aequicollis* Texas p. 306, CASEY Mem. Col. 3.

Graciella latevittata p. 644, *nigromarginata*, *brunneomaculata*, p. 645, spp. n., W.-Africa, HINTZ Deutsche ent. Zeitschr. 1912.

Hebestola joergenseni sp. n. Argentina, BRUCH p. 177 Rev. Mus. La Plata 18.

Hemicallidium gen. n. type *Physocnemum amethystinum* p. 274, CASEY Mem. Col. 3.

Heterachthes floridanus, *exilissimus*, p. 307, *fluviatilis* p. 308, spp. n., U.S., CASEY T.c.

Homaesthesia pubicollis p. 254, *debiliiceps* p. 255, spp. n. Colorado, CASEY T.c.

Hypermallus spp. n. and subspp. n., *flumineus*, *incertus externus*, p. 300, *brevicornis*, *abruptus*, p. 301, *villosus scuticularis*, *lacustris*, *medialis*, p. 302, *m. canadensis*, *m. densicollis*, *defectus*, p. 303, *molliculus* p. 304, N. America, CASEY T.c.

Lasiophrys longicornis sp. n. p. 10, PIC Mel. exot. 2.

Leptidea brevipennis, MANON, Bordeaux Actes soc. linn. 65 1911 Proc.-verb. pp. 28-60.

Leptura attenuata granieri var. n. p. 3, *sequensi baicalica* n. var. p. 4, *erratica* var. *bottcheri* nov. p. 5, *revestita gabilloti* var. n. p. 18, PIC Mat. Longicornes 8 1.—*L. erythroptera*, DAYREM Miscell. entom. 19 1911 p. 119.

†*Leptura petrorum* sp. n. p. 26 pl. viii f. 2 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No 3.

Liasemum gen. n. *mokelumne* sp. n. California p. 262, CASEY Mem. Col. 3.

Lissonotus lucanus sp. n. Lower California p. 317, CASEY T.c.

Lophalia gen. n. type *Sphenothecus cribricollis* p. 335, CASEY T.c.

Mallodon debile Alabama p. 222, *baroni* Mexico p. 223, spp. n., CASEY Mem. Col. 3.

Malthophia gen. n. p. 308, *oculata* sp. n. California p. 309, CASEY T.c.

Mecometopus patagonicus sp. n., Chubut, BRUCH p. 169 Rev. Mus. La Plata 18.

Megaceresium horni sp. n. Salomons Ins., HELLER p. 171 Ent. Mitt. 1.

Megacyllene gen. n. type *Clytus antennatus* p. 351, CASEY Mem. Col. 3.

Merium bifossatum sp. n. Wisconsin p. 287, CASEY T.c.

Microcallidium subgen. n. *Phymatodes* p. 283, CASEY T.c.

Microclytus frosti sp. n. Maine p. 375, CASEY T.c.

Mimiculus cervinus sp. n. O.-Afr., HINTZ p. 202 Deutsche ent. Zeitschr. 1912.

Mimofrea gen. n. p. 198, *uniformis* p. 199, *latefasciata* p. 200, spp. n., Kamerun, HINTZ T.c.

Monochamus sutor varr. n. *fusco-maculatus*, *hybrida*, p. 249, PETRI Siebenbürg. Käfer.—*M. galloprovincialis subrufopubtins* n. var. p. 18, *italianus* sp. n. p. 20, PIC Mater. 8.

Neoclosterus opacipennis, *lujae*, p. 95, *ferranti*, *robustus*, p. 96, spp. n., BOPPE Bull. Soc. ent. France 1912.

Neoclytus spp. n. and subspp. n. *fulguratus* p. 367, *infans* p. 368, *i. occiduus*, *tularensis*, *i. strictulus*, p. 369, U.S., CASEY Mem. Col. 3.—*N. aulai* sp. n. Argentina, BRUCH p. 168 Rev. Mus. La Plata 18.

Neodorcadion jakovlevi Alashan p. 70, *kozlovi* Centrale Mongolei p. 71, *kaznakovi* Alashan p. 73, *sifanicum* Nanshan p. 74, spp. n., SUVOROV Rev. russ. ent. 12.

Nothorhina spp. n. and subspp. n. *aspera impressa*, *spissicornis*, *s. longicornis*, *aspera rectipennis*, p. 264, *gracilipes* p. 265, N. America, CASEY Mem. Col. 3.

Oberca formosana p. 20, *lineaticeps* p. 21, *coreana* spp. n., *lineaticeps*, *faisanensis* var. n. p. 21, PIC Mater. 8 pt. 2.

Orthosoma ampliars Indiana, *spadix* Long Island, p. 231, spp. n., CASEY Mem. Col. 3.

Otaromia Auriv. = (*Jonthodina* Ach.), LAMEERE p. 51 Ann. Soc. ent. Belgique 56.

Pachydiscus sartus, Lebensweise, Frass Gänge, Metamorphose (Russ.), PLOTNIKOV Taškent 1912 p. 18 f. 17–21.

Paraclytus gen. n. p. 374, *brevitarsis*, *crucialis*, p. 375, spp. n. California, CASEY Mem. Col. 3.

Paracomeron gen. n. near *Paramoron*, *aurivilliusi* sp. n. Neu Guinea, HELLER pp. 173–174 Ent. Mitt. 1.

Paramallus gen. n. p. 227, *arizonicus* Arizona p. 228, CASEY Mem. Col. 3.

Parandra ambliceps Indiana, *gravidula* Pennsylvania, p. 216, *obsolescens* Costa Rica p. 217, spp. n., CASEY T.c.

Parmaena pubescens cruciata var. n. p. 4, PIC Mater. 8.

Phymatodes spp. n. and subspp. n., *grandis* p. 277, *concinus* p. 278, *hartfordi* p. 279, *crucialis*, *elegans*, p. 282, *exilis* p. 283, *varius dissidens*, *latipennis*, p. 280, *amoenus hudsonicus*, *densipennis*, p. 284, U.S., CASEY Mem. Col. 3.

Phymatodina subgen. n. *Phymatodes* p. 281, CASEY T.c.

Physocnemum compressipes Wisconsin p. 269, *densum*, Kansas p. 270, spp. n., CASEY T.c.

Phytoecia immundula = ♀ *varentzovi*, SEMENOV Rev. russ. ent. 12 p. 499.

Plagionotus bobelayi luristanicus n. var. p. 6, PIC Mat. Longicornes 8 1.

Plaxomicrus violaceomaculatus sp. n. p. 11, PIC Mel. exot. 2.

Plionoma gen. n., *degener* sp. n. Arizona, p. 334, CASEY Mem. Col. 3.

Prionina gen. n. p. 251, *simplex* sp. n. Kansas p. 253, CASEY T.c.

Prionus: Revision of *Prionidae*, 20th mem. *Prionus*, pp. 185–260, *gahani* N.E. China p. 189, *boppei* Yunnan p. 195, *semenowi* Bagdad p. 224, spp. n., *pectinicornis pici* and *p. gaillardi* subspp. n. p. 231, *horni* Arizona p. 243, *lecontei* California p. 244, spp. n., LAMEERE Ann. Soc. ent. Belgique 56.

Prionus spp. n. and subspp. n., *kempi* p. 233, *oblongus*, *parvus*, p. 234, *validiceps*, *tumidus*, p. 235, *tristis* p. 236, *tetricus* p. 237, *consors acomanus*, *c. proximans*, p. 241, *vastus* p. 236, *alutaceus* p. 237, *spiculosus* p. 240, *angustulus* p. 241, *californicus punctulatus*, *fissifrons*, p. 243, *terminalis* p. 244, *solidus* p. 238, *consors* p. 240, *pocularis prolixus*, *bicolor* Indiana, p. 239, *californicus ineptus* p. 242, *texanus* p. 243, *townsendi*, *aztecus*, p. 246, *curticollis*, *diversus*, *cuneatus*, p. 247, *imbricornis brunneus*, *i. mimus*, p. 248, *fissicornis parviceps* p. 250, *f. transversus* p. 251, N. America, CASEY Mem. Col. 3.

Pseudaelara gen. n. near *Xiphothaeta*, *sellaemontis* sp. n. Neu Guinea, HELLER pp. 175–176 Ent. Mitt. 1.

Pseudibidion gen. n. type *Stenocorus unicolor* p. 293, CASEY Mem. Col. 3.

Ptycholaemus striaticollis, *murinus*, p. 96, spp. n., BOPPE Bull. Soc. ent. France 1912.

- Purpuricenus koehleri* ab., DEPOLI Riv. Col. ital. 10 p. 193.—*P. miniatus*, PIC Mat. Longicornes 8. 1. 1911 p. 21.—*P. lecontei* sp. n. Honduras p. 325, CASEY Mem. Col. 3.
- Pyrodes cervicalis* sp. n. Honduras p. 256, CASEY Mem. Col. 3.
- Rhytiphora-macleayi* sp. n. West Australia, LEA p. 34 Mem. Mus. Melbourne 4.
- Riponus* subgen. n. *Prionus* p. 245, CASEY Mem. Col. 3.
- Romaleum thoracicum* p. 297, *crinicornis*, *mancum*, p. 298, spp. n. U.S., CASEY T.C.
- Rosalia f. acomana*, p. 313, subspp. n. *funebri mandibularis*, CASEY T.C.
- Saperda calcarata*, GEE J. Econ. Ent. 5 p. 336.
- Smodicum convergens* sp. n. Texas p. 269, CASEY Mem. Col. 3.—*S. argentinum* p. 170, *bonariense* p. 171, *dinellii* p. 172, *missionum* p. 174, spp. n., Argentina, BRUCH Rev. Mus. La Plata 18.
- Spondylis* spp. n. *collaris* p. 218, *robustula*, *subpubescens*, p. 219, U.S., *erebea* Mexico, *basalis* Washington, p. 220, CASEY Mem. Col. 3.
- Stenaspis lugubris*, *arizonicus*, p. 318, U.S., *validicornis* Mexico p. 319, spp. n., CASEY Mem. Col. 3.
- Stenobatyle* gen. n. p. 330, *cribrata* sp. n. Mexico p. 331, CASEY Mem. Col. 3.
- Stenocorus quercus* var. *auropubescens* n. n. p. 20 *auropubens*, PIC Mater. 8.
- Stenodontes cubensis* Cuba p. 224, *parallelus* Florida p. 225, spp. n., CASEY Mem. Col. 3.
- Stenosphenus lucanus* Lower California, *pruddeni* Arizona, p. 346, spp. n., CASEY Mem. Col. 3.
- Tamenes* gen. n. *Trachyderini*, *sarda* sp. n. fig. p. 133 GOUNELLE Bull. Soc. ent. France 1912.
- Taranomis* gen. n. type *Sphaenothecus bivittata* p. 334 CASEY Mem. Col. 3.
- Tetropium columbianum* sp. n. British Columbia p. 268, CASEY Mem. Col. 3.—*T. abietis* sp. n. California p. 320 FALL Ent. News 23.
- Tmesisternus luteostriatus* sp. n. Neu Guinea HELLER p. 172 Ent. Mitt. 1.
- Tragidion* spp. n. and subspp. n. *hirsuticolle* p. 321, *densiventre* p. 322, *coquus filicorne*, *fulvipenne nubifer*, *f. levipes*, *apicatum*, p. 323, U.S., CASEY Mem. Col. 3.
- Trigonarthron* gen. n. p. 403, voisin de *Protaxis*, *cinnabarinum* sp. n. p. 404 figs. 1-2 Madagascar, BOPPE Bull. Soc. ent. France 1912.
- Trigonoptera erythrospila* sp. n. Neu Guinea, HELLER p. 172 Ent. Mitt. 1.
- Tylcus* gen. n. type *Clytus hartwegi* p. 351, CASEY Mem. Col. 3.
- Tylosis* spp. n. and subspp. n.; *robusta*, *argus*, p. 342, *sexualis*, *subtruncata*, p. 343, *brevicollis*, *medialis*, *m. bifasciata*, *conjuncta*, p. 344, *c. parva*, p. 345, *texana* p. 343, U.S., CASEY Mem. Col. 3.
- Tyrinthia argentina* sp. n. Argentina, BRUCH p. 176 Rev. Mus. La Plata 18.
- Vesperus reitteri* sp. n. Portugal, CAMERON p. 49 Ent. Mag. 48.
- Xylotrechus multimpessus* sp. n. p. 19 China, *X. arvicola* var. *inbasalis* n. p. 6, PIC Mat. Longicornes 8. 1.—*X. albonotatus* p. 361, *longitarsis* p. 362, *incongruens* p. 366, *diruptus* p. 367, *inflaticollis* p. 360, *columbianus* p. 361, *montanicus* p. 361, *cylindrus*, *salebrosus*, p. 364, spp. n. N. America, CASEY Mem. Col. 3.
- Zalophia* gen. n. p. 335, *spissicornis* Ecuador sp. n. p. 336, CASEY Mem. Col. 3.

BRUCHIDAE.

Male genitalia, SHARP & MUIR p. 557 pl. lxxii Tr. ent. Soc. London 1912.

Bruchus major Texas, *depressus* Florida, p. 321, *brunneostictus* California p. 322, spp. n., FALL Ent. News 23.—*B. arenarius* sp. n. Illinois, WOLCOTT p. 162 Canad. Ent. 44.

†*Bruchus henshawi* p. 28 pl. vii ff. 1 & 14, *exhumatus* p. 29 ff. 2 & 10, *bowditchi* p. 30 ff. 6 & 13, *florissantensis* p. 30 f. 3, *scudderi* ff. 7 8 & 11, *haywardi*, p. 31 ff. 4 5 & 12, *osborni* p. 32 f. 9, Colorado Miocene, spp. n., WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.

Laria rufimana, CHITTENDEN U.S. Dept. Agric. Ent. Bull. 96 Pt. 5 pp. 59-82 ff. 11-20.

Pachymerus chinensis, CHITTENDEN U. S. Dept. Agric. Ent. Bull. 96 Pt. 6 pp. 83-94 pl. i f. 2 1.

CHRYSOMELIDAE.

The genera of *Hispinae*, with lists of the species and figs. of 48 spp., WEISE Gen. ins. 125 124 pp. 4 pls.

Ueber Sexualdichroismus bei paläarktischen Halticinen, HEIKERTINGER Zs. wiss. Insektenbiol. 8 pp. 14-17.

Biogeographische Skizzen über paläarktische Halticinen, HEIKERTINGER Ent. Mitt. Berlin 1 pp. 236-241.

Male genitalia, SHARP & MUIR pp. 558-568 pls. lxxii-lxxiv Tr. ent. Soc. London 1912.

Adoxus vitis, oviposition, CROSBY J. Econ. Ent. 5 p. 384.

Aenidea juno sp. n. Afr. centr., WEISE p. 149 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.

Aesernia arcuata, *helleri*, spp. n., N. Guinea, CLAVAREAU p. 294 Ann. Soc. ent. Belgique 56.

Agelastica orientalis Biologie (Russ.), VASILJEV Rev. russ. ent. 12 pp. 1-14 f. 1-10.

Agonia fallax p. 18, *nigricornis* p. 19, spp. n., Nilghiri, GESTRO Ann. Mus. Genova 45.

Amphimela frontalis sp. n. Asmara, WEISE p. 93 Arch. Naturges. 78 A.

Antonaria humeralis sp. n. O.-Afrika, WEISE p. 79 Arch. Naturges. 78 A.—*A. longicollis* sp. n. Afr. centr., WEISE p. 130 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.—*A. albonotata* sp. n. p. 11, Proc Mel. exot. 2.

Aphthona brunneomicans sp. n. Centralasien, HEIKERTINGER Verh. z.-b. Ges. Wien 62 p. (44)-(48).—*A. brunneomicans*, verwandte Formen, HEIKERTINGER pp. (88)-(92) T.c.—*A. sicelidis* ab. n. *obscuripes*, HEIKERTINGER p. 387 Ent. Mitt. 1.

Apophyllia marginipennis sp. n. Afr. centr., WEISE p. 149 Ergebn. Zentr.-Afrik. Exp. 4 L.7.

Asbecesta robusta, *costalis*, *ruwenso-rica*, spp. n., Afr. centr., WEISE p. 147 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.—*A. cinctipennis* O.-Afr., *antennalis* Kamerun, spp. n., WEISE p. 86 Arch. Naturges. 78 A.

Aspidomorpha castaneidorsis p. 125, *A. (Spaethia) schoutedeni* p. 127, spp. n., Africa, SPAETH Rev. Zool. afric. 2.—*A. flavens* n. sp. Ostafrika, SPAETH Ann. Mus. Hung. 10 pp. 505-508.—*A. castaneipennis* p. 117, *suavis* p. 118, spp. n., Borneo, *crucis* var. n., *insularis* p. 118, SPAETH J. Sarawak Mus. 1 No. 2.—*A. schubotzi* p. 158, *firma* p. 160, spp. n., Afr. centr., WEISE p. 158 Ergebn. Zentr. Afrik. Exp. 4 L. 7.

Aulamorphus ducis sp. n. Afr. centr., WEISE p. 151 T.c.

Blepharida 10-guttata sp. n. O.-Afrika, WEISE p. 94 Arch. Naturges. 78 A.—*B. lewini* sp. n. Windhuk, WEISE p. 62 Ent. Mitt. Berlin 1.

Bonesia schubotzi sp. n. Afr. centr., WEISE p. 144 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.

Bradylema ruandana sp. n. Ruanda, WEISE p. 127 T.c.

Callispa maculipennis sp. n. Nilghiri, GESTRO Ann. Mus. Genova 45 p. 14.—*C. bayonii* sp. n. Uganda, GESTRO p. 24 T.c.

Cassida chapuisi, *kristensi*, *liquefacta*, *praetimida*, *semipallens*, *sincera*, spp. n., Ostafrika, SPAETH Ann. Mus. Hung. 10 pp. 496-504.—*C. cinctidorsum* sp. n. Afr. centr., WEISE p. 162 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.

Ceralces longulus sp. n. Afr. centr., WEISE p. 137 T.c.

Chaetocnema hortensis subsp. n. *montenegrina*, HEIKERTINGER Verh. z.-b. Ges. Wien 62 pp. (44)-(48).

Chalcoides aurea ab. n. *obscuripes* p. 104, *plutus* ab. n. *nigrofemorata* p. 106, HEIKERTINGER Berlin. ent. Zeitschr. 57.

Chalepus nervosa p. 63, *dorsalis* p. 59, FELT N. Y. St. Mus. Bull. No. 155.

Chirida congoana sp. n. Africa, SPAETH p. 131 Rev. Zool. afric. 2.

- Chrysomela kuesteri* p. 12 pl. iii figs. 1 & 2, *crassicornis* p. 13 figs. 3 & 4, spp. n. Europe, HELLESEN Stavanger Mus. Aarsb. 22 No. 1.—*C. j. danieli* sp. n. Caucasus, ROUBAL Čas. České Spol. Entomolog. Prag. 9 1911 p. 27.—*C. fustuosa* Ei, KLEINE Intern. ent. Zs. 6 p. 168.—*C. coarctata* sp. n. Kamerun, WEISE p. 83 Arch. Naturges. 78 A.—*C. ruandana* p. 137, *guttipennis* p. 138, spp. n. Afr. centr., WEISE Ergebn. Zentr.-Afrik. Exp. 4 L. 7.
- Clytra scutellaris* sp. n. Afr. centr. WEISE p. 131 T.c.
- Colasposoma iturianum* sp. n. Afr. centr., WEISE p. 135 T.c.
- Conchyloctenia fibrata* sp. n. Ostafrika, SPAETH Ann. Mus. Hung. 10 pp. 504-505.
- Coptocephala bituberculata* sp. n. Benguela, WEISE p. 78 Arch. Naturges. 78 A.
- Corynodes hintzi* Kamerun, *marginalis* O.-Afr., spp. n., WEISE p. 83 T.c.—*C. emeraldinus*, *mirabilis*, p. 343, *weisei* p. 344, spp. n., Africa, CLAVAREAU Ann. Soc. ent. Belgique 56.
- Crepidaspis* gen. n. near *Thlaspidosoma*, *varicornis* sp. n. Borneo, SPAETH J. Sarawak Mus. 1 No. 2 p. 119.
- Crepidodera corpulenta* ab. [n. ?] *opaca*, PETRI p. 275 Siebenbür. Käfer.
- †*Crioceridea* gen. n., *dubia* sp. n. p. 27 pl. v ff. 7 & 8 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.
- Crioceris gestroi*, *lugubris*, spp. n., Africa, CLAVAREAU p. 170 Ann. Soc. ent. Belgique 56.—*C. nitida*, *nigrita*, spp. n., Afr. centr., WEISE pp. 129-130 Ergebn. Zentr. Afrik. Exp. 4 L. 7.
- Cryptocephalus ragusanus* sp. n. Sicilia, ROUBAL Riv. coleott. ital. 10 p. 1.—*C. cristula* var. n. *laetior*, ROUBAL Čas. České Spol. Entomolog. Prag 8 1911 p. 102.—*C. syrdari* n. n. pro *sanguinolentus* Ol., *C. sexsignatus post-tatefasciatus* n. var. p. 16, PIC Mél. exot. 2.—*C. carinthiacus*, PIC Lyon Ann. soc. linn. 59 p. 99.—*C. connexus* var. n. *fasciatus*, PETRI p. 261 Siebenbürg. Käfer.—*C. alumnus* sp. n. O.-Afrika, WEISE p. 80 Arch. Naturges. 78 A.
- Cryptonychus kolbei* sp. n. Afr. centr., WEISE p. 162 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.
- Dactylispa perpusilla* p. 28, *bayonii* p. 29, spp. n., Uganda, GESTRO Ann. Mus. Genova 45.—*D. filicornis* sp. n. Kamerun, WEISE p. 96 Arch. Naturges. 78 A.
- Diabrotica boucardi* Panama p. 12, *taeniolescens*, *4-signata*, p. 13, *subangulata* p. 14, *inconspicua*, *guyanensis*, *bertonii*, p. 15, *thamnii* p. 16, spp. n., Peru, BOWDITCH Canad. Ent. 44.—*D. quadrinotata* p. 57, *bicincta*, *parambaensis*, p. 58, *stuarti* p. 59, *haenschii*, *marcapa*, p. 60, *cyaneomaculata*, *cyaneoplagiata*, p. 61, spp. n., S. America, BOWDITCH T.c.—*D. 12-punctata*, THOMAS Agric. Exp. Sta. South Carolina Bull. No. 161 pp. 1-6 map.
- Diacantha apicata* sp. n. Afr. centr., WEISE p. 146 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.
- Dichirisa coendu* sp. n. Uganda, GESTRO Ann. Mus. Genova 45 p. 26.
- Diclidispa lenicornis* sp. n. Uganda, GESTRO p. 31 T.o.
- Dioryctus maculatus* sp. n. China, WEISE p. 80 Arch. Naturges. 78 A.
- Distolaca flavida* sp. n. Nilghiri, GESTRO Ann. Mus. Genova 45 p. 16.
- Donacia humilis* China, *ochroleuca* Transbaikalic, spp. n., WEISE p. 76 Arch. Naturges. 78 A.—*D. brevicornis* ab. n. *noesskei*, HANEL p. 91 Ent. Bl. 8.
- †*Donacia primaeva* sp. n. p. 26 pl. iv f. 3 Colorado Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.
- Downesia andrewesii* sp. n. Nilghiri, GESTRO Ann. Mus. Genova 45 p. 21.
- Ennodius orientalis* sp. n. Albert-Nyansa, KUNTZEN p. 52 Ent. Rdsch. 29.
- Entomoscelis adonidis* var., BEDEL Paris Bul. soc. ent. p. 359.
- Galeruca tanaceti bang-haasi* n. var. p. 329, *G. tanaceti* var. *rufifrons* n. nom = var. *bang-haasi*, LABOISSIÈRE Bull. Soc. ent. France 1912.
- Galerucella lineola* etc., life-history, MAO DOUGALL pp. 554-557 pl. J. Board Agric. London 19.—*G. luteola* p. 6 pl i, FELT N. Y. St. Mus. Bull. Mo. 156.

Galerucida haroldi p. 90 Tonkin;
maculata [sic] p. 91 Sumatra, spp. n.,
WEISE Arch. Naturges. 78 A.

Gynandrophthloma placida v. n.
puncticollis, WEISE p. 132 Ergebn.
Zentr.-Afrik. Exp. 4 L. 7.

Hallirhotius concinnus sp. n. O.-
Afrika, WEISE p. 86 Arch. Naturges.
78 A.

Haltica monticola sp. n. Kamerun,
WEISE p. 95 T.c.—*H. oleracea*, Lebens-
weise, HEIKERTINGER Verh. z.-b. Ges.
Wien 62 pp. 69–81.

Hemixantha suahelorum O.-Afr.,
kamerunensis Kamerun, spp. n., WEISE
p. 92 Arch. Naturges. 78 A.—*H. ruguli-
pennis* p. 149, *nitida* p. 150, spp. n.,
Afr. centr., WEISE Ergebn. Zentr.-
Afrik. Exp. 4 L. 7.

Hoplionota brookei p. 113, *moultoni*
p. 114, spp. n., Borneo, SPAETH J.
Sarawak Mus. 1 No. 2.

Idacantha multicolor sp. n. Afr. centr.,
WEISE p. 141 Ergebn. Zentr.-Afrik.
Exp. 4 L. 7.

Jamesonia antennalis sp. n. Afr.
centr., WEISE p. 155 T.c.—*J. bifasciata*,
media, spp. n., Kamerun, WEISE p. 94
Arch. Naturges. 78 A.

Lacoptera (Orphnodella) sassana
p. 129, *L. triangula* p. 130, spp. n.,
Africa, SPAETH Rev. Zool. afric. 2.

Lema analis, lucida spp. n. Central-
Afr., WEISE p. 128 Ergebn. Zentr.-
Afrik. Exp. 4 L. 7.—*L. tellinii, eri-
thraeana*, p. 173, *schoutedeni* p. 174,
nigrocephala, reinecki, p. 175, *restricta*
p. 176, *passyi, inermis*, p. 177, *convexi-
collis* p. 178, *obscuripennis, bayoni*,
p. 179, *transversa* p. 180, *subcuprea*,
kerremansi, p. 181, *congoana* p. 182,
spp. n., Africa, CLAVAREAU Ann. Soc.
ent. Belgique 56.

Leptaulaca longula p. 142, *pusilla*
p. 143, spp. n., Afr. centr., WEISE
Ergebn. Zentr.-Afrik. Exp. 4 L. 7.

Leptosonyx octocostatus sp. n. Kasch-
mir, WEISE p. 92 Arch. Naturges.
78 A.

Leucastea eritliana sp. n. O.-Afrika,
WEISE p. 78 T.c.

Liniscus ruandicus sp. n. Afr. centr.,
WEISE p. 136 Ergebn. Zentr.-Afrik.
Exp. 4 L. 7.

Liomela gen. n., *splendida* sp. n.
O.-Afrika, WEISE pp. 84–85 Arch.
Naturges. 78 A.

Longitarsus; the british synonymy
and notes, TOMLIN & SHARP Ent.
Mag. 48 pp. 2–7 etc.—*L. plantago-
maritimus* sp. n. England, DOLLMAN
p. 187 Ent. Rec. 24.—*L. gracilis* ab. n.
nigrithorax p. 65, *aeruginosus* f. n.
symphyti p. 69, *ganglbaueri* p. 292,
brisouti p. 293, spp. n., HEIKERTINGER
Ent. Bl. Berlin 8.—*L. karissimbicus*,
ruandensis, spp. n., Afr. centr., WEISE
p. 156 Ergebn. Zentr. Afrik. Exp. 4 L.
7.—*L.*; species on *Senecio*, TOMLIN p.
262 Ent. Mag. 48.

Lorentsia purpurascens sp. n. Borneo,
SPAETH p. 120 J. Sarawak Mus. 1
No. 2.

Luperodes albidipennis sp. n. Afr.
centr., WEISE p. 148 Ergebn. Zentr.-
Afrik. Exp. 4 L. 7.

Luperus circumfusus bipunctatus n.
var. p. 329, LABOISSIÈRE Bull. Soc.
ent. France 1912.

Malegia; Uebericht der russischen
Arten, *colchica* Transkaukasien, *weisei*
Transcaspien, spp. n., *uralensis* var. ? n.,
REITTER Wien. ent. Zeit. 31 pp. 91 &
92.

Mantura clavareaui sp. n. Japan,
HEIKERTINGER Verh. z.-b. Ges. Wien
62 pp. (44)–(48).

Megalognatha ruandana sp. n. Afr.
centr., WEISE p. 147 Ergebn. Zentr.-
Afrik. Exp. 4 L. 7.—*M. grouvellei*
sp. n. O.-Afrika, WEISE p. 87 Arch.
Naturges. 78 A.

Melasoma laticollis p. 138, *elegans*,
fasciata, nubila, p. 139, spp. n., Afr.
centr., WEISE Ergebn. Zentr.-Afrik.
Exp. 4 L. 7.—*M. virgintipunctatum*
ff. n. *quadripunctata, deegeri, extrema*,
melaina, SCHULZE p. 24 Berlin ent.
Zeitschr. 57.—*M. virgintipunctatum*
Variabilität, SCHULZE Berliner ent.
Zs. 56 pp. 139–147.

Melixanthus dichrous p. 133, *neglectus*,
beniensis, schubotzi, p. 134, spp. n.,
Afr. centr., WEISE Ergebn. Zentr.-
Afrik. Exp. 4 L. 7.

Mellesia gularis sp. n. Afr. centr.,
WEISE p. 143 T.c.

Metachroma, spp., SCHAEFFER Bull.
Brooklyn Ent. Soc. 8 p. 25.

- † *Metachroma florissantensis* sp. n. p. 28 pl. v f. 9 Colorado. Miocene, WICKHAM Bull. Univ. Iowa Lab. 6 No. 3.
- Metriona stellifera* sp. n. Borneo, SPAETH p. 121 J. Sarawak Mus. 1 No. 2.
- Minota obesa* v. n. *minima*, subsp. n. *carpathica*, HEIKERTINGER p. 60 Soc. entomol. 27.
- Monolepta vittigera* sp. n. Angola, WEISE p. 93 Arch. Naturges. 78 A.—*M. virens* sp. n. Afr. centr., WEISE p. 152 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.
- Nerissidius carnapi* Kamerun p. 50, *globulatus* Tschadsee p. 51, spp. n., KUNTZEN Arch. Naturges. 78 A.
- Nerissus leucocyclus* sp. n. p. 54, *N. femoralis* var. n. *prior* p. 55, Kamerun, KUNTZEN T.c.
- Nisotra aruwimiana* sp. n. Afr. centr. WEISE p. 158 Ergebn. Zentr.-Afrik. 4 L. 7.
- Nuzonia* gen. n. near *Coptocyclu*, *ibaguensis* sp. n. Columbia, SPAETH pp. 5-8 Stettin. ent. Zeit. 73.
- Oedionychis trinidadensis* for *illigeri* Jac. 1905, *amazona* for *inconspicua* Jac. 1905, *confusa* for *colombiana* Jac., *similis* for *rustica* Jac., *suntoensis* for *intersignata* Jac., nn. n., BOWDITCH p. 365 Canad. Ent. 44.
- Oides ruwensorica* sp. n. Afr. centr., WEISE p. 140 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.
- Orsodacna atra*, variation, FROST Psyche 19 pp. 153-156.
- Paradibolia robusta* sp. n. Afr. centr., WEISE p. 157 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.
- Peltobothrys* gen. n. nahe *Malacosoma*, *ohlinianus* sp. n. Feuerland, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 77 pl. ii f. 17.
- Peploptera bistrinotata* sp. n. Afr. centr., WEISE p. 132 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.
- Phascus occidentalis* sp. n. Kamerun, WEISE p. 82 Arch. Naturges. 78 A.
- Philopona ferruginea* sp. n. Afr. centr., WEISE p. 154 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.
- Phygasia rubripennis* p. 154, *carinata* p. 155, spp. n., Afr. centr., WEISE T.c.
- Phyllostreta ochripes comanensis* n. var. p. 136, PIC Bull. Soc. ent. France 1912.—*P. vittata*, Fundorte, HEIKERTINGER Verh. z.-b. Ges. Wien 62 pp. (44)-(48).
- Physonychis elongata, clavicornis*, spp. n., Afr. centr., WEISE p. 153 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.
- Plagiodera versicolora*, Eiablage, Metamorphose (Russ.), PYLÍNOV Simferopoli Trd. jest. muz. 1 pp. 20-36.
- Plagiometriona pehlkei* p. 7 Columbia, *peruana* p. 8 Peru, *pernix* p. 10 Columbia, *sponsa* p. 11 Peru, *boliviana* p. 13 Bolivia, *rubridorsis* p. 14 Ecuador, spp. n., SPAETH Stettin. ent. Zeit. 73.
- Plateumaris roscida* sp. n. Transbaikalien p. 77, WEISE Arch. Naturges. 78 A.
- Platyxantha carinata, ruwensorica*, spp. n., Afr. centr., WEISE p. 150 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.
- Podagrica malvae* ab. n. *picicollis*, HEIKERTINGER p. 18 Soc. entom. 27.
- Prioptera nigricornis* Borneo, *sumatrana* Sumatra, *figurata* Celebes, spp. n., WEISE p. 97 Arch. Naturges. 78 A.—*P. atricornis* sp. n. Borneo, SPAETH p. 117 J. Sarawak Mus. 1 No. 2.
- Pseudocolaspis brunneipes* var. n. *mogadorensis* p. 220, PIC Bull. Mus. Paris 1912.
- Psylliodes laticollis* ab. n. *rufofemorata*, HEIKERTINGER p. 239 Ent. Mitt. Berlin 1.
- Sardoides vulcanica* sp. n. Afr. centr., WEISE p. 145 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.
- Sclerophaedon carniolicus* ab. n. *violaceus*, FLEISCHER Wien ent. Zeit. 31 p. 103.
- Sebaethe chinensis* sp. n. China, WEISE p. 95 Arch. Naturges. 78 A.
- Sigrisma variabilis* p. 171, *picturata* p. 172, spp. n., Africa, CLAVAREAU Ann. Soc. ent. Belgique 56.
- Sphondilia testacea* sp. n. p. 11, PIC Mel. exot. 2.
- Stenellina impressicollis* sp. n. Kamerun, WEISE p. 87 Arch. Naturges. 78 A.

Taphius pallidus, major, spp. n., Kamerun, WEISE p. 81 T.c.

Tauroma assimilis p. 3, *purpurea* p. 4, spp. n., Peru, SPAETH Stettin. ent. Zcit. 73.

Thlaspidosoma dohrni var. n. *limbata*, SPAETH p. 119 J. Sarawak Mus. 1 No. 2.

Thyamis onosmae N. Africa sp. n. p. 295, PEYERIMHOFF Ann. Soc. ent. France 80.

Toxaria schubotzi sp. n. Afr. centr., WEISE p. 157 Ergebn. Zentr.-Afrik. Exp. 4 L. 7.

Uhelia goetzei sp. n. p. 57, *U. pardalis* var. n. *juelleborni* p. 56, O.-Afr., KUNTZEN Arch. Naturges. 78 A.—*U. nerissidioides* sp. n. Kikandja, KUNTZEN p. 132 T.c.

Vitruvia clytroides Sierra Leone p. 88, *calvicornis* Gabun, *monilicornis* Kamerun, p. 89, spp. n., WEISE Arch. Naturges. 78 A.

EROTYLIDAE.

Male genitalia, SHARP & MUIR p. 523 figs. 107 & 108 Tr. ent. Soc. London 1912.

Aulacochilus stolzii sp. n. Sumatra, RITSEMA Notes Mus. Leiden 34 p. 175.

Episcaphula hercules sp. n. Qld., LEA Proc. Linn. Soc. N. S. Wales 36 p. 477 pl. xvii f. 10.

Helota vide *Helotidae*.

Tritoma tenebrosa sp. n. U.S., FALL p. 41 Canad. Ent. 44.

†*Tritoma materna* pl. ii ff. 7 & 8, *submersa* p. 13 pl. iii ff. 2 & 3, Colorado Miocene, spp. n., WICKHAM Bull. Univ. Iowa 6 No. 3.

ENDOMYCHIDAE.

Male genitalia, SHARP & MUIR p. 525 pls. lxi & lxx Tr. ent. Soc. London 1912.

Hylaia elongata sp. n. Montenegro, APFELBECK p. 657 Wiss. Mitt. Bosn. 12.—*H. reissi* sp. n. Balkans, CSIKI p. 74 Rovart. Lapok 18 1911.

Sphaerosoma sturanyi p. 660, *antennarium* p. 661, spp. n., Balkan penins., APFELBECK T.c.—*S. globosum* ab. n. *rubrum*, PETRI p. 178 Siebenbürg. Käfer.

Symbiotes duryi sp. n. Ohio p. 463, ff. 1-2, WALTON Ohio Nat. 12.—*S. impressus* p. 102, *waltoni* p. 103, spp. n., Ohio, DURY Ohio J. Soc. Nat. Hist. 21 pp. 102-103.

COCCINELLIDAE.

Eiablage, Metamorphose, Nahrung, Schutzvorrichtungen der Coccinelliden (Russ.); FORČINSKIJ Trd. b. entom. učen. Kom. Gl. Upr. Zeml. 9 11 pp. 1-84 pl. i-ii textfig. 1-31.

Coccinellidae italiani, revisione, DELLA BEFFA Riv. coleotter. ital. 10 pp. 145-192 & 217-132.

Male genitalia, SHARP & MUIR p. 524 figs. 111 & 112 Tr. ent. Soc. London 1912.

Adalia bipunctata, Statistik und Biologie, MEISSNER Ent. Zs. 26 pp. 82-83 87-88 00 04-05; New York, abundance, FELT J. New York Ent. Soc. 20 p. 203.—*A. obliterated* var. *sublineata*, NICHOLSON p. 243 Ent. Rec. 24.

Agrabia sicardi sp. n. with *complexa* var. n. p. 448 California, NUNENMACHER Ent. News 23.

Anatis 15-punctata, caseyi sp. n., WESTCOTT Ent. News 23 p. 422.

Aulis ruwensorica sp. n. Ruwenzori, WEISE p. 52 Ergebn. Zentr.-Afrik. Exp. 4 L. 3.—*A. sharpi* sp. n. Mashonaland, SICARD p. 264 Nov. zool. 19.—*A. guttata* sp. n. Brazil, SICARD p. 137 Arch. Naturges. 78 A.

Azya trinitatis p. 320, *nana* p. 321, spp. n., S. America, MARSHALL Ann. Nat. Hist. 10.

Boschalis karisimbica sp. n. Ruanda, WEISE p. 51 Ergebn. Zentr.-Afrik. Exp. 4 L. 3.

Brachyacantha lengi sp. n. p. 449 California, NUNENMACHER Ent. News 23.—*B. manni* sp. n. p. 150 Brazil, NUNENMACHER Psyche 19.

Calvia decemguttata ab. n. *unicolor*, WINGELMÜLLER Verh. z.-b. Ges. Wien 62 p. (182).

Caria schoutedeni sp. n. Congo, SICARD p. 412 Rev. zool. afric. 1.—*C. arrowi* sp. n. Philippines, SICARD p. 253 Nov. Zool. 19

Chilocorus stillatus sp. n. Congo, SICARD p. 411 Rev. Zoo. afric. 1.—

- C. bipustulatus* ab. n. *exclamationis*. DEPOLI Wien ent. Zeit. 31 p. 101.
- Chnoodes gounellei* p. 304, *nigripes* p. 305, spp. n., Bolivia, SICARD Bull. Mus. Paris 1912.
- Chnootriba lata* sp. n. E. Africa, SICARD p. 251 Nov. Zool. 19.
- Cleothera biguttata* sp. n. Santos, SICARD p. 136 Arch. Naturges. 78 A.
- Coccinella humboldtiensis* sp. n. p. 448 California, NUNENMACHER Ent. News 23.
- Coelophora insularis* sp. n. Formosa, SICARD p. 134 Arch. Naturges. 78 A.
- Cranophorus guttatus* sp. n. Natal, SICARD p. 265 Nov. Zool. 19.
- Cryptognatha nodiceps* sp. n. Trinidad, MARSHALL p. 321 Ann. Nat. Hist. 10.
- Cycloneda fryi* var. n. *nigricollis* p. 304, SICARD Bull. Mus. Paris 1912.
- Cydonia propinqua* ab. n. *scapularis*, SICARD p. 261 Nov. Zool. 19.
- Cyrtaulis puncticollis* sp. n. Congo Français, SICARD Ann. Mus. Genova 45 p. 291.
- Dapolia lesnei* sp. n. p. 306 Bolivia, SICARD Bull. Mus. Paris 1912.
- Dysis quadrilineata* p. 254, *biguttata* p. 255 with ab. *G-guttata*, *decempunctata* p. 256, *gahani*, *limbicollis*, p. 257, *collaris*, *fulva*, p. 258, spp. n., Africa, SICARD Nov. Zool. 19.
- Elpidia distigma*, *simoni*, p. 259, *sanguinolenta* p. 260, spp. n., Mashonaland, SICARD Nov. Zool. 19.
- Endochilus styx* sp. n. Africa, SICARD Ann. Mus. Genova 45 p. 289.
- Epilachna lanceolata* sp. n. Mashonaland, SICARD p. 250 Nov. Zool. 19.—*E. tripartita* p. 132, *inversa* p. 133, spp. n., Uganda, SICARD Arch. Naturges. 78 A.—*E. connectens* p. 46, *tetragramma*, *quadripartita*, p. 47, spp. n., Afr. centr., WEISE Ergebn. Zentr.-Afrik. Exp. 4 L. 3.—*E. atropos* sp. n. Fernando Po p. 282, *moseri* varr. n. *ferrum-equinum* and *diluta* p. 283, SICARD Ann. Mus. Genova 45.—*E. polymorpha* var. n. *deckeni* p. 308, *chrysomelina* var. n. *limbicollis* p. 309, SICARD Bull. Mus. Paris 1912.—*E. chrysomelina*, Biologie, Schaden, PLOTNIKOV Taškent 1912 p. 21 f. 14–15.
- Exochomus gorhami* sp. n. Mashonaland, SICARD p. 261 Nov. Zool. 19.—*E. fulvimanus* sp. n. Victoria-See, WEISE p. 51 Ergebn. Zentr.-Afrik. Exp. 4 L. 3.—*E. scapularis* Arizona, LENG J. New York Ent. Soc. 20 p. 68.—*E. bouvieri* sp. n. p. 304 Bolivia, SICARD Bull. Mus. Paris 1912.
- Exoplectra gorhami* sp. n. Mexico, SICARD p. 137 Arch. Naturges. 78 A.—*E. brasiliensis* sp. n. p. 151 Brazil, NUNENMACHER Psyche 19.
- Harmonia rugulosa* sp. n. Mexico, SICARD p. 134 Arch. Naturges. 68 A.
- Helesius caseyi* sp. n. Columbia, SICARD p. 135 T.c.
- Hippodamia tredecimpunctata* var. n. *fulvomarginata*, WINGELMÜLLER Verh. z.-b. Ges. Wien 62 p. (182).
- Hyperaspis multicolor* sp. n. Mashonaland, SICARD p. 263 Nov. Zool. 19.—*H. idae*, *falli*, spp. n., U.S., p. 450, NUNENMACHER Ent. News 23.
- Lotis ovata* sp. n. C. Good Hope, SICARD p. 262 Nov. Zool. 19.—*L. nigrocincta* sp. n. p. 310 Africa, SICARD Bull. Mus. Paris 1912.
- Martinella undulata* sp. n. Natal, SICARD p. 262 Nov. Zool. 19.
- Mysia oblongoguttata* ab. n. *nigroguttata*, DOLLMAN p. 53 pl. ii Ent. Rec. 24.
- Ortalia x-signata* sp. n. Mashonaland p. 264, *punctata* ab. *octonotata*, *ochracea* ab. *rosea*, p. 263, SICARD Nov. Zool. 19.
- Pharoscymnus pictus* sp. n. Mashonaland, SICARD p. 267 Nov. Zool. 19.
- Platynaspis marginata* var. n. p. 309, SICARD Bull. Mus. Paris 1912.
- Pullus guttulatus*, *marshalli*, spp. n., Mashonaland, p. 266, *thiolerii* and *moreleti*, abb. n., p. 267, SICARD Nov. Zool. 19.—*P. alluaudi* p. 310, *rufus* p. 311, spp. n., Africa. SICARD Bull. Mus. Paris 1912.

Rodalia cinctipennis sp. n. Beni, WEISE p. 52 *Ergebn. Zentr.-Afrik. Exp.* 4 L. 3.

Scymnillus cochisiensis sp. n. Arizona p. 451, NUNENMACHER *Ent. News* 23.

Scymnus frontalis ab. n. *maculatus*, *apetzi* ab. n. *muelleri*, WINGELMÜLLER *Verh. z.-b. Ges. Wien* 62 p. (182).—*S. olibroides* sp. n. Africa, SICARD *Ann. Mus. Genova* 45 p. 290.

Sidis luteopictus sp. n. Africa, SICARD p. 290 T.c.

Solanophila chirindica p. 247, *ardosiaca* p. 248, *arrowi* p. 249, *auricoma* p. 250, spp. n., Africa, SICARD *Nov. Zool.* 19.—*S. weisei* Bolivia, *pantherina* Uganda, p. 129, *schenklingi* Nyam Nyam p. 130, *centralis* Uganda p. 132, spp. n., *S. fecunda* v. n. *fasciata*, *nilghirica* v. n. *maculicollis*, p. 131, SICARD *Arch. Naturges.* 78 A.—*S. gestroi* p. 284, *insularis* p. 285, *trifoliata* p. 286, spp. n., Africa, SICARD *Ann. Mus. Genova* 45.—*S. karisimbica* p. 43, *leucosticta*, *elliptica*, p. 44, *tetrastigma*, *vulcanica*, p. 45, spp. n., Afr. centr., WEISE *Ergebn. Zentr.-Afrik. Exp.* 4 L. 3.—*S. fasciata* sp. n. Africa p. 307, SICARD *Bull. Mus. Paris* 1912.—*S. pierreti* var. n. *leopardina*, *blaesca* var. n. *benardi*, *beuschi* sp. n. p. 245, Madagascar, SICARD *Bull. Soc. ent. France* 1912.—*S. crotchi* sp. n. p. 303 Bolivia, SICARD *Bull. Mus. Paris* 1912.

Synharmonia doderoi sp. n. Ribeira Palma, SICARD *Ann. Mus. Genova* 45 p. 288.

Thea parenthesis sp. n. Mashonaland, SICARD p. 252 *Nov. Zool.* 19.

Vibidia marshalli sp. n. Mashonaland, SICARD p. 252 T.c.

CORYLOPHIDAE.

Male genitalia, SHARP & MUIR p. 507 f. 75 *Tr. ent. Soc. London* 1912.

Aphanocephalus minutus p. 198, *punctatus* p. 200, *splendens* p. 201, Sumatra, *distinctus* p. 204 Bangai, *quadrinotatus* p. 206 Key, *pubescens* p. 207 Eastern Asia, *globulus* p. 209 Singapore, *africanus* p. 212 Africa, *bimaculatus* p. 214 Australia, *modiglianii* p. 215 Engano, *atomus* p. 217, *picinus* p. 219, Sumatra, spp. n., GROUVELLE *Notes Mus. Leiden* 34.

(N-9210 j)

HYMENOPTERA.

Bees and wasps of Paraguay, biology, BERTONI *An. Mus. Buenos Aires* 22 pp. 97-146.

The *Aculeata* and *Chrysididae* of Mendoza, JÖRGENSEN *An. Mus. Buenos Aires* 22 pp. 267-338.

APIDAE.

Die Bienenfauna von Westpreussen; ALFKEN *Danzig Ber. bot.-zool. Ver.* 34 pp. 1-96 2 Taf.

FREY-GESSNER completes the *Apidae* of *Fauna ins. Helvetiae* 2 pp. 257-319.

For synonymy of many exotic *Mejachilinae*, especially those of Smith, refer to MEADE-WALDO pp. 461-478 *Ann. Nat. Hist.* 10.

Tables analytiques des *Apides sociales*, FREY-GESSNER *Bull. Murith* 37 pp. 25-82.

Berichtigungen und Ergänzungen zur „Revision der Apiden der Provinz Mendoza, Republik Argentina“; JÖRGENSEN *Zool. Jahrb. Syst.* 33 pp. 643-644.

Zusätze und Berichtigungen zu H. Frieses: Die Bienen Afrikas; BRAUNS. *D. ent. Zs.* 1912 pp. 445-455 598-603.

Betr. H. Fricse in *Denkschr. med. Ges. Jena* 1909; STRAND *Arch. Natg.* 78 A H. 1 pp. 126-144.

Bees in Guatemala; W. P. COCKERELL. *Canad. Ent.* 44 pp. 277-282.

Notes on habits; HUNGERFORD & WILLIAMS *Ent. News* 23 p. 256.

Oligotropic bees; ROBERTSON *Ent. News* 23 pp. 457-460.

Agapostemon nasutus gualanicus var. n., COCKERELL p. 556 *Ann. Nat. Hist.* 9.—*A. proscriptus* sp. n. Guatemala, COCKERELL p. 24 op. cit. 10.

Allodape macula p. 286, *l-insignata*, *bibundica*, p. 287, *mimica* p. 288, *laeviceps* p. 289, *perpusilla*, *picticorpus*, p. 290, *scutelligera* p. 291, *mea* p. 292, *dapa*, *nula*, p. 293, spp. n., West-Afrika, STRAND *Mitt. Mus. Berlin* 6.—*A. simillima*, ♂ COCKERELL p. 383 *Ann. Nat. Hist.* 9.

Ancyloscelis hirta sp. n. Argentina, JÖRGENSEN p. 158 *Zool. Jahrb. Syst.* 32.

Andrena emesiana, lampronota, spp. n., p. 41 Syria, PÉREZ Bull. Soc. Rouen 46.—*A. saundersi* nom. n. for *A. nigri-ventris* Saund. p. 613, VIERECK Proc. U. S. Nation Mus. 42.—*A. thaspii*, var., COCKERELL p. 382 Ann. Nat. Hist. 9.

Anthidium aquiphilum Süd-Afr., *bazonis*, p. 306, *orichalciscopatum* p. 307, *auriscopatum* p. 308, West-Afrika, spp. n., STRAND Mitt. Mus. Berlin 6.—*A. kobrowi* p. 599 Transvaal, *willowmorense* p. 602 Kapland, spp. n., BRAUNS Deutsche ent. Zeitschr. 1912.—*A. rodriguezii* sp. n. Guatemala, COCKERELL p. 563 Ann. Nat. Hist. 9.—*A. andinum* sp. n. Argentina, JÖRGENSEN p. 136 Zool. Jahrb. Syst. 32.

Anthophora heliopolitensis p. 30, *soror* p. 31, spp. n., Syria, PÉREZ Bull. Soc. Rouen 46.—*A. vivida* var. n. *guinea*, STRAND p. 296 Mitt. Mus. Berlin 6.—*A. usticauda* sp. n. Guatemala, COCKERELL p. 22 Ann. Nat. Hist. 10.—*A. marginata* p. 106 Guatemala, COCKERELL Psyche 19.

Apis; wax scales, CASTEEL Circ. 161 U. S. Dep. Agric. Ent. 13 pp. figs.—*Apis mellifica*, pollen collecting, CASTEEL U. S. Dep. Agric. Ent. Bull. 121 pp. 1-36 ff. 1-9; *Apis mellifica*, Verdauung; PETERSEN Arch. ges. Physiol. 145 pp. 121-151 2 Taf.; Künstliche Befruchtung, ŠIROKOV Pčelovodstvo 12 pp. 49-53.

Augochlora gemmella p. 315, *amatilana* p. 316, spp. n., Guatemala, COCKERELL Ann. Nat. Hist. 10.—*A. cleopatra* p. 113, *thamyris* p. 114, spp. n., Argentina, JÖRGENSEN Zool. Jahrb. Syst. 32.

Bombus; der Alpen Steiermarks; GRAEFFE Mitt. Ver. Steiern. 48 pp. 376-380.—18 spp. Bohemiae, KLAPÁLEK Archiv. přír. výzk. Čech. Prag Bd. 12 No. 3 pp. 9-39.—*B. lapponicus* und dessen Formen (27 nn.) Synopsis (Russ.), KORIKOV Rev. russ. entom. 12 pp. 95-102.—*B. lepidus* Gan-see p. 606, *lemniscatus* p. 607 spp. n., *potanini grumiellus*, *fragans mongol*, p. 607, *waltoni kozloviellus*, *pyrrhosoma canosocollaris*, varr. n., *kozlovi*, p. 608, *supremus* Beschreibung p. 609, *dificillimus* sp. n. Centralasien p. 609, *pamirus* var. n., *lucorum jacobsoni* subsp. n., p. 610, ŠKORIKOV Rev. russ. ent. 12.—*B. terrestris* and

runderatus, variation in New Zealand, SLADEN Ent. Mag. 48 p. 66.—*B. mastrucatus* var. n. *tiroloensis* Alpen, FRIESE p. 192 Zool. Jahrb. Suppl. 15.—*B. spp.* California, DAVIDSON Bull. So. Cal. Acad. 10 1911 p. 66.—*B. lateralis wilmattae* subsp. n., COCKERELL p. 21 Ann. Nat. Hist. 10.—Studien an Hummeln, FRIESE & WAGNER Zool. Jahrb. Suppl. 15 Bd 1 pp. 155-210 5 Taf.—*Bombus* and *Psithyrus* of Britain; SLADEN The humble bee 283 pp. 6 pls.—*Bombus*; biology, LINDGARD København Tids. Landbr. Planteavl. 19 pp. 335-352 4 figg.

Caenohalictus wilmattae sp. n. Guatemala, COCKERELL p. 317 Ann. Nat. Hist. 10.

Cuenonomada tertia sp. n. p. 52 Brazil, COCKERELL Psyche 19.

Calliopsis spegazzini sp. n. Argentina, JÖRGENSEN p. 121 Zool. Jahrb. Syst. 32.

Camptopoeum opuntiarum sp. n. Argentina, JÖRGENSEN p. 118 T.c.

Capicola flavitarsis sp. n. S.-Afrika, FRIESE p. 185 Arch. Naturges. 78 A.

Centris bakeri p. 42, *heterodonta* p. 43, *libertatis* p. 44, *ceratocephala* p. 45, spp. n., Brazil, COCKERELL Psyche 19.—*C. bakeri* p. 199 Mexico, *metathoracica* p. 200 Ecuador, spp. n., FRIESE Arch. Naturges. 78 A.—*C. lepeletieri* sp. n. S. Domingo, *C. haemorrhoidalis* Fabr., COCKERELL p. 140 Ann. Nat. Hist. 9.—*C. inermis gualanensis* subsp. n., COCKERELL p. 568 Ann. Nat. Hist. 9.

Ceratina vittata sp. n. Orange river, BINGHAM p. 382 Tr. ent. Soc. London 1912.—*C. langenburgiae* p. 15 Nyassa-See, *togoana* p. 16 Togo, *penicilligera* p. 17 Sansibar, *daressalamica* p. 18 O.-Afr., *guineana* p. 19 W.-Afr., *defeminata* p. 20 Tanganyika, *taborae* p. 21 O.-Afr., *acutipyga* p. 22 Kapland, *senegalensis* p. 24 Senegal, *furcilinea* p. 25 Tanganyika, *nyassensis* p. 26 Nyassa, *foveifera* p. 27 Kamerun, spp. n., *C. nasalis* var. n. *viriditincta* p. 23, STRAND Arch. Naturges. Suppl. 4 77.

C. fryeri Aldabra p. 34, *nodosiventris* p. 35, *tabescens* p. 36 Seychelles, spp. n., COCKERELL Tr. Linn. Soc. London 15.—*C. allodapoides* p. 282, *guineae*, *subelongata* p. 283, *nasiinsignita* p. 285,

- loa* p. 286, spp. n., Span.-Guinea, STRAND Mitt. Mus. Berlin 6.—*C. wilmatia* p. 557, *regalis*, *quinquemaculata*, p. 558, *xanthostoma* p. 559 with var. *rufipennis* p. 560, spp. n., Guatemala, *amabilis rhodochrysea* var. n. p. 556, COCKERELL Ann. Nat. Hist. 9.—*C. chrysocephala* p. 46, *manni* p. 47; Brazil, spp. n., COCKERELL Psyche 19.—*C. callosa*, Bauten, Eiablage, Parasiten etc. (Russ. + deutsch. Rés.), MALYŠEV St. Peterburg Trav. Soc. nat. 43 1 pp. 252–255 276–277.—*C. viridissima* p. 242, pupa p. 243, DUTT Mem. Dept. Agric. Ind. Ent. Ser. 4.
- Chacoana schizacantha* sp. n. Minas Geraes, DUCKE p. 93 Zool. Jahrb. Syst. 34.
- Chalicodoma libanensis* n. sp. Syria p. 39, PÉREZ Bull. Soc. Rouen 46.—*C. karoensis*, *nasutula*, p. 446, *meadewaldoi* p. 448, spp. n., Kapland, BRAUNS Deutsche ent. Zeitschr. 1912.
- Chelyniä ricardonis* sp. n. Canada, COCKERELL p. 293 Canad. Ent. 44.
- Chloralictus vernalis* sp. n. Argentina, JÖRGENSEN p. 115 Zool. Jahrb. Syst. 32.
- Coelioxys rufescens* var. n. *agona*, ALFKEN p. 45 Ber. Ver. Danzig 34.—*C. odin* sp. n. Span. Guinea, STRAND p. 309 Mitt. Mus. Berlin 6.—*C. immaculata* p. 165, *erysimi* p. 166, *quercina*, *fragariae*, p. 167, *hirsutissima* p. 168, spp. n., U.S., *C. texana vegana* subsp. n. p. 166, COCKERELL Canad. Ent. 44.—*C. sanguinosus* sp. n. Guatemala, COCKERELL p. 23 Ann. Nat. Hist. 10.—*C. ardescens* sp. n. p. 51 Brazil, COCKERELL Psyche 19.
- Colletes*; Mitteleuropäische Formen, FRIESE Arch. Natg. 78 A pp. 149–161.—*C. motaguensis* p. 564, *antiguensis* p. 565, spp. n., Guatemala, COCKERELL Ann. Nat. Hist. 9.—*C. weiskei* p. 364, *azureus* p. 365, spp. n., Argentina, FRIESE Deutsche ent. Zeitschr. 1912.—*C. clematidis*, *vachali*, p. 93, *brethesi* p. 94, *glycyrrhizae* p. 95, *similis*, *lycii*, p. 96, *schrottkyi* p. 97, *clarus* p. 98, spp. n., Argentina, JÖRGENSEN Zool. Jahrb. Syst. 22.
- Crocisa guineensis* var. n. *tessmanni*, STRAND p. 297 Mitt. Mus. Berlin 6.
- Diadasia parahybensis* p. 58, *murihirta*, spp. n., *sumichrasti vulpихirta* (N-9210 j)
- subsp. n., p. 59, Brazil, COCKERELL Psyche 19.
- Dialictus onustulus* sp. n. Guatemala, COCKERELL p. 318 Ann. Nat. Hist. 10.
- Dianthidium gualanense* sp. n. Guatemala, COCKERELL p. 560 Ann. Nat. Hist. 9.—*D. heathi* sp. n. p. 45 Brazil, COCKERELL Psyche 19.
- Entechnia laurea*, habits, DOELLA JURANDO Physis 1 pp. 52–56.
- Epeolus novomexicanus* sp. n. Santa Fé, COCKERELL p. 487 Ann. Nat. Hist. 10.—*E. peterseni* sp. n. Argentina, JÖRGENSEN p. 139 Zool. Jahrb. Syst. 32.
- Eriades quinquecostatus*, *brage*, spp. n., Span. Guinea, STRAND p. 299 Mitt. Mus. Berlin 6.—*E. namanus*, *capicola*, *albiscopanus*, S.-Afr., *curviventris* Togo, pp. 6–7, spp. n., STRAND Soc. entom. 27.
- Eucera pumila* p. 31, *acolopus* p. 32, *bipartita* p. 34, *aciculata*, *speculifera*, p. 35, *obsoleta*, *kervillei*, p. 36, *gracilipes* p. 38, spp. n., Syria, PÉREZ Bull. Soc. Rouen 46.
- Eucerinae*; list of spp.; COCKERELL Proc. U. S. Nation. Mus. pp. 261–273.
- Eulaema manni* sp. n. p. 41. Brazil, COCKERELL Psyche 19.
- Euprosopis* gen. n. typo *P. huzela* Cock., PERKINS p. 106 Ann. Nat. Hist. 9.
- Euryglossa variabilis* p. 110, *euxantha* p. 111, spp. n., Australia, PERKINS Ann. Nat. Hist. 9.—*E. mutica*, *aurantifera*, spp. n., N. S. Wales, COCKERELL p. 143 Ann. Nat. Hist. 9.
- Euryglossina cockerelli* sp. n. Queensland, PERKINS p. 113 Ann. Nat. Hist. 9.
- Exomalopsis callura* sp. n. Guatemala, COCKERELL p. 319 Ann. Nat. Hist. 10.—*E. zexmeniae* sp. n. Guatemala p. 447, COCKERELL Ent. News 23.—*E. paraguayensis manni* subsp. n. p. 56, COCKERELL Psyche 19.
- Exoneura angophorae*, *ploratula*, spp. n., Sydney, COCKERELL p. 224 Ann. Nat. Hist. 9.
- Frieseomelitta* n. gen. für *Trigona silvestrii* Friese, IHERING p. 5 Zeitschr. wiss. Insektbiol. 8.

Gastropsis victoriae, var., COCKERELL p. 381 Ann. Nat. Hist. 9.

Gnathoprosopis gen. n. p. 104 type *P. xanthopoda* Cock., *theodorei* sp. n. Queensland p. 105, PERKINS Ann. Nat. Hist. 9.—*G. hackeri* sp. n. Queensland *euxantha* n.n. for *xanthopoda*, COCKERELL p. 489 Ann. Nat. Hist. 10.

Halictomorpha autumnalis sp. n. Argentina, JÖRGENSEN p. 116 Zool. Jahrb. Syst. 32.

Halictus schelkownikovi sp. n. Gouv. Elisabetpol, KAKUJEV Mitt. Kaukas. Mus. 7 1 p. 5.—*H. kervilleanus*, *syriacus*, p. 42, *damascenus* p. 43, *prognathus* p. 44, *debilior*, *emesianus*, p. 451, *divergens* p. 46, spp. n., Syria, PEREZ Bull. Soc. Rouen 46.—*H. nelleburgensis* p. 266, *guineacola* p. 267, *guntheri*, *guineabius*, p. 268, *squamiceps* p. 269, *alenicus* p. 270, spp. n., Span. Guinea, STRAND Mitt. Mus. Berlin 6.—*H. inornatus* sp. n. Cape colony, BINGHAM p. 382 Tr. ent. Soc. London 1912.—*H. aldabranus* p. 31, *H. (Evylaeus) nicolli* p. 32, spp. n., Seychelles, COCKERELL Tr. Linn. Soc. London 15.—*H. dotatus* p. 384, *saycei*, *kesteveni*, p. 286, spp. n., Australia, COCKERELL Ann. Nat. Hist. 9.—*H. (Chloralictus) bruesi* sp. n. Jamaica p. 485, *leichardti* = (*paracolletinus* Cock.) p. 486, COCKERELL op. cit. 10.—*H. meridionalis* sp. n. Argentina, JÖRGENSEN p. 115 Zool. Jahrb. Syst. 32.

Heriades aldabranus sp. n. Aldabra, COCKERELL p. 39 Tr. Linn. Soc. London 15.

Heterapis halictiformis sp. n. Queensland, PERKINS p. 112 Ann. Nat. Hist. 9.

Holmbergeria gen. n. near *Colletes*, *crisariae* sp. n. Argentina, JÖRGENSEN p. 100 Zool. Jahrb. Syst. 32.

Hylaeoides; genitalia etc., PERKINS p. 108 Ann. Nat. Hist. 9.

Hypanthidium aureocinctum sp. n. Mexico p. 444, COCKERELL Ent. News 23.

Isepeolus vachali p. 143, *cockerelli* p. 144, *smithi* p. 146, *viecki* p. 147, *kiefferi* p. 148, *bellus* p. 149, *analisis* p. *abnormis*, p. 150, spp. n.; JÖRGENSEN Zool. Jahrb. Syst. 32.

Leptergatis wheeleri sp. n. p. 105 Guatemala, COCKERELL Psyche 19.

Lestrimelitta cubiceps sp. n. O.-Afrika, FRIESE p. 169 Arch. Naturges. 78 A.

Liopoeum hirsutulum var. n. *mendocinum*, JÖRGENSEN p. 119 Zool. Jahrb. Syst. 32.

Lithurgus scotti sp. n. Seychelles, COCKERELL p. 38 Tr. Linn. Soc. London 15.—*L. sp.*, PERKINS Proc. Hawaiian Ent. Soc. 2 p. 180.

Megachile binghami sp. n. (= *bellula* ♂ of Bing.) p. 465, *M. habropodoides* Sikkim p. 472, *neavei*, *battorensis*, p. 473, *frederici* p. 474, Africa, spp. n., MEADE-WALDO Ann. Nat. Hist. 10.—*M. stuppeola* p. 300, *africanibia* p. 301, *benitocola* p. 302, *cognatimorpha* p. 303, *guineae* p. 304, *mutala*, spp. n., *M. emarginata* var. n. *lua* p. 305, West-Afrika, STRAND Mitt. Mus. Berlin 6.—*M. seychellensis* race nov. *aldabrarum*, COCKERELL p. 40 Tr. Linn. Soc. London 15.—*M. cetera* p. 220, *holura* p. 221, *cincturata* p. 222, *fuscitarsis* p. 223, spp. n., Australia, *trichognatha tosticauda* p. 221, subsp. n., COCKERELL Ann. Nat. Hist. 9.—*M. zexmeniae* p. 24, *aurantipennis* p. 26, *M. (Oligotropus) gualanensis* p. 27, spp. n., Guatemala, *tuxtla* ♀ p. 25, COCKERELL Ann. Nat. Hist. 10.—*M. philinea* sp. n. Peru, COCKERELL p. 176 Entomologist 45.—*M. liguanensis* Jamaica, *huascari* Peru, spp. n., p. 486, *sayi sancta* subsp. n., p. 487, COCKERELL Ann. Nat. Hist. 10.—*M. vernonensis* sp. n. Brit. Columbia, COCKERELL p. 354 Canad. Ent. 44.—*M. melancholica* p. 126, *obscurior* p. 127, *holmbergi* p. 129, *hoffmannseggiae* p. 130, spp. n., Argentina, JÖRGENSEN Zool. Jahrb. Syst. 32.—*M. virescens*, *microsoma*, p. 55, *permuda* p. 56, spp. n., Brazil, COCKERELL Psyche 19.

Megalopta ipomeae sp. n. Argentina, SCHROTKY p. 271 Zeitschr. wiss. Insektbiol. 8.

Melipona solani sp. n. Guatemala, COCKERELL p. 315 Ann. Nat. Hist. 10.—*M. pseudocentris* p. 47, *abunensis* p. 48, Brazil, spp. n., COCKERELL Psyche 19.

Melissa imperialis p. 205 Mexico, *chalybaea* p. 208 Brasilia, *pretiosa* p. 212 Venezuela, spp. n., FRIESE Arch. Naturges. 78 A.

Melissodes assimilis to *Xenoglossa* p. 24, *tepaneca aschenborniana* subsp. n.

- p. 28, COCKERELL Ann. Nat. Hist. 10.
- Meliturga capensis* sp. n. S.-Afrika, BRAUNS p. 69 Deutsche ent. Zeitschr. 1912.
- Meliturgula minima* sp. n. S.-W. Afrika, FRIESE p. 188 Arch. Naturges. 78 A.
- Mermiglossa* gen. n. near *Meliturga*, *rufa* sp. n. S.-W. Afrika, FRIESE pp. 188-189 T.c.
- Meroglossa*; characters and composition, pp. 96-99, *M. soror* p. 100, *decipiens*, *deceptor*, p. 101, spp. n., Australia, PERKINS Ann. Nat. Hist. 9.—*M. persulcata* sp. n. Queensland p. 144, *parallela* var. n. *recessiva* p. 149, COCKERELL Ann. Nat. Hist. 9.
- Mesoplia azurea*, *guatemalensis* subsp. n., COCKERELL p. 567 T.c.
- Mesotrichia incerta seychellensis* subsp. n. p. 36, COCKERELL Tr. Linn. Soc. London 15.
- Morgania nigrithorax* sp. n. Span. Guinea, STRAND p. 310 Mitt. Mus. Berlin 6.
- Neoceratina* gen. n., *australensis* sp. n. Queensland, PERKINS p. 117 Ann. Nat. Hist. 9.
- Neopasiphae* gen. n. near *Euryglossa* p. 114, *mirabilis* sp. n. W. Australia p. 115, PERKINS T.c.
- Nesoprosopis hula* p. 721, *felicum*, *homoeochroma*, p. 722, *pele* p. 723, *psammobia* p. 724, Hawaii, *chinensis* Macao p. 725, spp. n., PERKINS Tr. ent. London 1911.
- Nomada kobrowi* sp. n. Transvaal, BRAUNS p. 68 Deutsche ent. Zeitschr. 1912.—*N. australensis* sp. n. Queensland, PERKINS p. 116 Ann. Nat. Hist. 9.—*N. dahli* sp. n. Bismarck-Arch. FRIESE p. 95 Mitt. Mus. Berlin 6. *N. (Micronomada) jamaicensis* sp. n. Jamaica, COCKERELL p. 484 Ann. Nat. Hist. 10.—*N. abnormis* sp. n. Amazonas, DUCKE p. 104 Zool. Jahrb. Syst. 34.
- Nomia senegalicola* Senegal, *zuahula* Tanganyika, *corruscatrix* Kapland, *interstitinervis* Guinea, spp. n., STRAND pp. 104-105 Ent. Rdsch. 29.—*N. tetraloniformis* p. 272, *jessmanni* p. 273, *nelleburgensis* p. 274, *russuloides*, *makomensis*, p. 275, *andrenimorpha* p. 276, *mia* p. 277, *aleniana* p. 278, *garu* p. 279, *benitoana* p. 280, spp. n., *N. hylaeoides* var. n. *guineensis* p. 281, West-Afrika, STRAND Mitt. Mus. Berlin 6.—*N. mionana* Senegal, *halictiella* N'di, spp. n. STRAND pp. 160-161 Arch. Naturges. 78 A.—*N. meadewaldoi* sp. n. Kapland, BRAUNS p. 450 Deutsche ent. Zeitschr. 1912.—*N. maturans* p. 10, *megasoma*, *pavonura*, p. 11, *mediorufa* p. 12 with *gyammensis* subsp. p. 13, spp. n., Formosa, COCKERELL Entomologist 45.—*N. frenchi*, *satelles*, spp. n., Australia, p. 122, *flavoviridis* variation. p. 119, *kurandina* and *halictella*, males, p. 121, COCKERELL Entomologist 45.—*N. (Reepenia) eboracina* sp. n. Queensland, COCKERELL p. 377 Ann. Nat. Hist. 9.—*N. lyonsiae* p. 491 Queensland, *comperta* India p. 493, spp. n., COCKERELL Ann. Nat. Hist. 10.—*N. aenescens* sp. n. Neu Guinea, FRIESE p. 94 Mitt. Mus. Berlin 6.
- Osmia*; N. Amer. spp., COCKERELL Proc. U. S. Nation. Mus. 42 pp. 215-225.—*O. novaescotiae* p. 355, *subaretica* p. 357, *tersula* p. 358, spp. n., N. America, COCKERELL Canad. Ent. 44.—*O. erythrotricha* sp. n. Guatemala, COCKERELL p. 561 Ann. Nat. Hist. 9.
- Oxaea nigerrima* sp. n. Mexico, FRIESE p. 199 Arch. Naturges. 78 A.
- Pachyprosopis angophorae*, *flavicauda*, p. 141, *humeralis* p. 142, spp. n., N. S. Wales, COCKERELL Ann. Nat. Hist. 9.—*P. obesa* p. 383, *nitidiceps* p. 384, spp. n., Australia, COCKERELL T.c.
- Palaeorhiza*; characters p. 102, *muii* Amboina sp. n., *varicolor* var. *eboracina*, p. 103, PERKINS Ann. Nat. Hist. 9.
- Panurginus solani* sp. n. Rio de Janeiro, DUCKE p. 87 Zool. Jahrb. Syst. 34.—*P. ornatipes* and allies, CRAWFORD p. 367 Canad. Ent. 44.—*P. innuptus absonus* var. n. p. 446, *picitarsis* nom. n. for *picipes* Mor., *labrosiformis distractus* subsp. n., p. 447, COCKERELL Ent. News 23.
- Paracolletes rebellis*, *platycephalus*, p. 379, *eugeniarum* p. 380, spp. n., Australia, *crassipes* var. p. 378, COCKERELL Ann. Nat. Hist. 9.
- Parasphecodes bryotrichus* p. 225, *microdontus* p. 226, *hybodinus*, *recantans*, p. 227, *speculiferus* p. 228, spp. n., Australia, COCKERELL T.c.

Paraugochlord semiramis sp. n. Argentina, JÖRGENSEN p. 114 Zool. Jahrb. Syst. 32.

Parepeolus gen. n. für *Leiopodus lecointei*, DUCKE p. 102 Zool. Jahrb. Syst. 34.

Pasiphae longipes p. 101, *friesei* p. 102, *armata* p. 103, *abdominalis* p. 104, spp. n., JÖRGENSEN Zool. Jahrb. Syst. 32.

Perdita tropicalis sp. n. Guatemala, COCKERELL p. 562 Ann. Nat. Hist. 9.—*P. canadensis* sp. n. Alberta, CRAWFORD p. 360 Canad. Ent. 44.

Phileremulus mallochi sp. n. Alberta, CRAWFORD p. 359 T.c.

Prosopis nelleburgensis sp. n. Span. Guinea, STRAND p. 265 Mitt. Mus. Berlin 6.—*P. dentiferella* Delagoa-Bai, *rubrifacialis* Togo, p. 20, *dregei* Kapland, spp. n., *atriceps* var. n. *major* Nyassa-See p. 27, *albinasata* sp. n., *Braunsi* var. n. *fumata*, Kapland, *sansibarica* Sansibar p. 30, *krebsiana* Kapland, *nyassana* Nyassa-See p. 33, spp. n., *heraldica* var. n. *rufipicta* p. 34, STRAND Soc. entom. 27.—*P. simplex* sp. n. Cape Colony, BINGHAM p. 381 Tr. ent. Soc. London 1912. *P. nubilosella mediosticta* subsp. n. p. 145, *xanthaspis* ♂ p. 106, *albonitens* var. n. *chromatica* p. 149, *flavojugata* p. 146, *scintilla* p. 147, *ancorata*, *eburniella*, p. 148, spp. n., Australia, COCKERELL Ann. Nat. Hist. 9.—*P. kelvini* p. 489, *leai* p. 490, spp. n., Australia, COCKERELL Ann. Nat. Hist. 10.—*P. gualunica* p. 565, *quadratifera* p. 566, spp. n., Guatemala, COCKERELL Ann. Nat. Hist. 9.—*P. albonitens*, var. *chromatica* = sp. n., COCKERELL p. 382 T.c.—*P. uberta*, *lambella*, p. 65, *trisulca* p. 66, *basirufa*, *gemina*, *nasuta* p. 67, *lychnis*, *curtula*, p. 68, *cruenta*, *orbica*, *recisa*, p. 69, *puerula* p. 70, spp. n., S. America, VACHAL Rev. Ent. franc. 28 1910.

Protomeliturga gen. n. für *Calliopsis turnerae*, DUCKE p. 89 Zool. Jahrb. Syst. 34.

Psaenythia canina sp. n. p. 53 Brazil, COCKERELL Psyche 19.

Pseudagapostemon singularis, *babuarus*, spp. n., Argentina, JÖRGENSEN p. 112 Zool. Jahrb. Syst. 32.

Psithyrus, 6 spp. Bohemiae, KLAPÁLEK Archiv. příř. výzk. Čech. Prag.

Bd. 12 No. 3 pp. 39–48.—*P. guatemalensis* sp. n. Centr. America, COCKERELL p. 21 Ann. Nat. Hist. 10.

Ptiloglossa mayarum sp. n. Guatemala, COCKERELL p. 562 Ann. Nat. Hist. 9.

Rhinochaetula subg. n. for *capicola* p. 185, *cinctiventris*, *rufiventris*, p. 186, *plumipes* p. 187, spp. n., FRIESE Arch. Naturges. 78 A.

Scapter politus sp. n. Span. Guinea, STRAND p. 281 Mitt. Mus. Berlin 6.

Sphecodes rufichelis p. 12, *atriapicalus* p. 13 Kapland, *nyassanus* p. 14 Nyassa-See, *togoanus* p. 15 Togo, spp. n., *S. oneili* var. n. *nigriclypeus* p. 12, STRAND Arch. Naturges. 77 Suppl. 4.—*S. scotti* sp. n. Seychelles, COCKERELL p. 30 Tr. Linn. Soc. 15.—*S. mendocinus* p. 108, *cordillerensis* p. 109, spp. n., Argentina, JÖRGENSEN Zool. Jahrb. Syst. 32.

Spinoliella argentina sp. n. Argentina, JÖRGENSEN p. 119 Zool. Jahrb. Syst. 32.

Steganomus auritegulatus sp. n. Sansibar, STRAND p. 16 Soc. entom. 27.

Strandiella gen. n. near *Sphecodes* p. 181, *longula* p. 182, *glaberrima*, *fuscipennis*, *spherodoides*, p. 183, *rufiventris*, *rufescens*, p. 184, spp. n., FRIESE Arch. Naturges. 78 A.

Tapinotaspis heathi sp. n. p. 57 Brazil, COCKERELL Psyche 19.

Tetralonia bayni p. 153, *schrottkyi* p. 154, *bruchi* p. 155, *brethesi* p. 156, spp. n., Argentina, JÖRGENSEN Zool. Jahrb. Syst. 32.

Tetrapedia mayarum sp. n. Guatemala, COCKERELL p. 30 Ann. Nat. Hist. 10.

Thrinchostoma tessmanni sp. n. Span. Guinea, STRAND p. 271 Mitt. Mus. Berlin. 6.

Trichocolletes gen. n. for *Lamprocolletes venustus* Sm., COCKERELL p. 176 Entomologist 45.

Trigona africana var. n. *bibundicola*, STRAND p. 311 Mitt. Mus. Berlin 6.—*T. clypeata* v. n. *zebra* p. 169, *beccarii* v. n. *nigrifacies* p. 170, FRIESE Arch. Naturges. 78 A.—*T. angophorae* sp. n. N. S. Wales, COCKERELL p. 225 Ann. Nat. Hist. 9.—*T. jatifornis* p. 311, *argyrea*, *zexmeniae*, p. 313, spp. n., Guatemala, *ziegleri mayarum* subsp. n.

p. 311, *frontalis flavocincta* var. p. 314, COCKERELL op. cit. 10.—*T. munnii* p. 48, *rhodoptera* p. 49, *pellucida*, *branneri*, p. 50, *frontalis*, spp. n., Brazil, *flavocincta* subsp. n. p. 50, COCKERELL Psyche 19.

Turnerella doddi sp. n. Port Darwin, PERKINS p. 114 Ann. Nat. Hist. 9.

Xenoglossa citrullina sp. n. Peru, COCKERELL p. 177 Entomologist 45.

Xylocopa sicheli var. n. *kobrowi*, BRAUNS p. 66 Deutsche ent. Zeitschr. 1912.—*X. wilmattae*, with subsp. *gualanensis*, *mexicanorum*, spp. n., Centr. America, p. 555, *fimbriata* var. n. *motaguensis* p. 556, COCKERELL Ann. Nat. Hist. 9.—*X. guatemalensis* sp. n. p. 105 Guatemala, COCKERELL Psyche 19.—*X. varians* var. n. *piurensis* p. 491, *splendidula charapensis* subsp. n. p. 492, COCKERELL Ann. Nat. Hist. 10.—*X. branneri* sp. n. p. 42 Brazil, COCKERELL Psyche 19.—*X. bariwal* Brasilien, *boops*, Brasilien, *caviventris* Mexiko, *clavicus*, Philippinen, *funesta* Brasilien, *ganglbaueri*, *graueri*, Ostafrika, *hirsutissima* Paraguay, *X. (Koptorthosoma) minor* Sikkim, *penicillata* Annam, *leucothoracoides* Dar es Salam, *lombokensis*, *maior*, Philippinen, *mendax*, *piligeru*, Brasilien, *pseudoleucothorax*, *steindachnari*, Ostafrika, spp. n., *luteola* var. n. *nigrescens*, MAIDL Ann. Hofmus. Wien 26 p. 249 etc.—*X. micans*; Gynandromorphie, MAIDL Verh. z.-b. Ges. Wien 62 p. 19.

DIPLOPTERA = VESPIDAE, EUMENIDAE,
MASARIDAE.

Masaridae, zur Diagnose der Gattungen u. Arten, ZAVATTARI Arch. Natg. 78 Abt. A H. 2 pp. 58–65.

Eumenidae of the Naples Museum, ZAVATTARI Annuar. Mus. Napoli 3 No. 19 6 pp.

Vespidae Norwegen, RENGEL Nyt. Mag. Naturv. 50 pp. 37–47.

Destruction des nids de guêpes, DU BUYSSON Rev. sci. Bourbon 24 1911 pp. 85–89.

Abispa odyneroides sp. n. New Guinea, PERKINS p. 120 Ann. Nat. Hist. 9.

Alastor abnormis sp. n. W. Australia, BINGHAM p. 380 Tr. ent. Soc. London 1912.—*A. heymonsi* sp. n. Brasilia,

ZAVATTARI p. 257 Arch. Naturges. 78 A.

Ancistrocerus ceanothi sp. n. Virginia p. 449, ROHWER Proc. U. S. Nation. Mus. 41.

Baeoprymna gen. n. near *Zethus* p. 224, *rufoornata* sp. n. Guiana p. 225, CAMERON J. R. Agric. Soc. Demerara 2.

Belonogaster atratus sp. n. West-Africa, SCHULTHESS - RECHBERG Soc. entom. 27 p. 41.

Ctenochilus argentinus v. n. *bimaculatus*, ZAVATTARI p. 262 Arch. Naturges. 78 A.

Charterginus rufoornatus sp. n. S. America, CAMERON p. 220 J. R. Agric. Soc. Demerara 2.

Chartergus trichiosomus, *pallidibalteatus*, spp. n., p. 219, CAMERON T. c.

Ectopioglossa gen. n. *Eumenidae* p. 118, *australensis* sp. n. Queensland p. 119, PERKINS Ann. Nat. Hist. 9.

Eumenes lineatifrons p. 227; *demeraraensis* p. 228, *8-maculatus*, *rotundicollis* p. 229, *acapulcensis* p. 230, spp. n., Demerara, CAMERON J. R. Agric. Soc. Demerara 2.—*E. festanus* p. 80 Columbia, *difficilis* p. 82, *allegurus* p. 83, Brasil, *peruvianus* p. 85 Peru, *saussurci* p. 86, *bogotensis* p. 87, *intermedius* p. 80, *simillimus* p. 90, Columbia, *balzarianus* p. 93 Ecuador, *gribodoi* p. 94 Bolivia, *nymphalis*, *procellosus* p. 95, Columbia, *ruficollis* p. 96 Brasil, *pluviosus* p. 98 Bolivia, *orizabae* p. 100 Mexico, *meariensis* p. 101, *lugubris* p. 103 Brasil, *dorsomaculatus* p. 104 Ecuador, *invisibilis* p. 106, *deplanatus* p. 107, Surinam, *paranymphus* p. 108 Columbia, *tenulus* p. 109 Brasil, *garrulus* p. 110 Columbia, *ecuadoriensis* p. 114 Ecuador, *olympicus* p. 115, *graculus* p. 116, Columbia, *peregrinus* p. 117 Peru, *duckei* p. 119 Brasil, *ehrenbergi* p. 124 Mexico, *colombianus* p. 130 Columbia, spp. n., *pallidipes* var. n. *rufiventris* p. 82, *E. nanus* v. n. *obscurus* p. 92, *E. picturatus* v. n. *obscuratus* p. 113, *E. joergenseni* v. n. *bicingulatus* p. 122, *E. canaliculatus* v. n. *dives* p. 129, ZAVATTARI Arch. Naturges. 78 A.—*E. affinissima*, var. fig., pl. xiii, *conica* pupa fig., DUTT Mem. Dept. Agric. Ind. Ent. Ser. 4.

Gamma, div. n. zu *Eumenes*; ZAVATTARI p. 85 Arch. Naturges. 78 A.

Gribodia gen. n. für *Monobia cavifrons* Grib., ZAVATTARI p. 161 T.c.

Icaria (*Icariastrum*) *wollastoni*, *bispinosa*, p. 449, *mimikae* p. 450, *I. (Icariola) semihyalinata*, *fluviatilis*, p. 451, spp. n., New Guinea, MEADE-WALDO Ann. Nat. Hist. 9.

Laboides, div. n. zu *Zethus*, ZAVATTARI p. 65 Arch. Naturges. 78 A.

Megacanthopus rotundicollis p. 216, *atriceps*, *ruficornis*, *violaceipennis*, p. 217, *longipetiolatus* p. 218, S. America, etc., spp. n., CAMERON J. R. Agric. Soc. Demerara 2.

Monobia nigra sp. n. Brasilia, ZAVATTARI p. 160 Arch. Naturges. 78 A.

Montezumia huasteca v. n. *centralis* p. 135, *M. nitida* sp. n. p. 136 Ecuador, *M. leprieuri* v. n. *intermedia* p. 138, *M. infernalis* v. n. *obscura* p. 148, ZAVATTARI T.c.—*M. pallidimarginata* p. 225, *striatifrons*, *rodwayi*, p. 226, *leptocera* p. 227, spp. n., Demerara, CAMERON J. R. Agric. Soc. Demerara 2.

Nortonia parvula p. 165 Brasil., *strandii* p. 170 Mexico, spp. n., ZAVATTARI Arch. Naturges. 78 A.

Odynerus herrichii tricarinatus var. n., *schmidti* sp. n. p. 4, Gouv. Elisabethpol, KOKUJEV Mitt. Kaukas. Mus. 7.—*O. 14-maculatus* sp. n. Avakubi, SCHULTHESS p. 294 Ergebn. Zentr. Afrika Exp. 4 10.—*O. (Symmorphus) calciatii* sp. n. Kashmir, ZAVATTARI Boll. Mus. Torino 27 No. 657.—*O. abispoides* sp. n. New Guinea, PERKINS p. 121 Ann. Nat. Hist. 9.—*O. longstaffi* Capo colony p. 378, *decoratus* W. Australia p. 379, spp. n., BINGHAM Tr. ent. Soc. London 1912.—*O. canamexicus* sp. n. Mexico p. 448, ROHWER Proc. U. S. Nation. Mus. 41.—*O. intrepidus* p. 177 Brasil., *bogotanus* p. 179 Columbia, *gribodoi* p. 180, *mearimensis* p. 181, Brasil., *fur* p. 182, *latro* p. 183, Argent., *cirrifer* p. 184 Peru, *schulzi* p. 186 Brasil., *pallidus* p. 189 Columb., *litoralis* p. 190 Brasil., *epicus* p. 191 Peru, *dux* p. 196, *virax* p. 197, Columb., *paulensis* p. 198, *inornatus*, *decollatus*, p. 201, *trepidus* p. 203, Brasil, *antennatus* p. 204, *divergens* p. 205, Columbia, *scapulatus* p. 206 Brasil, *torquatus* p. 208, *mimicus* p. 212, Columbia, *scrupus* p. 220 Cuba, *rufotegulatus* p. 224, *vilcanotae* p. 225, *dimidiaticornis* p. 226, *coccineipes* p. 236, Peru, *beelzebub* p. 239 Venezuela,

penicillatus p. 240 Guyana, *crinitus* p. 241 Brasil., *corallineipes* p. 242 Peru, *invisibilis* p. 243 Columbia, *mimulus* p. 244 Panama, *cyphosus* p. 247 Trinidad, *cucullatus* p. 250 Brasil., spp. n., *O. microsynoeca* v. n. *obscurus* p. 188, *O. areatus* v. n. *scutellatus* p. 200, *O. chilotus* v. n. *unicinctus* p. 227, ZAVATTARI Arch. Naturges. 78 A.—*O. pilosellus* Costa Rica p. 221, *reticulatus*, *clavilinus*, p. 222, *trillii* p. 223, S. America, spp. n., CAMERON J. R. Agric. Soc. Demerara 2.—*O. charadrophilus*, *hylophilus*, p. 720, *xerobius* p. 721, spp. n., Hawaii, synonymy p. 726, PERKINS Tr. ent. Soc. London 1911.—*O.*, synonymy of Seychelles spp., MEADE-WALDO p. 43 Tr. Linn. Soc. London 15.—*O. pubescens* Farbenvariationen (Russ.), BIRULA Rev. russ. ent. 12 p. 548.—*O. pseudopterocheitoides*, PERKINS Proc. Hawaiian Ent. Soc. 2 p. 180.

Pinta gen. n. für *Montezumia chalybaea* SAUSS., ZAVATTARI p. 151 Arch. Naturges. 78 A.

Polistes guyanensis sp. n. Demerara, CAMERON p. 221 J. R. Agric. Soc. Demerara 2.—*P. pallipes*, habits, TURNER Psyche 19 pp. 184–190.

Polybia nana p. 209, *fulvicauda*, *nigriceps*, p. 210, *bimarginata* p. 211, *brunneiceps*, *spilogastra*, p. 213, *sulciscutis* p. 215, spp. n., S. America, CAMERON J. R. Agric. Soc. Demerara 2.

Pseudomasaris phaceliae p. 450, *albifrons* p. 451, U. S., spp. n., *zonalis* *neomexicanus*, z. *basirusus*, ROHWER Proc. U. S. Nation. Mus. 41.

Rhynchium caucasicum sp. n. Gouv. Elisabethpol, KOKUJEV Mitt. Kaukas. Mus. 7 p. 3.—*R. schubotzianum* sp. n. Ituri, SCHULTHESS p. 293 Ergebn. Zentr. Afrika Exp. 4 10.—*R. nigrolimbatum* sp. n. W. Australia, BINGHAM p. 380 Tr. ent. Soc. London 1912.

Synagris trispinosa, *imitatrix*, DU BUYSSON p. 178 Rev. Ent. franç. 28 1910.

Trimeria howardi sp. n. Buenos Aires, BERTONI An. Mus. Buenos Aires 22 p. 104.

Zethus waldoi p. 19 Columbia, *magrellii* p. 21 Venezuela, *atripennis* p. 27 Brasil., *duckei* p. 29 Peru, *aurantiacus* p. 30 Brasil., *pygmaeus* p. 32 Peru, *hamatus* p. 33 Brasil., *minus* p. 35

Argent., *lunaris* p. 38 Columbia, *solaris* p. 39, *roridus* p. 41, Ecuador, *ventricosus* p. 45, *demissus* p. 46, *indistinctus*, *rubellus*, p. 47, Brasil., *nodosus* p. 49 Paraguay, *mocsaryi* p. 50, *bolivianus* p. 51, Bolivia, *trispinosus* p. 52 Brasil., *nicaraguensis* p. 54 Nicaragua, *cubensis* p. 55 Cuba, *histrionicus* p. 56 Guatemala, *peruvianus* p. 58 Peru, *sulcatus* p. 59 Bolivia, *apicalipennis* p. 60, *venezuelanus* Venezuela, *felix*, p. 61, *infelix* p. 62, Columbia, *minus* p. 64, *iheringi* p. 70, Brasil., *pavidus* p. 72 Mexico, spp. n., *mutatus* für *anisitsi* Zavatt., *permutatus* für *holmbergii* Brèthes n. nn. p. 25, *Z. brasiliensis* var. n. *obscurus* Brasil p. 67, ZAVATTARI Arch. Naturges. 78 A.

FOSSORIA.

Typen Thunbergs, ROMAN Zool. Beiträge aus Uppsala 1 pp. 229–293.

Die paläarktischen Gattungen der Familie Psammodiidae olim *Pompilidae*, ŠUSTERG Verh. z.-b. Ges. Wien 62 pp. 171–213.

Kritische Deutung europäischer Sapygiden; SCHULZ Soc. entomol. 27 pp. 67–68.

Sphecidae, *Pompilidae*, *Vespidae*, *Scoliidae*, *Mutillidae* der Districts Radomysl, Beschreibungen (Russ. + lat. Diagn.), BIRULA Rev. russ. ent. 12 pp. 531–551.

Conditions of existence and instincts of the *Pompilidae* and *Sphegidae*, ADLERZ Stockholm Vet.-Ak. Handl. 47 No. 10.

Habits of N. American Fossors, HUNGERFORD & WILLIAMS Ent. News 23 pp. 241–260 pls. xiv–xvi.

Bibliographie générale des Mutilides, ANDRÉ Rev. ent. Caen 28 1910 pp. 134–166.

Aeolothynnus and *Thynnoturneria*, synonymy, TURNER p. 49 Ann. Nat. Hist. 10.

Agenia erythrotricha sp. n. Congo, CAMERON p. 395 Ann. Soc. ent. Belgique 56.

Agriomyia cornuticollis sp. n. Centr. Australia, TURNER p. 48 Ann. Nat. Hist. 10.

Ammatomus africanus sp. n. Rhodesia, TURNER p. 374 T.c.

Ammophila lukombensis sp. n. Congo, CAMERON p. 398 Ann. Soc. ent. Belgique 56.—*A. lobicollis*, *guiana*, p. 428, *oxystoma*, *pilimarginata*, p. 429, spp. n., Demerara, CAMERON J. R. Agric. Soc. Demerara 2.—*A. abbreviata*, copulation, TURNER Psyche 19 p. 137 f. 1.

Ampulex approximata sp. n. India p. 367, various synonymy p. 368, TURNER Ann. Nat. Hist. 10.—*A. compressa* p. 227 fig., DUTT Mem. Dept. Agric. Ind. Ent. Ser. 4.

Anthobosca; revision pp. 724–753, *fastuosa* Sm. pl. lxxxi f. 3, *erythronota* Cam. figs. 5 & 6, *albomaculata* Sm. figs. 7 & 8, *moderata* Turn. f. 4, *crassicornis* Sm. f. 1, *occipitalis* sp. n. Australia p. 734, TURNER P. Zool. Soc. London 1912.

Arigorytes gen. n. type *Gorytes coquillettei* p. 469, ROHWER Proc. U. S. Nation. Mus. 41.

Austrostigmus gen. n., *reticulatus* sp. n. Queensland, TURNER p. 55 Ann. Nat. Hist. 10.

Barymutilla despicata f. n. S. Africa p. 549, *comparata* var. n. *affected* p. 550, BINGHAM Tr. ent. Soc. London 1911.

Bembex handlirschi sp. n. p. 393 fig., FERTON Ann. Soc. ent. France 80.—*B. handlirschella* n. n. pro *handlirschi*, FERTON p. 186 Bull. Soc. ent. France 1912.—*B. flavicincta* p. 414, *kohli* p. 415, spp. n., Nyasaland, TURNER Ann. Nat. Hist. 9.—*B. scotti* Nigeria p. 371, *johnstoni* Uganda p. 372, spp. n., TURNER Ann. Nat. Hist. 10.—*B. latifasciata* sp. n. Australia, TURNER p. 57 T.c.—*B. cameroni* sp. n. Mexico p. 467 ff. 4 & 5, ROHWER Proc. U. S. Nation. Mus. 41.—*B. guiana* sp. n. Demerara, CAMERON p. 431 J. R. Agric. Soc. Demerara 2.

Bembidula ornatICAUDA sp. n. Demerara, CAMERON p. 432 T.c.

Brachycistis amplus p. 100, HYSLOP Proc. Ent. Soc. Washington 14.

Braunsomeria gen. n. *Elidinae* p. 697, *quadriceps* p. 698 pl. lxxxi figs. 9 & 10, *atriceps* p. 699, spp. n., C. Good Hope, TURNER P. zool. Soc. London 1912.

Cerceris kokujevi Krasnoodsk p. 507 f. 1, *edolata* p. 508 f. 2, *argentosa* p. 509 f. 3 Tashkent, spp. n., SESTAKOV Rev. russ. ent. 12.—*C. synagroides* sp. n.

Nyasaland, TURNER p. 413 Ann. Nat. Hist. 9.—*C. greeni* sp. n. India, TURNER p. 370 Ann. Nat. Hist. 10.—*C. monograph* of Indian, *arbuensis* Rajputana, *agnata* Tenasserim, *belli* W. India, *binghami*, Tenasserim, *botanica* Quetta, *boysi* W. Himalayas, *circumcincta* Kashmir, *comberi* W. India, *compta* W. India, *downesivora* Pegu hills and Burma, *ephippium* and *fastidiosa* W. India, *fletcheri* Behar, *inexorabilis*, *melaina* and *mellicula*, W. India, *nursei* Quetta, *opulenta* W. India, *protea* Punjab and Rajputana, *rhynchophora* W. India and Quetta, *ariadne* and *lama* Tibet, *invitu* Sumatra, *ferocior* and *shelfordi* Borneo, spp. n., *saussurei* var. *chrysothemis* n. Quetta, *specifica*, *wickwari*, Ceylon, TURNER J. Bombay Soc. 21 pp. 476–516.—*C. cucullata* sp. n. N. Australia, BINGHAM p. 375 Tr. ent. Soc. 1912.—*C. froggatti* Rockhampton sp. n., TURNER Proc. Linn. Soc. N. S. Wales 36 p. 668.—*C. ampla* p. 16 ff. 6 & 16, *psamathe* p. 21 ff. & 2, *zelica* p. 23 f. 12, *irene* p. 26 f. 27, *chryssipe* p. 18 f. 8, *arclate* p. 18 f. 26, *prominens* p. 19 ff. 7 & 39, *clymene* p. 20 f. 4, *alaope* p. 22 f. 9, *halone* p. 24 f. 28, *catawba* p. 25, spp. n., U.S., *jucunda carolina* p. 26, *finitima nigroris* p. 27, var. n., BANKS Ann. Ent. Soc. Amer. 5.—*C. gandarai* p. 470 f. 9, *flavotrochanterica* p. 471 f. 10, spp. n., Mexico, ROHWER Proc. U. S. Nation. Mus. 41.—*C. eversmanni* n. n. für *cornuta*, SCHULZ p. 91 Berlin. ent. Zeitschr. 57.—*C. fumipennis*, habits, GROSSBECK J. New York Ent. Soc. 20 p. 135.

Ceropales pernix and *albovariegata* to *Xanthampulex*, TURNER p. 361 Ann. Nat. Hist. 10.

Chlorion mandibularis p. 257, *resinipes* p. 258, *bridwelli*, U.S., *pennsylvanicum* Mexico, *chichimecum* Costa Rica, *texanum* Mexico, p. 259, spp. n., FERNALD Proc. U. S. Nation. Mus. 42.

Clytemnestra; australian species, TURNER p. 58 Ann. Nat. Hist. 10.

Crabro; australian species of subg. *Solenius*, TURNER p. 63 Ann. Nat. Hist. 10.—*Crabro*, *Dasyproctus*, *Solenius*, various synonymy, TURNER pp. 376 & 377 T.c.—*C. stirocephalus* p. 436, *curvicollis* p. 437, spp. n., Demerara, CAMERON J. R. Agric. Soc. Demerara 2.

Dasylabris ate f. n. Rhodesia, BINGHAM p. 544 Tr. ent. Soc. London 1911.

Dasymutilla ferrugata balabetei var. n. Florida, *georgiana* p. 456, *allardi* p. 463, *errans*, *bosquensis*, p. 457, *texensis* p. 460, *blawana*, *champlaini*, p. 461, *scrobinata* p. 462, *plesia* p. 456, *blawa* p. 457, *ferrugatella*, *coloradella* Colorado p. 458, *segregata* p. 459, *bruneri* p. 460, *mesillae* p. 461, *carolina* p. 462, U.S., *formicalia* Mexico p. 463, spp. n., *coloradella virginica*, *kamloopsensis*, *segregata finni*, p. 459, *mutata miamensis* p. 462, subspp. n., ROHWER Proc. U. S. Nation. Mus. 41.

Dasyproctus expectatus Sydney p. 60, *muii* Amboina p. 61, *burnettianus* Queensland p. 62, spp. n., TURNER Ann. Nat. Hist. 10.

Deuteragenia nom. n. für *Pogonius* Dahlb., SÜSTERA Verh. z.-b. Ges. Wien 62 pp. 171–213.

Dicranorhina wollastoni sp. n. New Guinea, TURNER p. 199 Ann. Nat. Hist. 9.

Dielis fulvopilosa sp. n. Arizona, BANKS p. 200 Canad. Ent. 44.

Dolichomutilla vetustata p. 541, *neavei* p. 42, ff. n., S. Africa, BINGHAM Tr. ent. Soc. London 1911.

Dolichurus gilberti sp. n. Assam, TURNER p. 365 Ann. Nat. Hist. 10.

Elis clotho ♂ (= *leighi* sp. n. ?), BINGHAM p. 557 Tr. ent. Soc. 1911.

Elis (Mesa) aliciae pl. lxxxii f. 12 p. 704, *auristua* p. 705, *apicipennis* p. 707, *incorta* p. 710, *spoliata* p. 711, *longiventris* p. 712 pl. lxxxii f. 13, Africa, *sellowi* p. 722, *major* p. 723, S. America, spp. n., *tricolor* Sm. f. 16, *dimidiaticornis* Bingham f. 15, p. 720, TURNER P. zool. Soc. London 1912.

Encopognathus rugosopunctatus sp. n. Natal, TURNER p. 419 Ann. Nat. Hist. 9.

Epactiothynnus nitidiceps sp. n. Aru, TURNER p. 535 op. cit. 10.

Ephuta ? *caenodonta* sp. n. Demerara, CAMERON p. 415 J. R. Agric. Soc. Demerara 2.

Eubapyga carolina sp. n. U.S., BANKS p. 203 Canad. Ent. 44.

Gastrosericus lamcllatus p. 421, *silverlocki* p. 422, *attenuatus* p. 423, spp. n., Africa, TURNER Ann. Nat. Hist. 9.

Glyptometopa curcka sp. n. Arizona, BANKS p. 202 *Canad. Ent.* 44.

Gorytes (Harpactus) escalerae sp. n. Mogador, TURNER p. 375 *Ann. Nat. Hist.* 10.—*G. perkinsi* sp. n. Queensland, TURNER p. 57 *T.c.*—*G. austrinus* sp. n. Australia, BINGHAM p. 376 *Tr. ent. Soc. London* 1912.—*G. auropilosellus* sp. n. Demerara, CAMERON p. 430 *J. R. Agric. Soc. Demerara* 2.

Hemithynnus tillyardi p. 536, *hamlyn-harrisi* p. 538, spp. n., Australia, TURNER *Ann. Nat. Hist.* 10.

Homogambrus cimicivorus sp. n. p. 186, FERTON *Bull. Soc. ent. France* 1912.

Homonotus purpureopruinosus sp. n. Congo, CAMERON p. 394 *Ann. Soc. ent. Belgique* 56.

Laropsis, sp. n. Rohwer, food p. 100, HYSLOP *Proc. Ent. Soc. Washington* 14.

Larra corrugata sp. n. New Guinea, TURNER p. 198 *Ann. Nat. Hist.* 9.—*L. guiana* sp. n. Demerara, CAMERON p. 433 *J. R. Agric. Soc. Demerara* 2.

Leiothynnus spinigerus sp. n. Moreton Bay, TURNER p. 354 *Ann. Nat. Hist.* 10.

Leptothynnus? pellastes sp. n. N. S. Wales, TURNER p. 542 *T.c.*

Macromeris violacca p. 188 fig., DUTT *Mem. Dept. Agric. Ind. Ent. Ser.* 4.

Methoca bicolor = *M. rufonigra* p. 185 fig., DUTT *T.c.*

Mutilla charaxus p. 530, *medon* p. 531, *peringueyi* p. 532, females described; *secreta, dura*, p. 534, *iphianassa* p. 535, *crinata* p. 536, *iphonoc, lysippe*, p. 537, *rufocoronata* p. 538, *loangwana* p. 539, form. n., S. Africa, BINGHAM *Tr. ent. Soc. London* 1911.—*M. humberiana* male pl. fig. 1, *subintrans* female fig. 4, p. 93, GREEN *Spolia Zeylan.* 8.—*M. sexmaculata*, fig., sp. fig. pl. xiv, DUTT *Mem. Dept. Agric. Ind. Ent. Ser.* 4.—*M. moorei* p. 413, *longilineata* p. 414, spp. n., Demerara, CAMERON *J. R. Agric. Soc. Demerara* 2.

Myrmilla africana f. n. Natal, BINGHAM p. 541 *Tr. ent. Soc. London* 1911.

Myzine andrei sp. n. p. 409 fig., FERTON *Ann. Soc. ent. France* 80.—*M. rufonigra* f. n. Rhodesia, BINGHAM p. 559 *Tr. ent. Soc. London* 1911.—

M. stigma p. 699 pl. lxxxii f. 11, *braunsi* p. 700 f. 14, *constrictiventris* p. 701, *umbratica* p. 702, spp. n., S. Africa, TURNER *P. zool. Soc. London* 1912.—*M. dimidiata* Guer. = *madraspata* Smith p. 167, DUTT *Mem. Dept. Agric. Ind. Ent. Ser.* 4.—*M. sexcincta* parasite of white-grubs, FLINT & SANDERS *J. Econ. Ent.* 5 p. 490.

Nitela spinolai, mœurs et instinct, VINCENS *Toulouse Bull. soc. hist. nat.* 43 1910 pp. 11-13.

Notogonia dixeyi sp. n. Natal, BINGHAM p. 377 *Tr. ent. soc.* 1912.

Nysson ganglbaueri sp. n. Tirol, KOHL *Verh. z.-b. Ges. Wien* 62 p. 57-63.—*N. ruthenicus* sp. n. Radomysl, BIRULA *Rev. russ. ent.* 12 p. 542.—*N. helioryctoides* p. 416, *rufoniger* p. 418, Rhodesia, *gregoryi* E. Africa p. 417, spp. n., TURNER *Ann. Nat. Hist.* 9.—*N. varipilosellus* sp. n. Demerara, CAMERON p. 430 *J. R. Agric. Soc. Demerara* 2.

Odontomutilla alienata p. 547, *rhua* p. 548, ff. n., S. Africa, BINGHAM *Tr. ent. Soc. London* 1911.

Parasferreola nom. n. für *Ferreola* Smith, ŠUSTERÁ *Verh. z.-b. Ges. Wien* 62 pp. 171-213.

Paramellinus gen. n. type *Gorytes bipunctatus* p. 469, ROHWER *Proc. U. S. Nation. Mus.* 41.

Passalocus (Polemistus) dorsalis sp. n. p. 84 fig. 8, KOHL *Bull. Sci. France Belgique* 46.

Pemphredon westmaëli var. *austriacus* Unterschiede von *westmaëli* und *schuckardi*, pp. 357-358, BIRULA *Rev. russ. ent.* 12.

Philanthus interstinctus and *dissectus* to *Cerceris* p. 813, TURNER *J. Bombay Soc.* 21.

Pison suspicax sp. n. Gouv. Elisabethopol, KOKUJEV *Mitt. Kaukas. Mus.* 7, p. 6.—*P. impunctatum* p. 200, *constrictum* p. 201, spp. n., New Guinea, TURNER *Ann. Nat. Hist.* 9.—*P. argentatum* mâle, KOHL *Bul. sci. France-Belgique* 46 p. 86.

Podion (Trigonopsis) longipilosellum sp. n. Demerara, CAMERON p. 427 *J. R. Agric. Soc. Demerara* 2.

Pompilus acrobates sp. n. p. 371, FERTON *Ann. Soc. ent. France* 80.—

- P. lukombensis* sp. n. Congo, CAMERON p. 394 Ann. Soc. ent. Belgique 56.—*P. jacens* f. n. Rhodesia, BINGHAM p. 560 Tr. ent. Soc. London 1911.—*P. crassidentatus* p. 420, *demeraraensis* p. 421, *harperi* p. 422, *cosmiopterus* p. 423, *inculcatriz*, *moorei*, p. 424, spp. n., Demerara, CAMERON J. R. Agric. Soc. Demerara 2.
- Priocnemis semitincta*, *directa*, *minorata*, p. 197, *relicta* p. 198, spp. n., U.S., BANKS Canad. Ent. 44.—*P. pilifrons*, *curtispinus*, p. 419, *purpureipes*, *sericeicornatus*, p. 420, spp. n., Demerara, CAMERON J. R. Agric. Soc. Demerara 2.
- Prosopigastra crosi*, sp. n. p. 190 fig., FERTON Bull. Soc. ent. France 1912.
- Psammochares georgiana* sp. n. U.S., BANKS p. 198 Canad. Ent. 44.
- Psen matalensis* sp. n. Ceylon, TURNER p. 362 Ann. Nat. Hist. 10.
- Psenulus rubrocaudatus* sp. n. Natal, TURNER p. 412 Ann. Nat. Hist. 9.—*P. ? scutellatus* sp. n. Queensland, TURNER p. 54 op. cit. 10.—*P. bicinctus* sp. n. Assam, TURNER p. 363 T.c
- Pseudagenia schoutedeni*, *longiventris*, spp. n., Congo, CAMERON p. 396 Ann. Soc. ent. Belgique 56.—*P. faustina* p. 51, *claudia* p. 52, *fabia* p. 53, spp. n., Australia, TURNER Ann. Nat. Hist. 10.—*P. nanella* sp. n. U.S., BANKS p. 198 Canad. Ent. 44.—*P. pulchricornis*, *semisuavis*, spp. n., Demerara, CAMERON p. 425 J. R. Agric. Soc. Demerara 2.—*P. blanda*, male p. 191 pl. xiv fig. 2, spp. p. 197 fig., *clypeata* egg and larva p. 194, DUTT Mem. Dept. Agric. Ind. Ent. Ser. 4.
- Pycnomutilla harmoniiformis* sp. n. Connecticut p. 455, ROHWER Proc. U. S. Nation. Mus. 41.
- Rhagigaster aruensis* sp. n. Aru, TURNER p. 533 Ann. Nat. Hist. 10.
- Rhinopsis melanognathus* sp. n. Connecticut p. 464, ROHWER Proc. U. S. Nation. Mus. 41.
- Rhopalum scyhellense* n. n. for *oceanicus* Turn.; TURNER p. 375 Ann. Nat. Hist. 10.
- Salius cabraensis* sp. n. Congo, *abdominalis* Sm. ♂ CAMERON p. 393 Ann. Soc. ent. Belgique 56.—*S. aurodecoratus*, *tuberculiventris*, spp. n., Demerara, CAMERON p. 417 J. R. Agric. Soc. Demerara 2.
- Sapyga burmeisteri*, ♂ DU BUYSSON p. 173 Rev. Ent. franç. 28.
- Sceliphron madraspatanum* p. 202 fig., *bilineatum* p. 221 fig., DUTT Mem. Dept. Agric. Ind. Ent. Ser. 4.
- Scolia cubensis* Cuba p. 318, *fulviventris* Arizona p. 323, *fuscipennis* Mexico p. 324, spp. n., BARTLETT Ann. Ent. Soc. Amer. 5.
- Scoliphia* gen. n. *Tiphidae*, *spilota* sp. n. Arizona, BANKS Canad. Ent. 44.
- Sphex (Parasphex) curvilineatus* sp. n. Congo, CAMERON p. 398 Ann. Soc. ent. Belgique 56.—*S. (Parasphex) elegantulus* sp. n. China, TURNER p. 369 Ann. Nat. Hist. 10.—*S. (Isodontia) permutans* sp. n. New Guinea, TURNER p. 198 Ann. Nat. Hist. 9.—*S. darwiniensis* sp. n. Australia, TURNER p. 56 Ann. Nat. Hist. 10.—*S. nigropilosus* sp. n. Mexico p. 465, ROHWER Proc. U. S. Nation. Mus. 41.—*S. lobatus* p. 226 fig., DUTT Mem. Dept. Agric. Ind. Ent. Ser. 4.
- Stenocrabro plesius* sp. n. Connecticut p. 472, ROHWER Proc. U. S. Nation. Mus. 41.
- Stenomutilla clelia* ♀, *beroe* ♂, BINGHAM p. 545 Tr. ent. Soc. London 1911.
- Stigmus gueinzius* sp. n. Natal, TURNER p. 411 Ann. Nat. Hist. 9.
- Stizus comberi* Ceylon p. 337, *nyasae* Africa p. 338, *escalerae* Haut-Kharoum p. 339, *rubellus* p. 342, *neavei* p. 343, *marshalli* p. 344, *tuberculiventris* p. 345, Africa, spp. n., with various notes and synonymy pp. 337-348, TURNER T.c.—*S. pulchritinctus* sp. n. Congo, CAMERON p. 400 Ann. Soc. ent. Belgique 56.
- Tachynomia fervens*, ♀, TURNER p. 534 Ann. Nat. Hist. 10.
- Tachysphex mantiraptor* sp. n. p. 360, FERTON Ann. Soc. ent. France 80.—*T. longiventris*, *semiappendiculata*, p. 434, *rufogeniculata* p. 435, spp. n., Demerara, CAMERON J. R. Agric. Soc. Demerara 2.
- Tachytes marshalli* sp. n. Mashonaland, TURNER p. 420 Ann. Nat. Hist. 9.—*T. excellens* p. 435, *ametina*, *pretiosa*, p. 436, spp. n., Demerara, CAMERON J. R. Agric. Soc. Demerara 2.

Thynnoides mesopleuralis p. 539, *berthoudi*, *fuscocostalis*, p. 540, spp. n., Australia, TURNER Ann. Nat. Hist. 10.

Thynnoturneria trimaculata p. 49, *centralis* p. 50, spp. n., Australia, TURNER T.c.

Thynnus mutandus sp. n. Aru, TURNER p. 544 T.c.

Tiphia canamexica p. 452 f. 1, *mexiana* p. 453 f. 2, Mexico, *fulvitaris* Peru p. 454, spp. n., ROHWER Proc. U. S. Nation. Mus. 41.

Traumatomutilla nitidipustulata sp. n. Demerara, CAMERON p. 417 J. R. Agric. Soc. Demerara 2.

Trichogorytes gen. n. p. 469, *argenteopilosus* sp. n. Arkansas p. 470, ROHWER Proc. U. S. Nation. Mus. 41.

Trielis hermione sp. n. U.S., BANKS p. 200 Canad. Ent. 44.

Trirhogma caerulea and *prismatica*, TURNER p. 366 Ann. Nat. Hist. 10.

Trypoxylon marginifrons sp. n. Congo, CAMERON p. 399 Ann. Soc. ent. Belgique 56.—*T. latioratum* p. 438, *brevicarinatum*, *marginatum*, p. 439, spp. n., Demerara, CAMERON J. R. Agric. Soc. Demerara 2.—*T. basile* p. 475 ff. 16 & 17, *politiforme* p. 476 ff. 18 & 19, U.S., *gandarai* Mexico p. 476, *leucotrichium* Peru and Panama p. 477 ff. 22-24, spp. n., *saussurci* nom. n. for *Trypoxylon mexicanum* Sauss. p. 478, ROHWER Proc. U. S. Nation. Mus. 41.

Zaspilothynnus hackeri sp. n. Brisbane, TURNER p. 543 Ann. Nat. Hist. 10.—*Z. biroi pratti* subsp. n., TURNER p. 54 T.c.

Zoyphium doddi sp. n. Queensland TURNER p. 59 T.c.

FORMICIDAE.

The genera of *Dolichoderinae* with lists of the species, EMERY Gen. ins. 137 50 pp. 2 pls.

The types of genera and sub-genera of *Ponerinae*, EMERY pp. 271-273 Ann. Soc. ent. Belgique 56.

Formiciden aus dem paläarktischen Faunengebiet, Fundorte, neue Formen etc., KARAVAJEV Rev. russ. ent. 12 pp. 581-596 f. 1-3.

Japanese ants (Japanese), YANO Dobuts. Z. Tokyo 24 pp. 121-130.

The ants of Victoria county, Texas, MITCHELL Proc. Ent. Soc. Washington 14 pp. 67-76.

The honey ants of Point Loma; LEONARD Trans. San Diego Soc. Nat. Hist. 1 pp. 85-97 ff. 1-6.

Sardische Ameisen, KRAUSSE Arch. Natg. 78 A pp. 162-166.

Vergleichend-anatomische Untersuchungen über den Stechapparat der Ameisen; FOERSTER Zool. Jahrb. Anat. 34 1912 pp. 347-380 2 Taf.

Der Wanderzug der Steppen- und Wüstenameisen von Zentral-Asien nach Süd-Europa und Nord-Afrika; EMERY Zool. Jahrb. Suppl. 15 Bd 1 pp. 95-104.

Parabiosis in Brazilian ants; MANN Psyche 19 pp. 36-41.

Acantholepis frauenfeldi nigrescens var. n., KARAVAJEV Rev. russ. ent. 12 p. 15 f. 6; *A. frauenfeldi splendens* var. n. Kreta, KARAVAJEV Rev. russ. ent. 12 p. 586.

Acanthoponera goeldii sp. n. Brazil, FOREL p. 34 Ann. Soc. ent. Belgique 56.

Acropyga sauteri sp. n. Formosa, FOREL p. 72 Ent. Mitt. Berlin 1.—*A. (Atopodon* n. subg.) *inezuae*, Sumatra, *butteli*, Malacca, p. 772, *termitobia* Selangor p. 773, spp. n., FOREL Revue Suisse Zool. 20.—*A. moluccana* v. n. *occipitalis*, STITZ p. 510 Sitzb. Ges. naturf. Fr. 1912.

Aenictus punctiventris var. n. *scutellaris*, FOREL p. 53 Zool. Jahrb. Suppl. 15.—*A. fergusonii* var. n. *breviceps*, FOREL Notes Mus. Leiden 34 p. 105.

Allomerus 8-articulatus tuberculatus n. st., FOREL p. 2 Mem. Soc. ent. Belgique 20.

Allophidole subg. n., *kingi* etc., FOREL p. 237 Mem. Soc. ent. Belgique 19.

Anergates atratulus, in Britain, CRAWLEY p. 218 Ent. Rec. 24.

Aneuretus butteli sp. n. Ceylan p. 770, FOREL Revue Suisse Zool. 20.

Anochetus subcoecus sp. n. Formosa, FOREL p. 46 Ent. Mitt. Berlin 1.—*A. diegensis* sp. n. Colombia, FOREL p. 29 Ann. Soc. ent. Belgique 56.

- Anomma nigricans* und *wilverthi*, ♀, Hamburg, FOREL Jahrb. wiss. Anst. 29 Beih. 2 pp. 173-181.
- Aphaenogaster schmidti* sp. n. Korea, KARAVAJEV Rev. russ. ent. 12 p. 582 f. 1.—*A. araneoides* var. n. *nitidiventris*, FOREL p. 15 Mem. Soc. ent. Belgique 20.
- Apterostigma mayri* var. n. *discrepans*, FOREL p. 190 Mem. Soc. ent. Belgique 19.
- Atopodon* subgen. n. vide *Acropyga*.
- Atopomyrmex scotti* sp. n. Seychelles, FOREL Tr. Linn. Soc. London 15.
- Atopula* gen. n. *Myrmicinae* type *nodifera* Em., EMERY p. 104 Ann. Soc. ent. Belgique 56; p. 273 *Atopula* merged in *Vollenkovia*.
- Atta columbica*, *A. landolti cloosae* n. st., p. 179, *silvestrii bruchi* n. st. p. 180, *subterranea purensis* var. n. p. 181, *aspersa santschii* var. n. p. 182, *urichii marthae* n. st., *A. (Trachymyrmex) cornetzi* sp. n. Colombia, p. 183, with var. *narango* p. 184, *irmgardae* sp. n. Colombia p. 185, *bugnioni* sp. n. Colombia p. 186, *rimosa atrata* n. st. p. 188, FOREL Mem. Soc. ent. Belgique 19.
- Azteca christopherseni* Panama p. 52, *trianguliceps* Brazil p. 53, *stolli* Guatemala p. 54, spp. n., also n. ff. S. America pp. 47-56, FOREL op. cit. 20.
- Bothriomyrmex decapitans* sp. n. p. 78 fig. c., SANTSCHI Bull. Soc. Alger. 1911.
- Brachymyrmex incisus* p. 63, *bruchi* p. 64, *goeldii* p. 65, spp. n., S. America, *admotus niger* n. st. p. 62, FOREL Mem. Soc. ent. Belgique 20.
- Campomyrma* subgen. n. (*Myrma*) type *Polyrhachis clypeata*, p. 860, WHEELER Science 33.
- Camponotinae*; classification, with subgg. n., qq. v., FOREL pp. 87-92 Mem. Soc. ent. Belgique 20.
- Camponotus lateralis* subsp. *spissinodis* p. 20, *sicheli* varr. *rubra* u. *nigra* pp. 20-21 f. 9, *maculatus* subsp. *thoracicus* p. 21, subsp. *barbaricus* var. *inversa* p. 22, KARAVAJEV Rev. russ. ent. 12.—*C. maculatus* v. n. *schultzei*, FOREL p. 179 Jahrb. Hamburg Anst. 29 2 p. 173 etc.—*C. (Myrmamblys) itoi* sp. n. Japan, FOREL p. 340, *C. itoi tokioensis* st. n., ITO p. 341 Ann. Soc. ent. Belgique 56.—*C. herculeanus japonicus* var. *aterrima* Ostsibirien p. 594 f. 3, *cruentata* var. n. Korea p. 395, KARAVAJEV Rev. russ. ent. 12.—*C. thomasseti* sp. n. Seychelles, FOREL p. 166 Tr. Linn. Soc. London 15.—*C. truebi* var. n. *arnoldi* p. 75, *C. friedae* sp. n. p. 77 Formosa, FOREL Ent. Mitt. Berlin 1.—*C. tritschleri* p. 63, *icarus* p. 66, *aurelianus*, *trajanus*, p. 68. spp. n., Sumatra, *C. maculatus* subsp. n. *hongkongensis* p. 62, *dedalus* var. n. *moeschiella* p. 65, FOREL Zool. Jahrb. Suppl. 15.—*C. viehmeyeri* Forel sp. n. Neu Guinea, VIEHMEYER p. 7 Abh. Mus. Dresden 14.—*C. bruchi* p. 69, *cillae* p. 74, *nepos* p. 75, *punctatus*, *alacer*, p. 76, *hedwigae* p. 79, *caracalla*, *paris*, p. 80, *moelleri* p. 83, *C. (Colobopsis) coriolanus* p. 84, S. America, *christopherseni* Panama p. 85, spp. n., also various ff. n., FOREL Ann. Soc. ent. Belgique 20.—*C. badius* var. n. *krama*, FOREL Notes Mus. Leiden 34 p. 110.—*C. reticulatus fullawayi* subsp. n. p. 47, WHEELER J. New York Ent. Soc. 20.
- Cardiocondyla wroughtoni* subsp. n. *quadriceps*, FOREL p. 57 Zool. Jahrb. Suppl. 15.
- Carebara bicarinata* sp. n. p. 139 fig., SANTSCHI Bull. Soc. ent. France 1912.—*C. ampla* sp. n. p. 284, *vidua* var. n. *abdominalis* p. 285, SANTSCHI T.c.
- Cataglyphis albicans kaimana* and *opaca* n. varr. p. 149, SANTSCHI Bull. Soc. Alger. 4.
- Cataulacus praetextus* var. n. *sumatrensis*, *granulatus* var. n. *longinoda*, FOREL p. 60 Zool. Jahrb. Suppl. 15.
- Cerapachys jacobsoni* sp. n. Java, FOREL Notes Mus. Leiden 34 p. 103.
- Chtonolasius* subgen. n. von *Lasius* für *flavus*-Gruppe (Russ.), RUSKIJ Kazani Zap. Veterin. Inst. 29 pp. 629-633 f. 3.
- Colobopsis tricolor* sp. n. Neu Guinea, STITZ p. 511 Sitzb. Ges. naturf. Fr. 1912.
- Cremastogaster foraminiceps* sp. n., p. 412, *ferruginea bruta* n. var., *vulcania* sp. n., p. 413, Africa, SANTSCHI Bull. Soc. ent. France 1912.—*C. popohana*, *schimmeri*, spp. n., Formosa, FOREL p. 69 Ent. Mitt. Berlin 1.—*C. spengeli*

sp. n. Sumatra, FOREL p. 56 Zool. Jahrb. Suppl. 15.—*C. baduvi* sp. n. Java, FOREL Notes Mus. Leiden 34 p. 106.—*C. arizonensis* p. 132, WHEELER J. New York Ent. Soc. 20.—*C. tricolor* ♀, EMERY Annuar. Mus. Napoli 3 No. 26 p. 2.—*C. brevispinosa* new forms pp. 211–215, *limata* ff. n. *palans* and *ludio* p. 216, *longispina* subsp. n. *egregior*, *distans* *peosnerae* var. n., p. 218, *clydia* and *bruchii* spp. n., S. America, p. 219, FOREL Mem. Soc. ent. Belgique 19.—*C. scutellaris* v. n. *nigra* p. 654, *sordidula* v. n. *caspica* p. 670, EMERY Deutsche ent. Zeitschr. 1912.—*C. sordidula* var. n. *japonica*, FOREL p. 339 Ann. Soc. ent. Belgique 56.

Cryptocerus depressus var. n. *porocabensis* p. 200, *pusillus* var. n. *columbica*, *angustus* var. n. *clarior* p. 201, *maculatus nanus* n. st., *grandinosus* var. n. *nevadensis* p. 202; *bruchii* p. 202, *emeryi* p. 203, *goeldii* p. 205, spp. n., S. America; *laminatus christophersenii* n. st. p. 204; FOREL Mem. Soc. ent. Belgique 19.

Decapheidole subgen. n., *perpusilla* Em. and *decem* For., FOREL p. 237 T.c.

Dendrolasius subgen. n. von *Lasius* für *fuliginosus* (Russ.), RUSZSKIJ Kazan' Zap. veterin. Inst. 29 pp. 629–633 f. 2.

Diacamma rugosum v. n. *macreta*, VIEHMEYER p. 6 Abh. Mus. Dresden 14.—*D. jacobsoni* Java sp. n. p. 100, *rugosum geometricum* var. n. *curtula*, FOREL Notes Mus. Leiden 34.

Dilobocondyla (*Tetramyrma* n. subgen.) *braunsi* sp. n. Colonie du Cap p. 767, FOREL Revue Suisse Zool. 20.

Discothyrea globus var. n. *sauteri*, FOREL p. 47 Ent. Mitt. Berlin 1.

Dolichoderus indrapurensis sp. n. Sumatra, FOREL p. 61 Zool. Jahrb. Suppl. 15.—*D. debilis* var. n. *parabiotica* p. 33, *bidens cogitans* n. st. p. 34, *simplex* sp. n. Peru p. 35, FOREL Mem. Soc. ent. Belgique 20.—*D. taprobanae* v. n. *ceramensis*, STITZ p. 509 Sitzb. Ges. naturf. Fr. 1912.—*D. gibbifer* var. n. *gibbosior*, FOREL Notes Mus. Leiden 34 p. 108.—*D. debilis rufescens* var. n. p. 40, MANN Psyche 19.

Dorylus; heads of, *Anomma* pp. 154–157, *D. (A.) mayri* sp. n. Cameroons p. 159, notes and varieties pp. 157–

162, SANTSCHI Ann. Soc. ent. Belgique 56.—*D. labiatus* p. 246, *orientalis* p. 247, figs., DUTT Mem. Dept. Agric. Ind. Ent. Soc. 4.

Dorymyrmex biconis p. 37, *exsanguis* p. 38, *iheringi* p. 39, *breviscapis*, *ensifer*, p. 40, *bruchii* p. 42, spp. n., S. America, *pyramicus* var. n. p. 36, *goeldii* var. n. *dubia* p. 38, FOREL Mem. Soc. ent. Belgique 20.—*D. steigeri* p. 532 Argentine et Uruguay, SANTSCHI Revue Suisse Zool. 20.

Eciton; Biologie und Verbreitung IHERING Ent. Mitt. Berlin 1 pp. 226–235.—*E. jansonii* Nicaragua p. 42, *E. (Labidus) mars* p. 44, *E. (Acamatus) paraense* p. 45, S. America, *diabolus* p. 47, *cloosae* p. 48, Mexico, spp. n., *quadriglume dulcius* st. n. p. 42, *hartigi hansii* st. n. p. 43, *febrigi columbicum* p. 46, *pseudops garbei* n. st. p. 47, FOREL Ann. Soc. ent. Belgique 56.—*E. hirsutum* p. 523 Argentine, *le moultei* p. 524 Guyane française, SANTSCHI Revue Suisse Zool. 20.—*E. vagans*, ♂ p. 207, WHEELER Psyche 19.—*E. (Acamatus) bruchii* p. 30, *diana* p. 31, spp. n., S. America, FOREL Mem. Soc. ent. Belgique 20.

Ectatomma muticum var. n. *densestriata* p. 31, *strigosum* var. n. *aerea* p. 32, *sulcatum* var. n. *caerensis*, *tornatum* var. n. *ericae*, *mordax* var. n. *purensis*, p. 33, *morgani* sp. n. Peru p. 31, FOREL Ann. Soc. ent. Belgique 56.—*E. binghami* subsp. n. *crassicornis*, FOREL p. 51 Zool. Jahrb. Suppl. 15.

Emeryopone gen. n. *buttel-reepeni* sp. n. Sumatra, p. 761, FOREL Revue Suisse Zool. 20.

Epitritus clypeatus Singapore, *mandibularis* E. Africa, spp. n., SZABÓ p. 27 Arch. Zool. 1 1909.

Forelius nigriventris sp. n. Argentina p. 44, *maccooki* and *chalybaeus* n. ff. of p. 45, FOREL Mem. Soc. ent. Belgique 20.

Formica criniventris for *crinita* Wheeler, *rufa aggerans* for *r. rubiginosa* Emery, *flammiventris* for *rufiventris* Emery, *fusca argentea* for *fusca argentata* Wheeler, *rufibarbis occidua* for *rufibarbis occidentalis* Wheeler, *lasioides vetula* for *lasioides picea* Emery, *pallidefulva schaufussi dolosa* for var. *meridionalis* Wheeler, nn. n., WHEELER Psyche 19 p. 90.

Goniomma hispanicum, KARAVAJEV
Rev. russ. ent. 12 p. 11.

Hagiomyrma subgen. n. (*Myrma*)
type *Formica ammon*, p. 860, WHEELER
Science 33.

Harpagoxenus sublevis Verbreitung
und geflügelten Weibchen, VIEHMEYER
Ent. Mitt. Berlin 1 pp. 193-197.

Holcoponera curtula var. n. *vollen-
weideri* p. 33, *moelleri* sp. n. Brazil
p. 34, FOREL Ann. Soc. ent. Belgique
56.

Hylomyrma subg. n. vide *Pogono-
myrmex*.

Iridomyrmex dimorphus sp. n. Neu
Guinea, VIEHMEYER p. 7 Abh. Mus.
Dresden 14.—*I. humilis platensis* n. st.
p. 46, *iniquus* var. n. *bicolor* p. 47,
FOREL Mem. Soc. ent. Belgique 20.—
I. tigris p. 507 Neu Guinea, *politus*
p. 508 Ceram, spp. n., STITZ Sitzb. Ges.
naturf. Fr. 1912.—*I. bicknelli* st. n.
formosae, FOREL p. 70 Ent. Mitt.
Berlin 1.—*I. humilis*, in S. America,
GALLARDO pp. 133-138 Physis 1.

Isopheidole subg. n. vide *Pheidole*.

Lasius; Einteilung auf Grund der
Biologie und Morphologie, subg. n.
(Russ.), RUSKIJ Kazani Zap. veterin.
Inst. 29 pp. 629-633 f. 1-3.—*L. spathe-
pus* Wh., *fuliginosus* var. n. *nipponensis*,
FOREL p. 339 Ann. Soc. ent. Belgique
56.—*L. flavus*, nests, LINDER Proc.
7th Int. Zool. Cong. 668-671 4 ff.—
L. fuliginosus orientalis var. n. Korea,
KARAVAJEV Rev. russ. ent. 12; *L.
fuliginosus*, founding colony, DONIS-
THORPE & CRAWLEY pp. 664-672 Tr.
ent. Soc. London 1911.—*L. umbratus*
and *niger*, relations, parthenogenesis,
CRAWLEY Tr. ent. Soc. London 1911
pp. 657-663.

Leptogenys saussurei For. st. *acutiros-
tris* sp. n. [sic] Madagascar, SANTSCHI
p. 150 Ann. Soc. ent. Belgique 56.—
L. confucii sp. n. Formosa, FOREL
p. 48 Ent. Mitt. Berlin 1.—*L. caeciliac*
sp. n. Neu Guinea, VIEHMEYER p. 6
Abh. Mus. Dresden 14.—*L. diminuta*
v. n. *papuana*, STITZ p. 498 Sitzb.
Ges. Naturf. 1912.

Leptothorax asper varr. n. *antoniensis*
and *sufurea*, FOREL p. 18 Mem. Soc.
ent. Belgique 20.—*L. flavispinus* var. n.
crassispina fig. 2 p. 11, *amilcaris*
fig. 3 p. 12, *angustulus* var. n. *bruneu*

p. 13 fig. 8, *atlantis* sp. n. p. 13 fig. 9,
SANTSCHI Bull. Soc. Alger. 1911.—
L. arenarius var. n. *fusciventris* p. 85,
SANTSCHI Bull. Soc. Alger. 1911.—
L. tuberum Kolonien, KARAVAJEV
Rev. russ. ent. 12 pp. 381-382;
tuberum var. n. *luteus*, Britain, CRAWLEY
p. 63 Ent. Rec. 24.—*L. normandi*
sp. n. p. 173 fig. 3, *nigrita salambo*
n. var., *longipilosus* sp. n. p. 174
fig. 4, SANTSCHI Bull. Soc. Alger.
4.—*L. convexus timida* n. var. p. 148,
hesperius anacanthus n. nom. = *inermis*
Sants. 1909 p. 149, SANTSCHI T.c.

Lioponera decorsei sp. n. Africa,
SANTSCHI p. 150 Ann. Soc. ent. Bel-
gique 56.

Lophomyrmex 4-spinosus st. n.
taivanæ, FOREL p. 55 Ent. Mitt.
Berlin 1.

Lordomyrma cryptocera v. n. *accu-
minata*, STITZ p. 504 Sitzb. Ges. naturf.
Fr. 1912.

Megalomyrmex duckei p. 13, *goeldii*
p. 14, *pusillus* p. 15, spp. n., S. America,
leoninus nasutus n. st. p. 13, FOREL
Mem. Soc. ent. Belgique 20.

Meranoplus castaneus subsp. n. *ham-
maceros*, FOREL p. 60 Zool. Jahrb.
Suppl. 15.

Messor arenarius thebiacum n. st.
p. 164, *plinii* sp. n. E. Africa p. 165,
SANTSCHI Ann. Soc. ent. Belgique 56.—
M. lobicornis rugosa var. n. p. 10,
arenarius Nestbau p. 5 f. 1, *barbarus*
var. *santschii* p. 6 f. 2, *polita* var. n.
pp. 6-7, subsp. *capitatus* var. *sancta*
p. 7 f. 3, *splendens* var. n. p. 8, *obscuri-
ventris* var. n. subsp. *semoni*, p. 9,
subsp. *striaticeps* var. *curvispina* p. 10,
KARAVAJEV Rev. russ. ent. 12.

Metapone; taxonomy, larva, EMERY
pp. 94-96 Ann. Soc. ent. Belgique 56.
—*M. sauteri* sp. n. Solentsee p. 763,
FOREL Revue Suisse Zool. 20.

Monomorium salomonis var. n. *areni-
phila* p. 84, SANTSCHI Bull. Soc. Alger.
1911.—*M. cristatum* sp. n. Madagascar,
SANTSCHI p. 163 Ann. Soc. ent. Bel-
gique 56.—*M. santschii*, KARAVAJEV
Rev. russ. ent. 12 p. 3.—*M. salomonis*
asrata p. 147, *bicolor caeruleascens* p. 148,
varr. n., SANTSCHI Bull. Soc. Alger. 4.

Myrma Billberg 1820 = *Polyrhachis*
Smith 1858 WHEELER p. 860, Science
33.

Myrmamblys subg. n., *Camp. reticulatus* etc., FOREL p. 90 Mem. Soc. ent. Belgique 20.

Myrmerina sauteri sp. n. Formosa, FOREL p. 54 Ent. Mitt. Berlin 1.

Myrmecocystus spp. table p. 173, *melliger lomaënsis* subsp. n. p. 175, *yuma* sp. n. Arizona p. 176, *y. flaviceps* var. n. p. 177, WHEELER Psyche 19.—*M. setipes*, male p. 262 fig., DUTT Mem. Dept. Agric. Ind. Ent. Ser. 4.—*M. albicans rotundinodis* subsp. n. p. 16. *bicolor* var. *desertorum* p. 17 f. 7, *bombycinus psycho-biologisches*, pp. 17–19 f. 7, KARAVAJEV Rev. russ. ent. 12.—*M. bicolor sudanica* var. n., KARAVAJEV p. 590 f. 2 T.c.

Myrmelachista (*Decamera*) *dalmasi* sp. n. Colombia p. 60, *ulei dubia* n. st. p. 59, *arborea* var. n. *nasuta* p. 60 FOREL Mem. Soc. ent. Belgique 20.

Myrmentoma subg. n. *Camp. lateralis* etc., FOREL p. 92 T.c.

Myrmepomis subg. n. *Camp. sericeiventris* etc., FOREL p. 92 T.c.

Myrmeurynota subg. n. *Camp. eurynotus* etc., FOREL p. 92 T.c.

Myrmicocrypta emeryi var. n. *fortis* p. 189, *triangulata* sp. n. Guatemala p. 190, FOREL Mem. Soc. ent. Belgique 19.

Myrmobruchys subg. n. *Camp. ursus* etc., FOREL p. 91 Mem. Soc. ent. Belgique 20.

Myrmogigas subg. n. *Camp. gigas* etc., FOREL p. 91 T.c.

Myrmogonia subg. n. *Camp. laminatus* etc., FOREL p. 92 T.c.

Myrmophyma subg. n. *Camp. capito* etc., FOREL p. 91 T.c.

Myrmorhachis subg. n. *Camp. polyrhachioides* etc., FOREL p. 92 T.c.

Myrmosericus subg. n. p. 91 *Camp. rufoglaucus* etc., FOREL T.c.

Myrmosaga subg. n. *Camp. kelleri* etc., FOREL p. 92 T.c.

Myrmosphincta subg. n. *Camp. sextatus* etc., FOREL p. 92 T.c.

Myrmotarsus subg. n. *Camp. mistura* etc., FOREL p. 92 T.c.

Myrmothrix subg. n. *Camp. abdominalis* etc., FOREL p. 91 T.c.

Myrmotrema subg. n. *Camp. foraminosus* etc., FOREL p. 91 T.c.

Myrmoturba subg. n. *Camp. maculatus* etc., FOREL p. 91 T.c.

Neoponera goeldii sp. n. Brazil p. 36, *crenata fiebrigi* st. n. p. 37, *venusta* sp. n. Brazil p. 39, FOREL Ann. Soc. ent. Belgique 56.

Octostruma subg. n. for part of *Rhopalothrix*, FOREL p. 196 Mem. Soc. ent. Belgique 19.

Odontomachus monticola var. n. *formosae*, FOREL p. 46 Ent. Mitt. Berlin 1.—*O. imperator* subsp. n. *opaculus*, VIEHMEYER p. 6 Abh. Mus. Dresden 14.—*O. ruficeps* vv. n. *verticillatus* p. 501 and *tamensis* p. 503, STITZ Sitzb. Ges. Naturf. Fr. 1912.—*O. affinis mayi* subsp. n. p. 39, MANN Psyche 19.

Oligomyrmex sauteri sp. n. Formosa, FOREL p. 56 Ent. Mitt. Berlin 1.

Oxyopomyrmex santschii siciliana var. n., KARAVAJEV Rev. russ. ent. 12 p. 11.

Pachycondyla fuscoatra var. n. *montana*, FOREL p. 39 Ann. Soc. ent. Belgique 56.—*P. (Bothroponera) variolata, sculpturata*, p. 151, *asina* p. 153, spp. n., Africa, SANTSCHI Ann. Soc. ent. Belgique 56.—*P. sauteri* sp. n. Formosa, FOREL p. 49 Ent. Mitt. Berlin 1.

Pachysima subg. n. vide *Sima*.

Pentastruma gen. n. near *Strumigenys*, *sauteri* sp. n. Formosa, FOREL pp. 50–51 Ent. Mitt. Berlin 1.

Pheidole pallidula v. n. *emeryi* Sardinia; KRAUSSE p. 169 Int. ent. Zs. 6.—*P. punctulata melancholica* st. n., SANTSCHI p. 164 Ann. Soc. ent. Belgique 56.—*P. taivanensis, amia*, spp. n., *P. javana* varr. n. *formosae, dolenda*, pp. 59–60, *P. ernsti* sp. n., *P. rinae* st. n. *tipuna* pp. 67–68, Formosa, FOREL Ent. Mitt. Berlin 1.—*P. javana* v. n. *pectinata*, STITZ p. 504 Sitzb. Ges. Naturf. Fr. 1912; *javana* subsp. n. *proteus*, FOREL p. 55 Zool. Jahrb. Suppl. 15.—*P. lemur* p. 225, *aper* p. 227, *christophersenii* p. 229, spp. n., S. America, subgg. n. *Decapheidole* and *Allophaidole*. p. 237, also numerous new S. american forms pp. 221–236, FOREL Mem. Soc. ent. Belgique 19.—*P. bakeri* sp. n. Havana, FOREL p. 82 Ent. Mitt. Berlin 1.—*P. (Isopheidole* n. subg.) *longipes* p. 765 FOREL Revue Suisse Zool. 20.

Pheidologeton yanoi sp. n. Formosa, FOREL p. 57 Ent. Mitt. Berlin 1.

Physocrema subg. n. of *Cremastogaster*, *inflata* Sm. etc., FOREL p. 220 Mem. Soc. ent. Belgique 19.

Platythyrea wroughtoni sechellensis subsp. n., FOREL p. 159 Tr. Linn. Soc. London 15.

Plectroctena minor var. n. *dentata*, SANTSCHI p. 150 Ann. Soc. ent. Belgique 56.

Podomyrma striata v. n. *nigrescens*, STITZ p. 504 Sitzb. Ges. naturf. Fr. 1912.

Pogonomyrma (*Hylomyrma* subg. n.) *columbicus* p. 16, *goeldii* p. 17, spp. n., S. America, FOREL Mem. Soc. ent. Belgique 20.

Polyrhachis subgen. of *Myrma* type *Formica bihamata* p. 860, WHEELER Science 33.—*P. striata fritschleri* st. n., FOREL Notes Mus. Leiden 34 p. 111.—*P. viroi* v. n. *bidentata*, STITZ p. 512 Sitzb. Ges. Naturf. Fr. 1912.—*P. wolffi* sp. n. p. 79 Formosa, *P. salomo* subsp. n. *hiram* p. 80 Salomons-Inseln, FOREL Ent. Mitt. Berlin 1.—*P. spengeli* p. 69, *ridleyi* p. 71, *glykera* p. 72, *moeschi*, *olybrius* p. 73, *caeciliae* p. 76, spp. n., Sumatra, *P. dives* subsp. n. *belli* p. 74, *rachilles* var. n. *confinis*, subsp. n. *discrepans*, p. 76, *irritabilis* subsp. n. *winkleri* p. 78, FOREL Zool. Jahrb. Suppl. 15.—*P. similis* Neu Guinea p. 8, *pyrgops* China p. 9, *subaenescens* p. 10, *fulgens* p. 11, *schlaginhauseni* p. 12, *antennata*, Neu Guinea, *inclusa* Celebes, p. 13, *excellens* Neu Guinea p. 14, spp. n., *levissima* v. n. *aruensis*, *rastellata* v. n. *torricelliana* p. 9, *hostilis* v. n. *latinota* p. 11, VIEHMEYER Abh. Mus. Dresden 14.—*P. militaris bruta* n. st., SANTSCHI p. 166 Ann. Soc. ent. Belgique 56.

Ponera bugnioni sp. n. Sumatra, *opacipes* var. n. *gibbinota*, FOREL p. 52 Zool. Jahrb. Suppl. 15.—*P. vanreesi* sp. n. Java, FOREL Notes Mus. Leiden 34 p. 97.—*P. gleadowi* var. n. *sauteri*, FOREL p. 48 Ent. Mitt. Berlin 1.—*P.*; var. n., FOREL pp. 40 & 41 Ann. Soc. ent. Belgique 56.—*P. ergatandria cognata* n. st., SANTSCHI p. 153 Ann. Soc. ent. Belgique 56.

Prenolepis formosae sp. n. Formosa, FOREL p. 73 Ent. Mitt. Berlin 1.—

P. minutula atomus fullawayi var. n. p. 46, WHEELER J. New York Ent. Soc. 20.—*P. (Nylanderia) johannae* with var. *dibullana* p. 66, *staudingeri* p. 67, *goeldii* p. 68, spp. n., S. America, FOREL Mem. Soc. ent. Belgique 20.

Pristomyrma brevispinosus var. n. *formosae*, FOREL p. 54 Ent. Mitt. Berlin 1.

Proatta gen. n., *butteli* sp. n. Sumatra p. 769, FOREL Revue Suisse Zool. 20.

Procetum numidicum sp. n. p. 172 figs. 1–2, SANTSCHI Bull. Soc. Alger. 4.

Procryptocerus striatus, varr. n. *odiosa*, *latitans* and *muelleri*, p. 206; *sampaoui* Brazil p. 207, *ferreri* Colombia p. 208, spp. n., FOREL Mem. Soc. ent. Belgique 19.

Promyrma gen. n., *butteli* n. sp. Malacca, p. 764, FOREL Revue Suisse Zool. 20.

Psammomyrma subg. n. for *Dorymyrma planidens* etc., FOREL p. 43 Mem. Soc. ent. Belgique 20.

Pseudolasius binghami st. n. *taivanae*, FOREL p. 74 Ent. Mitt. Berlin 1.

Pseudomyrma stollii p. 20, *culmicola*, *rochai*, p. 27, *goeldii* p. 28, *eduardi* p. 29, spp. n., S. America, also various ff. n. pp. 19–26, FOREL Mem. Soc. ent. Belgique 20.

Rhizomyrma goeldii varr. n. *columbica* and *tridentata*, FOREL p. 61 T.c.

Rhopalothrix (Octostruma subg. n.) *truncata* sp. n. Brazil, *simoni spei* n. st., FOREL p. 196 op. cit. 19.—*R. emeryi* sp. n. Australia, FOREL p. 58 Zool. Jahrb. Suppl. 15.

Rhoptromyrma mayri sp. n. Indien, FOREL p. 57 Zool. Jahrb. Suppl. 15.

Rhytidoponera araneoides v. n. *impressinodis* p. 498, *strigosa* vv. n. *curvata* p. 499, *nexa* p. 500, *major* p. 501, STITZ Sitzb. Ges. Naturf. Fr. 1912.—*R. subcyanea* subsp. n. *abdominalis*, *schlaginhauseni* p. 4, *laciniosa* p. 5, spp. n., Neu-Guinea, VIVHMEYER Abh. Mus. Dresden 14.—Revision der *Rhytidoponera* (subg. *Chalcoponera*) der *metallica*-Gruppe; EMERY D. ent. Zs. 1912, pp. 77–81.

Sericomyrma diego p. 192, *parvulus*, *wrichi*, p. 193, *mayri* p. 194, spp. n. *opacus* var. n. *muelleri* p. 195, S.

America, FOREL Mem. Soc. ent. Belgique 19.

Sima ophthalmica, *S.* (*Pachysima* subg. n. p. 97) *latifrons*, spp. n., W. Africa, p. 98, EMERY Ann. Soc. ent. Belgique 56.—*S. foveolata* Mayr st. *maculifrons* sp. n. [sic], SANTSCHI p. 162 Ann. Soc. ent. Belgique 56.—*S. stipitum* sp. n. Singapore, FOREL p. 54 Zool. Jahrb. Suppl. 15.—*S. nigra* var. n. *krama*, FOREL Notes Mus. Leiden 34 p. 105.—*S. rufonigra* p. 248 fig., DUTT Mem. Dept. Agric. Ind. Ent. Ser. 4.

Solenopsis tipuna sp. n. Formosa, FOREL p. 56 Ent. Mitt. Berlin 1.—*S. scipio* p. 80 fig. 11, *lotophaga* p. 81 fig. 15, *occipitalis* p. 83, spp. n., *latro oasisium* n. st. p. 84, SANTSCHI Bull. Soc. Alger. 1911.—*S. goeldii* p. 9, *allinodis* p. 10, *spei* p. 11, *eduardi* p. 12, spp. n., S. America, and S. American ff. n. pp. 4–10, FOREL Mem. Soc. ent. Belgique 20.—*S. latro aurata* var. n. p. 11 f. 4, *lou* p. 12 f. 5, KARAVAJEV Rev. russ. ent. 12.—*S. geminata*, LEWIS Proc. Hawaiian Ent. Soc. 2 pp. 175–178; *geminata* v. n. *micans*, STITZ p. 506 Sitzb. Ges. naturf. Fr. 1912.

Stegomyrmex gen. n. *Myrmicinae* p. 99, *connectens* sp. n. Peru p. 100, EMERY Ann. Soc. ent. Belgique 56.

Strictoponera laevior var. n. *avia*, FOREL Notes Mus. Leiden 34 p. 98.

Stigmatomma bruni sp. n. Formosa, FOREL p. 45 Ent. Mitt. Berlin 1.—*S. elongata* sp. n. p. 519 Uruguay, SANTSCHI Revue Suisse Zool. 20.

Strumigenys scotti sp. n. Seychelles, FOREL p. 159 Tr. Linn. Soc. London 15.—*S. feae* var. n. *formosensis*, FOREL p. 52 Ent. Mitt. Berlin 1.—*S. bruchi* sp. n. La Plata p. 197, *saliens* var. n. *angusticeps* p. 198, FOREL Mem. Soc. ent. Belgique 19.

Tapinoma ramulorum varr. n. *cear-ense* and *saga* p. 57, *heyeri* var. n. *risii* p. 58, FOREL Mem. Soc. ent. Belgique 20.

Technomyrmex horni sp. n., *modiglianii* var. n. *angustior*, Formosa, FOREL p. 71 Ent. Mitt. Berlin 1.

Terataner gen. n. type *Atopomyrmex foreli* Em. p. 103, *rufipes* sp. n. Madagascar p. 104, EMERY Ann. Soc. ent. Belgique 56.

(N-9210 j)

Tetramorium caespitum oxyomma var. n. p. 13, var. *schmidti* p. 14, KARAVAJEV Rev. russ. ent. 12; *T. caespitum* centralasiatischen, p. 583, *picta* var. n. p. 584, *striativentre* subsp. *schneideri* var. *longispina* var. n. p. 585, Transcaspian, KARAVAJEV Rev. russ. ent. 12.—*T. mixtum* st. n. *amia*, *confucii* sp. n. Formosa, FOREL p. 53 Ent. Mitt. Berlin 1.

Tetramyrma subg. n. vide *Dilobcondyla*.

Tranopelta heyeri var. n. *columbica*, FOREL p. 3 Mem. Soc. ent. Belgique 20.

Triglyphothrix ceramensis sp. n. Ceram, STITZ p. 506 Sitzb. Ges. naturf. Fr. 1912.—*T. striatidens* var. n. *felix*, FOREL p. 160 Tr. Linn. Soc. London 15.—*T. walshi* var. n. *spuria*, FOREL p. 58 Zool. Jahrb. Suppl. 15.—*T. parvispina* var. n. *formosae*, FOREL p. 52 Ent. Mitt. Berlin 1.

Typhlomyrmex Mayr, valid p. 857, WHEELER Science 33.

Vollenhovia piroskae sp. n. Seychelles, FOREL p. 162 Tr. Linn. Soc. London 15.—*V. piroskae* var. n. *ngoko*, FOREL Notes Mus. Leiden 34 p. 108—*Vollenhovia* vide etiam *Atopula*.

Wasmannia rochai sp. n. Ceara, *auropunctata* var. n. *obscura*, FOREL p. 1 Mem. Soc. ent. Belgique 20.

CHRYSIDIDAE.

Chrysididae in diversis insectis vitam agentes parasiticam, MOCSÁRY Ann. Mus. Hung. 10 pp. 269–276.

Cephaloparnops abruptus sp. n. Ost. Persien, SEMENOV Rev. russ. ent. 12 p. 180.

Chrysis petri, ♂, *alticola* subsp. n., p. 190, *remota* p. 191, *fax*, *mane* sp. n. Mongolia, p. 192, *inaequalis sapphirina* var. n. Semiretshje p. 194, *rutilans* subsp. *mesasiatica* n.n. pro *asiatica* p. 194, *stranchi* p. 195, *valerii* p. 196, *mocsariana* n.n. pro *semenovi* praecoc. p. 197 Beschreibung, *zhar-pitza* sp. n. Transcaspia p. 198, *herzensteini* Beschreibung p. 199, *pulchella adolescentula* subsp. n. p. 200, SEMENOV Rev. russ. ent. 12.—*C. antennata* Erythraea, *arushana* Africa orient. *assabensis* Erythraea, *auromarginata*

d 33—2

benguellae Africa occ., *cassiope* Transvaal, *colonica* Erythraea, *confinis* Transvaal, *costae* Erythraea, *csikiana* Sibiria occ., *erythraeana* Erythraea, *eversmanni* Turkestan, *excisifrons* India orient., *femorata* Erythraea, *formosana* Formosa, *hedychrififormis* Erythraea, *hyacinthina* Turkestan, *hyalipennis* Erythraea, *katonae* Africa or., *kerenensis* Erythraea, *kirbyana* Transvaal, *korbiana* Turkestan, *lanata* Transcaspia, *latreillei* Africa mer., *longidens* Erythraea, *longispina* Arabia, *montivaga*, *nitidularia*, Turkestan, *nyansana* Africa or., *obtusata* Erythraea, *oligotrema*, *pachysoma*, Africa or., *regalis* Turkestan, *sauteri* Formosa, *schenkiana*, *scutata*, Africa or., *secernenda*, Turkestan, *sumbawana* Ins. Sumbawa, *szalayana* Africa or., spp. n., MOCSÁRY Ann. Mus. Hung. 10 pp. 375-414.

Chrysis, spp. n.: *abdominalis* Peru, *adenica* Arabia, *adolphi* Brasilia, *alaica* Turkestan, *annamita* Annam, *anonyma* Costa-Rica, *antennalis* Mexico, *astuta* Japonia, *auroprasina* Malacca, *begam* India, *burmeisteri* Argentina, *calosoma* Africa mer., *columbiaca* Columbia, *costaricana* Costa-Rica, *deuteroleuca* Brasilia, *ecuadorica* Ecuador, *faceta* Formosa, *flexuosa* Caucasus, *florisomnis* Brasilia, *fulgida* Turkestan, *fulvitaris* Australia, *guatemalana* Guatemala, *horvathi* Smyrna, *hyalinata* Costa-Rica, *incarum* Peru, *infans* Caucasus, *kali* India, *kashgarica* Kashgar, *kerteszi* Turkestan, *lara* Java, *maharani*, *mir*, India, *pleuretica* Argentina, *presidialis* Mexico, *quadridens* Costa-Rica, *roseni* Columbia, *sikkimensis* India, *spinicollis* Argentina, *subtruncata* Brasilia, *tamevlana*, *undulella*, India, *venezuelana* Venezuela, *vishnu* Assam, *westwoodi* Africa mer., spp. n., MOCSÁRY Ann. Mus. Hung. 10 pp. 549-592.

Chrysis (Tetrachrysis) minuta p. 3, *cyaneata*, *wollmanni*, p. 4, *syrdarica* p. 5, *erythrocerata* p. 6, *C. (Hexachrysis) semenovi*, *C. (Euchroeus) robusta*, p. 7, *rugulosa* p. 8, spp. n., Syr-Daria, MOCSÁRY Arch. zool. 1 1909.

Dichrysis escalerae sp. n. p. 408 Maroc, DU BUYSSON Bull. Mus. Paris 1911.

Gaullea gen. n. *Euchrysidinae* p. 173, *argentina* sp. n. Chaco p. 174, DU BUYSSON Rev. Ent. franc. 28 1910.

Gonochrysis agadirensis sp. n. p. 408 Maroc, DU BUYSSON Bull. Mus. Paris 1911.

Hedychridium mysticum sp. n. S.-O.-Persien, SEMENOV Rev. russ. ent. 12 p. 177.

Hedychrum cribratum p. 1, *punctigenum* p. 2, spp. n., Syr-Daria, MOCSÁRY Arch. zool. 1 1909.

Parnopes grandior ab. n. p. 179, *semiviolaceus* subsp. n. p. 180, SEMENOV T.c.

Pseudochrysis satarte Transcaucasia p. 185, *coa* S.-O.-Persien p. 186, spp. n., *virgo* Beschreibung p. 189, SEMENOV T.c.

Teratochrysis subgen. n. gen. *Chrysis*, SEMENOV p. 198 T.c.

Wollmannia gen. n. near *Hedychrum*, *concinna* Syr-Daria sp. n., MOCSÁRY Arch. zool. 1 p. 2 1909.

ICHNEUMONIDAE.

Studium der Verwandlung parasitischen Hymenopteren (Russ.), ŠEVYREV Selisk. choz. i lěsov. 71 pp. 214-231 429-443 mit f. 1-9.

Parasites of *Agrotis segetum*, ŠEVYREV St. Peterburg 1912 pp. 1-216 62 figs.

Typen Thunbergs, ROMAN Zool Beiträge aus Uppsala 1 pp. 229-293.

Die Typen der Gravenhorst'schen Gattungen *Banchus*, *Exetastes* und *Leptobatus*, PFANKUCH Breslau Jahresh Ver. Insektenk. 5 p. 20-32.

Catalogue of Brit. Mus. *Ichneumonidae*, part 1, Ophionides and Metopiides; MORLEY Rev. Ichn. Brit. Mus xi + 88 pp.

SCHMIEDEKNECHT, Opuscula ichneumonologica, Fasc. xxviii-xxxii.

Descriptions of twenty-one new genera and fifty-seven new species of ichneumon-flies, VIERECK Proc. U.S. Nation. Mus. 42 pp. 613-648 ff. 1 2.

Ophioninae, a review of Genera insectorum 114, VIERECK Ent. News 2 pp. 43-46.

Tryphoninae, a review of Ichneumonologia Britannica Vol. 4 by Claud Morley; Genotypes designated, VIERECK Proc. Ent. Soc. Washington 14 pp. 175-178.

Ichneumonidae *Pimplinae* aus Norwegen und Deutschland, ULBRICHT *Nyt. Mag. Naturv.* 50 pp. 23–28.

Finds of parasitic Hymenoptera Sweden, NORDENSTROM *Entomol. Tidskr.* 33 pp. 252–253.

Gezogene Ichneumoniden aus Südfinnland, ROMAN *Entomol. Tidskr.* 33 p. 65–72.

Acroblapticus gen. n. *Ophioninae* p. 2163 & 2173, *debilis* sp. n. p. 2174 Thüringen, SCHMIEDEKNECHT *Opusc. Ichn.* 28 1911.

Aenoplegimorpha gen. n., *phytonomi* sp. n. Utah p. 147, VIERECK *Proc. U.S. Nation. Mus.* 42.

Agasthenopoda gen. n. *Tryphoninae* 32 1912 p. 2519 and 33 1913 p. 2573, *australis* sp. n. Palaestina 33 1913 p. 2573, SCHMIEDEKNECHT *Opusc. Ichn.*

Allocamptus conspicuus Tasmania p. 21, *simillimus* Guiana, *africanus* Natal, p. 22, *brevis* Amazons, *sinatus* India, p. 24, *serpentinus* Borneo, *cubitalis* Florida, p. 25, *crassus* Australasia?, *triangularis* Sumatra p. 26, *pulchellus* E. Africa, *emandibulator*, *deflexus*, Australia, p. 27, spp. n., *renovatus* n. n. for *curvinervis* Cam., MORLEY *Rev. Ichn. Brit. Mus.* 1.

Amblyteles vadatorius, Parasit von *Agrotis*, POSPELOV *Věstn. sacharn. promyšl.* 13 pp. 158–161 figs. 1 & 2.

Amorphota ephestiae sp. n. N.S. Wales, CAMERON *Proc. Linn. Soc. N.S. Wales* 37 p. 187.—*A. ephestiae* sp. n. on *Ephestia*, CAMERON *Agric. Gaz. N.S. Wales* 23 p. 309.

Angitia plutellae sp. n. Colorado p. 583, VIERECK *Proc. U.S. Nation. Mus.* 43.

Anilastus pallipes p. 153, *robustus*, spp. n., p. 154, Netherland, SMITS VAN BURGST *Tijdschr. Ent.* 55.

Anisitsia gen. n. type *Campoplex villosus* p. 632, VIERECK *Proc. U.S. Nation. Mus.* 42.—*Anisitsia nigerrima* sp. n. Idaho p. 583, VIERECK *op. cit.* 43.

Anomalon leucostomum sp. n. Congo, CAMERON p. 387 *Ann. Soc. ent. Belgique* 56.—*A. pyretorum* sp. n. Hongkong, CAMERON p. 195 *Entomologist* 45.

Apaeleticus rufus sp. n. Tunis, SMITS VAN BURGST *Tijdschr. Ent.* 55 p. 265.

Apatagium gen. n. near *Paniscus* p. 115, *tristrigatum* p. 116 Sumatra, *rectum* p. 118, *macrostigma* p. 119, Java, spp. n., ENDERLEIN *Stettin. ent. Zeit.* 73.

Asternaulax gen. n., *fiskei* sp. n. North Carolina, p. 632, VIERECK *Proc. U.S. Nation. Mus.* 42.

Athyreodon armstrongi sp. n. Santo Domingo p. 105, HOOKER *Trans. Amer. Ent. Soc.* 38.

Australophion gen. n. for *Ophion peregrinus* Sm., MORLEY p. 30 *Rev. Ichn. Brit. Mus.* 1.

Banchus calcaratus sp. n. Hungary, SZÉPLIGETI *Arch. Zool.* 1 1910 p. 186

Barydotira hammari sp. n. Pennsylvania p. 584, VIERECK *Proc. U.S. Nation. Mus.* 43.

Bathythrix kuwanae sp. n. Japan p. 584, VIERECK *Proc. U.S. Nation. Mus.* 43.

Benjaminia gen. n. type *Charops fuscipennis* p. 633, VIERECK *Proc. U.S. Nation. Mus.* 42.

Bosmina rapi sp. n. N.S.W., CAMERON *Proc. Linn. Soc. N.S. Wales* 37 p. 190.

Brachixiphosoma gen. n. type *Biphosoma pyralidis* p. 147, VIERECK *Proc. U.S. Nation. Mus.* 42.

Brachycyrtus ornatus, PFANKUCH *D. ent. Zs.* 1912 p. 456.

Caenajoppa maculiceps sp. n. Borneo, CAMERON p. 90 *Soc. entom.* 27.

Callicryptus magnificus sp. n. Guatemala p. 585, VIERECK *Proc. U.S. Nation. Mus.* 43.

Calliphururus? taeniogaster sp. n. Pennsylvania p. 585, VIERECK *T.c.*

Campoctonus gen. n. type *Limmeria corrupta* p. 633, VIERECK *Proc. U.S. Nation. Mus.* 42.

Campoplegidea gen. n. type *Campoplex oxyacanthae* p. 633, VIERECK *T.c.*

Campoletidea subgen. n. vide *Campoplex*.

Campoplex maynei sp. n. Congo, CAMERON p. 389 *Ann. Soc. ent. Belgique* 56.—*C. calamiae* sp. n. Brisbane, CAMERON *Proc. Linn. Soc. N.S. Wales*

- 37 p. 189.—*C. (Campoletidea) caradrinae* Colorado p. 634, *C. (Diadegma) japonicus* Japan p. 636 f. 1, *C. (Hypothereutes) exiguae* California p. 638, *C. (Sesioplex) depressus* Louisiana p. 644, spp. n., VIERECK Proc. U.S. Nation. Mus. 42.—*C. (Angitia) hellulae* sp. n. California p. 631, VIERECK T.c.—*C. epinotiae* California *polychrosidis* Maryland, spp. n., p. 586, VIERECK Proc. U.S. Nation. Mus. 43.
- Cardiochiles nigriceps* sp. n. Georgia p. 578, VIERECK T.c.
- Casinaria scabrimiformis* sp. n. Pennsylvania p. 635, VIERECK Proc. U.S. Nation. Mus. 42.—*Casinaria eupitheciae* sp. n. Connecticut p. 586, VIERECK Proc. U.S. Nation. Mus. 43. Vide etiam *Neonortonia*.
- Charopsimorpha* gen. n. type *Charops tibialis* p. 635, VIERECK Proc. U.S. Nation. Mus. 42.
- Chreusa ornatipes* sp. n. Bidi, CAMERON p. 94 Soc. entom. 27.
- Chromocryptus bifasciator* p. 236 f. 1, *pulchratorius* p. 273 pl. vi f. 13 Thunb. spp. n. Guiana Amer. merid., ROMAN Zool. Beiträge aus Uppsala 1.
- Conoblasta fumiferanae* sp. n. Quebec p. 148, VIERECK Proc. U.S. Nation. Mus. 42.
- Cremastidea* subgen. n. vide *Cremastus*.
- Cremastus schoenobius caucasicus* var. n., KOKUJEV Mitt. Kaukas. Mus. 7 1 p. 2.—*C. punctus* sp. n. Seychelles, MORLEY p. 175 Tr. Linn. Soc. London 15.—*C. (Cremastidea) chinensis* sp. n. China p. 587, VIERECK Proc. U.S. Nation. Mus. 43.
- Cryptanura uniformis* sp. n. p. 200 Brazil, BRUES Ann. Ent. Soc. Amer. 5.
- Cryptaulax bifasciatus* sp. n. Congo, CAMERON p. 386 Ann. ent. Belgique 56.—*C. bimaculator* Thunb. sp. n. Caput bouae spei, ROMAN Zool. Beiträge aus Uppsala 1 p. 238.
- Crypturopsis microgaster* sp. n. Guatemala p. 588, VIERECK Proc. U.S. Nation. Mus. 43.—*C. brasiliensis* p. 198, *minor* p. 199, spp. n., Brazil, BRUES Ann. Ent. Soc. Amer. 5.
- Cryptus mokrzeckis* sp. n. aus *Cetonia* sp., KURDJUMOV Rev. russ. ent. 12 p. 225.—*C. heathi* sp. n. p. 196 f. 8 Brazil, BRUES Ann. Ent. Soc. Amer. 5.
- Ctenopelma elegantulum* sp. n. Thüringen, p. 2630 & 2635, SCHMIEDEKNECHTS Opusc. Ichn. 33 1913.
- Cyanoxorides albolineatus* sp. n., CAMERON p. 94 Soc. entom. 27.
- Cymodusopsis* gen. n., *aristoteliæ* sp. n. Missouri p. 588, VIERECK Proc. U.S. Nation. Mus. 43.
- Daictimorpha* gen. n., *peruviana* sp. n. Peru p. 636, VIERECK Proc. U.S. Nation. Mus. 42.
- Delaulax ruficollis* sp. n. Congo, CAMERON p. 390 Ann. Soc. ent. Belgique 56.
- Dicolus equatorius* sp. n. Seychelles, MORLEY Tr. Linn. Soc. London 15 p. 177.
- Dinotomus vulpinus* v. n. *nigrithorax*, STRAND p. 74 Arch. Naturges. 78A.
- Diocetes vulgaris* sp. n. Seychelles, MORLEY p. 174 Tr. Linn. Soc. 15.
- Eclitus praeclarus* sp. n. Thüringen p. 2555 & 2559, SCHMIEDEKNECHT Opusc. Ichn. 32 1912.
- Ectopimorpha* gen. n. type *Amblyteles anceps* p. 589, VIERECK Proc. U.S. Nation. Mus. 43.
- Enicospilus bicoloratus, lomelaensis*, spp. n. Congo, CAMERON p. 388 Ann. Soc. ent. Belgique 56.—*E. fuscipennis flavostigma* p. 58, *cressoni* Mexico, p. 62, *fernaldi* p. 63, *neotropicus*, Santo Domingo, p. 69, subsp. n. and spp. n. *brullei* nom. n. for *Ophion striatus* Br. p. 70, *szepligetii* nom. n. for *Henicospilus seminiger* Szepl. p. 90, HOOKER Trans. Amer. Ent. Soc. 38.
- Ephialtes cognator* Thunb. sp. n. Suecia, ROMAN Zool. Beiträge aus Uppsala, 1 p. 244.—*E. dolichosoma* sp. n. North Carolina p. 637, VIERECK Proc. U.S. Nation. Mus. 42.
- Epiurus innominatus* sp. n. British Columbia p. 149, VIERECK Proc. U.S. Nation. Mus. 42.
- Eremotylus rufoniger* Peru p. 141, *angulatus* Porto Rico p. 144 pl. ii f. 13, *flavofuscus radialis* Peru p. 143, spp. n. and subsp. n., HOOKER Trans. Amer. Ent. Soc. 38.
- Erythromorpha wallacei* sp. n. Aru, CAMERON Proc. Linn. Soc. N.S. Wales 37 p. 218.

Eurycampus gen. n. p. 27 near *Agathophiona*, *meridionalis* Natal, *flavipennis*, *calicator*, Amazons, *novascotiae* N. America, p. 29 spp. n., MORLEY Rev. Ichn. Brit. Mus. 1.

Eurzophion magnificus p. 5, *superbus* p. 6, spp. n., S. Africa, MORLEY Rev. Ichn. Brit. Mus. 1.

Exeristes nubilipennis, *hyalinipennis*, spp. n., p. 638, VIERECK Proc. U.S. Nation. Mus. 42.

Exochoblastus gen. n. *Tryphoninae* 30 p. 2401 & 31 p. 2468, *oreophilus* sp. n. Thüringen p. 2469, SCHMIEDEKNECHT Opusc. Ichn. 31 1912.

Fiebrigia gen. n. type *Campoplex texanus* p. 638, VIERECK Proc. U.S. Nation. Mus. 42.

Gambrus stokesii sp. n. N. S. Wales, CAMERON Proc. Linn. Soc. N.S. Wales 37 p. 180.

Gnathonophorus gen. n. *Tryphoninae* 32 1912 p. 2519 & 33 1913 p. 2574, *moricei* sp. n. Palaestina, Oran 33 1913 p. 2575, SCHMIEDEKNECHT Opusc. Ichn.

Grotea delicator Thunb. sp. n. St. Barthélemy, ROMAN Zool. Beiträge aus Uppsala 1 p. 249.

Habrobraconidea gen. n. p. 578, *bicoloripes* sp. n. Connecticut p. 579, VIERECK Proc. U.S. Nation. Mus. 43.

Hemiteles vasiljevi, *transcaspicus*, spp. n., Turkestan, KOKUJEV Rev. russ. ent. 12 pp. 407-408.—*H. cingulatorius* sp. n. Seychelles, MORLEY p. 169 Tr. Linn. Soc. London 15.—*H. cayennator* Thunb. sp. n. Cayenne, ROMAN Zool. Beiträge aus Uppsala 1 p. 241.

Henicospilus brevinervis St. Vincent etc. p. 34, *exoticus*, *major*, Amazons, p. 36, *athi* p. 40, *grandis* p. 41, Africa, *incongruus* Madagascar p. 43, *atricornis* p. 46 Asia, *crassus* p. 47 India, *gardei*, *stramineus*, p. 49, *obliquus*, *albicaput*, *fulvicaput*, p. 50, *dubitator*, *attenuatus*, *turneri*, *melanospilus*, p. 51, *amplipennis*, *consimilis*, p. 52, Australia, *trinotatus* Australia? p. 53, spp. n., *tosquineti* n. n. for *trimaculatus* Tosq. p. 43, *flavicaput* n. n. for *xanthocephalus* Cam. 1907 p. 45, MORLEY Rev. Ichn. Brit. Mus. 1.—*H. leionotus* var. n. *longicornis*, MORLEY p. 173 Tr. Linn. Soc. 15.

Herpestomus hyponomeutae sp. n. Japan p. 589, VIERECK Proc. U. S. Nation. Mus. 43.

Hoploplatystylus gen. n. near *Rhyssolabus* p. 46, *smits-van-burgsti* sp. n. Tunis, SCHMIEDEKNECHT Tijdschr. Ent. 55 p. 47.

Hybopleurax gen. n. near *Thyreodon*, *sumatranum* sp. n. Sumatra, ENDERLEIN pp. 624-5 Zool. Anz. 39.

Hymenospimecis nom. n. for *Epimecis* Brull. p. 149, VIERECK Proc. U. S. Nation. Mus. 42.

Hymenosyneches nom. n. for *Syneches*. Foerst. p. 149, VIERECK T.c.

Hyposoter diversicolor sp. n. Connecticut p. 590, VIERECK Proc. U.S. Nation. Mus. 43.

Hypothercutes elyi Connecticut, *nigrolineatus* New Mexico, spp. n., p. 590, VIERECK T.c.

Hypsantyx impressus = *Zemiophorus impressus*, ROMAN Entomol. Tidskr. 33 pp. 67-69.

Ichneuomon u. *Lissopimpla*, Nomenclatur, SCHULZ Zs. wiss. Insektenbiol. 8 p. 353.—*I. tottor* Thunb. sp. n. Caput bonæ spei, ROMAN Zool. Beiträge aus Uppsala 1 p. 283.—*I. klagesi* nom. n. for *flavofascialis* Vier., VIERECK p. 591 Proc. U. S. Nation. Mus. 43.

Idechthis patulus sp. n. Paraguay p. 630, VIERECK Proc. U. S. Nation. Mus. 42.

Ipoobracon foveiventris sp. n. Madagascar, ROMAN Entomol. Tidskr. Stockholm 33 pp. 246-248.

Ischnus trochanteratus sp. n. Tunis, SMITS VAN BURGST Tijdschr. Ent. 55 p. 267.

Joppa geminata v. n. *catharinae*, *antennator* vv. n. *nigripectus*, *parana*, p. 72, *melanosticta* v. n. *blumenauensis* p. 73, STRAND Arch. Naturges. 78 A.

Lapton femoralis, PFANKUCH Deutsche ent. Zeitsehr. 1912 p. 457.

Lathrolestes blancoburgensis sp. n., Thüringen p. 2562 33 1913 p. 2565.—*L. citrofrontalis* sp. n. Thüringen p. 2561 33 1913 p. 2568 SCHMIEDEKNECHT Opusc. Ichn. 32 1912.

Leptoperilissus gen. n. *Tryphoninae* 32 1912 p. 2518 & 33 1913 p. 2577, *oraniensis* sp. n. Oran p. 2578 33 1913, SCHMIEDEKNECHT Opusc. Ichn.

Limnerium validum, life and habits, TIMBERLAKE U. S. Dept. Agric. Ent. Techn. 19 Pt. 5 pp. 71-92 ff. 32-41.

Lissarcha gen. n. *Cryptini*, *flavomaculata* sp. n. Borneo, CAMERON p. 95 Soc. entom. 27.

Lissonota oudemansi sp. n. Netherland, SMITS VAN BURGST Tijdschr. Ent. 55 p. 152.—*L. leucostoma* sp. n. Congo, CAMERON p. 391 Ann. Soc. ent. Belgique 56.

Macrojoppa boliviana sp. n. Bolivia, STRAND p. 71 Arch. Naturges. 78 A.

Macrophion flammiger sp. n. Jamaica, MORLEY p. 15 Rev. Ichn. Brit. Mus. 1.

Mallochia gen. n. p. 591, *agenioides* sp. n. Virginia p. 592, VIERECK Proc. U. S. Nation. Mus. 43.

Megaplectes branneri sp. n. p. 195 f. 10 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Melanichneumon leucothalmus Thunb. sp. n. Caput bonæ spei, ROMAN Zool. Beiträge aus Uppsala 1 p. 262 pl. vi f. 10.

Mesochorus trisulcatus sp. n. Japan p. 640 f. 2, VIERECK Proc. U. S. Nation. Mus. 42.—*M. diversicolor* sp. n. British Columbia p. 149, VIERECK T.c.

Mesostenoideus stirocephalus sp. n. N.S.W., CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 177.—*M. (?) crassus* sp. n. p. 197 f. 7 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Mesostenus versicolor sp. n. Europe p. 641, VIERECK Proc. U. S. Nation. Mus. 42.—*M. tricolor* p. 267, *subelongatus* p. 268, spp. n. Tunis, SMITS VAN BURGST Tijdschr. Ent. 55.—*M. rufolineatus* p. 384, *kolleri* p. 385, spp. n., Congo, CAMERON Ann. Soc. ent. Belgique 56.—*M. pomonellæ* N.S.W., *victoriæ* Victoria, spp. n., CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 178.

Metopius bicarinatus Amazons, *medianus* Georgia, p. 78, *notabilis* Cyprus p. 79, *eritreæ* Africa, *lar* India, p. 81, *unifenestratus* p. 82, *crassicornis* p. 83, Australia, spp. n., MORLEY Rev. Ichn. Brit. Mus. 1.

Micromeson subgen. n. (*Pezomachus*), *annulatum* sp. n. Maryland p. 147 f. 5, *lymense* sp. n. Connecticut p. 138, STRICKLAND Ann. Ent. Soc. Amer. 5.

Microtoridea gen. n., *lissonota* sp. n. India p. 150, VIERECK Proc. U. S. Nation. Mus. 42.

Monoblastus caliroæ sp. n. Virginia p. 151, VIERECK Proc. U. S. Nation. Mus. 42.

Neogreeneia gen. n., *picticornis* sp. n. Pennsylvania p. 641, VIERECK T.c.

Neonortonia subgen. n. of *Casinaria* p. 592, VIERECK Proc. U. S. Nation. Mus. 43.

Neophion gen. n. p. 30, *crassus* sp. n. Nova Scotia p. 31, MORLEY Rev. Ichn. Brit. Mus. 1.

Neopimplodes gen. n., *syleptæ* sp. n. India p. 151, VIERECK Proc. U. S. Nation. Mus. 42.

Neopristomerus gen. n. type *Pristomerus appalachianus* p. 592, VIERECK Proc. U. S. Nation. Mus. 43.

Neotheronia teiæ, *antheræ*, N.S.W., spp. n., CAMERON Proc. Linn. Soc. N. S. Wales 37 pp. 183-4.

Nototrachys sinuatus Amazons p. 70, *australensis* Queensland p. 71, spp. n., *variistriatus* n. n. for *reticulatus* Cam. p. 70, MORLEY Rev. Ichn. Brit. Mus. 1.

Ophelloideus ashmeadi p. 108 Peru, *politissimus* p. 110 Bras., *sannio* p. 111 Peru, spp. n., ENDERLEIN Stettin. ent. Zeit. 73.

Ophiogastrella gen. n. p. 201. *maculithorax* sp. n. p. 202 f. 1 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Ophion porculata p. 55, *politus*, *politior*, p. 56, *occidentalis*, *flicicornis*, p. 57, S. America, *major* Africa p. 60, *rectus* Singapore p. 63, *antennatus* Australia p. 65, spp. n., *nigritulus* n. n. for *nigricans* Cam. p. 64, MORLEY Rev. Ichn. Brit. Mus. 1.—*O. congoensis* sp. n. Congo, CAMERON p. 387 Ann. Soc. ent. Belgique 56.—*O. larseni* sp. n. Falklands-Inseln, ENDERLEIN Stockholm Vet.-Ak. Handl. 43 No. 3 p. 41 pl. iii f. 36 Textf. 5-6.—*O. bilineatus elongatus* p. 30, *abnormis magniceps* p. 36, subspp. n., HOOKER Trans. Amer. Ent. Soc. 38.

Ophionellus manni sp. n. p. 203 f. 9 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Orientospilus gen. n. near *Henicospilus*, *individuus* sp. n. Rajputana, MORLEY p. 6 Rev. Ichn. Brit. Mus. 1.

Orthocentrus protuberans var. n. *deletus*, MORLEY p. 172 Tr. Linn. Soc 15.

Orthognathella longiceps sp. n. N.S.W. CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 172.

Osprynchotes ruficollis sp. n. Congo-CAMERON p. 384 Ann. Soc. ent. Belgique 56.—*O. macrorhynchus* p. 6, *aethiopicus* p. 11, *moeroi* p. 12, spp. n., Africa, Annuar. Mus. Napoli 3 No. 17 1911.

Paniscus testaceinervii sp. n. Australia, CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 181.—*P. cameroni* p. 123 Calcutta, *pengalenganus* p. 125, *rimosus*, *scissulatus*, p. 128, *truncativenosus* p. 129, Java, *madagascariensis* p. 131 Madag., *coriarius* p. 132 Columbia, *rectivena* p. 135, *obliquetransversalis*, Brasil, *parviareolatus* p. 136, *strigatus* p. 137, Mexico, *columbianus* p. 138 Columb., *fractivena* p. 139 Brasil, *asper* p. 140 Cuba, spp. n., *P. rufus* v. n. *flavitaris* p. 134 Brasilia, ENDERLEIN Stettin. ent. Zeit. 73.

Paracanidia gen. n. p. 642, *elyi* sp. n. Connecticut p. 643, VIERECK Proc. U. S. Nation. Mus. 42.

Pedinopelte gravenhorsti v. n. *demacu*, *latana*, STRAND p. 75 Arch. Naturges. 78 A.

Perilissus thuringiacus sp. n. Thüringen pp. 2524 & 2547, SCHMIEDEKNECHT Opusc. Ichn. 32.

Pezomachus flavocinctus ♂ p. 129 f. 4, *ottawaensis* ♂ p. 134, *maculatus* p. 121 f. 2, *longipes* p. 123, *stanfordensis* p. 123, *manni* p. 132, *brevistylus* p. 119, *pennsylvanicus* p. 126, *nigrofuscus* p. 133, *utahensis* p. 118, *minutus* p. 119, *auripes* p. 134, *longistylus*, *robustus*, p. 120, *coloradensis* p. 122, *spiraculus* p. 124 f. 3, *dispar* p. 125, *similis* p. 127, *nodosus* p. 128 spp. n., N. America; nomm. n. *ashmeadii* for *Cremnodes californicus* Ashm. p. 135, *bruesii* for *obesus* Brues p. 136, *aciculatus* for *foersteri* Brues, *ferruginosus* for *insolens*, *cressonni* for *gracilis* Cress., *insularis* for *Theroscopus rufipes* Ashm., p. 136, STRICKLAND Ann. Ent. Soc. Amer. 5.

Phaeogenes plutellae sp. n. aus *Plutella maculipennis* Poltava, KURDĪMOV Rev. russ. ent. 12 p. 224.

Philogalleria gen. n., *sextuberculata* sp. n. Victoria, CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 190-1.

Philopsyche annulipes sp. n. N.S.W., CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 136.

Phygadeuon confinis sp. n. Tunis, SMITS VAN BURGST Tijdschr. Ent. 55 p. 269.—*P. plesius* sp. n. Quebec p. 148, VIERECK Proc. U. S. Nation. Mus. 42.

Pimpla madecassa, ROMAN Entomol. Tidskr. Stockholm 33 1912 pp. 243-246.—*P. (Iseropus) viduiformis* Connecticut p. 591, *P. (Epiurus) kuwanæ* Japan p. 589, *P. (Pimpla) parnaræ* p. 593 Japan, spp. n., VIERECK Proc. U. S. Nation. Mus. 43.

Platylabus spilonotus sp. n. Congo, CAMERON p. 382 Ann. Soc. ent. Belgique 56.—*P. bicinctorius* Thunb. sp. n. Caput bonæ spei, ROMAN Zool. Beiträge aus Uppsala 1 p. 235 pl. vi f. 1.

Plectiscus oceanicus sp. n. Seychelles, MORLEY p. 178 Tr. Linn. Soc. London 15.

Polyblastus petryi sp. n. Thüringen pp. 2422 & 2451, SCHMIEDEKNECHT Opusc. Ichn. 31 1912.

Polycyrtus curvilineatus sp. n. N. S. Wales, CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 175.—*P. cockerellæ* sp. n. Guatemala p. 593, VIERECK Proc. U. S. Nation. Mus. 43.

Polyselasmus gen. n. *Tryphoninae* für *Eclytus semiluctuosus* Vollenh. pp. 2518-2552, SCHMIEDEKNECHT Opusc. Ichn. 32 1912.

Polysphincta bohemani var. n. *tropicus*, MORLEY p. 172 Tr. Linn. Soc. 15.

Pristomeridia ruficaput sp. n. Seychelles, MORLEY p. 176 Tr. Linn. Soc. London 15.

Pristomerus euzopheræ sp. n. India p. 152, VIERECK Proc. U. S. Nation. Mus. 42.—*P. lipsii* Luzon p. 152, *vogeli* p. 155, *mayhoffi* p. 157, Philippinen, *kaemmelii* Sumatra p. 159, *daehnhardti* Hinterindien p. 162, spp. n., KRIEGER Xenia Nicolaitana.

Probolus varilineatus sp. n. N. S. Wales, CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 174.

Prosthodocis gen. n. near *Paniscus*, *scabiosa* sp. n. Columbia, ENDERLEIN pp. 141-142 Stettin. ent. Zeit. 73.

Pseudocasinaria gen. n. type *Casinaria americana* p. 644, VIERECK Proc. U. S. Nation. Mus. 42.

Psilosage oraniensis sp. n. Oran. pp. 2367 & 2370, *discedens* sp. n. Thüringen p. 2367, SCHMIEDEKNECHT Opusc. Ichn. 30 1912.

Rhynchophion gen. n. near *Thyreodon*, *odontandroplox* sp. n. Brasilia, ENDERLEIN p. 630 Zool. Anz. 39.

Rhyssa tuberculicollis sp. n. N.S.W., CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 183

Ritzemabosia meridionalis sp. n. Tunis, SMITS VAN BURGST Tijdschr. Ent. 55 p. 269.

Sauterellus gen. n. *Paniscinae*, *pianiscutellatus* sp. n. Formosa, ENDERLEIN pp. 112-113 Stettin. ent. Zeit. 73.

Scolobates fennicus sp. n. Finnland p. 2491, SCHMIEDEKNECHT Opusc. Ichn. 32 1912.

Scorpiorus flavicauda sp. n. Südfinnland, ROMAN Entomol. Tidskr. 33 p. 65.

Sesioplex subgen. n. vide *Campoplex*.

Spudaeus forsii sp. n. Südfinnland, ROMAN Entomol. Tidskr. 33 p. 60.

Stauropodoctonus alienus Asia ? p. 17 *biumbratus* Madras p. 18, spp. n., *orientalis* n. n. for *Spilophion maculipennis* Cam. 1905, MORLEY Rev. Ichn. Brit Mus. 1.

Stilpus anthomyidiperda sp. n. Tennessee p. 644, VIERECK Proc. U. S. Nation. Mus. 42.

Stirexephanes gen. n., *melanarius* sp. n. Borneo, CAMERON p. 90 Soc. entom. 27.

Stroblia gen. n. *Ophioninae* für *Catomicrus alpigenns* Strobl. pp. 2163 & 2182, SCHMIEDEKNECHT Opusc. Ichn. 28 1911.

Stylocryptus kriegeri p. 175, *amoenus* p. 178, *rusticus* p. 179, *nitidus* p. 185, *alutaceus* p. 186, spp. n., Deutschl., HABERMEHL Deutsche ent. Zeitschr. 1912.

Suvalata transversa sp. n. Aru, CAMERON Proc. Linn. Soc. N.S. Wales 37 p. 217.

Talimeda gen. n. *Ichneumoninae* p. 382, *pallidiceps* sp. n. Congo p. 383, CAMERON Ann. Soc. ent. Belgique 56.

Tarytia minuta sp. n. Seychelles, MORLEY p. 175 Tr. Linn. Soc. London 15.

Tetragononochora cetepurange sp. n. p. 194 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Thaumalotypus evertsi sp. n. Netherland, SMITS VAN BURGST Tijdschr. Ent. 55 p. 152.—*T. spinulatus* sp. n. Connecticut p. 116 f. 1, STRICKLAND Ann. Ent. Soc. Amer. 5.

Theronia nigrinervis sp. n. Congo, CAMERON p. 391 Ann. Soc. ent. Belgique 56.—*T. gestator* (Thunb.) sp. n. Ostindien, ROMAN Zool. Beitrage aus Uppsala 1 p. 257 pl. vi f. 7-8.—*T. fulvescens* parasite of *Neophasia menapia*, ALDRICH J Econ. Ent. 5 p. 87.

Thersilochus evanescens sp. n. Seychelles, MORLEY p. 178 Tr. Linn. Soc. 15.

Thymaris modestus sp. n. Thüringen, p. 2509, SCHMIEDEKNECHT Opusc. Ichn. 32 1912.

Thyreodon ligulifer Brazil p. 9, *lactepennis* Amazons, *reflexus* Rio Grande do Sul, p. 11, *bicolor* Centr. America, *boliviae* Bolivia, p. 13, spp. n., MORLEY Rev. Ichn. Brit. Mus 1.—*T. ferrugineus* Mexico p. 121, *fernaldi* western U.S. and Mexico p. 311, spp. n., HOOKER Trans. Amer. Ent. Soc. 38.—*T. kriegeri* p. 627 Columbia, *venustus* p. 628 Amazonas, spp. n., ENDERLEIN Zool. Anz. 39.

Trachichneumon gen. n. type *Ichneumon confirmatus* p. 645, VIERECK Proc. U.S. Nation. Mus. 42.

Trachyopterus gen. n. p. 67, *primus* sp. n. Amazons p. 68, MORLEY Rev. Ichn. Brit. Mus. 1.

Trichomma epischniae, granitellae, spp. n., California, p. 645, VIERECK Proc. U.S. Nation. Mus. 42.

Troctocerus elegans ♂, PFANKUCH D. ent. Zs. 1912 p. 326.

Tryphon separandus sp. n. Thüringen pp. 2374 & 2380, *mauritanicus* sp. n. Oran., pp. 2376 & 2386, SCHMIEDEKNECHT Opusc. Ichn. 30 1912.

Xanthocharops gen. n. *Ophioninae* p. 173, *primus* sp. n. Seychelles p. 174, MORLEY Tr. Linn. Soc. 15.

Xanthopimpla eous sp. n. Seychelles, MORLEY p. 171 Tr. Linn. Soc. London 15.—*X. multipunctor* p. 267 pl. vi f. 12 a-b Kap., *stemmator* p. 280 China Thunb., spp. n., ROMAN Zool. Beitrage aus Uppsala 1.

Xylophruridea gen. n., *agrili* sp. n. West Virginia p. 646, VIERECK Proc. U.S. Nation. Mus. 42.

Zacharops gen. n. type *Charops annulipes* p. 646, VIERECK Proc. U.S. Nation. Mus. 42.

Zamansa gen. n. type *Cryptus aztecus* p. 647, VIERECK T.c.

Zamesochorus gen. n. *orientalis* sp. n. India p. 152, VIERECK T.c.

Zupletlocornia gen. n. *Tryphoninae* 32 191 2 p. 2519 & 33 1913 p. 2597 für *Trmatopygus procurator* Grav., SCHMIEDEKNECHT Opusc. Ichn.

Zasternaularax gen. n., *simplicicornis* sp. n. Montana p. 647, VIERECK Proc. U.S. Nation. Mus. 42.

Zatranosema nom. n. for *Tranosema* p. 45, VIERECK Ent. News 23.

BRACONIDAE. STEPHANIDAE.

Typen Thunbergs, ROMAN Zool. Beitrage aus Uppsala 1 pp. 229-293 pl.

Aerophasmus gen. n. *Stephaniscinae*, *exilis* sp. n. Columbia, ENDERLEIN pp. 16-17 Arch. Naturges. 78A.

Adesha gen. n., *albolineata* sp. n. Borneo, CAMERON p. 78 Soc. entom. 27.

Agulhis *ornaticeps*, *ornaticornis*, p. 377, *trifasciatus* p. 378, spp. n., Congo, Cameron Ann. Soc. ent. Belgique 56.

Allorhogas gen. n. p. 3, *gallicola* sp. n. U.S. p. 4, GAHAN Proc. Ent. Soc. Washington 14.

Alysia *goniarcha*, *maculiceps*, spp. n., Congo, CAMERON p. 381 Ann. Soc. ent. Belgique 56.—*A. camerunensis* sp. n., ENDERLEIN p. 99 Arch. Naturges. 78A.

Apanteles *tasmanica* sp. n. Launceston, CAMERON Proc. Linn. Soc. N.S. Wales 37 p. 916.—*A. colemani* p. 143, *creatonoti* p. 144, *papilionis* p. 145, *stauropi* p. 146, India, *cushmani* p. 144 *sesiae* p. 146, *electrae* California p. 145; spp. n., VIERECK Proc. U.S. Nation. Mus. 42.—*A. prodeniae* p. 139, *taramacae* p. 140, India, *fumiferanae* Quebec p. 139, *tischeriae* Delaware p. 140, spp. n., VIERECK T.c.—*A. (Apanteles)* spp. n., *aristoteliae* p. 613, *braunae*, *epinotiae*, p. 614, *gelechiae*, *lithocolletidis*, p. 615; *plesiis*, *polychrosidis*, p. 615,

trachynotus p. 616, *A. (Protapanteles) feltiae* p. 625, *hesperidivorus*, *pyraustae* p. 626, *A. (Pseudapanteles) choreuti* p. 627, spp. n., N. America, VIERECK T.c.—*A. (Protapanteles) harnedi* Mississippi p. 580, *oxyacanthoidis* Maine p. 581, *A. (Stenopleura) chilocida* Japan, *depressus* Indiana, p. 582, *podunkorum* Connecticut p. 583, spp. n., VIERECK Proc. U.S. Nation. Mus. 43.

A. (Pseudapanteles) terminalis sp. n. U.S. p. 2, GAHAN Proc. Ent. Soc. Washington 14.

Aphidius colemani sp. n. India p. 141, VIERECK Proc. U.S. Nation. Mus. 42.

Ascogaster olethreuti sp. n. Washington p. 617, VIERECK T.c.

Atanycolidea gen. n. type *Bracon rugosiventris* p. 617, VIERECK T.c.

Binarea calida sp. n. p. 209 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Bracon schmidtii p. 2, *vigilax* p. 3, spp. n., Gouv. Elisabethpol, KOKUJEV Mitt. Kaukas. Mus. 7 1.—*B. discoideus* Entwicklung, Parasitismus in *Rhynchites pauxillus* (Russ.), YANATA Simferopoli Trd. jest. muz. 1 pp. 72-74.—*B. pachyceri* sp. n. p. 219, QUINTARET Bull. Soc. Linn. Marseille 4.—*B. australicus*, *pilitarsis*, *levisulcatus*, N.S.W., spp. n., CAMERON Proc. Linn. Soc. N.S. Wales 37 pp. 193-4.—*B. paraensis* p. 212 f. 11, *crassitarsis* p. 213 f. 4, *thalesiformis* p. 215, spp. n., Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Braunsia nigriceps p. 378, *fulvicollis* p. 379, spp. n., Congo, CAMERON Ann. Soc. ent. Belgique 56.

Bucculatriplex gen. n. type *Bracon bucculatricis* p. 577, VIERECK Proc. U.S. Nation. Mus. 43.

Cantharoctonus gen. n., *stramineus* sp. n. Peru p. 617, VIERECK Proc. U.S. Nation. Mus. 42.

Cardiochiles szepligetii n.n. für *testaceus* Szepl. 1902, ENDERLEIN p. 262 Ent. Mitt. Berlin 1.—*C. bifoveatus* sp. n. Congo, CAMERON p. 380 Ann. Soc. ent. Belgique 56.

Cenocoelius tricolor sp. n. p. 208 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Centistina gen. n. *Liophroninae*, *longicornis* sp. n. Madagaskar, ENDERLEIN p. 40 Arch. Naturges. 78 A.

Chelonorhogis gen. n., *rufithorax* sp. n. Formosa, ENDERLEIN p. 258 Ent. Mitt. Berlin 1.

Chelonus salebrosus sp. n. Sumatra and Ceylon, ENDELREIN p. 97 Arch. Naturges. 78A.—*C. szepligetii* nom. n. for *C. sobrinus* Szep. p. 620, *C. (Chelonella) buscki* Trinidad, *ruficollis* Brazil, p. 618, *townsendi* Peru p. 619, *C. (Chelonus) chilensis* Chile, *gossypii* Brazil, p. 620, spp. n., VIERECK Proc. U.S. Nation. Mus. 42.—*C. busckiella* sp. n. Trinidad p. 578, VIERECK Proc. U.S. Nation. Mus. 43.—*C. brasiliensis* sp. n. p. 206 Brazil, BRUES Ann. Ent. Soc. Amer. 5.—*C. texanus*, PIERCE & HOLLOWAY, J. Econ. Ent. 5 pp. 425-428.

Chremylus concinnus sp. n. Formosa, ENDERLEIN p. 23 Arch. Naturges. 78A.

Cynodobracon gen. n., *carinifrons* sp. n. Borneo, CAMERON pp. 77-78 Soc. entom. 27.

Coelodontus gen. n. nahe *Iphiaulax costator* Thunb. sp. n. Caput bonæ spei, ROMAN Zool. Beitrage aus Uppsala 1 p. 246 pl. vi f. 5 textf. 3.

Cyanopterus depressi Trinidad p. 620, *peculiaris* Paraguay, *steirastomae* Trinidad, p. 621, spp. n., VIERECK Proc. U.S. Nation. Mus. 42.

Dendrosoter camerunus sp. n. Kamerun, ENDERLEIN p. 36 Arch. Naturges. 78A.

Digonogastra gen. n. type *Bracon epicus* p. 621, VIERECK Proc. U.S. Nation. Mus. 42.

Doryctes solo sp. n. Ceylon, ENDERLEIN p. 27 Arch. Naturges. 78A.

Doryctophasmus gen. n. *Stephanscinæ*, *ferrugineiceps* sp. n. Neu Guinea, ENDERLEIN p. 18 T.c.

Ectetamenochir gen. n. *Doryctinae*, *crinicornis* sp. n. Amazonas, ENDERLEIN pp. 33-34 T.c.

Eiolo gen. n. *Macrocentrinæ* p. 370, *curvinervis* sp. n. Congo p. 372, CAMERON Ann. Soc. ent. Belgique 56.

Eubadizon nigripennis sp. n. Deutschl., DAHL p. 553, Beitr. Naturdenkmalpfl. 3.—*E. sumatranum* Sumatra, *westermanni* W.-Afr. p. 38, *columbianum* Colombia, *tibiale* Brit. Honduras, p. 39, spp. n., ENDERLEIN Arch. Naturges.

78A.—*E. lithocolletidis* sp. n. Massachusetts p. 622, VIERECK Proc. U.S. Nation. Mus. 42.

Eucystomastax gen. n., *bicolor* sp. n. p. 223 ff. 2 & 6 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Eutrichopsis agromyzae sp. n. Indiana p. 622, VIERECK Proc. U.S. Nation. Mus. 42.

Exobracon rufus sp. n. Congo, CAMERON p. 371 Ann. Soc. ent. Belgique 56.

Foenatopus flavicollis p. 359, *piceicornis* p. 360, spp. n., Congo, CAMERON Ann. Soc. ent. Belgique 56.

Gyrocampa pospelovi sp. u. Kiev., KURDĪMNOV Rev. russ. ent. 12 p. 228.

Habrobacon johannseni Maine p. 622, *tetralophae* Indiana p. 623, spp. n., VIERECK Proc. U.S. Nation. Mus. 42.

Helcon castaneae sp. n. North Carolina p. 623, VIERECK T.c.

Helorimorpha brasiliensis sp. n. p. 204 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Heterospilus fasciventris p. 224, *meridionalis* p. 225, *dubitatus* p. 226, spp. n., Brazil, BRUES T.c.

Hopitalysis muelleri sp. n. Brasilia, SCHULZ p. 74 Zool. Anz. 39.

Hormicllus gen. n. near *Hormius*, *solocipes* sp. n. Formosa, ENDERLEIN p. 20 Arch. Naturges. 78A.

Hormiopterus sulciventris sp. n. Formosa, ENDERLEIN p. 24 T.c.

Idiasta nigripennis sp. n. p. 227 f. 3 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Iphiaulax reducioides p. 216, *fortis* p. 217, *starksi* p. 218, *carapunae* p. 219, *abunensis* p. 220, spp. n., Brazil, BRUES Ann. Ent. Soc. Amer. 5.—*I. vierecki* n.n. für *braconiformis* Strand 1911, STRAND p. 291 Internat. ent. Zeitschr. 5.—*I. rufolineatus* p. 362, *lukombensis* p. 363, *maynei* p. 364, *sexfasciatus*, *congoensis*, p. 365, *dimaensis*, *kolleri*, p. 366, *tincticanaliculatus* p. 367, *stanleyi* p. 368, spp. n., Congo CAMERON Ann. Soc. ent. Belgique 56.—*I. rubri-caudis* p. 32, *butonensis* p. 33, *kinabaluensis* p. 34, *ancyloneurus*, *waterstradti* p. 35, *martini* p. 36, *distincticarinatus* p. 37, *curvicaniculatus* p. 38, *abjectus* p. 39, *micholitzii* p. 40, *militaris* p. 41, *patunungensis* p. 42, *rubritinctus* p. 43.

faberi, *peinanensis* p. 41, *sibalangitensis* p. 45, Ind. Archipel., *marginifoveatus* p. 39 Nen. Guinea, *luzonensis* p. 41 Luzon, *rotundicanaliculatus*, *pallidiceps*, p. 46, *dissolutus* p. 47, *de haani*, *basiplagiatus*, p. 48, *cnemophilus* p. 51, *melanospilus*, *ornatiscapus*, p. 52, *intactus*, *sambalunensis*, p. 53, *sapitensis*, *corruscator*, p. 54, *javanicola* p. 55, Ind. Archipel., *kuehnii*, *deliensis*, p. 56, *clavimaculatus* p. 57, *grabowskyi*, *levissimus*, p. 58, *obiensis*, *trichionotus*, p. 59, *margininervis* p. 60, *lunduensis*, *megalophthalmus*, p. 61, *atriornatus*, *electus*, p. 62, *distinctisulcatus*, *lactefasciatus*, p. 63, *allopterus* p. 64, *sarikensis* p. 65, *javanicus* p. 66, ind. Archipel., *pallidiorbitalis* p. 65 Luzon, *maculinervis* p. 67, *malaccaensis* p. 69, Malacca, *syraënsis* p. 67, *fortisulcatus* p. 68, *ehrenbergi* p. 70, Syria, spp. n., STRAND Arch. Naturges. 78A.

Lecythodella gen. n. *Euphorinae*, *garleppi* sp. n. Peru, ENDERLEIN p. 41 Arch. Naturges. 78A.

Leluthinus gen. n. near *Heterogamus*, *lividus* sp. n. Sumatra, pp. 96-97, ENDERLEIN Arch. Naturges. 78A.

Liobracon partitus sp. n. Brasilia, ENDERLEIN p. 33 T.c.

Lorenzoa gen. n. near *Toxares*, *solani* sp. n. Eritrea, DE STEFANI PEREZ Marcellia 8 1909 pp. 15-16.

Macrocentrus collaris Parasit von *Agrotis*, POSPELOV Věstn. sacharn. promyšl. 13 p. 160 figs. 3 & 4.—*M. ceylonicus* sp. n. Ceylon, ENDERLEIN p. 99 Arch. Naturges. 78A.—*M. cerasivoranae* sp. n. New York p. 623, VIERECK Proc. U.S. Nation. Mus. 42.—*M. amicroploides* sp. n. New York p. 579, VIERECK Proc. U.S. Nation. Mus. 43.

Meteorus versicolor, biology, SCHEIDTER Natw. Zeitschr. Landw. 10 pp. 300-315.—*M. vexator*, ♂, MORLEY p. 4 Entomologist 45.—*M. arctiicida* India p. 141, *trachynotus* Quebec p. 142, spp. n., VIERECK Proc. U.S. Nation. Mus. 42.—*M. nipponensis* sp. n. Japan p. 624, VIERECK T.c.—*M. archipsidis* sp. n. New York p. 580, VIERECK Proc. U.S. Nation. Mus. 43.

Microbracon hystopi Washington p. 142, *psilocorsi* Texas p. 143, spp. n., VIERECK Proc. U. S. Nation. Mus. 42.—*M. vestitocida* sp. n. Peru p. 624, VIERECK T.c.

Microgaster glomeratus, natural history, CODINA Bol. Soc. Aragon. 10 1911 pp. 109-113.—*Microgaster*; Entwicklung aus der Puppe von *Pieris*, REUM Ent. Zs. Frankfurt 26 pp. 77-78.

Mirax brasiliensis sp. n. p. 205 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Monarea longicornis sp. n. p. 35 Brasilia, *M. fasciipennis* var. n. *nigriceps* p. 34, ENDERLEIN Arch. Naturges. 78 A.

Monogonogastra gen. n. type *Bracon atripectus* p. 625, VIERECK Proc. U. S. Nation. Mus. 42.

Myersia gen. n. *Myersiidae* fam. n. p. 575, *laminata* sp. n. Maryland p. 576, VIERECK Proc. U. S. Nation. Mus. 43.

Neotrimorus bicolor Formosa, *baculiger* Kamerun, spp. n., ENDERLEIN p. 29 Arch. Naturges. 78 A.

Odontofornica gen. n., *arata* sp. n. Formosa, ENDERLEIN pp. 260 & 261 Ent. Mitt. Berlin 1.

Ogmophasmus gen. n. *Stephaniscinae*, *flaviceps* sp. n. Kamerun, ENDERLEIN p. 13 Arch. Naturges. 78 A.

Opius maculipennis sp. n. Formosa, ENDERLEIN p. 262 Ent. Mitt. Berlin 1.—*O. euthyrrhimi* sp. n. N.S.W., CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 197.

Parabinarea gen. n. p. 210, *manni* sp. n. p. 211 f. 5 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Parapambolus gen. n. *rufigaster* sp. n. Deutschl., DAHL p. 555 Beitr. Naturdenkmalpfl. 3.

Pachythecus gen. n., *ruficeps*, *testaceus*, *albo-balteatus*, spp. n., Borneo, CAMERON pp. 84-85 Soc. entom. 27.

Pedinotus columbianus sp. n. Columbia, ENDERLEIN p. 28 Arch. Naturges. 78 A.

Perilitus epitricis sp. n. Tennessee p. 625, VIERECK Proc. U. S. Nation. Mus. 42.

Phanerotoma flavida sp. n. Formosa, ENDERLEIN p. 259 Ent. Mitt. Berlin 1.—*P. trivittata* sp. n. p. 207 Brazil, BRUES Ann. Ent. Soc. Amer. 5.

Plesiosphaeropyx gen. n. p. 82, *albi-palpis* sp. n. p. 84 Borneo, CAMERON Soc. entom. 27.

Prosthiacantha gen. n. *Doryctinae*,
harpactorina sp. n. Brasilia, ENDERLEIN
p. 24-25 Arch. Naturges 78 A.

Psenobolus columbianus p. 6, *sculptu-*
ratus p. 7 Columbia, *leucacrocera*,
p. 8 Brasilia, spp. n., ENDERLEIN T.o.

Psilormiscus gen. n. near *Cardio-*
chiles, *sumatranus* sp. n. Sumatra,
ENDERLEIN p. 98 T.o.

Rhogas crassipalpus, *ceylonicus* p. 94
breviventris p. 95, *tricolor* p. 96, spp. n.
Ceylon, ENDERLEIN T.o.—*R. carini-*
ventris sp. n. Formosa, ENDERLEIN
p. 257 Ent. Mitt. Berlin 1.—*R. insignipes*
p. 221 *bakeri* p. 222. spp. n., Brazil,
BRUES Ann. Ent. Soc. Amer. 5.—
R. laphygrae sp. n. Texas p. 581,
VIERECK Proc. U. S. Nation. Mus. 43.

Rhopalospathius gen. n. *Spathiinae*
p. 368, *auranteiceps* p. 369, *erythro-*
thorax p. 371, spp. n., Congo, CAMERON
Ann. Soc. ent. Belgique 56.

Rinamba gen. n. *Helconinae*, *opaci-*
collis sp. n. Congo, CAMERON p. 375
T.o.

Sesicctonus gen. n., *parathyridis* sp. n.
Panama p. 1, VIERECK Smithsonian
Inst. Misc. Collect. 59 No. 5 (Pub.
2080) p. 1.

Spathiohormius gen. n. near *Hormius*,
ornatulus, p. 21 Formosa, *flicornis*
p. 22 Ceylon, spp. n., ENDERLEIN Arch.
Naturges. 78 A.

Spathius pellitus, *solox*, spp. n.
Sumatra, ENDERLEIN p. 5 Arch.
Naturges. 78 A.—*S. brunneri* sp. n.
Montana p. 627, VIERECK Proc. U. S.
Nation. Mus. 42.

Stenophasmus sumatranus p. 9,
obesus, Sumatra, *imbecillus* Borneo,
p. 10, *annuliventris* p. 11, *mimeticus*
p. 12, Formosa spp. n., ENDERLEIN
Arch. Naturges. 78 A.

Stephanus xanthocephalus sp. n. Congo,
CAMERON p. 358 Ann. Soc. ent.
Belgique 56.—*S. hornianus* sp. n.
Ceylon, ENDERLEIN p. 390 Ent. Mitt. 1.

Stirobracon ruficornis sp. n. Borneo,
CAMERON p. 85 Soc. entom. 27.

Stirostoma gen. n. *Cyclostomi*, *longi-*
cornis sp. n. Congo, CAMERON p. 376
Ann. Soc. ent. Belgique 56.

Synaldis incisa sp. n. Kansas p. 4,
GAHAN Proc. Ent. Soc. Washington 14.

Tebennotoma gen. n. *Doryctinae*,
calvata sp. n. Madagascar, ENDERLEIN
pp. 36-37 Arch. Naturges. 78 A.

Thaumatotypidea gen. n. type *Crem-*
nodes tuberculatus p. 577, VIERECK
Proc. U. S. Nation. Mus. 43.

Triaspis spp. n., *pissodis* Montana p.
628, *vestitica* with *v. minutissimus*
var. n. Peru p. 629, VIERECK Proc.
U. S. Nation. Mus. 42.

Trigonophasmus gen. n. *Stephanis-*
cinae, *schenklingi* sp. n. Peru, ENDER-
LEIN pp. 14-15 Arch. Naturges. 78 A.

Tripteria gen. n. *Doryctinae*, *crini-*
cauda sp. n. Brasilia, ENDERLEIN p. 26
T.o.

Vipio (Pseudovipio) andrieui sp. n.
Africa p. 153 fig., VUILLET *Insecta* 2.

Xanthromicrodus pallidinervis sp. n.
Congo, CAMERON p. 379 Ann. Soc. ent.
Belgique 56.

Zamicrodus gen. n., *sensilis* sp. n.
Brazil p. 630, VIERECK Proc. U. S.
Nation. Mus. 42.

Zelomorpha (Zelomorphidea) melanota
sp. n. Paraguay p. 630, VIERECK T.o.

Zelomorphidea subgen. n. vide *Zelo-*
morpha.

Zombrus flaviceps p. 373, *melan-*
opterus, *tuberculatus*, *erythro-*
stomus, p. 374, spp. n., Congo, CAMERON Ann.
Soc. ent. Belgique 56.

EVANIIDAE.

Evaniidae, KIEFFER Das Tierreich
30 pp. xix + 431.

Bemerkungen über Kieffer's Bearb.
der Evaniiden im. „Tierreich“. STRAND
Arch. Natg. Berlin 78 Abt. A H. 6 1912
pp. 24-75.

Aulacus esenbecki = *A. gibbator*
Thunb., ROMAN Zool. Beiträge aus
Uppsala 1 p. 258.—*A. westwoodi* n.n.
für *rufitarsis* Westw., KIEFFER p. 375
Tierreich 30.

Brachygaster minuta subsp. n.,
schletterei n.n., KIEFFER p. 35 T.o.

Evania rimiscutellata sp. n. Kamerun,
ENDERLEIN p. 389 Ent. Mitt. 1.—*E.*
postfurcalis p. 24 Formosa, *oculata*
p. 25 Sumatra, *boliviana* p. 26 Bolivia,
spp. n., STRAND Arch. Naturges. 78 A.—
E. cameroniana n.n. für *cameroni*
Bradley p. 145, *oreas* n.n. für *crassi-*

cornis Kieffer p. 152, KIEFFER Tierreich 30.

Gasteruption ignoratum n. n. für *Foenus terrestris* Perrin p. 248, *abeillei* n.n. für *Foenus affectator* Perrin, KIEFFER p. 251 T.c.—*G. affectator* and *longigena*, KOHL Verh. z.-b. Ges. Wien 62 pp. 57–63.

Pristaulacus comptipennis p. 265, *rufipes*, *kiefferi*, p. 266, spp. n., Formosa, ENDERLEIN Ent. Mitt. Berlin 1.—*P. flavopictus* n.n. für *flavoguttatus* Cameron. KIEFFER p. 406 Tierreich 30.

Pseudofoenus ceylonensis sp. n. Ceylon, ENDERLEIN p. 388 Ent. Mitt. 1.

Tetraulacinus rufobalteatus subsp. n. *leviceps*, KIEFFER p. 364 Tierreich 30.

TRIGONALIDAE.

Lycogastroides gen. n., *gracilicornis* sp. n. Span.-Guinea, STRAND p. 129 Mitt. Mus. Berlin 6.

Lycogastrula gen. n., *micanticeps* sp. n. W.-Africa, STRAND p. 130 T.c.

Stygnogonaloides gen. n., *crassiceps* sp. n. Span.-Guinea, STRAND p. 128 T.c.

Xanthogonalos fasciatus sp. n. Paraguay, BERTONI An. Mus. Buenos Aires 22 p. 102.

CHALCIDIDAE.

Trichogrammatidae; Tables of the subfamilies and genera and revised catalogue, GIRAULT Bull. Wisconsin Soc. 10 pp. 81–100.

On the identity of the most common species of the family *Trichogrammatidae*, GIRAULT Bull. Wisconsin Soc. 9 pp. 135–165.

Abbella xanthogaster sp. n. Queensland, GIRAULT Mem. Mus. Queensland 1 p. 69.

Agromyzaphagus gen. n. p. 6, *detrimentosus* sp. n. Maryland p. 7, GAHAN Proc. Ent. Soc. Washington 14.

Anacryptus ferrugineus sp. n. N.S.W., CAMERON Proc. Linn. Soc. N. S. Wales 36 p. 642.

Anastatus vuillei French Soudan, p. 5, *colemanni* India p. 6, spp. n., CRAWFORD Proc. U. S. Nation. Mus. 42.

Anisopteromalus gen. n. ex aff. *Pseudocatolaccus*, *mollis* sp. n. Nieder-

Oesterreich, RUSCHKA Verh. z.-b. Ges. Wien. 62 pp. (238)–(246).

Anthrocephalus marginiceps, *erythro-gaster*, *carpocapsæ*, *spilogaster*, N.S.W., spp. n., CAMERON Proc. Linn. Soc. N. S. Wales 36 pp. 639–641.—*A. pomonellæ* sp. n. N.S.W.; CAMERON op. cit. 37 p. 200.

Aphelinoidea howardii p. 104, *speciosissima* p. 105, *weismanni*, *huxleyi*, p. 107, *painei* p. 108, spp. n., Queensland, GIRAULT Mem. Mus. Queensland 1.—*A. plutella* sp. n. Illinois p. 297, GIRAULT Ent. News. 23.

Aphelinus chryscmphali sp. n. Spain, MERCET p. 135 Bol. Soc. espan. 12.—*A. spp.*, GIRAULT Ent. News 23 pp. 82–83.

Aphicus nitens sp. n. aus *Eriococcus greeni* Poltava, KURDIUMOV Rev. russ. ent. 12 p. 834 f. 7.

Arressida annulicornis sp. n. N.S.W., CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 207.

Astichus bimaculatipennis sp. n. Iowa, GIRAULT p. 8 Canad. Ent. 44.

Bactrochalcis gen. n. p. 463, *reticulata* sp. n. Cameroons p. 464, KIEFFER Ann. Soc. ent. France 80.

Blastophaga grossorum, habits, RIXFORD J. Econ. Ent. 5 pp. 349–355.

Brachistella bicolor sp. n. Queensland, GIRAULT Mem. Mus. Queensland 1 p. 68.

Brachygramma gen. n. *Trichogrammatidae* p. 86, *biclavatum* sp. n. Queensland p. 87, GIRAULT T.c.

Callimone acaciæ sp. n. N.S.W., CAMERON Proc. Linn. Soc. N. S. Wales 36 p. 643.—*C. graminis*, *reticulatus*, spp. n., N.S.W., CAMERON op. cit. 37 pp. 209–10.

Catolaccus ater sp. n. aus *Apanteles glomeratus* Charkov, KURDIUMOV Rev. russ. ent. 12 p. 232 f. 2.—*C. townsendi* sp. n. Peru p. 172, CRAWFORD Proc. U. S. Nation. Mus. 43.

Cecidostiba burkei Washington p. 170, *ashmeadi* West Virginia p. 170, *thomsoni* Montana p. 171, spp. n., CRAWFORD Proc. U. S. Nation. Mus. 43.

Centrobiella gen. n. *Trichogrammatidae*, *mulierum* sp. n. Queensland p. 91, GIRAULT Mem. Mus. Queensland 1.

- Cerambycobius townsendi* p. 166, *peruvianus* p. 167, spp. n., Peru, CRAWFORD Proc. U. S. Nation. Mus. 43.
- Chalcis froggatti, fromonae*, N.S.W., spp. n., CAMERON Proc. Linn. Soc. N. S. Wales 36 p. 636-7.—*C. tegularis* sp. n. Sydney, CAMERON op. cit. 37 p. 199.
- Chalcitella piceiventris* sp. n. N.S.W., CAMERON op. cit. 36 p. 642.
- Cheiloneurus javanus* sp. n. Java p. 17, PERKINS Hawaiian Sug. Pl. Ass. Exp. Sta. Ent. Ser. Bull. No. 11.
- Cheipachus brunneri* sp. n. Montana p. 165, CRAWFORD Proc. U. S. Nation. Mus. 43.
- Chromeurytoma* gen. n., *clavicornis* sp. n. N.S.W., CAMERON Proc. Linn. Soc. N. S. Wales 36 p. 649.
- Chrysocharis parksi* p. 173, *ainsliei* p. 174, spp. n., Utah, CRAWFORD Proc. U. S. Nation. Mus. 43.
- Closterocerus*; Synopsis der Arten p. 235, *ovulorum* aus *Cassida nebulosa* Charkov, p. 235 f. 4, KURDIUMOV Rev. russ. ent. 12.—*C. javanus* sp. n. Java p. 15, PERKINS Exp. Sta. Hawaiian Sug. Pl. Ass. Ent. Bull. 10.—*C. utahensis* Utah p. 175, *winnemanae* Maryland p. 176, spp. n., CRAWFORD Proc. U. S. Nation. Mus. 43.
- Cluthaira* gen. n., *agaristae* sp. n. Sydney, CAMERON Proc. Linn. Soc. N. S. Wales 37 pp. 211-212.
- Coccidoctonus* gen. n. p. 167, *trinidadensis* Trinidad p. 168, CRAWFORD Proc. U. S. Nation. Mus. 43.
- Comedo koebelei* California, *anomocerus*, p. 187, *hookeri*, Virginia p. 188, spp. n., CRAWFORD Proc. U. S. Nation. Mus. 43.
- Courtella* gen. n. p. 464, *hamifera* sp. n. Togo p. 466, KIEFFER Ann. Soc. ent. France 80.
- Cratodecatoma* gen. n., *ruficeps* sp. n. N.S.W., CAMERON Proc. Linn. Soc. N.S.W. 37 pp. 205-6.
- Decatomia kelloggi* p. 278, *doanei* p. 279, *gracilis* p. 280, spp. n., California, FULLAWAY J. New York Ent. Soc. 20.
- Derostenus punctiventris* Utah, *picipes* Colorado, spp. n., p. 180, CRAWFORD Proc. U. S. Nation. Mus. 43.
- Diaulinopsis* gen. n. p. 182, *calli-chroma* sp. n. Arizona p. 183, CRAWFORD Proc. U. S. Nation. Mus. 43.
- Diaulinus pulchripes* Illinois, *websteri* Arizona, spp. n., p. 184, CRAWFORD T.C.
- Dicopus citri* sp. n. Spain, MERCET p. 335 Bol. Soc. españ. 12.
- Dirrhinoidea* gen. n. near *Dirhinus*, *maculata* sp. n. Paraguay, GIRAULT p. 165 Arch. Naturges. 78 A 9.
- Ditropinotus flavicoxus* sp. n. Maryland p. 5, GAHAN Proc. Ent. Soc. Washington 14.
- Echthrogonatopus hawaiiensis* sp. n. Hawaiian Is., p. 17, PERKINS Hawaiian Sug. Pl. Ass. Exp. Sta. Ent. Ser. Bull. No. 11.
- Elachertoidea* gen. n., *Eulophidae*, *bifasciatipennis* sp. n. Paraguay, GIRAULT p. 176 Arch. Naturges 78 A 9.
- Elachertus johannseni* Maine p. 181, *benefactor* New York p. 182, spp. n., CRAWFORD Proc. U. S. Nation. Mus. 43.
- Elasmus serenus* p. 176, *australiensis* p. 177, *insularis* p. 178, *formosus*, *aquila*, p. 179, *vicinus* p. 180, *cyaneicoxa*, *impudens*, p. 181, *minor*, *nigriscutellum* p. 182, *speciosissimus* p. 183, *splendidus* p. 184, *cyaneus* p. 185, *flavipostscutellum* p. 186, *quingilliensis* p. 187, spp. n., Australia, GIRAULT Mem. Mus. Queensland 1.
- Encyrtus subapterus* p. 332 f. 4 & 5, *breviventris* p. 333 f. 6, spp. n., aus *Eriococcus greeni* Poltava, KURDIUMOV Rev. russ. ent. 12.—*E. sericophilus* sp. n. p. 1182, CONTE C.R. Ac. Paris 154.
- Epistenia americana* p. 172, *gemmata* p. 173, spp. n., Paraguay GIRAULT Arch. Naturges. 78 A9.
- Eunotus acuitus* sp. n. p. 330 f. 1 aus *Eriococcus greeni* Poltava, KURDIUMOV Rev. russ. ent. 12.
- Eupelmus annulatus*, Parasit der *Bracon discoideus* (Russ.), JANATA Simferopolj Trd. jest. muz. 1 p. 76.—*E. testaceiventris* sp. n. N. S. Wales, CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 212.
- Euplectrus nyctemeræ* sp. n. India p. 9, CRAWFORD Proc. U. S. Nation. Mus. 42.

Eurytoma gibba, Schädling (Russ.), KURDIUMOV Mess. entomol. Kiev. 1 pp. 86-88 f. 1.—*Eurytoma brachyscelidis* Vict., *clelandi* W.A., spp. n., CAMERON Proc. Linn. Soc. N. S. Wales 36 pp. 647-3.—*E. tasmanica* sp. n. Launceston, CAMERON op. cit. 37 p. 203.—*E. incerta* p. 277, *querci* p. 278, spp. n., California, FULLAWAY J. New York Ent. Soc. 20.—*E. piuræ* sp. n. Peru p. 164, CRAWFORD Proc. U. S. Nation. Mus. 43.

Eustypiura rodriguezii sp. n. Guatemala p. 319, COCKERELL Ent. News. 23.

Glyphotoma gen. n., *albitarsis* sp. n. Borneo, CAMERON pp. 63-34 Soc. entom. 27.

Habrocyrtus microgastris sp. n. aus *Apanteles* Charkov, KURDIUMOV Rev. russ. ent. 12 p. 231.—*H. poecilopus*, Flugzeit, Parasit. der ersten Generation von *Bracon discoideus* (Russ.), JANATA Simferopoli Trd. jest. muz. 1.

Haeckeliania gen. n. *Trichogrammatidae* p. 97, *haeckeli* sp. n. Queensland p. 98, GIRAULT Mem. Mus. Queensland 1.

Horismenus urichi sp. n. Mexico p. 176, CRAWFORD Proc. U. S. Nation. Mus. 43.—*H. macrogaster* sp. n. Paraguay, GIRAULT p. 175 Arch. Naturges. 78 A 9.

Hydrophylax gen. n., *aquivolans* sp. n. New York p. 65 f. 1, MATHESON and CROSBY Ann. Ent. Soc. Amer. 5.

Hypopteromalus; reconstruction, GIRAULT Bull. Wisconsin Soc. 10 pp. 24-46 ff. 1-3.

Ixidiphagus caucurtei sp. n. p. 246 fig. 1, DU BUYSSON Arch. Parasit. 15.

Japania tristis sp. n. Queensland, GIRAULT Mem. Mus. Queensland 1 p. 74.

Jassidophthora gen. n. p. 17, *prima* sp. n. Mexico p. 18, PERKINS Exp. Sta. Hawaiian Sug. Pl. Ass. Ent. Bull. 10.

Lamprotatus alpestris sp. n. Steiermark, RUSCHKA Verh. z.-b. Ges. Wien 62 pp. (238-246).

Lathromerella gen. n. *Trichogrammatidae* p. 93, *fasciata* sp. n. Queensland p. 94, GIRAULT Mem. Mus. Queensland 1.

Lathromeroidea gen. n. *Trichogrammatidae* p. 93, *nigra*, p. 94, *nigrella* p. 96, spp. n., Queensland, GIRAULT T.c.

(N-9210 j)

Lelaps paraguayensis p. 170, *pulchra* p. 171, spp. n., Paraguay, GIRAULT Arch. Naturges. 78 A 9.

Leucospis viridissima sp. n. Ceylon, ENDERLEIN p. 144 Ent. Mitt. 1.

Lisseurytoma gen. n., *violaceitincta* sp. n. N. S. Wales, CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 202.

Marlattella aleyrodesii sp. n. N.S.W., CAMERON p. 215 T.c.

Megastigmus sulcicollis N.S.W. sp. n., CAMERON Proc. Linn. Soc. N.S.W. 36 p. 644.—*M. spermotrophus*, ECKSTEIN D. Forstztg. 27 p. 569.

Melittobia australica sp. n. Queensland, GIRAULT Psyche 19 p. 203.

Metapelma albisquamulata sp. n. Ceylon, ENDERLEIN p. 147 Ent. Mitt. 1.

Metastigmus brevicaudis, Lebensweise (Russ.), PARČINSKIJ Trd. b. entom. 9 9 pp. 25-26 f. b.

Neobrachista gen. n. *Trichogrammatidae* p. 70, *fasciata* sp. n. Queensland p. 71, GIRAULT Mem. Mus. Queensland 1.

Neobrachistella gen. n. *Trichogrammatidae* p. 89, *maxima* sp. n. Queensland p. 90, GIRAULT T.c.

Neocentrobia gen. n. *Trichogrammatidae*, p. 91, *cara* sp. n. Queensland p. 92, GIRAULT T.c.

Neochrysocharis gen. n., near *Closterocerus immaculatus* aus *Oscinella frit*, p. 234 f. 3, *albipes* aus *Pimpla graminella*, spp. n., Poltava, KURDIUMOV Rev. russ. ent. 12.

Neotetrastichus gen. n., *mimus* sp. n. China, p. 14, PERKINS Exp. Sta. Hawaiian Sug. Pl. Ass. Ent. Bull. 10.

Notanisomorpha ainsliei sp. n. Colorado p. 185, CRAWFORD Proc. U. S. Nation. Mus. 43.

Oxyglypta rugosa sp. n. Nieder Oesterreich, RUSCHKA Verh. z.-b. Ges. Wien pp. 238-246.

Oligosita australiensis p. 75, *minima* p. 76, *pulchra* p. 77, *aurea*, *novisanguinea*, p. 79, *fasciatipennis* p. 80, *insularis* p. 81, *sacra*, *anima*, p. 83, *fuscipennis* p. 84, spp. n., Queensland, GIRAULT Mem. Mus. Queensland 1.

Oophthora semblidis, Lebensweise, Bau, Entwicklung, Utilisierung

d 34

(Russ.), RADECKIJ Naturfreund St. Peterburg 7 Beil. pp. 1-17 f. 1-8.

Ootetrastichus holochlorus p. 8, *basalis* p. 11, *pallidipes* p. 12, *metallicus* p. 13, Java Amboina, *tarsalis* p. 9, *homochromus* p. 12, *distinguendus* p. 12, *mairi* p. 10, China spp. n., PERKINS Exp. Sta. Hawaiian Sug. Pl. Ass. Ent. Bull. 10.

Ormyrus distinctus sp. n. p. 276 California, FULLAWAY J. New York Ent. Soc. 20.

Paraheydenia gen. n., *longicollis* sp. n. N.S.W., CAMERON Proc. Linn. Soc. N. S. Wales 36 pp. 653-4.

Paraoligosita bella, Parasit von *Trigonotylus ruficornis*, Eiablage, KURDIUMOV Poltava Trd. selisk.-choz. opytn. stancii 7 pp. 11-14.

Paratrichogramma gen. n., *cinderella*, p. 111, *fusca* p. 112, spp. n., Australia, GIRAULT Mem. Mus. Queensland 1.

Pentarthron carpocapsae, Polyphagie, Fortpflanzung, Schaden (Russ.), RADECKIJ Turkest. selisk. choz. 7 pp. 595-598; Dimorphismus, Wirtstiere (Russ.), RADECKIJ Sadovod 11 pp. 430-434.—*P. fasciatum* sp. n. Mexico p. 19, PERKINS Exp. Sta. Hawaiian Sug. Pl. Ass. Ent. Bull. 10.

Perilampus tasmanicus sp. n. Hobart, CAMERON Proc. Linn. Soc. N. S. Wales 36 p. 646.—*P. megalaspis* sp. n. Borneo, CAMERON p. 63 Soc. entom. 27.—*P. americanus* p. 166, *minutus* p. 167, *nigriviridis* p. 168, spp. n., Paraguay, GIRAULT Arch. Naturges. 78 A 9.—*P. hyalinus*, life and habits, SMITH U. S. Dept. Agric. Ent. Techn. 19 pt. 4, pp. 33-69 ff. 24-31.

Perissopterus zebra sp. n. aus *Eriococcus greeni* Poltava, KURDIUMOV Rev. russ. ent. 12 p. 334.

Pleurotropis foveolatus sp. n. India p. 7, CRAWFORD Proc. U. S. Nation. Mus. 42.—*Pleurotropis ashmeadi* nom. n. for *Asecodes albitarsis* Ashmead p. 178, *rugosithorax* sp. n. Utah p. 179, CRAWFORD op. cit. 43.

Podagrion greeni Ceylon p. 3 f. 1, *koebelei* Australia p. 4 f. 2, spp. n., CRAWFORD Proc. U. S. Nation. Mus. 42.—*P. spilopterion* sp. n. N. S. Wales, CAMERON Proc. Linn. Soc. N. S. Wales 36 p. 645.—*P. echthrus* sp. n. Mexico

p. 163 ff. 1 & 2, CRAWFORD Proc. U. S. Nation. Mus. 43.

Prospaltella berlesei, diffusione, BERLESE Boll. Soc. Agric. ital. 14 19 pp. fig.—*P. flicornis* sp. n. Spain, MERCET p. 150 Bol. Soc. españ. 12.—*P. leucaspidis* sp. n. Spain, MERCET p. 213 T.c.

Pseudogramma gen. n. *Trichogrammatidae* p. 88, *fasciatipenne* sp. n. Queensland p. 89, GIRAULT Mem. Mus. Queensland 1.

Psygmatochera gen. n. near *Schizaspidia*, *ceylonica* sp. n. Ceylon, ENDERLEIN p. 146 Ent. Mitt. 1.

Pteromalus nidulans Variabilität der Zahl der Mandibelzähne, KURDIUMOV Rev. russ. ent. 12 p. 228.—*P. pospelovi* aus *Agrilus hastulifer* sp. n. Kiev pp. 229, *tenuicornis* aus *Anthonomus pomorum*, Charkov, Beschreibung, KURDIUMOV Rev. russ. ent. 12.—*P. albitarsis* sp. n. Colonia eritrea, DE STEFANI PEREZ Marcellia 6 p. 52.—*P. stironotus* sp. n. N. S. W., CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 213.

Pterygogramma dubium p. 99, *semifuscipenne* p. 102, spp. n., Queensland, GIRAULT Mem. Mus. Queensland 1.

Rhopoideus fuscus sp. n. Canada, GIRAULT p. 5 Canad. Ent. 44.

Scutellista aenea sp. n. aus *Eriococcus greeni* Poltava, KURDIUMOV Rev. russ. ent. 12 p. 331 f. 2, 3.

Scymnophagus secundus sp. n. Uganda p. 172, CRAWFORD Proc. U. S. Nation. Mus. 43.

Sennia gen. n., *acaciae* sp. n. Colonia Eritrea, DE STEFANI PEREZ Marcellia 6 1907 pp. 52-53.

Solenotus phytomyzae sp. n. Steiermark, RUSCHKA Verh. z.-b. Ges. Wien 62 pp. (238-246).

Sphégigaster orobanchiae sp. n. aus *Phytomyza orobanchiae* Charkov, KURDIUMOV Rev. russ. ent. 12 p. 233.

Spintherus pulchripennis sp. n. Montana p. 168, CRAWFORD Proc. U. S. Nation. Mus. 43.

Stenomalus laetus sp. n. Galizien, RUSCHKA Verh. z.-b. Ges. Wien 62 pp. (238-246).

Stephanodes psecas sp. n. Illinois p. 41, GIRAULT J. New York Ent. Soc. 20 p. 40.

Sympiesis comperei sp. n. Philippine Is. p. 9, CRAWFORD Proc. U. S. Nation. Mus. 42.

Syntomaspis druparum, and *Ichn-nigricornis*, synonymy, CROSBY p. 365 Canad. Ent. 44.—*S. caerulea* sp. n. p. 275 California, FULLAWAY J. New York Ent. Soc. 20.—*S. aucupariae, druparum*, Entwicklung, Lebensweise (Russ.), PORČINSKIJ Trd. b. entom. 9 9 pp. 22–25 f. 2–5.

Tepperella gen. n., *maculiscutis* sp. n. S.A., CAMERON Proc. Linn. Soc. N. S. Wales 36 pp. 625–3.—*T. trilineata* sp. n. Tasm., CAMERON op. cit. 37 p. 204.

Tetrasmicra bicolor sp. n. Paraguay, GIRAULT p. 163 Arch. Naturges. 78 A 9.

Tetrastichus; Variabilität der Zahl der Wimpern auf der Marginelader p. 236 f. 5. *pospelovi* aus *Yponomeuta* und *Anthonomus* p. 237, *sokolowskii* aus *Apanteles* p. 238 f. 6, *coccinellae* aus *Coccinella* Poltova p. 239 f. 7, spp. n., *cassidorum* aus *Cassida* Beschreibung p. 240, KURDIUMOV Rev. russ. ent. 12.—*T. perissiae* sp. n., KURDIUMOV, Parasit von *Torymus abbreviatus* und *Dichelomyia rosarum*, Lebensweise, Eiablage (Russ.), JANATA Simferopolj Trd. jest. muz. 1 pp. 92–94.—*T. mokrzeckii* sp. n. Crimea, KURDIUMOV Bull. Soc. nat. Crimée 1 p. 144.—*T. pospelowi*, Flugzeit, Parasit des zweiten Generation von *Bracon discoideus* (Russ.), JANATA Simferopolj Trd. jest. muz. 1 pp. 75–76.—*T. gowdeyi* sp. n. Uganda p. 181, CRAWFORD Proc. U. S. Nation. Mus. 43.—*T. colemani, ophiusae*, p. 8, spp. n., India, CRAWFORD Proc. U. S. Nation. Mus. 42.—*T. pattersonae* p. 280, *standfordiensis* p. 281, spp. n., California, FULLAWAY J. New York Ent. Soc. 20.—*T. asparagi*, life-history, RUSSELL and JOHNSTON J. Econ. Ent 5 pp. 429–433.

Thaumateliana gen. n. near *Thaumatelia*, *bicolor* sp. n. Paraguay, GIRAULT pp. 160–161 Arch. Naturges. 78 A 9.

Thripoctenus russelli, life and habits, RUSSELL U. S. Dept. Agric. Ent. Techn. 23 Pt. 2, pp. 25–52 ff. 1–11.

Torymus abbreviatus, Parasitieren an *Dichelomyia rosarum*, Metamorphose, Generationen (Russ.), JANATA Simferopolj Trd. jest. muz. 1 pp. 86–91.

(N-9210 j)

Trichaporus aeneoviridis sp. n. Illinois, GIRAULT p. 75 Canad. Ent. 44.

Trichoglenes braconophagus sp. n. N.S.W., CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 214.

Trichogramma australicum sp. n. Queensland, GIRAULT Mem. Mus. Queensland 1 p. 109.—*T. minutum*, oviposition, HOLLOWAY Ent. News 23 p. 329.

Trichogrammatidae; synonymische Bemerkungen, KURDIUMOV Rev. russ. ent. 12 p. 283.

Trichogrammatoidea flava sp. n. Australia, GIRAULT Mem. Mus. Queensland 1 p. 113.

Trichohalticella gen. n., *pilosella* sp. n. N.S.W., CAMERON Proc. Linn. Soc. N. S. Wales 36 pp. 637–8.

Tumidiclava ciliata sp. n. Queensland, GIRAULT Mem. Mus. Queensland 1 p. 96.

Ufens piceipes p. 71, *flavipes* p. 72, *hercules* p. 73, spp. n., Queensland, GIRAULT T.c.

Uscana galtoni sp. n. Queensland, GIRAULT p. 103 T.c.

Westwoodella plebeia sp. n. Mexico p. 16, PERKINS Exp. Sta. Hawaiian Sug. Pl. Ass. Ent. Bull. 10.

Xantheurytoma gen. n., *flava* sp. n. N.S.W., CAMERON Proc. Linn. Soc. N. S. Wales 36 pp. 650–1.

MYMARIDAE.

Alaptus muelleri p. 122 West Australia, *newtoni* p. 125 Queensland, spp. n., GIRAULT Mem. Mus. Queensland 1.

Anagrus baeri sp. n. Australia, GIRAULT Mem. Mus. Queensland 1 p. 155.—*A. subfuscus*, MARTIN D. ent. Zs. 1912 pp. 595–598.

Anaphes wallacei p. 147, *kantii* p. 148, *painei* p. 149, *laplacei* p. 150, spp. n., Australia, GIRAULT Mem. Mus. Queensland 1.

Anaphoidea harveyi p. 151, *galtoni* p. 152, *linnaei* p. 153, spp. n., Australia, GIRAULT T.c.

Dicopus psyche sp. n. Fiji Is., GIRAULT Proc. Ent. Soc. Washington 14 p. 22.

d 34—2

Eomymar gen. n. p. 26, *muiri* sp. n. Java p. 27, PERKINS Exp. Sta. Hawaiian Sug. Pl. Ass. Ent. Bull. 10.

Gonatocerus baconi p. 129, *darwini* p. 130, *haeckeli* p. 131, *metchnikoffi* p. 132, *huxleyi* p. 134, *comptei* p. 135, *lamarcki* p. 138, *davinci* p. 138, *goethei* p. 139, *spinozai* p. 140, *brunoi*, *helmholtzii*, p. 142, *huyghensi* p. 143, spp. n., Australia, GIRAULT Mem. Mus. Queensland 1.—*G. mexicanus* p. 21, *koebeli* p. 22, *juvator* p. 23, spp. n., Mexico, PERKINS Exp. Sta. Hawaiian Sug. Pl. Ass. Ent. Bull. 10.

Leimacis lomonosoffi sp. n. Queensland, GIRAULT Mem. Mus. Queensland 1 p. 119.

Litus schleideni sp. n. Queensland, GIRAULT p. 127 T.c.

Mymar regalis sp. n. England, ENOCK p. cviii pl. A Proc. ent. Soc. London 1911.—*M. schwanni* p. 166, *tyndalli* p. 168, spp. n., Australia, GIRAULT Mem. Mus. Queensland 1.

Parvulinus gen. n. *Mymaridae* p. 332, *auranti* sp. n. Spain p. 333, MERCET Bol. Soc. españ. 12.

Polynema spenceri p. 171, *draperi* p. 172, *sieboldi* p. 173, *romanesi* p. 174, spp. n., Australia, GIRAULT Mem. Mus. Queensland 1.—*P. striaticorne regina* sp. n. British Columbia p. 24, GIRAULT Proc. Ent. Soc. Washington 14.—*P. giraulti* Mexico p. 24, *eucharis* Fiji p. 25, spp. n., PERKINS Exp. Sta. Hawaiian Sug. Pl. Ass. Ent. Bull. 10.

Stethynium daltoni p. 160, *mayeri* p. 161, *lavoisieri* p. 162, *cuvieri* p. 163, *vesalii* p. 164, spp. n., Australia, GIRAULT Mem. Mus. Queensland. 1.

PROCTOTRYPIDAE.

The genera of *Diapriidae* with lists of the species, KIEFFER Gen. ins. 124 75 pp. 2 pls.

Acantholapitha gen. n. p. 70, *nigricollis* sp. n. p. 74 Borneo, CAMERON Soc. entom. 27.

Aclista curvinervis sp. n. Norwegen, *norvegica* sp. n. Norwegen, KIEFFER Nyt Mag. Naturv. 50 p. 20.

Acoloides unicolor sp. n. Seychelles, KIEFFER p. 55 Tr. Linn. Soc. London 15.

Acolus sexarticulatus sp. n. Deutschl., DAHL p. 550 Beitr. Naturdenkmalpfl. 3.

—*A. zonatus, lucidiceps*, spp. n., Seychelles, KIEFFER p. 55 Tr. Linn. Soc. London 15.

Acropiesta xanthura sp. n. Deutschland, KIEFFER Nyt Mag. Naturv. 50 p. 19.

Amblyaspis norvegicus, strandi, spp. n. Norwegen, KIEFFER p. 35 T.c.—*A. flavosignatus* p. 78, *bifoveatus* p. 79, spp. n., Seychelles, KIEFFER Tr. Linn. Soc. London 15.

Anteon oriphilus sp. n. Seychelles, KIEFFER p. 47 Tr. Linn. Soc. London 15.

Apegusoneura gen. n., *striolatus* sp. n. Borneo, CAMERON pp. 69–70 Soc. entom. 27.

Ashmeadopria gen. n. for *Tropidopria* part, KIEFFER p. 59 Gen. Ins. 124.

Baeus curvatus sp. n. Seychelles p. 52, KIEFFER Tr. Linn. Soc. London 15.

Baryconus calopterus sp. n. Seychelles p. 64, KIEFFER T.c.

Basalys luteipes sp. n. Deutschland, KIEFFER Nyt Mag. Naturv. 50 p. 22.

Belyta norvegica Norwegen, *germanica* Deutschland, spp. n., KIEFFER pp. 18–19 T.c.—*B. exsul* sp. n. Seychelles, KIEFFER p. 74 Tr. Linn. Soc. London 15.

Calogalesus gen. n., *parvulus* sp. n. Seychelles, KIEFFER p. 73 T.c.

Calyozina gen. n., *ramicornis* sp. n. Formosa, ENDERLEIN p. 263 Ent. Mitt. Berlin 1.

Ceraphron saxatilis sp. n. Seychelles, KIEFFER p. 50 Tr. Linn. Soc. London 15.

Ceratobaeus insularis sp. n. Seychelles, KIEFFER p. 53 T.c.

Cinetus strandi sp. n. Deutschland, KIEFFER Nyt Mag. Naturv. 50 p. 21.

Conostigmus seychellensis sp. n., KIEFFER p. 50 Tr. Linn. Soc. London 15.

Diapria seychellensis pl. iii f. 13. *scotti* p. 72, *mahensis, saxatilis*, p. 73, spp. n., Seychelles, KIEFFER T.c.

Dicondylus perpolitus p. 14, *plebeius, javanus*, p. 15, spp. n. Java, PERKINS Hawaiian Sug. Pl. Ass. Exp. Sta. Ent. Ser. Bull. No. 11.

Dissomphalus excisicrus, saxatilis, spp. n., Seychelles, p. 49, KIEFFER Tr. Linn. Soc. London 15.

- Enneascelio* gen. n., *exaratus* sp. n. Seychelles, KIEFFER pl. ii f. 5 p. 59 T.c.
- Entomacis longicornis* p. 69, *curticornis* p. 70, spp. n., Seychelles, KIEFFER T.c.
- Epyris algoae* p. 460, *cafrarius*, *algaensis*, p. 461, spp. n., KIEFFER Ann. Soc. ent. France 80.
- Galesus cratocerus* sp. n. Borneo, CAMERON p. 69 Soc. entom. 27.
- Gonatopus kienitzi* sp. n. Deutschl., DAHL p. 553 Beitr. Naturdenkmalpfl. 3.—*G. anomala* sp. n. Fiji p. 14, PERKINS Hawaiian Sug. Pl. Ass. Exp. Sta. Ent. Ser. Bull. No. 11.—*G. silvestrii* sp. n. Patagonia, KIEFFER Boll. Lab. Portici 6 p. 174.
- Hadronotus saxatilis*, *festivus*, spp. n., Seychelles, p. 56, KIEFFER Tr. Linn. Soc. London 15.—*H. fulviventris* sp. n. India p. 2, CRAWFORD Proc. U. S. Nation. Mus. 42.
- Hemilexodes muscorum* sp. n. Deutschl., DAHL p. 551 Beitr. Naturdenkmalpfl. 3.
- Hemimorax* gen. n., *clavicornis* sp. n. Borneo, CAMERON p. 77 Soc. entom. 27.
- Holepyris algoensis* p. 456, *semiruber* p. 457 with var. *striatiplicura*, *capicola* p. 459, spp. n., Africa, KIEFFER Ann. Soc. ent. France 80.
- Hoplogryon perminutus*, *pedestris*, spp. n., Deutschl., DAHL p. 550 Beitr. Naturdenkmalpfl. 3.—*H. kansasensis* sp. n. Kansas p. 7, GAHAN Proc. Ent. Soc. Washington 14.
- Labeo saxetanus* sp. n. Seychelles, KIEFFER p. 46 Tr. Linn. Soc. London 15.
- Lamproteleia* gen. n., *fasciatipennis* pl. iii f. 9, *pulchripennis* p. 63, spp. n., Seychelles, KIEFFER T.c.
- Leptorhaptus heteropus*, *insulanus*, spp. n., Seychelles, p. 77, KIEFFER T.c.
- Loxotropa exsul*, *semirufa*, spp. n., Seychelles, p. 70, KIEFFER T.c.—*L. tricarinata* sp. n. Borneo, CAMERON p. 69 Soc. entom. 27.
- Macroteleia versicolor* pl. iii f. 7, *mahensis* p. 60, *flavigena* p. 61, spp. n., Seychelles, KIEFFER Tr. Linn. Soc. 15.
- Mesitius capensis* p. 455, *braunsi* p. 456, spp. n., S. Africa, KIEFFER Ann. Soc. ent. France 80.
- Mesodryinus mahensis* sp. n. Seychelles, KIEFFER p. 45 pl. ii figs. 1 & 2 Tr. Linn. Soc. London 15.
- Microgalesus* gen. n., *quadridens* sp. n. Seychelles, KIEFFER p. 74 T.c.
- Neuroteleia* gen. n., *rufa* pl. iii f. 8 p. 61, *heterocera* p. 62, spp. n., Seychelles KIEFFER T.c.
- Nomincia* gen. n. voisin de *Dicrogenium*, *africana* sp. n. p. 452, KIEFFER Ann. Soc. ent. France 80.
- Odontacolus* gen. n. near *Ceratobaeus*, *longiceps* sp. n. pl. ii f. 4 Seychelles p. 54, KIEFFER Tr. Linn. Soc. London 15.
- Oriscelio* gen. n., *seychellensis* sp. n. pl. ii f. 6, KIEFFER p. 58 T.c.
- Oxyglabis strandi* sp. n. Norwegen, KIEFFER Nyt Mag. Naturv. 50 p. 17.
- Pantoclis germanicus* sp. n. Deutschland, KIEFFER Nyt Mag. Naturv. 50 p. 21.—*P. insulanus*, *seychellensis*, p. 75, *scotti* p. 76, spp. n., Seychelles, KIEFFER Tr. Linn. Soc. London 15.
- Parabaeus* gen. n., *ruficornis* sp. n. pl. ii f. 3 Seychelles, KIEFFER p. 53 T.c.
- Parachista orciplana* sp. n. Norwegen, KIEFFER Nyt Mag. Naturv. 50 p. 18.
- Paradryinus terryi* China p. 10, *javanus* p. 11, *nudus* p. 12, *hospes*, Java, spp. n., PERKINS Hawaiian Sug. Pl. Ass. Exp. Sta. Ent. Ser. Bull. No. 11.
- Paranteris* gen. n. pl. iii f. 10 p. 65, *nigriclava*, *nigraticeps* pl. iii f. 10 p. 66, *flaviclava*, *nitidiceps*, *densiclava*, *striatigena*, p. 67, spp. n., Seychelles, KIEFFER Tr. Linn. Soc. London 15.
- Parasierola rostrata* sp. n. Seychelles, KIEFFER p. 47 T.c.
- Paratrimorus atriceps* sp. n. Seychelles p. 64, KIEFFER T.c.
- Pedinomma angustipennis* sp. n. Chile, KIEFFER Boll. Lab. Portici 6 p. 174.
- Planopriella* n. n. for *Planopria* K., KIEFFER p. 48 Gen. ins. 124.

Platygaster mahensis, seychellensis, spp. n., p. 79, Seychelles, KIEFFER Tr. Linn. Soc. London 15.

Polygnotus luctuosus sp. n. Deutschland, KIEFFER Nyt Mag. Naturv. 50 p. 36.

Pristobethylus semiserratus sp. n. p. 459, KIEFFER Ann. Soc. ent. France 80.

Pristocera crucifera, remota, pallidimanus, spp. n., Seychelles, KIEFFER p. 48 Tr. Linn. Soc. London 15.—*P. natalensis* sp. n., p. 454, KIEFFER Ann. Soc. ent. France 80.

Proctotrypes borneanus sp. n. Borneo, CAMERON p. 64 Soc. entom. 27.

Psiloteleia atra sp. n. Seychelles, KIEFFER p. 57 Tr. Linn. Soc. London 15.

Rhabdepyris capensis sp. n. p. 462, KIEFFER Ann. Soc. ent. France 80.

Rhopalopria gen. n., *vulgaris* sp. n. pl. iii f. 12, p. 71, Seychelles, KIEFFER Tr. Linn. Soc. London 15.

Schizopria gen. n., *fallax* pl. iii f. 11, p. 68, *flaviclava* p. 69, spp. n., Seychelles, KIEFFER T.c.

Scleroderma seychellensis sp. n., KIEFFER p. 50 T.c.

Telenomus seychellensis p. 51, *myrmidon, mahensis*, p. 52, spp. n., Seychelles, KIEFFER T.c.—*T. comperei* China p. 1, *colemani* India p. 2, spp. n., CRAWFORD Proc. U. S. Nation. Mus. 42.

Xenotoma insularis sp. n. Seychelles, KIEFFER p. 76 Tr. Linn. Soc. London 15.

CYNIPIDAE.

Les Cynipides et leurs galles d'après le cahier de notes du Dr. Jules Girard, HOUARD Nouv. Arch. Mus. Paris 3 pp. 199-341.

Ibaliiden, SCHULZ Soc. entomol. 27 p. 109.

Aegilips capensis sp. n. p. 450, KIEFFER Ann. Soc. ent. France 80.

Andricus pistillaris sp. n.; gallicola su *Quercus*, California, TROTTER Portici Boll. Lab. Zool. 5 pp. 117-118.

Aulax hypecoi sp. n. Tripolitania, TROTTER Marcellia 11 p. 214.—*A. papaveris*, biology &c., REIJNVAAN &

DOCTERS VAN LEEUWEN Marcellia 5 pp. 137-151 3 fig.

Callirhytis seminator, gall p. 465, GIRAULT Ent. News 23.

Coelonychia rufa sp. n. p. 451, KIEFFER Ann. Soc. ent. France 80.

Cynips fortii sp. n. Asia minore, TROTTER Marcellia 6 1907 p. 12 5 fig.—*C. trinacriae* sp. n. Sicilia, DE STEFANI PEREZ Marcellia 5 p. 127.—*C. kollari* und *lignicola* Unterschied, WANACH Berliner ent. Zs. 1912 SitzBer. p. 1.

Diastrophus nebulosus p. 466, *cutaeformis* p. 467, distribution, GIRAULT Ent. News 23; IVES J. Elisha Mitchell Soc. 26 p. 76.

Heptamerocera lonchaeae sp. n. N. S. Wales, CAMERON Proc. Linn. Soc. N. S. Wales 37 p. 199.

Myrtopsen gen. n., *mayri* sp. n. Brasile, RUEBSAAMEN Marcellia 6 1908 p. 136 2 fig.

Neuroterus saltatorius, gall, FELT J. New York Ent. Soc. 20 p. 293.

Rhodites kiefferi sp. n. p. 25, LOISELLE Feuille natural. 42.—*R. bicolor*, gall, p. 466, GIRAULT Ent. News 23.

Rhoptromeris widhalmi sp. n. aus *Oscinella frit*, KURDIUMOV Rev. russ. ent. 12 p. 223 f. 1.

Solenozopheria vaccinii, gall, p. 465, GIRAULT Ent. News 23.

Tessmannella gen. n., *spinosa* p. 303, *nigra* p. 304, spp. n., W.-Afr., HEDICKE D. ent. Zs. 1912.

Trichagalma gen. n., *drouardi* sp. n. Japan, MAYR Marcellia 6 1907 p. 3.

CHALASTOGASTRA OR HYMENOPTERA
PHYTOPHAGA.

Tenthrediniden Mitteleuropas, Allgemeines u. Systematik, n. varr., ENSLIN Deutsche ent. Zeitschr. 1912 Beiheft.

Chalastogastra aus Norwegen und Deutschland, STRAND Nyt Mag. Naturv. 50 pp. 29-34.

Die Tenthrediniden der Provinz Posen, MEYER Zs. D. Ges. Wiss. natw. Abt. 19 pp. 69-74.

Afrikanische Tenthrediniden, ENSLIN D. ent. Zs. pp. 224 350.

Chalastogastra of Boulder county, ROHWER Univ. Colo. Stud. 9 pp. 91-104

Quelques rectifications à propos des Tenthredines, LOISELLE Feuille natural. 42 pp. 65-67.

Afterraupen der Blattwespen (Schluss.), RUDOW Ent. Rdsch. 29 pp. 7-8 24 40 59-60 77-78 89-90.

Abia inflata, larva, FELT N. Y. St Mus. Bull. No. 155 p. 114.

Acordulecera antennata p. 246 f. 6a, *scutellata*, *foveata*, p. 247, *parva*, *erythrogastra*, *caryae*, p. 248, *nigrata*, *portiae*, p. 249, *nigritarsis*, *basirufa*, *flavipes*, p. 250, *quercus* p. 251, spp. n. N. America, ROHWER Proc. U. S. Nation. Mus. 43.

Acorduloceridea gen. n., *compressicornis* sp. n., p. 5, Panama, ROHWER Smithsonian Inst. Misc. Coll. 59 Pub. 2088.

Allantidea gen. n. type *Monophadnus bengalensis* p. 208, ROHWER Proc. U. S. Nation. Mus. 43.

Allantus albiventris subsp. n. *hostia*, ENSLIN p. 102 Arch. Naturges. 78 A.—*Allantus* and *Tenthredo*, characters of british, MORICE Ent. Mag. 43 pp. 151-159 &c.

Amauronematus knabi Saskatchewan p. 241, *procidentius* Pennsylvania p. 245, spp. n., ROHWER Proc. U. S. Nation. Mus. 43.

Ancepeptamena jacobsoni p. 107, *javana* p. 108, *abdominalis* p. 109, spp. n., Java, ENSLIN Tijdschr. Ent. 55.

Arge geei China p. 206, *salicis* Maryland p. 206, spp. n., ROHWER Proc. U. S. Nation. Mus. 43.

Athalia nigripes, *melanopoda*, spp. n. Kiwu-See, ENSLIN p. 55 Ergebn. Zentr.-Afrik. Exp. 4 L. 4.

Athlophorus jacobsoni p. 118, *javanus* p. 119, spp. n., Java, ENSLIN Tijdschr. Ent. 55.

Caliroa cerasi, WEBSTER Agric. Exp. Sta. Iowa Bull. 130 pp. 165-193 ff. 1-13; moults, WEBSTER J. New York Ent. Soc. 20 pp. 125-130.

Caloptilia nigrostoma sp. n. p. 1 Panama, ROHWER Smithsonian Inst. Misc. Coll. 59 Pub. 2088.

Caulocampus gen. n. type *Priophorus acericaulis* p. 239, ROHWER Proc. U. S. Nation. Mus. 43.

Cephaleia distincta, *criddlei*, p. 296, *jenseni* p. 297. spp. n., N. America, MACGILLIVRAY Canad. Ent. 44.

Chalinus purpureiventris sp. n. Congo, CAMERON p. 357 Ann. Soc. ent. Belgique 56.

Colposelandria gen. n. p. 110, *jacobsoni* sp. n. Java p. 117, ENSLIN Tijdschr. Ent. 55.

Craterocercus floridanus sp. n. Florida p. 238, ROHWER Proc. U. S. Nation. Mus. 43.

Dineuridea gen. n. type *Marlattia erythrothorax* p. 240, ROHWER T.c.

Diprion grandis sp. n. Nebraska p. 208, ROHWER T.c.

Dolerus palustris, Biologie, DE MEYERE Tijdschr. Ent. 55 p. 209.

Dulophanes flavipes sp. n. Ruwenzori, ENSLIN p. 54 Ergebn. Zentr.-Afrik. Exp. 4 L. 4.

Eriocampa ovata, ♂, ENSLIN Ent. Mitt. Berlin 1 p. 304.

Erythraspides rufonota sp. n. p. 2 Panama, ROHWER Smithsonian Inst. Misc. Coll. 59 Pub. 2088.

Euura serissimae p. 240, *nigrella* p. 241, spp. n., Ontario, ROHWER Proc. U. S. Nation. Mus. 43.

Heptamelus javanus sp. n. Java, ENSLIN Tijdschr. Ent. 55 p. 105.

Hoplocampa brevis, Lebensweise, Metamorphose, Schaden in der Krim (Russ.), ŠEGOLEV Simferopoli Trd. jest. muz. 1 pp. 37-62 2 pls.—*H. testudinea*, Lebensweise, Entwicklung (Russ.), PORČINSKIJ Trd. b. entom. 9 9 pp. 26-28 f. 7.—*H. cookei*, syn. *californica*, ROHWER Ent. News 23 p. 472.

Itycorsia angulata sp. n. U.S., MACGILLIVRAY p. 296 Canad. Ent. 44.

Lagium spp. n. Kansas, *erythrogastrum*, p. 214, *angulabre* p. 215 f. 2a, *planifrons* Virginia p. 216, spp. n., ROHWER Proc. U. S. Nation. Mus. 43.

Lyda stellata in Denmark, NIELSEN København Tids. Skov. 24 A pp. 69-73 3 figg.

Macrocephalus agrimoniae n. nom. pro *xanthostcmus* Ev. 1847, GOURY p. 147 Feuille natural. 42.

Macrophya spp. n. *zabriskiei*, *xantho-nota*, p. 218, *melanota*, *nigristigma*, p. 219, *externiformis* p. 220, spp. n., N. America, *nebraskensis* nom. n. for *M. sambuci* Rohwer p. 220, *lineatana* Virginia p. 220, *tenuicornis* India p. 221, spp. n., ROHWER Proc. U. S. Nation. Mus. 43.

Macroxyela bicolor, *obsoleta*, p. 294, *distincta* p. 295, spp. n., U.S., MACGILLIVRAY Canad. Ent. 44.

Manaos gen. n. *nigrinotatus* sp. n. Brazil, p. 62, ROHWER Psyche 19 pp. 62-63.

Messa javana sp. n. Java, ENSLIN Tijdschr. Ent. 55 p. 121.

Metellus rubi, egg, CROSBY J. Econ. Ent. 5 p. 403.

Monopadnus truncatus sp. n. Saskatchewan p. 232, ROHWER Proc. U. S. Nation. Mus. 43.

Monostegia nearctica sp. n. Massachusetts p. 208, ROHWER T.c.

Nematus erichsonii, HEWITT Bull. 10 ser. 2 Dep. Agric. Canada 42 pp. 4 pls.; DUNLOP pp. 147-156 Zoologist 1912.

Neopoppia gen. n. p. 226, *metallica* sp. n. Java p. 227, ROHWER Proc. U. S. Nation. Mus. 43.

Neothrinax gen. n. p. 111, *javana* sp. n. Java p. 112, ENSLIN Tijdschr. Ent. 55.

Nesoselandria ceylonensis sp. n. Ceylon p. 234, ROHWER Proc. U. S. Nation. Mus. 43.

Oryssoides: ROHWER Proc. U. S. Nation. Mus. 43 pp. 141-158 pls. xxxii xxxiii ff. 1-6.

■ *Oryssus unicolor*, Hongrie, caractères des espèces, MOCSÁRY Ann. Mus. Hung. 10 p. 300.—*O. modestus* p. 150 f. 6b, *abietes* p. 153 f. 6g, *pini* p. 154 f. 6f, *relativus* Colorado p. 155 f. 6e, *hopkinsi* Washington p. 155, spp. n., ROHWER Proc. U. S. Nation. Mus. 43.—*O. wagneri* sp. n. Argentina, DA BUYSOON p. 172 Rev. Ent. franç. 28 1910.

Pachynematus clitellatus, Lebensweise, Eiablage, Metamorphose, KURDJUMOV Poltava Trd. selisk.-choz. opytn. stancii 7 pp. 17-21 pl. i & fig. 3.

Pamphilius nigriritibialis sp. n. Saskatchewan p. 205, ROHWER Proc. U. S. Nation. Mus. 43.—*P. transversa*, *dentatus*, p. 297, *fletcheri* p. 298, spp. n., N. America, MACGILLIVRAY Canad. Ent. 44.

Paracharactus, *leucostomus*, p. 230, *niger* California, *nigriscmus*, p. 231, Saskatchewan, spp. n., ROHWER Proc. U. S. Nation. Mus. 43.

Paraxyela gen. n. for *X. tricolor* Nort., MACGILLIVRAY p. 294 Canad. Ent. 44.

Perclista quercus sp. n. Massachusetts p. 232, ROHWER Proc. U. S. Nation. Mus. 43.

Pontania crassicornis p. 241, *lucidae*, *agama*, p. 242, *foveata* p. 243, spp. n., N. America, *nevadensis nigripecta* var. n. p. 243, ROHWER T.c.

Proselandria gen. n., *megalops* sp. n., p. 4, Panama, ROHWER Smithsonian Inst. Misc. Coll. 59 Pub. 2088.

Prostromboceros subgen. n. vide *Stromboceros*.

Protoxyela gen. n. type *X. aenia* Nort., MACGILLIVRAY p. 295 Canad. Ent. 44.

Ptilia lautiformis sp. n. p. 2 Panama, ROHWER Smithsonian Inst. Misc. Coll. 59 Pub. 2088

Rhadinoceraea lucida sp. n. Wisconsin p. 229, ROHWER Proc. U. S. Nation. Mus. 43.

Rhogogaster truncatus Washington, *pitohatus* western United States, spp. n., p. 211, ROHWER T.c.

Sciapteryx coquilletti sp. n. California p. 212, ROHWER T.c.

Senoclidea gen. n. p. 228, *amala* Java p. 228, *terminata* Philippines p. 229, spp. n., ROHWER T.c.

Sjoestedtia aethiopica sp. n. Ruwenzori, ENSLIN p. 53 Ergebn. Zentr.-Afrik. Exp. 4 L 4.

Stromboceros javanus sp. n. Java p. 114, *konowi* n. n. for *phaleratus* from Peru p. 117, ENSLIN Tijdschr. Ent. 55.—*S.* (*Prostromboceros* subg. n.) *planifrons* (*Stromboceridea*) *albimaculatus* p. 235, Java, *S.* (*Neostromboceros*) *metallica* Malay Peninsula p. 236, spp. n., ROHWER Proc. U. S. Nation. Mus. 43.

Strongylogaster remotus Pennsylvania, *alboannulatus* New Jersey, p. 237, spp. n., ROHWER T.c.

Tanyphatnidea gen. n., *microcephala* sp. n. Java, p. 207, ROHWER T.c.

Tenthredella celsia für *caucasica* Mocs., *coenobita* für *parvula* Cress., p. 104, *chaonica* für *terminalis* Prov., *consoma* für *vittata* Kirby, *rubricoxis* für *rustipes* Kl., *conoepa* für *consobrina* Mocs., *deaurata* für *dealbata* Mocs., *contusa* für *lateralis* Mocs., *crenata* für *fulvicornis* Mocs., *dentina* für *minuta* Mocs., *cucullata* für *unifasciata* Mocs., *cynthia* für *basilaris* Prov., *denotata* für *basilaris* McGill., *flavicaria* für *flavida* Marl., p. 105, nn. n., ENSLIN Arch. Naturges. 78 A.

Tenthredo abjecta für *analisis* André, *adaequata* für *andrei* Knw., *admeta* für *annularis* Nort., *adulatrix* für *pallipes* Froym., *aegra* für *brevicornis* Knw., *aeruginea* für *brunnea* Cam., *aglaja* für *picta* André, *aliena* für *dorsata* Mocs., *arethusa* für *elegantula* Cress., *asella* für *interrupta* Nort., *associata* für *liturata* Mocs., p. 103, *atalanta* für *multicolor* Smith, *aulica* für *nigritarsis* Knw., *aversata* für *obscurata* Knw., *baja* für *ornata* André, *barbalis* für *parvula* Kriechb., *bractea* für *trifasciata* Knw., *camilla* für *mocsaryi* Enslin, *carna* für *rustipes* Mocs., *conoepa* für *sanguinolenta* Mocs., *clathrata* für *scutellata* Ensl., *candida* für *fulvicornis* Mocs., *calvaria* für *lateralis* Mocs., *cereola* für *testacea* Mocs., *carpinata* für *japonica* Mocs., *persa* v. *caja* für *mandibularis* Ensl., *bifasciata* v. *catax* für v. *atra* Ensl., *caucasica* v. *cinctaria* für *unifasciata* Mocs., p. 104, nn. n., ENSLIN Arch. Naturges. 78 A.

Tenthredo (Labidia) anomocerus p. 223 f. 4, *alienatus* p. 224, *anomus* p. 225, spp. n., N. America, *opimus coloradensis* subsp. n. p. 224, ROHWER Proc. U. S. Nation. Mus. 43.

Tenthredopsis, notes on british. MORICE pp. 232-236 Ent. Mag. 48.

Waldheimia melanocephala sp. n. p. 3 Panama, ROHWER Smithsonian Inst. Misc. Coll. 59 Pub. 2088.

Zalagium gen. n. p. 216, *clypeatum* sp. n. New York p. 217 f. 3, ROHWER Proc. U. S. Nation. Mus. 43.

Zamacrophya gen. n. p. 221, *nigrilabris* sp. n. Mexico p. 222, ROHWER T.c.

LEPIDOPTERA.

Lepidopteren des Russischen Altai, Farbenvariationen (Russ.), CUGUNOV Rev. russ. ent. 12 pp. 434-451.

Lepidopterorum Catalogus, Pars. 4-9, vide AURIVILLIUS & WAGNER.

Types of Lepidoptera in the National Museum, Melbourne, TURNER Mem Mus. Melb. No. 4 pp. 16-22.

Die Gross-Schmetterlinge der Erde, Tl 1 Lfg 94-103. Tl 2 Lfg 111-145. SEITZ, Adalbert [mit K. Jordan u. A.] Stuttgart (A. Kernen) [1912]; Tl 1: Abt. 2 (233-479 I-VII) Abt. 3 (205-276) Abt. 4 (I-II); Tl 2: Abt. 1 (241-328 337-344) Abt. 2 (449-536 545-560 1-32 49-68 49-64) Abt. 3 (137-200) Taf.

Atlas der Schmetterlings u. Raupen Europas u. d. russisch-asiatischen Besitzungen. Uebers. n. d. Deutschen, Lief. ii-iv (Russ.), LAMPERT St. Petersburg 1912 pp. 129-400 pls. xiii-lxxii.

Illustrations of rare and typical *Lepidoptera*, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 4 pp. 1-57 pls. i-xxvii.

La collection de Lépidoptères du Muséum national d'Histoire naturelle de Paris, BOULET Bul. Muséum Paris 1912 pp. 56-59.

Schmetterlinge aus Ångermanland, Schweden, WAHLGREN Entomol. Tidskr. Stockholm 33 pp. 73-106.

Heinemann's Die Schmetterlinge Deutschlands und der Schweiz, LINSTOW Intern. ent. Zs. Guben 6 pp. 30-31 38 42-43 58-59 66-67. Bemerkungen dazu v. REINBERGER.

Nordtirols *Heterocera*, HELLWEGER JahrBer. Brixen 37 pp. 1-88.

Die Lepidopterologischen Verhältnisse des niederösterreichischen Waldviertels; GALVAGNI & PREISSECKER Jahrber. Wien ent. Ver. 22 pp. 3-168.

Beitrag zur Kenntnis der Macrolpidopteren-Fauna Nordtirols, HEIN Jahrber. ent. Ver. Wien 22 pp. 179-198.

Lepidopteren Monte Maggiore Istrien, REBEL Jahrber. Wien ent. Ver. pp. 227-240.

Die Lepidopterenfauna Steiermarks; SCHIEFERER & MEIXNER Mitt. Ver. Steierm. 48 pp. 320-337.

Die Lepidopterenfauna von Herkulesbad und Orsova; Eine zoogeographische Studie, REBEL Ann. Hofmus. Wien 25 pp. 253-430.

Lepidopterenfauna des Oetztales; KIRT Verh. z.-b. Ges. Wien 62 pp. 320-416.

Lepidopteren Centralasiens (Russ. + engl.), KRULIKOVSKIJ Bull. Soc. Oural. nat. 31 1 pp. 95-126.

Lepidopteren des Kuznecki-Alatau (Russ.), ČUGUNOV Rev. russ. ent. 12 pp. 65-69.

Berichtigungen, *Hesperia*, *Dicranura*, *Arctia*, STICHEL Berliner ent. Zs. 56 p. 273.

Semi-apterous females of *Lep.*, HUDSON pp. 269-275 Ent. Mag. 48.

Elementary work, ROWLAND-BROWN Butterflies and moths 271 pp. 21 pls.

Il libro delle Farfalle, MANTERO Genova 1912 21 fig. 25 tav. con spieg.

Le Farfalle, SENNA Milano 1912 195 pp. 24 tav.

Couleur des papillons, PICTET Verh. Schweiz. Natf. Ges. 94 pp. 289-290.—Melanism and albinism, PICTET Mem. Soc. Phys. Genève 37 pp. 111-278 pls. i-v.—Le couleur blanche, PICTET Genève C. R. Soc. Phys. Nat. 27 1910.—Origine de la couleur bleu, PICTET Genève C. R. Soc. Phys. Nat. 27 1910.

Rhopalocera.

On the generic types of North American diurnal *Lepidoptera*, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 6 pp. 1-13.

Rhopalocera etc. in many lands, LONGSTAFF 729 pp. 16 pls.

Die Schmetterlinge der Schweiz I. Band, VORBRODT Bern 1911

Catalogue des Lépidoptères des environs de Genève. Publié sous les auspices de la Société lépidoptérologique de Genève. 1. partie: *Rhopalocères*. Appendice Bull. Soc. Lépidopt. Genève 2 1910 (vi + 36) 1 Karte.

Rhopaloceren Südwest-Russlands (Russ.), KSENŽOPOLSKIJ Trd. Obšč. izsl. Volyni 8 pp. 1-76 pls. i ii.

A list of indian *Rhopalocera*, critical notes on many species and subspecies (553-584 969-1008), EVANS J. Bombay Soc. 21,

Notes on *Rhopalocera* from the Naga hills, TYTLER J. Bombay Soc. 21 pp. 508-606 1 pl.

Rhopalocera of the Abor expedition, EVANS Rec. Ind. Mus. 8 pp. 61-65.

Colored plates, Abridgement of Wright's Butterflies of the west coast, WRIGHT San Bernardino Cal. 1907 36 unnumb. leaves 32 col. plates.

Aberrationen-Riecherei! PETER Ent. Zs. 26 pp. 85-86 89-90 94.

Organes d'adaptation chez les adultes de certains Lépidoptères *Rhopalocères* à nymphose hypogée, LE CERF Paris C. R. Acad. sci. 154 pp. 1719-1721.

Notes entomologiques; HOLL Bul. soc. Alger 1911 pp. 89-93.

Phylogenie der Flügelzeichnung bei TagSchmetterlingen; BEMMELN Zool. Jahrb. Jena Suppl. 15 Bd 3 pp. 453-478 Taf.

Jugendzustände tropischer Tagfalter, FASSL Soc. entomol. 27 pp. 43-44 46-48 53-54.

PAPILIONIDAE.

Rhopalocera palaeartica, *Papilionidae*, *Pieridae*, VERITY 1905-1911 pp. lxxxvi + 368 + xii 72 + 2 + 2 pls.

Baronia brevicornis eusemna p. 44, *b. phronima* p. 45, n. ff., Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Dorilis apollinus ab. n. *aurantiaca*, CULOT Genève Bull. Soc. Lépidopt. 2 1911 p. 98.

Leptocircus meges race n. *indistincta* p. 588, TYTLER J. Bombay Soc. 21.

Mimbyasa subg. n. to include *janaka* and *bootes* p. 972, EVANS J. Bombay Soc. 21.

Ornithoptera victoriae var. n. *buinensis* p. 337, *alexisi* n. ab., *brabanti* n. var., *lunielii* n. ab., p. 338, LE MOULT Bull. Soc. ent. France 1912.—*O. hecuba* abb. n. *transiens*, *virido-cellularis*, *kiblera*, *nigra*, *flavomaculata*, *immaculata* and *inaureomaculata*, PRZEGENDZA p. 43 Fauna exotica 2.—*O. hecuba* abb. [n.] *transiens*, *viridocellularis*, *kibleri*, p. 81, *nigra*, *flavomaculata*,

p. 82, *immaculata* p. 83, *inaureomaculata* p. 84, PRZEGENDZA Intern. ent. Zs. 6.

Papilio antenor varr. n. *gehleni* p. 383, *albomaculata* p. 384, LE MOULT Bull. Soc. ent. France 1912.—*P. dardanus speciosa* n. f. p. 290, LE CERF Bull. Soc. ent. France 1912.—*P. dardanus-polytrophus alluaudi* n. f., *antinorii alticola* n. var., p. 141, *hermes* sp. n. with var. *pellax* p. 142, *pelodurus* ab. n. *histicus*, BOULLAY & LE CERF Bull. Soc. ent. France 1912.—*P. dardanus* var. *polytrophus f. punctimargo, sjoestedti atavus* n. var. p. 336, LE CERF Bull. Soc. ent. France 1912.—*P. dardanus leighi* f. n., POULTON pp. xxxiii-xliii Proc. ent. Soc. London 1911.—*P. dardanus hippocoon*, POULTON pp. xii-xvii P. ent. Soc. London 1912.

Papilio machaon Dunkelfärbung, REINBERGER Zs. wiss. Insektenbiol. 8 p. 234 & p. 358; *machaon* ab. n. *oudemansi*, STRAND p. 253 Ent. Zeitschr. 25; *machaon* ab. n. *melanosticta*, REVERDIN Genève Bull. Soc. Lépidopt. 2 1910 pp. 44-50.

P. bouletti sp. n. p. 382 Congo, LE CERF Bull. Soc. ent. France 1912.—*P. chibcha* sp. n., *euterpinus* v. n. *eburneus* Columbia, FASSL p. 103 Ent. Rdsch. 29.—*P. chromealus* sp. n. Honduras, EHLMANN p. 244 Canad. Ent. 44.—*P. palu* sp. n. Celebes, MARTIN p. 164 D. ent. Zs. Iris 26.—*P. richardi* sp. n. Hunan, DUSMET p. 302 Bol. Soc. españ. 12.—*P. oxyartes* ♀, PRZEGENDZA Intern. ent. Zs. Guben 6 1912 p. 147.—*P. polytes* female dimorph *stichioides* n. p. 558, EVANS J. Bombay Soc. 21.—*P. pylades-angolanus hypochroa* n. ab., *castor* var. n. *kmer* p. 246, *demoleus chryseis* n. ab., *chaon xanthia* n. ab., *helenus aurea* n. ab., *polytes chrysos* n. ab., p. 247, BOULLET & LE CERF Bull. Soc. ent. France 1912.—*P. triumphator* ab. n. *mai* Naga hills p. 590, TYTLER J. Bombay Soc. 21.—*P. turnus niger*, HERING p. 234 Zeitschr. wiss. Insektbiol. 8.—*P. belesis*, larva, p. 54, DYAR Proc. Ent. Soc. Washington 14.

Parnassius, BRYK Ent. Mitt. 1 pp. 376-382.—*Parnassius* suisses, VON BÜREN VON SELIS Genève Bull. Soc. Lépidopt. 2 1911 pp. 90-98.—*P. actius* ab. n. *mirandus*, NIEPELT p. 305 Internat. ent. Zeitschr. 5.

Parnassius apollo varr. pp. 2-12, *mneomosyne calabrica* var. n. p. 12, TURATI Annuar. Mus. Napoli 3 No. 18 1911; *P. apollo* v. *norvegicus*, MENTHE Intern. ent. Zs. 6 p. 244, BRYK t.e. p. 270; *P. apollo* von der Insel Gotland, PAGENSTECHE Ent. Zs. 26 pp. 93 97-98 121-122 125-126; *P. apollo* ab. *novarae*, UGRJUMOW Ent. Zs. 26 p. 155; *P. apollo* abb. n. *sphenagon* and *theioides* Herzegowina, SCHAWERDA Verh. z.-b. Ges. Wien 62 pp. (112)-(116); *P. apollo* Formen aus den Alpen, ARNOLD München Mitt. ent. Ges. 8 pp. 26-28 1 Taf.; *P. apollo* Kaukasien, PAGENSTECHE München Mitt. ent. Ges. 8 pp. 65-84; *P. apollo* var. n. *strambergensis*, SKALA Verh. Ver. Brünn 50 p. 63 etc.

P. apollo subsp. n. *sojoticus* p. 11, *antijesuita* p. 26, *P. mneomosyne* varr. n. *agrofennica* p. 25, *banghaasi* p. 40, ab. n. *enderleini* p. 50, f. n. *poppii* p. 99, ab. n. *ottonis* p. 101, *maculata* p. 112, *mneomosyne* abb. n. *bosniacki, rebeli*, p. 53, *seitzi, spuleri, reuteri*, p. 61, *reuterides* p. 62, *maxbarteli* p. 74, *perfusa* p. 87, *antiquincunx* p. 89, *herrichi* p. 112, *P. v. smintheus* ab. n. *mariae* p. 58, BRYK Soc. entom. 27.

Parn. charltonius var. *bryki*, HAUDE Soc. entomol. 27 p. 75; *P. charltonius ducalis* n. var. p. 143, BOULLET & LE CERF Bull. Soc. ent. France 1912.—*P. delius* ab. n. *huemeri*, PAGENSTECHE p. 183 Jahrb. Ver. Wiesbaden 65; *P. delius* ab. n. *reducta*, REVERDIN Genève Bull. Soc. Lépidopt. 2 1910 pp. 44-50.

P. delphius abb. n. *nox* and *immarginata*, Turkestan, NIEPELT p. 132 D. ent. Zs. Iris 1911.

Parnassius mneomosyne, Abb., REBEL Ann. Hofmus. Wien 25 pp. 253 etc.; *P. mneomosyne* ab. n. *ruhmanni*, HOFFMANN p. 157 Ent. Rdsch. 29; *P. mneomosyne* var. *hassica* ab. *siegeli*, GRUND Soc. entomol. 27 p. 74; *P. mneomosyne*, Raupe und Falter, LOCHER Ent. Zs. Frankfurt 26 pp. 81 86-87.

P. phoebus abb. n. *brunneomaculata, continua*, RUHMANN p. 129 Ent. Zs. 1912; *P. phoebus* ab. n. *ines*, KERTÉSZ Arch. Zool. 1 p. 29 1910; *P. phoebus*, Abarten, SCHWINGENSCHUSS Verh. z.-b. Ges. Wien 62 p. (110).—*P. nordmanni* ab. n. *atrogattata*, *P. tancrei* ab. n. *cocles*, p. 359, *P. aurelia* ab. n. *liturata*

P. simo var. n. *simonides*, p. 360, AUSTAUT Internat. ent. Zeitschr. 5.—*P. nordmanni* ab. n. *lunulatus* p. 3, *P. charltonius* ab. n. *haudei* Kaschmir p. 5, *atroguttata* p. 6 Himalaya, and *rubrocatenatus* p. 7 Trans-Alai, var. n. *occidentalis* p. 10 Chitral, *P. apollo* ab. n. *nordmannioides* Zermatt p. 30, *phoibogryphos* p. 31 Europa etc., *lamperti* p. 35, BRYK Jahrb. Ver. Wiesbaden 65.—*P. rueckbeili* ab. [n.] *leucostigma* Alpes de Chamill, *delphius* ab. [n.] *satanas* Asia centr., AUSTAUT p. 87 Int. ent. Zs. 6.—*P. stubbendorffii* var. n. *hoenei* Japan, *apollo* var. *transsylvanicus*, SCHWEITZER p. 249 Ent. Zeitschr. 25.

Thais rumina ab. n. *nebulosa* p. 6 pl. A fig. 5, *irregularis* p. 8 fig. 6, *nigricans* p. 8 pl. A fig. 9, HOLL Bull. Soc. Alger 4.—*Thais polyxena* Ab., HÄRTING Ent. Zs. 26 p. 111; v. n. *kreusa*, TOMALA p. 84 Ent. Rdsch. 29.

Zerynthia rumina medicicaste, larve, SCHULZE p. 293 Zool. Anz. 40.

PIERIDAE.

BELL continues his account of common butterflies of India, with life-histories and 5 pls., J. Bombay Soc. 21 passim.

Aporia crataegi ab. n. *sheljuzhkoii*, BRYK p. 82 Soc. entomol. 27; *A. crataegi*, Verschwinden, REIKOWSKI Intern. ent. Zs. 5 p. 368.—*A. nabellica* race *hesba* n. p. 559, EVANS J. Bombay Soc. 21.

Catasticta; notes and synonymy, *dentata* pl. xlv figs. 1 & 2 p. 522, *albofasciata* f. 3, *seitzi* f. 4, *watkinsi* f. 5, *distincta* f. 6, p. 523, *leucophaea* f. 7, *lanceolata* f. 8, *minor* f. 9, *subflava* pl. xlvi f. 7, *punctata* f. 1, p. 524, *huebneri* f. 2, *aureomaculata* f. 3, *suffusa* f. 4, *albina* f. 5, p. 525, *truncata* f. 6, *superba* f. 10, *similis* f. 8, *flavomaculata*, p. 526, *intermedia* p. 527, spp. n., S. America, *susiana* pl. xlvi f. 9, *manco* f. 10, LATHY & ROSENBERG Tr. ent. Soc. London 1911.—*C. zebra* sp. n. Bolivia, FRUHSTORFER p. 59 Ent. Rdsch. 29.

Catopsilia rurina ab. n. *peruvicola*, STRAND p. 186 Arch. Naturges. 78 A 9.

Colias aurora ab. n. *rhododactyla*, *crocopepla*, *theia*, Amur, WARNECKE p. 68 Soc. entomol. 27.—*C. chlorocoma*

ab. n. *sulphurea*, MILLER p. 223 D. ent. Zs. Iris 26.—*C. crocea* ab. *coerulea*, DRAGONI-RABENHORST Ent. Zs. 26 p. 115; *C. crocea* ab. n. *cremonae*, BANG-HAAS p. 103 D. ent. Zs. Iris 26.—*C. erate*, Varietäten JACHONTOV Rev. russ. ent. 12 p. 36; Pseudo-Albinismus (Russ.), DIADČENKO Naturfreund 7 p. 149.—*C. fieldii* p. 64, EVANS Rec. Ind. Mus. 8.—*C. hyale* ab. n. *brabantica*, STRAND p. 253 Ent. Zeitschr. 25; *C. hyale duplex* ab. n. Gouv. Kiev p. 28 pl. i f. 2, *edusa flavida* morpha n. p. 29, *myrmidone vernalis* gen. nova, *myrmidonides* ab. n., p. 30, Südwest-Russland (Russ.), KSENŽOPOL'SKIJ Trd. Obšč. izsl. Volyni 8.—*C. myrmidone* ab. n. *bahri* and *edusoides*, SKALA p. 16 Internat. ent. Zeitschr. 6; *C. myrmidone*, bleichen, HOFFMANN Ent. Zs. 26 pp. 123 130; *C. myrmidone*, Verbreitung und Variabilität, PIESZOZEK Jahrb. ent. Ver. Wien 22 pp. 199–225; *myrmidone* ab. n. *gartneri* and *obscura*, SKALA Verh. Ver. Brünn 50 p. 63 etc.; ab. n. *depuncta*, NITSCHKE Verh. z.-b. Ges. Wien 62 p. (109); ab. [n.] *rubro-isabellina* p. 142, *discolor* p. 143, FRITSCH Ent. Rdsch. 29; v. *nana*, MAYER Ent. Zs. 25 p. 261.—*C. nastes* and *werdandi*, life-history, eggs, SHELDON Entomologist 45 p. 122.—*C. palaeno*, in Belgium, BALL p. 277 Ann. Soc. ent. Belgique 56.—*C. phicomone*, Generation, HÖFER Ent. Zs. Frankfurt 26 p. 49.—*C. tunkuna* Monts Sayans, *aquilo* Laponie, spp. n., AUSTAUT p. 88 Int. ent. Zs. 6.—*C. weberbaueri* sp. n. Peru, STRAND p. 185 Arch. Naturges. 78 A 9.

Colotis calais, dimorph female *albina* nov. pp. 559 & 980, EVANS J. Bombay Soc. 21.

Delias callista p. 582, *hapalina* p. 583, *mesoblema* p. 584, *alepa*, *leucobalia*, p. 585, *catisa* p. 586, *fascelis* p. 587, *cato-causta* p. 591, spp. n., New Guinea *iltis-luctuosa*, *weiskei leucias*, p. 584, *eichorni frater* p. 585, *bornemanni nais* p. 587, *arocae pheres* p. 588, *itamputi conversa* p. 589, *meekei neagra* p. 592, subspp. n., *microsticha flavopicta* n. n. for *rothschildi* Kenr. p. 593, JORDAN Nov. zool. 18.—*D. hermione* sp. n. Borneo, MOULTON p. 84 J. Straits Asiat. Soc. 63.—*D. benasu* p. 225, *prinsi* p. 227, spp. n., Celebes, MARTIN D. ent. Zs. Iris 26.—*D. dorimene* subsp. n. *avenda* Ceram, FRUHSTORFER

p. 5 Ent. Rdsch. 29.—*D. eucharis*, variation, MANDERS p. 153 Ent. Rec. 24.

Dismorphia macasana sp. n. Ecuador, STRAND p. 184 Arch. Naturges. 78 A 9.—*D. astynome paulistana*, *mercenaria versicolora*, subspp. n., Brasilia, FRUHSTORFER p. 59 Ent. Rdsch. 29.—*D. niepelti*, Weibchen, STRAND Ent. Rdsch. 29 p. 106.

Eucheira socialis, HOFFMANN Fauna exotica 1 p. 47 etc.

Euchloe belemia pl. iii f. 1 p. 166, MENDES Broteria 10.—*E. belemia*, *falloui*, *charlonia*, early stages, CHRÉTIEN Bull. Soc. ent. France 1912.—*E. cardamines* ab. nov. *saxonia*, HERING Zs. wiss. Insektenbiol. 8 p. 234.

Ixias piepersi, ♀, MARTIN D. ent. Zs. Iris 26 pp. 191–196.

Leptosia duponcheli var. *aestiva*, SHELDON p. 148 Ent. Rec. 24.

Melete caesarea sp. n. Columbia, FRUHSTORFER p. 59 Ent. Rdsch. 29.

Pareronia valeria subsp. n. *hainanensis* Hainan, FRUHSTORFER p. 6 Ent. Rdsch. 29.

Pieris alberta sp. n. Central-Afrika, GRÜNBERG p. 552 Ergebn. D. Zentr.-Afrik. Exp. 3 L. 17.—*P. brassicae*, Biologisches, AUÉL Zs. wiss. Insektenbiol. 8 pp. 258–260; *P. brassicae*, *napi*, *bimaculata*, Varietäten, JACHONTOV Rev. russ. ent. 12 pp. 35–36.—*P. canidia* race *canis* n. p. 559, EVANS J. Bombay Soc. 21.—*P. daplidice*, TETZNER Zs. wiss. Insektenbiol. 8 p. 31.—*P. elia* sp. n. Abessynia, STRAND p. 92 Arch. Naturges. 77 Suppl. 4.—*P. mesentina* abb. n. *iris* and *sulphurea*, GAUCKLER p. 76 Soc. entomol. 27.—*P. napi*, Formenabgrenzung, SCHIMA Verh. z.-b. Ges. Wien 62 pp. (5)–(10); *P. napi* var. *napaeae* ab. n. *postero-maculata*, REVERDIN Genève Bull. Soc. Lépidopt. 2 1910 pp. 44–50.—*P. rapae relicta* ab. n., (Russ.), KSENŽOPOLSKIJ Trd. Obšč. izsl. Volyni 8 pp. 23–25 pl. i f. 1.

Thestias weelei sp. n. Sabang, VAN ECKE Notes Mus. Leiden 34 p. 80.

Tachyris melania, DIXEY p. lix Proc. ent. Soc. London 1911.

Teracolus eris var. n. *erioides* Abessynia, STRAND p. 92 Arch. Naturges. 77 Suppl. 4.

Terias hecabe, *simulata*, *hecabeoides*, *citrina*, *rotundalis*, *uniformis*, *drona*, *eingala*, *rama*, *sari*, *silhetana*, notes and synonymy, pp. 137–138, *hecabe* and *silhetana* pp. 138–139, GREEN Spolia Zeylan 8.—*T. blanda* subsp. n. *wuwulana* Bismarck-Arch., FRUHSTORFER p. 35 Ent. Rdsch. 29.—*T. tilaha* subsp. n. *lamperti*, FRUHSTORFER p. 95 T.c.

DANAIDAE, ITHOMIIDAE, ACRAEIDAE,
HELICONIIDAE.

Heliconiidae, Lebensweise, MICHAEL Fauna exotica 2 pp. 8 10–12 13–16 17–19 21–22.

Acraea; monograph of african, with 16 pls. imago, larva and male characters, ELTRINGHAM Tr. ent. Soc. London 1912 pp. 1–374 pls. i–xvi.—*A. grosvenori* p. 276 pl. ii f. 9, *aubyni* p. 304 pl. v f. 6, spp. n., the following are subspp. n., *quirina rosa* p. 60, *rogersi lamborni* p. 63, *nohara pseudatolmis* p. 130 pl. i f. 6, *nohara punctellata* p. 131 pl. v f. 9, *doubledayi arabica* p. 173 pl. ii f. 2, *equatorialis anaemia* p. 179 pl. v f. 5, *sotikensis rowena* p. 227, *penelope vitrea* pl. iv f. 7 and *p. derubescens* pl. iv f. 5, p. 284, *p. translucida* p. 285 pl. iv figs. 4 & 6, *servona tenebrosa* p. 296; also numerous ff. n.

Acraea rupicola sp. n. Kamerun, SCHULTZE p. 92 Ent. Rdsch. 29.—*A. pullula* sp. n., *vinidia* ab. n. *ruandae*, Ruanda, GRÜNBERG p. 516 Ergebn. D. Zentr.-Afrik. Exp. 3 L. 17.—*A. eliana* sp. n. Abessynia, STRAND p. 87 Arch. Naturges. 77 Suppl. 4.—*A. alciope* ab. n. *bakossua*, STRAND p. 114 T.c.—*A. terpsichore* ab. n. *contraria*, STRAND p. 81 Arch. Naturges. 78 A 1.—*A. encedon*, all-female broods, POULTON p. liv Proc. ent. Soc. London 1911.—*A. zambesina* pl. iv f. 3 p. 185, MENDES Broteria 10.

Amauris inferna ab. n. *infernalis*, STRAND p. 108 Arch. Naturges. 77 Suppl. 4.—*A. nossima interrupta* n. var. p. 381, BOULLET Bull. Soc. ent. France 1912.—*A. psyttalea*, broods, POULTON p. lxxvii P. ent. Soc. London 1912, *A. psyttalea* ab. n. *intermedia*, GRÜNBERG p. 506 Ergebn. D. Zentr.-Afrik. Exp. 3 L. 17.

Anosia plexippus, larval habits, AIKEN p. 146 Entomologist 45.

Danaida philene subsp. n. *pleistarchus* Bismarck-Arch., FRUHSTORFER p. 34 Ent. Rdsch. 29.

Danais chrysippus, experiments as to mimicry, pp. 445-448 pl. xli, the forms *dorippus* and *alcippus* p. 444, MANDERS Tr. ent. Soc. London 1912: discussion Proc. ent. Soc. London 1912 pp. vii-xii.

Eueides isabella subsp. n. *ecuadorensis*, STRAND p. 181 Arch. Naturges. 78 A 9.

Euploea magou p. 197, *cordelia* p. 199, spp. n., Celebes, MARTIN D. ent. Zs. Iris 26.—*E. callithoë* subsp. n. *morna*, *memertes* subsp. n. *oëneon*, *treitschkei* subsp. n. *mattyensis*, Bismarck-Arch., FRUHSTORFER p. 34 Ent. Rdsch. 29.

Heliconius clysonimus subsp. n. *flavopunctatus* and *fischeri*, *H. tolima* sp. n., p. 55, *weymeri* subsp. n. *submarginatus* p. 56, Columbia, FASSL Ent. Rdsch. 29.—*H. adela* sp. n. Peru p. 54, *melittus* f. n. *fassli*, *idalion* f. n. *confluens* p. 55, NEUSTETTER Fauna exotica 1.—*H. hermathena* ff. n. *vereatia* and *hydarina*, STICHEL p. 1 Internat. ent. Zeitschr. 6.—*H. emilius*, *orchamus*, *hero*, ff. n. Kolumbia, WEYMER pp. 73-74 Ent. Rdsch. 29.

Leucothyris peruvicola sp. n. Peru, STRAND p. 183 Arch. Naturges. 78 A 9.

Napeogenes ellariformis p. 182, *anteëlla* p. 183, spp. n., Peru, STRAND T.c.

Planema schubotzi sp. n. Afrika, GRÜNBERG p. 519 Ergebn. D. Zentr. Afrik. Exp. 3 L. 17.

Radena juvena subsp. n. *catella* Bismarck-Arch., FRUHSTORFER p. 33 Ent. Rdsch. 29.

NYMPHALIDAE.

Nymphalidae, AURIVILLIUS In: Seitz Grossschmetterlinge der Erde Fauna afric. xiii p. 121 Taf.

Nymphalidae, FRUHSTORFER In: Ad. Seitz Gross-Schmetterlinge der Erde Fauna indoaustr. 9 pp. 453-560 Taf.

Agrias sardanapalus var. n. *intermedius* Colombia, FASSL p. 10 Ent. Rdsch. 29.—*A. claudia* subsp. n. *maxentia* p. 45, *amydon* f. n. *athenais* p. 46, Peru, FRUHSTORFER Ent. Rdsch. 29.

Anaea peruviana sp. n. Peru, STRAND p. 98 Arch. Naturges. 77 Suppl. 4.—*A. panariste* f. n. *ludmilla*, FASSL p. 85 Ent. Rdsch. 29.

Apatura iris, OCHS Intern. ent. Zs. p. 5.—*A. ambica* race *chitralensis* n. p. 558, EVANS J. Bombay Soc. 21.

Argynnis aglaja ab. n. *viridiatra*, STRAND p. 253 Ent. Zeitschr. 25.—*A. aphirape* Ei, RICHTER Ent. Zs. 25 pp. 220-221 230, Erwiderung darauf v. SCHMIDT T.c. p. 221.—*A. aphirape* ab. n. *haverkampfi*, BALL p. 280 figs. Ann. Soc. ent. Belgique 56; *A. aphirape* abb. n. *deanella*, *marga*, *excelsa*, SCHMIDT p. 6 Ent. Zeitschr. 26.—*A. dia nigricans* ab. n. (Russ.), KSEUŽOPOLISKJI Trd. Obšč. izsl. Volyni 8 p. 40 pl. i f. 5.—*A. lathonia* subsp. n. *messoa*, *A. aglaja* subspp. n. *yopala* p. 514, *taldena*, *A. adippe* subspp. n. *mohmandorum*, *zarewna*, *garcila*, p. 515, *A. hyperbius* subsp. n. *sagada*, *A. childreni* subsp. n. *caesarea*, p. 516, FRUHSTORFER Seitz. Gr. Schm. indoaustr. 9.—*A. latonia* ab. *fervida*, FRITSCH p. 144 Ent. Rdsch. 29.—*A. hyperbrus* race *hybrida* n. p. 558, *A. aglaja* race *ashreta* n., *adippe* race *pallida* n., pp. 558 and 582, EVANS J. Bombay Soc. 21.—*A. niobe* ab. n. *fasciata*, BLACHIER Genève Bull. Soc. Lépidopt. 2 1910.—*A. pales medioitalica* subsp. n. p. 21, TURATI Annuar. Mus. Napoli 3 18 1911.—*A. pandora*, Winterzucht, CALMBACH Ent. Zs. 26 p. 15.

Atella alcippe subspp. n. *floresiana* and *omarion*, p. 472, *denosa* p. 473, FRUHSTORFER Seitz Gr.-Schm. indoaustr. 9.

Basilarchia weidermeyerii angustifascia var. n., BARNES & MODUNNOUGH p. 163 Canad. Ent. 44.

Brenthis pales f. n. *hannoverana*, FÜGE p. 189 Zeitschr. wiss. Insektbiol. 8.

Callithea philotima sp. n. Peru, REBEL Verh. z.-b. Ges. Wien 62 p. 218.

Catargyria linda subsp. n. *paulana*, FRUHSTORFER p. 14 Ent. Rdsch. 29.

Cethosia biblis subspp. n. *phanaroia* p. 498, *tisamena*, *adantonia*, *nacoleia*, p. 499, *liacura*, *tagalorum*, p. 501, *sarsina* ff. n. *viridipicta* p. 502, *mixta* p. 499, *G. lamarcki*, f. n. *justa*, subsp. n. *elaticia* p. 502, *C. cyane* subsp. n. *euanthes* p. 503, *C. hypsea* subspp. n. *tricolora*

mungava; *bankana*, p. 504, *myrina* subsp. n. *sarnada*, *C. penthesilea* subsp. n. *baweanica*, p. 506, f. n. *elgitha* p. 507, *C. chrysippe* f. n. *aurigena* subsp. n. *tymbrasa* p. 508, FRUHSTORFER Seitz. Gr. Schm. indoaustr. 9.

Charaxes cynthia ab. n. *mawamba* p. 538, *boueti* var. n. *alticola* p. 539, GRÜNBERG Ergebn. D. Zentr.-Afrik. Exp. 3 L. 17.—*C. hierax* var. n. *naganum* Naga hills, TYTLER p. 55 J. Bombay Soc. 21.

Cirrochroa fasciata subspp. n. *bilbilis*, *ortopla*, *C. satyrina* subsp. n. *angustata*, p. 485, *C. tyche* ff. n. *latitaenia* p. 486, *caera*, *oreta*, *calcaria*, subspp. n. *lesseta*, *tanaquil*, *moeris*, *domorana*, *zebuna*, *guimarensis*, p. 487, *C. aoris* f. n. *stramenticia* p. 488, *C. satellita* subsp. n. *illergeta* p. 491, *C. semiramis* subsp. n. *ninos* p. 492, FRUHSTORFER Seitz., Gr.-Schm. indoaustr. 9.

Cupha erymanthis subspp. n. *nagara* p. 466, and *synnara*, *C. arias* subspp. n. *cacina* p. 467, *sangirica*, f. n. *pseudarias*, *C. maeonides* subsp. n. *rovena*, *C. crameri* subspp. n. *keyana*, *leonida*, p. 468, *C. madestes* subspp. n. *oderca* p. 469 and *decernia* p. 470, FRUHSTORFER T.C.

Cymothoe sassiana sp. n. Ituri, *butleri* var. n. *dubia*, SCHOUTEDEN p. 394 Rev. zool. afric. 1.—*C. kraepelini* sp. n. Kamerun, SCHULTZE p. 91 Ent. Rdsch. 29.—*C. alcimeda* f. n. *trimeni* Kapland p. 132, *C. anitorgis* ab. n. *leonis* Kamerun p. 153, AURIVILLIUS Seitz. Gr.-Schm. Afric. 13.—*C. lurida* ab. n. *brunnea* p. 167, *cyclader* subsp. n. *intermedia* p. 169, *aramis* subsp. n. *excelsa* p. 174, *C. a.* ab. n. *albofasciata*, *coccinata* ab. n. *similis*, p. 175, *sangaris* ab. n. *gerresheimi* p. 179, *ogowa* ab. n. *major* p. 181, *rebeli* sp. n. p. 182 Kamerun, NEUSTETTER Deut. Zs. Iris 26.—*C. caenis* ab. n. *bakossensis* p. 119, *C. coccinata* ab. n. *zickzack* p. 120, STRAND Arch. Naturges. 77 Suppl. 4.

Cynthia erota ff. n. *auricoma*, *trio-cellata*, p. 476, subspp. n. *varna* p. 478, *divica*, *meduca*, *bagrada*, *ricussa*, *kabiana* and *salayara*, ff. n. *albotaeniata*, *virilis*, p. 479, subspp. n. *dioneia*, *basania*, p. 480, *kschattryia*, *C. arsinoë* subsp. n. *ardea* p. 481, *C. sapor* subsp. n. *mesima* p. 484, FRUHSTORFER Seitz. Gr.-Schm. Indoaustr. 9.

Cyrestis acilia subsp. n. *bassara* Bismarck-Arch., FRUHSTORFER p. 34 Ent. Rdsch. 29.

Diestogyna obtusangula p. 160, *incerta* p. 165, Kamerun, spp. n., *atossa* ab. n. *australis* Congo p. 170, AURIVILLIUS Seitz. Gr.-Schm. Afric. 13.

Doleschallia bisaltide ff. n. *argyroides*, *nimbata*, p. 556, *bisalis*, *cingara*, p. 557, *coronata*, *exornans*, *polibetina*, p. 558, *orthagoria*, p. 560 subspp. n. *siamensis* Siam p. 557, *surculus* Bawean p. 558, *scapus* Sumbawa, *ermelinda* Sumba, *apameia* Obi, *cehega* Batjan, *tenimberensis* Selaru p. 559, *menexema* Florida-Insel, *D. browni* subsp. n. *scotina* Shortlands-Ins., p. 560, FRUHSTORFER Seitz Gr.-Schm. F. indoaustr. 9.

Doxocopa argus f. n. *armilla*, *idyja* subsp. n. *padola*, Haiti, FRUHSTORFER Ent. Rdsch. 29.

Epiphile adrasta subsp. n. *bandusia*, FRUHSTORFER p. 14 Ent. Rdsch. 29.—*E. epimenes* f. n. *kalbreyeri*, *epicaste* ab. n. *bonplandioides*, FASSL p. 122 Ent. Rdsch. 29.

Eresia callonioides sp. n. Peru, STRAND p. 181 Arch. Naturges. 78 A 9.—*E. ildica* v. n. *heliconiformis*, STRAND p. 143 T.C.—*E. castilla* f. n. *occidentalis*, FASSL p. 122 Ent. Rdsch. 29.

Ergolis ariadne subsp. n. *gedrosia*, *merione* subspp. n. *pharis*, p. 456 and *ginosa* p. 457, FRUHSTORFER Seitz Gr. Schm. indoaustr. 9.

Eriboea narcaea var. n. *aemiliani*, DUSMET p. 304 Bol. Soc. españ. 12.

Eunica modesta p. 54 larva, DYAR Proc. Ent. Soc. Washington 14.

Euphaedra peculiari, *albovittata*, *luperca variegata*, abb. n., AURIVILLIUS Seitz Gr. Schm. afr. 13 p. 184.—*E. xypete* ab. n. *bombeana*, STRAND p. 116 Arch. Naturges. 77 Suppl. 4.—*E. luperca* v. n. *strasseni*, SCHULTZE p. 92 Ent. Rdsch. 29.—*E. luperca* f. n. *medonoides*, WICHGRAF p. (49) Berlin ent. Zeitschr. 57.

Euralia anhedon and *dubia*, POULTON p. xlv Proc. ent. Soc. London 1911.

Euryphene ducalis sp. n. Ruwenzori, GRÜNBERG p. 534 Ergebn. D. Zentr.-Afriek. Exp. 3 L. 17.—*E. maledicta* p. 117, *subtentyris* p. 118, spp. n.,

Kamerun, STRAND Arch. Naturges. 77 Suppl. 4.—*E. cutteri* f. n. *fasciata*, AURIVILLIUS Seitz Gr. Schm. afr. 13 p. 179.

Eurytela dryope and *hiarbas* distinguished, POULTON p. xviii P. ent. Soc. London 1912.

Euthalia francae race n. *attenuata* Naga hills, TYTLER p. 59 J. Bombay Soc. 21.—*E. garuda* race *diversa* n. pp. 558–576, EVANS J. Bombay Soc. 21.

Evonyma eurota subsp. n. *dymanes* and *muson*, FRUHSTORFER p. 15 Ent. Rdsch. 29.

Gynaecia dirce p. 54 larva, DYAR Proc. Ent. Soc. Washington 14.

Hypolimnas dimona sp. n. Sula Mangoli, FRUHSTORFER p. 5 Ent. Rdsch. 29.—*H. alimena* subsp. n. *senia* p. 545, *bandana*, *remigia*, *eligia*, *talanta*, *selina*, *curicta*, *libisonia*, p. 546, *diphridas* and *ysabela*, ff. n. *interjecta*, p. 547, *diadema* p. 545, *H. misippus* f. n. *picta* p. 547, *H. bolina* ff. n. *cyaneacula*, *subucula*, *viriliformis*, *victrix*, *ornamentalis*, *luctuosa*, *subviolacea*, *egna*, p. 549, *chrysonicans* p. 550, *astra*, *discalis*, p. 551, *ivena*, *pseudomisippus*, p. 552, *maeza*, *crexa*, *pelva*, p. 553, subsp. n. *joloana* p. 549, *micromalayana*, *vitramana*, p. 551, *palauensis* p. 552, *elliciana* p. 553, *diomeas* f. n. *coerulans* p. 553, *H. pandarus* f. n. *triumphans* p. 554, *H. octocula* subsp. n. *marianensis*, *H. deois* subsp. n. *obianus*, ff. n. *tydeina*, p. 555, *depunctata* p. 556, FRUHSTORFER Seitz Gr. Schm. indoaustr. 9.—*H. dubia* broods, POULTON p. lxxvii P. ent. Soc. London 1912.

H. misippus, mimicry experiments, MANDERS pp. 449–453 pl. xli Tr. ent. Soc. London 1912; reared broods, POULTON p. lxxiii P. ent. Soc. London 1912; variation, heredity, POULTON p. xliv op. cit. 1911.

Issoria sinha subsp. n. *macromalayana* p. 473, *brixia* p. 474, *tenonia*, *syllaria*, *samoana*, *shortlandica*, p. 475, FRUHSTORFER Seitz Gr. Schm. indoaustr. 9.

Junonia livia sp. n. Bolivia, FRUHSTORFER p. 15 Ent. Rdsch. 29.—*J. coenia*, breeding, SCHRADER Pomona Coll. J. Ent. 4 pp. 673–677 f. 221.

Kallima cymodoce v. n. *lugens*, SCHULTZE p. 92 Ent. Rdsch. 29.

Laringa horsfieldi subsp. n. *velitra*, FRUHSTORFER Seitz Gr. Schm. indoaustr. 9 p. 460.

Limenitis lysanias subsp. n. *karschi* Sula Mangoli, FRUHSTORFER p. 5 Ent. Rdsch. 29.—*L. populi*, zweite Generation von, FÜGE Ent. Zs. 25 pp. 239–244.—*L. sibylla* zweite Generation von HAFNER Ent. Zs. 2 p. 12.

Lucinia sida subsp. n. *cubana*, FRUHSTORFER p. 14 Ent. Rdsch. 29.

Melitaea alma, CLEMENCE p. 102 pl. iii Canad. Ent. 44.—*M. athalia* var. n. *teriolensis*, WAGNER Verh. z.-b. Ges. Wien 62 p. (210).—*M. aurinia volhgnica* var. n. p. 35 pl. i ff. 2 & 4, *didyma marginata* ab. n. p. 37 pl. ii ff. 5 & 6, *progressiva* ab. n. p. 37 pl. ii f. 7, *striata* p. 37 f. 8 (Russ.), KSEUŽO-POLĀSKIJ Trd. Obsč. izsl. Volyni 8.—*M. didyma* subsp. n. *nadezhdae*, SHELJUZHKO p. 137 D. ent. Zs. Iris 26; *M. didyma* ab. n. *acrogynoides*, REVERDIN Genève Bull. Soc. Lépidopt. 2 1910 pp. 44–50; *M. didyma patycosana* p. 18, *athalia maxima* p. 19, subsp. n., TURATI Annuar. Mus. Napoli 3 No. 18 1911.—*Melitaea trivialis* ab. n. *tenuisignata*, SKALA Verh. Ver. Brünn 50 pl. 63 etc.; *M. trivialis striata* ab. n. p. 37 pl. i f. 6, *athalia progressiva* ab. n. p. 38 pl. ii f. 9, *dictynna progressiva* ab. n. p. 38 f. 10 (Russ.), KSEUŽO-POLĀSKIJ Trd. Obsč. izsl. Volyni 8.—*M. cynthia* ab. n. *brunneomarginata*, KIEFFER p. 70 Ent. Rdsch. 29.—*M. sindura* race *balba* n., *trivialis* race *mixta* n. p., 558, EVANS J. Bombay Soc. 21.

Metamandana dido subsp. n. *pygmalion* and *diatonica*, FRUHSTORFER pp. 14–15 Ent. Rdsch. 29.

Mynes plateni f. n. *zoa* p. 535, *M. geoffroyi* subsp. n. *turturilla*, ff. n. *braga* & *scatinia*, p. 536, FRUHSTORFER Seitz Gr. Schm. indoaustr. 9.

Napeocles jucunda subsp. n. *dumnorix*, FRUHSTORFER p. 14 Ent. Rdsch. 29.

Neptidopsis fulgurata ab. n. *pseudoplatyptera*, STRAND p. 68 Arch. Naturges 78 A 1.—*N. ophione* var. n. *nucleata*, GRÜNBERG p. 526 Ergebn. D. Zentr.-Afrik. Exp. 3 L 17.

Neptis swynnertoni sp. n. Rhodesia, TRIMEN p. xxviii P. ent. Soc. London 1912.—*N. keyensis* sp. n. Key-Islands, KLUNDER VAN GIJEN Tijdschr. Ent.

55 p. 45.—*N. melicerta* var. n. *melicertula*, STRAND p. 116 Arch. Naturges. 77 Suppl. 4.—*N. vikasi* subsp. n. *batuensis*, FRUHSTORFER p. 118 Ent. Rdsch. 29.—*N. columella* race *kankena* n. p. 558.—*N. (Stabrobates) melba* sp. n. Himalaya pp. 558 and 578, EVANS J. Bombay Soc. 21.

Panacea prola zaraja, procilla ocana, subsp. n., FRUHSTORFER p. 46 Ent. Rdsch. 29.

Penthema lisarda subsp. n. *mihintala* p. 463, *darlisa* f. n. *telearchides* p. 464, FRUHSTORFER Seitz Gr. Schm. indo-austr. 9.

Phyciodes coracara sp. n. p. 40, Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Polygonia c-album ab. n. *nigrolunaria*, NITSCHE Verh. z.-b. Ges. Wien 62 p. (109).

Precis clelia ab. n. *subvirilis*, STRAND p. 144 Arch. Naturges. 78 A 9; *P. clelia* abb. n. *bipupillata, posterior, subtriocellata, subbipupillata, virilis* Abessynia, STRAND p. 89-90 Arch. Naturges. 77 Suppl. 4.—*P. iphita* subsp. n. *cebara* p. 517, *P. hedonia* f. n. *pseudiphita*, subsp. n. *teurnia, thero, numana*, p. 518, *P. atlites* subsp. n. *acera* p. 519, *P. lemonias* subsp. n. *aenaria, vaisya*, f. n. *persicaria, P. erigone* f. n. *persiccata*, p. 520, subsp. n. *tegea, P. timorensis* subsp. n. *cibota, P. villida* subsp. n. *phylace* p. 521, f. n. *procax* p. 522, *orithya* subsp. n. *hainanensis* p. 522, *patenas, leurasia, eutychia*, p. 523, *palea, saleyra*, p. 524, f. n. *phycites* p. 522, FRUHSTORFER Seitz Gr. Schm. indoaustr. 9.

Prepona praeneste ab. n. *paradisiaca*, FASSL p. 76 Ent. Rdsch. 29.—*P. chromus* ab. n. *ochracea*, FASSL p. 121 T.c.—*P. neoterpe* subsp. n. *photidia*, FRUHSTORFER p. 45 Ent. Rdsch. 29.

Pseudacraea ruwenzorica sp. n. Ruwenzori, GRÜNBERG p. 530 Ergebn. D. Zentr.-Afrik. Exp. 3 Lief. 17.—*P. deludens* sp. n. Nyasaland, NEAVE p. 228 Ent. Rec. 48.—*P. hobleyi*, allies, POULTON p. lxxxiv P. ent. Soc. London 1912.—*P. fickei* f. n. *occidentalis*, AURIVILLIUS Seitz Gr. Schm. afr. 13 p. 196.—*Pseudergolis wedah* subsp. n. *chinensis, avesta* subsp. n. *toalarum*, FRUHSTORFER Seitz Gr. Schm. indoaustr. 9 p. 461.

(N-9210 j)

Pyrameis atalanta, migration, DAVIS J. New York Ent. Soc. 20 p. 293.—*P. cardui* ab. *carnea*, FRITSCH p. 136 Ent. Rdsch. 29.—*P. cardui* ab. *elymi*, HOFFMANN Ent. Zs. Frankfurt 26 p. 45.—*P. indica* subsp. n. *pholoë* FRUHSTORFER Seitz Gr. Schm. indo-austr. 9 p. 525.

Pyrhogyra neaera subsp. n. *susarion*, FRUHSTORFER p. 15 Ent. Rdsch. 29.

Salamis cacta, broods, POULTON p. lxxv P. ent. Soc. London 1912.

[*Salamis* in last vol. was misplaced in *Danaidae*.]

Sephisia chandra var. n. *albina* and *chandrana* p. 558, EVANS J. Bombay Soc. 21.

Symbrenthia hippoclus subsp. n. *jolonus, aritus, sumatranus, batunensis*, p. 530, *armis* p. 532, f. n. *illustrata* p. 531, *S. hypselis* subsp. n. *circesia* p. 532, *optatus, niphandina* p. 533, FRUHSTORFER Seitz Gr. Schm. indo-austr. 9.

Temenis laothoe subsp. n. *pedania* and *korallion*, FRUHSTORFER p. 14 Ent. Rdsch. 29.

Terinos terpander subsp. n. *bankanensis* p. 493, *T. clarissa* subsp. n. *bangueyana & luciella* p. 495, FRUHSTORFER Seitz Gr. Schm. indoaustr. 9.

Timelaea maculata f. n. *muliebris*, FRUHSTORFER p. 511 T.c.

Vanessa caschmirensis subsp. n. *aësis, V. canace* subsp. n. *siphnos*, p. 527, *javanica, manilana*, p. 528, FRUHSTORFER T.c.—*V. polychloros*, egg, FROHAWK p. 225 Entomologist 45; ab. *diffusa*, FRITSCH p. 136 Ent. Rdsch. 29.—*V. urticae* Temperaturvarietäten, JACHONTOV Rev. russ. ent. 12 p. 36; Pseudo-Albinismus (Russ.), DIADŌENKO Naturfreund 7 p. 148; *V. urticae transiens* ab. n. Südwest-Russland (Russ.), KSEUŽOPOLĬSKIJ Trd. Obšč. izsl. Volyni 8 pp. 32-33 pl. ii f. 4.

SATYRIDAE.

Antirrhea ulei sp. n. Venezuela, STRAND p. 47 Fauna exot. 2.—*A. philaretus* subsp. n. *apoxyomenes* Bolivia, FRUHSTORFER p. 31 Ent. Rdsch. 29.

Argyrophenga antipodum p. 207, pupa fig., HOWES Trans. N. Zeal. Inst. 44.

Caerois chorinaeus subsp. n. *protonoë*
Peru, FRUHSTORFER p. 31 Ent. Rdsch.
29.

Catargynnis macasica sp. n. Ecuador,
STRAND p. 144 Arch. Naturges 78 A 9.

Coenonympha arcania ab. n. *suproph-*
talmica, *iphis* var. n. *iphicleoides*, SCHA-
WERDA Verh. zool.-bot. Ges. Wien 62 p.
138.—*C. arcania satyrion*, Artberechti-
gung, SCHAWERDA Verh. z.-b. Ges. Wien
62 p. (122).—*C. iphis* var. n. *iphicleoides*,
SCHAWERDA Verh. z.-b. Ges. Wien 62
pp. (138)–(148); ab. n. *cohaerens*, SKALA
Verh. Ver. Brünn 50 p. 63, etc.—
C. pamphilus ab. n. *addenda*, REVER-
DIN Genève Bull. Soc. Lépidopt. 2
1910 pp. 44–50.—*C. hero* abb. n. *herota*
& *heromorpha*, *pamphilus* ab. n.
lineigera, STRAND p. 257 Ent. Zeitschr.
25.

Cyllogenes janetae pl. A fig. 7 p. 54,
TYTLER J. Bombay Soc. 21.

Epinephele jurtina caeca ab. n.
(Russ.), KSEŪZOPOLĬSKIJ Trd. Obsč.
izsl. Volyni 8 p. 49 pl. i f. 3; *E. jurtina*
et *telmessia*, LE CERF Paris Bull. Soc.
ent. 1912 pp. 225–231 fig.—*E. tithonus*
tithonellus, *jurtina subhispulla*, abb. n.,
STRAND p. 254 Ent. Zeitschr. 25;
f. n. *fulgens*, TURATI p. 304 Ent. Rec.
24.

Erebia aethiops ab. ♀, REINBERGER
Intern. ent. Zs. Guben 6 p. 59.—*E.*
alecto-nicholli ab. n. *homogena*, WAGNER
Verh. z.-b. Ges. Wien 62 p. (210).—
Erebia blandina & *epiphron* larval
food-plant, ROTHSCHILD p. 239 Ent.
Mag. 48.—*E. epiphron* var. *cassiope*,
BAUER Halle, Mitt. ent. Ges. H. 3–4
pp. 28–35; ROWLAND-BROWN p. 334
Entomologist 45.—*E. euryale brutiorum*
subsp. n., TURATI p. 16 Annuar. Mus.
Napoli 3 No. 18 1911.—*E. ligea* und
aethiops, Periodicität, JACHONTOV Rev.
russ. ent. 12 p. 37.—*E. manto*, varr.,
LOWE Entomologist 45 p. 144.—
E. medusa ab. n. *diffuse*, BLACHIER
Genève Bull. Soc. Lépidopt. 2 p. 51 etc.
—*E. melas* var. n. *hercegovinensis*,
SCHAWERDA Verh. zool. bot. Ges.
Wien 62 p. (138).—*E. pharte* ab. n.
extrema, SCHWINGENSCHUSS Verh. z.-b.
Ges. Wien 62 p. (116).—*E. stygne*,
Ei, GERSTNER Soc. entomol. 27 p. 94.

Euptychia pertepida sp. n. p. 39,
Mexico, DYAR Proc. U. S. Nation. Mus.
42.

Leptoneura bowkeri, pl. xvii f. 4,
TRIMEN p. 387 Tr. ent. Soc. London
1912.

Lethe brisanda p. 50 pl. A figs. 1 & 2,
confusa p. 51, *dinarbas* pl. A. figs.
3 & 4, *sidonis* p. 52, TYTLER J. Bombay
Soc. 21.

Manataria hercyna subsp. n. *hyr-*
nethia Bolivia, FRUHSTORFER p. 31
Ent. Rdsch. 29.

Melanargia; d'Andalousie, GERVAIS
D'ALDIN Bull. Soc. ent. France 1912
p. 53.—*M. galatea* f. n. *zobeli*, HEIN-
RICH p. (29) Berlin. ent. Zeitschr. 57.—
ab. n. *nigricans*, CULOT Genève Bull.
Soc. Lépidopt. 2 1911 p. 101.—*N.*
ines, Ei, RICHTER Lotos 60 p. 251.—
M. japygia suwarovius, life-history,
FROHAWK & ROTHSCHILD p. 237
Entomologist 45.

Mycalesis buea p. 109, *hintzi*, *cam-*
pides, p. 110, spp. n., *M. funebris* f. n.
agraphides p. 113, Kamerun, STRAND
Arch. Naturges. 77 Suppl. 4.—*M. ena*,
pl. xvii figs. 1 & 1a p. 384, TRIMEN Tr.
ent. Soc. 1912.—*M. benina* p. 508,
mesogenina p. 509, spp. n., *auricruda*
ab. n. *parvoocellata* p. 510, *golo* var. n.
obliterata, *olivia* sp. n. Kirou-See, p. 511,
GRÜNBERG Ergebn. D. Zentr.-Afrik.
Exp. 3 L. 17.—*M. perseoides* race
khasia n., *visala*, race *orcha*, p. 568,
EVANS J. Bombay Soc. 21.

Oeneis velleda sp. n. Sibiria, AUSTAUT
p. 360 Internat. ent. Zeitschr. 5.—
Oe. norna varr. n. *tundra*, *saga*, p. 104,
brunhilda sp. n. Sajon p. 105, BANG-
HAAS D. ent. Zs. Iris 1912.

Pedaliodes roraimae sp. n. Venezuela,
STRAND p. 48 Fauna exot. 2.

Pseudonympha durbani pl. xvii f. 2,
hippia f. 3, TRIMEN p. 385 Tr. ent. Soc.
London 1912.

Satyrus actaea ab. n. *macrophthalma*,
HAFNER Carniola 1912 p. 43–75.—
S. abdelkader, Ei, RICHTER Lotos 60
p. 251.—*S. neomeris* v. n. *saengeri*,
semele v. n. *rautheri*, Sardinia, KRAUSSE-
HELDRUNGEN p. 159 Arch. Naturges.
78 A 9.—*S. hubneri* race *moorei* n.
p. 558, EVANS J. Bombay Soc. 21.

Shania subg. n. of *Ypthima* pp. 558–
564 for *Y. megalia*, EVANS T.c.

Taygetis weymeri sp. n. Mexico,
DRAUDT p. 61 Fauna exotica 1.

Triphysa phryne var. n. *glacialis*,
BANG-HAAS p. 105 D. ent. Zs. Iris 26.

Tristeleuta subg. n. zu *Antirrhea*,
STRAND p. 44 Fauna exot. 2.

Ypthima affectata p. 61, EVANS
Rec. Ind. Mus. 8.

BRASSOLIDAE, MORPHIDAE.
AMATHUSIIDAE.

Amathusiidae [Schluss.], FRUHSTORFER
In: Seitz. Gross-Schmetterlinge de
Erde Fauna indoaustr. Stuttgart pp.
449-452 Taf.

Amathusiidae STICHEL Das Tier-
reich Lfg 34 pp. xv + 248.

Morphidae, FRUHSTORFER In: Ad.
Seitz, Gross-Schmetterlinge der Erde
Fauna amer. 5 pp. 333-344 Taf.

Brassolis sophorae sophorae and
sophorae lurida, females, VAN EECKE
Notes Mus. Leiden 34 p. 257 2 figs.

Caligo eurilochus [!] subsp. n. *phrya-*
sus, *C. prometheus* subsp. n. *anaxi-*
mandrus, FRUHSTORFER p. 15-16 Ent.
Rdsch. 29.

Eryphanes polyxena subsp. n.
spintharus, FRUHSTORFER p. 15 Ent.
Rdsch. 29.

Faunis arcesilaus subsp. n. *cyme*
Java, FRUHSTORFER Seitz Gr. Schm.,
F. indoaustr. p. 449.

Iphimedeia subg. n. zu *Morpho*,
FRUHSTORFER Seitz Gr. Schm., F.
amer. 5 p. 335.

Morpho peleides subsp. n. *insularis*
Trinidad, FRUHSTORFER p. 31 Ent.
Rdsch. 29.—*M. theseus* subsp. n.
thiasus, *susarion*, *yaritanus* Columbia,
etc., p. 336, *M. hecuba* subsp. n.
heracles Amazonas p. 338, *polyidos*
Venezuela, *M. laertes* subsp. n. *eutropius*
Espiritu Sto. p. 339, *M. catenarius* ff. n.
nigrescens, *effigurata* 340, *M. achil-*
laena subsp. n. *violaceus* p. 342 Brasilia,
M. patroclus subsp. n. *agamedes* Peru p.
343, *M. peleides* subsp. n. *zela* Mexico,
zonaras Columbia p. 344, FRUHSTORFER
Seitz Gr. Schm. F. amer. 5.

Opsiphanes tamarindi subsp. n.
kleisthenes & *cherocles*, *O. bogotanus*
subsp. n. *phrataphernes*, *O. quiteria*
subsp. n. *augeias* & *phylas*, FRUH-
STORFER p. 15 Ent. Rdsch. 29.

(N-9210 j)

Thaumantis odana f. n. *albocostalis*
subsp. n. *wedana* & *panwila*, FRUH-
STORFER Seitz Gr. Schm. indoaustr.
p. 449.

ELYMNIIDAE, ERYCINIDAE,
(=RIODINIDAE), LIBYTHEIDAE.

Abisara eromend p. 594, *heterisa*
p. 595. spp. n., New Guinea, JORDAN
Nov. Zool. 18.—*A. kausambi* subsp. n.
stasinus & *litavicus*, *A. kausambioides*
subsp. n. *iliaca*, *A. neophron* subsp. n.
gratius, FRUHSTORFER p. 23 Ent.
Rdsch. 29.—*A. celebica* subsp. n.
saleyra, FRUHSTORFER p. 22 T.o.

Caria melino p. 40, *stillaticia* p. 41,
spp. n., Mexico, DYAR Proc. U. S.
Nation. Mus. 42.

Dicallaneura amabilis casis subsp. n.,
JORDAN p. 596 Nov. Zool. 18.

Dodona eugenes venox, *dipoea nostia*,
subsp. n., FRUHSTORFER p. 24 Ent.
Rdsch. 29.

Libythea celtis, eggs and oviposition,
CHAPMAN p. 302 pls. xii & xiv Ent.
Rec. 24.

Mesosemia ramsdeni sp. n. Cuba
p. 126, SKINNER Ent. News 23.

Ourocnemis bouletti sp. n. p. 412
fig., LE CERF Bull. Mus. Paris 1911.

Taxila haquinus subsp. n. *ducas* &
agias p. 23, *T. thuisto* subsp. n.
therikles & *eulyches* p. 24, FRUHSTORFER
Ent. Rdsch. 29.

Zemerus emesoides subsp. n. *banguay-*
anus p. 22, *flegyas* subsp. n. *balinus*
p. 23, *Z. flegyas* subsp. n. *annamensis*,
phyliscus, *hostius*, *arimazes* & *sosi-*
phanes, p. 23, FRUHSTORFER Ent.
Rdsch. 29.—*Z. flegyas*, p. 63, EVANS
Rec. Ind. Mus. 8.

LYCAENIDAE.

Uebersicht der Lycaeniden des Indo-
Australischen Gebiets, FRUHSTORFER
Berliner ent. Zs. 56 pp. 197-272.

Lycaenidae of Borneo, MOULTON J.
Straits Asiat. Soc. 60 1911 pp. 73-177,
pl.

Zeichnungs-Aberrationen bei Lycae-
niden, COURVOISIER D. ent. Zs. Iris 26
pp. 38-35.

Agriades gravesi sp. n. Lebanon.
CHAPMAN p. 159 pls. vii & viii Ent.
Mag. 48; *A. gravesi* is var. of *alexius*,

d 35-2

CHAPMAN p. 277 pl. ix figs. 1 & 2 Ent. Mag. 48.—*A. polonus*, WAGNER Soc. entomol. 27 p. 68.

Albulina pheretes, early stages, CHAPMAN pp. 393–406 pls. xviii–xxxvi Tr. ent. Soc. London 1912.

Aphnaeus gabriel p. 162 pl. 733 f. 4 sp. n. Burma, SWINHOE Lep. ind. 9.—*A. syama* subsp. n. *sepulveda* China, *latipicta* Tonkin, *terana* Sumatra, *pongulina* Java p. 217, *A. takanonis* subsp. n. *ducalis* China, *A. lohita* subsp. n. *seliga* Tenerassim, *batina* Annam p. 218, *panasa* Tonkin, *rokana* Borneo, *senama* Sumatra, *A. rectilineata* subsp. n. Java p. 219, *A. rubicundus* subsp. n. Borneo, *A. vulcanus* subsp. n. *javanus* Java p. 220, FRUHSTORFER Berlin. ent. Zs. 56.—*A. khurdanus*? and sp. pl. ii f. 5 p. 600, TYTLER J. Bombay Soc. 21.

Araotes lapithis subsp. n. *arianus* Palawan, *uruwela* Borneo, *archytas* Java, FRUHSTORFER p. 227 Berlin ent. Zs. 56.

Arhopala incerta p. 128, *sarawaca* p. 134, *tembaga* p. 136, *shelfordi*, *sajah*, p. 142, spp. n., Borneo, MOULTON J. Straits Asiat. Soc. 60 1911.—*A. ganesa* race *watsoni* n. p. 559, EVANS J. Bombay Soc. 21.

Aslauga kallimoides sp. n. Kamerun, SCHULTZE p. 43 Ent. Rdsch. 29.

Biduanda thesmia subsp. n. *umara*, *vanica*, p. 251, *batunensis* p. 272, FRUHSTORFER Berlin. ent. Zs. 56.

Bindahara phocides f. n. *phocidina* p. 244, *B. p.* subsp. n. *origenes* p. 245, FRUHSTORFER T.c.

Bothrina chennelli, from *Cyaniris* p. 594, TYTLER J. Bombay Soc. 21.

Bryna subg. n. of *Lycaena* p. 558 for *Polyommatus* to include *icarus* and *stoliczkana*, notes p. 984, EVANS J. Bombay Soc. 21.

Callophrys mystaphia sp. n. Kars, MILLER p. 222 D. ent. Zs. Iris 26.—*C. rubi* var. n. *caerulescens*, BANG-HAAS p. 106 D. ent. Zs. Iris 26.—*C. avis*, food-plant, CHAPMAN p. 409 Tr. ent. Soc. London 1912.

Camena ister subsp. n. *yasa* Nias p. 205, *ecphantus* Java, *C. deva* subsp. n. *angeda* India, *devadatta* Borneo, *cartena*, *methara* Java, p. 206, *C. ctesia* subsp. n. *agalla* China, *C. lucida* subsp. n. *minturna* Sikkim, *nacandra*

Java, p. 207, *C. cotys* subsp. n. *capusa* Nias, *C. anysides* subsp. n. *aristarchus* Bazilan, p. 208, *C. anysis* subsp. n. *polyorketes* Philippinen 270 and *canachus* Sulu-Ins. p. 271, FRUHSTORFER Berlin ent. Zs. 56.

Catapocilma elegans subsp. n. *myosotina* p. 234, *sophonias*, *emas*, p. 235, FRUHSTORFER Berlin. ent. Zs. 56.

Catochrysops lithargyria and *strabo*, notes p. 136, GREEN Spolia Zeylan. 8.

Celastrina argiolus, larval food-plant, BURROWS p. xcii P. ent. Soc. London 1912.

Charana splendida p. 155 f. 3, *C.?* *abnormis* p. 156 f. 10, spp. n., Borneo, MOULTON J. Straits Asiat. Soc. 60 1911.

Cheritra freja subsp. n. *frigga* Sumatra *C. aurea* subsp. n. *volumnia* Perak, *C. orpheus* subsp. n. *eurydice* Palawan p. 243, FRUHSTORFER Berlin ent. Zs. 56.

Chliaria balua sp. n. Borneo, MOULTON p. 151 f. 6 J. Straits Asiat. Soc. 60 1911.—*C. othona* subsp. n. *matiana* Tonkin p. 231, FRUHSTORFER Berlin ent. Zs. 56.

Chrysophanus alciphron var. *gordius* f. *caeca*, BUSSE Ent. Zs. 26 p. 101.—*C. dcriilis* ab. n. *straminea*, BLACHIER Genève Bull. Soc. Lépidopt. 2 p. 51 etc.—*C. phleas pusilla* p. 56 pl. i f. 10 ab. n., *alciphron violacea* ab. n. p. 55, *dorilis striata* ab. n. p. 56 (Russ.), KSENŽOPOL-ISKIJ Trd. Obsč. izsl. Volyni 8 f. 10.—*Phlaeas* Linnésche Diagnose von Intern. ent. Zs. Guben 6 p. 156—Berichtigung dazu v. COURVOISIER p. 161; *phlaeas* ab. n. *semialba*, STRAND p. 257 Ent. Zeitschr. 25.—*Chrysophanus* var. *rutilus* und Lebensweise, KRÄHE Ent. Zs. p. 106.—*Ch. virgaureae*, *phlaeas*, Saisonvarietat p. 38, JACHONTOV Rev. russ. ent. 12.—*Chrysophanus*; Arten, Nomenklatur, COURVOISIER Intern. ent. Zs. Guben 6 p. 29–30 37–38 41–42 51–52 65–66 71–72.—*C. boldenarum* p. 206 fig., *sallustius* p. 207 fig., larvae and pupae, HOWES Trans. N. Zeal. Inst. 44.

Cupido iobates ab. n. *conjugens*, STRAND p. 81 Arch. naturges. 78 A 1.—*C. palemon* var. n. *fracta*, GRUNBERG p. 545 D. Zentr.-Afrik. Exp. 3 L. 17.

Cyaniris lugua floresiana f. nov.,
COURVOISIER Tijdschr. Ent. 55 p. 16.

Dacalana sangirica sp. n. Sangir,
FRUHSTORFER p. 270 Berlin ent. Zs.
56.

Deudorix staudingeri subsp. n. *sumatrensis* Sumatra p. 264, *D. epijarbas* subsp. n. *ancus* Himalaya, *amatius* Tonkin, *menesicles* Formosa, p. 265, *coriolanus* Philippinen, *megakeles* Celebes, *turbo* Key-Inseln, *mesarchus* Lombok, *cinnabarus* Java, p. 266, *terenzius* Nias, *enganicus* Engano, *D. perse* subsp. n. *ghela* Ceylon, *maseas* Andamanen, p. 267, *silo* Borneo, *vocetius* Palawan, p. 268, FRUHSTORFER T.C.—*D. antalus* v. n. *kitobolensis*, STRAND p. 145 Arch. Naturges. 78A 9.

Epamera gazei sp. n. Nigeria, DRUCE p. 128 pl. ix figs. 2 & 3 Ent. Mag. 48.

Horaga albistigmata sp. n. Borneo p. 159, MOULTON J. Straits Asiat. Soc. 60 1911.—*H. onyx* subsp. n. *paullus* Bazilan, *joloana* Tolo, p. 232, *juniga*, *H. affinis* subsp. n. *artontes* Nias, *H. ciniata* subsp. n. *permagna* Celebes, *H. lefebvrei* subsp. n. *osma* Mindanao, *H. achaja* sp. n. Siam, p. 233, FRUHSTORFER Berlin ent. Zs. 56.

Hypolycaena theoloides subsp. n. *extensa* Engano, *vardara* Siargao p. 237, *camotana* Philippinen p. 271, *H. erylus* subsp. n. *himavantus* Sikkim p. 237, *syphax* Nias, *gamatius* Celebes, *thyrius* Halmahera, *pigres* Obi, *figulus* Waigiu, *pupienus* Lombok, *teatus* Borneo, *mindoranus* Mindoro, p. 238, *orsiphantus* Bazilan, *aimnestus* Palawan, *georgius* Sulu-Archipel, *H. phorbas* subsp. n. *silo* Neu-Guinea, *H. sipylus* subsp. n. *gison*, p. 239, *rhodanus* Celebes, *numa* Sumbawa, *capella* Lombok, *pictor* Waigiu, p. 240, FRUHSTORFER Berlin ent. Zs. 56.—*H. erylus*, Symbiose der Raupe und *Oecophylla smaragdina*, JACOBSON Tijdschr. Ent. 55 p. 9-14.

Hypothecia astyla subsp. n. *tegea* p. 241, *mindanaensis* p. 271, FRUHSTORFER Berlin ent. Zs. 56.

Ilerda epicles subsp. n. *hilima*, FRUHSTORFER p. 253 Berlin ent. Zs. 56.—*I. kohimensis* sp. n. p. 598 pl. B fig. 3 Naga hills, *viridipuncta* race n. *kala* fig. 4, *brahma* ab. n. *hybrida*, p. 599, TYTLER J. Bombay Soc. 21.—*I. androcies* race *viridis* nov. p. 989, EVANS J. Bombay Soc. 21.

Iolaus mildbraedi sp. n. Kamerun, SCHULTZE p. 93 Ent. Rdsch. 29.

Iraota timoleon subsp. n. *mangolina*, FRUHSTORFER p. 272 Berlin ent. Zs. 56.

Lampides vyneri sp. n. Borneo, MOULTON J. Straits Asiat. Soc. 60 p. 111 1911.—*L. agnatinus* sp. n. Java, COURVOISIER Tijdschr. Ent. 55 p. 17.—*L. elpis* and ab. n. *chinee* p. 596 pl. B fig. vi, TYTLER J. Bombay Soc. 21.

Liphya castnia ab. n. *partita*, STRAND p. 145 Arch. Naturges. 78 A 9.

Liptena sauberi sp. n. Kamerun, SCHULTZE p. 92 Ent. Rdsch. 29.

Logania drucei sp. n. Borneo p. 85 f. 9, MOULTON J. Straits Asiat. Soc. 60 1911.

Loxura atymnus subsp. n. *continentalis* Siam p. 221, *fuconius* Borneo, *leminius* Sumatra, *deinostratus*, *matienus* Java, p. 222, *manilius* Lombok, *anglerius* Kisser, *L. cassiopeia* subsp. n. *amatica* Borneo, *numana* Sumatra, *fuscicauda* Nias, p. 223, FRUHSTORFER Berlin ent. Zs. 56.

Lycaena diana sp. n. Kars, MILLER p. 220 D. ent. Zs. Iris 26.—*L. antiacis*, HASKIN Bull. So. Cal. Ac. 8 p. 8 pl.—*L. (Agriades) alexius* Frr., a good species, CHAPMAN p. 127 Ent. Mag. 48.—*Lycaena-Argus* Gruppe Nomenklatur, COURVOISIER Intern. ent. Zs. 6 p. 213-215 223-224 227-230 241-244 258-259 267-269 312.—*L. orion*, SRDINKO Intern. ent. Zs. Guben 6 p. 102.—*L. arion* ab. n. *fasciata*, SKALA Verh. Ver. Brünn 50 p. 63 etc.—*L. corydon* n. var. *constanti*, *L. astarche* ab. n. *caeca*, BLACHIER Genève Bull. Soc. Lépidopt. 2 p. 51 etc.—*L. eros eroides* p. 59 pl. i f. 7, *blökeri* morpha n. p. 60 f. 8 (Russ.), KSEUŽOPOLŤSKIJ Trd. Obsč. izsl. Volyni 8.—*L. meleager* ab. n. *punctata*, SKALA Verh. Ver. Brünn 50 p. 63 etc.—*L. orbitulus* race *walli* nov. pp. 558 & 983, *sarta* race *gracilis* pp. 559 & 984, EVANS J. Bombay Soc. 21.

Lycaenesthes ruwenzoricus sp. n. Ruwenzori, GRUNBERG p. 543 Ergebn. D. Zentr.-Afrik. Exp. 3 I. 17.—*L. emolus topa* race n. p. 986, EVANS J. Bombay Soc. 21.

Lycaenopsis oskewa p. 90, *lingga* f. 5, *nigerrimus*, p. 96, *delapra* p. 98, spp. n.,

Borneo, MOULTON J. Straits Asiat. Soc. 60 1911.—*L. shelfordi*, ♀, DRUCE p. 500 Ann. Nat. Hist. 9.

Marmessus lisias subsp. n. *lisiades* Kinabalu p. 248, *iskander* Sumatra, *M. rufotaenia* sp. n. Malacca p. 249, *M. moorei* subsp. n. *nola* Borneo, *sumatranus* Sumatra p. 272, *M. ravindra* subsp. n. *medullia* Java p. 250, FRUHSTORFER Berlin ent. Zs. 56.

Miletus euclides Miskin = *meleagris* Wat., WATERHOUSE Vict. Nat. 27 p. 157.

Mimacraea laeta p. 49, *schubotzi*, *flavofasciata*, Kamerun, *pulverulenta*, *graeseri*, Kongo, p. 50, spp. n., SCHULTZE Ent. Rdsch. 29.—*M. eltringhami* p. 635, *costleyi* p. 636, spp. n., Centr. Africa, DRUCE Ann. Nat. Hist. 9.

Nacaduba ardates, *nora* and *noreia*, p. 137, GREEN Spolia Zeylan. 8.

Neocheritra amrita f. n. *megalesia*, FRUHSTORFER p. 246 Berlin ent. Zs. 56.

Notarthrinus boulti sp. n. Borneo, CHAPMAN p. 103 pl. vi Ent. Mag. 48.

Ogyris aurantiaca sp. n. Neu-Guinea, REBEL Ver. z.-b. Ges. Wien 62 p. (218).

Polyommatus boeticus, FRASER p. 287 J. Bombay Soc. 21.

Phengaris atroguttata p. 594 pl. B figs. 7 & 8, TYTLER J. Bombay Soc. 21.

Poritia hewitsoni ff. n. *interjecta*, *nigritia*, p. 198, *palilia*, Sikkin, *P. h.* subsp. n. *ampsaga* Annam, *P. erycinoides* ff. n. *demaculata*, *naukydes*, p. 199, *coronata* Java, *P. e.* subsp. n. *manilia* Sumatra, p. 120, *P. pavonica* subsp. n. *veturia* Siam p. 201, *P. phalena* subsp. n. *javanica* Java p. 202, *P. phalia* subsp. n. *binghami* Tenerassim p. 203, FRUHSTORFER Berlin ent. Zs. 56.—*P. pasira* sp. n. Borneo p. 122 f. 2, MOULTON J. Straits Asiat. Soc. 60 1911.—*P. hewitsoni tavoyana* p. 65, EVANS Rec. Ind. Mus. 8.

Pseuderesia mildbraedi sp. n. Kamerun, SCHULTZE p. 43 Ent. Rdsch. 29.

Rapala manea subsp. n. *ocerta*, *asikana* Java, *enganica* Engano, *lombokiana* Lombok, *baweanica* Bawean, *philippensis* Luzon, p. 254, *R. alcetas* subsp. n. *bandatara* Bazilan, *ingana* Borneo, *R. schistacea* subsp. n. *renata*, *beluta*, *R. abnormis* subsp. n. *abusina*, p. 255, *R. barthema* subsp. n. *litunia*

Java, *R. sphinx* subsp. n. *zamona* Luzon, p. 256, *melida* Borneo, *R. kessuma* subsp. n. *clearchus* Sumbawa, *R. nissu* subsp. n. *palamera* Sumatra, *odosia* Java p. 257, *R. varuna* subsp. n. *ambasa* Nias, *sagata* Bawean, *arima* Lombok, *saha* Borneo p. 258, *nada* Palawan, *phrangida* Luzon, *batilma* Tonimber, *formosana* Formosa p. 259, *R. xenophon* subsp. n. *catulus* p. 260, *R. dienece* subsp. n. *dazata* Nias, *mezetulus* Java, *valeria* Bazilan, p. 261, *aurelia* Annam, p. 262, *R. pheritima* subsp. n. *sakaia* Java, *R. utimutis* subsp. n. *guevara* Borneo, *R. melampus* subsp. n. *menaichus* Nias, *dekaiarchus* Java, p. 263, FRUHSTORFER Berlin ent. Zs. 56.

Semanga superba subsp. n. *gloriosa* Java, FRUHSTORFER T.c.

Sheffieldia gen. n. near *Cooksonia*, *neavei* sp. n. E. Africa, DRUCE p. 128 pl. ix f. 7 Ent. Mag. 48.

Sinthusa chandrana subsp. n. *sophonisbe* Tonkin, *margala* Annam, *S. uasaka* subsp. n. *obscurata* Assam, *pallidior* Himalaya, p. 228, *S. malika* subsp. n. *volsa* Java, *S. amba* subsp. n. *privata* Borneo, *S. niasicola* subsp. n. Nias p. 229, FRUHSTORFER Berlin ent. Zs. 56.

Sithon nedymond subsp. n. *megabates*, *anaximander* Sumatra, *ismarus* Birma, *mastanabal* Borneo, FRUHSTORFER p. 226 T.c.

Spalgis lemolea, larval food, POULTON p. xviii P. ent. Soc. London 1912.

Suasa madaura sp. n. Tonkin, FRUHSTORFER p. 230 Berlin ent. Zs. 56.

Tajuria sunia sp. n. Borneo, MOULTON p. 148 J. Straits Asiat. Soc. 60 1911.—*T. jalindra* subsp. n. *macanita* India, *gamtara* Borneo, p. 210, *T. cippus* subsp. n. *theodosius* Bawean, *frontinus* Lombok, *maxentius* Malacca, *T. maculata* f. n. *albipicta* Assam, *T. m.* subsp. n. *nigella* Borneo, p. 211, *T. mantra* subsp. n. *mesambria* Java, *maroneia* Nias, *T. plateia* subsp. n. [sic!] Celebes, p. 212, *T. isaeus* subsp. n. *pisatis* Java, *amardus* Nias, p. 213, *T. cleoboides* subsp. n. *epigenes* Java, *T. donatana* subsp. n. *banguyana* Banguy, *elaju* Nias, *T. japyx* subsp. n. *massicus* Celebes, p. 214, *T. cyrillus*

subsp. n. *herculus* Celebes, p. 215, FRUHSTORFER Berlin ent. Zs. 56.

Teratoneura isabellae, DRUCE pl. ix f. 1 Ent. Mag. 48.

Thecla hamila p. 896 pl. xcvi f. 1, *fancia* f. 2, *sicrana* f. 3, *bertha* f. 4, p. 897, *schausa* f. 5, *japola* f. 6, p. 898, *fernanda* f. 7, *nora* f. 8, *molena* f. 9, p. 899, *esmeralda* figs. 10 & 11, *castrena* figs. 12 & 13, p. 900, *campa* f. 14, *datitia* f. 15, p. 901, spp. n., Brazil, JONES P. zool. Soc. London 1912.—*T. maraches* pl. x f. 2, *fassli* pl. ix f. 10, *orocana* f. 11, p. 130, *lophis* pl. x f. 1, *opisena* f. 3, p. 131, spp. n., S. America, DRUCE Ent. Mag. 48.—*T. primnoza* p. 41, *zenaida*, *greppa*, p. 42, Mexico, spp. n., DYAR Proc. U.S. Nation. Mus. 42.—*Thecla clytie*, *leda* and *ines*, BARNES & McDUNNOUGH Ent. News 23 pp. 40-53 pl. vi ff. 1-7; *T. clytie* var. *leda*, syn. *ines* p. 346, HASKINS Ent. News 23 p. 344.—*T. dumetorum*; syn. *affinis*, *viridis*, HASKIN & GRINNELL, Ent. News 23 pp. 3-8.

Ticherra acte f. n. *idina*, *T. a.* subsp. n. *liviana*, FRUHSTORFER p. 245 Berlin ent. Zs. 56.

Tiora subg. n. of *Lycaena* p. 558 & 984 for *Polyommatus shandura*, EVANS J. Bombay Soc. 21.

Una usta, p. 593 pl. B figs. 1 & 2, TYTLER J. Bombay Soc. 21.

Yasoda pita subsp. n. *singama* Java, *Y. tripunctata* subsp. n. *atrinotata* Tonkin, p. 224, *dohertyi* Perak, *Y. androconifera* sp. n. Tonkin p. 225, FRUHSTORFER Berlin ent. Zs. 56.

Zeltus etolus subsp. n. *maximilianus* *gratidianus*, *pompaedius*, *ensorinus*, FRUHSTORFER p. 242 T.c

HESPERIIDAE.

Essai de revision de la famille des Hespérides, MABILLE & BOULLET Ann. sci. nat. Paris 16 p. 1-159 fig.

Ablepsis guyanensis sp. n. p. 156, MABELLE & BOULLET Ann. Sci. nat. 16.

Adopaea thaums ab. n. *pallidiscus*, STRAND p. 258 Ent. Zeitschr. 25.

Anisynta tillyardi sp. n. New South Wales, WATERHOUSE & LYELL p. 223 Victor. Nat. 28.

Butleria aca sp. n. p. 44 Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Calliades gen. n. voisin de *Thymele* p. 108, *rhacoces* sp. n. p. 110, MABILLE & BOULLET Ann. Sci. Nat. 16.

Calpodes ethlius, CHITTENDEN Circ. 145 U. S. Dep. Agric. ent. 10 pp. figs.; ENGELHARDT J. New York Ent. Soc. 20 p. 70; larva, SCHWARZ Ent. News 23 p. 130.

Cecropierus reflexus sp. n. p. 124, MABILLE & BOULLET Ann. Sci. Nat. 16.

Ceratruchia fasciata v. n. *tessmanniana* p. 109, *indeterminabilis* sp. n. p. 110, W.-Afr., STRAND Arch. Naturges. 78 A 9.

Daimio milliana sp. n. Burma p. 34 pl. 765 f. 3, SWINHOE Lep. ind. 10.

Dion turmada sp. n. Ecuador pl. x f. 7, DRUCE p. 132 Ent. Mag. 48.

Eagris sabadius var. n. *aldabranus* FRYER p. 20 pl. i f. 15 Tr. Linn. Soc. London 15.

Entheus ninyas sp. n. Bolivia pl. x f. 4, DRUCE p. 131 Ent. Mag. 48.

Epargyreus haitiensis sp. n. p. 65, MABILLE & BOULLET Ann. Sci. nat. 16.

Falga scydra sp. n. Ecuador pl. x f. 6, DRUCE p. 132 Ent. Mag. 48, p. 276 recognised as *F. theoclea* Hew.

Gecana gen. n. type *Ismene fergussoni*, SWINHOE p. 230 Lep. Ind. 9.

Heronia gen. n. p. 139, type *labriaris* Butl. pl. ii f. 4, MABELLE & BOULLET Ann. Sci. nat. 16.

Hesperia; armure génitale mâle, REVERDIN Genève Bull. Soc. Lépidopt. 2.—*H. melotis*, varr. and synonymy, ROWLAND-BROWN p. 77 Entomologist 45.—*H. malvae* and allies, ROWLAND-BROWN p. 5-7 T.c.; *H. malvae*, *fritillum* et *melotis*, REVERDIN Genève Bull. Soc. Lépidopt. 2 p. 59-77.—*H. malvae* ab. n. *pseudotaras*, Suisse, LACREUZE Genève Bull. Soc. Lépidopt. 2.—*H. sibirica*, REVERDIN Genève Bull. Soc. Lépidopt. 2 1910 p. 78.—*H. linea*, habits, oviposition, FROHAWK p. 253 pl. viii Entomologist 45.—*H. sidae*, life-history, POWELL p. 563 pl. xlvii Tr. ent. Soc. London 1911.

Hesperilla dominula = (*drachmophora* Meyr.), WATERHOUSE & LYELL p. 225 Victor. Nat. 28.

Heteropia cycledis sp. n. p. 42 Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Matapoides gen. n. near *Matapa smaragdinus* sp. n. Borneo, DRUCE p. 502 Ann. Nat. Hist. 9.

Milena subgn. n. of *Parnara* to include *plebeia* de N. p. 559, EVANS J. Bombay Soc. 21.

Murgaria albociliata nigrociliata var. n. p. 158, MABILLE & BOULLET Ann. Sci. nat. 16.

Nascus adrastor pl. i fig. 6, *diaphorus* pl. i fig. 4, p. 153, spp. n., MABILLE & BOULLET Ann. Sci. nat. 16.

Ocybadistes affinis sp. n. Queensland, WATERHOUSE & LYELL p. 227.

Pamphila silvius ab. *pseudopalae-mon*, FRITSCH p. 135 Ent. Rdsch. 29.

Pamphila palaemon ab. n. *conjuncta*, BLACHIER Genève Bull. Soc. Lépidopt. 2 p. 51 etc.

Pardaleodes alenica sp. n. W.-Afr., STRAND p. 108 Arch. Naturges. 78 A 9.

Parnara perobscura sp. n. Addah, DRUCE p. 504 Ann. Nat. Hist. 9.—*P. borbonica* v. n. *continentalis* O.-Afr., STRAND p. 80 Arch. Naturges. 78 A 1.

Pedestes bononoides sp. n. Sarawak, DRUCE p. 501 Ann. Nat. Hist. 9.

Physalea sororcula sp. n. p. 91 pl. ii fig. 3, MABILLE & BOULLET Ann. Sci. Nat. 16.

Pola gen. n. type *Ismene ataphub*, SWINHÖE p. 226 Lep. ind. 9.

Potamanax pisates sp. n. Ecuador pl. x f. 5, DRUCE p. 131 Ent. Mag. 48.

Protogenes gen. n. p. 92, voisin de *Thymele*, *affinis* sp. n. p. 93, MABILLE & BOULLET Ann. Sci. nat. 16.

Pyrgus zebra pl. xvii f. 5, *secessus* figs. 6 & 7, TRIMEN p. 388 Tr. ent. Soc. London 1912.

Pyrrhopygopsis crates, *fulvicrus*, spp. n., p. 3, *cleanthes aspilota* n. var. p. 7, MABILLE & BOULLET Ann. Sci. Nat. 16.

Sarangesa davidsoni p. 91 pl. 779 fig. 1, *hampsoni* p. 92 pl. 780 f. 1, spp. n., India, SWINHÖE Lep. Ind. 10.

Sarangesa ophthalmicodes sp. n. O.-Afr., STRAND p. 80 Arch. Naturges. 78 A 1.

Scobura matanga sp. n. Borneo, DRUCE p. 501 Ann. Nat. Hist. 9.

Sepa indistincta sp. n. Borneo, DRUCE p. 503 Ann. Nat. Hist. 9.

Spialia gen. n. type *Hesperia galba* Fabr., SWINHÖE p. 99 Lep. ind. 10.

Staphylus litus sp. n. p. 44 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Synemon, vide *Castniidae*.

Syrichthus, de l'Europe occidentale et de l'Algérie, OBERTHÜR Feuille jeunes natural. 42 p. 169.

Taractrocera sp. n. Burma p. 122 pl. 785 f. 3, SWINHÖE Lep. ind. 10.

Tarsoctenus bivittatus p. 23, *rufibasis* p. 24, spp. n., MABILLE & BOULLET Ann. Sci. nat. 16.

Telegonus anaphus anaphides var. n. p. 75, MABILLE & BOULLET Ann. Sci. nat. 16.

Telemiades perseus p. 114 pl. ii fig. 1, *diores* p. 117 with var. *obscurus*, *aberrans*, *acutipennis*, p. 120, spp. n., MABILLE & BOULLET Ann. Sci. Nat. 16.

Thorybes thedea sp. n. p. 43 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Thracides uridon sp. n. p. 43 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Thymele telegonoides sp. n. p. 104 pl. ii fig. 7, MABILLE & BOULLET Ann. Sci. Nat. 16.

Thymele fulgerator p. 55 larva, DYAR Proc. Ent. Soc. Washington 14.

Tothrix gen. n. type *Ismene mahintha*, SWINHÖE p. 233 Lep. Ind. 9.

Trapezites maheta, *phigalioides*, *iacchoides*, distinguished, synonymy, WATERHOUSE & LYELL p. 225 Victor. Nat. 28.

Yanguna leander sp. n. p. 92, BOULLET Bull. Soc. ent. France 1912.

Heterocera.

Some recent moth determinations; SWEZEY Proc Hawaiian Ent. Soc. 2 pp. 165-167.

CASTNIIDAE, MEGATHYMIDAE.

Castnia superba sp. n. Peru, STRAND p. 146 Arch. Naturges. 78 A 9.—*C. bogota* sp. n. Columbia, STRAND p. 99 Arch. Naturges. 77 Suppl. 4.—*C.*

thysanete sp. n. p. 100 Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Megathymus neumoegei stephensi subsp. n. p. 126, SKINNER Ent. News 23.—*M. streckeri texana* subsp. n. Texas p. 39 pl. ii f. 9, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 3.

Synemon partita n. n. für *parthenoides*, Boisd., *S. majagerda*, *magnifica*, *discalis*, spp. n., *S. collecta* abb. n. *obscuripennis*, *simpla*, *josepha* and *affinita*, *S. hesperioides* f. n. *maculata*, *S. directa* f. n. *bifasciata*, Australia, STRAND Seitz Gr.-Schm. Indoaustr. p. 1-3.

SESIIDAE OF AGERIIDAE.

Aegeriidae, BARTEL In: Seitz Gross-Schmetterlinge Fauna palaeart. 2 p. 375-416 Taf.

Figures of *Aegeriidae*, ROTHSCHILD Nov. zool. 19 pl. s. iv & v.

Aegeria ruficrista sp. n. Sarawak, ROTHSCHILD p. 122 Nov. zool. 19.—*A. crabroniformis*, SCHEFFLER Ent. Zs. Frankfurt 26 p. 32-34 37-39.

Aenigmina gen. n., *aenea* sp. n. p. 291, Africa, *latimargo* n. var. p. 292, LE CERF Bull. Soc. ent. France 1912.

Aschistophleps haematochrodes sp. n. Tonkin p. 54 fig., LE CERF T.c.

Chamaesphacia annellata f. n. *ledereri* für *ceriaeformis* Led., *C. bibioniformis* f. n. *boisduvalii* für *mysiniiformis* Boisd. p. 404, *C. cirgisa* p. 408, *crassicornis* p. 409, Uralsk, spp. n., BARTEL Seitz Gr.-Schm. pal. 2.

Dipsosphacia barbara sp. n. Algeria, p. 390, *rothschildi* Amasia, *auricaudata*, *roseiventris*, Ili-Gebiet, p. 393, *sareptana* Sarepta p. 395, *turcmena* Transkaspien p. 396, spp. n., BARTEL Seitz Gr.-Schm. pal. 2.

Melittia auricollis sp. n. Borneo, ROTHSCHILD p. 123 Nov. zool. 19.

Microsphacia gen. n. für *Paranthrene* aut., BARTEL Seitz Gr.-Schm. pal. 2 p. 414.

Paranthrene tabaniformis f. n. *sangaica*, BARTEL Seitz Gr.-Schm. pal. 2 p. 380.

Sesia donckieri sp. n. Madagascar p. 55 fig., LE CERF Bull. Soc. ent. France 1912.—*S. andreniformis*,

natural history, COCKAYNE Tr. City London Soc. 1909 pp. 21-24 pl.—*S. rubrofascia*, ♀ p. 122, JONES Ent. News 23.

Sphacia scribai sp. n. Japan, BARTEL Seitz Gr.-Schm. pal. 2 p. 379.—*S. coeruleonitens* p. 122, *tricolor* p. 123, spp. n., Borneo, ROTHSCHILD Nov. zool. 19.

Synanthedon unocingulata p. 383, *nihonica* p. 388, spp. n., Japan, BARTEL Seitz Gr.-Schm. pal. 2.

SPHINGIDAE.

Sphingidae, JORDAN In: Seitz Gross-Schmetterlinge Fauna palaeart. Abt. 2 p. 229-260 pl.

Life-histories of Peruvian *Sphingidae* 45 pp. 10 pls., MOSS Tr. zool. Soc. London 20.

Neue Aberrationen, GSCHWANDER Intern. ent. Zs. 5 p. 375.

Ach. atropos, WETTL Ent. Zs. 26 p. 155; Raupe und Puppe, JELINEK Cas. České Spol. Entomolog. Prag 7 1901 p. 10-14.—*A. styx* f. n. *interrupta* Assam, CLOSS p. 122 Berlin ent. Zs. 56.

Ambulyx goeldi marcata subsp. n., SCHAUS p. 54 Ann. Nat. Hist. 9.

Amplipterus globifer sp. n. p. 45 Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Celerio euphorbiae, Nahrung, STICHELL Zs. wiss. Insektenbiol. 8 p. 326.—*C. hybr. densoi* ff. n. *rubescens* and *salmonia* p. 267, *hybr. eugeni* f. n. *rubescens* p. 270, DENSO Seitz Gr.-Schm. pal. 2.—*C. hybr. n. livorneuphorbiae*, WOLTER p. 193 Int. ent. Zeitschr. 6.

Deilephila galii abb. n. *lutea* and *dentata*, GSCHWANDNER p. 375 Ent. Zeitschr. 26.—*D. euphorbiae* ab. *ziczac*, FRITSCH p. 136 Ent. Rdsch. 29.—*D. nerii* f. n. *confluens*, CLOSS p. 155 Int. ent. Zs. 6.—*D. phileuphorbia* und *paralias*; KHEIL Intern. ent. Zs. Guben 6 p. 111-113 117-119.

Deilephila hybr. n. galivornica, GROSSE & KUNZ p. 195 Int. ent. Zeitschr. 6.—*D. hybr. sec. [n.] helenae, kindergallii* (Zuchtungsbastarde), GROSSE p. 114 Int. ent. Zs. 6.—*D. hybr. galitanica* Denso = *D. hybr. galii* Rott ♂ × *D.*

mauretanica Stgr. ♀; GROSSE Intern. ent. Zs. 5 p. 321 327-328.—Incroci e reincroci tra la *Deilephila dahlia* e la *D. euphorbiae*, TURATI Zs. wiss. Insektenbiol. 8 p. 313-316 345-348.

Dolbina elegans sp. n. Syria, BANGHAAS p. 229 D. ent. Zs. Iris 26.

Hippotion aporodes sp. n. Gold Coast, ROTHSCHILD & JORDAN p. 135 Nov. Zool. 19.—*H. celerio* f. n. *luecki*, CLOSS p. 155 Int. ent. Zs. 6.

Hyloicus adumbrata sp. n. p. 45 Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*H. biolleyi* sp. n. Costa Rica, SCHAUS p. 54 Ann' Nat. Hist. 9.—*H. pinastri*, chenille, HENNIN Ent. Rdsch. 29 p. 38.

Macroglossum spilonotum sp. n. New Guinea, ROTHSCHILD & JORDAN p. 134 Nov. Zool. 19.

Marumba juvenis sp. n. Malay Penins., ROTHSCHILD & JORDAN p. 132 Nov. Zool. 19.—*M. bengalensis* sp. n. Bengal p. 1270, HAMPSON J. Bombay Soc. 21.

Nephele rosae ab. n. *destigmata*, STRAND p. 154 Arch. Naturges. 78 A.

Nyceryx lunaris sp. n. Ecuador, JORDAN p. 599 Nov. Zool. 18.

Phyllosphingia dissimilis subsp. n. *sinensis*, JORDAN Seitz Gr.-Schm. pal. 2 p. 247.

Platysphinx bourkei pl. xvii f. 7, TRIMEN p. 391 Tr. ent. Soc. London 1912.

Polyptychus spurrelli p. 128, *cymatodes* p. 130, *molitor* p. 132, spp. n., Africa, ROTHSCHILD & JORDAN Nov. Zool. 19.—*P. inconspicuus* p. 151, *objectus* p. 152, spp. n., Afrika, STRAND Arch. Naturges. 78 A.

Praedora marshalli tropicalis subsp. n., ROTHSCHILD & JORDAN p. 128 Nov. Zool. 19.

Protoparce mossi sp. n. Peru, JORDAN p. 87 with larva pl. vii Tr. zool. Soc. London 20.—*P. carolina*, larva, PETERSON Ann. Ent. Soc. Amer. 5 pp. 246-269 pls. xix-xxi

Psilogramma increta v. [n.] *serrata*, AUSTAUT p. 89 Int. ent. Zs. 6.

Srerinthus coecus Beschreibung, Verbreitung pp. 250-253 f. 1, *tremulae* Raupe, Lebensgewohnheiten (Russ. +

d. R.); FILIPJEV Rev. russ. ent. 12.—*S. tatarinovi* v. [n.] *flavina*, AUSTAUT p. 89 Int. ent. Zs. 6.—*S. jamaicensis flavitincta* var. n. p. 127, NIXON Ent. News 23.—*S. populi*, Gynandromorphismus (Russ.), JACHONTOV Jestestv. i geogr. 17 2 pp. 1-14.—*S. cerisyi* and *ophthalmicus*, distinctions, DOD p. 299 Canad. Ent. 44.—*S. ocellata ocellata* ♂ × *S. ocellata atlantica* ♀, DANNENBERG Zs. wiss. Insektenbiol. 8 pp. 27-31.

Sphinx ligustri ab. n. *unifasciata*, GSCHWANDNER p. 375 Ent. Zeitschr. 26.—*S. franckii*, SMYTH Ent. News 23 pp. 9-12 pl. ii.

Temnora cinereofusca sp. n. Afrika, STRAND p. 155 Arch. Naturges. 78 A.

BOMBYCES, s.l., incl. AGARISTIDAE
COSSIDAE, HEPIALIDAE.

Agaristidae, JORDAN in Seitz Gross-Schmett. Indoaust. 11 pp. 1-30.

Was sind „*Agaristidae*“?, STRAND Fauna exotica 1 p. 57.

Epicopeidae, JANET in Seitz Gross-Schmetterlinge Fauna indoaust. 10 pp. 57-59.

Notodontidae, GRÜNBERG in Seitz Fauna pal. 2 pp. 284-319 pl.

Verbesserungen und Zusätze zu den Cossiden, ROTHSCHILD in Ad. Seitz Gross-Schmetterlinge der Erde Fauna palaeart. Bd 2 Stuttgart [1912] pp. 450-452.

Hepialidae, PFITZNER in Seitz. Gross-Schmetterlinge Fauna palaeart. 2 pp. 433-439 Taf.

Psychidae, STRAND in Seitz Gross-Schmetterlinge Fauna palaeart. 2 pp. 353-370 Taf.

Die europäischen Saturniiden, GADOLLA Ver. Steierm. 47 pp. 396-400.—*Saturniidae*; Züchtung, PIECK Intern. ent. Z. 5 pp. 376-377 & 6 3-4 11-13.—*Saturniiden* Zucht von südafrikanischen, LÜCK Zs. wiss. Insektenbiol. 8 pp. 372-374.

Figures of numerous species of *Syntomidae* and *Arctiidae*, ROTHSCHILD Nov. Zool. 19 pls. iii-v.

Acantharctia guineae sp. n. W.-Afr., STRAND p. 103 Arch. Naturges. 78 A 9.

Aclytia jonesi, *klagesi*, *affinis*, *flavica-*
put, *coeruleonitens*, p. 159, *hoffmannsi*,
reducta, p. 169, spp. n., S. America,
ROTHSCHILD Nov. zool. 19.

Acoloithus erythrozona sp. n. p. 100
Mexico, DYAR Proc. U. S. Nation. Mus.
42.

Acossus leucegchytus sp. n. p. 105
Mexico, DYAR Proc. U. S. Nation. Mus.
42.

Adelocephala xanthochroia sp. n. p. 49
Mexico, DYAR Proc. U. S. Nation. Mus.
42.—*A. andrea* sp. n. Venezuela,
DOGNIN p. 151 Mem. Soc. ent. Bel-
gique 19.—*A. centrimacula* sp. n.
Ecuador, STRAND p. 153 Arch. Natur-
ges. 78 A 9.

Adscita morelia sp. n. p. 99 Mexico,
DYAR Proc. U. S. Nation. Mus. 42.

Agapema copaxoides sp. n. p. 46
Mexico DYAR Proc. U. S. Nation. Mus.
42.

Aglia tau, Aberrationen, KUNZ Soc.
entomol. 27 pp. 45–46 51–52 56–57
59–60; Fliegt gegen Wind, SCHUSTER
Ent. Zs. Frankfurt a. M. 26 p. 100;
Bemerkungen dazu, HECHLER ebenda
p. 116; FRITSCHÉ p. 119; ab. n.
huemeri, STANDEFUSS p. 1 Ent. Zeitschr.
26; mut. *ferenigra* und forma *nigerrima*,
KUNZ Ent. Zs. 26 pp. 22 27–28.

Agylla bisecta Borneo, *alboluteola*
Assam, *rubrofasciata* Peru, p. 226,
pseudobisecta, *semidivisa*, *extensa*, *flavi-*
cornis, *albotestacea*, p. 227, *postimparilis*
p. 228, spp. n., ROTHSCCHILD Nov. Zool.
19.—*A. idolon* sp. n. p. 50 Mexico,
DYAR Proc. U. S. Nation. Mus. 42.

Agylloides gen. n. near *Agylla*, *asu-*
rella, p. 186, *problematica* p. 187, spp.
n., W.-Afrika, STRAND Arch. Naturges.
78 A.

Agyrta lacteicolor, *mathani*, *bifasciata*,
p. 161, *klagesi*, *abdominalis*, *buchwaldi*.
p. 162, *nitens*, *acutipennis*, *ockendeni*,
pulchrisformis, p. 163, *semihyalina*,
rubroanalis, *germana*, *pseudodelphire*,
birchi, p. 164, and subspp. *b. borealis*
and *pumila*, p. 165, spp. n., S. America,
chena garleppi subsp. n. p. 161, ROTH-
SCHILD Nov. Zool. 19.

Aidos admiranda sp. n. Costa Rica,
SCHAUS p. 56 Ann. Nat. Hist. 9.

Alatanadata gen. n. near *Rachia*,
latipennis sp. n. Kamerun, STRAND pp.
166–167 Arch. Naturges. 78 A.

Alenella gen. n. near *Borocera*, *con-*
cava sp. n. W.-Afrika, STRAND p. 141
T.c.

Alenophalera gen. n. für *Phalera*
variegata, STRAND p. 165 T.c.

Amastus flavidus sp. n. Colombia,
DOGNIN p. 10 Hét. nouv. 5.—*A. rubri-*
dorsata Colombia, *subterminata* Peru,
spp. n., DOGNIN p. 5 Hét. nouv. 6.

Amata leucozonoides sp. n. Borneo,
ROTHSCHILD p. 123 Nov. zool. 19.

Amazia collaris sp. n. Brazil, JONES
p. 420 Tr. ent. Soc. London 1912.

Amicta caucasica sp. n. Kaukasus,
BANG-HAAS p. 109 D. ent. Zs. Iris
26.

Anmalo paranomon sp. n. Mexico
p. 54, DYAR Proc. U. S. Nation. Mus.
42.

Amycles affinis p. 153, *tenebrosa*,
brinkleyi, *klagesi*, p. 154, spp. n., S.
America, ROTHSCHILD Nov. zool. 19.

Anaphe; variation, *venata* var. n.
etiennesi p. 21, SCHOUTEDEN Ann. Soc.
ent. Belgique 56.—*A. infracta*, natural
history, GOWDEY pp. 269–274 Bull.
ent. research 3.

Androcharta klagesi, *hoffmannsi*, spp.
n., S. America, ROTHSCHILD p. 151
Nov. Zool. 19.

Anotodonta gen. n. near *Dinotodonta*
bivittata sp. n. Span.-Guinea, STRAND
p. 164 Arch. Naturges. 78 A.

Antarctia uniformis sp. n. Brazil,
JONES p. 421 Tr. ent. Soc. London
1912.

Antherea pernyi, Zucht, Fortpflan-
zung, Beschreibung des ♀ (Russ.),
ROSSINSKIJ Moskva Trd. Kom. šelkov.
13 pp. 3–18 f. 1–8.

Antheua olivaceomicans sp. n. Afrika,
STRAND p. 158 Arch. Naturges. 78 A.

Antichloris trinitatis Trinidad, *nigro-*
lineata, *intensa*, p. 154, *atrinervis* with
subsp. *steinbachi*, *metallica*, p. 155,
S. America, spp. n., ROTHSCHILD Nov.
zool. 19.

Anticyra angolana sp. n. Afrika,
STRAND p. 158 Arch. Naturges. 78 A.

Apatelodes hiantha, *doramia*, *lescamia*,
p. 82, *batima*, *bunca*, *milma*, p. 83,
spp. n., Mexico, DYAR Proc. U. S.
Nation. Mus. 42.

Apantesis phyllira and *placentia* larval stages, BARNES & McDUNNOUGH *Canad. Ent.* 44.—*A. interrupta*, larva, ID. T.c. p. 188.

Aphaegocera aurantipennis sp. n. Uganda, HAMPSON p. 611 *Ann. Nat. Hist.* 10.

Aphyle conifera sp. n. Colombia, DOGNIN p. 9 *Hét. nouv.* 5.

Apisa quadrimaculata sp. n. Congo-Staat, ZERNY p. 120 *D. ent. Zs. Iris* 26.—*A. monotica* f.n. *deannulata*, *A. chrysopyga* v. n. *ruficilla*, p. 184, *A. sjoestedti* v. n. *homopunctata* p. 185, STRAND *Arch. Naturges.* 78 A.

Apocerea hoffmannsi sp. n. S. America, ROTHSCHILD p. 170 *Nov. zool.* 19.

Arachnis aulea p. 55 larva, DYAR *Proc. Ent. Soc. Washington* 14.

Arbela theivora pl. G f. 1, HAMPSON *J. Bombay Soc.* 21.—*A. tetraonis* fig., IYER. *Calcutta For. Bulletin* No. 11 1912.

Arctia schottlaenderi sp. n. Tianschan, STRAND p. 2 *Internat. ent. Zeitschr.* 6.—*A. caja*, ab., SMITS *Feuille natural.* 42 p. 68; ab. n. *nigrociliata*, HOFFMANN p. 157 *Ent. Rdsch.* 29; Generation ii, LOCHER *Ent. Zs.* 26 p. 98.—*A. figurata* Formen, Wesen und Bedeutung; ROTHKE *D. ent. Zs. Iris* 26 pp. 1-14 1 Taf.

Ardonipsa gen. n., *Lithosiidae melas* sp. n. p. 50, Mexico, DYAR *Proc. U. S. Nation. Mus.* 42.

Areva albogrisea sp. n. Ecuador, ROTHSCHILD p. 228 *Nov. zool.* 19.

Argyrolepidia pamphilia subsp. n. *madina*, *A. leonora* subsp. n. *tasso*, p. 22, *A. concisa* sp. n. Neu-Guinea p. 23, *A. goldiei* subsp. n. *figurata*, *perisa* and *cremor*, *A. aurea* subsp. n. *fervida*, *A. megisto* f. n. *intermedia*, p. 24, JORDAN Seitz *Gr. Schm. indo-aust.* 11.

Asbolia chica sp. n. Brazil, JONES p. 440 *Tr. ent. Soc. London* 1912

Asura discocellularis p. 100, *guentheri* p. 101, *camerunensis* p. 102, spp. n., W.-Afr., STRAND *Arch. Naturges.* 78 A 9.—*A. thumathaeformis* sp. n. Natal, STRAND p. 192 T.c.

Attacus atlas Zucht, BENZ *Intern. ent. Zs.* 6 p. 43.—*A. edwardsi*, EI, ENGLISCH *Ent. Rdsch.* 29 p. 21; Zucht FISCHER *Fauna exotica* 2 p. 51.—Weiteres darüber v. UNZICKER, *Ebenda* pp. 67-68.

Augiades benuncas sp. n. p. 349 Algeria, OBERTHÜR *Bull. Soc. ent. France* 1912.

Autochloris affinis sp. n. Peru, ROTHSCHILD p. 156 *Nov. zool.* 19.

Automeris melmon, *dandemon*, *colenon* p. 47, *thyreon* p. 48, spp. n., Mexico, DYAR *Proc. U. S. Nation. Mus.* 42.—*A. leucane* p. 55 larva, DYAR *Proc. Ent. Soc. Washington* 14.

Automolis brachystriata p. 9, *internervosa* p. 10, Colombia, spp. n., DOGNIN *Hét. nouv.* 5.

Balacra germana pl. ii f. 24, *humphreyi* pl. i f. 14, p. 119, *intermedia* p. 120 pl. ii f. 23, spp. n., Africa, catalogue, and figs. of other species pp. 119-122, pls. i & ii, ROTHSCHILD *Nov. Zool.* 19 pp. 119-122.

Beralade signinervis sp. n., *levenna* v. n. *micromacula*, Africa m., STRAND *Arch. Naturges.* 78 A.

Bitecta flaveola sp. n. New Guinea, ROTHSCHILD p. 223 *Nov. zool.* 19.

Bombyx mori variation, CONTE C. R. *Acad. sci.* 154 pp. 302-304.—*B. mori*, Färbung des Cocous (Russ.), IVANOV *Izv. Kavk. šelkov. st.* 1912 1 pp. 1-6.

Bunaea carabella sp. n. Kongo, STRAND p. 99 *Arch. Naturges.* 77 *Suppl.* 4.

Byrsia latiplaga with subsp. *pallidior* sp. n. New Guinea, ROTHSCHILD p. 238 *Nov. zool.* 19.

Caeculia luctuosa sp. n. Colombia, DOGNIN p. 156 *Mem. Soc. ent. Belgique* 19.

Calamidia irrorata p. 223, *castanea*, *reticulata*, p. 224, spp. n., New Guinea, *warringtonella goliathina* subsp. n. p. 223, ROTHSCHILD *Nov. zool.* 19.

Calidota momis, *albatocosta*, p. 55, spp. n., Mexico, DYAR *Proc. U. S. Nation. Mus.* 42.

Caligula salmoni, new hybrid, WATSON p. 86 *cut. Nov. zool.* 19.

Callimorpha dominula var., LE CERF Bull. soc. ent. France 1912 p. 248; ab. n. *spaneyi*, STRAND p. 64 Ent. Rdsch. 29; *C. v. donna* gekreuzt mit *dominula*, ROTH Ent. Zs. 25 pp. 223-225.

Callioratis pactolicus, early stages, POULTON p. lxxii P. ent. Soc. London 1912.

Callizygæna venusta sp. n. Borneo, JORDAN p. 146 Nov. zool. 19.

Callopepla grandis sp. n. Brazil, ROTHSCHILD p. 156 Nov. zool. 19.

Caprima plagiata sp. n. New Guinea p. 150, *mutilata henica* subsp. n. p. 149, JORDAN Nov. zool. 19.

Caprimia bipuncta, *germana*, *coeruleomarginata*, *imitatrix*, p. 241, *unipunctata*, *peraffinis*, *postexpansa*, *fuliginosa*, *marginipuncta*, p. 242, *postvitrea*, *postnigra*, *pseudogelida*, New Guinea, *coerulescens* with subsp. *insignis*, p. 243, *auratiomarginata*, Bougainville p. 244, spp. n., ROTHSCHILD Nov. zool. 19.

Carthara cachiana, *subrufa*, p. 46, *denticulata* p. 47, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.—*C. secata* sp. n. Brazil, DOGNIN p. 132 Mem. Soc. ent. Belgique 19.

Castronia gen. n. *Aretiidae* p. 420, *collaris* sp. n. Brazil p. 421, JONES Tr. ent. Soc. London 1912.

Catalebeda discocellularis sp. n. W.-Afrika, STRAND p. 131 Arch. Naturges. 78 A.

Celama dimera sp. n. Guiana, DOGNIN p. 123 Mem. Soc. ent. Belgique 19.

Ceramidia phaiodes sp. n. Colombia, DOGNIN p. 122 T.c.—*C. klagesi* p. 151, *simplex*, *bricenoi*, *painei*, S. America, *scintillocollaris*, *underwoodi*, Centr. America, p. 152, *mathani*, *affinis*, *viridisaturata*, p. 153, S. America, spp. n., ROTHSCHILD Nov. zool. 19.

Cerura bicaspis f. n. *japonica*, GRÜNBERG Seitz Gr.-Schm. pal. 2 p. 286.—*C. duonumenia* sp. n. p. 81 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Ceryx alenina sp. n. Afrika, STRAND p. 173 Arch. Naturges. 78 A.—*C. fouqueti* sp. n. p. 286 Cochinchine, JOANNIS Bull. Soc. ent. France 1912.

Chalipecten gen. n. near *Chalia*, STRAND Seitz Gr.-Schm. pal. 2 p. 355.

Charagia eugynoides sp. n. New Guinea, STRAND p. 186 Arch. Naturges. 78 A 9.

Chelonomorpha dubia sp. n. Birma, JORDAN Seitz Gr.-Schm. indoaust. 11 p. 6.

Chionaema aurantiipuncta Lombok, *distincta* Pegu, *fasciatella* Celebes, *rufistigma* Borneo, p. 245, *flavalba* Penang, *rufifrons* W. Africa, *aurantiorufa* Sumatra with subsp. *niasena*, p. 246, spp. n., ROTHSCHILD Nov. zool. 19.—*C. rubriterminalis* p. 188, *loloana* p. 190, Kamerun, *ugandana* Uganda, *togoana* Togo, p. 189, spp. n., STRAND Arch. Naturges. 78 A.

Chondrostega vandalicia pl. iii f. 11 p. 170, MENDES Broteria 10.

Chrostosma patricia p. 34, *fumosa* p. 35, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Chrysaegliodes gen. n. near *Chrysaeglia*, *nolifornis* sp. n. Gabun, STRAND p. 184 Arch. Naturges. 78 A.

Chrysopsyche antennifera sp. n. W.-Afrika, STRAND p. 113 Arch. Naturges. 78 A.—*C. varia*, larva and cocoons, CARPENTER p. lxxxii Tr. ent. Soc. London 1912.

Chrysoscota albomaculata, *lactezflaga*, spp. n., New Guinea, ROTHSCHILD p. 216 Nov. zool. 19.

Cicinnus lygia sp. n. Costa Rica, SCHAUS p. 56 Ann. Nat. Hist. 9.—*C. putidula* p. 171, *muta*, *narita*, p. 172, *laxa*, *pulla*, p. 173, spp. n., S. America, DOGNIN Mem. Soc. ent. Belgique 19.

Cisthene argentinensis, *major*, spp. n., S. America, ROTHSCHILD p. 230 Nov. zool. 19.

Citheronia beledonon sp. n. p. 49 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Claphe regina, *princeps*, p. 161, *roseonigra* p. 162, *elongata*, *marissima*, *napaloides*, p. 163, *alumnata punctulata*, *roseimaculata*, p. 164, *albofusca*, *sulcata*, p. 165, *pseudamida*, *perosa*, p. 166, *flumentana*, *fusconigra*, p. 167, *umbrosa*, *obsessa*, *farinula*, p. 168, *unda*, *lixa*, *subterranea*, p. 169, *moisa* p. 170, spp. n., S. America, *braganza* var. n. *sordida* p. 165, DOGNIN Mem. Soc. ent. Belgique 19.—*C. braganzoides*, *phedonoides*, p. 41, *jaliana* p. 42, spp. n.

Costa Rica, SCHAUSS Ann. Nat. Hist. 9.—*C. nystamma* sp. n. p. 93 Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*C. macasibia* sp. n. Ecuador, STRAND p. 154 Arch. Naturges. 78 A 9.—*C. maria* p. 58 larva, DYAR Proc. Ent. Soc. Washington 14.

Clisiocampa interstriata sp. n. Guiana, DOGNIN p. 154 Mem. Soc. ent. Belgique 19.

Cnethocampa pityocampa, DU BUYS-SON Feuille natural. 2 pp. 35-36; FALCOZ T.c. p. 50.

Coloradia euphrosyne sp. n. p. 48 Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*C. doris*, *loiperda* var. n., DYAR Proc. Ent. Soc. Washington 14 p. 105.

Copaza curvilinea sp. n. Costa Rica, SCHAUSS p. 43 Ann. Nat. Hist. 9.

Coreura engelkei sp. n. Colombia, ROTHSCHILD p. 158 Nov. zool. 19.

Correbia elongata p. 180 with subsp. *boliviana*, *bricenoi*, *rufescens*, p. 181, *germana*, *felderi*, *assimilis*, *similis*, *steinbachi*, *simonsi*, p. 182, *klagesi* p. 183, spp. n., S. America, *elegans meridionalis* subsp. n., ROTHSCHILD T.c.

Coscinia caligans sp. n. Sicilia p. 45 tav. iii fig. 21, TURATI Nat. Sicil. 20.—*C. cribrum* var. n. *nevadensis*, RIBBE p. 351 D. ent. Zs. Iris 23.

Cosmosoma galbana, *thia*, *galatea*, spp. n., Costa Rica, SCHAUSS p. 35 Ann. Nat. Hist. 9.—*C. dorsicincta* p. 6, *coccinifera* p. 7, Colombie, spp. n., DOGNIN Hét. nouv. 5.

Cossus cossus subsp. n. *chinensis*, *armeniaca*, *C. striolatus* loc.?, *sareptensis*, *nigrosignatus* Syria, *divisa* Turkei, spp. n., ROTHSCHILD Seitz Gr.-Schm. pal. 2 p. 451.

Crambidia bifasciata sp. n. New Guinea, ROTHSCHILD p. 219 Nov. zool. 19.

Craspia igneotincta pl. iv f. 2 p. 192, MENDES Broteria 10.

Cricula andrei ab. [n.?] *vinosa*, WATSON p. 344 Internat. ent. Zeitschr. 5.

Crinocraspeda aethiopica sp. n. W.-Africka, STRAND p. 129 Arch. Naturges. 78 A.

Cruria synopla subsp. n. *latifascia* Queensland, *C. donowani* subsp. n. *xanthosoma* and *timorica*, *C. neptioides* subsp. n. *papuana*, JORDAN Seitz Gr.-Schm. indoaustr. 11 p. 14.

Cruriopsis gen. n. near *Cruria*, *funebri* subsp. n. *cognata*, JORDAN T.c. pp. 21-22.

Ctenucha garleppi, *jonesi*, *andrei*, *fosteri*, *rubrovenata* with subsp. *tucumana*, *reducta*, spp. n., S. America, p. 184, *togata schausi* subsp. n. p. 183, ROTHSCHILD Nov. Zool. 19.—*C. reimoseri* sp. n. Paraguay, ZERNY p. 124 D. ent. Zs. Iris 26.

Cyanopepla baroni p. 156, *dognini*, S. America, *beata* Panama, spp. n., *submacula borealis* subsp. n., p. 157, ROTHSCHILD Nov. zool. 19.

Dalaca indicata sp. n. Ecuador, STRAND p. 100 Arch. Naturges. 77 Suppl. 4.—*D. obliquestrigata* sp. n. Peru, STRAND p. 156 Arch. Naturges. 78 A 9.

Damias varia subsp. n. *euxantha*, *anisa*, *ravida* and *baia*, p. 12, *D. splendida* subsp. n. *dispar*, *D. chalybeata* subsp. n. *leucidia* p. 13, JORDAN Seitz Gr.-Schm. indoaustr. 11.

Dasychira mkattana sp. n. O.-Afr., STRAND p. 71 Arch. Naturges. 78 A 1.—*D. multipunctis* sp. n. O.-Afrika, STRAND p. 313 T.c.

Deilemera chromis ab. n. *tessmanni*, *arieticornis* ab. n. *sulphurana*, STRAND p. 106 Arch. Naturges. 78 A 9.

Delphire rufiventris subsp. n., *klagesi*, p. 165, *infra-alba* p. 166, spp. n., S. America, ROTHSCHILD Nov. zool. 19.

Desmeocraerula gen. n., *Notodontidae inconspicuana* sp. n. Span.-Guinea, STRAND p. 168-169 Arch. Naturges. 78 A.

Desmotricha metapolia sp. n. Colombia, DOGNIN p. 8 Hét. nouv. 5.

Diaerisia sannio subsp. *caucasica*, JACHONTOV Rev. russ. ent. 12 p. 24.

Dichromapteryx didyma sp. n. p. 99 Costa Rica, DYAR Proc. U. S. Nation. Mus. 42.

Dieida persa, Turkei, TISCHENDORF Zs. wiss. Insektenbiol. 8 p. 33.

Diptilum crassum sp. n. Columbia, ZERNY p. 123 D. ent. Zs. Iris 26.

Dirphia brevifurca sp. n. Ecuador, STRAND p. 100 Arch. Naturges. 77 Suppl. 4.

Disoidemata lactea p. 225, *maculata* p. 226, spp. n., Peru, ROTHSCHILD Nov. Zool. 19.—*D. quadriplaga* sp. n. Guiana, DOGNIN p. 125 Mem. Soc. ent. Belgique 19.

Drepana falcataria ab. n. *infernalis*, HOFFMANN p. 158 Ent. Rdsch. 29.—*D. bicostata* sp. n. Himalaya p. 1272, HAMPSON J. Bombay Soc. 21.

Drymonia eximia sp. n. Japan, *D. chaonia* ab. n. *lunula*, GRÜNBERG Seitz Gr.-Schm. pal. 2 p. 297.

Dunama gen. n. *Notodontidae*, *angulinea* sp. n. Costa Rica, SCHAUS p. 52 Ann. Nat. Hist. 9.

Dylomia suavis sp. n. Brazil, JONES p. 431 Tr. ent. Soc. London 1912.

Dysauxes hybr. n. *punctilla* aus *punctata* ♂ u. *ancilla* ♀, DENSO p. 135 D. ent. Zs. Iris 26.

Dysdaemonia nobilis sp. n. Costa Rica, SCHAUS p. 44 Ann. Nat. Hist. 9.

Dyspessa clathrata subspp. n. *pallida* Samarkand, *albosignata* Transkaspien, pi 451, *D. albina* Turkestan, *curta* Afghanistan, *affinis* Karagaitan, spp. n., p. 452, ROTHSCHILD Seitz Gr.-Schm. pal. 2.—*D. tristis* sp. n. Karagai-tau, BANG-HAAS p. 110 D. ent. Zs. Iris 26.

Echedorus medialis sp. n. Brazil JONES p. 433 Tr. ent. Soc. London 1912.

Ecpantheria euripides sp. n. p. 56 Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*E. cretacea* sp. n. Colombia, DOGNIN p. 11 Hét. nouv. 5.

Ectaptera drucei, *roseipennis*, *miniata*, spp. n., Peru, ROTHSCHILD p. 185 Nov. zool. 19.

Edibessa ferugina p. 437, *placida*, *rufa*, *rubrivena*, p. 438, spp. n., Brazil, JONES Tr. ent. Soc. London 1912.

Eilema makomensis p. 97, *subgriseola*, *nelleburgensis*, p. 98, spp. n., *eningae* v. n. *pia* p. 99, W.-Afr., STRAND Arch. Naturges. 78 A 9.—*Eilema marwitziana* p. 177, *pusilana*, O.-Afr., *cafrana* Caffraria p. 178, *cuneata* p. 179, *trinitas* p. 181, Togo, *angulistrigata* p. 182, *angustipennis*, Kamerun, *verulana* Natal, p. 183, spp. n., *sanguicosta* v. n. *nyasana* p. 180, STRAND T.c.

Elysius sarcochroa sp. n. Colombia, DOGNIN p. 4 Hét. nouv. 6.

Empyreuma affinis sp. n. Cuba, *sanguinea* n. n. for *lichas* Fabr. with *S. portoricensis* subsp. n., p. 155, *affinis haitensis* subsp. n. p. 156, ROTHSCHILD Nov. zool. 19.

Endrosa aurita ab. n. *fuliginosa*, BLACHIER Genève Bull. Soc. Lépidopt. 2 pp. 51 etc.

Epectaptera metochria sp. n. Colombie, DOGNIN p. 3 Hét. nouv. 6.

Ephialtias superbior sp. n. Ecuador, STRAND p. 147 Arch. Naturges. 78 A 9.

Epicopia formosana sp. n. (Japanese and English), NAGANO Konch. Sek. Gifu 16 pp. 4–6.

Epicrisias gen. n., *eschara* sp. n. p. 55, Mexico, DYAR. Proc. U. S. Nation. Mus. 42.

Epijana maculifera sp. n. Afrika, STRAND p. 148 Arch. Naturges. 78 A.

Epiperola conformis Mexico, *paida* Panama, p. 97, spp. n., DYAR Proc. U. S. Nation. Mus. 42.

Epitoxis myopsychoides sp. n. Afrika, STRAND p. 182 Arch. Naturges. 78 A.

Eressa syntomoides with subspp. *hosei* p. 123, *vespina*, *6-puncta*, spp. n., Borneo, *marcescens ericsoni* subsp. n., p. 124, ROTHSCHILD Nov. zool. 19.—*E. rubribasis* sp. n. p. 287 Cochinchine, JOANNIS Bull. Soc. ent. France 1912.

Eriphioides rosenbergi sp. n. Colombia, ROTHSCHILD p. 151 Nov. zool. 19.—*E. phaeoptera* sp. n. Colombia, DOGNIN p. 122 Mem. Soc. ent. Belgique 19.

Estigmene acreae, oviposition, early stages, p. 464, GIRAULT Ent. News 23.—*E. prima*, larva, WINN p. 221 Canad. Ent. 44.

Euagra klagesi sp. n. Surinam, ROTHSCHILD p. 160 Nov. zool. 19.

Eucereon postcoeruleum, *perexcavatum*, *kennedyi*, p. 171, *integrum*, *steinbachi*, *buchwaldi*, *dilutius*, *rubroanale*, p. 172, *rosenbergi*, *patronides*, p. 173, *conspicuum*, *fosteri*, *pseudocasca*, *brienceni*, *gribeatum*, *albidius*, p. 174, *schausi*, *tessellatum*, *obliquifascia*, p. 175, *strix*, *fuscatum*, *flemmingi*, *hampsoni*, *lithosioides*, p. 176, *fuscobrunneum*, *picoides*, *tigrisoma*, p. 177, S. America,

moeschleri Jamaica, *confusum*, *parambae*, p. 178, *buchwaldi*, *rufidorsale*, *sordidescens*, *nervulum*, *nubilosum*, p. 179, *coeruleocaput*, *hoffmannsi*, *ockendeni*, p. 180, S. America, spp. n., also numerous subspp. n., ROTHSCHILD Nov. zool. 19.—*E. exile* sp. n. Ecuador, STRAND p. 146 Arch. Naturges. 78 A 9.—*E. albitorna* sp. n. Colombia, DOGNIN p. 8 Hét. nouv. 5.

Euchaetias spraguei, larva, BARNES & McDUNNOUGH p. 190 Canad. Ent. 44.—*E. parazona* sp. n. p. 56 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Euchromia guineensis ab. n. *discifera*, ZERNY p. 120 D. ent. Zs. Iris 26.

Euclea poasica, *distrakens*, p. 94, Costa Rica, *buscki* Panama p. 95, spp. n., DYAR Proc. U. S. Nation. Mus. 42.

Eunotela bipunctata sp. n. Brazil, JONES p. 420 Tr. ent. Soc. London 1912.

Eupackardia gen. n. type *Callosamia calleta*, COCKERELL Ent. News 23 p. 228.

Euprepia oertzeni, abb., CULOT Genève Bull. Soc. Lépidopt. 2 1911 pp. 98–100.

Euproctis melanovis sp. n. Kamerun, STRAND p. 313 Arch. Naturges. 78 A.—*E. mima* sp. n. Kamerun, STRAND p. 106 Arch. Naturges. 78 A 9.

Euprosterna hosia sp. n. p. 96 Costa Rica, DYAR Proc. U. S. Nation. Mus. 42.

Eupyra distincta sp. n. Venezuela, ROTHSCHILD p. 156 Nov. zool. 19.

Eusemia hebe Java, *mundina* Malakka, spp. n., *E. vetula* subsp. n. *palavanica*, p. 3, *E. nipalensis* ab. n. *clara*, subspp. n. *expansa*, *schana*, p. 4, *E. distincta* subsp. n. *macrosema* p. 5, *E. adulatrix* subsp. n. *spilosa* Hainan p. 6, JORDAN Seitz Gr.-Schm. indoaust. 11.

Eusphalera flavifrons sp. n. New Guinea, JORDAN p. 148 Nov. zool. 19.

Exsula dentatrix f. n. *conjuncta* p. 8, *E. victrix* ff. n. *punctigera* and *limma* p. 9, JORDAN Seitz Gr.-Schm. indoaust. 11.

Falcatulula gen. n. *Ludiinae*, *brunneata* sp. n. Span.-Guinea, STRAND p. 143 Arch. Naturges. 78 A.

Farigia curita sp. n. Brazil, JONES p. 427 Tr. ent. Soc. London 1912.

Fentonia ocypete f. n. *japonica*, GRÜNBERG Seitz Gr.-Schm. pal. 2 p. 292.

Gamelia musta sp. n. Costa Rica, SCHAUS p. 43 Ann. Nat. Hist. 9.

Gangaridopsis gen. n. für *Gangarides citrina* Wileman, GRÜNBERG Seitz Gr.-Schm. pal. 2 p. 294.

Gargettoscrancia subg. n. zu *Scrancia*, STRAND p. 162 Arch. Naturges. 78 A.

Garudinia bimaculata Borneo, *biguttata* Assam, *aureopurpurata* New Guinea, *cupreifascia* Tambore, *bizonata* Parana, *bifasciata* Borneo, p. 233, *excisa*, *trifasciata*, p. 234, New Guinea, spp. n., ROTHSCHILD Nov. zool. 19.

Garudinodes affinis, *castaneus*, *recurviloba*, spp. n., New Guinea, ROTHSCHILD p. 232 T.c.

Gastropacha quercifolia ab. *alnifolia*, SCHAEFER Intern. ent. Zs. 6 pp. 254 & 273.

Gastroplukaena gen. n., *punctipennis* sp. n. W.-Afrika, STRAND p. 147 T.c.

Gingla myrta, *astora*, p. 99, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*G. phonicoruma* sp. n. p. 748 Mexico, DYAR Pomona Coll. J. Ent. 4.

Givira cleopatra sp. n. Utah, BARNES & McDONNOUGH Ent. News 23 p. 55 pl. vi ff. 11 & 12.—*G. sandelphon* sp. n. p. 106 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Gluphisia crenata [f. n.] *amurensis*, GRÜNBERG Seitz. Gr.-Schm. pal. 2 p. 295.

Goodia lunata ab. n. *obscuripennis*, STRAND p. 145 Arch. Naturges. 78 A.

Graphosia reticulata sp. n. New Guinea, ROTHSCHILD p. 212 Nov. zool. 19.

Halisidota cinctipes fumosa subsp. n., SCHAUS p. 38 Ann. Nat. Hist. 9.—*H. nimbifacta*, *nimbiscripta*, *carinator*, p. 51, spp. n., Mexico, *schausi ruscheweyhi* Argentina p. 52, *underwoodi modalis* Venezuela, *u. instabilis* Mexico p. 53, subspp. n. DYAR Proc. U. S. Nation. Mus. 42.—*H. bipartita* sp. n. Colombia, DOGNIN p. 6 Hét. nouv. 6.

Harrisina auchenchrysa p. 99, *tesacans* p. 100, spp. n., Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Heliura assimilis, distincta, p. 166, *klagesi* with subsp. *meridionalis, rubrocincta, germana, bimaculata, postflavida*, p. 167, *fuliginosa, viridicingulata, elongata, coeruleocephala, lemoulti*, p. 168, *fumata, ockendeni, pieroides*, p. 169, *stolli* with subsp. *meridionalis, rufipes, griseipuncta*, p. 170, spp. n., S. America, ROTHSCHILD Nov. zool. 19.

Hemerocampa leucostigma p. 14 pl. 2, FELT N.Y. St. Mus. Bull. No. 156.

Hemiceras avangareza sp. n. Costa Rica, SCHAUS p. 53 Ann. Nat. Hist. 9.

Hemihyalea parergana sp. n. Colombia, DOGNIN p. 129 Mem. Soc. ent. Belgique 19.—*H. tenuimargo* sp. n. Colombie, DOGNIN p. 5 Hét. nouv. 6.

Hemileuca electra rickseckeri n. ab. pl. vii f. 1 a, *burnsi conjuncta* n. ab. f. 4 p. 97, WATSON Ent. News 23.—*H.* sp., larva p. 30 pl. i, ALDRICH J. New York. Ent. Soc. 20 pp. 28–31 pl. i.

Hepialiscus algeriensis ab. n. *bicolor*, PFITZNER Seitz Gr.-Schm. pal. 2 p. 437.

Hepialus humuli f. n. *grandis*, PFITZNER Seitz p. 434 T.c.—*H. thule*, pupal wings, MACGILLIVRAY Ann. Ent. Soc. Amer. 5 pp. 239–245 f. 1.

Herpolasia albomedia callerema subsp. n., JORDAN p. 149 Nov. zool. 19.

Heterocampa nigriplaga, viridiana, spp. n., Brazil, JONES p. 428 Tr. ent. Soc. London 1912.—*H. antistes* p. 49, *mystica* p. 50, spp. n., Costa Rica SCHAUS Ann. Nat. Hist. 9.

Heteropan alienus p. 146, *apicalis* p. 147, *iscatus* p. 148, spp. n., New Guinea, *truncata adamaris* subsp. n. p. 147, JORDAN Nov. zool. 19.

Hipocrita atra sp. n. Sajan, BANG-HAAS p. 109 D. ent. Zs. Iris 26.

Holcocerus tsingtauana sp. n. China, BANG-HAAS p. 109 D. ent. Zs. Iris 26.—*H. nigrescens* p. 451 Karagaitan, *dilutior* Kyssyl, *murinus, musculus*, Syr-Daria, *strigillata* Afghanistan, *puengeleri* Transkaspien, p. 452, spp. n., ROTHSCHILD Seitz Gr.-Schm. pal. 2.

Holocera angulata v. n. *guineensis*, STRAND p. 145 Arch. Naturges. 78A.

(N-9210 j)

Homocomeria nivea v. n. *reimeri*, STRAND p. 312 T.c.

Hupodonta pulcherrima ab. n. *stigmatica*, GRÜNBERG Seitz Gr.-Schm. pal. 2 p. 299.

Hyaleucera minuta, ockendeni, uniformis, spp. n., S. America, ROTHSCHILD p. 186 Nov. zool. 19.—*H. agylloides* sp. n. p. 50 Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Hybocampa powelli sp. n., CH. OBERTHÜR p. 339 Bull. Soc. ent. France 1912.

Hylesia nigradorsata Peru, *composita* Merida, p. 152, *lilacina* Guiana p. 153, spp. n., DOGNIN Mem. Soc. ent. Belgique 19.

Hyperaeschra stragula var. n. *ochreata*, BARNES and McDUNNOUGH p. 124 Canad. Ent. 44.

Hyphantria penthetria sp. n. p. 56 Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Hyphoraia aulica subsp. *testudinaroides*, JACHONTOV Rev. russ. ent. 12 p. 25.

Hypocrisias lisoma p. 53, *berthula* p. 54, spp. n., Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Ilema contorta sp. n. Seychelles p. 4 pl. i f. 1, FRYER Tr. Linn. Soc. London 15.—*I. perplexa, germana*, New Guinea, *rufofasciata* E. Africa, p. 219, *pyralina, violitincta*, Tambora, *aurantiotestacea* Amboina, *lutescens* Sula Besi, *curvipлага* Malay Penins., p. 220, *cuprea* New Guinea, *nitens* E. Africa, *testacea* Solomon islds. with subsp. *lousiadensis, sericeoalba* Kopet Dagh, *testaceoflava*, p. 221, *niveata, ligneofusca, transfasciata, unifascia*, New Guinea, *aurantioflava* Tambora, *brunneotincta*, p. 222, *quadripunctata* p. 223, Africa, spp. n., ROTHSCHILD Nov. Zool. 19.—*I. atrifrons* pl. ci f. 8, HAMPSON J. Bombay Soc. 21

Illice discistriga p. 126 Guiana, *tessellata* p. 127 Colombia, spp. n., DOGNIN Mem. Soc. ent. Belgique 19.

Immetalia bernsteini ab. n. *brevimacula*, subspp. n. *obiana* and *buruana*, *I. saturata* subsp. n. *leucomelas* p. 10, ff. n. *leucotaenia, calida* and *hemigrapha* p. 11, JORDAN Seitz Gr.-Schm. indo-austr. 11.

- Isanthrene crabrionides*, *atrizonata*, p. 3, *dorsimacula* p. 4, Colombia, spp. n., DOGNIN Hét. nouv. 5.
- Ischnocampa ignava* sp. n. Colombia, DOGNIN p. 129 Mem. Soc. ent. Belgique 19.—*I. achrosis* sp. n. Equateur, DOGNIN p. 4 Hét. nouv. 6.
- Josiodes suapurensis* with subsp. *intensus*, *nigrobasis*, *fasciata*, S. America, *quadrifascia* Chiriqui, p. 229, spp. n., ROTHSCHILD Nov. zool. 19.
- Lambessa virago* sp. n. Algeria, ROTHSCHILD p. 118 T.c.
- Lambula sericea*, *brunneomarginata*, *sericeoides*, p. 212, *bimaculata*, *albofasciata*, *albiceps*, p. 213, *bicolor*, *substrigillata*, *minuta*, *flavobrunnea*, *aurantiaca*, *castanea*, p. 214, *caprimimoides* p. 215, spp. n., New Guinea, ROTHSCHILD T.c.
- Lamprostola thermeola* sp. n. Colombia, DOGNIN p. 126 Mem. Soc. ent. Belgique 19.
- Langs-dorsia tessellata* sp. n. Brazil, JONES p. 432 Tr. ent. Soc. London 1912.
- Lasiocampa serrula palaestinensis* und *dauidis*, PAULUS Zs. wiss. Insektenbiol. 8 p. 32.—*L. quercus* et *Ocneria dispar*, hérédité des caractères acquis; Pictet C. R. Soc. Phys. Genève 28 p. 36-38.—*L. quercus*, mues, PICTET Genève Bull. Soc. Lépidopt. 2 1911 p. 80-89.—*L. dauidis* ab. n. *schulzi*, *serrula* ab. n. *seileri*, HERTZ p. 27 D. ent. Zs. Iris 26.—*L. kilwicola* sp. n. O.-Afrika, STRAND p. 312 Arch. Naturges. 78 A.—*L. trifolii* Raupe, FRITSCHE Ent. Zs. 26 p. 107-108.
- Lechriolepis tessmanni* p. 121, *nigri-venis* p. 122, *rotunda* p. 124, *basirufa* p. 125, W.-Afr., *ochraceola* p. 124 O.-Afr., spp. n., *L. heres* abb. n. *aisparilis*, *dimidiata* and *obscurata*, p. 126, STRAND Arch. Naturges. 78A.
- Leipoxais ziczac* sp. n. O.-Afr., STRAND p. 79 T.c.—*L. peraffinis* f. n. *cinerascens*, *L. rufobrunnea* p. 132, *regularis* p. 133, *makomona* p. 134, *puncticosta* p. 135, *proboscifera* p. 136, spp. n., W.-Afrika, STRAND T.c.
- Leucodrepana furvicosta* sp. n. Himalaya p. 1271, HAMPSON J. Bombay Soc 21.
- Liparis monacha*, KNOCHE Natw. Zs. Landw. 10 p. 85-138; ESCHERICH Natw. Zs. Landw. 10 p. 65-85.
- Lithosia sororcula* ab. n. *plumbea*, REBEL Ann. Hofmus. Wien 25 p. 253 etc.—*L. lutarella* v. *nigrogrisea*, PFENNIGSCHMIDT Intern. ent. Zs. 6 p. 169.—*L. unita*, GOUIN Bordeaux Actes Soc. Linn. 65 1911 Proc.-verb. p. 119.
- Lobobunaea lauræ* sp. n. Afrika, STRAND p. 141 Arch. Naturges. 78A.—*L. niepelti* sp. n. Kongo, STRAND p. 179 T.c.
- Longicella mollis* ab. n. *catamelas*, JORDAN Seitz Gr.-Schm. indoaust. 11 p. 20.
- Lonomia pulverosa* sp. n. Ecuador, STRAND p. 150 Arch. Naturges. 78A 9.
- Loxophlebia peralta*, *flavipicta*, spp. n., Costa Rica, SCHAUS p. 34 Ann. Nat. Hist. 9.—*L. multicineta* sp. n. Colombia, DOGNIN p. 121 Mem. Soc. ent. Belgique 19.—*L. chrysobasis* sp. n. Colombia, DOGNIN p. 5 Hét. nouv. 5.
- Lycomorhodes dichroa* sp. n. Colombia, DOGNIN p. 128 Mem. Soc. ent. Belgique 19.
- Lymantria nisseni* sp. n. Algeria, ROTHSCHILD p. 125 Nov. zool. 19.—*L. nobunaga* sp. n., NAGANO, K. Konch. Sek. Gifu 16 p. 4.—*L. dispar*, Zwergform, JACHONTOV Rev. russ. ent. 12 p. 39; schwarzes ♂, SCHULZE Intern. ent. Zs. 6 p. 85; Melanismus, STICHEL Zs. wiss. Insektenbiol. 8 p. 358.
- Macaduma fuliginosa*, *foliacea*, New Guinea, p. 235, *pallicosta*, *castanea*, Queensland, *rufocostalis* New Guinea with subsp. *reducta*, *tortricoides*, *castaneofusca*, p. 236, *rufoumbrata* with subsp. *indistincta*, *castaneogriseata*, *quercifolia*, p. 237, *lichenia* p. 238, New Guinea, spp. n., ROTHSCHILD Nov. zool. 19.
- Macrocneme cyanescens* sp. n. Colombia, DOGNIN p. 7 Hét. nouv. 5.
- Macromphalia catharina* Brazil, *valdiviensis* Chile, spp. n., DOGNIN p. 157 Mem. Soc. ent. Belgique 19.
- Maenas tolimensis* sp. n. Colombia, DOGNIN p. 130 T.c.
- Mahensia* gen. n. near *Siccia*, *seychellarum* sp. n. Seychelles pl. i f. 2 p. 5, FRYER Tr. Linn. Soc. London 15.

- Mallocampa punctilimbata* p. 145, *alenica* p. 146, spp. n., W.-Afrika, STRAND Arch. Naturges. 78A.
- Malmis nigricostata* sp. n. Argentina, DOGNIN p. 171 Mem. Soc. ent. Belgique 19.
- Manoba rufotincta*, *lactogrisea*, *albina*, *terminalis*, *grisescens*, p. 231, *alboplagiata* p. 232, spp. n., New Guinea, ROTHSCHILD Nov. zool. 19.
- Megalopyge costaricensis*, *torva*, spp. n., Costa Rica, SCHAUS p. 55 Ann. Nat. Hist. 9.—*M. nivosa* p. 436, *lanocrispa* p. 437, spp. n., Brazil, JONES Tr. ent. Soc. London 1912.—*M. amitina* p. 170, *pellucens* p. 171, spp. n., S. America, DOGNIN Mem. Soc. ent. Belgique 19.—*M. albicollis superba* p. 58 larva, DYAR Proc. Ent. Soc. Washington 14.
- Meganaclia microsippia* sp. n. Afrika, STRAND p. 183 Arch. Naturges. 78A.
- Melisoides* gen. n. near *Melisa*, *lobata* sp. n. Afrika, STRAND p. 192 T.c.
- Meragisa albescens*, *proxima*, spp. n., Costa Rica, SCHAUS p. 51 Ann. Nat. Hist. 9.
- Mesoscia anguilinea* sp. n. French Guiana p. 53, SCHAUS Proc. Ent. Soc. Washington 14.—*M. dyari* sp. n. Costa Rica, SCHAUS p. 55 Ann. Nat. Hist. 9.
- Mesathen bisexualis* sp. n. Colombia DOGNIN p. 6 Hét. nouv. 5.—*M. albilimbata* sp. n. Colombia, DOGNIN p. 3 Hét. nouv. 6.
- Metalobosia chalcoela*, *holophaea*, p. 127, *atriloba* p. 128, spp. n., Colombia, DOGNIN Mem. Soc. ent. Belgique 19.
- Metarctia rubicundula* p. 187, *cinereoguttata* p. 189, spp. n., W.-Afr., *M. invaria* ab. n. *pusillima* p. 187, STRAND Arch. Naturges. 78A.
- Metraga colle*, *byrne*, p. 95, spp. n. Costa Rica, DYAR Proc. U.S. Nation. Mus. 42.
- Micragra borealis* sp. n. S. America, ROTHSCHILD p. 160 Nov. zool. 19.
- Microphobetron* gen. n., *rebella* sp. n. p. 98, Costa Rica, DYAR Proc. U.S. Nation. Mus. 42.
- Mimeusemia simplex* subspp. n. *eumelas* and *buruensis*, JORDAN Seitz Gr.-Sehm. indoaustr. 11 p. 18.
- Mintopola sordida* sp. n. Colombia, ROTHSCHILD p. 226 Nov. zool. 19.
- Mithuna quadrilineata* with subsp. *dilutior* sp. n. New Guinea, ROTHSCHILD p. 219 T.c.
- Monoleuca occidentalis* sp. n. California p. 32 pl. ii f. 9, BARNES and McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.
- Monosyntaxis affinis* Malay Penins., *persimilis* New Guinea, spp. n., ROTHSCHILD p. 224 Nov. zool. 19.
- Myropsyche nervalis*, *makomensis*, spp. n., Afrika, STRAND p. 175 Arch. Naturges. 73A.
- Nacliodes* subg. n. zu *Meganaclia*, STRAND p. 183 Arch. Naturges. 78A.
- Napata pseudolelex* sp. n. Ecuador, ROTHSCHILD p. 155 Nov. zool. 19.—*N. hyporhoda* p. 122, *flammans* p. 123, spp. n., Colombia, DOGNIN Mem. Soc. ent. Belgique 19.
- Narosopsis* gen. n., *leucospila* sp. n., p. 96 Costa Rica, DYAR Proc. U.S. Nation. Mus. 42.
- Natada nichorta*, *nindla*, p. 96, spp. n., Costa Rica, DYAR Proc. U.S. Nation. Mus. 42.
- Neasura tajrobana* pl. ei f. 13, HAMPSON J. Bombay Soc. 21.
- Neonerita arcifera* sp. n. Colombia, DOGNIN p. 129 Mem. Soc. ent. Belgique 19.
- Neoscaptia fascionitens* p. 238, *affinis*, *flavicaput*, *apicipuncta*, *bimaculata*, *androconiata*, p. 239, *cupreonitens*, *albicollis*, *basinitens*, p. 240, spp. n., New Guinea, ROTHSCHILD Nov. zool. 19.
- Nishada brunnea* New Guinea, *flavens* Java, p. 216, *testacea* Malay Penins., *griseoflava* Manila, p. 217, spp. n., ROTHSCHILD T.c.
- Nodozana cocciniceps* sp. n. Colombia, DOGNIN p. 128 Mem. Soc. ent. Belgique 19.
- Nola mesocyma* sp. n. Guiana, DOGNIN p. 123 T.c.—*N. maia*, *sperata*, p. 36, *biumbata*, *artata*, p. 37, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.
- Norape undulata* sp. n. Brazil, JONES p. 439 Tr. ent. Soc. London 1912.
- Norasuma kolga*, eggs, cocoons, POULTON p. xcv Proc. Soc. London 1911.

Notodonta ziczac subsp. n. *pallida* p. 300, *N. tieft* ab. n. *obsoleta* p. 301, GRÜNBERG Seitz Gr.-Schm. pal. 2.

Nudaria mundana var. n. *alpina*, UFFELN p. 13 Ent. Zeitschr. 26.

Nudaurelia oubie rothschildi p. 538, *neuvillei*, *argilosa*, p. 539, *aethiopica* varr. n.; p. 540, LE CERF Bull. Mus. Paris 1911.

Nyctosia poicilonotus sp. n. p. 50 Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Ocha lasthenioides, *nigribarbata* with var. *nigricula*, p. 158, *dacasa*, *laurina*, p. 159, *parva*, *lanceolata*, p. 160, spp. n., S. America, DOGNIN Mem. Soc. ent. Belgique 19.

Ochrostigma ussuriensis [sp. n.] Ussuri, PUNGELER Gr.-Schm. pal. p. 305.—*O. melagona* Zucht, SCHEPP Ent. Zs. 25 p. 258.

Ocneria kruegeri sp. n. Sardinia, TURATI p. 304 Ent. Rec. 24.—*O. dispar* × *japonica*, loi de Mendel, PICTET Arch. Sci. Phys. Genève 28 1909.

Ocnogyna rothschildi sp. n. Süd-Russland, BANG-HAAS p. 108 D. ent. Zs. Iris 26.—*O. baeticum* ab. n. *prieta*, *O. zoraida* abb. n. *henricus*, *olaria* & *blanca*, RIBBE pp. 348–349 D. ent. Zs. Iris 23.

Ocybola n. gen. for *Orgyia semifusca*, TURNER p. 20 Mem. Mus. Melbourne 4.

Oedaleosia concolor sp. n. Sudan?, STRAND p. 191 Arch. Naturges. 78 A.

Oenistis lifuensis Lifu, *aurifera*, *metallescens*, *bistrigata*, New Guinea, spp. n., ROTHSCHILD Nov. Zool. 19.

Olceclostera bifenestrata sp. n. Costa Rica, SCHAUS p. 46 Ann. Nat. Hist. 9.—*O. trilineata* sp. n. Guiana, DOGNIN p. 132 Mem. Soc. ent. Belgique 19.

Onychipoda curta, *elongata*, *bimarginata*, *fluvithorax*, spp. n., Africa, ROTHSCHILD p. 230 Nov. Zool. 19.

Opharus paulina sp. n. Brazil, JONES p. 421 Tr. ent. Soc. London 1912.

Ophthalmis lincea subsp. n. *intermedia*, *bismarcki*, *dimidiata* & *hemixantha*, *O. milete* subsp. n. *leucisca*, *torva* p. 19, *ornata* & *sumbana* p. 20, JORDAN Seitz Gr.-Schm. indoaustr. 11.

Orgyia antiqua ab. n. *grisea*, DENSO p. 132 D. ent. Zs. Iris 26.—*O. dubia*

Parthenogenesis, RANGNOW Intern. ent. Zs. 5 p. 334.

Oxytenis albilunulata sp. n. Costa Rica, SCHAUS p. 44 Ann. Nat. Hist. 9.

Pachymeta custodita p. 172, *stigmatica* p. 144, spp. n., W.-Afrika, STRAND Arch. Naturges. 78 A.

Pachymetana gen. n. near *Pachymeta*, STRAND p. 143 T.c.

Pachymetoides subg. n. zu *Pachymeta*, STRAND p. 145 T.c.

Pachypasa cornuta, *tessmanni*, spp. n., W.-Afrika, STRAND p. 139 T.c.

Padenia sordida sp. n. Gunong Ijan, ROTHSCHILD p. 234 Nov. Zool. 19.

Padenodes bizone, *violinitens*, p. 234, *unifascia*, *plagosus*, *bifasciatus*, p. 235, spp. n., New Guinea, ROTHSCHILD T.c.

Palaeosia plagiata sp. n. New Guinea, ROTHSCHILD p. 228 T.c.

Palpifer sexnotatus f. n. *ronin*, PFITZNER Seitz Gr. Schm. pal. 2 p. 437.

Paraona interjecta sp. n. Natal, STRAND p. 188 Arch. Naturges. 78 A.

Parasa hilarata Metamorphosis (Japanese), NAGANO Konch. Sek. Gifu 16 pp. 301–305.—*P. sinica* Metamorphosis (Japanese), NAGANO p. 343 T.c.

Parasemia plantaginis uralensis patruelis ab. n., JACHONTOV Rev. russ. ent. 12 p. 40.

Paropta confusa sp. n. Serafshan, ROTHSCHILD Seitz Gr.-Schm. pal. 2 p. 452.

Pasteosia albescens sp. n. New Guinea, ROTHSCHILD p. 228 Nov. Zool. 19.

Pericallia matronula Vorkommen und Lebensweise in der freien Natur.; RACKL München Mitt. ent. Ges. 3 pp. 38–39.

Pericopsis lycaste p. 56 larva, DYAR Proc. Ent. Soc. Washington 14.

Perola producta, *brevicornis*, p. 97, spp. n., Costa Rica, DYAR Proc. U. S. Nation. Mus. 42.

Phaeomolis lepida sp. n. Costa Rica, SCHAUS p. 38 Ann. Nat. Hist. 9.

Phalera flavimacula sp. n. Formosa, WILEMAN p. 259 Entomologist 45.—*P. diversa* sp. n. Bombay p. 1271, HAMPSON J. Bombay Soc. 21.—*P. bucephala* var. n. *tenebricosa*, STERTZ p. 26 D. ent. Zs. Iris 26.

Phasicnecus sulphureotinctus sp. n. Afrika, STRAND p. 150 Arch. Naturges. 78 A.

Phedusia riachuela sp. n. Brazil, JONES p. 426 Tr. ent. Soc. London 1912.

Phcositis gen. n., *excellens* sp. n. O.-Afrika, STRAND p. 213 Arch. Naturges. 78 A.

Phiala nelleburgensis sp. n. Afrika, STRAND p. 148 T.c.

Philenora subfusca sp. n. Seychelles p. 5 pl. i f. 4, FRYER Tr. Linn. Soc. London 15.—*P. nyassa* Nyassa-See, *malagassa* Madagaskar, p. 193, *asuriformis* O.-Afr. p. 195, spp. n., STRAND Arch. Naturges. 78 A.

Phileros ockendeni sp. n. Peru, *rubriceps* 3 subspp. n., ROTHSCCHILD p. 185 Nov. zool. 19.

Philotherma spargatana p. 114, *nigritarsis* p. 115, *testaccicornis* p. 116 W.-Afr., *squamata* p. 117, *ochraceus* p. 118, *montibia* p. 119, *rectilinea* p. 120 O.-Afr., spp. n., *P. sordida* ab. n. *posticata* p. 118, STRAND Arch. Naturges. 78 A.

Phlebohecta viduata sp. n. Borneo, JORDAN p. 149 Nov. zool. 19.

Phryganopsis flavifrontella p. 94, *tessmanniana* p. 95, *ilemimorpha* p. 96, spp. n., W.-Afr., STRAND Arch. Naturges. 78 A 9.—*P. unipunctana*, *loloana*, p. 172, *nigrapex* p. 173, *jaundeana* p. 174, *monotonia* Kamerun, *nyassana* Nyassa, p. 175, *subasperatella* Natal p. 173, spp. n., STRAND T.c.

Platagarista gen. n. near *Phalaenoides* für *tetrapleura* Meyr., JORDAN Seitz Gr.-Schm. indoaustr. 11 p. 21.

Pliniola gen. n. für *Tegulata nigristriata* Holl., STRAND p. 185 Arch. Naturges. 78 A.

Perophora albescens p. 435, *fenestrata*, *jaruga*, p. 436, spp. n., Brazil, JONES Tr. ent. Soc. London 1912.

Poliosia flavogrisea sp. n. N. Guinea, ROTHSCCHILD p. 216 Nov. Zool. 19.

Porestia folia sp. n. Brazil, JONES p. 426 Tr. ent. Soc. London 1912.

Porina copularis p. 123, *jocosa* p. 124, spp. n., N. Zeal., MEYRICK Trans. N. Zeal. Inst. 44.

Porthesia pectinata sp. n. Seychelles p. 14 pl. i f. 12, FRYER Tr. Linn. Soc. London 15.—*P. producta* abb. n. *pusillima*, *ukamica*, STRAND p. 148 Arch. Naturges. 78 A 9.

Porthetria dispar p. 42 pls. 9–12, FELT N. Y. St. Mus. Bull. No. 155.

Pronola perdifusa p. 125, *ectrocta* p. 126, spp. n., Colombia, DOGNIN Mem. Soc. ent. Belgique 19.

Propyria ockendeni, *nigrirufa*, *albofasciata*, spp. n., S. America, ROTHSCCHILD Nov. zool. 19.

Pseudapiconoma preussi ab. n. *longimaculata* p. 189, *P. flavimacula* abb. n. *elegantissima* & *monotonia* p. 191, STRAND Arch. Naturges. 78A.

Pseudofentonia gen. n. für *Fentonia* Hamps., STRAND p. 40 Fauna oxot. 2.

Pseudosphex deceptans sp. n. Brasilia, ZERNY p. 121 D. ent. Zs. Iris 26.

Pseudotalara euthoracica, *schedoxantha*, spp. n., Costa Rica, SCHAUS p. 57 Ann. Nat. Hist. 9.—*P. pseudophile*, *lateralis*, p. 100, spp. n., Mexico, DYAR, Proc. U. S. Nation. Mus. 42.

Pseudovipsania melanois sp. n. p. 98 Costa Rica, DYAR T.c.

Psilopleura sanguinea sp. n. Brazil, JONES p. 419 Tr. ent. Soc. London 1912.—*P. pentheri* sp. n. Brasilia, ZERNY p. 122 D. ent. Zs. Iris 26.

Ptychoglene haematodes sp. n. p. 746 Mexico, DYAR Pomona Coll. J. Ent. 4.

Pusiola occidentalis p. 92, *celidana* p. 93, spp. n., W.-Afr., STRAND Arch. Naturges. 78 A 9.

Rebelia herrichiella n. n. für *plumella* H.-Schäff., STRAND Seitz Gr. Schm. pral. 2 p. 365.

Rhagophanes aurantia sp. n. New Guinea, ROTHSCCHILD p. 218 Nov. zool. 19.

Rhodogastria aldabrensis sp. n. Seychelles p. 6 pl. i f. 5, FRYER Tr. Linn. Soc. London 15.

Rhynchopyga castra sp. n. Brazil, JONES p. 419 Tr. ent. Soc. London 1912.

Rhyparia purpurata uralensis var. *conservanda*, JACHONTOV Rev. russ. ent. 12 p. 23

Rifargia incurvata p. 429, *castrena* p. 430, spp. n., Brazil, JONES Tr. ent. Soc. London 1912.—*R. culpata* sp. n. Costa Rica, SCHAUS p. 53 Ann. Nat. Hist. 9.

Rigema woerdeni varr. n. *centralis* W.-Afr. p. 50, *orientalis*, *meridionalis* O.-Afr. p. 53. *R. karschi*, *quisola* W.-Afr., *ochriventris* Uganda, spp. n., p. 54, STRAND Fauna exotica 1.

Roeselia pedanta sp. n. p. 94 Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*R. leucogramma*, *pulverea*, p. 124, *stictigramma* p. 125, spp. n., Colombia, DOGNIN Mem. Soc. ent. Belgique 19.—*R. pallidiceps* pl. E f. 6, HAMPSON J. Bombay Soc. 21.

Rothschildia lichtenba sp. n. p. 46 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Salluca ruptilinea sp. n. Costa Rica, SCHAUS p. 49 Ann. Nat. Hist. 9.

Samia cecropia, development, RAU Psyche 19 p. 69; *S. cecropia*, mating and oviposition, RAU Trans. Ac. S. St. Louis 20 pp. 275-308 & T.c. pp. 309-319.

Sarosa atritorna sp. n. Colombia, DOGNIN p. 4 Hét. nouv. 5.

Saturnia atlantipyri Züchtungshybride, NIEPELT p. 291 Internat. ent. Zeitschr. 5.—*S. pavonia* Hungerexemplar von, TILTSCHER Ent. Zs. Frankfurt 26 p. 51; v. *meridionalis*, WETTL Ent. Zs. 26 p. 155; *pavonia-major*, Pseudo-Albinismus (Russ.), DIADČENKO Naturfreund 7 p. 148.—*S. pyretorum*, early stages, SASAKI p. 762 Verh. 8 Internat. Zool. Kongr.

Saturnia pyri f. n. *allicola*, DENSO p. 128 D. ent. Zs. Iris 26; forma *allicola*, SASSE D. ent. Zs. Iris 26 p. 201.

Saurita improvisa sp. n. Costa Rica, SCHAUS p. 36 Ann. Nat. Hist. 9.

Scaptosyle plumosus Borneo p. 240, *bicolor* Malay Penins. p. 241, spp. n., ROTHSCHILD Nov. Zool. 19.

Schasiura gymneloides sp. n. S.-Amer., ZERNY p. 123 D. ent. Zs. Iris 26.

Schausinna affinis v. n. *signata*, STRAND p. 155 Arch. Naturges. 78 A 9.

Schizura dospeppa sp. n. p. 81 Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*S. manca* sp. n. Costa Rica, SCHAUS p. 48 Ann. Nat. Hist. 9.

Scoliacma khasiana India, *fuliginosa*, *brunnescens*, *bivittata*, New Guinea, spp. n., ROTHSCHILD Nov. Zool. 19.

Scrancia prothoracalis sp. n. Kamerun, STRAND p. 121 Arch. Naturges 77 Suppl. 4.—*S. albolineata* sp. n. Afrika, STRAND p. 163 Arch. Naturges. 78 A.

Scranciana gen. n. near *Scrancia*, *caudatissima* sp. n. Afrika, STRAND pp. 161-162 T.c.

Scrobigera amatrix subsp. n. *media*, JORDAN Seitz Gr.-Schm. indoaust. 11 p. 7.

Semyra eucharista sp. n. Brazil p. 95, DYAR Proc. U. S. Nation. Mus. 42.

Sericaria mori, 'caratteri esterni del sesso nella crisalide, QUAJAT Agricoltura moderna 17 No. 44.

Someropsis gen. n. near *Scmera*, *viriditincta* sp. n. Afrika, STRAND p. 160 Arch. Naturges. 78 A.

Sphecosoma perconstrictum sp. n. Brasilia, ZERNY p. 121 D. ent. Zs. Iris 26.

Sphinta schausiana sp. n. Brazil, JONES p. 434 Tr. ent. Soc. London 1912.

Spidia excentrica sp. n. Kamerun, STRAND p. 122 Arch. Naturges. 77 Suppl. 4.

Spilosoma rhodosoma sp. n. Sicilia, p. 38 tav. iii fig. 10 & 13 tav. v fig. 16 & 17, TURATI Nat. Sicil. 20.

Stauropus basalis ab. n. *niphonica*, GRÜNBERG Seitz Gr.-Schm. pal. 2 p. 290.—*S. chlorotricha* sp. n. Himalaya p. 1271, HAMPSON J. Bombay Soc. 21.

Stauropussa gen. n. near *Stauropus*, *viridipennis* sp. n. Kamerun, STRAND p. 169 Arch. Naturges. 78 A.

Stenostauridia gen. n. near *Stenostaura*, *comma* sp. n. Kamerun, STRAND pp. 171-172 T.c.

Stictosia pallidimaculata p. 214, *variegata* p. 245, spp. n., New Guinea ROTHSCHILD Nov. Zool. 19.

Stilpnotia surtur sp. n. Tulduss-Gebiet, BANG-HAAS p. 107 D. ent. Zs. Iris 26.

Symmerista corcova sp. n. Brazil, JONES p. 427 Tr. ent. Soc. London 1912.

Syntomerea gen. n., *typica* sp. n. Kamcrun, STRAND p. 176 Arch. Naturges. 78 A.

Syntomidae; männlicher Genitalapparat, CHOLODKOVSKIJ St. Petersburg Trav. Soc. nat. 43 1 pp. 67-73 pl. i.

Syntomis tricingula sp. n. Liban, CULOT Genève Bull. Soc. Lépidopt. 2 1911 p. 98.—*S. hyrcana* sp. n. Persia, BANG-HAAS p. 107 D. ent. Zs. Iris 26.—*S. infranigra* p. 178, *benitonis*, *alenicola*, p. 179, *ploetzi* p. 180, *üelleburgensis* p. 181, spp. n., W.-Afrika, STRAND Arch. Naturges. 78 A.—*S. nigricilia* sp. n. O.-Afr., STRAND p. 82 T.c.—*S. phacozana* sp. n. Ost-Afr., ZERNY p. 119 D. ent. Zs. Iris 26.

Syntomostola xanthosoma sp. n. Colombia, DOGNIN p. 11 Hét. nouv. 5.

Tachyptera psidii p. 57 larva, DYAR Proc. Ent. Soc. Washington 14.

Talara leucophaea sp. n. Guiana, DOGNIN p. 128 Mem. Soc. ent. Belgique 19.

Talmeca gnoma sp. n. Costa Rica, SCHAUS p. 50 Ann. Nat. Hist. 9.

Tarache brabantii sp. n. p. 540 E. Africa, LE CERF Bull. Mus. Paris 1911.

Taragama concavum p. 87 O.-Afr., *nyassanum* Nyassasee, *misanum* Togo p. 89, *tessmanni* p. 90, *guineanum*, spp. n., *T. ligniclusum* v. n. *occidentale* p. 91 Span.-Guinea, *T. polydorum* ab. n. *obliqua* p. 92, STRAND Arch. Naturges. 78 A 1.—*T. makomanum* sp. n. W.-Afrika, STRAND p. 137 T.c.

Thaumatopoea pinivora, Raupen Prozeßion, VIERHUB Intern. ent. Zs. 6 p. 161.

Thridopteryx ephemeraeformis, HASEMAN Agric. Exp. Sta. Missouri Bull. 104 pp. 309-330 ff. 1-16.

Thumatha inconstans v. n. *limbatula* and *delimbatula*, STRAND p. 192 Arch. Naturges. 78 A.

Thyone xanthaema sp. n. Guiana, DOGNIN p. 126 Mem. Soc. ent. Belgique 19.

Thyretarctia gen. n. für *haematica* Holl., STRAND p. 189 Arch. Naturges. 78 A.

Thyretes trichaetiformis sp. n. Ost-Afr., ZERNY p. 119 D. ent. Zs. Iris 26.

Tigrioides margaritacea, *approximans*, *lactea*, p. 217, *albogrisea*, *albescens*, *fuscescens*, *flavescens*, *rufescens*, p. 218, spp. n., New Guinea, ROTHSCHILD Nov. Zool. 19.

Timora margarita sp. n. p. 530 E. Africa, LE CERF Bull. Mus. Paris 1911.

Tipulodes rubriceps sp. n. Colombia, DOGNIN p. 7 Hét. nouv. 5.

Titya suffusa, *serratata*, p. 433, *castralia* p. 434, spp. n., Brazil, JONES Tr. ent. Soc. London 1912.—*T. perplexa* sp. n. Costa Rica, SCHAUS p. 42 Ann. Nat. Hist. 9.—*T. biapicata* sp. n. Guiana, DOGNIN p. 157 Mem. Soc. ent. Belgique 19.

Tolype flavobrunnea Brazil p. 154, *salvadora* Centr. America, *meridensis* Venezuela, p. 155, *nigropatagiata* Guiana p. 156, spp. n., DOGNIN Mem. Soc. ent. Belgique 19.

Trichaeta biplagiata sp. n. Borneo, *albifrontia borealis* subsp. n., ROTHSCHILD p. 123 Nov. Zool. 19.

Trichodesma klagesi p. 157, *perplexa*, *hoffmannsi*, *nitens*, *similis*, *parva*, p. 158, spp. n., S. America, ROTHSCHILD T.c.

Tricholoba immodica, *trisignata* p. 120, *squalidula* p. 121, spp. n., W.-Afrika, STRAND Arch. Naturges. 77 Suppl. 4.

Tropaea luna rubromarginata var. n. p. 91, DAVIS Psyche 19.

Turenna dirphioides p. 57 larva, DYAR Proc. Ent. Soc. Washington 14.

Turuenna electa p. 39, *festiva* p. 40, spp. n. Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Trosia lena p. n. Costa Rica, SCHAUS p. 56 Ann. Nat. Hist. 9.

Usta biplaga sp. n. Südwest-Afrika, REBEL p. 13 Fauna exot. 2.

Utetheisa pulchelloides pl. G f. 19, HAMPSON J. Bombay Soc. 21.

Utriculifera variegata, *utricularia*, spp. n., New Guinea, ROTHSCHILD p. 244 Nov. Zool. 19.

Vipsophobetron denderia sp. n. p. 98 Costa Rica, DYAR Proc. U. S. Nation. Mus. 42.

Virbia fluminea sp. n. Costa Rica, SCHAUS p. 39 Ann. Nat. Hist. 9.

Xanthospilopteryx flavisignata p. 609, *atrifusa*, *atribasalis*, p. 610, spp. n., Africa, HAMPSON Ann. Nat. Hist. 10.—*X. tessmanni* sp. n. Kamerun, STRAND p. 195 Arch. Naturges. 78 A.

Zanola verago p. 56 larva, DYAR Proc. Ent. Soc. Washington 14.

Zaphanta fraterna sp. n. Costa Rica, SCHAUS p. 48 Ann. Nat. Hist. 9.

Zygaena graslini ab., CULOT Genève Bull. Soc. Lépidopt. 2 1911 p. 98.—*Zygaena*; Futterplanzender Raupen, BURGEFF Zs. wiss. Insektenbiol. 8 p. 121 etc.—*Z. hippocrepidis*, HODGSON Rep. Brighton Soc. 1909 pp. 12–15.—*Z. melioli* var. n., HAURI Ent. Zs. 26 p. 15.—*Z. des environs d'Alger*, HOLL Alger Bul. soc. sci. nat. 4 pp. 114–120.—*Z. purpuralis* f. n. *carnifera*, *trifolii* f. n. *flavescens*, *filipendulae* f. n. *rubescens*, *transalpina* f. n. *pallens*, *peudani* f. n. *semipuncta*, ZIEGLER p. 21 Berlin. ent. Zeitschr. 57.

Z. del Lazio meridionale pp. 137–155, of Latium pp. 156–176, *Z. transalpina* [with Turati] pp. 177–195, OBERTHÜR Études 6.

NOCTUIDAE.

Catalogue of *Noctuidae*, subfam. *Euceliana*, *Stictopterinae*, *Sarothripinae* and *Acontiana*, HAMPSON Cat. Lep. Phal. 11.

Noctuidae, WARREN [Forts.] Ad. Seitz, Gross-Schmetterlinge der Erde Fauna palaeart. Stuttgart [1912] Abt. 3 pp. 205–276 Taf.

Revision of New Zealand species of *Caradrina*, MEYRICK Trans. N. Zeal. Inst. 44 pp. 82–107.

Notes on Alberta *Lepidoptera* continued, DOD Canad. Ent. 44 pp. 33–39.

Thorakales Tympanalorgan, EGGERS Jurjev Sitzb. Naturf. Ges. 20 3–4 pp. 138–144 pl. i.

Abagrotis tristis sp. n. Arizona p. 8 pl. i f. 17, BARNES & MCDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Acantholipes acephala sp. n. Congo, STRAND p. 88 Rev. Zool. africa 2.—*A. hypenoides*, synonymy p. 1229, HAMPSON J. Bombay Soc. 21.

Achaea chrysopepa, *leucopera*, p. 552, Africa, *sarcopasa* Madagascar p. 553,

spp. n. DRUCE Ann. Nat. Hist. 9.—*A. balteata* sp. n. p. 333 Madagascar, JOANNIS Bull. Soc. ent. France 1912.

Achatodes metaleuca sp. n. p. 65 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Acidaliodes infantilis sp. n. Costa Rica, SCHAUS p. 510 Ann. Nat. Hist. 10.

Acontia emboloscia pl. cxcii f. 14 p. 653, *aroa* f. 15 p. 654, *congenita* f. 16 p. 657 sp. n. Australia, *gephyrias* f. 17, *dinarodes* sp. n. E. Africa f. 18 p. 659, HAMPSON Cat. Lep. Phal. 11.

Acrapex melianoides sp. n. New Guinea, WARREN p. 35 Nov. Zool. 19.—*A.*; synonymy, key to species p. 901, *brunnea*, abb., HAMPSON J. Bombay Soc. 21.

Acripia chloropera pl. clxxxix f. 23, *semiviridis* f. 24, p. 592, HAMPSON Cat. Lep. Phal. 11.

Acronycta; synonymy and key to Indian species p. 425, *albiorbis* ab. 1, HAMPSON J. Bombay Soc. 21.—*A. nigromaculata* sp. n. Assam, WARREN p. 1 Nov. Zool. 19.—*A. alni*, Eier, RICHTER Ent. Rdsch. 29 p. 141.

Aegle vespertalis ab. n. *transversa*, WARREN Gr.-Schm. F. pal. 3 p. 243.

Aeschradia gen. n. near *Elaeognatha* for *Apamea mammida* Druce, HAMPSON p. 378 Cat. Lep. Phal. 11.

Agrotis (Euxoa) jordani sp. n. Sardinia with f. n. *chalybaea* p. 304, *kermesina* f. n. *virescens* p. 305, TURATI Ent. Rec. 24.—*A. nisseni* sp. n. Tunisia, ROTHSCHILD p. 125 Nov. Zool. 19.—*A. arenosa* sp. n. Formosa, WILEMAN p. 130 Entomologist 45.—*A. kermesina* abb. n. *albida* p. 234, *selinoides*, *darroensis*, p. 235, RIBBE D. ent. Zs. Iris 23.—*A. pulchrella* Sajan, *picata* Algier p. 140, *tyrannus* Karagai-tau p. 141, *imperator* Biskra, *urbana* Algier, p. 142, spp. n., *c-nigrum* v. n. *depravata* Yarkend, *wockeii* v. n. *tundrana* Ala-tau, p. 139, *renigera* v. n. *furiosa* Garm, im „Gebirge Peter der Grossen“ p. 141, BANG-HAAS Deutsche ent. Zs. Iris 26.—*A. exclamationis*, *segetum*, *metamorphose*, Phanologie, Parasiten in den Gouv. Tula und Tver (Russ.), SACHAROV Sad ogor. i bachča 6 pp. 700–705 760–765.—*A. lidia*, Literatur, WARNECKE Intern. ent. Zs. 5 p. 320.—*A. mul-*

tangula var. n. *travunia*, SCHAWERDA Verh. Zool. bot. Ges. Wien 62 p. (138).—*A. pronuba* v. n. *nigra*, KRAUSSE p. 168 Arch. Naturges. 78 A.—*A. segetum*. Auftreten, Parasiten (Russ.), POSPĚLOV Věstn. sacharn. promyšl. 13 pp. 157–161 figs. 1–4; Lebensgeschichte, Schaden, Bekämpfung (Russ.), GOMILEVSKIĀ Sěvern. choz. 11 pp. 118 121–124 131–134 14C–141 f. 1–10; Parasiten der Larve (Russ.), ŠEVYREV St. Peterburg 1912 pp. 63–212.—*A. subrosea* var. n. *kieferi*, REBEL Verh. z.-b. Ges. Wien 62 p. (118); Fundort, RICHTER Intern. ent. Zs. 5 p. 333; *subcaerulea* Verbreitung, WARNECKE Intern. ent. Zs. 6 pp. 2 3.

A. bleidi ♂ and ♀ pl. 128 figs. 1141 and 1142, *mansoura* f. 1145, p. 333, *powelli* ♂ and ♀ figs. 1146 and 1147 p. 334, OBERTHÜR Etudes 6.

Aiteta gamma pl. clxxxvii f. 52; *veluta* f. 26 p. 572 & *parallela* f. 28 p. 528, spp. n., W. Africa; *escalerai* p. 27, *meterythra* f. 29, *costiplaga* f. 30 p. 529, *hampsoni* f. 31, *trigoniphora* f. 32 p. 530, *cubflava* pl. clxxxviii f. 1, *albicosta* f. 2 p. 531, *iridias* f. 3 *elaina* f. 4 p. 532, *apriiformis* f. 5 p. 533, HAMPSON Cat. Lep. Phal. 11.—*A. angustipennis* Engano, *careoides* Penang with ab. *nirgimacula*, p. 38, *fumata* New Guinea ab. *griseomixta* Solomon islds., *rufula* Assam, p. 39 spp. n., WARREN Nov. Zool. 19.

Alabama argillacea, HASEMAN Science 35 p. 575.

Aleptinoides gen. n. p. 24, *ochrea* New Mexico p. 24 pl. ii f. 17, *atrolinea* Arizona p. 25 pl. i f. 23 spp. n., BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Aletia argillacea, migration p. 83, MUTKOWSKI Ent. News 23 & WICKHAM T. c. p. 181.

Aluaca insipidalis p. 46, *subrosealis*, *subochrotalis*, p. 47, Venezuela, spp. n., DOGNIN Hét. nouv. 6.

Amiana endopolia sp. n. p. 64 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Ammoconia caecimacula, *senex*, Eier, RICHTER Lotos 60 pp. 1–6.

Amolita delicata, *fratercula*, spp. n., Arizona, BARNES & McDUNNOUGH p. 90 Canad. Ent. 44.

Amphidrina, HAMPSON p. 435 J. Bombay Soc. 21.

Anarta myrtilli abb. n. *peralbata* & *nigrescens*, subsp. n. *citrina*, p. 252, WARREN Gr.-Schm. F. pal. 3.

Andropolia lichena sp. n. California p. 17 pl. ii f. 11, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Androlymnia p. 896, HAMPSON J. Bombay Soc. 21.

Anepilecta gen. n. für *accipiter* Fldr., WARREN Seitz Gr.-Schm. indoaustr. 11 p. 64.

Anigraea albomaculata pl. clxxvi f. 11 p. 94, *ochrobasis* sp. n. Queensland f. 12, *mediopunctata* f. 13 p. 95, *mediifascia* f. 14 p. 96, *homochroa* sp. n. Borneo f. 15, *viridata* f. 17 p. 98, *deletoides* f. 17 p. 99, *phaeopera* sp. n. Borneo f. 18, *siccata* f. 19, p. 100, *purpurascens* sp. n. Kumasi f. 30 p. 102, HAMPSON Cat. Lep. Phal. 11.

Anomis gentilis sp. n. Costa Rica, SCHAUS p. 532 Ann. Nat. Hist. 10.

Anomis obusta, *albipunctillum*, p. 27, Colombia, spp. n., DOGNIN Hét. nouv. 6.

Antaxlaga stigmata, *hemicrocca*, p. 67, *pletioglaucia*, *melanocrypta*, p. 68 spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Antharchaea obliqualis p. 80, *oma* p. 81, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Antharchaea poaphiloides sp. n. Costa Rica, SCHAUS p. 525 Ann. Nat. Hist. 10.

Antitype discalis, *hagar*, spp. n., Algeria, ROTHSCHILD p. 125 Nov. Zool. 19.

Anua xylochroa sp. n. W. Africa, DRUCE p. 552 Ann. Nat. Hist. 9.

Anuga juvena pl. clxvi f. 21 p. 105, *vida* f. 22 p. 107, HAMPSON Cat. Lep. Phal. 11.

Anth; synonymy, key to species, p. 435, HAMPSON J. Bombay Soc. 21.

Anytus leucocyma pl. G f. 24, HAMPSON J. Bombay Soc. 21.

Apamea distincta sp. n. Asia centr., WARREN Gr.-Schm. F. pal. 3 p. 224.—*A. testacea* v. n. *irritaria*, BANG-HAAS p. 146 D. ent. Zs. Iris 26.

- Apatela rapidan* sp. n. p. 62 Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Apocalymnia*; description p. 897, HAMPSON J. Bombay Soc. 21.
- Aporophyla nigra* Zucht, SEILER D. ent. Zs. Iris 26 pp. 216-219.
- Apothripa binotata* sp. n. Assam pl. clxxx f. 30, *albonotata* f. 29 p. 250, HAMPSON Cat. Lep. Phal. 11.
- Apsarasa*; Key p. 905, HAMPSON J. Bombay Soc. 21.
- Aquis aquisoides* pl. clxxxiv f. 22 p. 386, *albida* f. 23 p. 387, HAMPSON Cat. Lep. Phal. 11.
- Arachnognatha meterythra* pl. clxxxii f. 29 p. 321, HAMPSON Cat. Lep. Phal. 11.
- Aræa*, HAMPSON p. 419 J. Bombay Soc. 21.
- Aræopterum minimale* sp. n. Seychelles, FRYER pl. 1 Tr. Linn. Soc. London 15.
- Archanara punctilinea, nigropunctata*, spp. n., FORMOSA, WILEMAN p. 148 Entomologist 45.—*A. alge* abb. n. *liturata* & *fumata*, *A. insoluta* Transkaspien, *cervina* Turkestan, spp. n., WARREN Gr.-Schm. F. pal. 3 p. 238.
- Arcte papuensis* and ab. *albimixta* sp. n. New Guinea, WARREN p. 49 Nov. Zool. 19.
- Arcyophora carniola* sp. n. Rhodesia pl. cxci f. 8 p. 643, *stali* f. 9 p. 645, HAMPSON Cat. Lep. Phal. 11.
- Arenostola phragmitidis* ab. n. *olivescens*, *impudica* ab. n. *basitriga*, p. 235, *fluxa* ab. n. *pulverosa*, *pygmina* ab. n. *fasciata*, p. 236, WARREN Gr.-Schm. F. pal. 3.—*A. orphnina* sp. n. New Hampshire p. 167, DYAR Proc. Ent. Soc. Washington 14.—*A.*, HAMPSON p. 900 J. Bombay Soc. 21.
- Argidia aufidia* sp. n. Costa Rica. SCHAUS p. 518 Ann. Nat. Hist. 10.—*A. rufa*, *suprema*, *noctifera*, p. 172, spp. n., French Guiana, SCHAUS Proc. Ent. Soc. Washington 14.
- Ariola triangulifera* New Guinea etc., *pallidithorax* Tambora, spp. n., WARREN p. 46 Nov. Zool. 19.
- Ariolica lineolata* pl. clxxxvi f. 30 p. 487, *chinensis* f. 31 p. 488, *argentea* f. 32 p. 489, HAMPSON Cat. Lep. Phal. 11.
- Arisada mollis* sp. n. Penang, WARREN p. 37 Nov. Zool. 19.
- Aristaria vinasalis* sp. n. Costa Rica, SCHAUS p. 209 Ann. Nat. Hist. 9.
- Armactica andreusi* Christmas isld. pl. cxci f. 21 p. 664, *endoleuca* W. Australia f. 20, spp. n., *conchidia* figs. 22 & 23 p. 665, HAMPSON Cat. Lep. Phal. 11.
- Armada dentata* v. n. *nilotica*, BANGHAAS p. 160 D. ent. Zs. Iris 26.
- Arsaciodes* gen. n., *rufa* sp. n. Costa Rica, SCHAUS p. 207 Ann. Nat. Hist. 9.
- Arytrura* gen. n. für *Zethes musculus* u. *subpalcata*, ZAHN Rev. russ. ent. 12 p. 133 figs. 3-4.
- Asinduma olivana* pl. clxxxii f. 4, *elaesta* sp. n. Travancore f. 5 p. 293, HAMPSON Cat. Lep. Phal. 11.
- Asura fulerinarginata* pl. G f. 12, *phantasma* f. 10, *toxodes* f. 11, HAMPSON J. Bombay Soc. 21.
- Athetis furvula* ab. n. *tristior* Japan, *A. alsines* ab. n. *ochrea* [loc ?] p. 208, *A. blanda* ab. n. *centralasiae* Turkestan, *A. respersa* ab. n. *robusta* Europa p. 209, *A. flavirena* ab. n. *subdita* Schweiz p. 210, *A. perspicua, turbulenta*, spp. n., Turkmenia p. 211, *A. terrea* ab. n. *pergrisea* Süd-Europa p. 212, WARREN Gr.-Schm. F. pal. 3.—*A. (Caradrina) mona* sp. n. California, BARNES & McDUNNOUGH p. 56 Canad. Ent. 44.—*A.*, synonymy, and key p. 435, HAMPSON J. Bombay Soc. 21.—*A. (Caradrina) atrostriga* sp. n. Utah p. 23 pl. ii f. 7, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.
- Athyra antica* sp. n. p. 171 French Guiana, SCHAUS Proc. Ent. Soc. Washington 14.
- Aucha*; Key p. 417, HAMPSON J. Bombay Soc. 21.
- Autanthema* gen. n. *Acontianae*, *diversicolor* sp. n. New Guinea, WARREN p. 45 Nov. Zool. 19.
- Autographa gamma californica*, HYSLOP, U. S. Dept. Agric. Ent. Bull. 95 Pt. 7 pp. 109-118 ff. 45-51 pl. xi.
- Azeta rufescens* sp. n. Costa Rica, SCHAUS p. 204 Ann. Nat. Hist. 9.
- Baileya doubledayi* pl. clxxxvi f. 9, *ophthalmica* f. 10, p. 445, *australis*

f. 11 p. 446, *levitans* f. 12 p. 447, HAMPSON Cat. Lep. Phal. 11.

Baniana triangulifera, *centrata*, Tucuman, p. 23, *phaleniforma* Paraguay. *punctifera* Demerara, p. 24, spp. n., DOGNIN Hét. nouv. 6.—*B. ? haga* sp. n. Costa Rica, SCHAUS p. 531 Ann. Nat. Hist. 10.

Baputa bipartita sp. n. New Guinea, WARREN p. 56 Nov. Zool. 19.

Barasa cymatistis pl. clxxxiv f. 24, *griseola* f. 25, p. 390, *costalis* f. 26, *tetragramma* f. 27, *basigerella* f. 28, p. 392, HAMPSON Cat. Lep. Phal. 11.

Beara nubiferella pl. elxxxix f. 20, *papuana* sp. n. Fak-fak p. 582, HAMPSON Cat. Lep. Phal. 11.—*B. simplex* sp. n. Adonara, WARREN p. 46 Nov. Zool. 19.

Bendis iolas sp. n. Demerara, DOGNIN p. 22 Hét. nouv. 6.

Bertula fulvistrigalis sp. n. Borneo, WARREN p. 57 Nov. Zool. 19.

Bessacta gen. n. *Noctuinae* type *polyspila* Walk, *javensis* Java, *columnaris* Bunguran, spp. n., WARREN p. 52 T.c.

Bistica gen. n., *noela* sp. n., p. 67, Mexico, DYAR. Proc. U. S. Nation. Mus. 42.

Blenina chlorophila pl. clxxxv f. 2 p. 402, *auriculata* sp. n. New Guinea p. 404, *malachitis* f. 3 p. 405, *fumosa* f. 4 p. 408, *metanyctea* f. 5 p. 409, *obliquinaria* sp. n. New Guinea f. 6 p. 411, *chloromelana* f. 7, *smaragdina* f. 8, p. 412, *nigrans* f. 9 p. 413, *varians* f. 10, *solomonis* f. 11, p. 414, *miota* f. 12, p. 415, *diagona* sp. n. Nigeria f. 13 p. 416, *ephesioides* f. 14 p. 417, *triphænopsis* f. 15 p. 419, *metachrysa* f. 16, *quadripuncta* f. 17, p. 420, *amabilis* f. 18 p. 421, *viridata* f. 19, *puloa* f. 20, p. 422, HAMPSON Cat. Lep. Phal. 11.—*B. senex* (Japanese), NAGANO Konch. Sek., Gifu 16 (88-92).

Bleptina flaviguttalis p. 122, *minimalis* p. 123, spp. n. Arizona, BARNES & McDUNNOUGH Canad. Ent. 44.—*B. heteropalpia* sp. n. Madras p. 1231, HAMPSON J. Bombay Soc. 21.—*B. sangamonica* sp. n. Illinois p. 27 pl. ii f. 18, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Bocula brunneata, *mollis*, p. 55, *undilineata* p. 56, spp. n., Assam,

WARREN Nov. Zool. 19 — *B. sinifera* sp. n. Assam p. 1228, HAMPSON J. Bombay Soc. 21.

Bolina comprehendens p. 56 larva, DYAR Proc. Ent. Soc. Washington 14.

Bombotelia gen. n. *Eutelianae* p. 6, type *Penicillaria jocosatrix* Guen., *dorsipuncta* sp. n. Singapore p. 13, HAMPSON Cat. Lep. Phal. 11.

Boralia irrorata sp. n. Formosa, WILEMAN p. 147 Entomologist 45.

Bostrodes sagittaria p. 37, *rufisecta* p. 38, spp. n., Assam, WARREN Nov. Zool. 19.

Brachionycha sphinx ab. n. *linstowi*, STRAND p. 258 Ent. Zeitschr. 25.

Bradina andresi sp. n. Aegypt, REBEL p. 87 D. ent. Zs. Iris 26.

Bryomima distans sp. n. Arizona p. 14 pl. ii f. 10, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Bryophila raptriculoides sp. n. Sardinia with *marmorata* and *mediostrigata* ff. n., TURATI p. 305 Ent. Rec. 24.—*B.*, synonymy, and key p. 411, HAMPSON J. Bombay. Soc. 21.

Bryophilopsis orientalis Christmas isld. p. 311, *lunifera* Nigeria pl. elxxxii f. 23 p. 314, spp. n., *nesta* f. 24 p. 314, *tarachoides* f. 25, p. 315, *curvifera* f. 26, *cometes* f. 27, p. 316, *melanoleuca* f. 28 p. 317, spp. n., Africa, HAMPSON Cat. Lep. Phal. 11.

Buzara circumducta sp. n. St. Aignan, WARREN p. 56 Nov. Zool. 19.

Cacyparis elegans pl. elxxxvi f. 16 p. 462, *ceira* f. 17, *melanolitha* f. 18, p. 463, *cyclops* f. 19 p. 464, HAMPSON Cat. Lep. Phal. 11.

Calamia virens abb. n. *thalassina* and *rufata*, WARREN Gr.-Sehm. F. pal. 3 p. 241.

Calamistis, Key p. 899, HAMPSON J. Bombay Soc. 21.

Calathusa hypotherma pl. clxxxiv f. 11 p. 379, *ischnodes* f. 12, *octogesima* f. 13, p. 380, *abeboea* f. 14, *subflavida* sp. n. Queensland f. 15, p. 381, *stenophylla* f. 16 p. 382, *dispila* f. 17, *mesospila* f. 18, p. 383, *metableta* f. 19, *cremna* f. 20, p. 384, *delosticha* f. 21 p. 385, HAMPSON Cat. Lep. Phal. 11.

Calloecia, HAMPSON p. 892 J. Bombay Soc. 21.

- Callyna*, Key p. 907, HAMPSON T.c.,
- Calocampa exoleta*, chenille, GUIGNON Feuille natural. Paris 42 p. 117; DUMÉE Ibid. p. 134.
- Calophasia platyptera* ab. pl. iii f. 13, *hamifera* figs. 14 & 15, *almoravida* figs. 16 & 17, p. 173, MENDES Broteria 10.
- Calymnia affinis* ab. n. *nigrimaculata*, *trapezina* abb. n. *carnea*, p. 230, and *conspersa*, *achatina* abb. n. *intensa* and *illustrata* Japan p. 231, WARREN Gr.-Schm. F. pal. 3.—*C.*, synonymy and key p. 897, HAMPSON J. Bombay Soc. 21.
- Calymniodes maneti* sp. n. Costa Rica, SCHAUS p. 509 Ann. Nat. Hist. 10.
- Campometra guapila* p. 511, *obsoletifactor* p. 512, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 10.
- Camptozada* gen. n. type *Tinoscma mirabile* Swinh., HAMPSON p. 575 Cat. Lep. Phal. 11.
- Canna javensis* sp. n. Java, WARREN p. 1 Nov. Zool. 19.—*Canna*, key p. 420, HAMPSON J. Bombay Soc. 21.
- Capnodes hersilea* p. 523, *lycoris*, *hembrilla* p. 524, *melie* p. 525, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 10.—*C. ocrilineata* Colombia p. 34, *recocta* Demerara, *dorsilinea* Peru, p. 35, *ignifera*, *terrigena*, Bolivia, p. 36, *lilacina* San José, *lateritia* Demerara, p. 37, *trepidula* Peru, *boliviensis* Bolivia, p. 38, *cinerea* Peru, *censura* Colombia, p. 39, *gromatica*, *paraddana*, p. 40, Colombia, spp. n., *harmodia* var. n. *correcta* p. 34, DOGNIN Hét. nouv. 6.
- Caradrina tenera* sp. n. Yarkend, BANG-HAAS p. 155 D. ent. Zs. Iris 26.—*C. aspersa* ab. n. *alfacaria*, RIBBE p. 272 D. ent. Zs. Iris 23.—*C. exigua* Schaden, PLOTNIKOV Taškent 1912 p. 19 f. 8-11.
- Carea diplogramma* pl. clxxxviii f. 6 p. 545, *flava* f. 7 p. 546, *tumida* f. 30 p. 547, *costiplaga* f. 8 p. 548, *unipuncta* f. 9 p. 550, *biviata* f. 10 p. 551, *tarica* f. 11, *dione* f. 12, *nitida* f. 13, p. 552, *parallelaria* f. 14, *mathilda* f. 16, *obvia* sp. n. Philippines f. 15, p. 553, *pryeri* f. 17, *pratti* f. 18, p. 554, *rubrifusa* f. 19, *moira* f. 21, *devia* sp. n. Assam p. 555 f. 20, *diagona* sp. n. Bhutan f. 22, *obsolescens* f. 23, *pallida* f. 29, p. 556, *leucocraspis* pl. clxxxix f. 1, *endophaea* f. 2, p. 557; *internifusca* Assam, *metaphaea* Borneo p. 558, spp. n., *albirufa* f. 5 p. 559, *robinsoni* f. 6, *albopurpurea* f. 7, p. 560, *albipicta* f. 8 p. 561, *viridifascia* f. 9 p. 562, *efusa* f. 10, *viridipicta* f. 11, p. 563, *mesocausta* f. 12 p. 564, *vexilla* f. 13, *nexilla* sp. n. Singapore f. 14 p. 565, HAMPSON Cat. Lep. Phal. 11.—*C. nebulifera*, *trilineata*, Assam &c., *diluta*, p. 40 *venusta*, *balteata*, *carneplagiata*, p. 41, Malay Penins., *albmargo*, *vulpina*, Borneo, p. 42, *hepatica* Tondano, *mediogrisea*, *antennata*, Borneo, p. 43, *fulvescens* Java, *papuensis* Biagi, p. 44, spp. n., WARREN Nov. Zool. 19.
- Careades eceicei* pl. clxxxviii f. 24 p. 537, *hemichlora* pl. cxoi f. 28, *huntei* pl. clxxxviii f. 25 p. 538, *obliqua* f. 26 p. 539, *fulva* f. 27, *rubricosa* f. 28 p. 541, HAMPSON Cat. Lep. Phal. 11.
- Carteia subpallida* Hainan, *stigmatica* Assam, p. 50, *grisea* Timor, *taeniata* Penang, p. 51, spp. n., WARREN Nov. Zool. 19.
- Catamecia*, HAMPSON p. 889 J. Bombay Soc. 21.
- Casandria melanographa* p. 352, *amplipennis* p. 353, spp. n., S. America, *olivaris* sp. n. Mexico p. 354 pl. clxxxiii f. 10, *purpurascens* f. 17 p. 355, *arcuata* f. 18 p. 357, *metaphaea* sp. n. Costa Rica f. 14, *chirica* f. 12, p. 358, *steniptera* f. 13, *araea* f. 14, *haematopis* sp. n. San Salvador f. 19, p. 359; *filifera* f. 20 p. 360, *stroca* pl. clxxxii f. 30, *elota* f. 31, p. 361, *leucopsis* f. 32 p. 362 HAMPSON Cat. Lep. Phal. 11.—*C. olivaris* sp. n. p. 78 Mexico, DYAR, Proc. U. S. Nation. Mus. 42.
- Catocala*; Nord-Amerika, Liste, WORMSBACHER Zs. wiss. Insektenbiol. 8 f. 252-258.—*C. relictata* Formen; ROTHKE Ent. Rdsch. 29 pp. 1-5 & 12-14.—*C. helena* Berichtigung, SCHWEITZER Ent. Zs. Frankfurt 26 p. 29.—*C. nivea*, Metamorphosis (Japanese), NAGANO Konch. Sek. Gifu 16 pp. 385-389.—*C. optata* ab., VINCENT Paris Bul. soc. ent. 1912 p. 209.—*C.*, spp., early stages, ROWLEY & BERRY Ent. News 23 pp. 207-214.
- C. puerpera* varr. pl. 129, *optata* varr. pl. 130, *nupta confusa* pl. 130 f. 1157, *elocata lugens* f. 1158, *martyrum* f. 1159, *oberthueri* f. 1160, OBERTHÜR Etudes 6.

Celiptera dimera pp. 77 & 79, spp. n., Mexico, DYAR Proc. U.S. Nation. Mus. 42.—*C. candida* sp. n. Ecuador p. 26, DOGNIN Hét. nouv. 6.

Celama dentilinea pl. G f. 5, *leucoscopula* f. 2, *mesotherma* f. 3, *rufimixta* f. 4, HAMPSON J. Bombay Soc. 21.

Centrochlora gen. n., *esmeralda* sp. n., p. 61, Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Cerala grisea sp. n. Tibet pl. clxxxvii f. 1 p. 490, HAMPSON Cat. Lep. Phal. 11.

Cerocala orientalis sp. n. p. 287 Cochinchine, JOANNIS Bull. Soc. ent. France 1912.

Ceromacra putida sp. n. Demerara p. 27, DOGNIN Hét. nouv. 6.

Cetola, key p. 429, HAMPSON J. Bombay Soc. 21.

Chabuata nephroleuca sp. n. Brazil, JONES p. 421 Tr. ent. Soc. London 1912.—*C. rectinubila* p. 59, *griseago* p. 60, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Chalcopasta fulgens sp. n. Arizona p. 25, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.—*C. riandana*, *dysnoa*, p. 69, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Chamyna modesta sp. n. Costa Rica, SCHAUSS p. 205 Ann. Nat. Hist. 9.

Characoma curiosa pl. clxxx f. 10 p. 229, *vallata* f. 11 p. 230, *distincta* f. 12 p. 234, *multilinea* f. 14, *glaucopasta* Assam sp. n. f. 13, p. 235, *phaeoleuca* sp. n. Ceylon p. 236 f. 15, *glaphyra* f. 16, *polia* f. 17, p. 237, *miophora* sp. n. Africa f. 18, *cana* f. 19, p. 238, *deleta* f. 20, *ferrigrisea* f. 21, p. 239; HAMPSON Cat. Lep. Phal. 11.

Chasmina graciliella sp. n. India, WARREN p. 38 Nov. Zool. 19.—*C.* synonymy and key p. 906, HAMPSON J. Bombay Soc. 21.

Chiripha; synonymy p. 430, HAMPSON T.c.

Chloantha hyperici abb. n. *alba*, *brunnescens* and *nigra*, RIBBE p. 263 D. ent. Zs. Iris 23.

Chloethripa gen. n. for *Sarrothripa chlorana*, HAMPSON p. 260 Cat. Lep. Phal. 11.

Chlorhoda metaleuca sp. n. Costa Rica, SCHAUSS p. 203 Ann. Nat. Hist. 9.

Chloridea dipsacea ab. n. *canariensis*, *ononis* ab. n. *intensiva*, p. 245, *obsoleta* ab. n. *rufa* p. 246, WARREN Gr.-Schm. F. pal. 3.

Chloriola gen. n. for *Nolasena gratisima* Walk., HAMPSON p. 515 Cat. Lep. Phal. 11.

Chloroplaga gen. n. for *Acontia nygmia* Swinh., HAMPSON p. 596 T.c.

Chlorozada gen. n. near *Ariola*, *pyrites* pl. clxxxvii f. 22, p. 517, *prasina* f. 23 p. 518, *endophaea* pl. cxci f. 27 p. 519, spp. n., W. Africa, HAMPSON T.c.

Chlumetia lichenosa pl. clxxv f. 23 p. 63, *euryptera* N. Guinea sp. n. p. 64 p. clxxx f. 6, *duplicilinea* pl. clxxv f. 24, *hampsoni* f. 25, p. 65, *cana* sp. n. E. Africa, pl. clxxx f. 5 p. 67, HAMPSON T.c.

Chusaris nigerrimalis sp. n. Seychelles p. 13 pl. i f. 11, FRYER Tr. Linn. Soc. London 15.—*C. rubricena* sp. n. Ceylon p. 1238, HAMPSON J. Bombay Soc. 21.

Cirphis taiwana p. 132, *subdecora* p. 147, spp. n., Formosa, WILEMAN Entomologist 45.—*C. dasyncnema* sp. n. Queensland, TURNER p. 21 Mem. Mus. Melbourne 4 pp. 16-22.

Cirrodistis gen. n., *benedicta* sp. n., p. 71, Mexico. DYAR Proc. U.S. Nation. Mus. 42.

Cirrophanus miaiphona sp. n. p. 69 Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Cladocera orana pl. 128 f. 1139 p. 332, OBERTHÜR Etudes 6.

Cladocerotis noctambulatrix ♂ ♀ pl. cxxviii figs. 1137 & 1138 pp. 332, OBERTHÜR T.c.

Coenobia rufa, natural history, EDELSTEN pp. 24-26 Tr. City London Soc. 1909 1 pl.

Colocasia (Demas) coryli als Noktuide, GILLMER Intern. ent. Zs. 5 p. 340.

Concana leucomera sp. n. p. 80 Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*C. mundula* sp. n. Guyane française, DOGNIN p. 8 Hét. nouv. 6.—*C. permixta* sp. n. Costa Rica, SCHAUSS p. 514 Ann. Nat. Hist. 10.

Condica albiorbis p. 28, *albilineata*, *connotata*, *subnigrata* with ab. *uniformis*, p. 29, spp. n., India, WARREN Nov. Zool. 19.

Constantia debskii sp. n. Aegypt REBEL p. 80 D. ent. Zs. Iris 26.

Corna pegasus sp. n. Costa Rica, SCHAUSS p. 531 Ann. Nat. Hist. 10.

Cosmia spp., notes, TAUTZ Tr. London City Soc. 1911 pp. 25-28.

Cossedia hyriodes sp. n. Philippines p. 479, *semiflava* pl. clxxxvi f. 25 p. 480, HAMPSON Cat. Lep. Phal. 11.

Crambidia suffusa sp. n. California p. 3 pl. ii f. 16, BARNES & McDUNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Craniophora; synonymy and key p. 424, HAMPSON J. Bombay Soc. 21.

Craterestra postlineata, *scalata*, spp. n., India, WARREN p. 10 Nov. Zool. 19.

Cryptothripa gen. n. p. 309 type *Selepa occulta* Swinh., *polyhymnia* pl. clxxxii f. 22 p. 310, HAMPSON Cat. Lep. Phal. 11.

Cucullia vicina, *tosca*, spp. n., Karagai-tau, BANG-HAAS pp. 158 & 159 D. ent. Zs. Iris 26.—*C.*; Böhmens Arten, SRDINKO Čas. České Spol. Entomolog. Prag 7 1910 pp. 100-113.—*C. campanulae*, Lebensweise, TYKAŮ Čas. České Spol. Entomolog. Prag. 7 1909 p. 17.

Cybolomia arenosalis sp. n. Aegypt, REBEL p. 83 D. ent. Zs. Iris 26.

Cydosia hyva sp. n. Brazil, JONES p. 424 Tr. ent. Soc. London 1912.

Dadica albanalis sp. n. Ceylon, WARREN p. 36 Nov. Zool. 19.

Dagassa ? *atalanta* sp. n. Costa Rica, SCHAUSS p. 519 Ann. Nat. Hist. 10.—*D.* ? *arcuata* sp. n. Ecuador, DOGNIN p. 46 Hét. nouv. 6.

Darceta castula sp. n. Venezuela, DOGNIN p. 9 T.c.

Daseochaeta pulchra sp. n. Formosa, WILEMAN p. 132 Entomologist 45.—*D.*; synonymy and key p. 420, HAMPSON J. Bombay Soc. 21.

Dasypolia fraterna sp. n. Karagai-tau, BANG-HAAS p. 153 D. ent. Zs. Iris 26.

Data rectisecta sp. n. Cachar, WARREN p. 28 Nov. Zool. 19.

Delta; synonymy p. 429 key to species, HAMPSON J. Bombay Soc. 21.

Dercetis bilinealis sp. n. California p. 30 pl. ii f. 15, BARNES & McDUNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Dianthoecia vulcanica p. 24 tav. vi fig. 6, *kruegeri* p. 25 fig. 7, spp. n., Sicilia, TURATI Nat. Sicil. 20.—*D. filigrama* v. n. *karagaia*, BANG-HAAS p. 146 D. ent. Zs. Iris 26.—*D. luteago* pl. iii f. 12 p. 171, MENDES Broteria 10.

Dichonia chlorata pl. G f. 26, HAMPSON J. Bombay Soc. 21.

Dilophothripa alopha pl. clxxx f. 22 p. 241, HAMPSON Cat. Lep. Phal. 11.

Dipaustica n. gen. p. 98 type *Leucania epiastra*, MEYRICK Trans. N. Zeal. Inst. 44.

Diptera alpium glauca f. n., TURATI p. 25 Annuar. Mus. Napoli 3 No. 18 1911.—*D. alpium* und *Acronycta aceris*, PÖSCHMANN Zs. wiss. Insektenbiol. 8 p. 385.

Dipterygia multistriata sp. n. Sikkim, WARREN p. 14 Nov. Zool. 19.

Donacesa ? *peruviansis* sp. n. Peru, DOGNIN p. 31 Hét. nouv. 6.

Dyops xantholepis sp. n. p. 77 Mexico, DYAS Proc. U. S. Nation. Mus. 42.

Dysmilichia; synonymy p. 444, HAMPSON J. Bombay Soc. 21.

Earius novoguineana pl. clxxxvii f. 5, *rufopunctata* f. 6, p. 497, *citrina* f. 7 p. 499, *ogovana* f. 8 p. 501, *huegeli* f. 9 p. 502, *parallela* f. 10, *subviridis* f. 11, p. 504, *latimargo* sp. n. Christmas isld. f. 12 p. 505, *glaucescens* f. 13, *roseifera* f. 14, p. 506, *syriacana* f. 15 p. 508, *chlorophyllana* f. 16, *smaragdina* f. 17, *ochrophylla* f. 18, p. 509, HAMPSON Cat. Lep. Phal. 11.

Ectopatria renalba sp. n. Tasmania, WARREN p. 9 Nov. Zool. 19.

Egnasia tenella sp. n. Burma p. 1230, HAMPSON J. Bombay Soc. 21.

Elaeognatha argyroleuca sp. n. Guiana pl. clxxxiv f. 6 p. 371, *nitescens* f. 7, *argyritis* f. 8, p. 373, *purpurascens* f. 9 p. 374, *cacaonis* f. 10 p. 375, HAMPSON Cat. Lep. Phal. 11.

- Elecussa displosa* sp. n. Costa Rica, SCHAUS p. 531 Ann. Nat. Hist. 10.
- Eligma duplicata* pl. clxxxiii f. 4 p. 327, *hypsoides* f. 5 p. 328, *malagassica* f. 25 p. 329, *orthoxantha* f. 26 p. 331, HAMPSON Cat. Lep. Phal. 11.
- Elydna*; synonymy and key p. 893, HAMPSON J. Bombay Soc. 21
- Emarginea nocea* sp. n. p. 68 Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Empelathra pindarus* sp. n. Costa Rica, SCHAUS p. 519 Ann. Nat. Hist. 10.
- Enargia regina* ab. n. *deleta* Cypren p. 233, *abluta* ab. n. *fasciata* p. 234, WARREN Gr.-Schm. F. pal. 3.
- Enmonodia contractipennis* sp. n. p. 334 Tonkin, JOANNIS Bull. Soc. ent. France 1912.
- Ephyrodes? apicata* sp. n. Bolivia, DOGNIN p. 33 Hét. nouv. 6.
- Epidromia conspersata* sp. n. British Guiana, DOGNIN p. 32 T.c.
- Epilecta flavilinea* sp. n. Formosa, WILEMAN p. 130 Entomologist 45.
- Episilia cymnopristes* sp. n. p. 57 Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*E. arenacea* pl. G f. 21, *clavata* f. 20, HAMPSON J. Bombay Soc. 21.
- Epizeuxis terrebralis* sp. n. Arizona, BARNES & MCDUNNOUGH p. 122 Canad. Ent. 44.
- Erastria tilora* sp. n. p. 75 Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Ercheia chionopera* sp. n. Cameroons, DRUCE p. 554 Ann. Nat. Hist. 9.
- Erebrostrota ochra* sp. n. Demerara, DOGNIN p. 41 Hét. nouv. 6.
- Erebus odora*, New Jersey, COMSTOCK J. New York Ent. Soc. 20 p. 68.
- Eriopus nivelaeta* sp. n. Assam, WARREN p. 28 Nov. Zool. 19.—*E.* sp. (Japanese), NAGANO Konch. Sek. Gifu 16 pp. 173-177.
- Eriopyga dubia* p. 20, *antennata*, *gigantoides*, p. 21, spp. n., Arizona, BARNES & MCDUNNOUGH Canad. Ent. 44.—*E. catalina* sp. n. Arizona p. 12 pl. i f. 14, BARNES & MCDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.—*E. cymax*; *melanops*, p. 60, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*E. velutina* sp. n. Brazil, JONES p. 422 Tr. ent. Soc. London 1912.
- Erythroecia euposis* sp. n. p. 65 Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Etanna atrifasciata* pl. clxxx f. 7, *basalis* f. 8, p. 225, HAMPSON Cat. Lep. Phal. 11.
- Eublemma mozabitica* sp. n. Algeria, ROTHSCHILD p. 126 Nov Zool. 19.—*E. spirogramma* sp. n. Aegypt, REBEL p. 68 D. ent. Zs. Iris 26.—*E. albivena pallescens* var. n., *monotona* sp. n. p. 543, E. Africa, LE CERF Bull. Mus. Paris 1911.
- Euclidia mi* v. n. *extrema*, BANGHAAS p. 162 D. ent. Zs. Iris 26.
- Eugnathia* gen. n. für *E. longipalpis* Wkr., WARREN Gr.-Schm. F. pal. 3 p. 271.
- Euheterospila* gen. n. *Focillinae*, *antennalis* sp. n. Congo, STRAND p. 89 Rev. Zool. afric. 2.
- Euparthenos nubilis*, Entwicklungsgeschichte; ROTHIKE Ent. Rdsch. Stuttgart 29 pp. 67-69 74-76.
- Euplexia exangulata* India, *rostrifera* Celebes, p. 16, *nigrophumbea* Borneo p. 17, *submarginata*, *tenuilinea*, *argyrosipila*, p. 18, *moneta* New Guinea, *magnirena* India, p. 19, *discalis* Java p. 20, *esmeralda*, *delineata*, New Guinea, *lucisquama* Mindoro, p. 21, *carnefusa* Assam, *resplendens*, p. 22, *multicolor* p. 23, *cervinipennis*, *muscosa*, p. 24, *connexa*, *figurata*, p. 25, *carneola*, *complicata*, p. 26, New Guinea, *albo-guttata* Borneo, *tibetensis* Chumbi, p. 27, spp. n., WARREN Nov. Zool. 19.
- Eurois perviridis* sp. n., WARREN p. 9 Nov. Zool. 19.
- Eustrotia schencki* sp. n. Gross-Namaland, STRAND Wien ent. Zeit. 31 p. 234.—*E. bifasciata* sp. n. California, BARNES & MCDUNNOUGH p. 218 Canad. Ent. 44.—*E. anita*, *victrix*, p. 73, *lixinities*, *melor*, *melorista*, *dissociata*, p. 74, *megaplaga*, *plumbifusa*, p. 75, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Eutelia distorta* Kumasi p. 16, *melanephra* Sikkim p. 35 f. 27, *gabriela* Congo p. 31 pl. clxxiv f. 25, spp. n., *ferridorsata* pl. clxxiv f. 17, *leucographa* f. 18, p. 18, *fulvipicta* f. 19 p. 20, *fulcherrima* f. 20 p. 23, *blandula* f. 21

p. 24, *cuprea* f. 22, *albisecta* f. 23, p. 26, *pyrastis* f. 24 p. 28, *instructa* f. 26 p. 31, *grabceusci* f. 28, *approximata* f. 30, p. 37, *dimidiata* f. 29 p. 38, *geraea* f. 31 p. 39, *melanopsis* f. 32, *albiluna* pl. clxxv f. 1, p. 40, *menalcas* f. 2 p. 41, *chlorobasis* f. 3, *leucodelta* f. 4, p. 42, *metasarca* f. 5, *leighi* f. 6, p. 43, *pictatrix* f. 7 p. 44, *blandiatrix* f. 8 p. 48, *mesogona* f. 9, *symphonica* f. 10, p. 50, *diapera* f. 11 p. 51, *quadriliturata* f. 12, *adoratrix* f. 13, p. 52, *discistriga* f. 14 p. 53, *ochreiplaga* f. 15, *flaviluna* f. 16, p. 54, *solitaria* f. 17, *nigridentula* f. 18, p. 55, *morosa* f. 19 p. 56, *ochricosta* f. 20 p. 57, *polychorda* f. 21 p. 60, *purpureonigra* f. 22 p. 62; *poliochroa* pl. cxcii f. 24 p. 667, *gaucocycla* f. 25 p. 668, spp. n., Africa; *adoxodes* f. 32 p. 667, *malanga* f. 33 p. 668; HAMPSON Cat. Lep. Phal. 11.

Euterpia loudeti Bdv. ponte, mœurs, organes génitaux mâles, JULLIAN Genève Bull. Soc. Lépidopt. 2 p. 17.

Euthermesia blandita sp. n. Costa Rica, SCHAUSS p. 520 Ann. Nat. Hist. 10.—*E. grynia* sp. n. Colombia, DOGNIN p. 44 Hét. nouv. 6.

Euxoa fumipennis sp. n. Lifu, WARREN p. 5 Nov. Zool. 19.—*E. delicata* pl. i f. 21, *mercedes* f. 20, p. 5, *adusta* p. 6 pl. ii f. 13, *placida* p. 4 pl. i f. 19, *lucida* p. 7 pl. i f. 22, spp. n., California, BARNES & MCDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5. ♀ *E. poliotis* ab. n. *fuscata*, subsp. n. *perfusa*, WARREN Seitz Gr.-Schm. indo-austr. 11 p. 49.—*E. microtica*, ♀, FRYER p. 7 Tr. Linn. Soc. London 15.—*E. capsensis* pl. cxxviii figs. 1135 & 1144 p. 330, OBERTHÜR Etudes 6.

Feltia stygialis sp. n. Arizona p. 8 pl. i f. 16, BARNES & MCDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Focilla gregalis p. 173, *furva*, *gorge*, p. 174, spp. n., French Guiana, SCHAUSS Proc. Ent. Soc. Washington 14.

Fodina aldabrana sp. n. Aldabra, FRYER p. 9 pl. i f. 6 Tr. Linn. Soc. London 15.

Fotella olivia sp. n. California, BARNES & MCDUNNOUGH p. 216 Canad. Ent. 44.

Gabala margarita pl. clxxxvi f. 22 p. 469, HAMPSON Cat. Lep. Phal. 11.

Gadirtha trichocera sp. n. New Guinea p. 340, *pulchra* pl. clxxxiii f. 23 p. 341 *glaucograptia* sp. n. Africa f. 24 p. 342, *exacta* f. 27 p. 343, *turneri* f. 28, *costipallens* f. 8, p. 344, *arora* f. 16 p. 347, *hades* f. 15, *cuprescens* sp. n. New Guinea, p. 348, *elongata* f. 21 p. 349, *poliochroa* sp. n. Queensland f. 9 p. 350, HAMPSON T.c.

Garella nubilosa E. Africa pl. clxxx f. 9 p. 228, *nephelota* Nigeria pl. cxcii f. 31 p. 670, spp. n., HAMPSON T.c.

Gerra sophocles sp. n. p. 72 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Gerrodes minataea sp. n. p. 72 Mexico. DYAR T.c.

Giaura niveidisca pl. clxxxii f. 20, *niphea* f. 21, p. 278, *pura* f. 22, *ougarras* f. 23, p. 279, *apicalis* f. 24, *lichenosa* f. 25, p. 280, *leucotis* f. 26, *niphostola* sp. n. New Guinea f. 27, p. 281, *leucophaea* f. 28, *minor* f. 29, p. 282, *venalis* f. 30, *nigrescens* f. 31, p. 285, *robusta* f. 32 p. 286, *bostrycodes* pl. cxc f. 33 p. 670, HAMPSON Cat. Lep. Phal. 11.

Gigantoceras rectilinea sp. n. Kumasi p. 174 pl. clxxviii f. 17, *adoxodes* pl. cxcii f. 34 p. 669, HAMPSON T.c.

Glympis deletalis Venezuela p. 47, *ineptalis* Demerara p. 48, spp. n., DOGNIN Hét. nouv. 6.

Gnamptogyia strigalis sp. n. O.-Afr., STRAND p. 75 Arch. Naturges. 78 A 1.

Goniocalpe gen. n. for *Erizada sericealis*, HAMPSON p. 597 Cat. Lep. Phal. 11.

Gonioxestris gen. n. for *Arcyophora zanderi* Feld., HAMPSON p. 637 T.c.

Gonodonta plumbicineta sp. n. p. 79 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Gortyna, HAMPSON J. Bombay Soc. 21 p. 890.

Grammodes algira var. n. *europa*, SCHAWERDA Verh. Zool.-bot. Ges. Wien 62 p. (138).—*G. algira* Eier, RICHTER Ent. Rdsch. 29 p. 141.

Grotella parvipuncta New Mexico, *soror* Arizona, spp. n., BARNES & MCDUNNOUGH p. 19 Canad. Ent. 44.

Gryposoba gen. n. for *Cymatophoropsis catagrapha* T., HAMPSON p. 423 Cat. Lep. Phal. 11.

Gyrtona acisalis pl. clxxix f. 25 p. 211, *niveivitta* f. 26, *ferriceps* sp. n. Rangoon f. 27, p. 212, *oxyptera* sp. n. Singapore f. 28 p. 213, *erebenna* f. 29 p. 214, *nama* f. 30 p. 215, *phaeozona* f. 32, *ochreographa* sp. n. Singapore f. 31, p. 216, *divitalis* pl. clxxx f. 1, *plumbisparsa* f. 2, *polionota* f. 3, p. 217, *atribasalis* sp. n. Sikkim f. 4 p. 219, HAMPSON T.c.

Gyrtonides gen. n. *albifascia* sp. n. Ega, HAMPSON p. 453 T.c.

Gyrtothripa gen. n. p. 448 type *Gyrtona pusilla* M., *microdonta* sp. n. Singapore p. 449 pl. clxxxvi f. 13, HAMPSON T.c.

Hadena standfussi sp. n. Sicilia p. 27 tav. vi fig. 17 & 18, TURATI Nat. Sicil. 20.—*H. xylinoides* Alai p. 148, *ingloria* Sayan, spp. n., *lama* v. n. *dubiosa*, p. 149, BANG-HAAS D. ent. Zs. Iris 26.—*H. schoenheiti* sp. n. O.-Afr., STRAND p. 72 Arch. Naturges. 78 A 1.

Hadenella cervoides sp. n. Arizona p. 54 (but p. 57 said to be *Caradrina fragosa*), BARNES & McDUNNOUGH Canad. Ent. 44.

Hadjina eremita sp. n. Gebirge Peter des Grossen, BANG-HAAS p. 147 D. ent. Zs. Iris 26.—*H.* p. 886, key p. 887, HAMPSON J. Bombay Soc. 21.

Haemerosia vassilini sp. n. Kaukasus, BANG-HAAS p. 161 D. Ent. Zs. Iris 26.

Hadula orbona sp. n. Karagai-tau, BANG-HAAS p. 151 T.c.

Halone flavinigra pl. G f. 9, HAMPSON J. Bombay Soc. 21.

Heliocheilus fervens ab. n. *macularis*, WARREN Gr.-Schm. F. pal. 3 p. 245.—*H. lupatus*, ♂, FORBES J. New York Ent. Soc. 20 p. 193.

Heliophobus oditis ab. n. *blanca*, RIBBLE p. 258 D. ent. Zs. Iris 23.—*H. messaouda* ♂ pl. cxxviii f. 1136 p. 331, OBERTHÜR Etudes 6.

Heliothis purpurascens subsp. n. *subrosea*, WARREN Gr.-Schm. F. pal. 3 p. 257.—*H. ononis*, JACHONTOV Rev. russ. ent. 12 p. 39.—*H. aetheria* sp. n. Arizona, BARNES & McDUNNOUGH p. 17 Canad. Ent. 44.

Hemeroblemma stiva sp. n. Costa Rica, SCHAUS p. 513 Ann. Nat. Hist. 10.—*H. scharusiana* sp. n. Demerara DOGNIN p. 8 Hét. nouv. 6.

(N-9210 j)

Herminia gigantea v. n. *neglecta*, KRAUSSE p. 167 Arch. Naturges. 78A.

Herminodes latris, *iphis*, spp. n., Costa Rica, SCHAUS p. 515 Ann. Nat. Hist. 10.

Hermonassa inconstans, *sinuosa*, spp. n., Formosa, WILEMAN p. 131 Entomologist 45.—*H. stigmatica*, *furva*, p. 8, *lineata* p. 9, spp. n., India, WARREN Nov. zool. 19.—*H. consignata* abb. n. *rufa* and *oliva*, WARREN Seitz Gr.-Schm. indoaustr. 11 p. 62.

Hesperothripa gen. n. *Sarrothripinae*, *dicyma* sp. n. Sierra Leone, HAMPSON p. 227 Cat. Lep. Phal. 11.

Heterographa; Kritik der Arten, *fabrilis* Beschreibung und Geschlechtsapparat, JOHN Rev. russ. ent. 12 pp. 244-245 pl. ii.

Heterommiola nom. n. for *Heteromma*. Warren, STRAND Ent. Rdsch. 29 p. 16.

Heteropygas fasciger sp. n. Colombia. p. 26, DOGNIN Hét. nouv. 6.

Homolagoa gen. n. p. 91, *grotelliformis* sp. n. Arizona p. 92, BARNES & McDUNNOUGH Canad. Ent. 44.

Homoptera glaucinans v. n. *lignicolora*, STRAND p. 73 Arch. Naturges. 78 A 1.—*H. excellens* sp. n. Costa Rica, SCHAUS p. 510 Ann. Nat. Hist. 10.—*H. grata* sp. n. Colombia, DOGNIN p. 13 Hét. nouv. 6.—*H. eremochroa*, *ruficolora*, spp. n., p. 1222, India, HAMPSON J. Bombay Soc. 21.

Homopyralis aglaia p. 525, *albifasciata*, *ardesiaca*, p. 526, *charopus*, *croceipalpis*, p. 527, *elongata*, *nireus*, p. 528, *viridis* p. 529, *H. ? diffusa*, *lotis*, p. 530, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 10.—*H. verrucata*, *nigellus*, Demerara, p. 45, spp. n., DOGNIN Hét. nouv. 6.

Horama fulvitaris sp. n. Argentina, SCHROTTKY p. 166 D. ent. Zs. Iris 26.

Hydrillodes preplexalis sp. n. Seychelles, FRYER p. 12 Tr. Linn. Soc. London 15.

Hydroecia; ♂ structures pp. 738-749, *crinanensis* p. 741, *asiatica* sp. n. Turkestan p. 747, BURROWS Tr. ent. Soc. London 1911.—*H. burrowsi* sp. n. Vladivostock, CHAPMAN p. 109 pl. iii. Ent. Rec. 24.—*H. micacea* ab. n. *intacta*, *leucographa* abb. n. *flavidior*, *umbrosa*, *perlucida* sp. n. Ungarn,

d 37

WARREN Gr.-Schm. F. pal. 3 p. 226.—
H., HAMPSON p. 891 J. Bombay Soc.
21.

Hylophila craeffti pl. clxxxvii figs.
20 & 21 p. 512, HAMPSON Cat. Lep.
Phal. 11.

Hylophilodes gen. n. p. 510 type
Halias orientalis, rubromarginata pl.
clxxxvii f. 19 p. 511, HAMPSON T.c.

Hypaetra heterographa sp. n. Burma
p. 1223, HAMPSON J. Bombay Soc. 21.

Hypena cachialis, devexalis, ducalis,
p. 212, *frigida, gaudialis,* p. 213,
thontes p. 214, spp. n., Costa Rica,
SCHAUS Ann. Nat. Hist. 9.—*H. ab-*
normalis p. 1238, *atrirena* p. 1237,
Ceylon, *mesogramma* p. 1236, *molyb-*
dota p. 1237, *thermophæa* p. 1236,
spp. n., India, HAMPSON J. Bombay
Soc. 21.

Hypenagonia brachygalpia p. 1240,
flavisigna, longipalpis, p. 1239, spp. n.,
Ceylon, HAMPSON J. Bombay Soc.
21.

Hyphilare binigrata, ossicolor, spp. n.,
India, WARREN p. 12 Nov. zool. 19.

Hypodeva nocturna pl. clxxxix f. 26
p. 601, *superba* f. 34 p. 672, HAMPSON
Cat. Lep. Phal. 11.

Hypogramma auripennis sp. n. Costa
Rica, SCHAUS p. 513 Ann. Nat. Hist.
10.

Hypomecia lithoxylea sp. n. Algier,
BANG-HAAS p. 157 D. ent. Zs. Iris
26.

Hypopteridia gen. n. near *Dasygaster*
p. 11 type *reversa* MOORE, WARREN
Nov. zool. 19.

Hyposcota gen. n. for *Ballatha lacta*
Walk., HAMPSON p. 460 Cat. Lep. Phal.
11.

Hypsophila jugorum ab. n. *lunulata*,
WARREN Gr.-Schm. F. pal. 3 p. 255.

Hyssia nephrosticta sp. n. p. 59 Mexico,
DYAR Proc. U. S. Nation. Mus. 42.

Iscadia nigra pl. clxxxiv f. 1 p. 362,
ducinfieldia f. 2 p. 364, *producta* f. 3
p. 365, *bucleyi* f. 4 p. 366, *phaeoptera*
f. 5 p. 367, HAMPSON Cat. Lep. Phal.
11.

Isochlora yarkenda sp. n. Yarkend,
BANG-HAAS p. 160 D. ent. Zs. Iris
26.

Isogona fulgens sp. n. Costa Rica,
SCHAUS p. 205 Ann. Nat. Hist. 9.—
I. capitalis sp. n. Costa Rica, SCHAUS
p. 523 op. cit. 10.

Isolasia gen. n. *Cucullianae, bira-*
mata sp. n. Sikkim, WARREN p. 13
Nov. zool. 19.

Isoura metaphaea sp. n. Ceylon p.
1228, HAMPSON J. Bombay Soc. 21.

Janthinea frivaldszkyi ab. n. *restricta*,
WARREN Gr.-Schm. F. pal. 3 p. 258.

Jaspidea celsia Zucht, HEINRICH
Berliner ent. Zs. 56 p. 125.

Labanda huntei pl. clxxxiv f. 29
p. 394, *viridalis* f. 30 p. 395, *saturalis*
f. 31 p. 396, *dentilinea* f. 32 p. 398,
umbrosa sp. n. Burma pl. clxxxv f. 1
p. 400, HAMPSON Cat. Lep. Phal.
11.

Lamprothripa gen. n. type *Ptisciana*
scotia p. 288, *orbifera* pl. clxxxii f. 1
p. 289, *hampsoni* f. 2, *arcuosa* f. 3
p. 290, HAMPSON T.c.

Laphygma nigrescens sp. n. p. 63
Mexico, DYAR Proc. U.S. Nation. Mus.
42.

Lasionota gen. n. type *Acantholixes*
hypenoides MOORE, WARREN p. 55 Nov.
zool. 19.

Lasionycta hospita sp. n. Sajan,
BANG-HAAS p. 150 D. ent. Zs. Iris
26.

Leocyma discophora sp. n. Africa
pl. cxcii f. 19 p. 662, HAMPSON Cat.
Lep. Phal. 11.

Lepidodes limicola sp. n. Colombia,
DOGNIN p. 19 Hét. nouv. 6.

Leptosia griseimargo sp. n. Algeria,
WARREN p. 36 Nov. zool. 19.

Letaba gen. n. p. 71, *noa* sp. n. p. 72
Mexico, DYAS Proc. U. S. Nation. Mus.
42.

Letis claricostata sp. n. Peru, DOGNIN
p. 17 Hét. nouv. 6.

Leucania andereggii mit ab. *cinis*
und ab. *engadinensis*, Raupe, Zucht,
p. 70 ff., *comma* Raupe p. 79 ff., STAND-
FUSS Mitt. Schweiz. Entom. Ges. 12.—
L. favicolor, SOUTH pp. 62–65 Ento-
mologist 45; *L. pallens* and *favicolor*,
SOUTH p. lxxxvi Proc. ent. Soc. London
1911.—*L. suavis* sp. n. Arizona, BARNES
& McDUNNOUGH p. 52 Canad. Ent.
44.

Leucophanera gen. n. p. 481, *L. argyrozona* Joann., HAMPSON Cat. Lep. Phal. 11.

Lichnoptera albidiscata p. 14, *primulina*, Colombia, *maestoides* Peru, p. 15, *atrifrons* Colombia p. 16, spp. n., DOGNIN Hét. nouv. 6.

Lithacodia mustapha sp. n. p. 76 Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Lithocampa millieri v. n. *aksuensis*, BANG-HAAS p. 157 D. ent. Zs. Iris 26.

Lithophane ornithopus ab. n. *duebenia*, STRAND p. 258 Ent. Zeitschr. 25.

Lophocrama gen. n. type *Carea auritincta*, *phoenicochlora* sp. n. Africa pl. clxxxvii f. 24, HAMPSON p. 521 Cat. Lep. Phal. 11.

Lophoptera aleuca sp. n. Queensland p. 178 pl. clxxxviii f. 18, *methyalea* f. 19, *semirufa* f. 20, p. 179, *abbreviata* f. 21 p. 180, *hemithyris* f. 22 p. 181, *phaeobasis* f. 23, *illucida* f. 24, p. 182, *leucostriga* f. 25 p. 183, *huma* f. 26, *plumbeola* sp. n. Simla f. 27, p. 184, *denticulata* f. 28, *xista* f. 29, p. 185, *phaeoxista* sp. n. Ceylon f. 30, *plumbeifascia* f. 31, p. 186, *ferrinalis* f. 32 p. 187, *stipata* pl. clxxix f. 1 p. 188, *negretina* f. 2, *luctuosa* f. 3, *quadrinotata* f. 4, p. 189, *pustulifera* f. 5 p. 190, *metaphaea* f. 6 p. 191, *meeci* f. 7, *rufa* f. 8, *buruana* p. 192, *hyphenistis* f. 10, *tripartita* f. 11, p. 193, *acuda* f. 12, *viridaria* f. 13, p. 194, *glaucobasis* f. 14, *chlorograptia* f. 15, p. 195, HAMPSON T.c.

Lophosema gen. n. type *purpurascens* Schaus, HAMPSON p. 332 T.c.

Luperina (*Apamea*) *kruegeri* sp. n. Sardinia, TURATI p. 305 Ent. Rec. 24.—*L. gueneei*, TURNER p. 17 & p. 87 Ent. Rec. 24; larva, PORRITT p. 259 Ent. Mag. 48.

Lycomorpha splendens sp. n. Utah p. 3 pl. i f. 8, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Lycophotia fidelis pl. iii f. 10, MENDES Broteria 10.—*L. pampolycala* p. 57, *richtoides*, *triphænoides*, p. 58, spp. n., Mexico, DYAR Proc. U.S. Nation. Mus. 42.—*L. poliades* pl. G f. 22, HAMPSON J. Bombay Soc. 21.

(N-9210 j)

Macapta lydia sp. n. Brazil, JONES p. 423 Tr. ent. Soc. London 1912.

Maceda rotundimacula, *ignefumosa*, p. 48, *rufibasis* and ab. *interjuncta* p. 49, spp. n., New Guinea, WARREN Nov. zool. 19.

Macrocneme nigricornis sp. n. Argentina, SCHROTTKY p. 166 D. ent. Zs. Iris 26.

Macronoctua onusta p. 52 pl. 17 f. 3, FELT N.Y. St. Mus. Bull. No. 155.

Mamestra conspicua p. 144, *monotona* Sajan, *enodata* Karagai-tau, spp. n., *contigua* v. n. *decolor* p. 145, *perdita* v. n. *pallida* p. 146, BANG-HAAS D. ent. Zs. Iris 26.—*M. oleracea* Ei, GILLMER Intern ent. Zs. 5 p. 373.

Marapana cautiperas, *diplogramma*, Ceylon p. 1235, spp. n., HAMPSON J. Bombay Soc. 21.

Marathyssa angustipennis pl. clxxvi f. 8 p. 90, *albidisca* f. 9 p. 92, *cistellatrix* f. 10 p. 93, HAMPSON Cat. Lep. Phal. 11.

Massata ernestina sp. n. Bolivia, DOGNIN p. 33 Hét. nouv. 6.

Maurilia albirivula pl. clxxxix f. 16 p. 571, *heterochroa* f. 17 p. 572, *phaea* f. 18 p. 573, *iocephala* f. 19 p. 575, HAMPSON Cat. Lep. Phal. 11.

Mecistoptera albisigna sp. n. Madras p. 1240 HAMPSON J. Bombay Soc. 21.

Megachyta rona, *acutipennis*, spp. n., Costa Rica, SCHAUS p. 211 Ann. Nat. Hist. 9.

Megathripa gen. n. p. 319 for *Sarothripa rufimedia*, HAMPSON Cat. Lep. Phal. 11.

Melanchra xanthogramma sp. n. p. 117 N. Zealand, MEYRICK Trans. N. Zeal. Inst. 44.

Meliana albilinea, parasites, WEBSTER J. Econ. Ent. 5 pp. 335-336.

Melipotis trujillensis Peru, *asinus*, p. 10, *tucumanensis* p. 11, Tucuman, *M. niviferus*, *adjutus*, p. 12, Colombia, *fannius* Ecuador p. 13, spp. n., DOGNIN Hét. nouv. 6.

Meristis trigrammica ab. n. *perrufa*, WARREN Gr.-Schm. F. pal. 3 p. 229.

Metaleptina microcyma pl. cxc f. 15, *albibasis* f. 16, *obliterata* f. 17, p. 621; *albilinea* f. 18 p. 622, *dilenca* f. 19 p. 623, spp. n., W. Africa; *geministra* f. 20; HAMPSON Cat. Lep. Pha 11.

d 37-2

- Metaptya endoplaga* pl. clxxxix f. 27 p. 603, HAMPSON T.c.
- Metoposcopa* gen. n., *sagittalis* sp. n. O.-Afr., STRAND p. 77-78 Arch. Naturges. 78A 1.
- Metoptria monogramma* abb. n. *prieta* and *nigra*, RIBBE p. 291 D. ent. Zs. Iris 23.
- Micardia flaviplaga* sp. n. Japan, WARREN p. 38 Nov. zool. 19.
- Micriscadia* gen. n. near *Elaeognatha*, *metachryseis* sp. n. Guiana, HAMPSON p. 377 Cat. Lep. Phal. 11.
- Microbarasa* gen. n. p. 442 type *Blenina xantholopha*, *xanthosticta* pl. clxxxvi f. 8 p. 444, HAMPSON T.c.
- Microthripa* gen. n. for *Dendrothripa boeota* Turn., HAMPSON p. 226 T.c.
- Microxestis* gen. n. for *Euxestis wutzdorffi* Pung., HAMPSON p. 642 T.c.
- Microzada* gen. n. *anaemica* sp. n. W. Africa, HAMPSON p. 580 T.c.
- Mictochroa selinitis* sp. n. p. 73 Mexico, DYAR Proc. U.S. Nation. Mus. 42.
- Miniophyllodas* gen. n. p. 331 *Catocalinae*, *aurora* sp. n. Madagascar, JOANNIS Bull. Soc. ent. France 1912.
- Mniothripa* gen. n. for *Giaura lichenigera*, HAMPSON p. 260 Cat. Lep. Phal. 11.
- Monodes niveopis* p. 63, *cassida* p. 64, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Morrisonia pansicolor* fig., *sequens* fig., p. 204, *pascoei* p. 205 fig., spp. n. New Zealand, HOWES Trans. N. Zeal. Inst. 44.
- Mulelocha celita* p. 520, *subnigra* p. 521, *homopteridia* p. 522, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 10.—*M. subjugua* sp. n. Peru, DOGNIN p. 29 Hét. nouv. 6.
- Naenia typica orientalis* var. n. Chooguchak, China (Russ. + engl.), KRULIKOVSKIJ Bull. Soc. Oural. nat. 31 1 p. 108.
- Namangana perolivalis* p. 19 pl. i ff. 1 & 2, *suffusa* p. 21, ff. 6 & 7, *albimacula* p. 20 f. 3, *variabilis* p. 21 ff. 4 & 5, spp. n., *suffusa rubida* p. 23 f. 15 N. America, BARNES and McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.
- Nanaguna clopaca* pl. clxxxi f. 1, *variegata* f. 2, p. 256, *erastioides* pl. cxci f. 30 p. 257, HAMPSON Cat. Lep. Phal. 11.
- Neaxestis griseata* pl. cxci f. 4, *rhoda* f. 5, p. 639, *mesogonia* f. 6 p. 640, *piperita* f. 7 p. 641, HAMPSON Cat. Lep. Phal. 11.
- Negeta molybdota* pl. cxc f. 21, *approximans* f. 22, p. 625, spp. n., W. Africa; *statactitis* f. 23 p. 625, *cinerascens* f. 24, *nubilicosta* f. 25, p. 626, *phaeopepla* f. 26, *ochreoplaga* f. 27, p. 627, *mesoleuca* f. 28, *luminosa* f. 29, p. 628, *ruficeps* f. 30 p. 629; *purpurascens* sp. n. Kumasi f. 31 p. 630; *chlorocrota* f. 32 p. 630, *nivea* pl. cxci f. 1 p. 632, HAMPSON T.c.
- Neohermnia modestalis* sp. n. Costa Rica, SCHAUS p. 210 Ann. Nat. Hist. 9.
- Neonegeta* gen. n. p. 617 type *Westermannia trigonica*, *xanthobasis* pl. cxc f. 11, *zelia* f. 13; *atriflava* f. 12 p. 618, *purpurea* f. 14 p. 619, spp. n., W. Africa, HAMPSON Cat. Lep. Phal. 11.
- Nephelodes carminea* sp. n. Colombia, DOGNIN p. 130 Mem. Soc. ent. Belgique 19.
- Nephopteryx rubromixta* sp. n. Aegypt, REBEL p. 77 D. ent. Zs. Iris 26.
- Nertobriga soliera* pl. cxc f. 9 p. 615, *abbreviata* f. 10 p. 616, HAMPSON Cat. Lep. Phal. 11.
- Nigramma lophophora* sp. n. Travancore p. 196, *longipennis* sp. n. New Guinea pl. clxxix f. 16, *pyraloides* f. 17, p. 198, *subfasciata* f. 18, *todara* sp. n. Madras f. 19, p. 199, *polymorpha* f. 20 p. 200, *perligneatis* f. 21 p. 201, *dialeuca* f. 22, *purpurascens* f. 23, p. 202, *albicans* f. 24 p. 203, HAMPSON T.c.
- Nodana discosticta* sp. n. Ceylon p. 1233, HAMPSON J. Bombay Soc. 21.
- Nonagria typhae*, Biologie, TYKAË Čas. Českého Spol. Entomolog. Prag 7 1910 p. 129.
- Nymbis resecta* sp. n. Peru, DOGNIN p. 22 Hét. nouv. 6.
- Obroatis gatena*, O.? *gargilius*, spp. n., Costa Rica, SCHAUS p. 517 Ann. Nat. Hist. 10.—*O. nigriscripta* p. 30, *curvilineata* p. 31, Demerara, spp. n., DOGNIN Hét. nouv. 6.—*O. reniplaga*, *rosicpalpis*, p. 170, *cratinus* p. 171, spp. n.,

French Guiana, SCHAUS Proc. Ent. Soc. Washington 14.

Ochrothripa gen. n. p. 317 for *Criva leptochroma* Turn., HAMPSON Cat. Lep. Phal. 11.

Odontodes metamelaena pl. clxxvii f. 25 p. 143, HAMPSON T.c.

Oedicraspis gen. n. near *Arachnognatha*, *subservida* sp. n. E. Africa, p. 320, HAMPSON T.c.

Ogdoconta plumbea sp. n. p. 66 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Oligia tonsa ab. n. *fasciata*, BARNES & McDUNNOUGH p. 55 Canad. Ent. 44.

Oncocnemis obscurata p. 13 pl. ii f. 5, *singularis* p. 14 f. 6, *astrigata* p. 13 f. 4, spp. n., U.S., BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Ophisma pyrosticha sp. n. Peru, DRUCE p. 553 Ann. Nat. Hist. 9.

Ophiusa mercatoria ab. n. *signipennifera* p. 73, *regularidia* p. 74, *quadrilineata* p. 75, spp. n., O.-Afr., STRAND Arch. Naturges. 79 A 1.—*O. lacteicincta* sp. n. Assam p. 1224, HAMPSON J. Bombay Soc. 21.

Oracsia stupenda sp. n. Colombia, DOGNIN p. 9 Hét. nouv. 6.

Orectis barteli sp. n. Sicilia p. 35 tav. i fig. 21, TURATI Nat. Sicil. 20.

Orrhodia fragariae Zucht, MÜHLING Ent. Zs. Frankfurt a. M. 26 p. 62.

Orsa flava sp. n. Costa Rica, SCHAUS p. 523 Ann. Nat. Hist. 10.

Orthocraspis gen. n. p. 586 type *Carea rectimarginata*, *acypera* pl. clxxxix f. 21 p. 587, HAMPSON Cat. Lep. Phal. 11.

Orthogramma subinsulsa Demerara *sublata* Peru, p. 28, spp. n., DOGNIN Hét. nouv. 6.

Orthosia litura Eier, RICHTER Lotos 60 pp. 1-6.

Oruza rupestre sp. n. Seychelles p. 10 pl. i f. 7, FREYER Tr. Linn. Soc. London 15.

Oxycnemis definita p. 17 pl. ii f. 3, *orbicularis* p. 18 f. 2, spp. n., BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.—*O. mexicana*

sp. n. p. 63 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Oxytrypia orbiculosa, Entwicklungsgeschichte, SCHMIDT Ann. Mus. Hung. 10 pp. 617-637 Taf. vii.

Ozarba rectifasciata, *apicolis*, p. 541, *variegata* p. 542, spp. n., E. Africa, LE CERF Bull. Mus. Paris 1911.

Odontestis gen. n. p. 632 type *Plusiocalpe prosticta* Holl., *cyphonota* Kumasi pl. exci f. 2 p. 633, *striata* p. 634 E. Africa, spp. n., *mesonephele* f. 3 p. 635, HAMPSON Cat. Lep. Phal. 11.

Paectes cebeae pl. clxxvi f. 23, *psaliphora* sp. n. Java f. 24, p. 110, *leucotrigona* f. 25, *cyandes* f. 26, p. 112, *poliotis* f. 27, *costistrigata* f. 28, p. 113, *pratti* f. 29 p. 114, *fabrica* f. 30 p. 115, *fovifera* sp. n. Panama p. 118, *oculatrix* f. 31 p. 120, *semicircularis* sp. n. Trinid. f. 32 p. 121, *chrysoplaga* pl. clxxvii f. 1 p. 122, *curvilinea* f. 2, *flabella* f. 3, p. 123, *declinata* f. 4 p. 125, *acutangula* sp. n. Bahamas f. 5 p. 126, *abrostoloides* f. 6, *fuscescens* f. 7, p. 127, *delineata* f. 8 p. 128, *lunodes* f. 9 p. 129, *arcigera* f. 10, *obrotunda* f. 11, p. 130, *nubifera* sp. n. Mexico f. 12 p. 131, *chlorophora* sp. n. Colombia f. 13, *phaeoplaga* f. 14, p. 132, *eumicta* f. 15, *nyctichroma* f. 16, p. 133, *endochlora* f. 17 p. 134, *haematosema* f. 18, *glaua* f. 19, p. 135, *polia* sp. n. Paraguay f. 20 p. 136, *griseifusa* f. 21 p. 137, *areusa* f. 22 p. 138, *sabulosa* f. 23, *albescens* sp. n. Honduras f. 24, p. 139; HAMPSON T.c.

Palindia vivida sp. n. Paraguay, DOGNIN p. 20 Hét. nouv. 6.

Papaipema errans sp. n. Arizona, BARNES & McDUNNOUGH p. 56 Canad. Ent. 44.—*P. apicata* sp. n. p. 65 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Paracretonia gen. n., *xithon* sp. n. California p. 167, DYAR Proc. Ent. Soc. Washington 14.

Parallelia arcifera sp. n. W. Africa, DRUCE p. 554 Ann. Nat. Hist. 9.

Parathermes inclusa sp. n., O.-Afr., STRAND p. 76 Arch. Naturges. 78 A 1.

Pardasena verna pl. clxxx f. 23, *miochroa* f. 24, p. 246, *minorella* f. 25 p. 247, *punctata* f. 26; *lativia* pl. exci f. 26, *punctata* pl. clxxx f. 26, p. 248,

- atripuncta* f. 27, *melanosticta* f. 28, p. 249, spp. n., Africa, HAMPSON Cat. Lep. Phal. 11.
- Parhylophila* gen. n. for *Chloephora celsiana*, HAMPSON p. 514 T.c.
- Pariambia*, key, HAMPSON p. 417 J. Bombay Soc. 21.
- Pataeta carbo* pl. clxxv f. 26 p. 69, HAMPSON Cat. Lep. Phal. 11.
- Penisa* gen. n. für *P. oblataria* Wur., WARREN Gr.-Schm. F. pal. 3 p. 260.
- Periconota* gen. n., *obliqua* sp. n. p. 66, Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Perigea albigutta* sp. n. Formosa, WILEMAN p. 133 Entomologist 45.—*P. ochracea* p. 32, *hilaris* New Guinea, *olivacea* India, p. 33, *turpis*, *semirufa* with ab. *rubrisuffusa*, New Guinea, p. 34, spp. n., WARREN Nov. Zool. 19.—*P. orta* sp. n. Arizona, BARNES & McDUNNOUGH p. 54 Canad. Ent. 44.—*P. menota* p. 61, *micrippia* p. 62, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*P.* synonymy and key p. 882, HAMPSON J. Bombay Soc. 21.
- Peteroma ligneola* Tucuman p. 20, *denticulata* Ecuador p. 21, spp. n., DOGNIN Hét. nouv. 6.
- Phaeothripa* gen. n. p. 318 for *Sarothripa morena* Swinh., HAMPSON Cat. Lep. Phal. 11.
- Phleboëis rogneda* v. n. *atra*, BANGHAAS p. 143 Deutsche ent. Zs. Iris 26.
- Phlegetonia callichroma* pl. clxxv f. 27, *violescens* sp. n. Gambia pl. clxxvi f. 1, p. 72, *porphyriota* sp. n. Lagos pl. clxxv f. 28 p. 74, *cebeae* f. 29 p. 75, *apicifascia* f. 30 p. 76, *albiapicata* f. 31, *albiceps* f. 32, p. 78, *stictoprocta* pl. clxxvi f. 2 p. 79, *fasciatrix* f. 3, *scelerata* f. 4, p. 80, *strigula* f. 5 p. 81, *atripars* sp. n. Perak f. 6 p. 84, *mediofusca* f. 7 p. 84, HAMPSON Cat. Lep. Phal. 11.
- Phlogophora scita*, Eizucht, SIEGEL Intern. ent. Zs. 5 p. 374.
- Phobolusia aurilinea* sp. n. Costa Rica, SCHAUS p. 203 Ann. Nat. Hist. 9.
- Phuphena constricta* sp. n. Paraguay, DOGNIN p. 6 Hét. nouv. 6.
- Phyllophila aleptinoides* sp. n. California, BARNES & McDUNNOUGH p. 217 Canad. Ent. 44.—*Phyllophila numerica* ab. n. *disjecta*, WARREN Gr.-Schm. F. pal. 3 p. 274.
- Pilipectus cyclopis* sp. n. Ceylon, *prunifera* from *Cacyparis*, HAMPSON J. Bombay Soc. 21 p. 1234.
- Plaxia umbratica* sp. n. Colombia, DOGNIN p. 29 Hét. nouv. 6.
- Pleonectyptera cuernavacalis* sp. n. p. 746 Mexico, DYAR Pomona Coll. J. Ent. 4.
- Plusia agualaniata* sp. n. Peru, DOGNIN p. 7 Hét. nouv. 6.—*P. ain*, HOFFMANN Zs. wiss. Insektenbiol. 8 pp. 9-13 66-69.—*P. bractea* ab. n. *argentea*, GRONEMEYER p. 7 Internat. ent. Zeitschr. 6 and GRONEMEYER Ent. Zs. 25 p. 240, Ent. Zs. 26 p. 6; HOFFMANN Ent. Zs. 25 p. 255.—*P. chalcopasta* India and Ceylon, *megaloba* Assam, p. 1225, spp. n., HAMPSON J. Bombay Soc. 21.
- Plynteria florens* p. 515, *costata*, *stellata*, p. 516, spp. n. Costa Rica, SCHAUS Ann. Nat. Hist. 10.
- Polia trasca* p. 58, *cleptoschema* p. 59, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*P. chi* ab. n. *albofasciata*, KIEFER p. 70 Ent. Rdsch. 29.—*P. dubia* var. n. *johni* Spanien, STERTZ p. 24 D. ent. Zs. Iris 26 pl.—*P. rufocincta*, Eier, RICHTER Lotos 60 pp. 1-6.
- Poliiothripa* gen. n. p. 333 for *Polia ameria* Dr., HAMPSON p. 333 Cat. Lep. Phal. 11.
- Polyorycta* gen. n. für *P. dimidialis*, WARREN Gr.-Schm. F. pal. 3 p. 260.
- Porosagrotis camalpa* sp. n. p. 57 Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*P. vetusta*, CHITTENDEN U. S. Dept. Agric. Ent. Bull. 109 Pt. 4 pp. 47-51 f. 8.
- Porphyrinia ostrina* ab. n. *suffusa* p. 263, *parva* ab. n. *griseata* p. 264, *respersa* ab. n. *obliquata* p. 265, *parallela* ab. n. *densata*, *pusilla* ab. n. *gracilis*, p. 267, *compuncta* ab. n. *rufata* p. 268, WARREN Gr.-Schm. F. pal. 3.
- Powellina lasserrei* pl. 128 figs. 1134 & 1143 p. 330, OBERTHÜR Etudes 6.
- Prionoptera socorrensis* sp. n. Colombia, DOGNIN p. 18 Hét. nouv. 6.

Prosoparia perfuscaria = (*Friesia anormalis* B. & M.), BARNES & McDUNNOUGH p. 57 Canad. Ent. 44.

Prospalta ochrisquamata Assam, *praesepta* Amboina to Australia, p. 30, *sublucens* India and Australia p. 31, *pulverosa* and ab. *variegata* Australia, *pallidipennis* India, p. 32, spp. n., WARREN Nov. Zool. 19.

Pseudacantia (?) *rhizobuca* sp. n. p. 330, BRABANT Bull. Soc. ent. France 1912.

Pseudanarta heterochroa sp. n. p. 60 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Psilomonodes gen. n. für *agrotina* Guen., WARREN Gr.-Schm. F. pal. 3 p. 217.

Pterogonia nerissa pl. cxcii f. 10 p. 650, HAMPSON Cat. Lep. Phal. 11.

Pteroma alternata sp. n. p. 78 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Pucialia argentea pl. clxxxiii f. 1 p. 335, *mariva* f. 2 p. 336, *chlorographa* f. 3, *peliopepla* f. 6, p. 337, *rectilinea* f. 7, *purissima* pl. clxxxvi f. 15, p. 338, *similis* f. 22 p. 339, HAMPSON Cat. Lep. Phal. 11.

Raparna digramma larva p. 1231, HAMPSON J. Bombay Soc. 21.

Raphia aethiops sp. n. Algier, BANGHAAS p. 152 D. ent. Zs. Iris 26.

Redingtonia gen. n. near *Azenia*, *alba* sp. n. Arizona, BARNES & McDUNNOUGH p. 91 Canad. Ent. 44.

Regectaria marginalis p. 208, *splendida* p. 209, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Renia turpis sp. n. Costa Rica, SCHAUS p. 207 Ann. Nat. Hist. 9.—*R. subterminalis* p. 27 pl. ii f. 21, *mortualis* p. 28 f. 23, *extremalis* p. 29 f. 22, spp. n. Arizona, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Rhaesena defecta sp. n. p. 79 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Rhizedra gen. n. p. 234, *lutosa* Hbn., subsp. n. *griseata* Japan, *pallidipennis* sp. n. Turkestan p. 235, WARREN Gr.-Schm. F. pal. 3.

Rhizogramma detersa ab. n. *andrusica*, RIBBE p. 262 D. ent. Zs. Iris 23.—*R. detersa* ab. n. *obscura*, SCHWIN-

GENSCHUSS Verh. z.-b. Ges. Wien 62 p. 110.

Rhyacia pilosata, *pratermissa* with subsp. *insulata*, India, *papuana*, p. 6, *stigmatias* with ab. *pallidistigma*, New Guinea, *griseithorax* India, p. 7, *mundipennis* Java p. 8, spp. n., WARREN Nov. Zool. 19.—*R. ochracea* ab. n. *perrufa*, *ypsilon* ab. n. *pernigrata*, *spina* ab. n. *obfusca*, p. 52, *isochroma* ab. n. *rufata* p. 53, *triangularis* ab. n. *albicosta* and *rufata* p. 55, *compta* ab. n. *perampla*, *nigrosigna* ab. n. *obscurior*, p. 57, *cinctipennis* ab. n. *albistigma* p. 58, *rubicilia* ab. n. *obscura*, *hasiana*, *nubifera*, *olivacea* and *nigrivena*, *basistriga* ab. n. *subcarnea* and *rufistigma*. *flavirena* ab. n. *derufata*, p. 59, WARREN Seitz Gr.-Schm. indo-austr. 11.

Rhynchina leucogonia sp. n. Madras p. 1236, HAMPSON J. Bombay Soc. 21.

Rhyncholita? *viridicosta* sp. n. Costa Rica, SCHAUS p. 202 Ann. Nat. Hist. 9.

Risoba sphaerophora pl. clxxxv f. 21 p. 425, *flavipennis* f. 22 p. 427, *glauca* sp. n. Borneo f. 23 p. 428, *jucunda* f. 24 p. 429, *diphtheroides* f. 25 p. 430, *chlora* sp. n. Singapore f. 26, *viridata* f. 27, p. 431, *delicata* f. 28 p. 432, *pratti* f. 29, *lunata* f. 30, p. 433, *diversipennis* f. 31 p. 434, *basalis* f. 32, *cebea* pl. clxxxvi f. 1, p. 435, *olivens* f. 2 p. 436, *literata* f. 3, *avola* f. 4, p. 437, *grisea* f. 5 p. 438; *diplogramma* f. 6 p. 441 and *sticticraspis* f. 7 p. 442, spp. n., E. Africa; HAMPSON Cat. Lep. Phal. 11.

Rivula dimorpha sp. n. Seychelles p. 12 pl. i f. 10, FRYER Tr. Linn. Soc. London 15.—*R. sericealis* subsp. n. *tanitalis*, REBEL p. 70 D. ent. Zs. Iris 26.—*R. cognata* Bombay p. 1241, *simulatrix* Ceylon p. 1242, spp. n., HAMPSON J. Bombay Soc. 21.

Rodriguesia gen. n., type *Deva ornata* p. 61, DYAR Proc. Ent. Soc. Washington 14.

Sacadodes gen. n. p. 167, *pyralis* sp. n. Trinidad p. 168, DYAR Proc. Ent. Soc. Washington 14.

Safia? *guayaquilata* sp. n. Ecuador, DOGNIN p. 19 Hét. nouv. 6.

Sarrothripus malachitis sp. n. E. Africa p. 263 pl. clxxxi f. 3, *musculana* f. 4 p. 264, *coreana* f. 5 p. 266, *parvella* f. 6, *symmicta* f. 7, p. 267, *strigivenata*

f. 8, *cana* sp. n. New Guinea pl. cxci f. 29, p. 268, *sinuosa* pl. clxxxi f. 9 p. 269, *minuta* f. 10, *exophila* f. 11, p. 270, *brunneicosta* f. 12 p. 271, *mesoplaga* f. 13, *crystallites* f. 14, p. 272, *aroa* f. 15 p. 273, *avola* f. 16, *cebea* f. 17, p. 274, *boeopis* f. 18, *abstrusa* f. 19, p. 275; HAMPSON Cat. Lep. Phal. 11.—*S. musculana*, Biologie (Russ.), VASILJEV Rev. russ. ent. 12 pp. 14–23 f. 12–14.

Sasserna? *irrorata* sp. n. Costa Rica, SCHAUS p. 206 Ann. Nat. Hist. 9.

Sasunaga interrupta New Guinea, *longiplaga* Penang, *apiciplaga* Kei isld. p. 15, *basiplaga* Assam p. 16, spp. n. WARREN Nov. Zool. 19.

Satrapodes dosca sp. n. p. 66 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Schinia velutina sp. n. Utah, BARNES & McDUNNOUGH p. 18 Canad. Ent. 44.—*S. argentifascia* sp. n. Arizona p. 3 pl. ii f. 1, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Scioptila gen. n. für *Eriopoda* H. Schöff., WARREN Gr.-Schm. F. pal. 3 p. 220.

Scoliopteryx libatrix Gynandromorphismus (Russ.), JACHONTOV Jestestv. i geogr. 17 2 pp. 1–14.

Scopifera repanda sp. n. Costa Rica, SCHAUS p. 208 Ann. Nat. Hist. 9.

Scotogramma nevada p. 9 pl. i ff. 12 & 13, *fervida* p. 10 ff. 9 & 10, *castrae* p. 11 f. 11, spp. n., BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Scythocentropia inquinata pl. 128 f. 1140 p. 332, OBERTHÜR Etudes 6.

Selenis fossula sp. n. Peru p. 30, DOGNIN Hét. nouv. 6.

Selepa nigralba pl. clxxxii f. 6; *leucograptia* f. 7, *violascens* f. 8, p. 296, *rufescens* f. 9 p. 297, spp. n., *ferrofusa* f. 10 p. 297, *aenescens* f. 11; *plumbeata* f. 12 Ceylon, *transvalica* f. 13 Africa, spp. n., p. 299; *rhythmopis* f. 14, *geraea* f. 15, p. 300, *cumasia* sp. n. Kumasi f. 16 p. 301, *leucogonia* f. 17 p. 302, *circulella* f. 18, *molybdea* sp. n. Singapore f. 19, p. 303, *docilis* f. 20, *nephelozona* f. 21, p. 304, *ianthina* pl. cxc f. 34 p. 671, HAMPSON Cat. Lep. Phal. 11.

Sesamia grisescens sp. n. New Guinea, WARREN p. 35 Nov. Zool. 19.

Setoctena dives pl. cxci f. 11, *trigramma* sp. n. Rajputana f. 12, p. 651, *ledereri* f. 13 p. 652, HAMPSON Cat. Lep. Phal. 11.

Seudyra poecila Sikkim, *cirrho* Formosa, p. 27, *melanura* Celebes p. 28, spp. n., *S. bala* subsp. n. *hilaris* p. 27, JORDAN Seitz Gr.-Schm. indoaustr. 11.

Sideridia lineatissima sp. n. India, WARREN p. 12 Nov. Zool. 19.

Siglophora cymographa sp. n. Borneo pl. clxxxvi f. 23 p. 474, HAMPSON Cat. Lep. Phal. 11.

Sillophora gen. n. *Noctuinae*, *bimaculata* sp. n. Celebes, WARREN p. 54 Nov. Zool. 19.

Simplicia inareolalis sp. n. Seychelles, FRYER p. 12 Tr. Linn. Soc. London 15.

Simyra nervosa var. n. *expressa*, BANG-HAAS p. 139 D. ent. Zs. Iris 26.—*S. unifacta* sp. n. p. 61 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Sinna atrifusa pl. clxxxvi f. 20, *floralis* f. 21, p. 466, HAMPSON Cat. Lep. Phal. 11.

Sinocharis gen. n. near *Eulocastra*, *korbae* sp. n. Ussuri, PÜNGELER p. 7 Mitt. ent. Ges. München 3.

Spintherops roseata sp. n. Algeria, ROTHSCHILD p. 126 Nov. Zool. 19.

Spodoptera mauritia ab. n. *effeminata* [loc.?], WARREN Seitz Gr.-Schm. F. pal. 3 p. 207.

Stellidia juno, *estella*, spp. n., Brazil, JONES p. 425 Tr. ent. Soc. London 1912.

Steniscadia gen. n. next *Elaeognatha*, *poliophaea* sp. n. Ecuador, p. 376, *polyodonta* sp. n. Costa Rica pl. clxxxix f. 33 p. 671, HAMPSON Cat. Lep. Phal. 11.—*S. polyodonta* sp. n. Costa Rica, SCHAUS p. 204 Ann. Nat. Hist. 9.

Stenoecia gen. n. near *Janthinea* Typ. S. dos Err., WARREN Gr.-Schm. F. pal. 3 p. 258.

Stenopterygia commixta sp. n. Penang with ab. *atribasalis*, WARREN p. 14 Nov. Zool. 19.

Stenosticta gen. n. near *Nycteola*, *grisea* sp. n. E. Africa, HAMPSON p. 206 Cat. Lep. Phal. 11.

Stibadium raglena sp. n. p. 68 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Stictoptera fenestra pl. clxvi f. 26 p. 146, *heterogramma* sp. n. Guiana f. 27 p. 149, *anaemia* f. 28, *olivascens* f. 29, p. 151, *timesia* f. 30 p. 157, *vitiensis* Fiji sp. n. p. 159, *striata* f. 31, *ochrota* sp. n. Simla f. 32, p. 160, *griseata* sp. n. Madras pl. clxxviii f. 4 p. 161, *bisexualis* sp. n. New Guinea f. 2, *variegata* sp. n. Perak f. 3, p. 163, *semialba* f. 4 p. 164, *grisea* f. 5, *melanistis* sp. n. New Guinea f. 6, p. 165, *ferriifera* f. 7 p. 166, *atriifera* sp. n. Singapore f. 8, *svinhoei* f. 9, p. 167; *stygia* f. 10 p. 168, *albipuncta* f. 11, *microthyris* f. 12, p. 169, *multi-striata* f. 13 p. 170, spp. n., New Guinea, *repleta* f. 14 p. 170, *confluens* f. 15, *colomba* f. 16 p. 171; HAMPSON Cat. Pel. Phal. 11.

Stictothripa gen. n. p. 450 type *Thalpocharis grisella* Schaus, *delaia* pl. clxxxvi f. 14 p. 452, HAMPSON T.c.

Stiria ischune, *sisaya*, *mouris*, p. 70, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Stiriodes condistica, *nepotica*, p. 71, spp. n., Mexico, DYAR T.c.

Strathocles funebris sp. n. Costa Rica, SCHAUS p. 209 Ann. Nat. Hist. 9.

Strepselydna gen. n. für *truncipennis* Hmps., WARREN Gr.-Schm. F. pal. 3 p. 229.

Synalamis brunneoviridans sp. n. Colombia, DOGNIN p. 18 Hét. nouv. 6.

Sypna hieroglyphigera sp. n. Ecuador, STRAND p. 101 Arch. Naturges. 77 Suppl. 4.

Synthymia fixa ab. n. *griseofusa*, WARREN Gr.-Schm. F. pal. 3 p. 242.

Taeniocampa puengeleri Algier sp. n. p. 69 Taf. vii fig. 1 & 2, STANDFUSS Mitt. Schweiz. Entom. Ges. 12.

Tambana pallidipennis Java, *nigra* Assam with subsp. *fuscipennis*, spp. n., WARREN p. 5 Nov. Zool. 19.

Tapinostola distincta sp. n. Amur, BANG-HAAS p. 154 D. ent. Zs. Iris 26.—*T. concolor* and *hellmanni*, life-histories, EDELSTEN & TODD p. 285 pl. ix Entomologist 45.—*T. concolor*, oviposition, KERSHAW p. 256 Entomologist 45.

Tarache arcloides sp. n. Arizona, BARNES & McDUNNOUGH p. 92 Canad. Ent. 44.—*T. interposita*, *vittamargo*, p. 76, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Tathothripa gen. n. p. 307 for *Ariola continua* Walk., HAMPSON Cat. Lep. Phal. 11.—*T. abbreviata*, *nigricristata* with ab. *inversa*, spp. n., New Guinea, WARREN p. 47 Nov. Zool. 19.

Tetanolita ? negalis sp. n. Arizona p. 29 pl. ii f. 19, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Thalatha argentea sp. n. New Guinea, WARREN p. 2 Nov. Zool. 19.

Thyriodes terrabensis sp. n. Costa Rica, SCHAUS p. 510 Ann. Nat. Hist. 10.

Tiracola rufimargo sp. n. New Guinea with ab. n., WARREN p. 10 Nov. Zool. 19.

Titulcia argyroplaga pl. clxxxvi f. 26 p. 483, *rufimargo* f. 28 p. 484, spp. n. Borneo; *confictella* f. 27, *meterythra* f. 29, p. 485, HAMPSON Cat. Lep. Phal. 11.

Tolpia argentescens sp. n. Ceylon p. 1234, HAMPSON J. Bombay Soc. 21.

Topadesa flammans sp. n. Assam pl. clxxxvi f. 24 p. 477, HAMPSON Cat. Lep. Phal. 11.

Tortricidia bicolorata sp. n. Arizona p. 26 pl. i f. 24, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Tortriciforma chloroplaga pl. clxxxix f. 25 p. 595, HAMPSON Cat. Lep. Phal. 11.

Tortricodes barbaralis sp. n. Costa Rica, SCHAUS p. 210 Ann. Nat. Hist. 9.

Toxocampa decolor sp. n. Yarkend, BANG-HAAS p. 162 D. ent. Zs. Iris 26.—*T. cracca* ab. b. *perstrigata*, REBEL Ann. Hofmus. Wien 25 p. 253 etc.

Trachea subfusca sp. n. Formosa, WILEMAN p. 260 Entomologist 45.—*T. cara* sp. n. Utah, BARNES & McDUNNOUGH p. 52 Canad. Ent. 44.—*T. (Hadena) arbora* p. 15 pl. ii f. 12, *mactatoides* p. 16 f. 20, spp. n., Arizona, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.—*T. viridirena* sp. n. Brazil, JONES p. 423 Tr. ent. Soc. London 1912.

Triaenoneura albifascia sp. n. Aegypt, REBEL p. 75 D. ent. Zs. Iris 26.

Trichestra serrata pl. G f. 25, HAMPSON J. Bombay Soc. 21.

Trichcurois nigrocuprea ab. n. *caecata*, WARREN Seitz. Gr.-Schm. indoaustr. 11 p. 64.

Trichoptya gen. n. *Noctuinae* type *sejuncta* Walk., *inquinata* Tambora, *expansilis* Queensland, p. 53, *nigropunctata* and varr. Trobriand islds., *subspurcata* St. Aignan, p. 54, spp. n., WARREN Nov. Zool. 19.

Trichoridia euchroa sp. n. Colombia, DOGNIN p. 132 Mem. Soc. ent. Belgique 19.

Trichorthosia spinosa sp. n. Arizona p. 9 pl. i f. 18, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No 5.

Tridentifrons gen. n. p. 45 *Acontianae* *insularis* sp. n. Java p. 46, WARREN Nov. Zool. 19.

Trigonophora clava sp. n. Formosa, WILEMAN p. 147 Entomologist 45.

Triommatodes aequalipunctata Demerara p. 41, *adversa* Omai, *castigata* Peru, p. 42, *costinotata* Demerara, *mapiriensis* Bolivia, p. 43, spp. n., DOGNIN Hét. nouv. 6.

Trisuloides pygaria Sumatra p. 2, *papuensis* Biagi, *polyphaenaria* Java, p. 3, *albiplaga* Assam p. 4, spp. n., WARREN Nov. Zool. 19.

Trogobriga gen. n. next *Nertobriga*, *albifera* sp. n. Uganda, HAMPSON p. 616 Cat. Lep. Phal. 11.

Tyana tenuimargo pl. clxxxvii figs. 2 & 3, *monosticta* sp. n. China f. 4, p. 493, HAMPSON T.c.

Tympanistes alternata sp. n. Assam, WARREN p. 47 Nov. Zool. 19.—*T. flavescens* pl. clxxxix f. 22 p. 588, HAMPSON Cat. Lep. Phal. 11.

Tyrissa laurentia sp. n. Demerara, DOGNIN p. 25 Hét. nouv. 6.

Ufeus carnea pl. G f. 23, HAMPSON J. Bombay Soc. 21.

Vespolia plumipes sp. n. Costa Rica, SCHAUS p. 509 Ann. Nat. Hist. 10.

Vestermannia argentata pl. clxxxix f. 28 p. 604, *longiplaga* f. 29, *argyroplaga* f. 30, *concha* f. 31, p. 605; *gloriosa*

sp. n. New Guinea f. 32 p. 606; *triangularis* pl. cxo f. 1, *cuprea* f. 2, p. 608, *agrapha* f. 3, *anchorita* f. 4, p. 609; *goodi* sp. n. W. Africa f. 5 p. 610; *araeogramma* f. 6, *convergens* f. 7, p. 610, *coelisigna* f. 8 p. 611, HAMPSON Cat. Lep. Phal. 11.

Vizaga mirabilis pl. clxxxix f. 15 p. 568, HAMPSON T.c.

Xanthia gilvago v. n. *algerica*, BANGHAAS p. 157 D. ent. Zs. Iris 26.

Xanthoecia flavago ab. n. *suffusa*, WARREN Gr.-Schm. F. pal. 3 p. 225.

Xylina antennata p. 48 pls. xiv-xvi FELT N.Y. St. Mus. Bull. No. 155.

Yrias prophronis sp. n. p. 747 Mexico, DYAR Pomona Coll. J. Ent. 4.

Zethes; Genitalorgane. Synopsis, JOHN Rev. russ. ent. 12 pp. 131-133 figs. 1-2.

Zia ectrocta pl. G f. 7, HAMPSON J. Bombay Soc. 21.

GEOMETRIDAE.

(Incl. *Uraniidae*, *Epiplemidae* and *Cymatophoridae*.)

Uraniidae, SEITZ In: Ad. Seitz Gross-Schmetterlinge Fauna palaeart. Abt. 2 pp. 275-280 Taf.

Cymatophoridae, WARREN in Seitz Grossschmett. pal. 2 pp. 321-333 Taf.

Révision des Phalénites décrites par Guenée dans le species général des Lépidoptères; OBERTHÜR Etudes 6 pp. 223-307 plates cxliv-cxl figs. 1338-1563.

The genera of *Hemitheinae* with lists of the species. PROUT Gen. ins. 129 274 pp. 5 pls.

DOGNIN gives synonymy of numerous forms recently described and figured by Ch. Oberthür, Ann. Soc. ent. Belgique 56 pp. 136-141.

Notes on Taylor's types of *Geometridae*, BARNES & McDUNNOUGH p. 270.

Early stages of certain geometrids, BARNES & McDUNNOUGH Psyche 19 pp. 14-20.

Die Geometriden des Erfurter Gebietes nach Vorkommen und Lebensweise; BEER Halle Mitt. ent. Ges. H. 3-4 pp. 6-28.

Schmarotzer der deutschen Geometrae; RUDOW Intern. ent. Zs. Guben 5 pp. 316-317 6 pp. 167-168.

Abraxas grossulariata u. a., Variieren der Copulationsorgane und des Flüggadders (Russ.), KOSMINSKIJ Rev. russ. ent. 12 pp. 313-327 deutsch. Rés. pp. 327-328 f. 1-11: *A. grossulariata* var. n. *nigra*, PORRITT p. 215 Ent. Mag. 48.—*A. marginata* ab. n. *dumcei* p. 248, JOANNIS Bull. Soc. ent. France 1912.—*A. diversicolor*, larva described p. 1248, HAMPSON J. Bombay Soc. 21.

Acanthophora muelleri sp. n. p. 89 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Acidalia myrtilata sp. n. Deutschl., DADD p. 11 Berlin ent. Zeitschr. 57.—*A. sardonata* sp. n. p. 266, *plumbaginata* n ab. p. 268, HOMBURG Bull. Soc. ent. France 1912.—*A. marcotica*, *andresi*, spp. n., Aegypten, DRANDT p. 374 Internat. ent. Zeitschr. 5.—*A. ornata* v. n. *paucisignata* Sardinia, KRAUSSE p. 132 Int. ent. Zs. 6.—*A. lutulentaria* var. n. *aurata*, MENDES p. 175 pl. iii figs. 18-20 Broteria 10.—*A. virgularia* var. n. *minuscularia*, RIBBE p. 305 D. ent. Zs. Iris 23; cross-breeding races, ALEXANDER P.R. Soc. B 85 pp. 45-52; —*A. trigeminata*, Generation? RUHLAND Intern. ent. Zs. 6 p. 238.

Acidaliinae; historical, nomenclature, PROUT Tr. City London ent. Soc. 1910 1911 pp. 21-32.

Acollesis terminata sp. n. Zululand, PROUT p. 219 Gen. ins. 129.

Aeolochroma gen. n. type *Hypochroma turneri* LUC., PROUT p. 35 T.c.

Agathia discisticta India, *maculimargo* Amboina, *laqueifera* Assam etc., spp. n., p. 60, *diversilinea ampla* subsp. n. p. 59, PROUT T.c.

Agathiopsis submaculata, subsp. n., WARREN p. 68 Nov. Zool. 19.

Aglossochloris gen. n. type *Phorodesma fulminaria* Led., PROUT p. 212 Gen. ins. 129.

Agoschema n. n. for *Microschema* Warr., PROUT p. 56 T.c.

Alcidis ribbei sp. n. Salomons-Inseln, PAGENSLECHER p. 44 Fauna exot. 2.

Alcis plebeia p. 70, *formosana*, *obliquisigna*, *nigronotata*, p. 71, *A. ? costimacula* p. 72, *A. ? conjuncta*, *virgata*, p. 90, *A. macularia* p. 91 spp. n., *Formosa*, *semiclarata* varr., *basinotata* n: n. for *nigronotata*, WILEMAN Entomologist 45.—*A. cretajunda* p. 92, *elpidata*, *interbrunnea*, p. 93, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*A. herse* p. 236, *aglauros*, *pandrosos*, p. 237, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 10.

Allochrosis gen. n. near *Hypochrosis*, *suriens* sp. n. O.-Afr., STRAND p. 70 Arch. Naturges. 78 A 1.

Allochrostes gen. n. for *Racheospita saliata* Feld., PROUT p. 246 Gen. ins. 129.

Alsophila pometaria, REIFF Fauna exotica 2 p. 37.

Anaitis plagiata v. n. *conjuncta*, KRAUSSE p. 168 Arch. Naturges. 78 A; ab. *cotangens*, HORCH Intern. ent. Zs. 6 p. 185.

Anapalta artemas sp. n. Costa Rica, SCHAUS p. 303 Ann. Nat. Hist. 10.

Anisodes aquila, *erastus*, p. 292, *peplumaria*, *scriptilinea*, p. 293, *silas*, *sopater*, p. 294, *tertullus*, *timotheus*, *transecta*, p. 295, *trophinus*, *tychius*, p. 296, *vineotincta* p. 297, spp. n., Costa Rica, SCHAUS T.c.—*A. heterostigma*, *fasciata*, spp. n., Colombia, DOGNIN Mem. Soc. ent. Belgique 19.

Anisogamia albiguttata p. 69, *reducta*, *semilineata*, p. 70, *viridistriga* p. 71, spp. n., New Guinea, also varr. n., WARREN Nov. Zool. 19.

Anisozya polyleucotes, *diazeuxis*, spp. n., New Guinea, PROUT p. 83 Gen. ins. 129.

Annemoria orthogramma sp. n. p. 90 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Anorthodisca florelineata sp. n. Colombia, DOGNIN p. 153 Mem. Soc. ent. Belgique 19.

Antharmostes papilio sp. n. E. Africa, PROUT p. 144 Gen. ins. 129.

Apicia ischyrizoaria sp. n. p. 88 Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*A. flexilis* sp. n. Costa Rica, SCHAUS p. 232 Ann. Nat. Hist. 10.

Aplasta ononaria ab. n. *blanca*, RIBBE p. 300 D. ent. Zs. Iris 23.

Apophyga nigrofusa sp. n. Formosa, WILEMAN p. 72 Entomologist 45.

Archaeobalbis gen. n. *Hemitheinae* type *Hypochroma viridaria* Moore, PROUT p. 24 Gen. ins. 129.

Argyrographa gen. n. for *Dichroma moderata* Walk., PROUT p. 199 T.c.

Arichanna ? *nigrifasciata* p. 73, *maculosa* p. 258, spp. n., Formosa, WILEMAN Entomologist 45.

Aspilates ochrearia v. n. *alba*, KRAUSSE p. 168 Arch. Naturges. 78 A.

Astyochia lachesis sp. n. Costa Rica, SCHAUS p. 239 Ann. Nat. Hist. 10.

Auophyllodes gen. n. p. 130 type *Comibaena venezuelata* Warr., *partita* sp. n. Panama p. 131, PROUT Gen. ins. 129.

Azelina flora sp. n. Brazil, JONES p. 431 Tr. ent. Soc. London 1912.

Bathycolpodes gen. n. p. 140 type *Episothalma marginata* Warr., *vegeta*, *ucoelopa*, *anisotes*, spp. n., W. Africa, p. 141, PROUT Gen. ins. 129.

Berta chrysolineata zygophixia subsp. n., PROUT p. 234 T.c.

Biston robustum Butl. (Japanese), NAGANO Konch. Sek. Gifu 16 pp. 129-132.

Blechroma tisstigmaria sp. n. p. 91. Mexico. DYAR Proc. U. S. Nation. Mus. 42.—*B. epaphras* sp. n. Costa Rica, SCHAUS p. 288 Ann. Nat. Hist. 10.

Blechromopsis gen. n. near *Blechroma*. *costipicta*, p. 72, *dissimilis*, *nubifera*, p. 73, *megaspila* p. 74, spp. n., New Guinea, WARREN Nov. Zool. 19.

Boarmia repandata, varr. n. *nigropallida* and *ochronigra*, MANSBRIDGE p. 94 Entomologist 45.

Bryoptera atomosaria sp. n. Colombia, DOGNIN p. 146 Mem. Soc. ent. Belgique 19.

Bupalus piniarius ff. n. *fulvaria* p. 7, *strigata*, *kolleri*, p. 8, *nana*, *tristis*, *nigricans*, p. 9, *albopuncta*, *albomacula*. p. 10, *hirschkei*, *nivalis*, *immacula*, p. 11, *albidaria* p. 12, DZIURZYNSKI Berlin ent. Zeitschr. 57; Entwicklung Lebensweise, Bekämpfung, WOLFF Jahresber. Ver. angew. Bot. 9 pp. 82-102.

Cacochloris gen. n. type *Stegania uvidula* Sw., PROUT p. 209 Gen. ins. 129.

Caenosynteles gen. n. p. 91, *haploaria* sp. n. p. 92 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Callisteuma gen. n. for *Aplodes fringillata* Schaus, PROUT p. 205 Gen. ins. 129.

Cambogia myrrha p. 537, *cinyras*, *naias*, *zenobia*, *multilunata*, p. 538, *dibapha* p. 539, *dione*, *nympha*, *dissensa* p. 540, *lavinia*, *dryantis*, p. 541, *insueta deleta*, p. 542, *dryope*, *crocina*, p. 543 *guapa*, *elongata*, p. 544, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.—*C. citriaria* sp. n. Costa Rica, SCHAUS, p. 299 Ann. Nat. Hist. 10.—*C. lunifera*, *fucosa*, p. 137, *fuscicosta*, Colombia, *filiferata*, Ecuador, p. 138, *arenacea*, *rubicunda*, p. 139, *fulvicosta*, *multilunata* p. 140, Colombia, spp. n., DOGNIN Mem. Soc. ent. Belgique 19.

Cathydata gen. n. for *Racheospila batina* Dr., PROUT p. 208 Gen. ins. 129.

Celidomphax gen. n. type *Phorodesma rubrimaculata* Warr., PROUT p. 194 T.c.

Cernia amyclaria = (*Pseudoterpna diphtherina* Meyr.), PROUT p. 47 T.c.

Certima annaria sp. n. Costa Rica, SCHAUS p. 234 Ann. Nat. Hist. 10.—*C. rufa* p. 148, *distans* p. 149, spp. n., Colombia, DOGNIN Mem. Soc. ent. Belgique 19.

Cheimatobia brumata Biologie, HOFFMANN Ent. Zs. 25 p. 261; Nahrung der Raupe, GÖTSCHMANN Ent. Zs. Frankfurt 26 p. 29.

Chemerina caliginaria ab. n. *andalusica*, RIBBE p. 329 D. ent. Zs. Iris 23.

Cheroscelis gen. n. *Hemitheinae* p. 137, *oospila* sp. n. Congo p. 138, PROUT, Gen. ins. 129.

Cheteoscelis gen. n. type *Chlorosea bistrifaria* Pack., PROUT p. 117 T. c.

Chlorochlamys curvifera, *triangularis*, spp. n., N. America, PROUT p. 177 T.c.

Chlorochroma angulilinea p. 74, *bicornuta*, *consobrina*, *delicata*, p. 75, *indentilinea*, *pomonae*, *rufimargo*, p. 76, *rufinotata*, *serratilinea*, *strigicosta*, p. 77,

- spp. n., New Guinea, *rubritincta* & n. *fuscimargo* p. 78, WARREN Nov. Zool. 19.
- Chloroclystis* sp. n. p. 115 N. Zealand, PHILPOTT Trans. N. Zeal. Inst. 44.—*C. polygraphata*, *plicata*, spp. n., Ceylon, HAMPSON p. 1247 J. Bombay Soc. 21.
- Chloroparda* gen. n. for *Thalassodes palliplagiata* Walk., PROUT p. 140 Gen. ins. 129.
- Chloropteryx pacifica* Peru, *acerces* Petropolis, spp. n., PROUT p. 179 T.c.
- Chlorosea roseitacta* sp. n. Arizona, PROUT p. 116 T.c.
- Chlorosterrha* gen. n. *Hemitheinae*, *albaniensis* = (*Sterrha dichroma* Feld.), *monochroma*, spp. n., S. Africa, PROUT p. 218 T.c.
- Chlorozancla* gen. n. for *Tanaorhinus falcatus* Hamps., PROUT p. 69 T.c.
- Cidaria bertrandi* sp. n. Algeria, ROTHSCHILD p. 127 Nov. Zool. 19.—*C. nyctichroa* sp. n. Madras p. 1245 pl. G f. 15, HAMPSON J. Bombay Soc. 21.
- Cidariophanes triangulifera* sp. n. Colombia, DOGNIN p. 147 Mem. Soc. ent. Belgique 19.
- Cimelia margarita*, CHRÉTIEN Paris Bul. soc. ent. 1912 pp. 207–209.
- Cleora* ? *glaucaria* sp. n. Arizona p. 291, GROSSBECK J. New York Ent. Soc. 20.
- Coenocharis hoplitaria* sp. n. p. 92, Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Comibaena latilinea* China, *apicipicta* Tibet, *fuscidorsata* India, spp. n., PROUT p. 101 Gen. ins. 129.
- Comostola inops* sp. n. Kashmir, PROUT p. 237 T.c.
- Coremia apollonaria*, *discataria*, *luca-saria*, p. 302, *zenasaria* p. 303, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 10.
- Crocalis fuliginosa* sp. n. Algeria, ROTHSCHILD p. 126 Nov. Zool. 19.
- Ctenothea* gen. n. for *Hemithea ornata* Warr., PROUT p. 181 Gen. ins. 129.
- Culpinia* gen. n. type *Thalera diffusa* Walk., PROUT p. 139 T.c.
- Cyclothea* gen. n. for *Thalera dis-juncta* Walk., PROUT p. 181 T.c.
- Cyneoterpna* n. n. for *Autanepsia* Turn., PROUT p. 43 T.c.
- Darna latimargo* sp. n. Colombia, DOGNIN p. 133 Mem. Soc. ent. Belgique 19.
- Dasycosymbia* gen. n., *gracilata* sp. n. Arizona, p. 283, GROSSBECK J. New York Ent. Soc. 20.
- Dasyuris transaureus* sp. n. p. 203. fig. N. Zealand, HOWES Trans. N. Zeal. Inst. 44.
- Deilinea lenitarsis* California p. 284, *verdiaria* Nevada p. 285, spp. n., GROSSBECK J. New York Ent. Soc. 20.
- Diastictis (Cymatophora) pallipennata* sp. n. Arizona, BARNES & McDUNNOUGH p. 126 Canad. Ent. 44.
- Dichorda phoenix* sp. n. Arizona, PROUT p. 128 Gen. ins. 129.
- Dichromatopodia masinissa*, *micipsa*, *orbona*, spp. n., Costa Rica, SCHAUS p. 298 Ann. Nat. Hist. 10.
- Digonodes gnorimaria*, *agonaria*, p. 87, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Dindicodes* subg. n. of *Terpna*, *crocina* Butl., PROUT p. 41 Gen. ins. 129.
- Dioscore homocoles* sp. n. New Guinea, PROUT p. 75 T.c.—*D. simplex* sp. n. Guinea, WARREN p. 78 Nov. Zool. 19.
- Diplodesma pudentifimbria* sp. n. Assam, PROUT p. 185 Gen. ins. 129.
- Dithadama angulata* p. 429, *delila* p. 430, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.
- Dolichoneura eriphyle* p. 309, *squalida* p. 310, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 10.
- Dolosis* gen. n. *Hemitheinae* p. 216, *illacerta* sp. n. Natal p. 217, PROUT Gen. ins. 129.
- Dysphania albescens* Borneo p. 53, *bivexillata* Sumatra p. 55, spp. n., PROUT T.c.—*D. flavifrons* p. 149 kab. ?, *decoloratula* p. 150 Key ?, spp. n., STRAND Arch. Naturges. 78 A 9.
- Dyspteris insignis* sp. n. Colombia, DOGNIN p. 144 Mem. Soc. ent. Belgique 19.

Ectropis brevifasciata p. 69, *trilineata* p. 70, *E. ? rusticaria* p. 91, *E. pulveraria* p. 92, spp. n., Formosa, WILEMAN Entomologist 45.

Ellopiia punctularia p. 424, *irrorata*, *vicinaria*, p. 425, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Emmiltis ordinaria sp. n. p. 84 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Enconista and *Onychora*, distinguished, JOANNIS Broteria 10 pp. 5-20.

Ennomos magnarius p. 54 pl. viii f. 2, FELT N. Y. St. Mus. Bull. No. 155.

Epilema fulvhamata sp. n. Ceylon p. 1243 pl. C f. 14, HAMPSON J. Bombay Soc. 21.

Epirrhoe caliscata sp. n. p. 84 Mexico, DYAR Proc. U. S. Nation. Mus. 24.

Erateina olivata, *saundersi* with var. *nigricaudula*, p. 142, *simplex* p. 143, spp. n., Colombia, DOGNIN Mem. Soc. ent. Belgique 19.

Erebochlora roseofasciata var. n. *magnifascia*, DOGNIN p. 136 T.c.

Eriopygidia daphne sp. n. Costa Rica, SCHAUS p. 550 Ann. Nat. Hist. 9.—*E. myrtusaria* sp. n. Costa Rica, SCHAUS p. 305 Ann. Nat. Hist. 10.

Eubordeta jucunda p. 597, *eccrita*, *flammea*, p. 598, *micaceu* p. 599, spp. n., New Guinea, JORDAN Nov. Zool. 18.

Eucherodes agnes subalba ab. n., WILEMAN p. 169 Entomologist 45.

Eucrostes rhodophthalma Cape of Good Hope p. 245, *insularis* Sokotra p. 246, spp. n., PROUT Gen. ins. 129.

Eucymatoge penumbrata sp. n. Arizona, PEARSALL p. 29 Canad. Ent. 44.

Eueana gen. n. for *Eucrostis niveociliaria* H. Sch., PROUT p. 201 Gen. ins. 129.

Eupithecia vaporata, *scabrogata*, spp. n., California, PEARSALL p. 28 Canad. Ent. 44.—*E. perillata* sp. n. California, PEARSALL Ent. News 23 p. 442.

Eurranthis pennigeraria abb. n. *nevadaria* and *prieta*, RIBBE p. 338 D. ent. Zs. Iris 23.

Eustroma reticulata, variation, PROUT p. 1 pl. i Entomologist 45; early stages, LITTLEWOOD p. 85 T.c.; egg, LITTLEWOOD p. 277 T.c.

Fidonia nelvae sp. n. Algeria, ROTHCHILD p. 126 Nov. Zool. 19.

Garaeus flavipicta sp. n. Assam p. 1244, HAMPSON J. Bombay Soc. 21.

Gaurena sinuata sp. n. China, WARREN Seitz Gr.-Schm. pal. 2 p. 326.

Gelasma melancholica Sarawak, *triplicifasciata* Madagascar, *atrapophanes* New Guinea, spp. n., PROUT p. 149, Gen. ins. 129.—*G. saturata* sp. n. New Guinea, WARREN p. 78 Nov. Zool. 19.

Geometra papilionaria, Albinismus, RICHTER Intern. ent. Zs. 5 p. 335.

Gigantothea gen. n. for *Chlorochroma gigas* Warr., PROUT p. 161 Gen. ins. 129.

Glaucopteryx latifasciata sp. n. Formosa, WILEMAN p. 169 Entomologist 45.

Gnophos ambiguata ab. n. *nigrescens*, HANNEMANN p. 220 Ent. Zeitschr. 25.—*G. punctivenaria taiwana* var. n., WILEMAN p. 73 Entomologist 45.

Gnophosema gen. n. for *Gnophos isometra* Warr., PROUT p. 48 Gen. ins. 129.

Graphipidus subacaesia Colombia p. 140, *pilifera* Ecuador p. 141, spp. n., DOGNIN Mem. Soc. ent. Belgique 19.

Grossbeckia gen. n. p. 124 *Fernaldcl. lineae*, *semimaculata* sp. n. Arizona p. 125, BARNES & MCDUNNOUGH Canad. Ent. 44.

Gymnoscelis lobata sp. n. Ceylon p. 1246 pl. G fig. 16, *substrigosa*, larva p. 1246, HAMPSON J. Bombay Soc. 21.

Habrosyne conscripta sp. n. Tibet, WARREN Seitz Gr.-Schm. pal. 2 p. 323.—*H. rectangula* var. n. *arizonensis* BARNES & MCDUNNOUGH p. 124 Canad. Ent. 44.

Haemalea punctilinea sp. n. Costa Rica, SCHAUS p. 431 Ann. Nat. Hist. 9.

Halterophora nereis sp. n. New Guinea, WARREN p. 78 Nov. Zool. 19.

Hammaptera caribbea p. 299, *fartaria*, *herbosaria*, p. 300, *linusaria*, p. 301 spp. n., Costa Rica SCHAUS Ann. Nat.

Hist. 10.—*H. semifasciata* sp. n. Colombia, DOGNIN p. 136 Mem. Soc. ent. Belgique 19.

Hemerophila harterti sp. n. Algeria, ROTHSCHILD p. 127 Nov. Zool. 19.

Hemistola semialbida p. 227, *perviridis*, *simplicissima*, *incommoda*, p. 228, spp. n., S. Africa, *chrysoprasaria lissas* subsp. n., *haploa* n. n. for *simplex* Warr., PROUT Gen. ins. 129.

Hemitheinois gen. n., *pteroglauca*, *pterochra*, p. 90, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Herbita pacondiaria sp. n. Brazil, JONES p. 432 Tr. ent. Soc. London 1912.

Heterephyra directilinea, *johannis*, spp. n., Costa Rica, SCHAUS p. 297 Ann. Nat. Hist. 10.

Heteroctenia fimbripunctata sp. n. Colombia, DOGNIN p. 148 Mem. Soc. ent. Belgique 19.

Hierochthonia gen. n. type *Microloxia pulverata* Warr. p. 204, *alexandriaria* sp. n. Centr. Asia p. 205, PROUT Gen. ins. 129.

Hipparchus pratti sp. n. China, PROUT p. 71 T.c.

Hyalochlora gen. n. type *Racheospila splendens* Dr., PROUT p. 125 Gen. ins. 129.

Hybernia aurantiaria var. n. *fusca*, PORRITT p. 90 Ent. Mag. 48.—*H. marginaria* ab. *denigraria*, GRABE Zeitschr. wiss. Insektenbiol. 8 p. 148.

Hydriomena; North American, synonymy etc., SWETT pp. 225–231 Canad. Ent. 44.—*H. costipunctata* sp. n. Arizona p. 31 pl. ii f. 14, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid N. Amer. 1 No. 5.—*H. henshawi* p. 164, *transfigurata* p. 195, spp. n., U.S., SWETT Canad. Ent. 44.—*H. vernata picturata*, p. 546, *confusa*, *tectoria*, p. 547, *furinae* p. 548, *lucifuga*, *cydippe*, p. 549, *gosala* p. 550, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Hypobapta subg. n. of *Terpna* (= *Hypochroma* G.), PROUT p. 41 Gen. ins. 129.

Hypochroma vide *Hypobapta*.

Hypocoela zapluta sp. n. Uganda, PROUT p. 143 Gen. ins. 129.

Hypodoxa gen. n. type *Hypochroma emiliaria* G., PROUT p. 34 T.c.

Hyrminia nubila sp. n. Costa Rica, SCHAUS p. 537 Ann. Nat. Hist. 9.

Idiochlora gen. n. for *Thalassodes ophthalmicata* Moore, PROUT p. 163 Gen. ins. 129.

Ischnopteris festa sp. n. Colombia, DOGNIN p. 148 Mem. Soc. ent. Belgique 19.

Ischnopteryx parvula sp. n. Costa Rica, SCHAUS p. 427 Ann. Nat. Hist. 9.—*I. constantia* sp. n. p. 85 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Isochromodes bellona sp. n. Costa Rica, SCHAUS p. 234 Ann. Nat. Hist. 10.

Ithysia italica sp. n. Europe, HARRISON p. 317 Entomologist 45.

Iulops gen. n. for *Eucrostis argocrana* Meyr., PROUT p. 213 Gen. ins. 129.

Janarda purpureomarginata sp. n. Colombia, DOGNIN p. 135 Mem. Soc. ent. Belgique 19.

Lambornia gen. n. *Hemitheinae*, *inspicuens* sp. n. Lagos, PROUT p. 235 Gen. ins. 129.

Larentia galiata var. n. *emina*, SCHAWERDA Verh. zool. bot. Ges. Wien 62 p. (138)—*L. pupillata*, ersten Stände, SCHWINGENSCHUSS Verh. z.-b. Ges. Wien 62 p. (211).—*L. variata* ab. n. *cembrae*, KITT Verh. z.-b. Ges. Wien 62 p. (215).—*L. silacea*, Aberration, BOEGL München Mitt. ent. Ges. 3 p. 40.—*L. exoriens* sp. n. p. 54 New Zealand, PROUT Proc. N. Zeal. Inst. 44.—*L. cinnabaris* sp. n. p. 303 fig. N. Zealand, HOWES Trans. N. Zeal. Inst. 44.

Leptolopha marginata sp. n. Costa Rica, SCHAUS p. 292 Ann. Nat. Hist. 10.

Leucula cachiaria sp. n. Costa Rica, SCHAUS p. 238 T.c.

Lithocharis gen. n. für *albibasis* Hmps., WARREN Seitz Gr.-Schm. pal. 2 p. 321.

Lophomachia gen. n. for *Thalera semialba* Walk., PROUT p. 85 Gen. ins. 129.

Lophopelma subg. n. vide *Terpna*.

Lophostola gen. n. for *Lophochlora annuligera* Sw., PROUT p. 229 T.c.

Lygris convexa, basistrigaria, spp. n., Formosa, WILEMAN p. 170 Entomologist 45.

Lythria purpuraria v. n. *aucta* Sardinia, KRAUSSE p. 132 Int. ent. Zs. 6.

Macaria honoraria sp. n. Madras p. 1244, *subalbataria* larva, HAMPSON J. Bombay Soc. 21.—*M. puertata* sp. n. California p. 286, GROSSBECK J. New York Ent. Soc. 20.

Macrolyrcea sceva sp. n. Costa Rica, SCHAUS p. 235 Ann. Nat. Hist. 10.

Meekia gen. n. p. 82 *Deiliniinae*, *flavicosta* with ab. *tincta* sp. n. New Guinea p. 83, WARREN Nov. zool. 19.

Melanolophia funebris sp. n. Costa Rica, SCHAUS p. 426 Ann. Nat. Hist. 9.

Merochlora gen. n. p. 221 type *Nemoria faseolaria* G., *eutrapphes* sp. n. Utah p. 222, PROUT Gen. ins. 129.

Metacineata gen. n. for *Rhomborista intermaculata* Warr., PROUT p. 95 T.c.

Metanema striolata sp. n. Costa Rica, SCHAUS p. 232 Ann. Nat. Hist. 10.

Microgonia amicaria sp. n. Costa Rica, SCHAUS p. 233 Ann. Nat. Hist. 10.

Metanema ugallia sp. n. p. 89 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Microloxia chlorissodes sp. n. China, PROUT p. 201 Gen. ins. 129.

Mimosema lobata sp. n. Colombia, DOGNIN p. 150 Mem. Soc. ent. Belgique 19.

Mixeophanes gen. n. p. 247 for *Euchloris dissimilis* Warr., PROUT Gen. ins. 129.

Mixocera (*Thelycera* subg. n.) *hemithales* p. 243, *xanthostephana*, *viridans*, p. 244, spp. n. Africa, PROUT T.c.

Mixochlora radiata sp. n. New Guinea WARREN p. 79 Nov. Zool. 19.

Nelo tamjana sp. n. Costa Rica, SCHAUS p. 428 Ann. Nat. Hist. 9.

Nemoria mutaticolor Mexico, *caerulescens* New Mexico, spp. n., PROUT Gen. ins. 129 p. 113.

Neobalbis gen. n. type *Pseudoterpna laearia* Hampson, PROUT p. 26 T.c.

Neromia rubripunctilla p. 182, *barretti*, *phoenicosticta*, *mittosticta*, *chlorosticta*, p. 183, spp. n., Africa, PROUT T.c.

Nesalcis laeca sp. n. Costa Rica, SCHAUS p. 238 Ann. Nat. Hist. 10.

Nipteria pectinata sp. n. Costa Rica, SCHAUS p. 427 Ann. Nat. Hist. 9.—*N. fronsaria*, *mitellaria*, spp. n., Costa Rica, SCHAUS p. 239 Ann. Nat. Hist. 10.—*N. abortivata* sp. n. Colombia, DOGNIN p. 144 Mem. Soc. ent. Belgique 19.

Obedia octoscripta sp. n. Formosa, WILEMAN p. 169 Entomologist 45.

Odezia tibiale, Zucht, FINKE Ent. Zs. 25 p. 219.

Oenospila peristicta sp. n. New Guinea, PROUT p. 162 Gen. ins. 129.

Omphacodes curvilinea, elegans, spp. n., Africa, PROUT p. 221 Gen. ins. 129.

Omphax bacoti p. 195, *leucocraspeda* p. 196, *shorti* p. 252, spp. n., Africa, PROUT T.c.

Ophthalmophora phrynearia p. 423, *uncinata* p. 424, spp. n. Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Opisthoxia cassandra p. 85, *salubaea*, p. 86, Mexico, spp. n., DYAR Proc. U. S. Nation. Mus. 42.

Oporinia subnitida sp. n. Colombia, DOGNIN p. 135 Mem. Soc. ent. Belgique 19.

Oospila eminens sp. n. Costa Rica, SCHAUS p. 428 Ann. Nat. Hist. 9.—*O. peralta* sp. n. Costa Rica, SCHAUS p. 287 Ann. Nat. Hist. 10.—*O. mesocraspeda* Panama p. 134, *sesquiplaga* Brazil p. 135, spp. n., PROUT Gen. ins. 129.

Oricia dominia sp. n. Costa Rica, SCHAUS p. 433 Ann. Nat. Hist. 9.

Orthocraspeda gen. n. for *Hypochroma netunaria* G., PROUT p. 28 Gen. ins. 129.

Ortholitha limitata abb. n. *prieta* & *medioprieta*, RIBBE p. 314 D. ent. Zs. Iris 23.

Orthorisma nom. n. for *Orthocraspeda* Pr., PROUT p. 181 Entomologist 45.

Oxydia obtusaria sp. n. Costa Rica, SCHAUS p. 234 Ann. Nat. Hist. 10.

- Oxypora* gen. n. *Geometrinae* p. 79, *dentilinea*, *spilota*, spp. n., New Guinea, p. 80, WARREN Nov. zool. 19.
- Ozola violacea* sp. n. New Guinea, WARREN p. 68 Nov. Zool. 19.
- Ozolla inexcisata* sp.n. Seychelles p. 16 pl. i f. 14, FRYER Tr. Linn. Soc. London 15.
- Pachista* subg. n. of *Terpna*, *superans* Butl., PROUT p. 40 Gen. ins. 129.
- Pachyodes taiwana* sp. n. Formosa, WILEMAN p. 259 Entomologist 45.
- Palimpsestis duplaris* ab. n. *pulverosa*, *P.* or ab. n. *discolor*, p. 327, *P. ampliata* subspp. n. *suffusa* & *angustimedia*, p. 329, WARREN Seitz Gr.-Schm. pal. 2.
- Paradarisa rantaizanensis* sp. n. Formosa, WILEMAN p. 258 Entomologist 45.
- Paragnorima* gen. n. für *fuscescens* Hamps., WARREN Seitz Gr.-Schm. pal. 2 p. 329.
- Paragonia tiselaaria* sp. n. p. 87 Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Parapsestis* gen. n. near *Palimpsestis*, WARREN Seitz Gr.-Schm. pal. 2 p. 329.
- Parxcelsa* gen. n. near *Hulstina*, *ultraria* sp. n. California, PEARSELL p. 100 Canad. Ent. 44.
- Paronychora* gen. n. for *oberthueri* Vasq., p. 20 pl. i, variation p. 23, var. n. *inclarata* p. 26, JOANNIS Broteria 10.—*P. oberthueri*, MENDES p. 178 pl. iii f. 9 T.c.
- Pentheochlora* gen. n. for *Thalera uniformis* Hamps., PROUT p. 150 Gen. ins. 129.
- Perconia strigillaria* ab. n. *dilatata*, STRAND p. 258 Ent. Zeitschr. 25.
- Perithalera* gen. n. for *Thalera oblongata* Warr., PROUT p. 144, Gen. ins. 129.
- Perizoma pudens*, *taetrica*, spp. n., Costa Rica, SCHAUS p. 304 Ann. Nat. Hist. 10.
- Pero-egens* p. 150, *curvistigma* p. 151, spp. n., Colombia, DOGNIN Mem. Soc. ent. Belgique 19.
- Perusia lucida* sp. n. Colombia, DOGNIN p. 150 T.c.
(N-9210 j)
- Petrophora rubrosuffusa* Arizona p. 282, *costimacula* California p. 283, spp. n., GROSSBECK J. New York Ent. Soc. 20.
- Phæochlaena crocearia* sp. n. Costa Rica, SCHAUS p. 432 Ann. Nat. Hist. 9.
- Phasiane clathrata centralasiae* var. n. (Russ. + engl.), KRULIKOVSKIJ Bull. Soc. Oural. nat. 31 1 p. 120.
- Phellinodes gratiosa* sp. n. Costa Rica, SCHAUS p. 310 Ann. Nat. Hist. 10.
- Pherotesia subsimilis* sp. n. Colombia, DOGNIN p. 147 Mem. Soc. ent. Belgique 19.
- Phrudocentra mitigata* Panama, *niveiceps* Peru, spp. n., PROUT p. 122 Gen. ins. 129.
- Phyllodonta emerita*, *peribleptaria*, p. 86, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Physocleora semirufa* sp. n. Argentina, DOGNIN p. 145 Mem. Soc. ent. Belgique 19.
- Pigia calotis* sp. n. p. 89 Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Pitthea agenoria* ab. n. *bifasciola* STRAND p. 107 Arch. Naturges. 78 A 9.
- Pleuroprucha insularia*, larva, PROUT p. 369 Canad. Ent. 44.
- Polyploca diluta* ab. n. *latimedia*, *P. ridens* ab. n. *concinna* p. 330, *P. arctipennis* ab. n. *innotata* p. 331, WARREN Seitz Gr.-Schm. pal. 2.
- Polypoetes albilinea* sp. n. Costa Rica, SCHAUS p. 431 Ann. Nat. Hist. 9.
- Pomosa punctaria* sp. n. Madras. p. 1245, HAMPSON J. Bombay Soc. 21.
- Prasinocyma sanguinicosta*, *niveitincta* p. 156, *rugistrigula*, *neavei*, *bifimbriata*, p. 157, Africa, *caeruleotincta* New Guinea p. 252, spp. n., PROUT Gen. ins. 129.
- Probolosceles agathia* p. 80, *reversa*, New Guinea, *monilaita* Solomon islds., p. 81, spp. n., WARREN Nov. Zool. 19.
- Progonodes semicaudata* sp. n. Brazil, PROUT p. 135 Gen. ins. 129.—*P. diversata* sp. n. p. 85 Mexico, DYAR Proc. U. S. Nation. Mus. 42.
- Prohydata auster* sp. n. Brazil, PROUT p. 187 Gen. ins. 129.—*P.*

completa sp. n. Colombia, DOGNIN p. 134 Mem. Soc. ent. Belgique 19.

Prosomphax quieta sp. n. E. Africa, PROUT p. 197 Gen. ins. 129.

Proutoscia gen. n. *Geometrinae*, *mirifica* sp. n. Costa Rica, SCHAUS p. 286 Ann. Nat. Hist. 10.

Psaliodes electa sp. n. Costa Rica, SCHAUS p. 551 Ann. Nat. Hist. 9.—*P. demasaria* p. 305, *claudiaria*, *crispata*, p. 306, *infulata*, *interstrata*, p. 307, *philetus*, *simplex*, p. 308, *sutum* p. 309, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 10.—*P. venisticta* sp. n. Colombia, DOGNIN p. 137 Mem. Soc. ent. Belgique 19

Pseudhemitheia saturata sp. n. Nigeria, PROUT p. 184 Gen. ins. 129.

Pseudopterpna vide *Cernia*.

Psychostrophia melanargia abb. n. *hemimelaena*, *catenifer*, SEITZ Gr.-Schm. pal. 2 p. 278.

Ptychopoda simililinea margarita var. n., *sulphuraria notata* var. n., DOGNIN p. 135 Mem. Soc. ent. Belgique 19.

Pyralopsis damalis sp. n. Costa Rica, SCHAUS p. 432 Ann. Nat. Hist. 9.

Pyrinia rufinaria sp. n. Costa Rica, SCHAUS p. 232 Ann. Nat. Hist. 10.

Pyrrhaspis reversa sp. n. New Guinea, WARREN p. 81 Nov. zool. 19.

Racheospila ella p. 105, *eugethes*, *cecilia*, p. 106, *haematospila*, *unipunctata*, p. 107, S. America, *magnidiscata* Costa Rica p. 108, *bonhotei* Bahamas p. 110, spp. n., PROUT Gen. ins. 129.—*R. manostigma* sp. n. p. 91 Mexico, DYAR Proc. U.S. Nation. Mus. 42.—*R. acutularia*, *agenoria*, *dorsilinea*, p. 289, *nympharia*, *strigaria*, *concinaria*, p. 290, *interlucens*, *porcius*, p. 291, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 10.

Rhadinomphax gen. n. type *Iodis divincta* Walk., PROUT p. 197 Gen. ins. 129.

Rhodomena electa p. 544, *excelsa* p. 545, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Sabulodes sulphurata, early stages, BARNES & McDUNNOUGH Ent. News 23 pp. 53-55 pl. vi ff. 8-10.

Saronaga consimilis Japan, *commifera* West-China, spp. n., WARREN Seitz Gr.-Schm. pal. 2 p. 321-322.

Scardamia ? percitraria sp. n. Aldabra, FRYER p. 15 pl. i f. 13 Tr. Linn. Soc. London 15.

Scodiona penulataria pl. iii f. 2, *lentiscaria* var. *distinctaria* figs. 3-5, p. 179, MENDES Broteria 10.

Scodionista gen. n. for *Econista amoritaria* Püng., JOANNIS p. 22 Broteria 10

Selidosema lactiflua sp. n. p. 117 N. Zealand, MEYRICK Trans. N. Zeal. Inst. 44.

Semiothisa lydia, *delia*, spp. n., Costa Rica, SCHAUS p. 231 Ann. Nat. Hist. 10.

Spaniocentra gen. n. for *Comibaena pannosa* MOORE, PROUT p. 94 Gen. ins. 129.

Stammodes ululata sp. n. California, PEARSALL p. 99 Canad. Ent. 44.—*S. topazata albida* subsp. n. p. 31 pl. ii f. 24, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Stenalcidia piperacia p. 145, *spilosata* p. 146, spp. n., Colombia, DOGNIN Mem. Soc. ent. Belgique 19.

Synchlora dorsuaria sp. n. Antigua, PROUT p. 116 Gen. ins. 129.

Synegia conflagrata sp. n. Madras p. 1243, HAMPSON J. Bombay Soc. 21.

Synopsia sociaria var. n. *almassa*, SCHAWERDA Verh. zool.-bot. Ges. Wien 62 p. (138).

Tachychlora gen. n. type *Comibaena lepidaria* Möschl., and including *uricha* Kaye = (*flavicomma* Warr.), PROUT p. 119 Gen. ins. 129.

Tachyphyle oleaster, *hamata*, spp. n., Costa Rica, SCHAUS p. 288 Ann. Nat. Hist. 10.

Tanaorrhinus reciprocatus Walker, Metamorphosis (Japanese), NAGANO Konch. Sek. Gifu 16 p. 429-433.

Terpna (*Lophopelma* subg. n.) *calaurops* sp. n. Hong Kong p. 41, *decorata* = (*dorsocristata* Pouj.) p. 39, vide etiam *Dindicodes*, *Hypobapta*, *Puchista*, PROUT Gen. ins. 129.

Thalassodes flavifimbria, *rubellifrons*, New Guinea, *halioscia* Solomon islds., spp. n., WARREN p. 82 Nov. zool. 19.—*T. hypocrita*, *aucta*, India, *dentalilinea*

W. Africa, spp. n., PROUT p. 152 Gen. ins. 129.

Thelycera subg. n. vide *Mixocera*.

Thera variata, PROUT p. 241–246 Entomologist 45.

Therina calidaria sp. n. p. 88 Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*T. silanaria*, *T. ? perpectinata*, spp. n., Costa Rica, SCHAUS p. 235 Ann. Nat. Hist. 10.

Thyatira stramineata sp. n. China, WARREN Seitz Gr.-Schm. pal. 2 p. 324.

Thysanopyga commendata sp. n. Costa Rica, SCHAUS p. 425 Ann. Nat. Hist. 9.

Timandra flavisponsaria sp. n. Madras p. 1248, HAMPSON J. Bombay Soc. 21.

Tithraustes phaëthon sp. n. Costa Rica, SCHAUS p. 432 Ann. Nat. Hist. 9.—*T. nubilata* sp. n. Colombia, DOGNIN p. 133 Mem. Soc. ent. Belgique 19.

Trygodes simplicissima sp. n. p. 88 Mexico, DYAR Proc. U. S. Nation. Mus. 42.—*T. amphion* sp. n. Costa Rica, SCHAUS p. 429 Ann. Nat. Hist. 9.

Urapteryx inspersa, *approximaria* spp. n., Formosa, WILEMAN p. 168 Entomologist 45.

Victoria gordonii, *immunifica*, spp. n., New Guinea, PROUT p. 86 Gen. ins. 129.

Vindusara rectifascia sp. n. Formosa, WILEMAN p. 259 Entomologist 45.

Xenochroma planimargo sp. n. Africa, PROUT p. 46 Gen. ins. 129.

Zamarada bathyscaphes p. 196, *puri-margo*, *nebulimargo*, p. 197, *ignicosta* p. 198, *fessa*, *metrioscaphes*, p. 199, *aclea* p. 200, spp. n., Selukwe, PROUT Entomologist 45.

Zonosoma linearia ab. n. *fasciata*, PROUT pl. i f. A p. 3 Entomologist, 45.

PYRALIDAE, THYRIDIDAE.

Acridura caerulealis, *pulchralis*, spp. n., Costa Rica, SCHAUS p. 297 Ann. Nat. Hist. 9.—*A. binigrata* sp. n. Colombia, DOGNIN p. 174 Mem. Soc. ent. Belgique 19.

Acrodegmia gigantalis sp. n. Brazil, JONES p. 440 Tr. ent. Soc. London 1912.

(N-9210 j)

Aetholix borneensis sp. n. Sarawak HAMPSON p. 246 Ann. Nat. Hist. 9.

Agathodes minimalis sp. n. Lagos, HAMPSON p. 562 Ann. Nat. Hist. 10.

Agrotera pyrostrota sp. n. New Guinea, HAMPSON p. 172 Ann. Nat. Hist. 9.

Alpheoides gen. n. p. 41, *parvulalis* sp. n. U.S. p. 42 pl. iii f. 14, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 (No. 5).

Ambala albivenalis sp. n. Ceylon p. 1250, HAMPSON J. Bombay Soc. 21.

Ambia novaguinensis sp. n. Arfak p. 549 pl. lxxviii f. 6, KENDRICK P. zool. Soc. London 1912.—*A. argyractalis*, *intortalis*, p. 676, *perornatalis* p. 677, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Anarpia gen. n. for *Scoparia pyrenaealis*, CHAPMAN p. 507 Tr. ent. Soc. London 1911.

Ancylostomia roseitinctella sp. n. p. 105 Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Anerastia castanealis sp. n. Ceylon p. 1251, HAMPSON J. Bombay Soc. 21.

Apocera gen. n. *Epipaschiinae*, *costata* sp. n. Costa Rica, SCHAUS p. 660 Ann. Nat. Hist. 9.

Argyractis albibasalis p. 670, *auspicatalis* p. 671, *amethystina*, *nitens*, p. 672, *parvissimalis*, *peraltalis*, p. 673, *purialis*, *tristalis*, *triumphalis*, p. 674, *volcanalis* p. 675, spp. n., Costa Rica, SCHAUS T.c.

Astura elevata var. n. *grandimacula*, DOGNIN p. 175 Mem. Soc. ent. Belgique 19.

Aulacodes delicata sp. n. Costa Rica, SCHAUS p. 679 Ann. Nat. Hist. 9.

Aulacoptera philippinensis sp. n. Philippines, HAMPSON p. 167 Ann. Nat. Hist. 9.

Azamora pyrochroma sp. n. Brazil, JONES p. 441 Tr. ent. Soc. London 1912.

Azochis curvilinealis p. 307, *graphialis*, *oncalis*, p. 308, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Bocchoris insulalis Fergusson Isl. p. 257, *labarinthalis* Nigeria p. 258,

rufiflavalis Madagascar, p. 259, *spp. n.*, HAMPSON Ann. Nat. Hist. 9.—*B. obliquialis* p. 293, *palcitalis* p. 294, *spp. n.* Costa Rica, SCHAUS Ann. Nat. Hist. 9.—*B. albinialis* *sp. n.* Arabia and Bombay p. 1263, HAMPSON J. Bombay Soc. 21.

Bostra mesoleucalis pl. G f. 42, *sarcosia*, p. 1260, *spp. n.* Ceylon, HAMPSON T.c.

Botyodes brachytorna *sp. n.* New Guinea, HAMPSON p. 3 Ann. Nat. Hist. 10.

Botys silacealis, Metamorphose, Eia-blage, Phenologie, Schaden an Mais (Russ.), STRĚLÍCOV Choziājstvo Kiev 7 pp. 1196–1202 1224–1228 f. 1–4.

Brevicella *gen. n.* *Hydrocampinae*, *emarginata* *sp. n.* New Guinea pl. lxxviii f. 8, KENRICK p. 549 P. zool. Soc. London 1912.

Calamochrous albipunctalis var. pl. lxxviii f. 22, KENRICK T.c.—*C. bipunctalis* *sp. n.* Madras p. 1269, HAMPSON J. Bombay Soc. 21.

Caprinia trichotarsia, *cuprescens*, *spp. n.*, New Guinea, HAMPSON p. 324 Ann. Nat. Hist. 9.

Catapsephis melanostigma *sp. n.* New Guinea, HAMPSON p. 161 T.c.

Crocidolomia limatalis *sp. n.* Costa Rica, SCHAUS p. 306 Ann. Nat. Hist. 9.

Cecidothyris guttulata pl. iv f. 1 p. 189, MENDES Broteria 10.

Cenoloba taprobana *sp. n.* Ceylon p. 1262, HAMPSON J. Bombay Soc. 21.

Chalcidoptera trogobasalis p. 321, *argyrophoralis* p. 322, *spp. n.*, S. Africa, *thermographa* *n. n.* for *rufilineatis* Hamps., HAMPSON Ann. Nat. Hist. 9.

Chalinitis viridalis *sp. n.* Arizona p. 35 pl. ii f. 8, BARNES & McDUNNOUGH Cont. Hist. Lepid. N. Amer. 1 No. 5.

Chilo araealis *sp. n.* Madras p. 1250 pl. G fig. 33, *simplex* larva described, HAMPSON J. Bombay Soc. 21.—*C. diletantellus* p. 104, *duomita* p. 105, *spp. n.*, Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Chloropaschia canities *sp. n.* Costa Rica, SCHAUS p. 166 Ann. Nat. Hist. 9.

Chrysauge aurantia *sp. n.* Brazil, JONES p. 440 Tr. ent. Soc. London 1912.

Cliniodes nomadalis *sp. n.* p. 104 Mexico, DYAR Proc. U.S. Nation. Mus. 42.

Clupeosoma lavinia *sp. n.* Costa Rica, SCHAUS p. 680 Ann. Nat. Hist. 9.

Conchylodes intricata p. 324, *gamma-phora*, *arcifera*. p. 325, *terminipuncta* p. 326, Centr. America, *stictiperalis* Brazil p. 327, *spp. n.*, HAMPSON Ann. Nat. Hist. 9

Crambus hungaricus *sp. n.* Hungary, SCHMIDT p. 31 Arch. zool. 1 1910.—*C. auronivellus* *sp. n.* Seychelles p. 22 pl. i f. 19, FRYER Tr. Linn. Soc. London 15.—*C. albiceps* p. 1250 pl. G f. 32, *endopolia* p. 1249 f. 30, *neurigrammalis* p. 1249 f. 31, *spp. n.*, Ceylon, HAMPSON J. Bombay Soc. 21.—*C. italellus* fig. p. 30, TURATI Anuar. Mus. Napoli 3 No. 18 1911.—*C. pyramidellus* Zucht, MITTEBERGER Ent. Zs. 25 p. 243.

Critonia ochracealis *sp. n.* Punjab p. 1251, HAMPSON J. Bombay Soc. 21.

Cryptoblabe flavizonalis, *scotochroalis* p. 1257 Ceylon, HAMPSON T.c.

Cryptoses chloepi, DYAR Proc. Ent. Soc. Washington 14 pp. 169–170.

Cynaeda bidentalis *sp. n.* Arizona p. 33 pl. iii ff. 2 & 5, BARNES & McDUNNOUGH Cont. Hist. Lepid. N. Amer. 1 No. 5.

Daulia argyrostrotalis *sp. n.*, Ceylon p. 1262, HAMPSON J. Bombay Soc. 21.

Decaturia *gen. n.*, *pectinalis* *sp. n.* Arizona, p. 41 pl. iii ff. 8 & 11, BARNES & McDUNNOUGH Cont. Nat. Hist. Lepid. N. Amer. 1 No. 5.

Desmia mesosticta p. 172, *dentipuncta*, S. America, *bifidalis* p. 173, *ufeodalis* p. 174, Mexico, *stenoleuca* Colombia, *melanopolis* Costa Rica, p. 242, *lacrimalis*, *geminipuncta*, S. America, *mortualis* Guatemala, p. 243, *stenizonalis* Costa Rica, *deploratis* Jamaica, p. 244, *ruptilinealis* Costa Rica, *tristigmalis* Ecuador, *tenuizona* Peru, p. 245, *spp. n.*, HAMPSON Ann. Nat. Hist. 9.—*D. cristinae*, *grandisalis*, p. 291, *flavalis*, p. 292, *spp. n.*, Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Deuterollyta francesca *sp. n.* Brazil, JONES p. 442 Tr. ent. Soc. London 1912.

- Diaphania nitidalis* p. 106 ff. 1-7 & 16, *hyalinata* p. 126 ff. 10-15 SMITH Agric. Exp. Sta. North Carolina West Raleigh Bull. 214.
- Diatraea epia, prosenes*, p. 165, California, spp. n., DYAR Rep. Laguna Mar Lab. 1.
- Dichocrocis xanthoplagalis* Nigeria p. 333, *nigricinctalis* Trobriand isld., *usticinctalis* Mashonaland, p. 334, *loxophora* Bali, *philippinensis* Manilla, *albilunalis* New Guinea, p. 335, spp. n., HAMPSON Ann. Nat. Hist. 9.—*D. macrostidza* sp. n. Burma p. 1264, HAMPSON J. Bombay Soc. 21.
- Dichogama colotha* sp. n. p. 103 Mexico, DYAR Proc. U.S. Nation. Mus. 42.—*D. obsolescens* sp. n. Grenada, HAMPSON p. 327 Ann. Nat. Hist. 9.
- Diplucrina* gen. n. for *Scoparia crataegella*, CHAPMAN p. 507 Tr. ent. Soc. London 1911.
- Diptychophora muscella* sp. n. Seychelles p. 23 pl. i f. 20, FRYER Tr. Linn. Soc. London 15.
- Endotricha flavofascialis* sp. n. Seychelles p. 24 pl. i f. 21, FRYER T.c.
- Entephira mioswari* pl. lxviii f. 10, *grisealis* f. 12, spp. n., New Guinea, KENRICK p. 550 P. zool. Soc. London 1912.—*E. leucinodialis* sp. n. Costa Rica, SCHAUUS p. 290 Ann. Nat. Hist. 9.—*E. subpictalis* p. 167, *sexpunctalis* p. 168, Sierra Leone, *geminipuncta* China, *staminialis* Guatemala, p. 169, *albivittalis* Natal p. 170, spp. n., HAMPSON Ann. Nat. Hist. 9.
- Ereta trichoneura* Panama p. 246, *scotialis* Mashonaland p. 247, spp. n., HAMPSON T.c
- Erpis-pacificalis* sp. n. Bonin Is., HAMPSON p. 165 T.c.
- Etiella zinckenella schisticolor*, HYSLOP U. S. Dept. Agric. Ent. Bull. 95 Pt. 6 pp. 89-104 ff. 28-40 pl. x.
- Eudoria* gen. n. for pt. of *Scoparia*, CHAPMAN p. 507 Tr. ent. Soc. London 1911.
- Eurypta flammalis* sp. n. Brazil, JONES p. 440 Tr. ent. Soc. London 1912.
- Euzophera strigalis* sp. n. Utah, BARNES & McDUNNOUGH p. 127 Canad. Ent. 44.
- Evergestis rubidalbalis* sp. n. Sicilia p. 49 tav. vi fig. 30, TURATI Nat. Sicil. 20.
- Filodes normalis* sp. n. Gold Coast, HAMPSON p. 323 Ann. Nat. Hist. 9.
- Galleria mellonella*, GLASER Ent. Zs. 26 pp. 91 95-96.
- Glyphodes magnificalis* pl. lxviii f. 17, *nigricincta* f. 16, *pseudocaesalis* f. 18, p. 552, N. Guinea, spp. n., *pfeifferae* var. f. 21, KENRICK P. zool. Soc. London 1912.—*G. costaricalis, juligalis*, p. 304, *nigricitialis, novicialis*, p. 305, spp. n., Costa Rica, SCHAUUS Ann. Nat. Hist. 9.—*G. caeruleiceps* New Guinea p. 562, *subterminalis, holophoenica*, p. 563, *purpurea*, S. America, *aurogrisealis* Costa Rica, *clavata* Guatemala, p. 564, *orthozonalis, hemicitralis*, S. America, *eurytornalis* Grenada, p. 565, *oeditornalis* Guatemala, *equicincta* Mexico, *euryzonalis*, p. 566, *interpositalis*, S. America, *albifascialis* Cuba, *decipiens*, Malacca, *chalcicraspis* New Guinea, p. 567, *hololeuca* Grand Cayman, *ocelliferalis* Nigeria, *triopis* New Guinea, p. 568, *phlebitis* Peru, *atrisquamalis* Arizona, p. 569, *diplocyma* Friendly islds., *argyritis* New Guinea, *irroratalis*, p. 570, *pyritalis*, Africa, *chlorophylalis* New Guinea, *prasinophila* Transvaal, *vernalis*, p. 571, *chlorochroalis*, Nigeria, *vagilinea* New Guinea, p. 572, *bocchorialis* Padang Rengas p. 573, spp. n., HAMPSON Ann. Nat. Hist. 10.—*G. schroederi* O.-Afr. p. 65, *costulalis* p. 66, *squamitibialis* p. 67, *triangularis, pusillalis*, p. 68, *deidoalis* p. 69, *bicoloralis, bipindalis*, p. 70, Kamerun, *scheffleri* p. 71, *ochripictalis*, O.-Afr., *loloalis*, p. 72, *zenkeralis, difficilalis*, p. 73, *expansialis* p. 74 W.-Afr., STRAND Arch. Naturges. 78 A.—*G. athysanota* p. 1269, *capriniodes* p. 1268, India etc., HAMPSON J. Bombay Soc. 21.—*G. infirmalis modialis* subsp. n. p. 747, DYAR Pomona Coll. J. Ent. 4.
- Goniorhynchus lasyguialis* Paraguay p. 1, *octosema* Singapore, *marginalis* Peru, p. 2, spp. n., HAMPSON Ann. Nat. Hist. 10.
- Hellula undalis*, CHITTENDEN & MARSH U. S. Dept. Agric. Ent. Bull. 109 Pt. 3 pp. 23-45 ff. 4-7.
- Heterographis argentescens* sp. n. Ceylon p. 1251 pl. G f. 35, HAMPSON J. Bombay Soc. 21.

Homoeosoma electellum, swarm,
COCKERELL Ent. News 23 p. 472.

Homophysa flavidalis Paraguay, *fur-*
valis, p. 156, *dichordalis*, Mexico, *dis-*
tictalis Guiana, p. 157, *albifascialis*
Peru p. 158, spp. n., HAMPSON Ann. Nat.
Hist. 9.

Hyalea africalis sp. n. Nigeria,
HAMPSON p. 249 T.c.

Hyperectis apicalis sp. n. Ecuador,
HAMPSON p. 246 T.c.

Isolopha basilata sp. n. Costa Rica,
SCHAUS p. 670 Ann. Nat. Hist. 9.

Jocara chlorisalis, *nana*, p. 661,
nigripuncta, *noctuina*, p. 662, *obscuralis*,
subcurvalis, p. 663, *subfusca*, *tenebrosa*,
p. 664, *terrenalis* p. 665, *translinea* p.
666, spp. n., Costa Rica, SCHAUS
T.c.

Lepidogma chlorophilalis p. 1257 pl.
G f. 39, *melanolopha* p. 1258, spp. n.,
Ceylon, HAMPSON J. Bombay Soc.
21.

Leucinodes xylopastalis sp. n. Costa
Rica, SCHAUS p. 306 Ann. Nat. Hist. 9.

Leucochroma jamaicensis Jamaica
p. 249, *colombensis*, *peruvensis*, p. 250,
trinitensis p. 251, S. America, spp. n.,
HAMPSON Ann. Nat. Hist. 9.

Lipocosma nigrisquamalis sp. n.
Panama, HAMPSON p. 160 T.c.—*L.*
plagalis sp. n. Costa Rica, SCHAUS p.
290 Ann. Nat. Hist. 9.—*L. inter-*
medialis sp. n. Texas p. 32 pl. iii f. 3,
BARNES & McDUNNOUGH Cont. Hist.
Lepid. N. Amer. 1 No. 5.

Locastra viriditincta sp. n. Costa Rica,
SCHAUS p. 668 Ann. Nat. Hist. 9.

Loxostege autocratoralis sp. n. p. 747,
Mexico, DYAR Pomoma Coll. J. Ent. 4.
—*L. sticticalis*, PADDOCK J. Econ. Ent.
5 pp. 436–443 pl. xiii.

Lygropia murinalis sp. n. Costa Rica,
SCHAUS p. 303 Ann. Nat. Hist. 9.—
L. phaeocraspi Colombia, *pogonodes*
Nigeria, p. 19, *heliosalis*, *flavivialis*,
chrysozonalis, p. 20, *phaeoneuralis*,
melanoperalis, p. 557, S. America,
straminea, *tetraspilalis*, *flavinotalis*, p.
558, *hyalostictalis*, Africa, *epipaschiodes*,
p. 559, *scopariodes*, New Guinea,
hypoleucalis Guiana, *bicincta* Singapore,
p. 560, *ochrotalis* Panama, *anaemicalis*
Gazaland, p. 561, *leucocephalis* Borneo,
obscuralis Venezuela, p. 562, spp. n.

HAMPSON Ann. Nat. Hist. 10.—*L.*
subcostalis sp. n. p. 104 Mexico, DYAR
Proc. U. S. Nation. Mus. 42.

Macalla aruensis pl. lxxviii f. 3,
olivalis f. 1, *mioswari* f. 5, p. 547, spp.
n., New Guinea, KENRICK P. zool. Soc.
London 1912.—*M. claphealis*, *mar-*
ginata, *nebulosa*, p. 667, *selecta* p. 668,
spp. n. Costa Rica, SCHAUS Ann. Nat.
Hist. 9.—*M. brachyscopalis* p. 1258,
eumictalis p. 1259 pl. G f. 40, spp. n.
Ceylon, HAMPSON J. Bombay Soc. 21,
M. sinualis, *regalis*, spp. n., Brazil,
JONES p. 443 Tr. ent. Soc. London
1912.

Marasmia araeatis Seychelles p. 247,
laticostalis Java p. 208, spp. n., HAMP-
SON Ann. Nat. Hist. 9.

Margarosticha plumbealis sp. n. New
Guinea p. 549 pl. lxxviii f. 9, KENRICK
P. zool. Soc. London 1912.

Massepha syngamiodes, *cuprescens*, S.
America, p. 166, *longipennis* Came-
roons p. 167, HAMPSON Ann. Nat. Hist.
9.—*M. rufescens* sp. n. Madras p. 1263
pl. G p. 44, HAMPSON J. Bombay Soc.
21.

Melissoblaptis monochroa sp. n. Cey-
lon p. 1249 pl. G f. 29, HAMPSON T.c.

Microglossa convatalalis sp. n. Kei,
KLUNDER VAN GIJEN Tijdschr. Ent.
55 p. 352.

Mimudea trilampas p. 175, *brunnealis*,
hyalopunctalis, p. 176, spp. n., Colombia,
DOGNIN Mem. Soc. ent. Belgique 19.

Myelois atrimaculalis sp. n. Ceylon
p. 1255, HAMPSON J. Bombay Soc.
21.,

Nacoleia rectistrialis Key islds. p. 433,
ptyonota Peru, *lophotalis* Singapore,
p. 434, *xanthota* New Guinea, *lopho-*
phoralis Japan, p. 435, *subbalis*
China, *foviseralis* Panama, *oxiperalis*
Jamaica, p. 436, *excurvalis* Guatemala,
acyperalis, p. 437, *trichogyialis*, W.
Africa, *asaphilais* Louisiade Arch.,
p. 438, *epipaschialis*, *pervulgalis*, p. 439,
W. Africa, *lenticurvalis*, *nitida*, S.
America, *perstygialis* China, p. 440,
fusalis S. Africa, *dizona* New Guinea,
p. 441, *hemiombra* Kauai, *scotaea*
Hawaii, p. 442, *selonalis* Borneo, *palli-*
dinotalis Japan, p. 443, *leucographella*
Sierra Leone, *atrirenalis* Paraguay,
p. 444, *attenualis* E. Africa, *stenialis*
Peru, p. 625, *ommatalis* E. Africa,

chromalis Bali, p. 626, *retractalis* Mexico, *terminalis* Jamaica p. 627, *leucophaea*, *indentata*, *stramineata* p. 628, *inflexalis*, *apertistigma*, p. 629, Centr. America, *euryphealis* New Guinea, *disemalis* Borneo, p. 630, *melaprocta* Ron isld., p. 631, *phaecopasta* Solomon islds., *schistisenalis* Panama, p. 632, spp. n., HAMPSON Ann. Nat. Hist. 9.—*N. consota* Madras, *fusci-fusalis* Ceylon and Woodlark I., *leucosemalis* Ceylon, *megaspilalis* Madras and Australia, *schrizonalis* Himalaya, *pachytornalis* Madras, spp. n., HAMPSON pp. 1265–1267 J. Bombay Soc. 21.—*N. caeruleonigra* p. 301, *esperanzalis*, *zethealis*, p. 302, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Nephoteryx acrobasella p. 1253, *ferrestincta* p. 1254, *nephelotalis* *rhodobasalis*, pl. G f. 36, p. 1253, spp. n., Ceylon, HAMPSON J. Bombay Soc. 21.

Neurophyseta camptogrammalis Guatemala p. 149, *normalis* St. Vincent p. 150, *arcigrammalis*, *diplogrammalis*, p. 151, Brazil, *albinalis* Costa Rica, *argyroleuca*, p. 152, *albirufa*, Peru, *perrivalis* Colombia, p. 153, *auralis* Brazil, *arcuatalis* Guatemala p. 154, *rufalis* Jamaica, *fulvalis* Brazil, p. 155, spp. n., HAMPSON Ann. Nat. Hist. 9.—*N. turrialbalis* sp. n. Costa Rica, SCHAUS p. 289 Ann. Nat. Hist. 9.

Noctuella puertalis sp. n. p. 200 California, BARNES & McDUNNOUGH Ent. News 23.

Noorda arfakensis sp. n. New Guinea p. 553 pl. lxviii f. 14, KENRICK P. zool. Soc. London 1912.—*N. margaronalis* sp. n. Punjab p. 1269, HAMPSON J. Bombay Soc. 21.

Nosophora bisexualis sp. n. Solomon islds., HAMPSON p. 321 Ann. Nat. Hist. 9.—*N. mesosticta* sp. n. Assam p. 1263, HAMPSON J. Bombay Soc. 21.

Nymphula flavialis sp. n. Costa Rica, SCHAUS p. 677 Ann. Nat. Hist. 9.—*N. grisealis* sp. n. Ceylon p. 1261, HAMPSON J. Bombay Soc. 21.

Oligocentris uniformalis sp. n. Sula Mangoli, HAMPSON p. 333 Ann. Nat. Hist. 9.

Oligostigma mollitalis, *profusalis*, spp. n., Costa Rica, SCHAUS p. 678 Ann. Nat. Hist. 9.—*O. andreusialis* pl. G

fig. 43, *chrysozonalis* spp. n. Madras, p. 1261, HAMPSON J. Bombay Soc. 21.

Omphisa variegata sp. n. New Guinea, p. 553 pl. lxviii f. 19, KENRICK P. zool. Soc. London 1912.—*O. brunnettalis* sp. n. p. 101 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Orocrambus subitis sp. n. p. 116 N. Zealand, PHILPOTT Trans. N. Zeal. Inst. 44.—*O. pervius* sp. n. p. 118 N. Zealand, MEYRICK Trans. N. Zeal. Inst. 44.

Pagyda fumosa sp. n. New Guinea, p. 551 pl. lxviii f. 13, KENRICK P. zool. Soc. London 1912.

Parthenodes incultalis sp. n. Costa Rica, SCHAUS p. 679 Ann. Nat. Hist. 9.

Perisyntrocha suffusa sp. n. New Guinea p. 548 pl. lxviii f. 4, KENRICK P. zool. Soc. London 1912.

Phlyctaenodes sticticalis, Biologie, Phaenologie, Schaden, Entwicklung (Russ.), VASILJEV Věstn. sacharn. promyšl. 12 pp. 859–861 895–897; 13 pp. 173–177 244–249 mit 13 f.

Phryganodes albiciliialis, *argentiligualis*, p. 298, *clementalis*, *evanidalis*, *gazalis*, *latiapicalis*, p. 299, *obliquialis*, *patricialis*, p. 300, *seminitidalis*, *rufalis*, p. 301, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.—*P. tridentalis*, *rotundalis*, S. America, p. 328, *lasio-cnemis* New Guinea, *leucogaster* Borneo, p. 329, *fascicilia* New Guinea, *samealis* Guiana, p. 330, *tetrastictalis* Gold Coast, *metalobalis* Guiana, *truncatalis* Panama, p. 331, *selenophora*, *glyphodoides*, Colombia, *cupriflavalis*, p. 332, *atrisignalis*, Singapore, *tridentalis* Gold Coast, p. 333, spp. n., HAMPSON Ann. Nat. Hist. 9.—*P. stygialis* sp. n. Ceylon p. 1264, HAMPSON J. Bombay Soc. 21.—*P. leucophasma*, *anchoritalis*, *mostella*, p. 102, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Phycita pectinicornella sp. n. Seychelles, FRYER p. 23 Tr. Linn. Soc. London 15.—*P. umbratalis* Madras, *melanosticta* Ceylon, spp. n., p. 1255, HAMPSON J. Bombay Soc. 21.

Pileocera inconspicua sp. n. Costa Rica, SCHAUS p. 680 Ann. Nat. Hist. 9.

Pileosoma holophaealis sp. n. Singapore, HAMPSON p. 2 Ann. Nat. Hist. 10.

Pilocrosis angulifera sp. n. New Guinea p. 553 pl. lxxviii f. 15, KENRICK P. zool. Soc. London 1912.—*P. cuprealis* Nigeria, *eurypalpalis* Costa Rica, p. 259, *goniopalpia* Colombia p. 260, *fumidalis* Borneo, *dithyralis* Guiana, *monothyrallis* Panama, p. 261, *femorallis* Guiana, *hypoleucalis* Mexico, *melangnatha* New Guinea, p. 262, *plicatalis* Guiana, *pterygodia* Gold Coast, p. 263 *reniferallis* Jamaica, *xanthozonalis* Guiana, *melastictalis*, p. 264, *glauccitalis*, S. Africa, *leucochasma* Peru, p. 265 *rufescens* Bahamas, *holoxantha* Jamaica, *dichocrosialis* Zambezi, p. 266, *lactealis* Brazil p. 267, spp. n., HAMPSON Ann. Nat. Hist. 9.—*P. apellalis*, *mapetalis*, *modestalis*, *musalis*, p. 295, *sixolalis*, *tortuosalis*, p. 296, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.—*P. caudatella* sp. n. p. 103 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Pionea contentalis, *montanalis*, *poasalis*, spp. n., Costa Rica, SCHAUS p. 310 Ann. Nat. Hist. 9.—*P. adiposalis* sp. n. Colombia, *albiflua* var. n. *clarescens*, DOGNIN p. 175 Mem. Soc. ent. Belgique 19.

Pococera albimedium p. 656, *berocella irrorata*, *crinita*, p. 657, *elegans* p. 658, *marmorata*, *notabilis*, *olivescens*, p. 659, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Polygrammodes hirtaloidalis, *modestalis*, p. 101, spp. n., Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Prasinoxena metaleuca sp. n. Ceylon p. 1249 pl. G p. 28, HAMPSON J. Bombay Soc. 21.

Prorophora dialeuca sp. n. Ceylon p. 1252 pl. G f. 34, HAMPSON J. Bombay Soc. 21

Proteinia cartatalis sp. n. Java, KLUNDER VAN GIJEN Tijdschr. Ent. 55 p. 351.

Pyrausta flammealis sp. n. New Guinea p. 554 pl. lxxviii f. 20, KENRICK P. Zool. Soc. London 1912.—*P. entephrialis*, *trisalis*, spp. n., Costa Rica, SCHAUS p. 311 Ann. Nat. Hist. 9.—*P. metasialis* Himalayas p. 1269, *microdontalis* Ceylon p. 1270, *monosema* Punjab p. 1270, spp. n., HAMPSON J. Bombay Soc. 21.—*P. dilecticolor* sp. n. p. 103 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Rhectosomia compositalis sp. n. Costa Rica, SCHAUS p. 309 Ann. Nat. Hist. 9.

Rhimphalea anoxantha sp. n. New Guinea, HAMPSON p. 248 Ann. Nat. Hist. 9.

Rhodoneura tibiale p. 20 pl. i f. 16, *apicale* f. 17, Seychelles, *aldabrana* f. 18, spp. n., p. 21, FBYER Tr. Linn. Soc. London 15.

Rhynchetria gen. n. *Pyraustinarum*, *damasales* sp. n. Java, KLUNDER VAN GIJEN Tijdschr. Ent. 55 p. 353.

Saluria hemiphaealis sp. n. Ceylon p. 1251, HAMPSON J. Bombay Soc. 21.

Samea simitalis, *choristalis*, S. America, p. 255, *mictalis* p. 256, *alophalis* p. 257, Mexico, spp. n., HAMPSON Ann. Nat. Hist. 9.

Sameodes fortunata sp. n. Costa Rica, SCHAUS p. 306 Ann. Nat. Hist. 9.

Sceliodes grisealis sp. n. New Guinea p. 550 pl. lxxviii f. 7, KENRICK P. Zool. Soc. London 1912.

Schoenobius pallulellus sp. n. p. 200 California, BARNES & McDUNNOUGH Ent. News 23.

Scoparia clavata sp. n. p. 116 N. Zealand, PHILPOTT Trans. N. Zeal. Inst. 44.—*S. locularis* p. 118, *agana* p. 119, spp. n., N. Zealand, MEYRICK Trans. N. Zeal. Inst. 44.—*S. rigidalis* pl. iii f. 7, *spaldingalis*, p. 34 ff. 1 & 4, *alialis* p. 35 f. 6, spp. n., U.S., BARNES & McDUNNOUGH Cont. Hist. Lepid. N. Amer. 1 No. 5.

Scoparia; revision of british, synonymy, generic divisions, ♂ characters, CHAPMAN pp. 501–518 pls. xxxv–xliv Tr. ent. Soc. London 1911.

Scoparona gen. n. for *Scoparia centuriella*, CHAPMAN p. 507 Tr. ent. Soc. London 1911.

Scybalista rufescens Panama, *leucotactalis* Brazil, p. 158, spp. n., HAMPSON Ann. Nat. Hist. 9.—*S. sanctalis* sp. n. Costa Rica, SCHAUS p. 289 Ann. Nat. Hist. 9.

Sematoneura denticosella sp. n. p. 105 Mexico, DYAR Proc. U. S. Nation. Mus. 42.

Spatulipalpia albicostalis, *albistrialis* pl. G fig. 38, p. 1256, spp. n., Ceylon, HAMPSON J. Bombay Soc. 21.

Spilomela minoralis sp. n. Guiana, HAMPSON p. 322 Ann. Nat. Hist. 9.

Stemmatophora aedalis sp. n. Madras p. 1260, HAMPSON J. Bombay Soc. 21.

Stenia carillalis p. 680, *pacificalis*, *poasalis*, p. 681, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.

Stericta rurealis sp. n. New Guinea p. 548 pl. lxxviii f. 2, KENRICK P. Zool. Soc. London 1912.—*S. apicalis*, *umbrosalis*, spp. n., Costa Rica, SCHAUS p. 669 Ann. Nat. Hist. 9.—*S. basalis* sp. n. Brazil, JONES p. 441 Tr. ent. Soc. London 1912.—*S. albifasciata*, DYAR Proc. Ent. Soc. Washington 14 p. 66.

Sufetula obliquistrialis Rossel Isld. p. 161, *nigrescens* Sierra Leone p. 162, *bilinealis*, *polystrialis*, New Guinea, *pygmaea* Mexico, p. 163, *cyanolepis* Celebes p. 164, *trichophysetis* Gold Coast p. 165, spp. n., HAMPSON Ann. Nat. Hist. 9.

Sylepta dinawa sp. n. New Guinea p. 551 pl. lxxxviii f. 11, KENRICK P. Zool. Soc. London 1912.—*S. monoleuca* p. 3, *albirivalis*, New Guinea, *microspilalis* Singapore, p. 4, *parvipuncta* Sierra Leone, *leucographalis* Bali, p. 5, *tumidipes* W. Africa, *microdotalis* Venezuela, p. 6, *leucinalis* Peru p. 7, *desmialis*, *melanomma*, Nigeria, p. 8, *xylocraspis* Natal, *holophaealis* Paraguay, *semilugens* Cameroons, p. 9, *acridentalis* New Guinea, *retractalis* Gold Coast, p. 10, *heliocroa*, *tetrathyalis*, New Guinea, *attenualis* E. Africa, p. 11, *glaucalis* Venezuela, *glaucoxia*, *diacymalis*, Mexico, p. 12, *phaeophlebalis* Peru, *atrisquamalis* E. Africa, *brunnescens* Mexico, p. 13, *prorogata* Surinam p. 14, *polycymalis* Africa, *strigicincta* Ecuador, p. 15, *stictigramma* Bahamas, *orthogramma* Cuba, p. 16, *planestava* New Guinea, *holochralis* E. Africa, *methyalinalis* Guiana, p. 17, *achromalis* W. Africa, *disticta* New Guinea, p. 18, spp. n., HAMPSON Ann. Nat. Hist. 10.—*S. dialis* p. 302, *excelsalis*, *falsalis*, p. 303, spp. n., Costa Rica, SCHAUS Ann. Nat. Hist. 9.—*S. agraphalis* Bhutan, *microsema* Ceylon, *pseudovialis*, E. Himalayas, Assam, spp. n., HAMPSON pp. 1267 & 1268 J. Bombay Soc. 21.

Symphonia synophanoses sp. n. Java, KLUNDER VAN GIJEN Tijdschr. Ent. 55 p. 350.

Symphysa discalis Jamaica p. 159, *rufifusalis* Panama p. 160, spp. n., HAMPSON Ann. Nat. Hist. 9.

Syngamia endolasea St. Vincent, *plicata*, p. 251, *ecphaea* p. 252, *inflamatialis* S. America, *micromphalis* Mexico, p. 253, *aurantiaca*, *albiceps*, Singapore, *anaemicalis* Paraguay, p. 254, spp. n., HAMPSON T.c.—*S. nebulosalis* sp. n. Costa Rica, SCHAUS p. 292 Ann. Nat. Hist. 9.—*S. monostigmatalis*, *fulviferalis*, spp. n., Colombia, DOGNIN p. 174 Mem. Soc. ent. Belgique 19.

Syngropia gen. n. *Pyraustinae*, *stictica* sp. n. Guatemala, HAMPSON p. 18 Ann. Nat. Hist. 10.

Tabidia nacoiealis sp. n. Penang, HAMPSON p. 171 Ann. Nat. Hist. 9.

Thliptoceras neotropicalis sp. n. Costa Rica, SCHAUS p. 307 Ann. Nat. Hist. 9.

Thaumatopsis fieldella sp. n. p. 221 California, BARNES & McDUNNOUGH Ent. News 23.—*T. lagunella* sp. n. p. 164 California, DYAR Rep. Laguna Mar. Lab. 1.

Thermopteryx gen. n., *rubrifusa* sp. n. Ceylon, pl. G f. 37 p. 1254, HAMPSON J. Bombay Soc. 21.

Tosale lugubris sp. n. Brazil, JONES p. 441 Tr. ent. Soc. London 1912.

Trichophysetis umbrifusalis sp. n. Madras p. 1259 pl. G fig. 41, HAMPSON J. Bombay Soc. 21.

Trithyris pretiosalis sp. n. Costa Rica, SCHAUS p. 292 Ann. Nat. Hist. 9.

Tyspanodes albidalis sp. n. Solomon islds., HAMPSON p. 323 Ann. Nat. Hist. 9.

Udea gigantalis sp. n. Colombia, *fusculalis* var. n. *impunctalis*, DOGNIN p. 177 Mem. Soc. ent. Belgique 19.

Ulopeza phaeothoracica, *flaviscep-salis*, W. Africa, *junctilinealis* Bali, p. 267, *nigricostata* Nigeria, *sterictodes* New Guinea, p. 268, *denticulalis* S. Africa p. 269, spp. n., HAMPSON Ann. Nat. Hist. 9.—*U. syleptalis* sp. n. Costa Rica, SCHAUS p. 296 Ann. Nat. Hist. 9.

Ulotricha egregialis, ersten Stände, FÜGE Ent. Zs. Frankfurt 26 p. 79.

Voliba gigantea sp. n. New Guinea, HAMPSON p. 160 Ann. Nat. Hist. 9.

Witlesia gen. n. for *Scoparia pallida*,
CHAPMAN p. 507 Tr. ent. Soc. London
1911.

Zinckenia lophoceralis sp. n. New
Guinea, HAMPSON p. 170 Ann. Nat. Hist.
9.

PTEROPHORIDAE, ALUCITIDAE,
ORNEODIDAE.

Pterophoridae; Unterverteilung,
KLUNDER VAN GIJEN Tijdschr. Ent.
55 pp. 49-57.

Alucita fitzi sp. n. Herzegowina,
REBEL Verh. z.-b. Ges. Wien 62 pp.
(104)-(108).

Deuterocopus alopecodes p. 105, *viti-*
cola p. 104, spp. n., India and Ceylon,
MEYRICK J. Bombay Soc. 21.

Macrotinactis p. 52 gen. n., *infumata*
p. 53 sp. n. S. Africa, MEYRICK
Ann. S. Afric. Mus. 10.

Marasmarcha phlyctaenias sp. n.
India p. 106, MEYRICK J. Bombay
Soc. 21.

Orneodes lyristis Assam p. 107,
panduris S. India p. 106, spp. n., MEY-
rick J. Bombay Soc. 21.

Platyptilia patriarcha p. 51 sp. n.
S. Africa, MEYRICK Ann. S. Afric.
Mus. 10.—*P. rhododactyla*, Lebensweise
in Turkestan, Schaden (Russ.), RADE-
KIJ Turkest. selisk. choz. 7 pp. 199-201
ff. 1-2.

Pterophorus sordidatus p. 52 sp. n.
S. Africa, MEYRICK Ann. S. Afric.
Mus. 10.

Stenoptilia nivea sp. n. Finland,
SAHLBERG Medd. Soc. Fauna
Fenn. 38 p. 209.—*S. zophodactyla*
Mœurs, hibernation, premiers états;
GOURY Feuille jeunes natural. 42
pp. 174-177.—*S. vicens* for *Oxyptilus*
vicens, MEYRICK Trans. N. Zeal. Inst.
44 p. 119.

Trichoptilus cryphias p. 51 sp. n.
S. Africa, MEYRICK Ann. S. Afric. Mus.
10.

TORTRICIDAE.

MEYRICK Tortricidae. Lepidopterorum
Catalogus. Pars 10, 86 pp.

MEYRICK proposes many new names
to replace some proposed recently
(Tr. Amer. ent. Soc. xxxiii 1907) by
Kearfott Ent. Mag. 48 pp. 32-36.—

Comment on Meyrick's alterations,
WALSINGHAM pp. 87-89 Ent. Mag.
48.—Corrected names, MEYRICK again,
T.c. pp. 111 & 112.—Meyrick's names
rejected, BUSCK pp. 225-227 Ent. Mag.
48; MEYRICK again, T.c. p. 253.—
Nonsense names, WHEELER p. 66 Ent.
Rec. 24, CHAPMAN T.c. p. 102.

Notizen über einige Kleinschmetter-
linge, DISQUE Ent. Zs. Frankfurt a.
M. 26 p. 75.

Acroclita Led., supersedes *Rhopobota*
Led. p. 855, *belinda* p. 858, *cheradota*
p. 856, *chlorissa* p. 857, *clivosa* p. 855,
corinthia, *esmeralda*, p. 858, *grypodes*
p. 856, *multiplex* p. 860, *neaera* p. 859,
scleropa, *symbolias*, p. 857, *thysanota*
p. 860, spp. n., India and Ceylon;
naevana Assam, S. India and Ceylon
p. 857, MEYRICK J. Bombay Soc. 21.

Adoxophyes parastropha Assam, *fla-*
grans Burma, spp. n., MEYRICK p. 3
Exot. Microlep. 1.

Ancylis tumida Ceylon p. 30, *aro-*
matias Madras, *hylaea* Assam, p. 31,
glycyphaga, *lutescens*, p. 32, Bengal,
sculpta p. 33 Korea, spp. n., MEYRICK
T.c.—*A. ancorata* p. 862, *carpalima*
Ceylon and Australia p. 861, *rostrifera*
p. 862, *scatebrosa* p. 861, spp. n. India
and Ceylon, MEYRICK J. Bombay Soc.
21.

Archips argyrospila p. 279, *rosaceana*
p. 289, *cerasivorana* p. 290, figs.,
HERRICK Agric. Exp. Sta. New York
Bull. 311.

Argyroploce sediliata p. 689, *lupata*,
vermiculata, p. 690, *caveata*, *electricus*,
p. 691, *logica* p. 692, spp. n., S. America,
MEYRICK Tr. ent. Soc. London 1911.—
A. archimedi sp. n. China, MEYRICK
p. 63 Exot. Microlep. 1.—*A. anemodes*
p. 873, *antaea*, *centritis*, p. 872, *com-*
psitis p. 870, *iophaea*, *microplaca*,
p. 873, *pyrrhocrossa* p. 874, *sandycota* p.
873, *scolopendrius*, *scorpiastis*, p. 871,
spp. n., India and Ceylon, MEYRICK
J. Bombay Soc. 21.

Astrophora crustata sp. n. Assam,
MEYRICK p. 9 Exot. Microlep. 1.

Atteria chrysanthema Colombia, *flabel-*
lata Ecuador, spp. n., MEYRICK p. 676
Tr. ent. Soc. London 1911.

Bactra clarescens sp. n. Guiana,
MEYRICK p. 689 Tr. ent. Soc. London
1911.

Balioxena gen. n. p. 12, *iospila* sp. n. Madagascar p. 13, MEYRICK Exot. Microlep. 1.

Cacoecia geographica sp. n. Venezuela, MEYRICK p. 678 Tr. ent. Soc. London 1911.—*C. leucocymba* Madagascar, *machlopis* Assam, p. 4, *salaconis* Philippines p. 5, spp. n., MEYRICK Exot. Microlep. 1.

Callibryastis gen. n. p. 13, *pachnota* sp. n. Assam p. 14, MEYRICK T.c.

Capua aluminias p. 674, *xylophaea*, *chrysostoma*, p. 675, spp. n., S. America, MEYRICK Tr. ent. Soc. London 1911.—*C. fabrilis* Philippines p. 1, *cornigera* Madras p. 2, spp. n., MEYRICK Exot. Microlep. 1.—*C. cassia* sp. n. p. 183 Hawaiian Is., SWEZEY Proc. Hawaiian Ent. Soc. 2.

Carpocapsa pomonella, life history, HAMMAR U. S. Dept. Agric. Ent. Bull. 115 Pt. 1 pp. i-vi 1-36 pls. i-iii ff. 1-22.

Carposina maxima sp. n. Colombia, MEYRICK p. 673 Tr. ent. Soc. London 1911.—*C. siturga* p. 53 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.—*C. morbida* sp. n. p. 120 N. Zealand, MEYRICK Trans. N. Zeal. Inst. 44.

Catamacta scrutatrix Natal, *provocata* Assam, p. 1, spp. n., MEYRICK Exot. Microlep. 1.

Cerace loxodes sp. n. Tenasserim, MEYRICK p. 19 T.c.

Chrysoxena gen. n. for *auriferana* Busck, MEYRICK p. 685 Tr. ent. Soc. London 1911.

Cnephasia aenigmatica, *hyacinthina*, p. 682, *citroleuca*, *hydrogramma*, p. 683, *iantha*, *ranunculata*, p. 684, *clisias*, *tenontias*, p. 685, spp. n., S. America, MEYRICK T.c.—*C. incepta*, *olearis*, p. 10, *temulenta* Transvaal, *corusca* Guiana, p. 11, spp. n., MEYRICK Exot. Microlep. 1.—*C. aporema* sp. n. San José, DOGGIN p. 49 Hét. nouv. 6.

Conchylis, Literaturbericht, DEWITZ Geisenheim Ber. Lehranst. Obstbau, 1911 1912 pp. 218-277.

Crusimetra gen. n., *verecunda* sp. n. Ceylon, p. 855, MEYRICK J. Bombay Soc. 21.

Ctenopseustis turida sp. n. Colombia, MEYRICK p. 681 Tr. ent. Soc. London 1911.

Eboda haruspex Ceylon, *facilis* Assam, spp. n., MEYRICK p. 15 Exot. Microlep.

1.—*Eboda obstinata*, larva, MEYRICK p. 20 T.c.

Enoditis gen. n. type *praecana* Kenn., MEYRICK p. 2 T.c.

Epiblema joenella Varietäten, UFFELN Zs. wiss. Insektenbiol. 8 pp. 133-137.—*E. nisella* und Varietäten, SCHOPFER D. ent. Zs. Iris 26 pp. 204-207 Taf.

Epichorista chloradelpa, *tortuosa*, p. 8, *perversa*, S. Africa, *sicca* Madagascar, *ingenua* Sikkim, p. 9, spp. n., MEYRICK Exot. Microlep. 1.

Eucosma leucodesma sp. n. Argentina, MEYRICK p. 688 Tr. ent. Soc. London 1911.—*E. stereoma* Bengal p. 33, *directa* Asia minor p. 34, spp. n., MEYRICK Exot. Microlep. 1.—*E. galactitis* p. 55, *siccescens* p. 54, spp. n., S. Africa, MEYRICK Ann. S. Afric. Mus. 10.—*E. calligrapha* p. 865, *celerata* p. 863, *cremnitis* p. 864, *cyanopis* p. 866, *lasiura* p. 868, *legitima* p. 865, *litigiosa*, *ludicra*, p. 867, *melanoneura* p. 866, *numellata* p. 868, *semicurva* p. 864, *solidata* p. 856, *spicea* p. 867, spp. n., India, Ceylon and Burma, MEYRICK J. Bombay Soc. 21.—*E. querula* sp. n. p. 125 New Zealand and Queensland, MEYRICK Trans. N. Zeal. Inst. 44.

Eulasia smaragdites sp. n. Argentina, MEYRICK p. 11 Exot. Microlep. 1.

Eulia craterosema p. 678, *zelotypa* p. 679, *sagmatica*, *tholeraula*, p. 680, *isodelta*, *conchitis*, p. 681, spp. n., S. America, MEYRICK Tr. ent. Soc. London 1911.—*E. terasana* sp. n. Kei, KLUNDER VAN GIJEN Tijdschr. Ent. 55 p. 353.

Eusanthis scardiosana sp. n. Kei, KLUNDER VAN GIJEN p. 354 T.c.

Euxanthis ramessana sp. n. Aegypt, REBEL p. 85 D. ent. Zs. Iris 26.

Grapholitha oxytropidis sp. n. Deutschl., MARTIN p. 95 D. ent. Zs. 26.—*G. planifrontana* sp. n. Aegypt, REBEL p. 85 D. ent. Zs. Iris 26.—*G. funebrana*, Verwandlung, Lebensweise, Schaden (Russ.), RADECKIJ Turkest. selisk. choz. 7. pp 681-687 ff. 1-2.

Gymnandrosoma gen. n., DYAR p. 60 Proc. ent. Soc. Washington 6 1904 [recorded erroneously in 1904 as *Gynandrosoma*, which is to be deleted].

Gypsonoma anthracites sp. n. Ceylon p. 863, MEYRICK J. Bombay Soc. 21.

Harmologa tritochlora sp. n. p. 120 N. Zealand, MEYRICK Trans. N. Zeal. Inst. 44.

Hermenias gen. n. type *epidola* p. 852, *implexa*, *pachnitis*, p. 852, *palmicola* p. 853, spp. n., Ceylon, MEYRICK J. Bombay Soc. 21.

Herpystis pallidula sp. n. S. India p. 862, MEYRICK T.c.

Homona socialis sp. n. Assam, MEYRICK p. 3 Exot. Microlep. 1.

Laspeyresia leucostoma Ceylon, S. India and Assam, p. 876, *optica* p. 875, *primigena* p. 877, *prolopha* p. 875, *pulverula* p. 876, *turifera* Assam, spp. n., MEYRICK J. Bombay Soc. 21.—*L. phalacris* sp. n. Asia minor, MEYRICK p. 64 Exot. Microlep. 1.

Lobesia genialis sp. n. Ceylon p. 869, MEYRICK J. Bombay Soc. 21.

Megalodoris gen. n. for part of *Cerace*, *electrina* sp. n. Philippines, MEYRICK p. 5 Exot. Microlep. 1.

Meritastis voluta sp. n. Colombia, MEYRICK p. 677 Tr. ent. Soc. London 1911.

Olethreutes hemeropsis sp. n. Colombia, DOGNIN p. 49 Hét. nouv. 6.—*O. spurra* ab. n. *rebeliana*, MITTERBERGER p. 19 Ent. Rdsch. 29.—*O. rubipunctana*, life history p. 101, HYSLOP Proc. Ent. Soc. Washington 14.—*Olethreutes penthinana*, Zucht, MITTERBERGER Lotos 60 p. 61.—*O. spuriana*, Ab., MITTERBERGER Soc. entomol. 27 p. 19.

Pammene homotorna Assam, *peristictes* Ceylon, *theristis* Ceylon and Himalayas, spp. n., p. 874, MEYRICK J. Bombay Soc. 21.

Paraptila gen. n. near *Cnephasia*, *argocosma* sp. n. Colombia, MEYRICK p. 677 Tr. ent. Soc. London 1911.

Peronea viridescens, *purpurascens*, p. 686, *trochilodes*, *marmarodes*, p. 687, *limosa* p. 688, spp. n., S. America, MEYRICK T.c.—*P. erioptila* Ceylon, *amethystas*, *enitescens*, p. 16, *dryadarcha*, *placata*, Assam, *semitexta* Sikkim, p. 17, *napaea* Quetta, *nectaritis* Madras, *hapalactis*, p. 18, *petulans* p. 19, Assam, spp. n., MEYRICK Exot. Microlep. 1.

Peteliacma gen. n., *torrescens* sp. n. Madagascar, MEYRICK p. 12 T.c.

Phalonia vorticata sp. n. Argentina, MEYRICK p. 673 Tr. ent. Soc. London 1911.—*P. capnospila* sp. n. Asia minor, MEYRICK p. 20 Exot. Microlep. 1.

Pharmacis chalcantha sp. n. Asia minor, MEYRICK p. 20 T.c.

Phtheochroa fusifera sp. n. Brazil, MEYRICK p. 674 Tr. ent. Soc. London 1911.

Planostocha gen. n. type *cumulata* Meyr., MEYRICK p. 13 Exot. Microlep. 1.

Polychrosis glebifera sp. n. Asia minor, MEYRICK p. 34 Exot. Microlep. 1.—*P. cellifera* sp. n. Behar and Ceylon p. 869, MEYRICK J. Bombay Soc. 21.

Rhyacionia purdeyi, SOUTH p. 73 Entomologist 45.—*R.*; synonymy, MEYRICK p. 89 Entomologist 45.

Schoenotenes spectralis sp. n. Queensland, MEYRICK p. 13 Exot. Microlep. 1.

Statherotis decorata ♀ p. 870, MEYRICK J. Bombay Soc. 21.

Sparganothis myrota sp. n. Colombia, MEYRICK p. 686 Tr. ent. Soc. London 1911.

Spatalistis orbigera p. 14, *tyrophthora* p. 15, spp. n., Assam, MEYRICK Exot. Microlep. 1.

Spheterista gen. n. for *Capua variabilis* Wals., MEYRICK p. 2 T.c.

Spilonota routhia, larva, MEYRICK p. 33 Exot. Microlep. 1.

Spilonota Steph. supersedes *Tmetocera* Led. and *Strepsicrates* Meyr. p. 853, *uestuosa*, *algosa*, Assam, *babylonica* S. India, p. 854, *meleanocopa* Assam p. 853, spp. n., *melanacta* note p. 853, MEYRICK J. Bombay Soc. 21.

Tortrix crispata, *mensaria*, p. 54, spp. n., S. Africa, MEYRICK Ann. S. Afric. Mus. 10.—*T. tricensa* Assam, *humana* Sikkim, *albescens* Transvaal, p. 6, *insincera* Asia Minor, *intrepida* Natal, *sanidota* Comoro Islds., p. 7, spp. n., MEYRICK Exot. Microlep. 1.—*T. urbana* sp. n. p. 86 Mexico, BUSCK Proc. Ent. Soc. Washington 14.—*T. boscantina* sp. n. Colombia, DOGNIN p. 48 Hét. nouv. 6.

Trymalitis scalifera p. 55 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.

Tymbarcha astuta sp. n. Assam, MEYRICK p. 14 Exot. Microlep. 1.

TINEIDAE.

Die Heinemann'sche Elachisten-Gruppe, MARTINI D. ent. Zs. Iris 26 pp. 185-188.

The genera of *Gracilariidae* with lists of the species, MEYRICK Gen. ins. 128 36 pp. 1 pl.

Notes on Chambers' species of Tineina, BRAUN Ent. News 23 pp. 163-170.

Acrocercops pentalocha India p. 15, *mendosa* Australia p. 16, *zadocaea* Grecece, *vanula* India, p. 17, *hierocosma* Australia p. 18, spp. n., MEYRICK Gen. ins. 128.

Acrocercops hexalocha, *carcharota*, p. 22, *monodecta*, *hormophora*, *heterodoxa*, p. 23, *carbuncolata*, *gravissima*, p. 24, Transvaal, *hyphantica* Bengal p. 25, spp. n., MEYRICK Exot. Microlep. 1.

Acrolophus diversus, *hirsutus*, p. 184, spp. n. California, BUSCK Proc. Ent. Soc. Washington 14.—*A. flavicomus* sp. n. p. 168 California, BUSCK Rep. Laguna Mar. Lab. 1.

Actinoscelis gen. n. *Glyphipterygidae*, *irina* sp. n. Bombay, MEYRICK p. 59 Exot. Microlep. 1.

Adela tridesma sp. n. Asia minor (= *trifasciella* Staud.), MEYRICK p. 10 Gen. ins. 133.

Aedemoses gen. n. *Stenomidae*, *haesitans* sp. n. Mexico pl. v. f. 21, WALSINGHAM p. 154 Biol. Centr.-Amer. Lep. Het. 4.

Agonopteryx rubristriata sp. n. Guatemala p. 136 pl. iv f. 31, WALSINGHAM T.c.

Amathynitis cathasopa, *athyra*, Ceylon, *oporina* Assam, *nucleolata* Ceylon, spp. n., p. 113, MEYRICK J. Bombay Soc. 21.

Amphiclada gen. n. *Glyphipterygidae*, *ferescens* sp. n. Grenada, MEYRICK p. 60 Exot. Microlep. 1.

Amydria fraudulenta p. 69 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.

Anacampsis chrysoplaca sp. n. Venezuela, MEYRICK p. 694 Tr. ent. Soc. London 1911.

Antaeotricha mesostrota, *ophrysta*, p. 708, *xanthoptila*, *praecisa*, p. 709,

carphitis, *corvula*, p. 710, spp. n., S. America, MEYRICK T.c.

Argyresthia conjugella Entwicklung, Lebensweise, Parasiten, Schaden (Russ.), PORÖINSKIJ Trd. b. entom. 9 9 pp. 29-54 ff. 8-16.—*Argyresthia* um Steyr und im Steiermark; MITTERBERGER Ent. Zs. 26 p. 109 etc.—*A. annettella* larva, BRAUN p. 159 Canad. Ent. 44.

Aristotelia leptocentra sp. n. Bengal, MEYRICK p. 64 Exot. Microlep. 1.

Athleta gen. n. *Stenomidae*, *trisecta* pl. v f. 24, p. 155, *cenotes* f. 23, *ptycta* f. 22, p. 156, Centr. and S. America, spp. n., WALSINGHAM Biol. Centr.-Amer. Lep. Het. 4.

Atteria docima sp. n. Peru pl. x f. 8, DRUCE p. 133 Ent. Mag. 48.—*A. (?) heliocausta* sp. n. Colombia, DOGNIN p. 51 Hét. nouv. 6.

Atteva exquisita sp. n. p. 86 Mexico, BUSCK Proc. Ent. Soc. Washington 14.

Augasma (?) nidifica p. 65 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.

Bedellia oplismeniella p. 184, *boehmeriella* p. 185, Hawaiian Is., spp. n., SWEZEY Proc. Hawaiian Ent. Soc. 2.

Borkhausenia crimnodes sp. n. Parana, MEYRICK p. 696 Tr. ent. Soc. London 1911.

Brachysymbola gen. n. *Tineidae*, *sepulcralis* sp. n. Tucuman, MEYRICK p. 718 T.c.

Brenthia luminifera, *strophalora*, p. 51, Assam, *virginialis* Natal, *ardens* Assam, p. 52, *cyanaula* Bengal, *carola*, *paranympha*, Assam, p. 53, spp. n., MEYRICK Exot. Microlep. 1.

Bucculatrix noltei sp. n. Deutschl., STRANGE Pctry p. 112 D. ent. Zs. Iris 26.

Calantica argentea sp. n. p. 86 Mexico, BUSCK Proc. Ent. Soc. Washington 14.

Catarata gen. n. *Stenomidae*, *lepisma*, p. 154, *stenota* p. 155, spp. n. Centr. America, WALSINGHAM Biol. Centr.-Amer. Lep. Het. 4.

Ceromitia nerina, *phaeocoma*, p. 28, *ochrottricha*, *mellicoma*, *transtrifera*, p. 29, spp. n., Transvaal, MEYRICK Exot. Microlep. 1.—*C. melanostrota* p. 69, *somphodes* p. 70, spp. n., S. Africa, MEYRICK Ann. S. Afric. Mus. 10.

Chlorophytis gen. n. p. 68, *secura* sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.

Choreutis moniliger, *hestiarcha*, Assam, p. 54, *philonyma* Ceylon, *argyrota*, p. 55, *cultrata*, Assam, *antiptila* China, p. 56, *stylata*, *molybdora*, Ceylon, *aerifera* New Zealand, p. 57, *tripedila* New Guinea, p. 58, spp. n.. MEYRICK Exot. Microlep. 1.

Coesyra rutila p. 61 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.

Coleophora; natural history, SICH pp. 32-38 pl. vi S.E. Nat. 1912.—*C. meridionella* sp. n. Dalmatien, REBEL Verh. z.-b. Ges. Wien 62 pp. (104)-(108).—*C. eremodes* p. 65 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.—*C. alcyonipenella*, Lebensweise und Entwicklung in Turkestan (Russ.), RADECKIJ Turkest. selisk. choz. 7 pp. 124-128 figs. 1-3.—*C. therinella*, TURNER p. 183 Ent. Rec. 24.—*C. maeniaceella* and *artemisiella*, TURNER pp. 241-243 T.c.—*C. ochrea* p. 281, *viminetella* ova pl. xii p. 282, larva, habits, TURNER Ent. Rec. 24.—*C. badiipennella* and allies, BANKES pp. 55-56 Ent. Mag. 48.—*C. laricella*, natural history, HERRICK Bull. Cornell exp. Stat. 322 pp. 39-54.

Coptotelia mitropa p. 700, *psittacopa*, *thyridopa*, *constellata*, p. 701, *acrocosma*, *hydrogramma*, p. 702, *amphicrena*, *iouleuca*, *lecithitis*, p. 703, spp. n., S. America, MEYRICK Tr. ent. Soc. London 1911.—*C. gnorisma* sp. n. Centr. America pl. iv f. 25, *fenestrella* Z. f. 24, WALSINGHAM p. 133 Biol. Centr. Amer. Lep. Het. 4.

Corsicum cuculipennellum, larva, BRAUN p. 160 Canad. Ent. 44.

Corsocasis gen. n. *Glyphipterygidae*, *coronius* sp. n. Assam, MEYRICK p. 59 Exot. Microlep. 1.

Crobylophora siglias sp. n. Assam p. 108, MEYRICK J. Bombay Soc. 21.

Crypsithyris spectatrix S. India, *soporata* Ceylon, p. 115, spp. n., MEYRICK T.c.

Cryptolechia holopyrrha, *chordostoma*, spp. n., S. America, MEYRICK p. 704 Tr. ent. Soc. London 1911.—*C. peperita* pl. iv f. 9, *dolopsis*, p. 122, *caduca* f. 10, *hydara* f. 11, *epidesma* f. 12, p. 122, *ancorata* f. 14, Centr. America, *erythema* f. 13 Centr. and S. America, p. 124,

crossota, *C.? rhodosarca* f. 15, p. 125, Centr. America, spp. n., WALSINGHAM Biol. Centr. Amer. Lep. Het. 4.

Cyclotorna experta p. 589, *egena* p. 590, spp. n., Queensland, MEYRICK Trans. ent. Soc. 1911.

Cyclotornidae fam. n., MEYRICK l.c.

Cyphosticha caerulea sp. n. Bengal, MEYRICK p. 26 Exot. Microlep. 1.

Dasycera auricollis sp. n. Guatemala p. 142 pl. v f. 3, WALSINGHAM Biol. Centr.-Amer. Lep. Het. 4.

Dichomeris amphicoma sp. n. Brazil, MEYRICK p. 695 Tr. ent. Soc. London 1911.

Dolidiria gen. n., *arcanella* sp. n., p. 5, Panama, BUSCK Smithsonian Inst. Misc. Coll. 59 Pub. 2079.

Doxa gen. n. near *Cryptolechia* p. 119, *sodalis* sp. n. Centr. and S. America p. 120 pl. iv f. 5, WALSINGHAM Biol. Centr. Amer. Lep. Het. 4.

Depressaria heydenii, in der Puppenhülle verzehrt liegend, MITTERBERGER Lotos 60 p. 140.—*D. petasitis*, Biologie, MITTERBERGER Ent. Rdsh. 29 pp. 25-27.—*D. atomella*, larva p. 116, FELT N. Y. St. Mus. Bull. No. 155.

Durrantia pugnax p. 114 pl. iv f. 1, *resurgens*, Guatemala, *acomposa* Panama f. 2, *amabilis* Centr. and S. America, p. 115, spp. n., WALSINGHAM Biol. Centr. Amer. Lep. Het. 4.

Ecballogonia gen. n. p. 137 near *Macrobathra*, *bimetallica* sp. n. Mexico p. 138 pl. iv f. 34, WALSINGHAM Biol. Centr. Amer. Lep. Het. 4.

Ectaga gen. n. near *Schiffermulleria*, *promeces* p. 140, *canescens* pl. v f. 2, *lictor* f. 1, Centr.-America, p. 141, spp. n., WALSINGHAM T.c.

Elachista; Zucht, Lebensweise etc., MARTINI Ent. Zs. Frankfurt 26 p. 83.—*E.*; Arten, MARTINI D. ent. Zs. Iris 26 pp. 208-211.—*Elachista*-Raupen; MARTINI D. ent. Zs. Iris 26 pp. 92-95.

Electrographa gen. n. near *Glyphipteryx*, *thiolychna* sp. n. Burma, MEYRICK p. 63 Exot. Microlep. 1.

Elegistis gen. n., *cunicularis* sp. n. Ceylon, p. 125, MEYRICK J. Bombay Soc. 21.

Energia gen. n. near *Durrantia*, *subversa* Mexico, p. 113, *inopina*

- Chiriqui p. 114 pl. iv f. 3, spp. n. WALSINGHAM Biol. Centr.-Amer. Lep. Het. 4.
- Epactris thyreota* sp. n. Ceylon p. 114, MEYRICK J. Bombay Soc. 21.
- Epagoze somatina* sp. n. Colombia, DOGNIN p. 50 Hét. nouv. 6.
- Epicallima lucidella* sp. n. Pennsylvania, BUSCK Ent. News 23 p. 170 and Washington Proc. Ent. Soc. 14 p. 44.
- Epicephala invita* sp. n. Transvaal p. 22, *chalybacma* larva and cocoon p. 21. MEYRICK Exot. Microlep. 1.
- Epicroesa calliteucha* sp. n. New Guinea, MEYRICK p. 58 T.c.
- Epiphraetis aulica* p. 63 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.
- Eretmocera thephagones* sp. n. Java, KLUNDER VAN GIJEN Tijdschr. Ent. 55 p. 355.
- Ereunetis acrodina* sp. n. p. 122 N. Zealand, MEYRICK Trans. N. Zeal. Inst. 44.
- Ethmia conglobata* Colombia p. 717, *chalcodora* Argentina p. 718, spp. n., MEYRICK Tr. ent. Soc. London 1911. — *E. cyanea* pl. v f. 4, *baliostola* f. 5 p. 144, *coronata* f. 6, *flavicaudata* f. 7, p. 145, *heptasticta* f. 8, *penthica* f. 9, *perpulcra* f. 14, p. 146, *phylacis* f. 4, *terpnota* f. 11, p. 147, *scythrope* f. 13, p. 148, spp. n. Centr. America, *muelleri* Busck f. 10, *hammella* Busck f. 15 WALSINGHAM Biol. Centr. Amer. Lep. Het. 4. — *E. proximella* p. 84, *abdominella* p. 85, spp. n., Mexico, BUSCK Proc. Ent. Soc. Washington 14.
- Exala* gen. n. *Gracilariidae* for *strassenella* Enderl., MEYRICK p. 24 Gen. ins. 128.
- Gelechia sesostrella* sp. n. Aegypt, REBEL p. 88 D. ent. Zs. Iris 26. — *G. figurella* sp. n. p. 168 California, BUSCK Rep. Laguna Mar. Lab. 1. — *G. paphlactis* sp. n. Brazil, MEYRICK p. 693 Tr. ent. Soc. London 1911. — *G. triplacopis* p. 59 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10. — *G. superatella* (= *Oec. ambigua* F. & R.) and *propriella* Walk. to *Necedes*, WALSINGHAM Biol. Centr. Amer. Lep. Het. 4.
- Gnorimoschema infirma* p. 58 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10. — *G. laguna* sp. n. p. 167 California, BUSCK Rep. Laguna Mar. Lab. 1.
- Gonada cabima* sp. n. p. 6 Panama, BUSCK Smithsonian Misc. Coll. 59 Pub. 2079.
- Gonionota cnephaea* pl. iv f. 26, *cristata*, Centr. America, *melobaphes* f. 27 Costa Rica to Panama, *cristata*, p. 129, *phlebodes* f. 28, *thracina* f. 29, p. 130, Centr. America, spp. n., WALSINGHAM Biol. Centr. Amer. Lep. Het. 4.
- Gracilaria citricula*, *ligata*, p. 26, *fili-fera*, *seriata*, p. 27, spp. n., Transvaal, MEYRICK Exot. Microlep. 1. — *G. crasi-phila*, *lophanes*, Australia, p. 27, *auspex* Ceylon, *phalaropa* India, p. 29, *platycosma* Ceylon, *leucolitha* Australia, p. 30, spp. n., MEYRICK Gen. Ins. 128. — *G. sp.*, early stages, p. 117, FULT N. Y. St. Mus. Bull. No. 155.
- Gymnogramma cyanea* p. 63 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.
- Hapsifera glareosa* p. 69 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.
- Heliodines perichalca* sp. n. New Mexico, MEYRICK p. 58 Exot. Microlep. 1.
- Heliosibes callispora* sp. n. New Zealand, MEYRICK p. 41 T.c.
- Hierodoris* gen. n. *Glyphipterygidae* p. 41, *iophanes* sp. n. New Zealand p. 42, MEYRICK T.c.
- Hilarographa leucopyrga* Japan p. 36, *bellica* Guiana p. 37, spp. n., MEYRICK T.c.
- Himotica* gen. n. *Oecophoridae*, *thyr-sitis* sp. n. Brazil, MEYRICK p. 705 Tr. ent. Soc. London 1911.
- Holcocera basi-plagata*, *titanica* pl. v f. 18, *nephalia*, p. 151, *hemiteles*, *homo-chromatica* pl. v f. 19, p. 152, spp. n., Centr. America, WALSINGHAM Biol. Centr.-Amer. Lep. Het. 4.
- Hypercallia inguinaris*, *caprones*, spp. n., Java, KLUNDER VAN GIJEN Tijdschr. Ent. 55 p. 355. — *H. arista* sp. n. Mexico p. 135 pl. iv f. 30, WALSINGHAM Biol. Centr. Amer. Lep. Het. 4.
- Hyphyena syntoma* pl. iv f. 21, *colpodes* f. 20, spp. n., Centr. America, WALSINGHAM p. 131 T.c.

Hyponomeuta nigricola p. 63 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.

Imma tetrascia p. 38, *vaticina*, Queensland, *ancistrota* New Guinea, p. 39, *paratma* Guiana, *phthorosema* Colombia, p. 40, spp. n., MEYRICK Exot. Microlep. 1.

Incurvaria vetulella var. n. *triglaven-sis*, HAUDER Verh. z.-b. Ges. Wien 62 p. (123).

Isocrita psalactis p. 63 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.

Izatha metadelta Meyr., *percnitis* Meyr. ♂, MEYRICK Trans. N. Zeal. Inst. 44 p. 121.

Jonaca nephelospila sp. n. Venezuela, MEYRICK p. 38 Exot. Microlep. 1.

Lampristis gen. n. *Plutellidae*, *leucopselia* sp. n. Ceylon, p. 131, MEYRICK, J. Bombay Soc. 21.

Lasiodictis gen. n. *Glyphipterygidae*, *melistoma* sp. n. Assam, MEYRICK p. 41 Exot. Microlep. 1.

Lecithocera fausta, in Brazil, MEYRICK p. 694 Tr. ent. Soc. London 1911.

Lepidoscia globigera sp. n. Ceylon p. 124, MEYRICK J. Bombay Soc. 21.

Leucoptera sphenograptia sp. n. Punjab p. 108, MEYRICK T.c.

Lita zygophyllella sp. n. Aegypt, REBEL p. 89 D. ent. Zs. Iris 26.—*L. vicinella* Biologie, PETRY D. ent. Zs. Iris 26 pp. 115-118.

Lithocolletis dorinda Bengal, *melanosparta* Transvaal, spp. n., MEYRICK p. 21 Exot. Microlep. 1.—*L. trinotella* etc., BRAUN p. 159 Canad. Ent. 44.

Lupercalia gen. n. p. 6, *ignita* sp. n. p. 7 Panama, BUSCK Smithsonian Misc. Coll. 59 Pub. 2079.

Lyonetia melanqchalca p. 108 Assam, *praefulva* p. 109 Ceylon, spp. n., MEYRICK J. Bombay Soc. 21.—*L. latis-trigella*, larva, BRAUN p. 161 Canad. Ent. 44.

Machaopteris ceramina p. 129, *penigera* p. 130, *halistrepta* p. 128, *honifera* p. 129, *timatula*, *melicera*, p. 130, *phenax* p. 129, spp. n., India and Ceylon, *receptella* p. 128, *taciturna*,

vernacula, Ceylon, p. 128, spp. n., MEYRICK J. Bombay Soc. 21.

Machimia encamina, *fundigera*, p. 696, *morata*, *orthodoxa*, *chlorochroa*, *concinna*, p. 697, *languida*, *erotias*, p. 698, *phaeo-crossa*, *haemataula*, *trygaula*, p. 699, spp. n., S. America, MEYRICK Tr. ent. Soc. London 1911.

Machlotrichia gen. n., *caeca* sp. n. S. Africa, MEYRICK p. 59 Ann. S. Afric. Mus. 10.

Mallobathra cellulata sp. n. Ceylon p. 125, MEYRICK J. Bombay Soc. 21.

Megacraspedus incola p. 58 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.

Metopleura gen. n. *Gelechiidae* p. 83, *potosi* sp. n. p. 84 Mexico, BUSCK Proc. Ent. Soc. Washington 14.

Micropardalis gen. n. *Micropterygidae* for *doroxena* M., MEYRICK p. 7 f. 2 Gen. ins. 132.

Mictopsichia picturata Assam p. 35, *hexaphala* Ceylon p. 36, MEYRICK Exot. Microlep. 1.

Mnemonicia gen. n. *Micropterygidae* type *subpurpurella* Haw., MEYRICK p. 5 f. 8 Gen. ins. 132.

Mnesichara gen. n. near *Carcina*, *dictyota* Guatemala pl. vi f. 16, p. 126, *picticollis* Panama p. 127 f. 17, spp. n., WALSINGHAM Biol. Centr. Amer. Lep. Het. 4.

Monopis crocicapitella and allies, characters, genitalia, BANKES p. 39 Ent. Mag. 48.—*M. florilega* Ceylon, *viatica* Assam, spp. n., p. 114, MEYRICK J. Bombay Soc 21 1911.

Moriloma gen. n., *pardella* sp. n. p. 3, Panama, BUSCK Smithsonian Inst. Misc. Coll. 59 Pub. 2079.

Mothonica gen. n. *Stenomidae*, *peripta* sp. n. Costa Rica pl. v f. 20, WALSINGHAM p. 153 Biol. Centr.-Amer. Lep. Het. 4.

Myrmecozela glebifera, *leontina*, *metro-phora*, p. 126, spp. n., India, MEYRICK J. Bombay Soc. 21.

Necedes gen. n. *Oecophoridae*, *stigma-phylli* Jamaica with var. *brevipalpis*, p. 138, *incisa*, *championella* pl. iv f. 35,

- p. 139, spp. n., Centr. America, WALSINGHAM Biol. Centr.-Amer. Lep. Het. 4.
- Nemophora stenochlora* sp. n. Algeria, MEYRICK p. 3 Gen. ins. 133.
- Nemotois chlorista* sp. n. Asia minor p. 5, *opalina*, *brachypetala*, Australia, *pyrotechna* India, *laticlavia* Celebes, p. 6, *athiophora*, *amphimetalla*, India, p. 7, spp. n., MEYRICK T.c.—*N. gymnota* sp.n. Madagascar, MEYRICK p. 30 Exot. Microlep. 1.
- Nepticula polydoxa* p. 107, *sporadopa* p. 108, spp. n., Ceylon, MEYRICK J. Bombay Soc. 21.—*N. pallida* p. 85, *discollorella* p. 86, *ulmella* p. 87, *leucostigma* p. 88, *tiliella* p. 90, *rhoifoliella* p. 93, *rhamnella* p. 96, *saccharella* p. 97, *argentifasciella* p. 100, *obsurella* p. 95, spp. n., U. S., figs., BRAUN Cincinnati Ohio J. Soc. Nat. Hist. 21.—*N. slingerlandella*, CROSBY Agric. Exp. Sta. New York Bull. 308 pp. 217–228 ff. 25–38; life-history, CROSBY p. 25 Canad. Ent. 44.
- Odites crocota*, *insons*, p. 60, spp. n., S. Africa, MEYRICK Ann. S. Afric. Mus. 10.
- Oecophyllembius neglectus*, storia naturale, SILVESTRI Boll. Lab. Portici 6 p. 176 33 fig.
- Ommatothelxis grandis* sp. n. Cameroons pl. x f. 9, DRUCE p. 133 Ent. Mag. 48.
- Opogona orchestris* Ceylon, *dramatica* Assam, *stathmota* Ceylon and S. India, *xanthocrita* S. India, *pandora* Assam, *sphaerotoma* S. India, *cerodelta* Himalayas, *plasturga*, *elaitis*, S. India, *photographa* Assam, spp. n., MEYRICK pp. 110–112 J. Bombay Soc. 21.
- Opostega epistolaris* sp. n. S. India p. 108, MEYRICK T.c.
- Ordrupia fanniella* sp. n. p. 6 Panama, BUSCK Smithsonian Misc. Coll. 59 Pub. 2079.
- Orphnolechia bathrogramma* sp. n. Venezuela, MEYRICK p. 711 Tr. ent. Soc. London 1911.
- Oxycryptis* gen. n. *Gelechiidae*, *attonita* sp. n. Colombia, MEYRICK p. 692 T.c.
- Paltodora helicauda*, *hiberna*, p. 57, *magnanima* p. 56, *pentacentra* p. 57, spp. n., S. Africa, MEYRICK Ann. S. Afric. Mus. 10.
- (N-9210 j)
- Paraclemensia acerifoliella* p. 56 pl. xviii & xvii f. 5, FELT N. Y. St. Mus. Bull. No. 155.
- Parapodia* gen. n. voisin d'*Apodia*, *tamaricicola* sp. n. France, p. 305, JOANNIS Bull. Soc. ent. France 1912.—*P. sinaica* Fr. (as *Gelechia*) = (*tamaricicola* Joann.), JOANNIS Bul. soc. ent. France 1912 p. 380.
- Parastega* gen. n. near *Stegasta* for *Psoricoptera niveisignella* Zell., MEYRICK p. 693 Tr. ent. Soc. London 1911.
- Parectopa picroglossa* p. 20, *thiasodes*, Ceylon, *haemataula* India, p. 21, spp. n. MEYRICK Gen. ins. 128.—*P. bathracma* sp. n. Transvaal, MEYRICK p. 25 Exot. Microlep. 1.
- Peleopoda regiella* sp. n. p. 7 Panama, BUSCK Smithsonian Misc. Coll. 59 Pub. 2079.
- Phrixosceles lithographa* sp. n. Queensland, MEYRICK p. 13 Gen. ins. 128.
- Pthorimæa operculella*, Morphologie externe et appareil digestif de la chenille de, BORDAS C. R. Acad. sci. 154 pp. 450–452; Appareil séricigène des chenilles de; BORDAS Paris C. R. Acad. sci. 154 pp. 618–620.
- Phyllobrostis eremitella* sp. n. p. 305 France, JOANNIS Bull. Soc. ent. France 1912.
- Phytomimia* gen. n. p. 133 near *Coptotelia*, *chlorophylla* pl. iv f. 22, *redundans* f. 23, Centr. America, spp. n., p. 134, WALSINGHAM Biol. Centr. Amer. Lep. Het. 4.
- Picrospora* gen. n., p. 66, *anastrota* p. 67, *area* p. 66, spp. n., S. Africa, MEYRICK Ann. S. Afric. Mus. 10.
- Plexippica* gen. n. p. 64, *vertebrata* sp. n. S. Africa, MEYRICK T.c.
- Plocamosaris* gen. n. *Xyloryctidae*, *pandora* sp. n. Brazil, MEYRICK p. 706 Tr. ent. Soc. London 1911.
- Polyortha chlamydata* sp. n. Colombia, DOGNIN p. 50 Hét. nouv. 6.
- Prapolithites* gen. n. *Stenomidae*, *virens* sp. n. Colombia, MEYRICK p. 707 Tr. ent. soc. London 1911.
- Prytaneutis* gen. n. allied to *Lyonetia*, *clavigera* sp. n. Ceylon, p. 109, MEYRICK J. Bombay Soc. 21.
- Pseudurgis scutifera* p. 67 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.

Psilocorsis argyropasta Mexico pl. iv f. 8, *indalma*, p. 118, *purpurascens* f. 7, p. 119, Guatemala, spp. n., WALSINGHAM Biol. Centr.-Amer. Lep. Het. 4.

Pyroderces simplex = (*gossypiella* Wlsm.), DURRANT p. 207 Bull. ent. research 3.

Sabatinca caustica, *calliarcha*, p. 124, *quadrijuga* p. 126, spp. n., New Zealand, *S. incongruella* Walker supersedes *Palaeomicra chalcophanes* Meyr.; MEYRICK Trans. N. Zeal. Inst. 44.

Sapheneutis galerita sp. n. Himalaya p. 127, MEYRICK J. Bombay Soc. 21.—*S. granosa* p. 67 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.

Scythris faeculenta, *melanodora*, p. 61, *roseola* p. 60, spp. n., S. Africa, MEYRICK T.c.

Scythropia crocostacta p. 65 sp. n. S. Africa, MEYRICK T.c.

Simaethis xanthogramma, *anthorma*, Philippines, p. 42, *trogalia*, *eumetra*, p. 43, *antichlora* p. 44, *strepsides* a, *cothurnata*, p. 45, *achyrodes*, Assam, *ialeura* India, p. 46, *psilachyra* Ceylon, *holachyrma*, *lethaea*, p. 47, Assam, *fulminea* Ceylon, *dichlora* Hainan, p. 48, *diplogramma*, *itriodes*, p. 49, *pilaria*, *halimora*, Assam, p. 50, spp. n., MEYRICK Exot. Microlep. 1.—*S. zomeuta*, *ministra*, p. 121, *analoga* p. 122, spp. n., N. Zealand, MEYRICK Trans. N. Zeal. Inst. 44.

Stenoma zelotes, *ceratistes*, *demotica*, p. 159, *phaula* pl. v f. 26, *plurima* f. 27, *epicta* f. 28, p. 160, *prosora* f. 29, *comosa* f. 30, p. 161, *ocellifer*, *fumifica* f. 21, *machetes*, p. 162, *hemiscia* p. 163, *discolor* p. 164, *fractinubes* f. 32, *caprimulga* f. 33, p. 165, *tolmeta* f. 34, *ochlodes* f. 35, *fractilinea*, p. 166, *mustela* pl. vi f. 1, *aphanes*, *homata* f. 8, p. 167, *petrina* f. 9, *catenifer*, p. 168, spp. n., Centr. America, WALSINGHAM Biol. Centr. Amer. Lep. Het. 4.—*S. megaleuca*, *isomeris*, p. 711, *melanesia*, *glauropa*, p. 712, *trichorda*, *byrsinitis*, *paurocentra*, p. 713, *pelinitis*, *phaeophanes*, p. 714, *clavifera*, *melanixa*, p. 715, *macronota*, *fluminata*, p. 716, *orthocapna* p. 717, spp. n., S. America, MEYRICK Tr. ent. Soc. London 1911.—*S. dissimilis* Lebensweise der Raupen, LÜDERWALDT Zs. wiss. Insektenbiol. 8 p. 5.

Stomphastis gen. n. *Gracilariidae*, *plectica* sp. n. India, MEYRICK p. 19 Gen. ins. 128.

Taleporia aphrosticha sp. n. p. 123 N. Zealand, MEYRICK Trans. N. Zeal. Inst. 44.

Teleia hyoscyamella sp. n. Aegypt, REBEL p. 89 D. ent. Zs. Iris 26.

Teratomorpha gen. n. near *Cryptolechia*, *albifrons* pl. iv f. 18, p. 127, *producta* p. 128 f. 19, spp. u., Centr. America, WALSINGHAM Biol. Centr. Amer. Lep. Het. 4.

Thaumatolita gen. n. near *Cryptolechia*, *hamifera* sp. n. Mexico pl. iv f. 6, p. 117, WALSINGHAM T.c.

Theatria gen. n. near *Symmoca*, *spudasma* sp. n. Panama pl. iv f. 4, WALSINGHAM p. 116 T.c.

Theristis mucronella ab. n. *obscurella*, SCHOPFER p. 32 D. ent. Zs. Iris 26.

Thiotricha janitrix sp. n., MEYRICK p. 64 Exot. Microlep. 1.

Thisizima bubalopa sp. n. India and Ceylon p. 125, MEYRICK J. Bombay Soc. 21.

Thrasydoxa gen. n. *Glyphipterygidae*, *tyrocopa* sp. n. Colombia, MEYRICK Exot. Microlep. 1.

Thriambeutis coryphaea sp. n. Philippines, MEYRICK p. 61 Exot. Microlep. 1.

Thyestarcha gen. n., *edax* sp. n. S. Africa, MEYRICK p. 62 Ann. S. Afric. Mus. 10.

Timocratica gen. n. *Stenomidae* p. 706, *isographa* sp. n. Venezuela p. 707, MEYRICK Tr. ent. Soc. London 1911.

Tinea suspiciosa p. 66 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.—*T. artificiosa* sp. n. Ceylon p. 119, *brachychlora*, Ceylon, remarks, p. 117, *camarota canicoma*, *charmatica*, *chelyodes*, *choloea*, spp. n., India and Ceylon, pp. 117–120, *glabrella* notes S. India and Ceylon, p. 123, *hierographa*, *imbricata*, *iritis*, *isoplaca*, *melanochrysa*, *melliflua*, *opisigona*, *orphnodes*, *plasmatica*, spp. n., India, Baluchistan and Ceylon, pp. 116 120–123; *platyntis*, India, Burma and Ceylon, described p. 124, *sacerdos*, India described, p. 123, *sartoria* p. 120, *scenatica* p. 117; *schoenoploca* S. India p. 115, *sindonia* p. 118, *spharagistis* p. 121, *strophiota* p. 118, *trierodes* p. 117, *zalocoma* p. 121, spp. n., India and Ceylon, MEYRICK J. Bombay Soc. 21.

Tocasta gen. n., *priscella* sp. n., p. 4, Panama, BUSCK Smithsonian Inst. Misc. Coll. 59 Pub. 2079.

Tortyra sybaritis Queensland, *tabularia* Lifu, p. 37, *hyalozona* Colombia p. 38, spp. n., MEYRICK Exot. Microlep. 1.

Trichorhabda gen. n. *Adelidae* for *fasciolata* Butl., MEYRICK p. 3 Gen. ins. 133.

Trichotaphe directa sp. n. Venezuela, MEYRICK p. 694 Tr. ent. Soc. London 1911.

Trichothyrsa gen. n. *Glyphipterygidae*, *coridarcha* Assam, *flammivola* India, p. 61, *taedifera*, *pyrrhocomma*, Ceylon, *grypodes* India, p. 62, spp. n., MEYRICK Exot. Microlep. 1.

Triclonella xanthota Mexico pl. iv f. 32, *euzosta* Centr. and S. America, f. 33, spp. n., WALSINGHAM p. 137 Biol. Centr. Amer. Lep. Het. 4.

Trophimaea testata sp. n. Ceylon p. 12†, MEYRICK J. Bombay Soc. 21.

Ulometra gen. n. *Adelidae* p. 27, *indigna* sp. n. Transvaal p. 28, MEYRICK Exot. Microlep. 1.

Urangela gen. n., *pygmaea* sp. n., p. 2, Panama, BUSCK Smithsonian Inst. Misc. Coll. 59 Pub. 2079.

Valentinia tarachodes p. 148 pl. v f. 16, *neptes* f. 17, *bromeliac*, p. 149, spp. n., Centr. America, WALSINGHAM Biol. Centr.-Amer. Lep. Het. 4.

Xylorycta navigatrix sp. n. Colombia, MEYRICK p. 705 Tr. ent. Soc. London 1911.

Xyrosaris secreta p. 64 sp. n. S. Africa, MEYRICK Ann. S. Afric. Mus. 10.

Zetesima gen. n. *Stenomidae*, *lasia* sp. n. Panama pl. v f. 25, WALSINGHAM p. 157 Biol. Centr.-Amer. Lep. Het. 4.

TRICHOPTERA.

Die Trichopteren des baltischen Bernsteins; ULMER Beitr. Natk. Preussen 10 pp. iv + 380.

Recherches histologiques sur l'influence du régime alimentaire, *Limno-* (N-9210 j)

philus flavicornis, ROQUES Paris C. R. ass. franç. avanc. sci. 40 1911 pp. 566-578 av. fig.

Trichoptera from Peru, MARTYNOV Ann. mus. zool. Ac. sc. 17 pp. 1-40 figs. 1-59.

Biology of the net-spinning larva of *Trichoptera*, WESENBERG-LUND København Fra Naturens Værksted 1912 pp. 161-171 15 figg.

Trichoptera, Bau der Rectaldrüsen, CHOLODKOVSKIJ St. Peterburg Trav. Soc. nat. 43 1 pp. 67-73 106-108 pl. i.

Novae species *Trichopt.*; DZIEDZIELEWICZ Kraków Spraw. Kom. fizyogr. 45 1911 pp. 45-47. (No names have been received in connection with this.)

†*Adelomyia* gen. n., inc. sed. p. 331, *exularis* sp. n. p. 333, Bernstein, ULMER Beitr. Naturk. Preussen 10.

†*Agraylea spathifera* sp. n. Bernstein, ULMER p. 39 T.c.

†*Allotrichia ampullata* sp. n., Bernstein, ULMER p. 40 T.c.

Apatania groenlandica sp. n. Groenland, KOLBE p. 41 Deutsche ent. Zeitschr. 1912.

†*Archaeocrunocia* gen. n. near *crunocia* p. 288, *tenuicornis* p. 290, *validicornis*, *aperter*, p. 292, spp. n., Bernstein, ULMER Beitr. Naturk. Preussen 10.

†*Archaeoneureolipsis* gen. n. *Polycentropidae*, *fortis*, p. 69, *geminata* p. 11, spp. n., Bernstein, ULMER T.c.

†*Archactinodes* gen. n. near *Tinodes* p. 178, *armata* p. 183, *globata*, *lanceolata*, p. 185, *dives* p. 187, *pauper* p. 188, *uncinata* p. 189, *angusta* p. 192, *tenuis* p. 193, *securifera* p. 194, *hageni* p. 195, *exarata* p. 197, spp. n., Bernstein, ULMER T.c.

Atopsyche ikonnikovi sp. n. Peru, MARTYNOV Ann. mus. zool. Ac. sc. 17 p. 34 figs. 54-59.

†*Aulacomyia* gen. n. *Sericostomatidae*, *infuscata* sp. n. Bernstein, ULMER pp. 321 & 322 Beitr. Naturk. Preussen 10.

†*Beracodes pectinata* sp. n. Bernstein, ULMER p. 327 T.c.

Catoxyethira gen. n. *Hydroptilidae*, *fasciata* sp. n. Kongo, ULMER p. 82 Ergebn. Zentr.-Afrik. Exp. 4 L. 6.

Chimarrha galeata p. 30 figs. 48-52, *consimilis* p. 33 fig. 53, spp. n., sp. ? Description p. 33, Peru, MARTYNOV Ann. mus. zool. Ac. sc. 17.

†*Diplectrona ocellaria* p. 213, *minima* p. 215, spp. n., Bernstein, ULMER Beitr. Naturk. Preussen 10.

Dipseudopsis bidens sp. n. O.-Afr., ULMER p. 88 Ergebn. Zentr.-Afrik. Exp. 4 L. 6.

Dolophilus insignis sp. n. Peru, MARTYNOV Ann. mus. zool. Ac. sc. 17 p. 29 figs. 44-47.

†*D. medius* p. 51, *congener* p. 52, *impar* p. 53, spp. n., Bernstein, ULMER Beitr. Naturk. Preussen 10.

†*Electracanthinus* gen. n. *Philopotamidae* p. 54, *klebsi* sp. n. p. 56, Bernstein, ULMER T.c.

†*Electragapetus* gen. n. near *Catagapetus*, *soitutus* sp. n. Bernstein, ULMER pp. 33-34 T.c.

†*Electraulax* gen. n. *Sericostomatidae* p. 295, *breviaseuta*, *longiuscula*, p. 296, spp. n., Bernstein, ULMER T.c.

†*Electrocerum* gen. n. *Odontoceridae*, *pedestre* sp. n. Bernstein, ULMER pp. 243 & 244 T.c.

†*Electrocrunoecia* gen. n. near *Crunoecia*, *turbata* sp. n. Bernstein, ULMER pp. 292 & 294 T.c.

†*Electrodiplectrona* gen. n. near *Diplectrona* p. 216, *decipiens* p. 218, sp. n. Bernstein, ULMER T.c.

†*Electrohelicopsyche* gen. n. fur *Mormonia taeniata* Pictet, ULMER p. 310 T.c.

†*Electropsilotes* gen. n. *Odontoceridae*, *rara* sp. n. Bernstein, ULMER pp. 246 & 247 T.c.

†*Electrotrichia* gen. n. *Hydroptilidae*, *subtilis* sp. n. Bernstein, ULMER pp. 42 & 43 T.c.

†*Erotosis aequalis* sp. n. Bernstein, ULMER p. 265 T.c.

†*Ganonema regulare* sp. n. Bernstein, ULMER p. 240 T.c.

†*Goëra gracilicornis* sp. n. Bernstein, ULMER p. 272 T.c.

Grammataulius bettenii sp. n. p. 18 pl. iii Oregon, HILL-GRIFFIN Ent. News 23.

Helicopsyche montana sp. n. Mexico, FELBER p. 46 Zeitschr. wiss. Insektbiol. 8.—*H. minuscula* sp. n. Peru, MARTYNOV Ann. mus. zool. Ac. sc. 17 p. 3 figs. 1-4.

†*H. typira*, *confluens*, spp. n., Bernstein, ULMER p. 307 Beitr. Naturk. Preussen 10.

†*Holocentropus consobrinus* p. 120, *consanguineus* p. 122, *pertatus* p. 124, *curvatus* p. 130, *omega* p. 131, *scissus* p. 183, *discedens* p. 135, *echinatus* p. 136, *cornutus* p. 137, *calcaratus* p. 138, *lanciger* p. 139, *uncatus* p. 140, spp. n., ULMER T.c.

†*Hydropsyche viduata* sp. n. Bernstein, ULMER T.c.

Hydroptila cruciata sp. n. O.-Afrika, ULMER p. 83 Ergebn. Zentr.-Afrik. Exp. 4 L. 6.

Leptocerus ramosus p. 103, *pulcher* p. 105, Kamerun, *curvatus* p. 107 Rives du Moyen Chari, *fissus* p. 108 O.-Afr., spp. n., ULMER T.c.

†*Lithax atrabula* sp. n. Bernstein, ULMER p. 274 Beitr. Naturk. Preussen 10.

†*Lype prolongata* p. 203, *eximia* p. 204, spp. n., Bernstein ULMER T.c.

Macronema distinctum sp. n. Sp. Guinea, ULMER p. 100 Ergebn. Zentr.-Afrik. Exp. 4 L. 6.

†*Maniconeurodes* gen. n. *Sericostomatidae*, *conwentzi* sp. n. Bernstein, ULMER pp. 202 & 303 Beitr. Naturk. Preussen 10.

Marilia elongata sp. n. p. 14 figs 17-20, sp. ? p. 16 fig. 21, *flexuosa* p. 17 figs. 22-27 Peru, MARTYNOV Ann. mus. zool. Ac. sc. 17.

†*M. ophthalmica* sp. n. Bernstein, ULMER p. 248 Beitr. Naturk. Preussen 10.

†*Molanna crassicornis* sp. n. Bernstein, ULMER p. 254 T.c.

†*Molannodes indubia* p. 251, *dubia* p. 252, spp. n., Bernstein, ULMER T.c.

Mortoniella tranquilla sp. n. Peru MARTYNOV Ann. mus. zool. Ac. sc. 17 p. 38.

Mystacides alafimbriata sp. n. p. 19 pl. iv Oregon, HILL-GRIFFIN Ent. News 23.

†*Neureclipsis geniculata* p. 73, *proxima* p. 74, *tornquisti* p. 75, *exsculpta* p. 77, spp. n., Bernstein, ULMER Beitr. Naturk. Preussen 10.

†*Nyctiophylacodes* gen. n. near *Nyctiophylax*, *curtula* sp. n. Bernstein, ULMER pp. 172 & 173 T.c.

Nyctiophylax danubicus sp. n. Besarabien (Russ.), MARTYNOV Varšava Izv. Univ. 1912 5 pp. 4–8 ff. 2–7.

†*N. rectus* p. 144, *hamatus* p. 145, *claviger* p. 147, *pexus* p. 148, *varians* p. 149, *repundus* p. 152, *bidentatus* p. 154, *diffusus* p. 155, *insectus* p. 156, *ovatus*, *acutus*, p. 157, *unguicularis* p. 159, *articulatus* p. 160, *coalitus* p. 161, *procerus* p. 162, *subacuminatus* p. 163, *sellatus* p. 164, *excelsus* p. 165, *curvus* p. 166, *sinuatus* p. 167, *serpentinus* p. 169, *quadruplex* p. 171, spp. n., Bernstein, ULMER Beitr. Naturk. Preussen 10.

Oecetis furva (Russ.), MARTYNOV Varšava Izv. Univ. 1912 5 p. 2 f. 1.

†*Ogmomyia* gen. n. inc. sed. p. 333, *cuspidata* sp. n. p. 335, Bernstein, ULMER Beitr. Naturk. Preussen 10.

†*Palaeagapetus* gen. n. *Glossosomatinae*, *rotundatus* sp. n., Bernstein, ULMER pp. 35 & 36 T.c.

†*Palaeocrunocia* gen. n. near *Crunocia* p. 282, *crenata* p. 283, *attenuata* p. 285, *abbreviata* p. 286, spp. n., Bernstein, ULMER T.c.

†*Palacohelicopsyche* gen. n. near *Helicopsyche*, *serricornis* sp. n. Bernstein, ULMER pp. 308–309 T.c.

†*Palacolepidostoma* gen. n. für *Trichotomum proavum* Hagen, ULMER p. 297 T.c.

†*Perisomyia* gen. n. (inc. sed.) p. 328, *sulcata* sp. n. p. 330 Bernstein, ULMER T.c.

†*Philopotamus hamatus* sp. n. Bernstein, ULMER p. 45 T.c.

†*Phryganea latissima* p. 232, *egregia* p. 234, *singularis* p. 236, spp. n. Bernstein, ULMER T.c.

Phylloicus bromelianum, BANKS Ent. News 23 p. 80.—*P. spectabilis* sp. n. p. 9 figs. 9–12, *assimilis*? p. 13 figs. 13–16, Peru, MARTYNOV Ann. mus. zool. Ac. St. Petersburg. 17.

†*Phylocentropus simplex* p. 63, *spiniger* p. 65, *ligulatus* p. 66, *antiquus* p. 68, spp. n., Bernstein, ULMER Beitr. Naturk. Preussen 10.

†*Plectrocnemis excavata* p. 88, *furcata* p. 90, *protensa* p. 91, *tubulosa* p. 92, *triangulata* p. 94, *singularis* p. 95, *prismatica* p. 96, *spinosa* p. 97, *clavata* p. 99, *ventralis* p. 102, *rostrata* p. 103, *macilenta* p. 105, *spinigera* p. 106, *angulata* p. 109, *simplicissima*, *dissicta* p. 110, spp. n., Bernstein, ULMER T.c.

†*Potamyia nitida* sp. n. Bernstein, ULMER p. 210 T.c.

Protodipseudopsis decolorata sp. n. W.-Afr., ULMER p. 89 Ergebn. Zentr.-Afrik. Exp. 4 L. 6.

Polymorphanisus similis, *angustipennis*, spp. n., Kamerun, ULMER pp. 96–97 T.c.

†*Pseudoberacodes* gen. n. *Sericostomatidae*, *mira* sp. n. Bernstein, ULMER p. 323 Beitr. Naturk. Preussen 10.

†*Rhabdoceras fuscum* sp. n. Bernstein, ULMER p. 241 T.c.

Rhyacophylax peruanus sp. n. Peru, MARTYNOV Ann. mus. zool. St. Petersburg. 17 p. 27 figs. 41–44.—*R. lacvis* Metamorphose, THIENEMANN Ent. Zs. 25 pp. 250–251 255–256.

†*R. profusa* p. 31, *laminata* p. 32, spp. n., Bernstein, ULMER Beitr. Naturk. Preussen 10.

Setodes gracilis sp. n. Bas Chari, ULMER p. 111 Ergebn. Zentr.-Afrik. Exp. 4 L. 6.

†*S. picescens* sp. n. Bernstein, ULMER p. 263 Beitr. Naturk. Preussen 10.

†*Silo brevicornis* sp. n. Bernstein, ULMER p. 273 T.c.

Smicridea polyfasciata p. 22 figs. 28–32, *bidentata* p. 24 figs. 33–37, *albifrontalis* p. 25 figs. 38–40, spp. n., Peru, MARTYNOV Ann. mus. zool. St. Petersburg. 17.

†*Sphaleropalpus* gen. n. *Helicopsychinae* p. 318, *pumicatus* sp. n. p. 320 Bernstein, ULMER Beitr. Naturk. Preussen 10.

†*Stenopsyche imitata* sp. n. Bernstein, ULMER p. 58 T.c.

†*Stenoptilomyia* gen. n. für *Sericostomun hyalinum* Hagen, ULMER p. 314 T.c.

Triaenodes serrata sp. n. Schilluk Ins., ULMER p. 110 *Ergebn. Zentr.-Afrik. Exp.* 4 L. 6.

†*Triplectides pellucens* p. 258, *rudis* p. 259, *patens* p. 260, spp. n., Bernstein, ULMER *Beitr. Naturk. Preussen* 10.

Wormaldia fallax sp. n. Kamerun, ULMER p. 84 *Ergebn. Zentr.-Afrik. Exp.* 4 L. 6.

NEUROPTERA (incl. *Panorpatae*).

New tribes of *Myrmeleonidae*, NAVÁS *Broteria* 10 pp. 38-40.

Myrmeleonidae; new classification, NAVÁS p. 231 *Ann. Soc. Sci. Bruxelles* 36.

Contribution à l'étude des Névroptères de France; LACROIX *Feuille natural.* 42 pp. 43-49 53-56.

Chrysopidae, aus Ungarn in morphologisch-systematischer Besichnung; PONGRÁ CZ *Allatt. Közlem* 11 pp. 161-221 259-261 *Taf.* ii-v.

The genera of *Nemopteridae* with lists of the species, NAVÁS *Gen. ins.* 136 23 pp. 3 pls.

Beiträge zu einer Monographie der Osmyliden, KRÜGER *Stettiner ent. Ztg* 73 pp. 319-373.

Ascalaphidae of South America, NAVÁS *Broteria* 10 pp. 203-233; new tribe *Neuroptingini* p. 212.

Ascalaphidae, Fauna West Africa, SOLDANSKI *Berlin Mitt. Mus.* 6 pp. 117-123.

Catalogue des Sialides des collections du Muséum, WEELE *Bul. Mus. Paris* 1911 pp. 409-412.

Contribution à l'étude des Névroptères de France, LACROIX *Feuille jeunes natural.* 42 pp. 162-166.

Neuropterous insect fauna of Corsica, PETERSEN *Ent. Medd.* 4 pp. 348-353 3 figs.

Notes sur quelques Névroptères, iii Névroptères d'Afrique nouveaux ou critiques, NAVÁS *Insecta* 2 pp. 68-80 av. figs.

Beiträge zur Kenntnis der Lebensweise und Entwicklungsgeschichte einiger Hautflügler, FAHRINGER & TÖLG *Verh. Ver. Brünn* 50 p. 242 etc.

Acanthaclisini, synopsis of genera, NAVÁS pp. 51-53 *Broteria* 10.

Acanthaclisis aurora sp. n. Aegypten, KLAPÁLEK *Sitzber. Ak. Wien* 121 p. 143.—*A. fulva* sp. n. Queensland, PETERSEN p. 269 *Ent. Mitt. Berlin* 1.—*A. subtendens* Walk., NAVÁS p. 6 f. 2 *Mem. Ac. Barcelona* 10 No. 9.

Aleuropteryx interna sp. n. Granada, NAVÁS p. 209 pl. iv f. 4 *Bol. Soc. Aragon* 10 1911.

Allochrysa grisoli sp. n. Venezuela, NAVÁS p. 101 *Broteria* 10.

Amœa nivea, NAVÁS p. 209 f. 2 *T.c.*

Anchieta; validity, NAVÁS p. 69 *Mem. Ac. Barcelona* 10 No. 9.

Ancylopteryx nepheloptera sp. n. Africa, NAVÁS p. 102 *Broteria* 10.

Aulops melania sp. n. Süd-Ussuri-gebiet, NAVÁS *Rev. russ. ent.* 12 p. 321 f. 5.

Avia gen. n. p. 75 type *Sojra nigrata* Nav., NAVÁS *Insecta* 2.

Balaga gen. n. für *Myrmeleon micans* p. 111, *niteus* sp. n. Piu-fa p. 111 f. 1, NAVÁS *Rev. russ. ent.* 12.—*B. galactophorus* p. 73 Panama, *obscurus* p. 94, Paraguay, spp. n., NAVÁS *Mitt. ent. Ges. München* 3.

Baliga gen. n. für *Myrmeleon asakurai*, NAVÁS *Rev. russ. ent.* 12 p. 110.

Balmes notabilis sp. n. China, NAVÁS p. 65 *Mem. Ac. Barcelona* 10 No. 9.

Bankisus gen. n. near *Gymnocnemia*, *oculatus* sp. n. S.-Afr., NAVÁS pp. 45-46 *Fauna exot.* 1.

Banyutus gen. n. near *Formicaleo* p. 66, *lethifer* sp. n. Africa centr. p. 67, *B. horridus* sp. n. Mozambique p. 92, NAVÁS *Broteria* 10.—*B. neuter* p. 98, *acutus* p. 99, *insidiosus* p. 100, spp. n., Africa, NAVÁS *Rev. Zool. Afric.* 2.

Berotha borneensis sp. n. Baram, NAVÁS p. 66 *Mem. Ac. Barcelona* 10 No. 9.—*B. nicabarica* *Islas Nicobar*

p. 108, *rufa* Queensland p. 109, spp. n., NAVÁS Broteria 10.—*B. mendozina* sp. n. Mendoza, PETERSEN p. 271 Ent. Mitt. Berlin 1.

Bittacus tipularius, Genitalsegmente, KLAFALEK Čas. České Spol. Entomolog. Prag 7 1910 pp. 114–119.

Boriomyia lateralis sp. n. Amur, NAVÁS Rev. russ. ent. 12 p. 419 f. 4.—*B. navasi* sp. n. Orihucla, ANDRÉU p. 58 Bol. Soc. Aragon 10 1911.

Cabralis gen. n. near *Psychopsis* p. 109, *gloriosus* sp. n. Africa p. 110, NAVÁS Broteria 10.

Campodotecnium lemniscatum p. 236, *cingulatum* p. 237, spp. n., Java, ENDERLEIN Notes Mus. Leiden 34.

Centroclisis lutea sp. n. Bombay p. 42, NAVÁS Broteria 10.—*C. punctulata* sp. n. Africa, NAVÁS p. 33 Mem. Ac. Barcelona 10 No. 9.

Chrysocerca nea sp. n. Nueva Guinea, NAVÁS p. 106 Broteria 10.

Chrysopa bequaerti sp. n. Congo, NAVÁS p. 409 Rev. zool. afric. 1.—*C. lucasina* sp. n. N. Africa p. 203 fig. 1, LACROIX Insecta 2.—*C. deserta* p. 225, *selenia* p. 227, spp. n., N. Africa, NAVÁS Insecta 2.—*C. inaequalis* Madagascar, *faceta* Islas Nicobar p. 103, *novempunctata* Esmirna p. 104, *procutitalis* Nicobar p. 105, spp. n., *faceta* var. n. *tenera* p. 104, NAVÁS Broteria 10.—*C. intacta* sp. n. Toronto, NAVÁS p. 199 Broteria 10.—*C. nigrovenosa* sp. n. *formosa* var. n. *frontalis*, *perla*, *nigrodorsalis* n. var.; *vulgaris* var. *fulviceps*, var. *minor*, var. *notata*, var. *rufostigma* n. var., PONGRÁ CZ Állatt. Közlem. 11 pp. 189–215 260–261 Taf. ii–v.—*C. flavifrons* var. n. *difformis* p. 351, *ventralis* var. n. *jodoti* p. 352, LACROIX Bull. Soc. ent. France 1912.—*C. vulgaris* var. n. *viridella* p. 207, *prasina* var. n. *respersa* and *amabilis* p. 208, NAVÁS Bol. Soc. Aragon. 10 1911.

Climaciella subfusca sp. n. Japan (Japanese), NAKAHARA Dobuts. Z. Tokyo 24 p. 562.

Cosina gen. n. p. 47 for *maclachlani* Weele, NAVÁS Broteria 10.—*C. neozelandica* sp. n. New Zealand, NAVÁS p. 36 Mem. Ac. Barcelona 10 No. 9.

Creagris plagatus sp. n. Africa, NAVÁS p. 39 Rev. zool. afric. 2.—

C. infirmus Senegal p. 58, *cinerascens* Africa orient. p. 59, spp. n., NAVÁS Broteria 10.—*C. surcoufi* sp. n. N. Africa p. 218 fig. 1, NAVÁS Insecta 2.

Delfimeus gen. n. p. 223 voisin de *Gymnoleo*, *scriptus* sp. n. p. 224 N. Africa, NAVÁS Insecta 2.

Dicolpus ellenbergeri sp. n. Congo, NAVÁS p. 5 Mem. Ac. Barcelona 10 No. 9.

Dilar septentrionalis sp. n. Süd-Ussurigebiet, NAVÁS Rev. russ. ent. 12 p. 320.

Dimares nummatus sp. n. Galapagos, NAVÁS p. 230 Ann. Soc. Sci. Bruxelles 36.—*D. illustris* sp. n. Birma, NAVÁS p. 58 Mitt. ent. Ges. München 3.—*D. elegans* var. n. *lepida*, NAVÁS p. 41 Broteria 10.

Drepanicus prasinus sp. n. California, PETERSEN p. 272 Ent. Mitt. Berlin 1.

Episperches latipennis sp. n. Guatemala, NAVÁS p. 3 Mem. Ac. Barcelona 10 No. 9.

Estenalla gen. n. *Panorpidarum arcuata* sp. n. Suchum, NAVÁS Rev. russ. ent. 12 pp. 356–357 f. 1.

Euzia gen. n. *Myrmeleonidarum* p. 113, *otiosus* sp. n. Japan, NAVÁS T.c.

Fadrina gen. n. p. 9 for pt. of *Acanthaclisis* and *rufa* W. Africa p. 10, *nigra* p. 11 Obok, spp. n., NAVÁS, Mem. Ac. Barcelona 10 No. 9.

Formicaleo natalicus p. 247, *punctipennis* p. 248, spp. n., Africa, NAVÁS Ann. Soc. Sci. Bruxelles 36.—*F. recurvus* sp. n. Congo, NAVÁS p. 407 Rev. zool. afric. 1.—*F. lituratus* p. 61, *diversus* p. 62, Abisinia, *sanguinolentus* Africa p. 63, *lynx* Nigricia, *atomarius*, p. 64, *inaequalis*, Africa p. 66, spp. n., NAVÁS Broteria 10.—*F. cuigneti* sp. n. N. Africa p. 219, NAVÁS Insecta 2.

Gama gen. n. type *Creagris inclytus* Pér. p. 57, NAVÁS Broteria 10.

Gandulus gen. n. near *Neuroleon*, *leptogaster* sp. n. Africa p. 73, NAVÁS T.c.

Ganguilus gen. n. near *Nelees*, *pallescens* sp. n. Africa, p. 72, NAVÁS T.c.

Ganussa gen. n. voisin de *Neuroleon*, *leptalea* sp. n. N. Africa, p. 222 fig. 3, NAVÁS *Insecta* 2.

Gepus gen. n. near *Myrmeleon*, *invisus* sp. n. Egypt, NAVÁS p. 48 Mem. Ac. Barcelona 10 No. 9.

Gerstaeckerella salonii sp. n. Paraguay, NAVÁS p. 201 Broteria 10.

Golafrus gen. n. p. 86 for *Palpares oneili* Pér., NAVÁS T.c.

Gumilla gen. n. trib. n. *Gumillini* near *Osmylus*, *adspersus* sp. n. Brazil, NAVÁS p. 57 Mem. Ac. Barcelona 10 No. 9.

Gymnoleon gaillardi sp. n. Africa, NAVÁS p. 42 Rev. zool. afric. 2.

Hagenomyia; definition p. 244, *luc-tuosa* sp. n. Transvaal p. 245, NAVÁS Ann. Soc. Sci. Bruxelles 36.

Halterina gen. n. type *Nemoptera purcelli* Pér., NAVÁS p. 11 Gen. ins. 136.

Helicomitus? *bequaerti* sp. n. Congo, NAVÁS p. 93 pl. iii f. 3 Rev. Zool. Afric. 2.

Jaya gen. n. near *Sogra* p. 31, *rogeri* sp. n. Abyssinia p. 32, NAVÁS Mem. Ac. Barcelona 10 No. 9.

Joguina gen. n. type *Apochrysa nicobarica* Br., NAVÁS p. 98 Broteria 10.

Kempynus gen. n. type *Osmylus excisus* McLachl. p. 59, *falcatus* sp. n. Chile p. 60, NAVÁS Mem. Ac. Barcelona 10 No. 9.

Klapalekus gen. n. near *Neuroleon*, *nubilatus* sp. n. Afr., NAVÁS p. 46 Faunà exotica 1.

Layahima gen. n. *Myrmeleonidae*, *layhaima nebulosa* Darjeeling sp. n. pp. 36 & 88, NAVÁS Broteria 10.

Leucochrysa voeltzkowi v. d. W. to *Apochrysa*, *L. marginata* sp. n. Madagascar, NAVÁS p. 100 T.c.

Macroleon; validity, NAVÁS p. 244 Ann. Soc. Sci. Bruxelles 36.—*M. sexmaculatus* sp. n. Sénégal p. 78, NAVÁS *Insecta* 2.

Macronemurus jejunus sp. n. Africa p. 74, NAVÁS Broteria 10.—*M. horni* sp. n. Ceylon, PETERSEN p. 267 Ent. Mitt. Berlin 1.

Madrastra gen. n. p. 7 near *Acanthacლისis handlirschi* sp. n. Minduro p. 8, NAVÁS Mem. Ac. Barcelona 10 No. 9.

Malacomyza ventralis sp. n. Estados Unidos, NAVÁS p. 198 Broteria 10.

Magallanes gen. n. type *Psychopsis insolens* MacLachl., NAVÁS p. 69 Mem. Ac. Barcelona 10 No. 9.

Mantispilla chlorotica p. 200, *nana* p. 201, Paraguay, spp. n., NAVÁS Broteria 10.—*M. scabrosa* New Mexico, *pulchella* Utah, p. 179, spp. n., BANKS Proc. Ent. Soc. Washington 14.

Maula gen. n. near *Myrmeleon*, *stigmatus* sp. n. Congo, NAVÁS p. 96 Rev. Zool. Afric. 2.

Megalhomus noualhieri, validity, NAVÁS p. 107 Broteria 10.—*Megalomus navasi* sp. n. N. Africa p. 204 fig. 2, LACROIX *Insecta* 2.

Micromus gradatus sp. n. Córcega, NAVÁS p. 112 Broteria 10.—*M. sauteri* sp. n. Formosa, PETERSEN p. 198 Ent. Mitt. Berlin 1.

Moza gen. p. 34 near *Austroleon*, *nubilis* sp. n. Mendoza p. 35, NAVÁS Broteria 10.

Myrmecaelurus spectabilis sp. n. Transkaukasien, NAVÁS p. 95 Mitt. ent. Ges. München 3.—*M. lachlani* Atlas p. 43, *grammaticus* Africa p. 44, *agrammus* Egypt p. 46, *limbatus* Africa p. 47, spp. n., NAVÁS Mem. Ac. Barcelona 10 No. 9.—*M. segonzaci* Marruecos p. 88, *lobatus* Egipto p. 89, spp. n., NAVÁS Broteria 10.—*M. sectorius* p. 239, *apicalis* p. 240, spp. n., Africa, NAVÁS Ann. Soc. Sci. Bruxelles 36.—*M. lachlani* var. n. *adusta* p. 218, NAVÁS *Insecta* 2.

Myrmeleodes gen. n. near *Myrmeleon* p. 242, *medius* sp. n. Cape Colony p. 243, NAVÁS Ann. Soc. Sci. Bruxelles 36.

Myrmeleon grammaticus sp. n. Asia Minor p. 49, NAVÁS Broteria 10.—*M. cabrerai* sp. n. Canary islds., NAVÁS p. 672 Rev. Ac. Madrid 10.—*M. stigmatis* sp. n. Mozambique p. 90, NAVÁS Broteria 10.—*M. pertenuis* sp. n. Sudan, KLAPÁLEK Sitzber. Ak. Wien. 121 p. 143.—*M. fusiformis* sp. n. S.-W.-Afr., PETERSEN p. 268 Ent. Mitt. Berlin 1.—*M. chloropterus* sp. n. Sénégal p. 77, NAVÁS *Insecta* 2.—*M. palpalis* sp. n. E. Africa, NAVÁS

p. 241 Ann. Soc. Sci. Bruxelles 36.—*M. ambicens* p. 89, *pertyi* p. 91 Brasilia, *capito* p. 90 Neu Guinea, spp. n., NAVÁS Mitt. ent. Ges. München 3. — *M. inconspicuus* var. n. *leonina* p. 30, *formicarius* synonymy, NAVÁS Broteria 10.—*M. immaculatus*, life history, EMERTON Psyche 19 p. 134.

Nanomitus gen. n. p. 93 near *Disparomitus*, *sellatus* sp. n. Congo p. 94 pl. iii f. 1, NAVÁS Rev. Zool. Afric. 2.

Neglurus gen. n. near *Glenurus*, *vitripennis* sp. n. Salangore, NAVÁS p. 39 Mem. Ac. Barcelona 10 No. 9.

Negretus gen. n. near *Palpares* p. 56, *ertli* sp. n. p. 57 Angola, NAVÁS Mitt. ent. Ges. München 3.

Neguitus gen. n. near *Neuroleon* p. 94, *calcaratus* sp. n. Madagascar p. 95, NAVÁS Broteria 10.

Nenus gen. n. near *Micromus* p. 67, *longulus* sp. n. China p. 68, NAVÁS Mem. Ac. Barcelona 10 No. 9.

Nephoneura clavata sp. n. Congo, NAVÁS p. 95 Rev. Zool. Afric. 2.

Nelees gen. n. p. 31, for *Myrmeleon nemausiensis*, NAVÁS Broteria 10.—*N. noxius* sp. n. Asia Minor p. 48, NAVÁS T.c.—*N. modestus* p. 68, *clathratus* p. 69, Africa, NAVÁS T.c.—*N. hellenicus* sp. n. Kalavryta, NAVÁS p. 93 T.c.—*N. lucasi* Algeria p. 40, *alexandrei* Zanzibar p. 41, spp. n., NAVÁS Rev. Zool. Afric. 2.—*N. indistinctus* sp. n. Africa, NAVÁS p. 97 Rev. Zool. Afric. 2.

Nesoleon rimatus sp. n. Africa, NAVÁS p. 38 T.c.—*N. erythraeus* sp. n. Eritrea, NAVÁS p. 96, Broteria 10.—*N. cognatus* p. 234, *divisus* p. 235, *interruptus* p. 236, *scalaris* p. 237, Africa, *fasciatus* Egypt p. 238, spp. n., NAVÁS Ann. Soc. Sci. Bruxelles 36.—*N. lunatus* p. 91 S.-W.-Afr., *kurzi* p. 92 Birma, spp. n., NAVÁS Mitt. ent. Ges. München 3.

Neuroleon angustus sp. n. Africa, NAVÁS p. 41 Rev. Zool. Afric. 2.—*N. drosimus* p. 70, *N. extraneus* p. 71, Africa, spp. n., NAVÁS Broteria 10.—*N. maroccanus* sp. n. Atlas, NAVÁS p. 42 Mem. Ac. Barcelona 10 No. 9.

Neusmia gen. n. voisin de *Neleis*, *pura* sp. n. N. Africa p. 221 fig. 2, NAVÁS Insecta 2.

Nicerus gen. n. near *Protidricerus*, *gervaisi* sp. n. China, NAVÁS p. 4 Mem. Ac. Barcelona 10 No. 9.

Nineta gen. n. type *Chrysopa flava* p. 98, NAVÁS Broteria 10.

Ninguta gen. n. für *Megalomus deltoides* und *Micromus angulatus*, NAVÁS Rev. russ. ent. 12 p. 420.

Nophis gen. n. near *Myrmedeon* p. 49, *teillardii* sp. n. Egypt p. 50, NAVÁS Mem. Ac. Barcelona 10 No. 9.

Nora gen. n. type *longicollis* Ramb., p. 46, NAVÁS Broteria 10.—*N. longicollis signata* n. var. p. 76, NAVÁS Insecta 2.

Nosa pardina sp. n. patr. inc., NAVÁS p. 23 Mitt. ent. Ges. München 3.—*N. tigris* Dalm. = (*Palpares manicatus* Ramb.), NAVÁS p. 56 T.c.—*N. leonina*, NAVÁS p. 86 T.c.—*N. lupina* p. 206, *calceata* p. 208, spp. n., Africa, NAVÁS Ann. Soc. Sci. Bruxelles 36.

Nothochrysa maculata sp. n. Transvaal, PETERSEN p. 270 Ent. Mitt. Berlin 1.—*N. impar* sp. n. Africa, NAVÁS p. 99 Broteria 10.

Nuglerus gen. n. p. 245 near *Glenurus*, *scalaris* sp. n. Brazil p. 246, NAVÁS Ann. Soc. Sci. Bruxelles 36.

Obus gen. n. near *Creagris*. p. 59, *arenosus* sp. n. Africa p. 60, NAVÁS Broteria 10.

Onclus gen. n. for *Syngenes horridus* Walk. NAVÁS p. 34 Mem. Ac. Barcelona 10 No. 9.

Osmylus naevius sp. n. India, NAVÁS p. 52 Mem. Ac. Barcelona 10 No. 9.

Palparellus gen. n. p. 225 type *P. spectrum* Ramb., *mistus* sp. n. S. Africa p. 226, NAVÁS Ann. Soc. Sci. Bruxelles 36.—*P. spectrum* var. n. *tristis*, NAVÁS p. 37 Rev. Zool. Afric. 2.

Palpares klapaleki p. 53 Persia, *equestris* Zungero p. 55, NAVÁS Broteria 10.—*P. ictericus* sp. n. Congo, NAVÁS p. 408 Rev. Zool. Afric. 1.—*P. pobegvini* p. 35, *dilatatus* p. 36, spp. n., Congo, NAVÁS Rev. Zool. Afric. 2.—*P. inclemens* var. n. *obscuratus* p. 105, *tristis* varr. n. *brevifasciatus* and *ugandanus*, *submaculatus* var. n. *taborensis* p. 106 O.-Afr. *formosus* var. n. *bifasciatus* S.-Afr. p. 107, *walkeri* var. n. *reticulatus* Chartum, *annulatus* p. 108, *kalahariensis* p. 110, S.-Afr., *rubescens* p. 111 Iola,

similis p. 112 O.-Afr., *striolatus* p. 113 Abessinia, *guttatus* p. 115 S.-W.-Afr., spp. n., STITZ Mitt. Mus. Berlin 6.—*P. longicornis* sp. n. Afr., NAVÁS p. 45 Fauna exot. 1.—*P. rieli* p. 69 fig. 1, *languidus* p. 71 fig. 2, spp. n., NAVÁS *Insecta.* 2.—*P. compositus* p. 210, *costatus* p. 211, *dispar* p. 213, *extensus* p. 214, *geniculatus* p. 216, *lentus* p. 217, *nigrita* p. 219 and var. *senegalensis* p. 220, *nudatus* p. 221, *ornatus* p. 222, *torridus* p. 224, spp. n., Africa, *pardus* var. n. *stellata* p. 223, *nigrita* var. n. *senegalensis* p. 220, NAVÁS Ann. Soc. Sci. Bruxelles 36.—*P. nebulo* sp. n. O.-Afr., NAVÁS p. 21 Mitt. ent. Ges. München 3.—*P. zugmayeri* sp. n. Beludschistan, NAVÁS p. 55 Mitt. ent. Ges. München 3.—*P. libelluloides* var. n. *nigripes*, NAVÁS p. 50 Mem. Ac. Barcelona 10 No. 9.—*P. hamatus* and *formosus*, NAVÁS p. 85 Broteria 10.

Palparidius and *Echthromyrmex* distinguished p. 227 *P. festivus* sp. n. Damara p. 228, Ann. Soc. Sci. Bruxelles 36.

Pamexis luteus Thunb., NAVÁS p. 87 Broteria 10.

Panorpa; food, CAMPION p. 321 Entomologist 45.—*P. klugi*, life-history, MIYAKE J. Coll. Agric. Tokyo 4 pp. 117-139 2 pls.—*P. sauteri* sp. n. Formosa, PETERSEN p. 197 Ent. Mitt. Berlin 1.

Psychopsis felina sp. n. Africa, NAVÁS p. 111 Broteria 10.

Raphidia herbesti sp. n. Chile, PETERSEN p. 273 Ent. Mitt. Berlin 1.

†*Raphidia exhumata* var. n. Colorado Miocene, COCKERELL Ent. News 23 pp. 215-216 2 ff.

Sicopsini n. n. for trib. *Psychopsini*, NAVÁS p. 62 Mem. Ac. Barcelona 10 No. 9.

Silveira gen. n. near *Psychopsis*, *marmoratus* sp. n. Mashonaland, p. 64, NAVÁS Mem. Ac. Barcelona 10 No. 9.

Sogra gen. n. *Acanthaclisini*, *nigrata* Dahomey, p. 43 *malitiosa* Central Africa p. 45, spp. n. NAVÁS Broteria 10.—*S. mendosa* sp. n. O.-Afr., NAVÁS p. 58 Mitt. ent. Ges. München 3.—*S. infernalis* sp. n. p. 73 fig. 3, NAVÁS *Insecta.* 2.—*Sogra*; revision pp. 12-31, *mordax* p. 19, *maligna* p. 20, *vitanda* p. 22, Africa, *nixosa* p. 23 Madagascar,

pertinax p. 24 Réunion, *mendax* p. 26, *iracunda* p. 27, Africa, *superba* Madagascar p. 28, *nefasta* Laos p. 30, spp. n., NAVÁS Mem. Ac. Barcelona 10 No. 9.

Solter gen. n. near *Myrmeleon* p. 32, *liber* sp. n. Portugal p. 33, NAVÁS Broteria 10.—*S. ledereri* Beyrout p. 37, *felderi* India p. 38, spp. n., NAVÁS Mem. Ac. Barcelona 10 No. 9.

Spilosmylus conformis Borneo p. 53, *punctatus* Flores p. 54, *lineatus* Philippines, *aureus* Siberia, p. 55, *croceus* Amboina p. 56, spp. n., NAVÁS T.c.

Stenares irroratus sp. n. Muscat, NAVÁS p. 204 Ann. Soc. Sci. Bruxelles 36.

Stenolomus; definition, NAVÁS p. 67 Mem. Ac. Barcelona 10 No. 9.

Suphalasca haullevillei p. 404 pl. xxi f. 1, *subcostalis* p. 405 f. 3, spp. n., Congo, NAVÁS Rev. Zool. Afric. 1.

Symmalthetas; validity, NAVÁS p. 205 Ann. Soc. Sci. Bruxelles 36.

Symphorobius bellus sp. n. Granada, NAVÁS p. 208 pl. iv f. 3 Bol. Soc. Aragon. 10 1911.—*S. buenoi* sp. n. Estados Unidos, NAVÁS p. 198 Broteria 10.

Tahulus gen. n. *Myrmeleonidarum* pp. 112-113 *caligatus* sp. n. p. 113 Tshifu-Tsintan, NAVÁS Rev. russ. ent. 12.

Tmesibasis alberti sp. n. Congo, NAVÁS p. 91 pl. iii f. 2 Rev. Zool. Afric. 2.

Tomatares limonius sp. n. O.-Afr., NAVÁS p. 24 Mitt. ent. Ges. München 3.—*T. pardalis* Fabr., NAVÁS p. 51 Mem. Ac. Barcelona 10 No. 9.

Weeleus gen. n. for *Myrmeleon acutus* Walk., NAVÁS p. 41 T.c.

Wernzia gen. n. for *Hemerobius coelivagus* Walk., NAVÁS p. 63 T.c.

DIPTERA.

Catalogue of Diptera of Spain, ESCOBET Mem. Soc. espan. 7 pp. 61-246.

Die Dipteren von Steiermark, Nachtrag ii, STROBL Mitt. Ver. Steierm. 46 pp. 45-293.

Persische Dipteren der Expeditionen von Zarudny, BECKER und STEIN Ann. mus. zool. Ac. sc. 19 pp. 503–652 pls. xii–xiv.

Catalogue of amber Diptera, MEUNIER pp. 160–186 Ann. Soc. Scient. 36 pp. 160–186.

Diptera Nematocera (except *Chironomidae* and *Culicidae*), BRUNETTI Faun. Brit. India 574 pp. 12 pls.

External structure of Diptera, and bibliography of Iberian; BEZZI pp. 114–156 Broteria 10.

Die Halteren der Dipteren, PFLUG-STAEDT Zeitschr. wiss. Zool. 100 pp. 1–59 4 pls.

The phylogeny of the Nematocera, with notes on the leg bristles, hairs and certain mouth glands of Diptera, WESCHÉ Biol. Bull. 23 pp. 250–270 pl. i.

Dipterological notes, JOHNSON Psyche 19 pp. 102–104.

Meigen's 1800 work, ALDRICH p. 104 Canad. Ent. 44.

Diptera bred from cow manure, PRATT pp. 180–183 Canad. Ent. 44.

Diptera at home on spiders' webs, KNAB J. New York Ent. Soc. 20 1912 pp. 143–146.

Über die als Fischfutter verkauften roten Mückenlarven, THIENEMANN Bl. Aquarienkunde 23 pp. 120–122.

Sphaeconophilus gen. n. in. sed. [? *Pupipara*], *belgicus* sp. n. Ardennes in *Vespa* nest, BECKER p. 142 figs. ♂ and ♀ Ann. Soc. ent. Belgique 56.

CECIDOMYIIDAE.

Canadian *Cecidomyiidae*, FELT Ottawa Nat. 25 p. 164 etc.

Cecidomyiden, Gallen auf Java, DOCTERS VAN LEEUWEN UND DOCTERS VAN LEEUWEN-REYNVAAN W. und J. Rec. Trav. bot. Néerl. 9 pp. 382–399.

Cecidomyidae General, FELT Biology of *Miastor* and *Oligarces*. Science 35 pp. 278–280.

Itonidae vs. *Cecidomyiidae*, BRUES Science 36 p. 216.

Acaroletes gen. n. type *Arthrocnodax tetranychii*, KIEFFER Marcellia 11 p. 229.

Allodiplosis gen. n., *laeviusculi* sp. n. Deutschl., RÜBSAAMEN p. 83–85 Zeitschr. wiss. Insektbiol. 7 1911.

Amaurosiphon gen. n. near *Pseudohormomyia*, *caricis* sp. n. Deutschl., RÜBSAAMEN p. 391 T.c.

Amblardiella gen. n., *Oligotrophus tamaricum*, KIEFFER Marcellia 11 p. 169.

Ametrodiplosis gen. n. für *Diplosis thalictricola* Rübs., RÜBSAAMEN p. 278 Zeitschr. wiss. Insektbiol. 7 1911.

Antichira gen. n., *striata* sp. n., Deutschl., RÜBSAAMEN p. 122 T.c.

Antichiridium n. n. für *Antichira* Rübs., RÜBSAAMEN p. 168 T.c.

Apiomyia gen. n. type *Oligotrophus bergenstammi*, KIEFFER Marcellia 11 p. 220.

Aplonyx gen. n., *chenopodii* sp. n. Sicilia, DE STEFANI PEREZ Marcellia 6 1908 p. 174.

Aprionus myrmecophilus sp. n. Bitche, KIEFFER Marcellia 11 p. 235.

Arthrocnodax occidentalis sp. n. California, FELT J. Econ. Ent. 5 p. 402.—*A. meridionalis* sp. n. p. 176 West Indies, FELT Ent. News 23.

Asphondylia viticola sp. n. Java, KIEFFER Marcellia 8 p. 124.—*A. diplaci* p. 151, *encelliae* p. 152, California, spp. n., FELT J. New York Ent. Soc. 20.—*A. miki*, WEBSTER circ. 147 U.S. Dep. Agric. ent.

Asteromyia grindeliae sp. n. p. 149 California, FELT J. New York Ent. Soc. 20.

Asynapta americana sp. n. p. 103 Pennsylvania, FELT T.c.

Blustodiplosis gen. n. type *Clinodiplosis artemisiae*, KIEFFER Marcellia 11 p. 8.

Brachydiplosis gen. n., *caricum* sp. n. Deutschl., RÜBSAAMEN p. 82 Zeitschr. wiss. Insektbiol. 7 1911.

Bruggmanniella pisoniae sp. n. p. 174 West Indies, FELT Ent. News 23.

Camptodiplosis gen. n. type *Mycodiplosis boleti*, KIEFFER Marcellia 11 p. 232.

Camptomyia aestiva sp. n. p. 104 Pennsylvania, FELT J. New York Ent. Soc. 20.

Catocha kiefferi sp. n. Sirbitzkogel, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Cecidomyia (?) *debskii* sp. n. Egypte, KIEFFER Marcellia 11 p. 171.—*C. rosaria* und *albipennis*, WÜST Ent. Zs. 25 pp. 247–248.

Chrysodiplosis squamatipes sp. n. p. 28 Ceylon, KIEFFER Spolia Zeylan. 8.

Clinodiplosis, Démembrement, KIEFFER Marcellia 11 pp. 6–11.—*C. schlehtendali* p. 16, *rhynchitou* p. 52, *gallicola* p. 55, spp. n., Deutschl., RÜBSAAMEN p. 16 Zeitschr. wiss. Insektbiol. 7 1911.—*C. ceylanicus* sp. n. p. 26 f. 3 Ceylon, KIEFFER Spolia Zeylan. 8.—*C. graminicola* p. 127 fig., *paederiae* p. 129, spp. n., Java, KIEFFER Marcellia 8.—*C. araneosa* sp. n. Maryland p. 154, FELT J. New York Ent. Soc. 20.—*C. lantanae* sp. n. Brasle, RÜBSAAMEN Marcellia 6 1908 p. 151.—*C. nidorum* sp. n. Autriche, KIEFFER Marcellia 11 p. 231.

Coccidomyia erii sp. n. p. 147 California, FELT J. New York Ent. Soc. 20.

Collinia gen. n., *acaciae* sp. n. Egypte, KIEFFER Marcellia 11 pp. 232–233.

Contarinia viburni sp. n. Bitche, KIEFFER p. 230 T.c.—*C. coloradensis* sp. n. Colorado p. 240, FELT J. New York Ent. Soc. 20.—*C. tritici* p. 287, FELT J. Econ. Ent. 5.

Coprodiplosis tetrachaetus sp. n. Bitche, KIEFFER Marcellia 11 p. 228.—*C. (?) inconspicuus* sp. n. p. 29 Ceylon, KIEFFER Spolia Zeylan. 8.

Coquilletomyia knabi sp. n. Costa Rica p. 154, FELT J. New York Ent. Soc. 20.

Corinthomyia gracilis sp. n. p. 102 Pennsylvania, FELT T.c.

Courteia gen. n., *graminis* sp. n. Java, KIEFFER Marcellia 8 1910 p. 131 1 fig.

Dasyneura schmidti p. 284, *erigerontis*, *glyciphylli*, p. 286, *medicaginis*, *picridis*, p. 287, *coryli* p. 288, *thomasi* p. 354, spp. n., Deutschl., RÜBSAAMEN Zeitschr. wiss. Insektbiol. 8.—*D. eugeniae* sp. n. Florida p. 106, FELT J. New York Ent. Soc. 20.

Diarthronomyia californica sp. n. California p. 752, FELT Pomona Coll. J. Ent. 4 p. 752.

Dichelomyia rosarum, metamorphose, Generationen, Parasiten, Schaden (Russ.) JANATA Suisferoholi Trd. jest muz. 1 pp. 78–95 1 Taf.

Dichodiplosis gen. n., *langeni* sp. n. Deutschl., RÜBSAAMEN pp. 169–171 Zeitschr. wiss. Insektbiol. 7 1911.

Dicrodiplosis antennata Maine p. 243, *californica* California p. 244, *helena* Massachusetts p. 245, spp. n., FELT J. New York Ent. Soc. 20.

Dyodiplosis gen. n. für *Hormomyia arenariae*, RÜBSAAMEN p. 49 Zeitschr. wiss. Insektbiol. 8.

Epidosis tolgii sp. n. Autriche, KIEFFER Marcellia 11 p. 234.—*E. ceylanicus* sp. n. p. 29 Ceylon, KIEFFER Spolia Zeylan. 8.

Feltiella gen. n. near *Diplosis*, *tetranychii* sp. n. Deutschl., RÜBSAAMEN p. 281 Zeitschr. wiss. Insektbiol. 7 1911.

Geisenheyneria gen. n., *rhenana* sp. n. Deutschl., RÜBSAAMEN p. 279 T.c.

Guignonia gen. n., *potentillae* sp. n. France, KIEFFER Marcellia 11 p. 219 fig.

Hallomyia gen. n., *iris* sp. n. figs. 1 & 2 p. 25 Ceylon, KIEFFER Spolia Zeylan. Colombo 8.

Haplodiplosis gen. n. für *Diplosis equestris* WAGNER, RÜBSAAMEN p. 393 Zeitschr. wiss. Insektbiol. 7 1911.

Hartigiola gen. n. für *Oligotrophus annulipes*, RÜBSAAMEN p. 161 op. cit. 8.

Hyperdiplosis producta sp. n. p. 177 West Indies, FELT Ent. News 23.

Isobremia gen. n. type *Bremia sonchi*, KIEFFER Marcellia 11 p. 231.

Isodiplosis gen. n. near *Diplosis involuta* sp. n. Deutschl., RÜBSAAMEN pp. 97–98 Zeitschr. wiss. Insektbiol. 8.

Itonida tritici sp. n. p. 289 U.S., FELT J. Econ. Ent. 5.—*I. aphidivora* p. 245, *putrida* p. 246, *aprilis* p. 247, spp. n. New York, FELT J. New York Ent. Soc. 20.—*I. inopsis*, ♀ gall, early stages, FELT J. Econ. Ent. 5 pp. 368–369.

Janetiella euphorbiae sp. n. Sicilia, DE STEFANI PEREZ Marcellia 6 1908 p. 108.—*J. coloradensis* sp. n. Colorado p. 148, FELT J. New York Ent. Soc. 20.

- Johnsonomyia cincta* sp. n. Guatemala p. 103, FELT T.c.
- Karschomyia townsendi* sp. n. Peru p. 155, FELT T.c.
- Lamprodiplosis* gen. n. type *Lestodiplosis rhopalothrix*, KIEFFER Marcellia 11 p. 229.
- Lasiodiplosis* nom. n. for *Lepidodiplosis* Kieff. 1912, KIEFFER p. 232 T.c.
- Lasioptera verbenae* p. 150, *diplaci* p. 151 California, spp. n., FELT J. New York Ent. Soc. 20.—*L. javanica* sp. n. Java, KIEFFER Marcellia 8 p. 123.
- Lasiopteryx manihot* sp. n. St. Vincent, FELT p. 144 Canad. Ent. 44.
- Leptosyna quercicola* n. n. for *quercus* Felt 1911, KIEFFER Marcellia 11 p. 235.—*L. quercivora* nom. n. for *quercus* Felt p. 123, FELT N.Y. St. Mus. Bull. No. 155.
- Lestodiplosis chrysanthemi* p. 226, *inermis* p. 227, *miastoris* p. 228, spp. n. B tche, KIEFFER, Marcellia 11.—*L. morchellae* sp. n. Deutschl., RÜBSAAMEN p. 350 Zeitschr. wiss. Insektbiol. 7 1911.—*L. ceylanicus* sp. n. p. 28 Ceylon, KIEFFER Spolia Zeylan. 8.
- Lestrema ceylanica* sp. n. p. 29 Ceylon, KIEFFER T.c.
- Macrolabis lonicerae* sp. n. Deutschl. RÜBSAAMEN p. 355 Zeitschr. wiss. Insektbiol. 8.
- Miastor*, Pädogenesis, MULLER Zool. Anz. 40 pp. 172-176.
- Mycodiplosis pulvinariae* sp. n. p. 175 West Indies, FELT Ent. News 23.
- Myricomyia longipalpis* sp. n. Portugal, KIEFFER Marcellia 11 p. 232.
- Neocatocha* gen. n., *marilandica* sp. n. Maryland p. 236, FELT J. New York Ent. Soc. 20.
- Neptunimyia* gen. n., *tridens* sp. n. New York p. 237, FELT T.c.
- Oligotrophus betheli* sp. n. Colorado p. 148, FELT J. New York Ent. Soc. 20.—*O. ventricolus*, EDWARDS p. 136 Ent. Mag. 48.
- Orseolia javanica* sp. n. Java, KIEFFER Marcellia 8 p. 125 fig.
- Orseoliella* gen. n., type *Orseolia javanica*, KIEFFER Marcellia 11 p. 231.
- Parallelodiplosis* gen. n. für *galliperda* Lw., RÜBSAAMEN p. 120 Zeitschr. wiss. Insektbiol. 7 1911.
- Parepidosis* gen. n. type *venustus* Winnertz, KIEFFER Marcellia 11 p. 234.
- Perrisia geranii* sp. n. France *Geranium cicutarium*, KIEFFER Marcellia 6 1907 p. 44.—*P. spireae* sp. n. p. 26, LOISELLE Feuille Natural 42.
- Phlyctidobia* gen. n. *Oligotrophus solmsi*, KIEFFER Marcellia 11 p. 220.
- Plutodiplosis* gen. n., *magnificus* sp. n. Ceylon p. 27, KIEFFER Spolia Zeylan. 8.
- Poomyia hellwigi* sp. n. Deutschl. RÜBSAAMEN p. 217 Zeitschr. wiss. Insektbiol. 8.
- Porricondyla vernalis* p. 104, *dietzii* p. 105, *porrecta* p. 105, *dorsata* p. 238, *juvenalis* p. 239, spp. n., N. America, FELT J. New York Ent. Soc. 20.
- Prodiplosis fitchii* sp. n. p. 288 U.S., FELT J. Econ. Ent. 5.
- Prosepidosis* gen. n., *pectinatus* sp. n. Bitche, KIEFFER Marcellia 11 pp. 233-234.
- Pseudohormomyia granifex* sp. n. Deutschl., RÜBSAAMEN p. 390 Zeitschr. wiss. Insektbiol. 7 1911.
- Rhopalomyia grossulariae*, HOUSER J. Econ. Ent. 5 pp. 180-184 pls. 5 & 6.
- Schizodiplosis* gen. n. type *Clinodiplosis floralis*, KIEFFER Marcellia 11 p. 233.
- Schizomyia psoraleae* sp. n. Transvaal; RÜBSAAMEN Marcellia 9 1910 p. 32; *scheppigi* sp. n. loc. ? RÜBSAAMEN Marcellia 9 1910 p. 36 1 fig.
- Silvestrina* gen. n., *silvestrii* sp. n. Sud-Africa, KIEFFER Bull. Lab. Portici 6 p. 172.
- Stictobremia* gen. n. p. 138, *campylomyzae* sp. n. p. 139, KIEFFER Bull. Soc. ent. France 1912.
- Syndiplosis winnertzi* sp. n. Deutschl., RÜBSAAMEN p. 13 Zeitschr. wiss. Insektbiol. 7 1911.
- Thecodiplosis mosellana* p. 287, FELT J. Econ. Ent. 5.—*T. zauschneriae* sp. n. p. 152 California, FELT J. New York Ent. Soc. 20.—*T. dulichii* sp. n. Massachusetts p. 241, FELT J. New York Ent. Soc. 20.

Thomasia gen. n. für *Diplosis oculiperda* Rübs. 1893, RÜBSAAMEN p. 168 Zeitschr. wiss. Insektbiol. 7 1911.

Trichodiplosis gen. n. *Clinodiplosis caricis*, KIEFFER Marcellia 11 p. 220.

Trisopsis gen. n., *oleae* sp. n. Sud-Africa, KIEFFER Boll. Lab. Portici 6 p. 171 fig.

Trotteria galii sp. n. Deutschl., RÜBSAAMEN p. 376 Zeitschr. wiss. Insektbiol. 8.

Uleella gen. n., *dalbergiae* sp. n. Brasile, RUEBSAAMEN Marcellia 6 p. 120 1908.—*U. pisonifolia* sp. n. St. Vincent p. 353, FELT Ent. News, 23.

Winnertziola gen. n. type *Winnertzia rubra*, KIEFFER Marcellia 11 p. 235.

Youngomyia pennsylvanica sp. n. p. 106 Pennsylvania, FELT J. New York Ent. Soc. 20.

MYCETOPHILIDAE.

The *Mycetophilidae* of North America, Part 3, *Mycetophilinae*, JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196 pp. 249–328 ff. 98–245.

The *Mycetophilidae* of North America, Part 4 Conclusion, JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 200 pp. 57–146 ff. 24–267.

Mycetophilidae Mährens, LANDROCK Zeitschr. Mährens Land-Mus. 12 pp. 273–322.

Die phyletischen Beziehungen der Lycoriiden (Sciariden) zu den Fungivoriden (Mycetophiliden) und Itonididen (Cecidomyiiden) und ihre systematische Gliederung, ENDERLEIN Arch. Natg. Berlin 77 Bd 1 SupplH. 3 pp. 116–201 2 Taf.

Acrodicrania ? ferruginea Assam, *A. incerta* Kurseong, p. 93, spp. n., BRUNETTI Faun. Brit. India Nematocera.

Allodia latelamellata sp. n. Admont STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*A. nigrofasciata* sp. n. Simla, BRUNETTI Faun. Brit. Ind. Nematocera p. 108.—*A. bulbosa* p. 316, *actuaria*, *falcata*, p. 317, *elata*, *bella*, p. 318, *beata*, *callida*, p. 319, *delita* p. 320, spp. n., U.S., figs., JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196.

Amesicrium gen. n. near *Sciara*, *nanum* sp. n. Seychellen, ENDERLEIN p. 128 Arch. Naturges. 77 Suppl. 3.

Anaclinia (Neurotelia) minor sp. n. Ungarn, LUNDSTRÖM Ann. Mus. Hung. 10 p. 517.

Anaretella gen. n., *africana* sp. n. O.-Afrika, ENDERLEIN p. 193 Arch. Naturges. 77 Suppl. 3.

Aniarella gen. n. near *Sciara*, *pellucens* sp. n. Brasilia, ENDERLEIN p. 141 Arch. Naturges. 77 Suppl. 3.

Anomalomyia indica sp. n. Darjeling, BRUNETTI p. 91 Faun. Brit. India Nematocera.

Apelmocreagris gen. ng near *Sciara* p. 146, *leucacropera* sp. n. Brasilia, *A. bibionea* Speis. v. n. *miniaticeps* Fernando Po, p. 148, ENDERLEIN Arch. Naturges. 77 Suppl. 3.

Boletina villosa sp. n. Livland, LANDROCK Wien ent. Zeit. 31 pp. 175–185.—*B. lundstroemi*, *moravica*, spp. n., Mähren, LANDROCK Wien. ent. Zeit. 31.—*B. obscura* ff. 179 & 146, *cincta* ff. 147 & 180, p. 270, *notescens* p. 272 ff. 153 & 185, *melancholica* p. 271, figs., *nacta* p. 277, *delicata* p. 276, figs., *gracilis* p. 271, figs., *imitator* p. 271, *sobria* p. 274, *sedula* p. 277, *longicornis* p. 272, *obesula* p. 276, spp. n. N. America, with figs., JOHANNSEN Agric. Epx. Sta. Maine Bull. No. 196.

Bolitophila pseudohybrida, *nigrolineata*, *rossica*, Polen, spp. n., Europa, LANDROCK pp. 36–37 Berlin ent. Zeitschr. 57.

Brachycampta czernyi sp. n. Brünn, LANDROCK Wien. ent. Zeit. 31 pp. 175–185.—*B. silvatica* sp. n. Mähren, LANDROCK Wien. ent. Zeit. 31 pp. 27–39.—*B. foliifera* sp. n. Gesäuse, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Brachypeza bisignata divergens var. n. p. 309 ff. 120 & 229, JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196.

Ceratosciara gen. n. near *Sciara*, *corniculata* sp. n. Seychellen, ENDERLEIN p. 183 Arch. Naturges. 77 Suppl. 3.

Ceroplatus quadripunctatus sp. n. Calcutta, BRUNETTI p. 57 Faun. Brit. India Nematocera.

Clastobasis vittigera sp. n. Assam, BRUNETTI p. 95 Faun. Brit. India Nematocera.

Coelosia lepida ff. 103 & 211, *modesta* ff. 212 & 104, *gracilis* f. 210, spp. n., N. America, p. 294, JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196.

Cordyla manca, *recens*, *scita*, p. 307, *neglecta* p. 308, spp. n., U.S., figs., JOHANNSEN T.c.—*C. fusca*, Larvenhypopharynx, VIMMER Rozpr. České Ak. Frant. Jos. 20 1911 No. 32 pp. 7–9.

Cratyna brevifurcata sp. n. Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Dahlia gen. n., *larviformis* sp. n. für *Corynoscelis eximia* Dahl 1911, ENDERLEIN p. 264 Zool. Anz. 40.

Delopsis collaris sp. n. Maddathorai, BRUNETTI p. 119 Faun. Brit. India Nematocera.

Docosia nigella, *nitida*, p. 300, figs., spp. n., N. America, JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196.

Dynatosoma major sp. n. Mähren, LANDROCK Wien. ent. Zeit. pp. 27–39.—*D. nigrina* p. 75, *placida* p. 76, spp. n., N. America, figs., JOHANNSEN Agric. Exp. Sta. Maine Bull. 200.

Eucrium gen. n. *Sciarinae*, *rueb-saameni* sp. n. Brasilia, ENDERLEIN p. 142 Arch. Naturges. 77 Suppl. 3.

Euryschalis gen. n. near *Coelosia* p. 559, *spectralis* sp. n. Kurseong p. 560, BRUNETTI Faun. Brit. India Nematocera.

Exechia macroura, *pseudocincta*, spp. n., Steiermark, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*E. nigros-cutellata* sp. n. Mähren, LANDROCK p. 308 Wien. ent. Ztg. 31.—*E. basilinea* sp. n. Kurseong, BRUNETTI p. 113 Faun. Brit. India Nematocera.—*E. cincinnata* p. 69, *nativa* p. 70, *captiva* p. 72, *quadrata* p. 69, *nugatoria* p. 70, *capillata*, *attrita*, p. 73, *absurda* p. 74, *palmata*, *assidua*, *auxiliaria*, p. 71, *bella* p. 72, *bellula* p. 71, *obediens*, *repanda*, p. 73, *casta* p. 74, *perspicua* p. 67, *nugax*, *nexa*, *abrupta*, p. 68, *satiata*, *canalicula*, p. 69, *absoluta* p. 72, spp. n., N. America, with figs., JOHANNSEN Agric. Exp. Sta. Maine Bull. 200.

Gephyromma gen. n., *fulgidum* sp. n. Brasilia, ENDERLEIN p. 189 Arch. Naturges. 77 Suppl. 3.

Gnoriste brevirostris p. 83 Mundali, *spathulata*, p. 84, Darjiling, spp. n.,

BRUNETTI Faun. Brit. India Nematocera.—*G. macra* sp. n. Wisconsin p. 257 ff. 138 & 170, JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196.

Greenomyia gen. n. near *Palaeoanacclinia* p. 85, *nigricoxa* sp. n. Phagu p. 87, BRUNETTI Faun. Brit. India Nematocera.

Isoneuromyia gen. n. near *Platyura* p. 66, *annandalei* sp. n. Sylhet p. 67, BRUNETTI T.c.—*I. rufescens* sp. n. Simla, BRUNETTI p. 559 T.c.

Lasiosoma nigrum sp. n. Livland, LANDROCK Wien. ent. Zeit. 31 pp. 175–185.—*L. nigroclavatum* sp. n. Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Leia flavobrunnea, *arcuata*, Darjiling, p. 99, *bicolor* Kurseong p. 100, *insignis* Ukhrul, *nigra* Simla, *spathulata* Darjiling, p. 101, spp. n., BRUNETTI Faun. Brit. India Nematocera.—*L. spp. n. nigra* p. 281 ff. 163 & 195, *plebeja* p. 285 ff. 166 & 200, *dryas* p. 287 ff. 168 & 202, spp. n., N. America, JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196.

Leptomorphus ornatus sp. n. Sylhet, BRUNETTI p. 85 Faun. Brit. India Nematocera.—*L. ypsilon* sp. n. New York p. 265 f. 177, JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196.

Limnopneumella gen. n. für *Anarete stettinensis* Enderl., ENDERLEIN p. 194 Arch. Naturges. 77 Suppl. 3.

Loewiella hungarica sp. n. Ungarn. LUNDSTRÖM Ann. Mus. Hung. 10 p. 516,

Lycoria [*Sciara*] *fuscolimbata* p. 150, *sumatrana* p. 151 Sumatra, *japonica* p. 152 Japan, *brevipetiolata* p. 154 Fernando Po, *pleciodes* p. 158, *tristans* p. 159, Ecuador, *psychina* p. 160, Mexico, *obscurans* p. 161 Ecuador, *pimpliformis* p. 162 Colombia, *nigrans* p. 163 Brasil, *forcipigera* p. 164 Costa Rica, *guayanensis* p. 166 Guyana, *prosthioxantha* p. 167 Colombia, *nigricans*, *fumigans*, p. 168, *regens* p. 169, *fulgescens* p. 170, *evanescens* p. 171, Brasil, *hyalescens* p. 172 Costa Rica, *columbiana* Colombia, *minuens* Brasil, p. 173, *simulans* p. 174, *propinquans*, *fulvescens*, p. 175, *flavescens* p. 176, *longinquans*, *vergens*, p. 177, *nubilans* p. 178, *arcuans* p. 179, *obsolescens* p. 180 Brasil, *fuscescens* p. 181 Costa

Rica, aequans p. 182 Brasil, spp. n., ENDERLEIN Arch. Naturges. 77 Suppl. 3.

Lygistorrhina urichi sp. n. Trinidad, EDWARDS p. 204 Ann. Nat. Hist. 10.

Macrobrachius longicosta sp. n. Kurseong, BRUNETTI p. 109 Faun. Brit. India Nematocera.

Macrocera ornata p. 51, *alternata* p. 52, *flavicosta*, *brunnea*, p. 53, *elegans*, *inconspicua*, p. 54, *ferruginea* p. 55, spp. n., India, BRUNETTI Faun. Brit. India Nematocera.

Megalosphys gen. n. near *Sciara* p. 129, *luteicoxa* p. 130, *pedunculata* p. 131 Brasilia, *hirtipes* p. 132, *nigricolor* p. 133, Colombia, *pygmaea* p. 134 Brasilia, spp. n., ENDERLEIN Arch. Naturges. 77 Suppl. 3.

Monoclona forcipata sp. n. Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Mycomyia flaviventris, *bifascipennis*, p. 72, Ceylon, *basalis* p. 73 Bhowali, *tinctipennis*, *ferruginea* p. 74 Kurseong, *trilineata* p. 75 Simla, *indefinita* Darjiling, *indica* Simla, p. 76, *flavithorax*, *curvilinea*, p. 77, Darjiling, spp. n., BRUNETTI Faun. Brit. India Nematocera.

†*Mycomyia cockerelli* sp. n. Colorado Miocene, JOHANNSEN Amer. J. Sci. 34 p. 140 f. i.

Mycothera paradoxa, *recta*, p. 82, *impellans*, spp. n., *fenestrata praenubila* var. n., p. 83, *mitis* sp. n. p. 82, U.S., JOHANNSEN Agric. Exp. Sta. Maine Bull. 200.

Mycetophila fulvithorax sp. n. Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*M. calva*, *posticalis*, *pulchra*, *triangularis*, spp. n., Ungarn, LUNDSTRÖM Ann. Mus. Hung. 10 pp. 510–521.—*M. cinctiventris*, *quadrifasciata*, Simla, p. 115, *griseolateralis* Tonglu, *curvilinea* Darjiling, p. 116, *suffusa*, *himalayensis*, Simla, p. 117, *binotata* Darjiling p. 118, spp. n., BRUNETTI Faun. Brit. India Nematocera.—*M. jucunda* p. 90, *extenta* p. 105, *socia* p. 106, *perlonga* p. 100, *perita* p. 90, *falcata* p. 93, *fastosa* p. 91, *lenis* p. 94, *anomala* p. 96, *foecunda*, *imitator*, p. 99, *pectita*, *lassata*, p. 101, *lenta* p. 102, *fatua*, *edura*, p. 103, *exusta*, *jugata*, p. 104, *edentula* p. 105, spp. n., N. America, figs., JOHANNSEN Agric. Exp. Sta. Maine Bull. 200.

Neoempheria griseipennis sp. n. Rattenmann Tauern, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Neoglaphyoptera tricuspidata, *trimaculata*, spp. n., Admont, STROBL T.c. p. 45 etc.

Neuratelia silvatica p. 262 ff. 174 & 143, *scitula* f. 144, *eminens* f. 175, *desidiosa*, p. 263, spp. n., N. America, JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196.

Novakia simillima sp. n. Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Odontopoda indica sp. n. Darjiling, BRUNETTI p. 90 Faun. Brit. India Nematocera.

Palaeoanaclinia flavohirta sp. n. Darjiling, BRUNETTI p. 86 Faun. Brit. India Nematocera.

†*Palaeognoriste affinis* sp. n. p. 89 fig. 1–2 Baltic amber, MEUNIER Bull. Soc. ent. France 1912.

Phronia tiefi, ♀, LANDROCK Wien ent. Zeit. 31 p. 253.—*P. producta*, *insulsa*, p. 60, *difficilis* p. 61, *similis* p. 62, *venusta* p. 61, spp. n., U.S., figs., JOHANNSEN Agric. Exp. Sta. Maine Bull. 200.—*P. simplex* Assam, *semifumata* Tonglu, p. 111, spp. n., BRUNETTI Faun. Brit. India Nematocera.

Phthinia curta sp. n. New York p. 291 ff. 102 & 208, JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196.

Platyura forcipula sp. n. Ungarn, LUNDSTRÖM Ann. Mus. Hung. 10 p. 514.—*P. nigerrima* sp. n. Turrachgraben, STROBL Mitt. Ver. Steierm. 46.—*P. grandis*, *suffusinervis*, p. 60, *apicipennis* p. 61, *affinis*, *flaviventris*, *marginata*, p. 62, *vicina* p. 63, *octosegmentata*, *ruficornis*, p. 64, *longifurcata*, *indistincta*, *funerea*, p. 65, *flavomarginata*, *fumipes*, p. 66, spp. n., India, BRUNETTI Faun. Brit. India Nematocera.

Pnyxia gen. n. type *Epidapus scabiei* p. 114, JOHANNSEN Agric. Exp. Sta., Maine Bull. 200.

Polylepta incerta, *dubiosa*, p. 79, Mundali, spp. n., BRUNETTI Faun. Brit. India Nematocera.—*P. leptogaster*, Larve, SCHMITZ Natuurhistor. Gen. Limburg Meded. 1912 1913 pp. 65–96.

Psectrosciara gen. n. p. 192, *mahensis* sp. n. Seychelles p. 193, KIEFFER Tr. Linn. Soc. London 15.—*P. scatopsiformis* sp. n. Costa Rica, ENDERLEIN p. 281 Zool. Anz. 40.

Psilomegalosphys gen. n. near *Sciara*, *xanthogaster* sp. n. Sumatra, ENDERLEIN p. 137 Arch. Naturges. 77 Suppl. 3.

Rhymosia flavolimbata Kurseong p. 103, *genitalis* Darjiling, *albolateralis* Naini Tal, p. 104, *annulicornis* Bengal p. 105, *humeralis* Sylhet, *fascipes* Ceylon, p. 106, spp. n., BRUNETTI Faun. Brit. India Nematocera.—*R. serripes*, *inflata*, p. 311, *imitator*, *akeleyi*, p. 312, *captiosa*, *diffissa*, p. 313, spp. n., U.S., figs., JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196.

Sciara incana, *nigrovittata*, spp. n., Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*S. vicina* p. 124, *hastata* p. 130, *mutua* p. 131, *narta*, *fatigans*, p. 132, *actuosa*, *dolens*, p. 134, *diluta*, *fumida*, p. 135, *trivialis*, *impatiens*, p. 136, *dives*, *futilis*, *abdita*, p. 125 *habilis* p. 126, *munda* p. 127, *imitans* p. 128, *dux* p. 127, *mellea* p. 129, *jucunda* p. 131, *lugens*, *parilis*, p. 132, spp. n., N. America, with figs., JOHANNSEN Agric. Exp. Sta. Maine Bull. 200.—*S. rimisutellata* p. 181, *seychellensis* p. 182, *albicoxa* p. 183, *biformata* p. 185, *nigriceps* p. 186, *divergens* p. 187, *mahensis*, *leucocera*, p. 193, spp. n., Seychelles, KIEFFER Tr. Linn. Soc. London 15.—*S. trilineata*, *trifasciata*, p. 126, *opposita*, *distinctuenda*, p. 127, Darjiling, *rufithora* p. 128, *rufoabdominalis*, Ukhrul, *luteiventris* Simla, *flammiventris* Darjiling, p. 129, *indica*, *flavofemorata*, p. 130, *nigripennis*, *diversipes*, p. 131, *fratercula*, *exacta*, p. 132, Kurseong, *longinervis* Siliguri p. 133, *flavicollis* Darjiling p. 134, *orientalis* India p. 135, *fascipennis* Kurseong p. 136, *scxsetosa*, *quadrisetosa*, Darjiling, *pallescens* Moulmein, p. 137, *fulvescens* Rajshai, *setilineata* Simla, p. 138, *latelneata* Tennasserim, *radicum* Calcutta, p. 139, *impostor* Darjiling p. 140, *segmenticornis* Bindukhera, *compacta* Gangtok, p. 141, *inconspicua* Sylhet, *hirtilineata* Simla, p. 142, *niveiapicalis* Ukhrul, *longipennis* Darjiling, p. 143, *flaviseta* Simla p. 144, *nitidithorax* Kalighat, *longitudinalis* Darjiling, p. 145, *ruficoxa* Kurseong, *flavipleura* Darjiling, p. 146, *evanescens*, *parallela*, Darjiling, p. 147,

(N-9210 j)

spp. n., BRUNETTI Faun. Brit. India Nematocera.—*S.*, etc., in mushrooms, POPENOE Circ. 155 U. S. Dep. Agric., Ent.

Sciophila siebecki sp. n. Mähren, LANDROCK Wien ent. zeit. 31 pp. 27-39.—*S. (Mycomya) corcyrensis* sp. n. Korfu, LUNDSTRÖM Ann. Mus. Hung. 10 p. 515.—*S. bicolor* sp. n. Darjiling, BRUNETTI p. 70 Faun. Brit. India Nematocera.

Scythropochroa gen. n. *Sciarinae latefurcata* p. 138 Seychellen, *relata* p. 139 Sumatra, spp. n., ENDERLEIN Arch. Naturges. 77 Suppl. 3.

Sytemna rejecta p. 296, *separata* p. 297, spp. n., U.S., *vittata fasciata* var. n. Maine p. 297, with figs., JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196.—*S. alpicola*, JENKINSON p. 67 Ent. Mag. 48.

Telmaphilus nebulosa sp. n. U.S., p. 64 ff. 30 & 158, JOHANNSEN Agric. Exp. Sta. Maine Bull. 200.

Trichomegalosphys gen. n. near *Sciara*, *funesta* sp. n. Sumatra, ENDERLEIN p. 136 Arch. Naturges. 77 Suppl. 3.

Trichonta girschneri sp. n. Mähren, LANDROCK Wien ent. zeit. 31 pp. 27-39.—*T. bicolor* sp. n. Mähren, LANDROCK Wien ent. zeit. 31 pp. 175-185.—*T. spp. n. triangularis* p. 303, *patens*, *diffissa*, p. 305, *cincta* p. 303, *bellula* p. 304, spp. n., U.S., figs., JOHANNSEN Agric. Exp. Sta. Maine Bull. No. 196.

Zygomma gen. n. *Sciarinae*, *fasciatellum* sp. n. Brasilia, ENDERLEIN pp. 143-144 Arch. Naturges. 77 Suppl. 3.

Zygoneura flavicoxa sp. n. New York p. 116 ff. 99 & 254, JOHANNSEN Agric. Exp. Sta. Maine Bull. 200.

CHIRONOMIDAE.

Chironomidae; Beziehungen zum Chemismus des Wassers, RHODE D. ent. Zs. pp. 203-223 283-301 379-386 5 Taf.

The larvae of *Chironomus*, GOETGHEBUER Mem. Ac. Belgique 2 3 fasc. 6 26 pp. & 5 pls.

Cytologische Verhältnisse der Speicheldrüsen bei Larven von *Chironomus plumosus* (Czechisch), RAMBOUESK Věstn. Král. České Spol. Nauk Prag 1912 No. 2 p. 24 1 Taf.

Die Kerne in den Sperholdrüsen der *Chironomus*-Larve, ALVERDES Arch. Zellforschg 9 pp. 168-204 2 Taf.

Humming due to *Chironomidae*?, MORLEY pp. 259-261 Ent. Mag. 48.

Atrichopogon flaviceps sp. n. Formosa, KIEFFER p. 28 Suppl. ent. Berlin 1.

Belgica antarctica, anatomie et développement, KEILIN Paris C. R. Acad. sci. 154 pp. 723-725 fig.

Bezzia tenebricosa p. 208, *xanthocephala* p. 209, spp. n., Belgium, GOETGHEBUER Ann. Biol. lac. 5.—*B. indecora* sp. n. p. 8 Ceylon, KIEFFER Spolia Zeylan 8.—*B. formosana* p. 30, *chrysolopha* p. 31, spp. n., Formosa, KIEFFER Suppl. ent. Berlin 1.—*B. fossicola* sp. n. p. 102, KIEFFER Bull. Soc. ent. France 1912.

Cardiocladius gen. n., *ceylanicus* sp. n. p. 22 f. 9 Ceylon, KIEFFER Spolia Zeylan 8.

Ceratopogon decoratissimus, *oculatus* with var. *alpicola*, *quadristriatus*, Admont, spp. n., STROBL Mitt. Ver. Steierm 46 p. 45 etc.—*C. viscatus* p. 364 figs. 7-8, *madagascariensis* p. 365 figs. 9-10, *crassipalpis* p. 365 figs. 11-12, *tenuipes* p. 366 fig. 13, spp. n., Zanzibar copal, MEUNIER Bull. Soc. ent. France 1912.—*C. incomptifeminibus*, *inornatipennis*, spp. n., Nigeria, AUSTEN Bull. ent. research 3.—*C. viscatus*, *madagascariensis*, *crassipalpis*, spp. n., Madagascar copal, MEUNIER p. 191 Ann. Soc. Sci. Bruxelles 36.—*C. lignicola* sp. n. Himalaya p. 445, BRUNETTI Rec. Ind. Mus. 7.

Chironomus formosus sp. n. Belgium, GOETGHEBUER p. 213 Ann. Biol. lac. 5.—*C. canus* sp. n. Natterriegel, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*C. inclusus* p. 361 fig. 1, *haustus* fig. 2, *sepultus* fig. 3, p. 362, Zanzibar copal, spp. n., MEUNIER Bull. Soc. ent. France 1912.—*C. inclusus*, *haustus*, Zanzibar copal, *sepultus* Madagascar copal, spp. n., MEUNIER p. 190 Ann. Soc. Sci. Bruxelles 36.—*C.*; Kerndrath und Nukleolus in den Speicheldrüsen der Larve, VAN HERWERDEN Utrecht Onderz. Phys. Lab. 12 1911 pp. 1-10.—Larve, Kerne der Speicheldrüsen (Russ. deutsch. Rés.), FAUSSEK St. Petersburg Trav. Soc. nat. 43 1 pp. 74-94 127-128 ff. 1-7.—*C. dorsalis*, in well water, GAHAN Proc. Ent. Soc. Washington 14 p. 102.

Corynoneura acuticornis sp. n. p. 101, KIEFFER Bull. Soc. ent. France 1912.

Cotocripus gen. n. p. 451, *caridei* sp. n. Buenos Aires p. 452, BRÈTHES An. Mus. Buenos Aires 22.

Cricotopus pulchripes sp. n. Snowdon, VERRALL p. 22 Ent. Mag. 48.—*C. carnosus* sp. n. Formosa, KIEFFER p. 32 Suppl. ent. Berlin 1.—*C. sordicola* sp. n. p. 87, KIEFFER Bull. Soc. ent. France 1912.

Culicoides puncticollis p. 205 f. 1, *kiefferi* p. 206, spp. n., Belgium, GOETGHEBUER Ann. Biol. lac. 5.—*C. distinctipennis* p. 101, *neavei* p. 102, *kingi* p. 104, spp. n., Africa, *grahamii* = (*habereri* Beck) p. 99, AUSTEN Bull. ent. research 3.—*C. ceylanicus* p. 5 *bilobatus* p. 6, spp. n., Ceylon, KIEFFER Spolia Zeylan. 8.—*C. formosae*, *indecora*, spp. n., Formosa, KIEFFER p. 29 Suppl. ent. Berlin 1.

Dactylocladius ceylanicus sp. n. Ceylon p. 25 f. 8, KIEFFER Spolia Zeylan. 8.—*D. bathophilus* sp. n. p. 88, KIEFFER Bull. Soc. ent. France 1912.

Diamesa alboannulata, *minima*, spp. n., Styria, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Dibezzia ceylanica sp. n. Ceylon p. 6, KIEFFER Spolia Zeylan. 8.

Forcipomyia longicalcar, p. 4, and *semipilosus* p. 5, spp. n., Ceylon, KIEFFER Spolia Zeylan. 8.—*F. sauteri* sp. n. Formosa, KIEFFER p. 27 Suppl. ent. Berlin 1.—*F. thienemanni* sp. n. p. 103, KIEFFER Bull. Soc. ent. France 1912.

Johannseniella fulvithorax sp. n. E. Africa, AUSTEN p. 105 Bull. ent. research 3.

Metriocnemus hygropatricus, *viridiventris*, spp. n., p. 86, KIEFFER Bull. Soc. ent. France 1912.

Ochlus gen. n. nahe *Podonomus* p. 107, *uschuaiensis* sp. n. p. 108 ff. 23-25 Feuerland, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3.

Oecacta hostilissima sp. n. Spanish Guinea, PITTALUGA p. 597 Bol. Soc. españ. 12.

Orthocladius; key to genera, pp. 23-24, KIEFFER Spolia Zeylan. 8.—*O. perpusillus* sp. n. Feuerland, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 106 ff. 21-22.

Palpomyia tainana sp. n. Formosa, KIEFFER p. 29 Suppl. ent. Berlin 1.

Parochilus gen. n., *fuegianus* sp. n. Fcuerland, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 109 ff. 26-27.

Paryphoconus gen. n. near *Macroptilum*, *angustipennis* sp. n. Brasilia, ENDERLEIN pp. 57-58 Stettin. ent. Zeit. 73.

Pelopia; synonymy, *annulatus* p. 8, *pallidipes* p. 9, spp. n., Ceylon, KIEFFER Spolia Zeylan. 8.—*P. fehlmanni* sp. n. Luganer See, KIEFFER p. 174 Zeitschr. wiss. Insectbiol. 8.

Polypedilum pelostolum sp. n. Formosa, KIEFFER p. 41 Suppl. ent. Berlin 1.

Procladius formosanus sp. n. Formosa, KIEFFER p. 31 T.c.

Prohelea subg. n. of *Forcipomyia*, synonymy, *ornaticrus*, p. 1, *tetracлада* p. 2, *calcarata*, *noctivaga*, *theobromae* fig. 1, p. 3, spp. n., Ceylon, KIEFFER, Spolia Zeylan. 8.

Stilobezzia festiva, *scutellaris* var. n., p. 7, *inermipes* sp. n. p. 8, Ceylon, KIEFFER T.c.

Tanytarsus lobatus p. 18, *transversalis* p. 19 f. 6, *prasiogastes*, *ceylanicus* fig. 7, p. 20, *poecilus* p. 21, spp. n., Ceylon, KIEFFER T.c.—*T. formosanus* sp. n. Formosa, KIEFFER p. 42 Suppl. ent. Berlin 1.

Tendipes frisianus, *falciformis*, p. 51, *fossicola*, *bathophilus*, p. 52, spp. n., Centr. Europe, KIEFFER Bull. Soc. ent. France 1912.—*T. pretiosus* p. 11 f. 3, *sumptuosus*, *elatus*, p. 12, *superbus* p. 13 f. 4, *gloriosus* p. 14, *allothrix* p. 15, *perichlosus* and *chlorogaster* p. 16. spp. n., Ceylon; *nigromarginatus* and *fuscitarsis*, *heptatomus*, *hexatomus* and *variicornis*, p. 18, Ceylon, KIEFFER Spolia Zeylan. 8.—*T. lobaticeps* v. n. *validus* p. 34, *formosae* p. 35, *sordidus*, *tainanus*, p. 36, *formosicola*, *prasinellus*, p. 37, *chlorophorus*, *chlorostolus*, p. 38, *pelochloris* p. 39, *glaucoventris* p. 40, spp. n., Formosa, KIEFFER Suppl. ent. Berlin 1.—*T. callichirus* Kieff. à *mahensis* n. n., *leucotarsus* K. en *leucochirus* n. n.; *chlorogaster* K. en *glaucoaster* n. n., KIEFFER Boll. Lab. Portici 6 p. 195.

Trichocladus montivagus sp. n. Liège p. 211 f. 5, GOETGHEBUER Ann. Biol. (N-9210 j)

lac. 5.—*T. hortensis* sp. n. p. 87, KIEFFER Bull. Soc. ent. France 1912.

Trichotanypus kraatzi sp. n. p. 103, KIEFFER T.c.

CULICIDAE.

Revision of british *Culicinae*, with notes, synonymy and figures, EDWARDS Entomologist 45 pp. 191 etc.

Culicidae of Africa, EDWARDS Bull. ent. research 3 pp. 1-48.

Wing-nervuration, new system, LAHILLE An. Mus. Buenos Aires 23 pp. 253-257.

Dipterenlarven, Eucephala, VIMMER Čas. České Spol. Entomolog. Jg. Prag 7 1910 pp. 38-48.

Notes on african larvae, INGRAM pp. 73-78 Bull. ent. research 3.

Sex structures in larvae, ADIE p. 463 pl. xxvi Ann. trop. Med. 6.

Larvae of african *Culicinae*, EDWARDS pp. 373-385 with figs. Bull. ent. research 3.

Acalloemyia gen. n. near *Verrallina*, *obscurus* sp. n. Malay States, LEICESTER p. 194 Stud. Inst. Malay States 3 pt. 3 1908.

Aedeomyia venustipes Skuse, TAYLOR p. 32 Bull. 1a North Territ. Australia.

Aëdomyia n. n. for *Aedeomyia* Th., EDWARDS p. 24 Bull. ent. research 3.

Aedes malayi sp. n. Malay States, LEICESTER p. 184 Stud. Inst. Malay States 3 pt. 3 1908.

Aioretomyia gen. n., near *Verrallina*, *varietas*, p. 185, *singularis* p. 188, *aedes* p. 189, *taeniata* p. 190, *perdita* p. 192, *ostentatio* p. 193, spp. n., Malay States, LEICESTER T.c.

Anopheles; Key of african, pp. 241-250, *theileri* n. n. for *P. albipes* Th. 1911, EDWARDS p. 247 Bull. ent. research 3.—*A.*, of the Andamans, CHRISTOPHERS pp. 6-11 Sci. Mem. India No. 56.—*A. treacherii* sp. n. Malay States, LEICESTER Studies Med. Inst. Malay 3 pt. 3 p. 19 1908.—*A. (Myzorhynchus) wellingtonianus* sp. n. Malay penins., ALCOCK J. London School trop. Med. 2 p. 1.—*A. tucumanus* sp. n., S. America, LAHILLE p. 258 pls. i-iii An. Mus. Buenos Aires 23.—*A. nigrans* n. n. for *karwari* James,

- STANTON p. 7 J. London School trop. Med. 2.—*A. claviger*, *pseudopictus*, *pulcherrimus*, *superpictus* Verbreitung in Turkestan, Biologie, Bekämpfung, VASILJEV Trd. b. entom. učen. Kom. Gl. Upr. Zeml. 9 2 pp. 1-26.—*A. costalis*, variation, ALCOCK J. London School trop. Med. 1 p. 205.—*A. mauritianus* and *pharoensis*, variation, ALCOCK J. London School trop. Med. 1 pp. 89-93.—*A. argyrotarsis* and *albimanus*, natural history, NICHOLLS pp. 251-267 Bull. ent. research 3.—*A. larvae*, growth and changes, STANTON pp. 387-391 Bull. ent. research 3.
- Blanchardiomyia* n. n. for *Desvoidya* Bl., BRUNETTI p. 440 Rec. Ind. Mus. 4.
- Chaetomyia* gen. n. p. 100 near *Desvoidya*, *flava* sp. n. p. 101 Malay States, LEICESTER Stud. Inst. Malay States 3 pt. 3 1908.
- Conopomyia* gen. n. near *Acartomyia*, *metallica*, p. 113, *hybrida* p. 115, *aurea* p. 116, spp. n., Malay States, LEICESTER T.c.
- Colonemyia* gen. n. near *Urano-taenia*, *caeruleocephala*, p. 233, *similis* p. 235, *hybrida* p. 237, spp. n., Malay States, LEICESTER T.c.—*C. mendacis* sp. n. Malay States, DANIELS p. 266 Stud. Inst. Malay States 3 pt. 3 1908.
- Corethra albipes*, life history, RICHARDSON Psyche 19 pp. 200-203 ff. 1 & 2.
- Corethrinae*; taxonomy, IMMS J. econ. Biol. 7 pp. 1-4.
- Culex scottii* sp. n. p. 86 Seychelles, KIEFFER Tr. Linn. Soc. London 15.—*C. albus* p. 148, *nigricephala* p. 149, *perplexus* p. 150, *loricatus* p. 151, *sepositus* p. 152, *auratus* p. 153, *multimaculosus* p. 155, *graminis* p. 158, *uniformis* p. 159, *minus* p. 160, spp. n., Malay States, LEICESTER Stud. Inst. Malay States 3 pt. 3 1908.—*C. parvus* p. 27, *palpalis* p. 29, Australia, spp. n., TAYLOR Bull. 1a North Territ. Australia.—*C. romeroi* n. n. p. 295 (= *Culex nigriritulus* Zett. 1850 ?), SURCOUF & GONGALEZ-RINCONES Arch. Parasitol. 15.—*C. elegans* and yellow fever, EAGER, Annual Report of the Surgeon-General of the Public Health and Marine-Hospital Service of the United States for 1905 Washington pp. 253-254.
- Culicada surcoufi* sp. n. p. 59, THEOBALD Bull. Mus. Paris 1912.
- Culicelsa fryeri* sp. n. Aldabra, THEOBALD p. 84 Tr. Linn. Soc. London 15.
- Cyclophorus* gen. n. (*Anopheles*) *nigripes* Staeger, EYSELL Arch. Schiffshyg. 16 pp. 421-431.
- Danielsia minuta* p. 30, *alboannulata* p. 31, spp. n., Australia, TAYLOR Bull. North Territ. Australia 1a.
- Dasomyia* gen. n. *Culicina*, *fusca* sp. n. Malay States, LEICESTER p. 102 Stud. Inst. Malay States 3 pt. 3 1908.
- Dendromyia communis* p. 254, *aureochaeta* p. 255, *achaetae* p. 257, spp. n., Malay States, LEICESTER T.c.
- Desvoidya jugraensis* p. 77, *aureolineata* p. 79, spp. n., Malay States, LEICESTER T.c.
- Ekrinomyia* gen. n. *Culicinae*, *aureostriata* sp. n. Malay States, LEICESTER p. 71 T.c.
- Etorleptomyia completiva* sp. n. Malay States, LEICESTER p. 178 T.c.
- Ficalbia longirostris* sp. n. Malay States, LEICESTER p. 228 T.c.
- Geitonomyia* gen. n. for *Culex caecus* Th., LEICESTER p. 134 T.c.
- Grabhamia caballa* sp. n. Transvaal, THEOBALD p. 93 Entomologist 45.
- Hodgesia quasisanguinae* p. 230, *malayi* p. 231, spp. n., Malay States, LEICESTER Stud. Inst. Malay States 3 pt. 3 1908.
- Hulecoeteomyia jugraensis* p. 109, *fluviatilis* p. 111, spp. n., Malay States, LEICESTER T.c.
- Ingramia* gen. n. pp. 6 & 43 type *Minomyia malfeyti* Newst., EDWARDS Bull. ent. research 3.
- Kingia albertii* sp. n. Congo, THEOBALD p. 78 Rev. Zool. afric. 2.
- Leicesteria dolicocephala* p. 95, *cingulata* p. 97, *annulitarsis* p. 99, spp. n., Malay States, LEICESTER Stud. Inst. Malay States 3 pt. 3 1908.
- Leicesteriomyia* n. n. for *Chaetomyia* Leic., BRUNETTI p. 452 Rec. Ind. Mus. 4.
- Lepidotomyia taeniata* sp. n. Malay States, LEICESTER p. 133 Stud. Inst. Malay States 3 pt. 3 1908.
- Lophoceratomyia rubithoracis* p. 119, *variata* p. 121, *niger* p. 123, *sylvestris* p. 125, *minor* p. 126, *taeniata* p. 127,

- mammilifer* p. 128, *eminentia* p. 131, spp. n., Malay States, LEICESTER T.c.
- Malaya* gen. n. near *Dendromyia*, *genurostris* sp. n. Malay States, LEICESTER p. 258 T.c.
- Mansonia annulata* sp. n. Malay States, LEICESTER p. 174 T.c.
- Myzorhynchus peditaeniatus* p. 31, *barbistrostris* p. 33, *separatus* p. 36, spp. n., Malay States, LEICESTER T.c.
- Ochlerotatus fascipalpis* sp. n. E. Africa p. 19 f. 4, *C. apicoannulatus* n. n. for *Aed. alboannulatus* Th. p. 18, *C. minutus stenoscutus* n. n. for *Sten. africanus* Th. p. 22, EDWARDS Bull. ent. research 3.—*C.*; table of australian with synonymy pp. 521–526, *stricklandi* n. n. for *Grabhamia australis* Strickl. p. 523, EDWARDS Ann. Nat. Hist. 9.
- Patagiamyia lindesayi*, ova p. 3, Paludism No. 5 1912.
- Pseudoscalbia* gen. n. p. 89, *pandani* pl. iv f. 4 p. 90, *nepenthes* ff. 5 & 6 p. 92, spp. n., Seychelles, THEOBALD Tr. Linn. Soc. London 15.
- Pseudohowardina lineata* sp. n. Transvaal, THEOBALD p. 92 Entomologist 45.
- Pseudotaeniorhynchus venezuelensis* sp. n. p. 61, THEOBALD Bull. Mus. Paris 1912.
- Psorophora blanchardi* sp. n. p. 282 ff. 23–29, SURCOUF & GONZALEZ-RINCONES Arch. Parasitol. 15.
- Pyretophorus watsonii* sp. n. Malay States, LEICESTER p. 38 Stud. Inst. Fed. Malay States 3 pt. 3 1908.
- Reedomyia seychellensis* sp. n. pl. iv ff. 1 & 2 p. 83 Seychelles, THEOBALD Tr. Linn. Soc. London 15.
- Sabethoides zangeli* sp. n. p. 305 fig. 38, SURCOUF & GONZALEZ-RINCONES Arch. Parasitol. 15.
- Skeiromyia* gen. n. near *Haemagogus*, *fusca* sp. n. p. 248 Malay States, LEICESTER Stud. Inst. Malay States 3 pt. 3 1908.
- Stegomyia fraseri* sp. n. Uganda p. 11, *S. metallica* nom. n. for *Quasistegomyia dubia* Th. p. 12, EDWARDS Bull. Ent. Research 3.—*S. gracilis* p. 81, *perplexa* p. 83, *imitator* p. 89, *dissimilis* p. 91, *fusca* p. 92, spp. n., Malay States, LEICESTER Stud. Inst. Malay States 3 No. 3 1908.—*S. fasciata*, LAHILLE p. 259 pls. iv & v An. Mus. Buenos Aires 23.
- Taeniorhynchus domesticus* sp. n. Malay States, LEICESTER p. 169 Stud. Inst. Malay States 3 pt. 3 1908.
- Teromyia* gen. n. near *Megarhinus*, *acaudata* p. 49, *quasiferox* p. 51, *magnificus* p. 54, *raris* p. 56, *funestus* p. 58, spp. n., Malay States, LEICESTER T.c.—*T. ater* sp. n. Malay States, DANIELS p. 265 Stud. Inst. Malay States 3 pt. 3 1908.
- Theobaldia fumipennis*, Steph. = (*theobaldi* Meijj), EDWARDS p. 277 Entomologist 45.
- Theobaldiomyia* n. n. for *Leucomyia* Th., BRUNETTI p. 462 Rec. Ind. Mus. 4.
- Topomyia* gen. n. near *Uranotaenia*, *minor*, p. 238, *decorabilis* p. 239, *argentoventralis* p. 240, *argyropalpis* p. 242, *rubithoracis* p. 243, *gracilis* p. 244, *nigra* p. 245, *dubitans* p. 246, *tipuliformis* p. 247, spp. n., Malay States, LEICESTER Stud. Inst. Malay States 3 pt. 3 1908.
- Toxorhynchites immisericors*, larva, GREEN p. 309 Rec. Ind. Mus. 7.
- Trichorhynchomyia* n. n. for *Trichorhynchus* Th., BRUNETTI p. 477 Rec. Ind. Mus. 4.
- Uranotaenia connali* p. 39, *mayeri* p. 40, spp. n., Accra, *bilineata* var. n. *fraseri* p. 39, *candidipes* n. n. for *nivipous* Th. p. 42, EDWARDS Bull. ent. research 3.—*U. nivipous* sp. n. Transvaal, THEOBALD p. 93 Entomologist 45.—*U. trilineata* p. 204, *micans* p. 206, *bimaculiala* p. 208, *unimaculiala* p. 210, *nivea* p. 211, *campestris* p. 213, *argyrotarsis* p. 214, *cancer* p. 215, *longirostris* p. 217, *modesta* p. 218, *nivipleura* p. 219, *unilineata* p. 220, *maxima* p. 221, *lutescens* p. 222, *maculipleura* p. 223, *bicolor* p. 225, *bimaculata* p. 226, *fusca* p. 227, spp. n., Malay States, LEICESTER Stud. Inst. Malay States 3 pt. 3 1908.
- Verrallina virilis* p. 197, *malayi* p. 198, *fragilis* p. 199, *indecorabilis* p. 200, *imitator* p. 201, spp. n., Malay States, LEICESTER T.c.
- Wyeomyia metallica* p. 251, *funerea* p. 252, spp. n., Malay States, LEICESTER T.c.

Zeugnomyia gen. n. near *Colonemyia* p. 231, *gracilis* sp. n. p. 232 Malay States, LEICESTER T.c.

PSYCHODIDAE.

Localités nouvelles de Phlébotomes, LANGERON Paris C. R. soc. biol. 72 pp. 973-974.

Pericoma andrenipes sp. n. Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Phlebotomus; structure and habits, *nigerrimus* sp. n. Malta p. 162 J. R. Army Corps 19.—*P. antennatus* Gold coast p. 365, *squamipleuris* Khartoum p. 366, spp. n., *minutus* var. n. *africanus* p. 363, NEWSTEAD Bull. ent. research 8.—*P. rostrans* sp. n. Rio Javary, SUMMERS p. 209 Bull. ent. research 8.—*P. squamiventris* p. 89, *longipalpis* p. 90, *intermedius* p. 92, spp. n., Brazil, LUTZ & NEIVA Mem. Inst. Oswaldo Cruz 4.—*P. minutus*, dimorphism ♀, ALCOCK p. 205 J. London School. trop. med. 1.

Psychoda albimaculata sp. n. Illinois life history, WELCH Ann. Ent. Soc. Amer. 5 pp. 411-418 pls. xxxi xxxii.

Telmatoscopus rothschildi sp. n. London, EATON p. 9 Ent. Mag. 48.

SIMULIIDAE.

Simulium striatum sp. n. p. 90 pl. i figs. 4-6 Ceylon, BRUNETTI Spolia Zeylan. 8.—*S. bicoloratum* p. 649 pl. xlvi ff. 6 & 7, *bipunctatum* p. 650 f. 8, *townsendi* p. 651 f. 9, *nitidum* p. 652, spp. n., Peru, MALLOCH Proc. U. S. Nation. Mus. 43.

BIBIONIDAE.

Aldrovandiella gen. n. für *Scatopse halterata* Meig. 1838, ENDERLEIN p. 278 Zool. Anz. 40.

Anapausis gen. n. für *Scatopse soluta* Loew 1846, ENDERLEIN p. 278 T.c.

Bibio flavohirta sp. n. Darjiling, BRUNETTI p. 561 Faun. Brit. India Nematocera.—*B. aequalis* sp. n. Shanghai p. 447, BRUNETTI Rec. Ind. Mus. 7.—*B. marci*, Larvenhypopharynx, VIMMER Rozpr. České Ak. Frant. Jos. 20 1911 No. 32 p. 6.

Corynoscelis eximia, BERGROTH Zool. Anz. 39 p. 668.

Ectaetia gen. n. für *Scatopse clavipes* Loew 1846, ENDERLEIN p. 279 Zool. Anz. 40.

Holoplagia gen. n. für *Scatopse transversalis* Loew 1846, ENDERLEIN p. 267 T.c.

Parapleciomyia gen. n. p. 446, *carbonaria* sp. n. Himalaya p. 447, BRUNETTI Rec. Ind. Mus. 7.

Plecia impostor sp. n. Himalaya p. 446, BRUNETTI Rec. Ind. Mus. 7.—*P. bellardii* n. n. for *vittata* Bell., TOWNSEND p. 289 Canad. Ent. 44.

Pseudanarete pilipennis sp. n. Steiermark, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Reichertella gen. n. p. 268, *brevifurca* Deutschl. p. 273, *peruana* Peru, spp. n., *huttoniana* n. n. für *Scatopse carbonaria* Hutton 1902 p. 275, ENDERLEIN Zool. Anz. 40.

Rhegmoclema gen. n., *rufithorax* sp. n. Seychellen, ENDERLEIN pp. 276 & 277 T.c.

Scatopse talpae p. 21, *coxendix* p. 22, spp. n. England, VERRALL Ent. Mag. 48.—*S. hamifera* sp. n. Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*S. californica* sp. n. p. 151 f. 85 California, COLE Rep. Laguna Mar. Lab. 1, ,

Swammerdamella gen. n. für *Scatopse brevicornis* Meig. 1830, ENDERLEIN p. 277 Zool. Anz. 40.

BLEPHAROCERIDAE.

Apistomyia elegans, Biologie, HETSCHKO p. 305 Wien ent. Ztg. 31.

Kelloggina barnardi sp. n., with metamorphosis, Capetown, EDWARDS p. 633 pl. xx Ann. Nat. Hist. 9.

Liponeura cinerascens, Metamorphose, HETSCHKO p. 319 Wien ent. Ztg. 31.

TIPULIDAE, PTYCHOPTERIDAE.

Adelphomyia americana p. 829, *cayuga* p. 831, spp. n., U.S., ALEXANDER Pomona Coll. J. ent. 4.

Aldrovandia gen. n. *Eriopterinae*, *gesneri* sp. n. Brasilia, ENDERLEIN p. 52 Zool. Jahrb. Syst. 32.

Amalopina gen. n., *elegantula* sp. n. Darjiling, p. 517, BRUNETTI Faun. Brit. India Nematocera.

Amalopsis glabripennis Darjiling p. 515, *elegans* Kurscong p. 516, spp. n., BRUNETTI T.c.

Androclasma gen. n., *ornatum* sp. n. Sumatra, ENDERLEIN pp. 34–35 Zool. Jahrb. Syst. 32.

Anisomera luteipennis sp. n. Seychelles p. 212 pl. x f. 15, EDWARDS Tr. Linn. Soc. London 15.

Antocha indica Kurseong p. 426, *unilineata* Mundali p. 427, spp. n., BRUNETTI Faun. Brit. India Nematocera.

Aporosa maculistigma Madagascar p. 77, *leucomelanopus* Columbia p. 78, spp. n., ENDERLEIN Zool. Jahrb. Syst. 32.

Atarba flava sp. n. Darjiling, BRUNETTI p. 435 Faun. Brit. India Nematocera.

Brachypremna revision; *williamsoni* sp. n. Indiana p. 231, *candida* nom. n. for *Tipula albimana* Wied., ALEXANDER J. New York Ent. Soc. 20 pl. xvi.

Ceratocheilus seychellarum sp. n. Seychelles p. 203, EDWARDS Tr. Linn. Soc. London 15.

Chionea valga, life history p. 102, JOHNSON Psyche 19.

Cladura; variation, ALEXANDER & LEONARD J. New York Ent. Soc. 20 pp. 36–40 pl. iv.—*C. flavo-ferruginea* and *indivisa*, wing-nervuration, ALEXANDER & LEONARD J. New York ent. Soc. 20 pp. 36–39 pl. iv.

Clydonodozus gen. n. near *Symplecta*, *multistriatus* p. 57, *punctulatus* p. 59, spp. n., Sumatra, ENDERLEIN Zool. Jahrb. Syst. 32.

Ctenacroscelis gen. n. near *Tipula*, *dohrnianus* p. 1, *sumatranus* p. 5, Sumatra, *sikkimensis* p. 4 Sikkim, spp. n., ENDERLEIN T.c.

Ctenophora and *Xiphura*, synonymy, BERGROTH p. 136 Ent. Mag. 48.—*C. pectinicornis*, Larvenhypopharynx, VIMMER Rozpr. Česká Ak. Frant. Jos. 20 1911 No. 32 pp. 4–6.—*C. angustipennis*, larva, ANTHON J. Morph. 19 pp. 541–560 ff. 1–53.

Cylindrotoma tarsalis f. 4, *anomala* f. 3, p. 2, spp. n., New York, JOHNSON Psyche 19.

Dactylolabis conspersa sp. n. Brasilia, ENDERLEIN p. 49 Zool. Jahrb. Syst. 32.

Dicranomyia muscosa sp. n. Ecuador, ENDERLEIN p. 75 T.c.—*D. bicinctipes* sp. n. Burma p. 447, BRUNETTI Rec. Ind. Mus. 7.—*D. marmoripennis* p. 369, *demarcata* p. 370, *kobusi* p. 371, *absens* p. 372, Kurseong, *pulchripennis* Darjiling p. 376, *puncticosta* Kurseong p. 377, *fraterna* Darjiling p. 378, *fascipennis* p. 379, *subfascipennis*, Kurseong, *ornatipes* Saikam, p. 380, *cinerascens* Darjiling p. 381, *cinctiventris*, *sordida*, Kurseong, p. 382, *delicata* Darjiling p. 383, *flavobrunnea*, *simplex*, Calcutta, p. 384, *fortis*, *nigrithorax*, Darjiling, p. 385, *subtessellata* Pattipola p. 565, *bicinctipes* Dawna Hills p. 566, *columbina* Peradeniya, *approximata* Ghumti, p. 567, *innocens* Almora p. 568, spp. n., BRUNETTI Faun. Brit. India Nematocera.—*D. tipulipes* Karsch pl. x f. 1, *gardineri* p. 197 pl. xi f. 2, *spadicithorax* p. 198, spp. n., Seychelles, EDWARDS Tr. Linn. Soc. London 15.

Dicranophragma pulchripennis sp. n. Kurseong p. 524, BRUNETTI Faun. Brit. India Nematocera.

Dicranota (*Raphidolabis*) *alpigena* sp. n. Natterriegel, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Dihexaclonus gen. n. für *Ozodicera apicalis* Macq. 1838, ENDERLEIN p. 28 Zool. Jahrb. Syst. 32.

Dolichozepeza orientalis p. 354, *obscura* p. 355 Kurseong, *postico* Ghumti p. 564, *infuscata* Nilgiri Hills p. 565, spp. n., BRUNETTI Faun. Brit. India Nematocera.

Elephantomyia insularis sp. n. Seychelles p. 203, EDWARDS Tr. Linn. Soc. London 15.—*E. fuscomarginata* sp. n. Sumatra, ENDERLEIN p. 64 Zool. Jahrb. Syst. 32.

Ellipectera astigmatica sp. n. British Columbia p. 164 pl. xiii f. 2, ALEXANDER Psyche 19.—*E. alexanderi* sp. n. New York p. 3 f. 5, JOHNSON Psyche 19.

Empeda inconspicua sp. n. Darjiling, BRUNETTI p. 475 Faun. Brit. India Nematocera.—*E. nigrolineata* sp. n. Costa Rica, ENDERLEIN p. 56 Zool. Jahrb. Syst. 32.

Ephelia verralli sp. n. England, BERGROTH p. 134 Ent. Mag. 48.—*E.*

fascipennis Kurseong p. 526, *ornata* Bhowali p. 527, *spp. n.*, BRUNETTI Faun. Brit. India Nematocera.

Eriocera obscuripennis p. 212 pl. x f. 17, *fuscinervis* p. 213 f. 18, *spp. n.*, Seychelles, EDWARDS Tr. Linn. Soc. London 15.—*E. rufithorax* Kandy p. 534, *tenuis* Nilgiri Hills p. 539, *aterima* Maddathorai p. 540, *elongatissima* Trivandrum p. 542, *flavipes* Kurseong p. 544, *testacea* Nilgiri Hills p. 547, *cingulata* p. 570, *nigerrima* p. 571, Ghumti, *triangularis* Nilgiri Hills p. 572, *spp. n.*, BRUNETTI Faun. Brit. India Nematocera.—*E. pannosa* p. 40, *gamma* p. 41, *paenulata* p. 43 Sumatra, *sauteriana* p. 42 Formosa, *macquarti* p. 45, *braconides*, *virgulativentris*, p. 47, Columbia, *ohausiana* p. 45 Ecuador, *spp. n.*, ENDERLEIN Zool. Jahrb. Syst. 32.—*E. albihirta* California p. 167 pl. xiii f. 6, *fultonensis* New York p. 168 f. 7, *cinerea* Massachusetts p. 169 f. 9, *spp. n.*, ALEXANDER Psyche 19.

Erioptera punctipennis Kurseong p. 449, *ferruginea* Pallode p. 450, *distans* Kurseong p. 451, *brevior*, *incerta*, Darjiling, p. 452, *parallela* Kurseong, *orientalis* Darjiling, p. 453, *subtincla* Darjiling, *flava* Bengal, p. 455, *grandior* Simla, *genitalis* Bhowali, p. 456, *halterata* Darjiling p. 457, *spp. n.*, BRUNETTI Faun. Brit. India Nematocera.—*E. (Mesocyphona) distincta* *sp. n.* New Mexico p. 165, ALEXANDER Psyche 19.

Furcomomyia reticulata Cuba p. 354, *osterhouti* p. 335, *translucida* p. 336, *gloriosa* p. 337, *eiseni* p. 338, Centr. America, *lutzi* Guiana p. 339, *libertoides* California, *simillima* Guatemala, p. 361, *andicola* p. 362, *insignifica*, *argentina*, p. 363, *fumosa* p. 364, S. America, *spp. n.*, ALEXANDER Canad. Ent. 44.

Geranomyia bezzii *sp. n.* N. Africa, ALEXANDER & LEONARD p. 205 Canad. Ent. 44.—*G. (Monophana) subg. n.) immaculata* *sp. n.* Aldabra, EDWARDS p. 200 pl. x f. 4 Tr. Linn. Soc. London 15.—*G. genitalis* Senmalai p. 388, *flavicoستا* Chandpal p. 389, *circipunctata* Bengal p. 390, *tridens* Sunderbuns p. 391, *pulchripennis* Kurseong p. 393, *spp. n.*, BRUNETTI Faun. Brit. India Nematocera.—*G. annulata* Costa Rica p. 72, *lineata* Columbia p. 73, *spp. n.*, ENDERLEIN Zool. Jahrb. Syst. 32.

Gnophomyia longipennis Dhakuri p. 489, *genitalis* Bhowali p. 490, *furcata*

Darjiling p. 491, *strenua* Kurseong, *aperta* Darjiling, p. 492, *incompleta* Kurseong p. 493, *nigra* Kumaon p. 494, *spp. n.*, BRUNETTI Faun. Brit. India Nematocera.

Gonomyia armillata *sp. n.* Madagascar, ENDERLEIN p. 55 Zool. Jahrb. Syst. 32.—*G. incompleta* India p. 471, *flavo-marginata*, *affinis*, Kurseong, p. 472, *aperta* Katchar p. 473, *proxima* Bengal p. 474, *spp. n.*, BRUNETTI Faun. Brit. India Nematocera.—*G. antica* *sp. n.* Ghumti, BRUNETTI p. 568 Faun. Brit. India Nematocera.—*G. (Leiponeura) amazona* *sp. n.* Brazil p. 418 f. 2, ALEXANDER Ent. News 23.

Icriomastax *gen. n.* near *Tipula*, *ocellata* *sp. n.* Brasilia, ENDERLEIN p. 9 Zool. Jahrb. Syst. 32.

Libnotes fuscineris Darjiling p. 411, *notatinervis* Kurseong p. 412, *spp. n.*, BRUNETTI Faun. Brit. India Nematocera.

Limnobia mahensis p. 201, *magnicauda*, *iridescens*, *thomasseti*, p. 202, Seychelles, *spp. n.*, figs., EDWARDS Tr. Linn. Soc. London 15.—*L. festiva* Kurseong p. 400, *tinctinervis* Darjiling, *indica* Calcutta, p. 401, *trimaculata* p. 402, *longinervis*, *centralis*, p. 403, Kurseong, *niveipes* Darjiling, *nigra* Pallode, p. 404, *vitripennis* Darjiling p. 405, *triangularis* Barough p. 406, *spp. n.*, BRUNETTI Faun. Brit. India Nematocera.—*L. argenteiceps* *sp. n.* Arizona p. 163 pl. xiii f. 1, ALEXANDER Psyche 19.

Limnophila longeantennata *sp. n.* Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*L. pallidicoxa* Kurseong, *simplex* Bhowali, p. 523, *multipunctata* Nilgiri Hills p. 569, *honestata* Almora p. 570, *spp. n.*, BRUNETTI Faun. Brit. India Nematocera.—*L. laricicola* *sp. n.* New York p. 167 pl. xiii f. 4, ALEXANDER Psyche 19.

Limonia irrorata *sp. n.* Transvaal, ENDERLEIN p. 74 Zool. Jahrb. Syst. 32.

Malpighia *gen. n.* p. 18, *portschinskyi* *sp. n.* Irkutsk p. 21, ENDERLEIN Zool. Jahrb. Syst. 32.

Megistomastix *gen. n.* p. 63, *portoricensis* *sp. n.* Porto Rico p. 65, ALEXANDER Psyche 19.

Mesocyphona maculosa, albicapitella p. 209, Seychelles, spp. n., figs., EDWARDS Tr. Linn. Soc. London 15.—*M. nigripes* sp. n. Kurseong p. 358, BRUNETTI Faun. Brit. India Nematocera.

Microtipula gen. n. p. 360, *amazonica* sp. n. Brazil p. 361 fig., ALEXANDER Ann. Ent. Soc. Amer. 5.

Molophilus inconspicua Simla p. 444, *assamensis* Sylhet p. 445, spp. n., BRUNETTI Faun. Brit. India Nematocera.

Mongoma zambesiae sp. n. Africa, ALEXANDER p. 86 Canad. Ent. 44.—*M. pallidiventris* sp. n. Pallode, BRUNETTI p. 481 Faun. Brit. India Nematocera.—*M. cariniceps* sp. n. Sumatra, ENDERLEIN p. 60 Zool. Jahrb. Syst. 32.—*M. bromeliadicola* sp. n. Costa Rica p. 415 fig., ALEXANDER Ent. News 23.

Mongomella gen. n. für *Mongoma pallida* Willist. 1896, ENDERLEIN p. 61 Zool. Jahrb. Syst. 32.

Mongomioides albogeniculata sp. n. Burma p. 448, BRUNETTI Rec. Ind. Mus. 7.—*M. marmorata* Calcutta, *nigroapicalis* Lucknow, p. 483, *albogeniculata* Dawna Hills, spp. n., BRUNETTI p. 569 Faun. Brit. India Nematocera.

Monophana subg. n. vide *Geranomyia*.

Neostyringomyia subg. n., ALEXANDER p. 85 Canad. Ent. 44.

Orimarga scotti, fryeri, p. 204, figs., Seychelles, spp. n., EDWARDS Tr. Linn. Soc. London 15.—*O. peragrina* sp. n. Kurseong p. 424, BRUNETTI Faun. Brit. India Nematocera.

Ormosia perpusilla sp. n. Seychelles p. 208 figs., EDWARDS Tr. Linn. Soc. London 15.

Ozodicera bimaculata sp. n. Brasilia, ENDERLEIN p. 27 Zool. Jahrb. Syst. 32.

Pachyrrhina madagascariensis sp. n. Madagascar, ENDERLEIN p. 17 T.c.—*P. serricornis* Darjiling p. 341, *puncticornis* Siliguri, *pleurinotata* Namoya, p. 343, *demarcata* Darjiling p. 344, *concolorithorax* Sylhet p. 346, *gamma* Mangaldai p. 347, spp. n., BRUNETTI Faun. Brit. India Nematocera.—*P. macrosterna* Guatemala p. 344 fig., *trinidadensis* Trinidad p. 346 fig., spp. n., ALEXANDER Ann. Ent. Soc. Amer. 5.

Pehlkea gen. n., *columbiana* sp. n. Columbia, ENDERLEIN p. 15 Zool. Jahrb. Syst. 32.

Phacelodocera gen. n. für *Ptilogyna flabellifera* Loew 1851, ENDERLEIN p. 26 T.c.

Physecrania angustipennis sp. n. Sumatra, ENDERLEIN p. 33 T.c.

Prionocera flaviceps sp. n. Sumatra, ENDERLEIN p. 28 T.c.

Psaronius gen. n. near *Limnophila*, *lituratus* sp. n. Guyana, ENDERLEIN p. 50 T.c.

Pycnocrepis gen. n. *Rhamphidiinae*, *annulipes* p. 65, *solocipennis* p. 67, spp. n., Madagascar, ENDERLEIN T.c.

Rhamphidia ferruginosa Burma p. 418, *unicolor* Darjiling, *inconspicua* Kurseong, p. 419, spp. n., BRUNETTI Faun. Brit. India Nematocera.

Rhapidolabis indica Simla, *fascipennis* Darjiling, p. 519, spp. n., BRUNETTI T.c.—*R. neomexicana* sp. n. New Mexico p. 170 pl. xiii f. 5, ALEXANDER Psyche 19.

Rhipidia annulicornis Columbia p. 80, *tabescens* Brasilia p. 81, spp. n., ENDERLEIN Zool. Jahrb. Syst. 32.

Rhipidia spp. n., subspp. n. West Indies, *calverti* p. 8 f. d, *schwarzi* p. 13 f. c, Brazil: *cramptoni* p. 10, *domestica amazonensis* p. 17, Guatemala: *subpectinata pleuralis* p. 12, *multiguttata* p. 14, *domestica angustifrons* Ecuador, p. 16, ALEXANDER Bull. Brooklyn Ent. Soc. 8.

Rhypholophus geniculatus Kurseong p. 441, *pulcher* Phagu p. 442, spp. n., BRUNETTI Faun. Brit. India Nematocera.

Sacandaga flava p. 71, ALEXANDER Ent. News 23.

Stegasmonotus gen. n. near *Tipula*, *longissimus* sp. n. Brasilia, ENDERLEIN p. 11 Zool. Jahrb. Syst. 32.

Stibadocera gen. n. *Cylindrotomidae* *bullans* sp. n. Sumatra, ENDERLEIN p. 83 T.c.

Styringomyia howardi sp. n. Zambesi, ALEXANDER p. 83 Canad. Ent. 44.—*S. mahensis* sp. n. Seychelles p. 206 pl. xi f. 8, EDWARDS Tr. Linn. Soc. London 15.

Tasiocera minutissima sp. n. Seychelles p. 210 figs., EDWARDS T.c.

Teucholabis flavonotata sp. n. Seychelles p. 205 figs., EDWARDS T.c.—*T. insignis* Tenmalia, *biannulata* Kurseong, p. 430, *cyanea* Ceylon p. 431, spp. n., BRUNETTI Faun. Brit. India Nematocera.—*T. rostrata* Costa Rica p. 68, *trifasciata* Columbia p. 69, *schineri* S.-Amer. p. 71, spp. n., ENDERLEIN Zool. Jahrb. Syst. 32.

Thaumastoptera aldaabrensis sp. n. Aldabra p. 205 pl. x f. 10, EDWARDS Tr. Linn. Soc. London 15.

Thrypticomysia seychellensis sp. n. Seychelles, EDWARDS p. 199 figs. T.c.

Tipula decipiens sp. n. Mähren, CZIŽEK Wien. ent. Zeit. 31 p. 171.—*T. saginata*, ♀, CZIŽEK p. 331 T.c.—*T. pseudovariipennis* sp. n. Mähren, CZIŽEK Verh. z.-b. Ges. Wien 62 p. 49.—*T. gracillima* Peradeniya p. 303, *princeps* p. 306, *dives* Kurseong p. 307, *flava* Sikkim, *fumifasciata* Ukhrul p. 308, *serricornis* Naini Sal p. 309, *pulcherrima* Bhowali p. 310, *fuscinervis* p. 312, *patricia* p. 313, Kurseong, *splendens* Badrinath p. 314, *tessellatipennis* Naini Sal p. 317, *marmoratipennis* p. 319, *quasimarmoratipennis* p. 320, Darjiling, *griseipennis* Badrinath p. 321, *nigrotibialis* Darjiling p. 324, *striatipennis* p. 325, *subtinca* p. 326, Kurseong, *continuata* Darjiling p. 328, *quadrinotata* Ukhrul p. 330, *brunnicauda* Simla p. 332, *tenuipes* Sylhet p. 333, *flavescens* Ceylon p. 334, *munda* Mussoori p. 336, *cinctoterminalis* Kurseong p. 338, *elegantula* Mazbat p. 339, spp. n., BRUNETTI Faun. Brit. India Nematocera.—*T. acutipleura*, *atrisumma*, p. 42, *marina* p. 44, *cylindrata*, *flavomarginata*, p. 46, *derbyi* p. 47, *californica* p. 49, *aspersa* p. 51, *planicornia* p. 52, *ungulata* p. 54, *bifalcata* p. 55, *sternata* p. 56, *biuncus* p. 58, *occidentalis* p. 59, *flavo-cauda* p. 60, *fulvinodus* p. 45, *rusticola* p. 47, *biarmata* p. 55, *pacifica* p. 48, *incurva* p. 43, *alta* p. 44, *nigrocorporis* p. 45, *rupicola* p. 50, *albimacula* p. 51, *meridiana* p. 58, *spatha* p. 59, *pyramis*, *sylvicola*, *tergata*, p. 56, *flavicomma* p. 57, spp. n., U. S., DOANE Ann. Ent. Soc. Amer. 5.—*T. armatipennis* p. 347 fig., *guato* p. 349 fig., *smithi* p. 350 fig., *parishi* p. 355 fig., Peru, *inca* p. 351 fig., *fumipennis* p. 359 fig., Bolivia, *aymara* p. 353 fig., *atacama* p. 357 fig.,

maya Guatemala p. 358 fig., spp. n., ALEXANDER T.c.—*T. coquilleti* für *nubifera* Coq., *tenuicula* p. 7 Columbia, *tabida* p. 8 Peru, spp. n., ENDERLEIN Zool. Jahrb. Syst. 32.—*T. oleracea*, Larvenhypopharynx, VIMMER Rozpr. České Ak. Frant. Jos. 20 1911 No. 32 pp. 1-4.

Tipulodina gen. n., *magnicornis* sp. n. Sumatra, ENDERLEIN pp. 30-31 Zool. Jahrb. Syst. 32.

Toxorhina incerta sp. n. Kurseong p. 422, BRUNETTI Faun. Brit. India Nematocera.

Trentepohlia gracilis sp. n. Madagascar, ENDERLEIN p. 61 Zool. Jahrb. Syst. 32.

Trichocera, biologie, développement, affinités, KEILIN Bul. sci. France-Belgique Paris 46 pp. 172-190 fig.—*T. punctipennis* Simla p. 511, *flava* Darjiling p. 512, *montana* Badrinath p. 513, spp. n., BRUNETTI Faun. Brit. India Nematocera.

Tricyphona alticola sp. n. Natterriegel, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Trimicra pygmaea sp. n. New York p. 166 pl. xiii f. 3, ALEXANDER Psyche 19.

Xiphura variabilis sp. n. Irkutsk, ENDERLEIN p. 24 Zool. Jahrb. Syst. 32.

RHYPHIDAE.

Anisopus picturatus Costa Rica p. 111, *infumatus* Trinidad p. 112, spp. n., KNAB Proc. Biol. Soc. Washington 25 pp. 111-112.

SCENOPINIDAE.

Omphrale longirostris p. 549, *crenata* p. 550, *dubiosa* p. 551, spp. n., Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17.—*O. papuana* sp. n. Formosa and Neu Guinea, KRÖBER p. 25 Suppl. ent. Berlin 1.

STRATIOMYIDAE.

Acanthina auricollis sp. n. Assam p. 449, BRUNETTI Rec. Ind. Mus. 7.

Allognosta inermis sp. n. Himalaya p. 455, BRUNETTI T.c.

Beris annulipes sp. n. Himalaya p. 455, BRUNETTI T.c.

Catantasis gen. n. p. 96, *clypeata* sp. n. Seychelles p. 97, KERTÉSZ Tr. Linn. Soc. London 15.

Cephalochrysa gen. n. for *Sargus hovas* Big., KERTÉSZ p. 99 T.c.

Clitellaria bistrata sp. n. Himalaya p. 452, BRUNETTI Rec. Ind. Mus. 7.

Eudmeta flavida sp. n. Assam p. 454 BRUNETTI T.c.

Eulalia hydropota var. an sp. n. ? *triangulifera*, p. 512 pl. xii f. 3 sp. n. Persien, BECKER Ann. Mus. St. Petersb. 17.

Euparyphus greylockensis sp. n. Massachusetts p. 5, JOHNSON Psyche 19.—*E. lagunae* sp. n. p. 151 f. 86 California, COLE Rep. Laguna Mar. Lab. 1.

Evasa ? *flavipes* Himalaya p. 451, BRUNETTI Rec. Ind. Mus. 7.

Microchrysa calopa sp. n. Assam p. 453, BRUNETTI T.c.

Monocanthomyia gen. n., *annandalei* sp. n. Himalaya, p. 448, BRUNETTI T.c.

Negritomyia maculipennis p. 451, BRUNETTI T.c.

Nemotelus fasciventris p. 510 pl. xii f. 1, *punctifacies* p. 511 f. 2, spp. n., Persien, BECKER Ann. mus. Zool. Ac. St. Petersb. 17.—*N. bonnarius* sp. n. Saskatchewan p. 4, JOHNSON Psyche 19.

Pachygaster nigrofemorata sp. n. Madras, BRUNETTI Rec. Ind. Mus. 7.

Plecticus cyaneus sp. n. Assam p. 453, BRUNETTI T.c.

Sargus seychellensis sp. n. Seychelles, KERTÉSZ p. 98 Tr. Linn. Soc. London 15.

Stratiomyia nobilis fischeri var. n. (Russ. + lat. Diagn.), WAGNER Rev. russ. ent. 12 p. 249.

PANTOPHTHALMIDAE OR ACANTHOMERIDAE.

Pantophthalmus gigas loc. inc., *helleri* Peru, p. 110, *leuckarti* p. 113 Brasilia, *comptus* p. 117 loc. inc., spp. n., ENDERLEIN Zool. Anz. 41.

Acanthomeria chuni sp. n. Peru, ENDERLEIN p. 103 T.c.

TABANIDAE.

Note sur les Tabanides de la collection du Musée royal d'Histoire naturelle

de Belgique, SURCOUF Bul. Muséum Paris 1912 pp. 144–145.

Note synoptique sur un Diptère de la collection de Macquart, SURCOUF Bull. Muséum Paris 1912 p. 146.

Tabanidae and *Coccidae*, MACFIE p. 223 Bull. ent. research 3.

Adersia gen. n. for *Silvius oestroides* Karsch, AUSTEN p. 4 Ann. Nat. Hist. 9.

Aegophagomyia gen. n. near *Silvius* p. 12, *pungens* p. 13 Zanzibar, *remota* p. 14 Rodriguez, *teriticeps* p. 15 Astove I., spp. n., AUSTEN T.c.—*A. pungens* pl. xi f. 10 p. 284, NEAVE Bull. ent. research 3.

Bouvierella pulchella sp. n. Madagascar, AUSTEN p. 16 Ann. Nat. Hist. 9.

Cadicera distanti p. 118, *speciosa* p. 120 f. 2, *flavicomis* p. 121, spp. n., Africa, AUSTEN Bull. ent. research 3.

Chrysops maculiventris sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 587.—*C. streptobalia* sp. n. Erythraea, SPEISER p. 141 Zool. Anz. 41.—*C. aprugna* p. 18, *insulensis* p. 21 *lloydi* p. 23, spp. n., Madagascar, AUSTEN Ann. Nat. Hist. 9.—*C. distinctipennis* pl. xi f. 8, *brucei* f. 9, *centurionis* f. 6, NEAVE p. 286 Bull. ent. research 3.

Corizoneura obscura to *Cadicera*, AUSTEN p. 119 Bull. ent. research 3.

Diachlorus fulvescens sp. n. Himalaya p. 456, BRUNETTI Rec. Ind. Mus. 7.

Diatomincura lineatithorax p. 399, *penetrabilis* p. 401, *hastata* p. 403, spp. n., Africa, AUSTEN Bull. ent. research 3.

Dorcaloemus woosnami sp. n. E. Africa, AUSTEN p. 353 Ann. Nat. Hist. 9.—*D. silverlocki* sp. n. Africa, AUSTEN p. 124 Bull. ent. research 3.

Haematopota tumidicornis sp. n. E. Africa, AUSTEN p. 366 Ann. Nat. Hist. 9.—*H. denshami* pl. xi f. 1, *similis* f. 2, *unicolor* f. 3, *hirta* f. 4, *furva* f. 7, NEAVE p. 288 Bull. ent. research 3.—*H. furva* p. 334 pl. xi f. 7, *neavei* p. 336 pl. x f. 9, spp. n., Africa, AUSTEN Bull. ent. research 3.—*H. grahami* p. 405 f. 1, *daveyi* p. 408, *rubens* p. 410 f. 2, *beringeri* p. 412 f. 3, *crudelis* p. 414

f. 4, spp. n., Africa, AUSTEN T.c.—*H. albofasciatipennis* p. 458, *striatipennis* p. 460 pl. xxxvii fig. 2, Himalaya, spp. n., BRUNETTI Rec. Ind. Mus. 7.—*H. rara* sp. n. Pennsylvania, *punctulata* redescribed, p. 182, JOHNSON Psyche 19.—*H. pluvialis*, fig., CRAGG Sci. Mem. Med. Ind. No. 55.

Hippocentrum murphyi sp. n. W. Africa, AUSTEN p. 135 f. 7 Bull. ent. research 3.

Holcoceria nobilis pl. x f. 10 p. 287, NEAVE Bull. ent. research 3.

Merycomyia gen. n., *geminata* Connecticut, p. 515 ff. 2 & 4, *mixta* Georgia p. 516 ff. 1 & 3, spp. n., HINE Ohio Nat. 12.

Pangonia, biologie, ROUBAUD Paris Bul. soc. ent. 1912 pp. 181–183.—*P. comata* sp. n. E. Africa, AUSTEN p. 122 f. 3 Bull. ent. research 3.—*P. bancrofti* sp. n. Queensland, AUSTEN p. 2 Ann. Nat. Hist. 9.—*P. tepicana* n. n. for *basilaris* Wd., TOWNSEND p. 289 Canad. Ent. 44.

Rhinomyza mordosa p. 7, *simplicicornis* p. 9, spp. n., Madagascar, AUSTEN Ann. Nat. Hist. 9.

Silvius unicolor sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 588.—*S. fallax* sp. n. Rhodesia, AUSTEN p. 113 f. 1 Bull. ent. research 3.—*S. masoni* p. 226, *alcocki*, *strangmani*, p. 287, spp. n., Port Darwin, SUMMERS Ann. Nat. Hist. 10.

Stibasoma hemiptera sp. n. p. 62, SURCOUF Bull. Mus. Paris 1912.—*S. flavistigma* sp. n. Mexico p. 516, HINE Ohio Nat. 12.

Subpangonia grahmi sp. n. Nigeria, AUSTEN p. 127 f. 4 Bull. ent. research 3.

Tabanus lacteipennis sp. n. p. 589 pl. xiv f. 27a, *pyrrhus* p. 591, *sabuletorum* ♀ p. 592, *albidifacies* p. 593, *polyzonatus* p. 594, *laetetinctus* sp. n. p. 595 Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17.—*T. regnaulti* sp. n. p. 183 Sangha, SURCOUF Bull. Soc. ent. France 1912.—*T. kingi* var. n. *nigri-feminibus* p. 25, *selousi* p. 26, *producticornis* p. 30, *minuscularius* p. 31, spp. n., Africa, *xanthomelas* n. n. for *leucaspis* Wulp p. 29, AUSTEN Ann. Nat. Hist. 9.—*T. sandersoni* p. 356, *simpsoni* p. 360, spp. n. Africa, *besti* var. n.

arbucklei p. 363, AUSTEN T.c.—*T. trianguliger* sp. n. E. Africa, AUSTEN p. 240 Ann. Nat. Hist. 10.—*T. nagiensis* p. 435 pl. xxiii. f. 4, *fulvicapillus* p. 437, *donaldsoni* p. 439, spp. n., Africa, CARTER Ann. Trop. Med. 6.—*T. necopinus* f. 1 p. 279, *copemani* p. 281, *pullulus* p. 282, *crocodilinus* p. 284, *pertinens* f. 2 p. 286, spp. n., Africa, AUSTEN Bull. ent. research 2.—*T. canofasciatus* p. 129 f. 5, *tenuipalpis* p. 131 f. 6, *barclayi* p. 133, spp. n., Africa, AUSTEN Bull. ent. research 3.—*T. medionotatus* p. 329, *neavei* pl. x f. 1 p. 330, spp. n., Africa, AUSTEN T.c.—*T. elestem* p. 224, *badius* p. 225, *anellosus* p. 286, spp. n., Port Darwin, SUMMERS Ann. Nat. Hist. 10.—*T. floridensis* Florida p. 513, *fulvistriatus* Mexico p. 515, spp. n., HINE Ohio Nat. 12.—*T. variabilis* pl. x f. 7, *velutinus* f. 6, *neavei* f. 5, *gratus* f. 8 *leucostomus* figs. 3 & 4, *producticornis* pl. xi f. 5, *maculatissimus* ♂ pl. x f. 1, *irroratus* f. 2, *variabilis* f. 7, NEAVE p. 291 etc. Bull. ent. research 3.—*T. quatuornotatus* vie larvaire, LÉCAILLON Paris Ann. soc. ent. 80 1911 pp. 487–491 fig.

LEPTIDAE.

Blood-sucking and supposedly blood-sucking *Leptidae*, KNAB Proc. Ent. Soc. Washington D.C. 14 pp. 108–110 pl. iii.

Atherix caeruleascens sp. n. Himalaya p. 463 pl. xxxvii fig. 3, BRUNETTI Rec. Ind. Mus. 7.

Chrysopilus helvolus p. 464 note, *humeralis* sp. n. Himalaya p. 466, BRUNETTI Rec. Ind. Mus. 7.—*C. ditissimus*, *fenestratus*, *griseipennis*, *nigripalpis*, *poecilopterus*, spp. n., Formosa, BEZZI Ann. Mus. Hung. 10 pp. 446–452.—*C. davisii* sp. n. Georgia p. 4, JOHNSON Psyche 19.—*C. connexus* sp. n. North Carolina p. 108, JOHNSON T.c.

Desmomyia gen. n. near *Arthroceras* p. 462, *thereviiformis* sp. n. Himalaya, BRUNETTI Rec. Ind. Mus. 7.

Dialysis cispacifica sp. n. Formosa, BEZZI Ann. Mus. Hung. 10 p. 444.

Leptis discoidalis p. 463, *unicolor* p. 464 spp. n. Himalaya, BRUNETTI Rec. Ind. Mus. 7.—*L. gracilis* sp. n. Vermont, JOHNSON Psyche 19.

Rhachicerus bicolor sp. n. Ceylon p. 461, BRUNETTI Rec. Ind. Mus. 7.

Rhagio formosus sp. n. Formosa, BEZZI Ann. Mus. Hung. 10 p. 445.

Spania nigra, identisch mit *pelliticornis*, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Symphoromyia pachyceras, blood sucker, KNAB and COOLEY Proc. Ent. Soc. Washington 14 p. 161.

Xylophagus lugens, early stages p. 121, FELT N. Y. St. Mus. Bull. No. 155.

THEREVIDAE.

Beitrag zur Kenntnis der Thereviden, Synonymie Bestimmungstabelle etc., BECKER Verh. z.-b. Ges. Wien 62 p. 289-319.

Die Thereviden der indo-australischen Region, KRÖBER Ent. Mitt. Berlin 1 p. 116 etc.

Die Thereviden Nordamerikas, KRÖBER Stettiner ent. Ztg 73 p. 209-272.

Acatopygia gen. n., *pulchella* sp. n. Neu-Süd-Wales, KRÖBER p. 149 Ent. Mitt. Berlin 1.

Acraspisa gen. n., *trifasciata* sp. n. Peak Downs, KRÖBER p. 286 T.c.

Acthortia gen. n., *frontata* sp. n. Aegypten, KRÖBER p. 30 Deutsche ent. Zeitschr. 1912.

Acupalpa gen. n. near *Ectinorrhynchus*, *rostrata* sp. n. Sydney, KRÖBER p. 152 Ent. Mitt. Berlin 1.

Anabarrhynchus cinereus p. 215, *aureovillosus* p. 216, *abdominalis*, Australia, *caesius* Neuseeland, p. 219, spp. n., KRÖBER T.c.

Apioicoceras subgen. n. *Xestomyza*, BECKER Verh. z.-b. Ges. Wien 62 p. 289-319.

Belonalys gen. n., *obscura*, p. 125, *gracilentata* p. 148, spp. n., Neu-Süd-Wales, KRÖBER Ent. Mitt. Berlin 1.

Caenozona gen. n., *bicolor* Gouldscha Ferghana p. 251, *arcuata* Jericho p. 252, spp. n., KRÖBER Deutsche ent. Zeitschr. 1912.

Cataclinoneurum gen. n., *alexandrinum* sp. n. Alexandrien, BECKER Verh. z.-b. Ges. Wien 62 p. 289-319.

Caenophanomyia insignis, ♂, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 544 pl. xiii f. 16.

Chrysanthemya subgen. n. *Xestomyza*, BECKER Verh. z.-b. Ges. Wien 62 p. 289-319.

Ectinorrhynchus scutellaris sp. n. Algoa Bay, KRÖBER p. 23 Deutsche ent. Zeitschr. 1912.—*E. rufipes* p. 157, *brunneus* p. 158, spp. n., Neu-Süd-Wales, KRÖBER Ent. Mitt. Berlin 1.

Euphycus gen. n. near *Phycus* p. 7, *bocki* sp. n. p. 10 Amur, KRÖBER Deutsche ent. Zeitschr. 1912.—*E. setosus* sp. n. Mexico, KRÖBER p. 211 Stettin. ent. Zeit. 73.

Eupsilocephala gen. n. für *Psilocephala singula* Walk., KRÖBER p. 255 Ent. Mitt. Berlin 1.

Gyrophthalmus subgen. n. *Thereva*, *khedivialis* sp. n. Kairo, BECKER Verh. z.-b. Ges. Wien 62 p. 289-319.

Henicomya *varipes* sp. n. Mexico, KRÖBER p. 213 Stettin. ent. Zeit. 73.

Hermannia gen. n., *lanata* sp. n. Alai mont., KRÖBER p. 25-26 Deutsche ent. Zeitschr. 1912.

Microphora gen. n., *angustifrons* sp. n. Neu-Pommern, KRÖBER p. 245 Ent. Mitt. Berlin 1.

Neothereva gen. n. near *Thereva*, *nitidifrons* Budapest p. 138, *angustifrons* Aegypten p. 139, *frontata* Europa p. 140, spp. n., KRÖBER Deutsche ent. Zeitschr. 1912.

Oldenbergia gen. n., *frontalis* sp. n. Sydney, KRÖBER p. 220 Ent. Mitt. Berlin 1.

Oocidicera subgen. n. of *Xestomyza*, BECKER Verh. z.-b. Ges. Wien 62 p. 289-319.

Orthactia gen. n. p. 26, *fascipennis* Kapland p. 27, *frontalis* Tunis, *nigra* Kapland, p. 28, *flavipennis* Turkestan p. 29, spp. n., KRÖBER Deutsche ent. Zeitschr. 1912.

Pachygenia gen. n., *nitida* sp. n. Kapland, KRÖBER p. 19 T.c.

Parapsilocephala gen. n., *elegans* sp. n. Sydney, KRÖBER p. 255-256 Ent. Mitt. Berlin 1.

Phycus kerteszi Formosa p. 4, *marginatus* Africa p. 5, *nigripes* Graecia,

niger Amur, p. 6, spp. n., KRÖBER Deutsche ent. Zeitschr. 1912.—*P. nigripes* sp. n. Himalaya, *brunneus* var. n. *brunnipes* p. 480, BRUNETTI Rec. Ind. Mus. 7.—*P. pallidicornis* sp. n. Neu-Süd-Wales p. 124, *nitidus* var. n. *obscuripes* p. 123, KRÖBER Ent. Mitt. Berlin 1.

Platycarenum gen. n., *porrectifrons* sp. n. Cap York, KRÖBER p. 243-244 T.c.

Pseudoloxocera gen. n., *pallipes* sp. n. Peak Downs, KRÖBER p. 286 & 287 T.c.

Pseudoxestomyza gen. n. near *Xestomyza* p. 11, *longirostris* sp. n. p. 12 Kapland, KRÖBER Deutsche ent. Zeitschr. 1912.

Psilocephala pulchra Turkmenia p. 112, *brunni* Asia centr. p. 113, *pallipes* Algoa-Bai p. 117, *splendida* Asia Minor p. 118, *nigrofemorata* Turkestan p. 119, *flavipes* Banat p. 121, *frontata* Formosa p. 123, *analisis* Asia minor, *velutina* Madagascar, p. 124, *argentea* Formosa p. 128, *nervosa* Österreich p. 129, *superba* Asia minor p. 131, *sauteri* Formosa p. 135, spp. n., KRÖBER Deutsche ent. Zeitschr. 1912.—*P. xylophagoides* sp. n. Transvaal, ENDERLEIN p. 327 Wien ent. Ztg. 31.—*P. ceylonica* Ceylon p. 251, *javana* Java, *rufa* Sydney, p. 253, *atripes* Neu Guinea, *affinis* Agra, p. 254, spp. n., KRÖBER Ent. Mitt. Berlin 1.—*P. obscura* sp. n. Formosa, KRÖBER p. 25 Suppl. ent. Berlin 1.—*P. melampodia*, early stages p. 121, FELT N. Y. St. Mus. Bull. No. 155.—*P. nigrimana* sp. n. Colorado, KRÖBER p. 238 Stettin. ent. Zeit. 73.

Salentia apicalis p. 544, *nigrescens* sp. n. p. 546, Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17.

Spatulipalpa gen. n., *paradoxa* p. 221, *ornata* p. 242, spp. n., Neu-Süd-Wales, KRÖBER Ent. Mitt. Berlin 1.

Taenogera gen. n. near *Microphora*, *longa* sp. n. Australia, KRÖBER p. 150-151 T.c.

Thereva aurantiaca p. 547, *lactepennis* p. 548, spp. n., Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17.—*T. curticornis* Kapland, *argentea* Transvaal, p. 401, *analisis* p. 405 Oranje-Staat, *canescens* p. 406, *neglecta* p. 407, Deutschl., *glaucescens* p. 408 Attica,

stigmatica p. 409 Tunis, *rhomboidalis* p. 498 Ochotsk, *maculipennis* Frankreich, *gruenbergi* Russland, p. 499, *satanas* p. 503 Asia centr., *hilari-morpha* Austria, *robusta* Ochotsk, p. 673, *ornata* p. 677, *pilifrons*, *innodata*, p. 678, Turkestan, *rufiventris* p. 679 Ungarn, *flavicornis* p. 680, *athericiformis* p. 681, Turkestan, *zonata* p. 682 Deutschl., *hermanni* Alai, *subfulva* Togos Tjurae, p. 683, *niveifacies* p. 684 Ungarn, *albohirta* Schweiz, *callosa* Tirol p. 685, *angustifrons* p. 686 Deutschl., *semirufa* p. 687 Jericho, *flaviventris* p. 693 Togos Tjurae, *fulvipennis* Kaukasus, *fulvibarba* Sarepta, p. 691, *aureomaculata* p. 695 Turkestan, *handlirschi*, *vulpina*, p. 696, Austria, *sobrina* p. 698 Sarepta?, *marmorata* p. 699 Russland, *graeca* p. 701 Ungarn and Griechenl., *frontosa* p. 703 Austria, *albibarba* p. 704 Ochotsk, spp. n., KRÖBER Deutsche ent. Zeitschr. 1912.—*T. flavolineata* sp. n. Assam p. 480, BRUNETTI Rec. Ind. Mus. 7.—*T. albopilosa* p. 256 Colorado, *californica* p. 259 Calif., *aurofasciata* p. 263 Color., *nebulosa* p. 264 Calif., *ustulata* p. 265, *cingulata* p. 267, Color., spp. n., KRÖBER Stettin. ent. Zeit. 73.

Xestomyza chrysanthemii and *tuberculata* Synonymie, VILLENEUVE Wien. ent. Zeit. 31 p. 96.

Xestomyzina gen. n. near *Phycus aureostriata* sp. n. Jerusalem, KRÖBER p. 10 Deutsche ent. Zeitschr. 1912.

ASILIDAE.

Revision of australasian *Asilidae* commenced, RICARDO p. 473 etc. Ann. Nat. Hist. 9.

Adelodus gen. n. near *Aphestia* p. 124, *rufipes* p. 125, *nigroceruleus* p. 127, spp. n., Australia, HERMANN Acta Ac. German 96.

Amathomyia gen. n. für *persiana* Becker, HERMANN p. 34 T.c.—*A. persiana* sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 543 pl. xii f. 14 & pl. xiii f. 15.

Amphisbetetus dorsatus sp. n. Persien, BECKER p. 519 pl. xii f. 4 T.c.

Ancylorrhynchus bicolor, *farinosus*, p. 524, spp. n., Persien, BECKER T.c.

Apoclea albipila sp. n. Persien, BECKER p. 526 T.c.

Asilus bolivari sp. n. Spain, ARIAS p. 123 Bol. Soc. españ. 12.—*A. ephippium*, ♂, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 538.

Astochia gen. n. p. 538, *metatarsata* sp. n. Persien p. 539 pl. xii f. 9, BECKER T.c.

Atomosia melanopogon Texas p. 144, *setosa* Brasilia p. 145, *nuda* Trinidad p. 147, *metallescens* Argentina p. 150, *armata* Brasilia p. 152, spp. n., HERMANN Acta Ac. German 96,

Atonia setigera p. 86, *mollis* p. 88, *pinguis* p. 90, *scalarata* p. 92, *lateropunctata* p. 93, Peru, *hispidella* p. 95, *albiceps* p. 97, Brasilia, spp. n., HERMANN T.c.

Atractia vivax Peru p. 177, *rubida* Brasil p. 179, *picta* Venezuela p. 181, *comata* Costa Rica p. 183, *fulvipes* Brasil p. 185, *dispar* Peru p. 186, *conjungens* p. 189, *longicornis* p. 190, *lucida* p. 192, Brasil, spp. n., HERMANN T.c.

Automolina gen. n. near *Atonia* p. 101, *chilensis* sp. n. p. 103 Chile, HERMANN T.c.

Bathropsis gen. n., *peruviana* sp. n. Peru, HERMANN p. 68–69 T.c.

Bathypogon nigrinus sp. n. Queensland, RICARDO p. 154 Ann. Nat. Hist. 10.

Brachyrrhopola fulva sp. n. Queensland, RICARDO p. 588 Ann. Nat. Hist. 9.

Cenochromyia gen. n. p. 114, *xanthogaster* p. 115, *guttata* p. 116, spp. n. Neu-Guinea, HERMANN Acta Ac. German 96.

Ceraturgus similis sp. n. U. S. p. 152, JOHNSON Psyche 19.

Cerotainia dasythrix Peru p. 48, *leonina* Mendoza p. 49, *argyropyga* p. 52, *flavipes* p. 57, *debilis* p. 59, *argyropasta* p. 61, *marginata* p. 62, *unicolor* p. 64, Peru, spp. n., HERMANN Acta Ac. German 96.

Chrysopogon fasciatus p. 483, *punctatus*, *queenslandi*, p. 484, spp. n., Australia, RICARDO Ann. Nat. Hist. 9.

Clariola albohirta p. 358, *nigrescens* p. 359, *aurifacies* p. 360, spp. n., Australia, RICARDO Ann. Nat. Hist. 10.

Ctenota molithrix, ♀, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 542 pl. xii f. 13.

Cyanonedys gen. n. p. 128, *leucura* p. 130, *lugubris* p. 132, *hornii* p. 133, spp. n., Australia, HERMANN Acta Ac. German 96.

Dasyllis erythrura sp. n. Paraguay, HERMANN p. 238 T.c.

Deromyia australis sp. n. Queensland, RICARDO p. 142 Ann. Nat. Hist. 10.

Dissmeryngodes gen. n. für *Laphria antica* Wied., HERMANN p. 75 Acta Ac. German 96.

Dysmachus quadriapiculatus Strobl identisch mit *D. hamulatus* Lw., VILLENEUVE Wien ent. Zeit. 31 p. 96.

Enigmomorpheus gen. n. p. 272, *paradoxus* sp. n. p. 274 Paraguay, HERMANN Acta Ac. German 96.

Epaphroditus gen. n. für *placens* Wlk., HERMANN p. 117 T.c.

Epilamyra gen. n. p. 541, *coerulea* sp. n. Persia p. 542 pl. xii ff. 11 & 12, BECKER Ann. mus. zool. Ac. St. Peterb. 17.

Epitriptus cretaceus p. 532, *farinosus* p. 533, spp. n. Persien, BECKER T.c.

Eumecosoma hirsutum sp. n. Bolivia, HERMANN p. 73 Acta Ac. German 96.

Goneccalypsis gen. n. p. 108, *lucida* sp. n. p. 110 Formosa, HERMANN Acta Ac. German 96.

Habropogon verticalis sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 522.

Hybozelodes gen. n. p. 197, *nigellus* p. 199, *albipes* p. 201, *platycerus* p. 202, spp. n., Peru, HERMANN Acta Ac. German 96.

Jathopogon gen. nov. für *Cyrtopogon leucomollus*, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 518.

Lamyra pleskei sp. n. Persien, BECKER pp. 540–541 pl. xii p. 10 T.c.

Leptogaster bancrofti p. 471, *australis*, *dissimilis*, p. 476, spp. n., Australia, RICARDO Ann. Nat. Hist. 9.

Loewinella gen. n. für *Atomosia virescens* Löw., HERMANN p. 104 Acta Ac. German 96.

Lophoceraea gen. n. near *Atractia* p. 193, *pennata* sp. n. p. 196, Peru, HERMANN T.c.

Machimus armipes p. 534, *cingulifer* p. 535, spp. n., *thoracicus* p. 535, sp. p. 536, Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17.

Metalaphria gen. n., *australis* sp. n. N. Australia, RICARDO p. 356 Ann. Nat. Hist. 10.

Neocyrtopogon gen. n., *bifasciatus* sp. n. Queensland, RICARDO p. 589 Ann. Nat. Hist. 9.

Neoitamus splendidus sp. n. Tirol, OLDENBERG p. 209 Ent. Mitt. Berlin 1.

Neophoneus mustela sp. n. Brasilia, HERMANN p. 269 Acta Ac. German. 96.

Neosaropogon gen. n. for pt. of *Dasypogon* p. 591, *claripennis* sp. n. Queensland p. 593, RICARDO Ann. Nat. Hist. 9.

Nicocles politus p. 153, JOHNSON Psyche 19.

Nusa rubidapex Venezuela p. 247, *phonicogaster* Bolivia p. 248, *cyrtophora* Brasil. p. 255, *sarcophaga* Peru p. 263, spp. n., HERMANN Acta Ac. German. 96.

Oidardis gen. n. p. 77, *gibbosa* p. 78, *aenescens* p. 80, spp. n., Peru, HERMANN T.c.

Opeatocerus gen. n. für *Atomosia purpurata* Westw., HERMANN p. 106 T.c.

Othoniomyia gen. n., *triangularis* sp. n. Brasilia, HERMANN pp. 119-120 T.c.

Philodicus bimaculata sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 530.

Pholidotus gen. n. near *Laphria*, *rubriventris*, p. 229, *ruficaudis* p. 232, *anceps* p. 234, spp. n., Peru, HERMANN Acta Ac. German. 96.

Proctacanthus gigas ♀ Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 527 pl. xii f. 7.

Promachus griseiventris sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 529 pl. xii f. 8.—*P.* S. China, sp. aff. *yessonius* p. 610 pl. A, ootheca, KERSHAW J. Bombay Soc. 21.—*P. fitchii* p. 153, JOHNSON Psyche 19.

Pronomopsis gen. n. near *Megapoda*, *chalybea* Mendoza, *rubripes* Peru, spp. n., HERMANN pp. 18-20 Acta Ac. German. 96.

Protichisma gen. n. p. 35, *longimanus* sp. n. Peru p. 37, HERMANN T.c.

Psilozona gen. n., *albitarsis*, p. 157, *nigritarsis* p. 159, spp. n., Queensland, RICARDO Ann. Nat. Hist. 10.

Rachiopogon gen. n. for *Dasypogon grantii* Newm., RICARDO p. 590 Ann. Nat. Hist. 9.

Rhopalogaster aurifer loc. ? p. 211, *lineata* Brasil p. 212, *niphardis* Bolivia p. 213, *fascipennis* Peru p. 216, spp. n., HERMANN Acta Ac. German. 96.

Saropogon longicornis p. 514, *vos-seleri* var., *gigas* sp. n., p. 516, Persien, BECKER Ann. mus. zool. St. Peterb. 17.—*S.*; synonymy of Australian, *discus* W. = (*hudsoni* Hutton), RICARDO pp. 143-147 Ann. Nat. Hist. 10.

Smeryngolaphria gen. n. near *Laphria pictipennis* sp. n. Bolivia, HERMANN pp. 226-227 Acta Ac. German. 96.

Stichopogon auctus sp. n. Tunis p. 74 fig. 1-8, BEZZI Bull. Soc. Alger. 4.

Strombocodia gen. n. p. 165, *elegans* sp. n. p. 167 Peru, HERMANN Acta Ac. German. 96.

Tolmerus facialis sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 537.

Udenopogon gen. n. p. 520, *inscriptus* sp. n. Persien p. 521 pl. xii ff. 5 & 6, BECKER Ann. mus. zool. St. Peterb. 17.

MYDASIDAE.

Cephalocera annulata sp. n. Assam p. 513, BRUNETTI Rec. Ind. Mus. 7.

Leptomidas sardous, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 552.—*L. indianus* sp. n. p. 478 pl. xxxvii f. 12 Assam, BRUNETTI Rec. Ind. Mus. 7.—*L. desideratus* sp. n. Georgia p. 151 f. 1, JOHNSON Psyche 19.

BOMBYLIIDAE.

Einteilung, Charakterisierung, Entwicklung, Synopsis der Gattungen, BECKER Ann. Mus. zool. 17 pp. 421-502 ff. 1-37.

Anastoechus p. 580, *nigricirratu*s, *fulvescens*, p. 581, *albopectinatus* p. 582, *retardatus* p. 583, spp. n., Persien, BECKER T.c.—*A. meridionalis* sp. n. Centr. Africa, BEZZI p. 610 Tr. ent. Soc. London 1911.

Anthrax brevis sp. n. Persien BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 572.—*A. homogeneous* pl. 1 f. 3, *camptocladus* f. 4, spp. n., Africa, BEZZI p. 622 Tr. ent. Soc. London 1911.—*A. morio* als Schmarotzer 2. Grados, LASSMANN Halle Mitt. ent. Ges. H. 3-4 pp. 61-62.

Antoniaustralia gen. n., BECKER Ann. Mus. zool. 17 p. 458 f. 8.

Aphochantus (= *Aphoebantus*) *desertus*, life history p. 101, HYSLOP Proc. Ent. Soc. Washington 14.

Aphoebanthus persicus sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 575 ff. 22 & 23.

Argyromoeba brunnicosa p. 570, *indigena* p. 571, spp. n., Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17.—*A. argentiapicalis* pl. xxxvii fig. 6, *gestroi* fig. 7, spp. n., Bombay, p. 470, BRUNETTI Rec. Ind. Mus. 7.

Canaria gen. n., BECKER Ann. mus. zool. 17 p. 462 f. 10.

Dischistus dimidiatus p. 610, *hirtus* p. 611, spp. n., Africa, BEZZI Tr. ent. Soc. London 1911.

Exoprosopa consanguinea Macq., Synonymie, VILLENEUVE Wien. ent. Zeit. 31 p. 96.—*E. bagdadensis* p. 558, *evanescens* p. 559, *clausa* p. 560, *fari-nosa* p. 562, *nonna* p. 564, *punctinervis* p. 565, *fuscotata* p. 566, *sabulina* p. 567, *lucidifrons* p. 568 pl. xiii f. 19, spp. n., *bagdadensis* p. 558, *tamerlau* ♂ p. 560 f. 17 & 18, BECKER Ann. mus. zool. Ac. St. Peterb. 17.—*E. inermis* p. 638, *lepidogastra* p. 639, *sigmoidea* p. 640, *discriminata* pl. 1 f. 15 p. 641, *luctifera* p. 642 f. 16, *argyrophora* f. 17, *scaligera* f. 19, p. 643, *jacchoides* f. 20 p. 644, *batrachoides* f. 22 p. 646, *stan-nusi* f. 23 p. 647, *capnoptera* f. 24, *penthoptera* f. 25, p. 648, *heterocera* p. 649, *villaeformis* p. 650, *hypomelaena* p. 651, spp. n., Africa, BEZZI Tr. ent. Soc. London 1911.—*E. vitripennis* sp. n. Bombay p. 468, BRUNETTI Rec. Ind. Mus. 7.

(N-9210 j)

Glabellula unicolor sp. n. Admont, STRÖBL Mitt. Ver. Steierm. 46 p. 45 etc.—*G. nobilis* sp. n. Asia minor, KERTÉSZ Ann. Mus. Hung. 10 p. 638.

Gyrocraepedum gen. n. p. 456 f. 7a b, *pleskei* sp. n. Persien p. 574 ff. 20 & 21, BECKER Ann. mus. zool. Ac. St. Peterb. 17.

Hemipenthes chorassani p. 553, *albina* p. 556, spp. n., *circumdata* var., *quinquefasciata*, p. 555, *rufipes* p. 557, BECKER T.c.

Hyperalonia thyridophora sp. n. Africa p. 653 pl. 1 f. 26, BEZZI Tr. ent. Soc. London 1911.—*H. semifuscata* sp. n. Bombay p. 466, BRUNETTI Rec. Ind. Mus. 7.—*H. sphinx*, pupa fig., DUTT Mem. Dept. Agric. Ind. Ent. Ser. 4 No. 4.

Isotamia gen. n. near *Exoprosopa* p. 627, *daveyi* sp. n. Africa pl. 1 f. 7 p. 628, BEZZI Tr. ent. Soc. London 1911.

Litorrhynchus; characters p. 629, *argyrolepis*, *ricardo*i pl. 1 f. 10, p. 630, *dentifera* p. 632 f. 11, *repletus* p. 633 f. 12, *dilatatus*, *perplexus*, p. 634, spp. n., Africa, *basalis* Ric. f. 8, *nyusae* Ric. f. 9 BEZZI T.c.

Lomatia gigantea sp. n. Africa pl. 1 f. 2, *locwi* n. n. for *inornata* Loew 1860, BEZZI p. 614 T.c.

Mariobezzia gen. n. p. 470 ff. 15 16, *lichtwardti* Turkestan p. 578 ff. 24 25, *zarudnyi* p. 579 Persien, spp. n., BECKER Ann. mus. zool. Ac. St. Peterb. 17.

Molybdamoeba leucopogon p. 618, *decipiens* p. 619, spp. n., Africa, BEZZI Tr. ent. Soc. London 1911.

Petrorossia gratiosa sp. n. Nigeria pl. 1 f. 14, *letho* Wied. = (*Anthrax longitarsis* Beck.), BEZZI p. 616 T.c.

Phthiria inconspicua sp. n. Persia, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 586.

Semiramis gen. n. p. 486 ff. 29 & 30, *punctipennis* sp. n. Persien p. 586 ff. 26 27, BECKER T.c.

Sisyrophanus leptocerus, *pyrrhocerus*, spp. n., Africa, BEZZI p. 612 Tr. ent. Soc. London 1911.

Sparnapolius asiaticus sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 586.

Systoechus robustus p. 608 pl. 1 f. 1, *melampogon* p. 609, spp. n., Africa centr., BEZZI Tr. ent. Soc. London 1911.—*S. nivalis* sp. n. Himalaya p. 472, BRUNETTI Rec. Ind. Mus. 7.

Systropus; synonymy of brazilian, BEZZI pp. 79–83 Broteria 10.

Thyridanthrax macquarti pl. 1 f. 5, *melanopleurus* f. 6, spp. n., Africa, BEZZI Tr. ent. Soc. London 1911.

Villa paniscoides sp. n. Africa, BEZZI p. 624 T.c.

ACROGERIDAE = CYRTIDAE,

†*Eulonchiella eocenica* sp. n. baltic amber, MEUNIER p. 177 Mem. Soc. sci. ent. 36.

Oncodes fuscus p. 477, *octomaculatus* p. 476, spp. n., India, BRUNETTI Rec. Ind. Mus. 7.

Pialea auripila sp. n. Himalaya p. 472, BRUNETTI Rec. Ind. Mus. 7.—*P. lomata*, validity, BEZZI p. 78 Broteria 10.

Pterodontia dorsolineata sp. n. Burma p. 475 pl. xxxvii figs. 8 9 & 10, BRUNETTI Rec. Ind. Mus. 7.

NEMESTRINIDAE.

Atriadops nivea sp. n. p. 477 pl. xxxvii f. 11 Ceylon, BRUNETTI Rec. Ind. Mus. 7.

Nemestrinus abdominalis, fascifrons, Synonymie, VILLENEUVE Wien ent. Zeit. 31 p. 96.

Nycterimyia horni Queensland, *kerteszi, fenestroclatrata, fenestroinornata*, Formosa, spp. n., LICHTWARDT pp. 27–28 Ent. Mitt. Berlin 1.

EMPIDAE.

Chelipoda fuscicornis, fusciseta, pictipennis, spp. n., Formosa, BEZZI Ann. Mus. Hung. 10 pp. 476–478 fig. 5.

Coryneta albomicans sp. n. Tirol, OLDENBERG p. 214 Ent. Mitt. Berlin 1.—*C. candidiseta, longirostris*, spp. n., Formosa, BEZZI Ann. Mus. Hung. 10 pp. 491–493.

Drapetis loewi sp. n. Deutschl., DAHL p. 465 Beitr. Naturdenkmalpfl. 3.—*D. brevis, femoralis*, Formosa, *hamifera* Nova Guinea, *pubicornis* Formosa, spp. n., BEZZI Ann. Mus. Hung. 10 pp. 478–486.

Elaphropeza kerteszi, melanura, marginalis, pictithorax, scutellaris, xanthocephala, spp. n., Formosa, BEZZI Ann. Mus. Hung. 10 pp. 486–490.

Empis platyptera sp. n. Hochlantsch, *pilimana* var. n. *holoneura*, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*E. hispanica*, Synonymie, VILLENEUVE Wien. ent. Zeit. 31 p. 96.—*E. hyalogyne, hystrichopyga, inclinata, plorans, raptoria, scopulifera, tenuinervis, velutina*, spp. n., Formosa, BEZZI Ann. Mus. Hung. 10 pp. 467–473.

Halsanalotes fuscipes sp. n. Formosa, BEZZI Ann. Mus. Hung. 10 p. 490.

Hilara czernyi, longesetosa, spp. n., Admont, *longevittata* var. n. *major*, STROBL Mitt. Ver. Steierm. 46 p. 45.—*H. melanochira, orientalis*, spp. n., Formosa, BEZZI Ann. Mus. Hung. 10 pp. 474–475.—*H. maluinensis* sp. n. Falklands-Inseln, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 48 f. 7.

Hybos grossipes and allies, CARTER p. 59 Ent. Mag. 48.

Leptozeza rugosiventris sp. n. Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*L. biplagiata* sp. n. Formosa, BEZZI Ann. Mus. Hung. 10 p. 475.

Microphorus beckeri sp. n. Steiermark, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Noeza major, tibialis, spp. n., Formosa, BEZZI Ann. Mus. Hung. 10 pp. 453–456.

Parahybos chirarga, incertus, melas, sauteri, simplicipes, spp. n., Formosa, BEZZI Ann. Mus. Hung. 10 pp. 461–465 figs. 1–3.

Parathalassius melanderi sp. n. p. 154 f. 88 California, COLE Rep. Laguna Mar. Lab. 1.

Platypalpus fagorum sp. n. Deutschl., DAHL p. 466 Beitr. Naturdenkmalpfl. 3.

Rhamphomyia pseudogibba, villosipes, spp. n., Steiermark, *squamigera* var. n. *squamosissima*, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*R. rostrifera, sauteri*, Formosa, spp. n., BEZZI Ann. Mus. Hung. 10 pp. 465–467 fig. 4.

Syneches luctifer, praestans, pullus, spp. n., Formosa, BEZZI pp. 457–461 T.c.

Tachista denticulata sp. n. Tirol, OLDENBERG p. 212 Ent. Mitt. Berlin 1.—*T. bistigma* sp. n. Formosa, BEZZI Ann. Mus. Hung. 10 p. 490.—*Tachysta arrogans* var. n. *productipes*, *calcarata* sp. n. Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Tachydrumia dilatovittata, *diversipes*, *leucothrix*, *longimana*, *pseudobicolor*, *pseudociliaris*, spp. n., Steiermark, *caxilis* var. n. *nigroterminata*, STROBL T.c.

DOLICHOPIDAE, LONCHOPTERIDAE.

Monograph of danish *Dolichopodidae*, LUNDBECK 407 pp.

Swedish *Dolichopodidae*, WAHLGREN Entomol. Tidskr. 33 pp. 1-54.

Swedish *Lonchopteridae*, WAHLGREN Entomol. Tidskr. 33 pp. 54-56.

Aphrosylus mitis sp. n. England, VERRALL p. 146 Ent. Mag. 48.

Chrysosoma lichtwardti p. 374, *nigricozatum* p. 375, *strigatum* p. 376, *gilvipes* p. 379, *sumatranum* p. 380, Sumatra, *fulgidipenne* p. 377, *loewi* p. 378, Formosa, spp. n., ENDERLEIN Zool. Jahrb. Suppl. 15.

Dolichopus varitibia sp. n. Lyngby Mose, LUNDBECK Dipt. Dan. 4 p. 84.

Hercostomus subsimplicipes sp. n. Cornwall, VERRALL p. 56 Ent. Mag. 48.

Krakatania gen. n. für *Psilopus rectus*, ENDERLEIN p. 408 Zool. Jahrb. Suppl. 15.

Lichtwardtia gen. n. near *Psilopus formosana* sp. n. Formosa, ENDERLEIN p. 406 T.c.

Margaritostylus anulisetia sp. n. Sumatra, ENDERLEIN p. 372 T.c.

Medeterus resplendens sp. n. Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*M. melancholicus* sp. n. Denmark, LUNDBECK Dipt. Dan. 4 p. 325.

Plagiozopelma g. n. near *Chrysosoma spengeli* sp. n. Sumatra, ENDERLEIN p. 367 Zool. Jahrb. Suppl. 15.

Psilopus violaris p. 397 Sumatra, *penicilliger* p. 398 Brasilia, *brevimanus* p. 400 Costa Rica, *ctenopus* p. 401 Ecuador, *capillimanus* p. 402, *filipeniculatus* p. 403, *gilvipes* p. 404, *angusta* (N-9210 j)

tus, fraterculus, p. 405, Brasilia, spp. n., ENDERLEIN T.c.

Sympicus simplicipes sp. n. Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Syntormon denticulatus, Synonymie STROBL T.c.—*S. filiger* n. n. for *rufipes* Zett., VERRALL p. 58 Ent. Mag. 48.

Thrypticus laetus p. 59, *pollinosus* p. 144, spp. n., Britain, VERRALL T.c.

PHORIDAE.

Generic names in *Phoridae*, MALLOCH Ent. News 23 pp. 356-358.

The insects of the dipterous family *Phoridae* in the United States National museum, MALLOCH Proc. U. S. Nation. Mus. 43 pp. 411-529 pls. xxxv-xli.

Habits and habitat of British *Phoridae*, MALLOCH Trans. Glasgow Soc. 8 pp. 153-156.

Acontistoptera mexicana sp. n. Mexico p. 509 pl. xl f. 6 & pl. xli f. 1, MALLOCH Proc. U. S. Nation. Mus. 43.

Aphiochaeta simulans p. 97, *brevisetia* p. 99, *atrimana* p. 166, *angustifrons* p. 167, *hyalipennis* p. 168, *rubescens* p. 170, *longicostalis* p. 171, spp. n., Britain, *decipiens* n. n. for *cilipes* Wood p. 169, WOOD Ent. Mag. 48.—*A. grandicornis*, *cinereifrons* Admont, spp. n., STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*A. aculeipes* p. 108, *mera* p. 109, *egena* p. 110, *viduata* p. 111, *innocens*, *extans*, p. 112, *consucta*, *brevis*, p. 113, *planipes* p. 114, *spretata*, *frontata*, *invenusta*, p. 115, *media*, *latinervis*, p. 116, *soluta* p. 117, spp. n., Seychelles, COLLIN Tr. Linn. Soc. London 15.—*A. ferruginea* sp. n. India, BRUNETTI p. 84 Rec. Ind. Mus. 7.—*A. approximata*, *flavifacies*, Calcutta, *inaequalis* Nepal, *trifasciata* Assam and Bengal, *pallicornis* Darjiling, *subfurcata* Bengal, *trilineata* Calcutta, spp. n., BRUNETTI pp. 507-511 T.c.—*A.*; spp. n., *conglomerata* p. 445, *californiensis* California p. 447, U.S., *nedae* Mexico p. 448, *barberi* p. 450 pl. xxxvi f. 7, *subpicta* p. 452 f. 3, *marginalis* p. 457, *perdita* p. 459, *submarginalis* p. 458, *arcuata* p. 460, *winnemana* p. 461, *fisheri* p. 463, *fungorum* p. 473 pl. xxxvii f. 4, *brunnipes* p. 475, *proboscidea* p. 477 pl. xxxvi f. 2, *sublutea* p. 468, *franconiensis* p. 479 pl. xxxvii f. 7, *anomala* p. 484,

subobscurata p. 485, *carlynensis* p. 468, *evarthae* p. 472, *longipennis* p. 473 pl. xxxvii f. 3, *straminea* p. 472, *straminipes*, *johannseni*, p. 474, *subatomella* p. 481 pl. xli f. 5, *inornata* p. 488, *cayuga* p. 474, *iroquoiana*, *ursina*, p. 476, *montiocla* p. 479, *dubitata* p. 480, *bicolorata* p. 486, *flavinervis* p. 493, *conica* p. 462 pl. xxxvi ff. 5 6 & 11, *inaequalis* p. 464, *borealis* p. 488, *perplexa* p. 489, *dyari* p. 493, *fuscope-dunculata* p. 498, *arizonensis* p. 478, *divergens* p. 480, *retardata* p. 482, *approximata*, *vulgata*, p. 483, *difficilis* p. 484, *conspicualis* p. 487, *infumata* p. 490, *rusticata* p. 489, *chaetoneura* p. 490, *peregrina* p. 492, *atomella* p. 481 pl. xxxvii f. 6, *fenestrata* p. 517, *schwarzi* p. 518, N. America, *macrochaeta* Porto Rico p. 464, *spinifemorata* Jamaica p. 465 pl. xxxvi f. 4, *scalaris cordobensis* var. n. Mexico p. 467 pl. xxxvi f. 9, *subflava* Porto Rico p. 469, *setaria* Hawaii p. 514, *orientata* Java p. 513 pl. xxxvii f. 1, *variata* Philippine Is. p. 515, *tasmaniensis* Tasmania p. 514, spp. n., MALLOCH Proc. U. S. Nation. Mus. 43.—*A. enderleini* for *minuta* End. p. 135, *ferruginosa* for *A. ferruginea* End., *umbripennis* for *fumipennis*, p. 136, nn. n., BRUES Psyche 19.—*A. flavohalterata* p. 29, *femoralis*, *polita*, p. 30, *angustifurcata* p. 31, *furcella*, *setimargo*, p. 32, *punctifemur* p. 33, *palpatrix*, *obscurata*, p. 35, *minuta* p. 36 *ferruginea*, *fumipennis*, p. 37, *crinellcosta* p. 38, *prosthioxantha*, *luederwaldti*, p. 39, *catharinensis* p. 40, spp. n., Brasilia, ENDERLEIN Stettin. ent. Zeit. 73.—*A. bezziana* p. 47 O-Afr., *kerteszi* p. 48 Costarica, *necrophoga* [!] p. 49 Brasilia, spp. n., ENDERLEIN Stettin. ent. Zeit. 73.

Apocephalus spinicosta p. 442 pl. xxxviii ff. 2 8 & 11, *coquilletti* p. 443 pl. xxxviii f. 4, *similis* p. 444 pl. xxxviii ff. 7 12 & 13, U.S., *aridus* Mexico p. 444 pl. xli f. 7, spp. n., MALLOCH Proc. U. S. Nation. Mus. 43.—*A. brasiliensis* p. 24, *parvifurcatus* p. 25, spp. n., Brasilia, ENDERLEIN Stettin. ent. Zeit. 73.

Beckerina orphnephiloides sp. n. Maryland p. 441 pl. xxxvi ff. 8 & 10, MALLOCH Proc. U. S. Nation. Mus. 43.

Byrsophrys gen. n., *boliviana* sp. n. Boliv., ENDERLEIN pp. 50-51 Stettin. ent. Zeit. 73.

Chaetoneurophora nom. n. for *Chaetoneura* Mall. p. 422, MALLOCH Proc. U. S. Nation. Mus. 43.

Chonocephalus fletcheri sp. n. Bengalen, SCHMITZ p. 727 Zool. Anz. 39.—*C. depressus* sp. n. Sumatra, MEIJERE p. 151 Zool. Jahrb. Suppl. 15.—*C. buccata* sp. n. Guatemala p. 510 pl. xl f. 5, MALLOCH Proc. U. S. Nation. Mus. 43.

Crepidopachys gen. n., *longirostrata* sp. n. Brasilia, ENDERLEIN p. 16 Stettin. ent. Zeit. 73.

Dohrniphora knabi sp. n. Panama p. 431, *venusta buscki* var. n. p. 432, *nitida* sp. n. South Africa p. 511, MALLOCH Proc. U. S. Nation. Mus. 43.

Gymnophora cymatoneura sp. n. Brasilia, ENDERLEIN p. 23 Stettin. ent. Zeit. 73.

Hypocera irregularis sp. n. England, WOOD p. 95 Ent. Mag. 48.—*H. marginata* sp. n. India p. 512, BRUNETTI Rec. Ind. Mus. 7.—*H. rectangulata* Java p. 512 pl. xxxv f. 9, *convergens* Panama p. 435, spp. n., MALLOCH Proc. U. S. Nation. Mus. 43.—*H. angustifrons* sp. n. Brasilia, ENDERLEIN p. 43 Stettin. ent. Zeit. 73.

Metopina fenyesei sp. n. Mexico p. 503 pl. xxxix f. 13, MALLOCH Proc. U. S. Nation. Mus. 43.

Metopotropis gen. n., *herero* sp. n. S.W.-Afr., ENDERLEIN pp. 51-52 Stettin. ent. Zeit. 73.

Paraspiniphora nom. n. for *Spiniphora* Mall. p. 425, *trispinosa* p. 427 pl. xxxv f. 2, *slossonae* p. 428 f. 1, *spinidosa* p. 429 f. 3, spp. n., N. America, MALLOCH Proc. U. S. Nation. Mus. 43.

Parasyneura gen. n., *rotundipennis* Java sp. n. p. 516 pl. xxxix ff. 1-3, MALLOCH T.c.

Phalacrotophora gen. n., *bruesiana* sp. n. Brasilia, ENDERLEIN p. 21 Stettin. ent. Zeit. 73.

Phora theodori sp. n. Deutschl., DAHL p. 462 Beitr. Naturdenkmalpfl. 3.—*P. bicornuta*, *crassinervis*, *forcipata*, spp. n., Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*P. aequidistans* Darjiling p. 501, *basalis* Assam p. 500, *rustithorax* Assam p. 502, spp. n., BRUNETTI Rec. Ind. Mus. 7.—*P.*

occidentata sp. n. N. America p. 438, MALLOCH Proc. U. S. Nation. Mus. 43.—*P. gigantea* p. 18, *fuscogalterata* p. 19, *dispar* p. 20, spp. n., Brasilia, ENDERLEIN Stettin. ent. Zeit. 73.—*P. chlorogastra* métamorphoses, WEISS Alger Bul. soc. 1911 p. 34.—*P. maculata* parasite de *Gelechia*, GOURY Feuille jeunes natural. 41 1911 p. 138.

Phorhynchus gen. n., *ater* sp. n. Ceylon p. 504, BRUNETTI Rec. Ind. Mus. 7.

Plastophora curriei British Columbia p. 501, *spatulata* Texas p. 502, *antiquensis* West Indies p. 502 pl. xxxix f. 11, MALLOCH Proc. U. S. Nation. Mus. 43.

Pronomiophora gen. n., *rostrata* sp. n. O-Afr., ENDERLEIN p. 46 Stettin. ent. Zeit. 73.

Psalidesma gen. n., *pyrenaicum* sp. n. Pyrenaeen, BECKER p. 320 Wien. ent. Ztg. 31.

Pseudohypocera gen. n. p. 439, *clypeata* sp. n. Mexico p. 440 pl. xxxv ff. 10–12, MALLOCH Proc. U. S. Nation. Mus. 43.

Puliciphora obtecta Java p. 148, *pusillima* Sumatra p. 149, spp. n., MEIJERE Zool. Jahrb. Suppl. 15.—*P. nudipalpis* p. 504 pl. xli f. 4, *palposa* p. 505 pl. xli f. 3, *glacialis* Massachusetts p. 507 pl. xl ff. 1 2 & 3, *virginiensis* p. 519, U.S., *nitida* Guatemala p. 508 pl. xl f. 4, spp. n., MALLOCH Proc. U. S. Nation. Mus. 43.

Rhynchomicropteron gen. n., *puliciforme* sp. n., p. 86 pl. i figs. 1–3, Ceylon, ANNANDALE Spolia Zeylan. 8.

Truphconeura varipes, *vitrinervis*, p. 419 pl. xli f. 2, *suspecta* p. 420, *subfusca* p. 422, spp. n., N. America, MALLOCH Proc. U. S. Nation. Mus. 43.

Udamochiras gen. n., *colossia* sp. n. Brasilia, ENDERLEIN pp. 41–42 Stettin. ent. Zeit. 73.

PLATYPEZIDAE.

Platypeza argyrogyna India, Ceylon and Java (= *cothurnata*) p. 483, *obscura* Himalaya p. 482, *orientalis* Assam p. 481, spp. n., BRUNETTI Rec. Ind. Mus. 7.

PIPUNCULIDAE.

Dorylas adventicius, *excellens*, *formosanus*, *fraternus*, *gigas*, *gracilis*, *mega-cephalus*, *mutilatus*, *nudus*, *platytarsis*, *sauteri*, Formosa, spp. n., KERTESZ Ann. Mus. Hung. 10 pp. 285–299.—*D. propinquus* p. 607, *immutatus* p. 608, spp. n., Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17.

Pipunculus flavomaculatus, *cilitarsis* Steiermark, spp. n., STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*P. appendiculatus* p. 485, *brevis* p. 491, *cinereo-aeneus* p. 490, *flicornis* p. 489, *flavo-cinctus* p. 485, *limpidipennis* p. 491, *mirabilis* p. 492, *nigronitens* p. 490, *nitens* p. 492, *quartarius* p. 493, spp. n., India and Burma, BRUNETTI Rec. Ind. Mus. 7.—*P. globosus*, *biscaynei*, spp. n., p. 453, N. America, CRESSON Ent. News 23 pp. 452–456.—*P. occidentalis* p. 291 f. 7, *exilis* f. 5, *inconspicuus* f. 6, p. 295, *townsendi* p. 292 f. 8, *trichaelus* p. 296 f. 1, *stigmatica* p. 294 f. 2, *trochanteratus* p. 297 f. 9, *caudelli* p. 298 f. 3, N. America, *metallescens* Nicaragua p. 298 f. 4, spp. n., MALLOCH Proc. U. S. Nation. Mus. 43.—*P. vierecki* p. 654 pl. xlvi ff. 4 & 5, *winne-mannae* p. 655 ff. 2 & 3, spp. n., Maryland, MALLOCH T.c.—*P. interruptus* p. 1 fig., *acuticornis* p. 2 fig., *buscki* p. 3 fig., spp. n., Panama, MALLOCH Smithsonian Inst. Misc. Coll. 60 No. 1 Pub. 2141.

Verrallia argentisegmentata Burma p. 494, *plumbella* Himalaya p. 495, spp. n., BRUNETTI Rec. Ind. Mus. 7.

SYRPHIDAE.

Life-histories of *Syrphidae*, 3, METCALF Ohio Nat. 12 pp. 477–488 pl. xxiii; 4, METCALF T.c. pp. 533–541 pl. xxx.

Fliegenpuppen *Syrphidae*, VIMMER Čas. České Spol. Entomolog. Prag 8 1911 pp. 109–119.

Asarcina ericetorum, forms, BEZZI Ann. Mus. Genova 45 p. 403.

Chalcomyia cyaneus sp. n. New Hampshire p. 119, SMITH Proc. Ent. Soc. Washington 14.

Chilosia, Finnischen Arten der Gattung, HELLEN Medd. Soc. Fauna Fenn. 38 pp. 149–164.

Chrysotoxum holtzi sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 605.

Eristalis tabanoides sp. n. Persien, BECKER p. 99 T.c.—*E. plumipes* sp. n. Guinea, BEZZI Ann. Mus. Genova 45 p. 433.—*E. montanus* p. 13, *vinetorum* p. 14, WALTON Proc. Ent. Soc. Washington 14.—*E. tenax* (Larven) als Rattenkönig, SCHULZ Posen Zs. D. Ges. Wiss. natw. Abt. 19 p. 16.

Eumerus jacobsoni sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 603.—*E. feae* Basilè p. 440, *vestitus* Guinea, p. 442, spp. n., BEZZI Ann. Mus. Genova 45.—*E. strigatus* p. 119 f. 6, FELT N. Y. St. Mus. Bull. No. 155.

Exmerodon subg. n. *Lampetiae*, *fulcratus* sp. n., Persien, p. 604, BECKER Ann. mus. zool. Ac. St. Peterb. 17.

Helophilus willingii sp. n. Saskatchewan p. 118, SMITH Proc. Ent. Soc. Washington 14.

Lampetia coerulea sp. n. Persien, BECKER Ann. mus. zool. Ac. sc. 17 p. 602.—*L. trochanterata* vide *Merodon*.

Liogaster aurichalcea sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 606.

Mallota aenigma sp. n. Fernando Poo, BEZZI Ann. Mus. Genova 45 p. 434.

Megaspis erratica p. 424 Guinea, *poënsis* p. 427 Fernando Poo, spp. n., BEZZI T.c.

Melanostoma longigena sp. n. Feuerland, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 102.

Merodon podagrius Villen. Zugehörigkeit zu *Lampetia trochanterata* Costa, VILLENEUVE Wien. ent. Zeit. 31 p. 96.

Microdon rhenanus sp. n. Deutschl., Biology, ANDRIES p. 305 Zeitschr. wiss. Zool. 103.—*M. craigheadii* sp. n. Pennsylvania p. 463, WALTON Ent. News 23.—*M. laetus* p. 13, WALTON Proc. Ent. Soc. Washington 14.—*M. eggeri*, Synonymie, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Platycheirus chrysocomoides, *claviventris*, spp. n., Steiermark, *latifacies* var. n. *nigriciliata*, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Protylocera nom. n. p. 415 (= *Eristalis* pars), *aperta* sp. n. Congo p. 417, BEZZI Ann. Mus. Genova 45.

Rhingia coerulea sp. n. Guinea, BEZZI Ann. Mus. Genova 45 p. 411.

Sphegina zetterstedtii var. n. *rufiventris*, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Syritta vittata, ♀, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 601.

Syrphus feae sp. n. Capo Verde, BEZZI Ann. Mus. Genova 45 p. 407.—*S.* Hallischen Arten, LASSMANN Halle Mitt. ent. Ges. H. 3-4 pp. 59-31.—*S. torvus* and *luniger*, larval habits, CHAMPION p. 215 Ent. Mag. 48.

Tubifera (*Mesembrius*) *strigelata* sp. n. Congo francese, BEZZI Ann. Mus. Genova 45 p. 436.

Xylota nigerrima Beck. identisch mit *fulviventris* Bigot, VILLENEUVE Wien. ent. Zeit. 31 p. 96.

CONOPIDAE.

Conopidae, systematische Verwandtschaft, Biologie etc., DE MEYERE Tijdschr. Ent. 55 pp. 184-207.

Conops mundus sp. n. Orissa p. 496, BRUNETTI Rec. Ind. Mus. 7.

†*Palaeomyopa tertiaria* sp. n. baltic amber, MEUNIER p. 180 Ann. Soc. scient. 36.

Physocephala; Synopsis p. 616, *persica* p. 609 pl. xiv f. 31, *punctithorax pugioniformis*, p. 611, pl. xiv f. 32, *furax* p. 612, *laeta* p. 613, *zurudnyi* p. 614, *detecta* p. 615, spp. n., Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17.—*P. albofasciata* Bombay p. 497 pl. xxxvii figs. 13 & 14, *annulifera* Assam p. 498, *nigrofasciata* Central Asia p. 497 figs. 15 & 16, *sepulchralis* Assam p. 498, spp. n., BRUNETTI Rec. Ind. Mus. 7.

Zodion montanum sp. n. Himalaya p. 499, BRUNETTI T.c.

OESTRIDAE.

Oestridae; hosts of some Eastern, MIDDLETON p. lvii Proc. ent. Soc. London 1911.

Cephalopsis gen. n. type *Æstrus maculatus* p. 53, TOWNSEND Proc. Ent. Soc. Washington 14.

Cephenomyia ulrichi in Ostpreussen, MÖSCHLER Königsberg Schr. physik. Ges. 52 pp. 273-277.

Dermatobia hominis, life history, BUSCK Proc. Ent. Soc. Washington 14 pp. 9-11.

Gastrophilus ternicinctus sp. n. Congo, GEDOELST p. 426 Rev. zool. Afric. 1.

Hypoderma bovis Lebensgeschichte, PETER Mitt. D. landw. Ges. Berlin 27 PETER pp. 156-163; biology (Danish), STUB Köbenhavn Mdksf. Dyr. 24 p. 409; Observations sur l'hypoderme du bœuf au point de vue de l'élevage du bétail, GAYETS & VANÉY C. R. Acad. sci. 154 pp. 42-45.

Oestrus aureoargentatus sp. n. Congo, RODHAIN & BEQUAERT Rev. zool. afric. 1 p. 381.—*O. macdonaldi* sp. n. Congo, GEDOELST p. 430 T.c.; host, SCHOUTEDEN p. 142 Rev. Zool. afric. 2.

Rhinoestrus nivarleti sp. n. Congo, RODHAIN & BEQUAERT p. 370 Rev. zool. afric. 1.

MUSCIDAE CALYPTRATAE.

A readjustment of muscoid names, TOWNSEND Proc. Ent. Soc. Washington 14 pp. 45-53.

For much synonymy on *Tachinidae* see VILLENEUVE Wien ent. Zeit. 31 pp. 93-96 & 96 & 97.

Diptera cyclorrhapa; Puppenunterschiede, VIMMER Čas. České Spol. Entomolog. Prag 8 1911 pp. 34-43 51-55.

Anthomyidae; new for Sweden and new localities, RINGDAHL Entomol. Tidskr. Stockholm 33 pp. 208-214.

Tachiniden aus *Psyche* (Russ.), ZYKOV Rev. russ. ent. 12 pp. 284-294.

Meigens und Pandellés *Sarcophaga*-Typen, Kramers Tachiniden der Oberlausitz, BOTTCHE D. ent. Zs. 1912 pp. 343-350.

Die männlichen Begattungswerkzeuge bei dem Genus *Sarcophaga* Meig. und ihre Bedeutung für die Abgrenzung der Arten, BOTTCHE D. ent. Zs. 1912 pp. 525-544 figs.

Investigations on the larvae of some muscoidcan flies parasitic on insects, Danish with English summary, NIELSEN Köbenhavn Nath. Medd. 63 1912 pp. 1-26 1 plate 19 figg.

Sarcophagid, Muscid and Anthomyiid larvae pp. 15-20 pls. i-v, BANKS U. S. Dept. Agric. Ent. Techn. 22.

Acoptena nuda Petersburg p. 255, *similis* Warschau p. 257, spp. n., SCHNABL & DZIEDZ. Acta Ac. German 95.

Admontia continuans sp. n. Admont, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Aglummyia gen. n. p. 354, *percinerea* sp. n. p. 355 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Alophorella gen. n. type *Thereva obesa* p. 45, TOWNSEND Proc. Ent. Soc. Washington 14.

Amobia distincta, TOTHILL p. 3 Canad. Ent. 44.

Andinomyia gen. n., *cruciata* sp. n. p. 329 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Apollenia gen. n. typ. *Pollenia mediuscula* Bigot p. 79, BEZZI Boll. Lab. Portici 6.

Archidops pretoriensis sp. n. Pretoria p. 61, BEZZI T.c.

Archytas incasana sp. n. p. 331 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Azelia gibberoides sp. n. Tauria, SCHNABL & DZIEDZ. p. 276 Acta Ac. German 95.

Belvosia piurana sp. n. p. 349 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Blaesoxipha acuminata Orenbourg, *berolinensis* Berlin, *confusa* Orenbourg, *rossica* Russie, spp. n., VILLENEUVE Ann. Mus. Hung. 10 pp. 611-613 fig. 3.

Blaesoxiphella gen. n. near *Blaesoxipha*, *brevicornis* sp. n. Russie mar., VILLENEUVE p. 613 T.c.

Blepharipeza montagna sp. n. p. 351 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Brachycoma acridiorum, BRÈTHES An. Mus. Buenos Aires 22 pp. 441-450 figs.

Brachymasicera subpolita sp. n. p. 341 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Bucentes geniculatus, RENNIE Proc. R. Phys. Soc. Edinb. 18 p. 231.

Carcelia laxifrons pro *Parexolista lucorum*, *kowarzi* = *Pelmatomyia pha-*

- Ienaira* Meig. pro parte, VILLENEUVE Feuille Natural. p. 90 42.
- Cestropsis* gen. n. p. 355, *viridis* sp. n. p. 356 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.
- Chaetophorocera* gen. n. *andina*, p. 342, *fuscosa* p. 343, spp. n., Peru, TOWNSEND T.c.
- Chaetosisyrops* gen. n. p. 320, *montanus* sp. n. p. 321 Peru, TOWNSEND T.c.
- Chiastochaeta lacteipennis* sp. n. Polen, SCHNABL & DZIEDZ p. 274 Acta Ac. German 95.
- Chloronesia* gen. n. *Sarcophagidae* p. 360, *andina* sp. n. Ecuador p. 361, TOWNSEND Proc. U. S. Nation. Mus. 43.
- Chrysomyia macellaria*, Nouveaux cas de myase, PIRAJA DA SILVA Arch. parasit. 15 pp. 425-430.
- Cnephalodopsis* nom. n. for *Cnephalodes* Towns. p. 345, TOWNSEND Proc. U. S. Nation. Mus. 43.
- Cnephalomyia* gen. n., *floridana* sp. n. p. 113 Florida, TOWNSEND J. New York Ent. Soc. 20.
- Coenosia steini* sp. n. Cornwall, VERRALL p. 196 Ent. Mag. 48.—*C. helvetica* Schweiz p. 230, *dziiedzickii* Warschau p. 233, *luteicornis* Russl. p. 329, spp. n., SCHNABL Acta Ac. German 95.
- Cordylobia* spp., habits review, KNAB Science 35 p. 602.
- Cosmina claripennis* p. 624, *similans* p. 625, *metallina* p. 628, spp. n., Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17.
- Craticulina fimbriata* sp. n. Lorenzo Marques p. 66, BEZZI Boll. Lab. Portici 6.
- Dejeania andina* sp. n. p. 333 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.
- Dexodes meridionalis* sp. n. p. 316 Peru, TOWNSEND T.c.
- Dolichostoma* gen. n., *alpina* sp. n. p. 325 Peru, TOWNSEND T.c.
- Doryphorophaga* gen. n. type *Lydella doryphorae* p. 164, TOWNSEND Proc. Ent. Soc. Washington 14.
- Licthophasia* gen. n. type *Syrphus crassipennis* p. 46, TOWNSEND T.c.
- Ecuadorana* gen. n., *bicolor* sp. n. Ecuador p. 324, TOWNSEND Proc. U. S. Nation. Mus. 43.
- Epalpodes* gen. n., *equatorialis* sp. n. Ecuador, p. 330, TOWNSEND T.c.
- Epidexia* gen. n., *filamentosa* sp. n., p. 112 Florida, TOWNSEND J. New York Ent. Soc. 20.
- Epimasicera* gen. n. type *Tachina westermanni* p. 51, TOWNSEND Proc. Ent. Soc. Washington 14.
- Erigonopsis* gen. n., *arequipae* sp. n. p. 326 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.
- Eriphia caucasica* sp. n. Kaukasus, SCHNABL p. 296 Acta Ac. German 95.
- Erycia (Bartromyia) tenella* sp. n. Pretoria p. 60, BEZZI Boll. Lab. Portici 6.
- Euacemyia* gen. n. type *Acemyia tibialis* p. 163, TOWNSEND Proc. Ent. Soc. Washington 14.
- Euceromasia* gen. n., *spinosa* sp. n. p. 112 Massachusetts, TOWNSEND J. New York Ent. Soc. 20.
- Eudejeania* gen. n., *subalpina*, p. 334, *nigra* p. 335, spp. n., Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.
- Eucxorista* gen. n. type *Tachina futilis* p. 166, TOWNSEND Proc. Ent. Soc. Washington 14.
- Eugymnochaeta* gen. n., *equatorialis* sp. n., p. 314, Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.
- Eumythyria meridionalis* sp. n. p. 305 Peru, TOWNSEND T.c.
- Euparaphyto* gen. n. *Sarcophagidae*, *alpina* sp. n., p. 359, Peru, TOWNSEND T.c.
- Euphorocera peruviana*, *minor*, p. 303, Peru, spp. n., TOWNSEND T.c.
- Euselenomyia* gen. n. *Sarcophagidae*, *peruviensis* sp. n., p. 364, Peru, TOWNSEND T.c.
- Euthelaira* gen. n. p. 305, *inambarica* sp. n. p. 306 Peru, TOWNSEND T.c.
- Eutheresia* gen. n., *monohammi* sp. n. Georgia p. 117, TOWNSEND J. New York Ent. Soc. 20.

Euzenilla gen. n., *aurea* sp. n. p. 111
Massachusetts, TOWNSEND T.c.

Fannia; monograph of british,
carteri n. n. for *femorata* Mall. p. 176,
MALLOCH Ann. Scott. Nat. Hist. 1912
pp. 133 etc.—*F. vittata* p. 1, *grandis*
p. 3, MALLOCH Smithsonian Misc. Col-
lect. 59 No. 17 Pub. 2133.—*F. canicu-
laris* and *scalaris*, larvae, bionomics,
HEWITT Parasitol. 5 pp. 161-174.

Gesneriella gen. n. near *Blaesoxipha*,
unicolor Hongrie, *rubripes* Provence,
spp. n., VILLENEUVE Ann. Mus. Hung.
10 pp. 614-615.

Glossina; distribution, SIMPSON
pp. 187-191 Bull. ent. research 3.—*G.*
in Sudan, habits and distribution, KING
Bull. ent. res. 3 pp. 89-93.—*G.*; habits,
POLLARD pp. 219-221 map Bull. ent.
research 3; SCHWETZ, Rev. zool. afric.
2 pp. 49-62.—*G. fuscipes*, habits,
McCONNELL pp. 55-59 Bull. ent. re-
search 3.—*G. morsitans*, notes, LLOYD
pp. 95 & 96 & 233-239 Bull. ent.
research 3; early stages, KINGIRON
pp. 291-295 figs. Bull. ent. research 2;
breeding-places, JACK pp. 357-361 Bull.
ent. research 2.—*G. palpalis*, climatic
experiments, MACFIE pp. 61-72 Bull.
ent. research 3.—*G. tachinoides*, MOISER
pp. 195-202 Bull. ent. research 3.—*G.*
austeni sp. n. Jubaland, NEWSTEAD
p. 129 Ann. Trop. Med. 6.—*G. austeni*
p. 355 f. 1, *fuscipleuris* p. 358 f. 2,
longipennis p. 359 f. 3, ♂ characters,
NEWSTEAD Bull. ent. research 3.—*G.*
ziemanni sp. n. Kamerun, GRÜNBERG
p. 246 SB. Ges. Naturfr. 1912.

Haematobia exigua buffalo fly, TRYON
p. 37 Bull 1a North Territ. Australia.

Hammomyia gallica sp. n. Rambouil-
let, SCHNABL & DZIEDZ. p. 236 Acta
Ac. German 95.

Hebecnema pictipennis sp. n. Peters-
burg, SCHNABL & DZIEDZ. p. 278 T.c.

Homalomyia coracina var. n. *dimi-
diata*, STROBL Mitt. Ver. Steierm. 46
p. 45 etc.

Hydrophoria scopulicauda sp. n.
Styria, STROBL T.c.

Hylemyia villosa St. Petersburg
p. 240, *latifrons* Krakau p. 242, *macrura*
Austria? p. 244, *indiscreta* Wladiwostok
p. 246, *genitalis* Warschau p. 248,
tibetana Tibet p. 251, *askoldica* Wladi-
wostok p. 253, spp. n., SCHNABL &

DZIEDZICKI Acta Ac. German 95.—*H.*
coarctata Biologie, KLEINE Berliner ent.
Zs. 56 pp. 132-138.

Hylephila tankowskii Wladiwostok
p. 234, *similis* Nowgorod p. 236, spp. n.,
SCHNABL & DZIEDZ. Acta Ac. German
95.

Hyperecteina; key p. 123, SMITH
Proc. Ent. Soc. Washington 14.

Hypodermodes gen. n. type *Musca*
mystacea p. 46, TOWNSEND Proc. Ent.
Soc. Washington 14.

Idiopsis pseudoprasina sp. n. Persien,
BECKER Ann. mus. zool. Ac. St. Peterb.
17 p. 627.—*I. buccata* sp. n. Pretoria
p. 73, BEZZI Boll. Lab. Portici 6.

Imitomyia nom. n. for *Himantostoma*
Loew p. 49, TOWNSEND Proc. Ent. Soc.
Washington 14.

Incamiya gen. n., *uzcensis* sp. n.
p. 317 Peru, TOWNSEND Proc. U. S.
Nation. Mus. 43.

Jaenimyia gen. n., *albicincta*, p. 350,
punctata p. 351, spp. n., Peru, TOWN-
SEND T.c.

Johnsonia elegans p. 14, WALTON
Proc. Ent. Soc. Washington 14.

Lasiopalpus subalpinus sp. n. p. 335
Peru, TOWNSEND Proc. U. S. Nation.
Mus. 43.

Limnophora setinerva Frankreich
p. 279, *kuntzei* Gastein, *varsaviensis*,
p. 282, *scutulata* p. 284, Waischau
spp. n., SCHNABL & DZIEDZICKI Acta
Ac. German 95.

Lispocephala salinarum „Torni“
[Deutschl. ?] p. 277, *erronea* Lithauen,
almoides Russl. p. 278, spp. n., SCHNABL
& DZIEDZ. T.c.

Lyperosiops gen. n. type *Stomoxys*
stimulans p. 47, TOWNSEND Proc. Ent.
Soc. Washington 14.

Macquartia chalconota, host, COLLINS
p. 66 Ent. Mag. 48.

Megaprosopus andinus sp. n. p. 365
Peru, TOWNSEND Proc. U. S. Nation.
Mus. 43.

Meigenia rubromaculata sp. n. Ad-
mont, STROBL Mitt. Ver. Steierm. 46
p. 45 etc.

Metopia meridiana sp. n. p. 361
Peru, TOWNSEND Proc. U. S. Nation.
Mus. 43.

Metopiops gen. n. p. 338, *mirabilis* sp. n. p. 339 Peru, TOWNSEND T.c.

Miltogramma hirtimanum sp. n. Congo, BEZZI p. 80 Rev. Zool. afric. 2.

Mintho flavicoxa sp. n. Pretoria p. 63, BEZZI Boll. Lab. Portici 6.

Musca pulla p. 92, *dichotoma* p. 93, spp. n., Africa, BEZZI T.c.

Mydaea cilipes Polen p. 286, *taurica* Krim p. 287, *moedlingensis* Österreich p. 290, *fulvigena* Krim p. 292, *calceataeformis* Warschau p. 293, spp. n., SCHNABL & DZIEDZICKI Acta Ac. German. 95.—*M. anomala*, parasite of South American birds, NIESLEN København Nath. Medd. 63 pp. 195–208 14 figs.; synonymy, etc., LUTZ & NEIVA Mem. Inst. Oswaldo Cruz 4 pp. 130–135.

Neadmontia gen. n. type *Admontia limata* p. 164, TOWNSEND Proc. Ent. Soc. Washington 14.

Neophorocera gen. n. type *Phorocera edwardsii* p. 163, TOWNSEND T.c.

Neothelaira gen. n., *dexina* sp. n. p. 109 Massachusetts, TOWNSEND J. New York Ent. Soc. 20.

Neotrafoia gen. n. p. 313, *incarum* sp. n. p. 314 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Neowinnertzia nom. n. for *Winnertzia* Schin. p. 52, TOWNSEND Proc. Ent. Soc. Washington 14.

Ocyrtosoma nom. n. for *Cyrtosoma* B. B. p. 48, TOWNSEND T.c.

Oestrogaster gen. n. p. 309, *fumosus* sp. n. p. 310 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Oestrochystricia gen. n. p. 332, *subalpina* sp. n. p. 333 Peru, TOWNSEND T.c.

Otomasicera gen. n., *patella* sp. n. p. 113 Massachusetts, TOWNSEND J. New York Ent. Soc. 20.

Oxexorista gen. n. type *Exorista eudryae* p. 165, TOWNSEND Proc. Ent. Soc. Washington 14.

Oxynops gen. n., *serratus* sp. n. p. 110 Florida, TOWNSEND J. New York Ent. Soc. 20.

Paraporis nom. n. for *Neaporis* Towns. p. 48, TOWNSEND Proc. Ent. Soc. Washington 14.

Pegomya planipalpis, HYSLOP U. S. Dept. Agric. Ent. Bull. 95 Pt. 6 pp. 105–108 ff. 41–44.

Pegomyza transversaloides p. 264, *ignotaeformis* p. 266, *brunneonigra*, Warschau, p. 271, spp. n., SCHNABL & DZIEDZICKI Acta Ac. German. 95.

Perua gen. n. p. 364, *cuzcana* sp. n. p. 365 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Pexopsis femoralis sp. n. Umbelusi p. 59, BEZZI Boll. Lab. Portici 6.

Phaenopsis gen. n. *Sarcophagidae* p. 362, *arabella* sp. n. p. 363 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Phaonia abasalis Mohylew (Russland) p. 305, *latifrons* Tibet p. 306, *pauli* Deutschl. p. 308, *latipalpis* Mohylew p. 310, *humeralis* Deutschl. p. 311, *opalina* Kaukasus p. 313, *exclusiva* Villach p. 314, *lithuanica* Mohylew p. 316, *glabriseta* Frankreich p. 318, *kobica* Kaukasus p. 320, *siebecki* Austria p. 321, *pyrenaica* Pyrenäen p. 323, spp. n., SCHNABL & DZIEDZICKI Acta Ac. German. 95.

Phasiopsis gen. n., *floridana* sp. n. p. 108 Florida, TOWNSEND J. New York Ent. Soc. 20.

Phasiopteryx montana sp. n. Colorado p. 114, *bilimeki* Mexico p. 116, TOWNSEND T.c.

Phasmophaga meridionalis, parasite of *Anisomorpha*, RUSSELL Proc. Ent. Soc. Washington 14 p. 117.

Philaematomyia = (*Pristirhynchomyia*), proboscis pl. xxv, *insignis* life-history pp. 515–520, *gurnei* sp. n. India p. 513, PATTON & CRAGG Ann. trop. Med. 5.—*P. insignis* trophi pp. 1–15, CRAGG Sci. Mem. Med. Ind. No. 54.

Phorocera einaris New England and Mexico p. 119, *incrassatus* Idaho p. 121, spp. n., SMITH Proc. Ent. Soc. Washington 14.

Plagiops gen. n. p. 303, *meridionalis* sp. n. p. 304 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.—*P. littoralis* sp. n. p. 107 Florida, TOWNSEND J. New York Ent. Soc. 20.

Plaxemyia beckeri sp. n. Syria, SCHNABL p. 325 Acta Ac. German. 95.

Pogonomyia ambiguaeformis Mohylew p. 297, *tibetana* Tibet p. 299, spp. n., SCHNABL Acta Ac. German. 95.

Protodexia gen. n., *synthetica* sp. n. p. 117 Massachusetts, TOWNSEND J. New York Ent. Soc. 20.

Protogonia gen. n. p. 347, *ocellaris* sp. n. p. 348 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Rhinia striata sp. n. Persien, BECKER Ann. mus. zool. Ac. St. Peterb. 17 p. 626.

Salmacia peruviana, *pacifica*, p. 346, *chaetosa*, *alpina*, p. 347, spp. n., Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Sarcomacronychia trivittata sp. n. p. 363 Peru, TOWNSEND T.c.

Sarcophaga rosellei p. 714 Deutschl., *czernyi* p. 731 Österr., spp. n., BÖTTCHER Deutsche ent. Zeitschr. 1912.—*S. mehadiensis* sp. n. Ungarn, BÖTTCHER p. 114 Ent. Mitt. 1.—*S. kerteszi* sp. n. Greece, VILLENEUVE Ann. Mus. Hungar. 10 p. 20.—*S. boettcheri* sp. n. Ile Poros Chypre, *setinervis mutila* n. var., VILLENEUVE p. 610 figs. 1-2 T.c.—*S. krameri* p. 165, *longicornis* p. 166, *tristylata*, *cauda-galli* p. 167, *fuscicauda*, *josephi*, p. 168, *calicifera* p. 169, spp. n., Formosa, BÖTTCHER Ent. Mitt. 1.—*S. auribarbata*, *aurigena*, p. 357, *argentea*, *peruana*, p. 358, spp. n., Peru, TOWNSEND Proc. U. S. Nation. Mus. 23.—*S. villeneuvei* n. n. für *rostrata* Du Roselle, BÖTTCHER p. 347 Deutsche ent. Zeitschr. 1912.—*S.* sp., parasite of *Cistudo carolina*, respiratory apparatus of larva, KEPNER Biol. Bull. 22 pp. 163-173 pls. i-ii f. 1.

Siphosturmia pollinosa sp. n. p. 321 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Spathidexia gen. n., *clemonsi* sp. n. p. 110 Massachusetts, TOWNSEND J. New York Ent. Soc. 20.

Spathimyia gen. n. p. 318, *ferox* sp. n. p. 319 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Spilogaster jugorum sp. n. Natterrigel, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Steinomyia gen. n. p. 656, *steini* sp. n. Scotland p. 657, MALLOCH Proc. U. S. Nation. Mus. 43.

Stomoxys calcitrans, anatomy, BRAIN Ann. Ent. Soc. Amer. 5 pp. 421-430 pls. xxxiii xxxiv; *S. calcitrans* and infant paralysis, BRUES & SHEPPARD J. Econ. Ent. 5 pp. 305-324.

Stygeromyia woosnami sp. n. E. Africa, AUSTEN p. 97 Bull. ent. research 3.

Synthesicmyia braziliana p. 14, WALTON Proc. Ent. Soc. Washington 14.

Tachina macrocera, VILLENEUVE Zs. wiss. Insektenbiol. 8 p. 296.

Tachinophyto variabilis and *floridensis*, TOTHILL p. 5 Canad. Ent. 44.

Triachora equinoctialis sp. n. p. 348 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Trichopticus appendiculatus sp. n. Steiermark, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Tropidopsis connectans sp. n. p. 312 Peru, TOWNSEND Proc. U. S. Nation. Mus. 43.

Vibrissomyia gen. n. p. 327, *lineata*, *bicolor*, p. 328, spp. n., Peru, TOWNSEND T.c.

Villanovia gen. n. ex aff. *Phyto*, für *Phyto aperta* Str., STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Winthemia fumiferanae sp. n. Canada, TOTHILL p. 2 Canad. Ent. 44.

MUSCIDAE ACALYPTRATAE.

Revision of Chloropidae, part I, palearctic species, BECKER Arch. zool. 1 1910 pp. 33-174 & 197-200 pls. ii & iii. [This has been lost sight of till now.]

Chloropidae; Monographie, iv-v Teil: narktische und neotropische Arten; Nachtrag i-iii Teil: paläarktische, aethiopische und indoaustralische Arten, BECKER Ann. Mus. Hung. 10 pp. 21-256 Taf. i.

For various synonymy, refer to VILLENEUVE Wien. ent. Zeit. 31 pp. 96 & 97.

Trypetid, Ortalid, Sepsid and Drosophilid larvae pp. 30-36 pl. v vii & viii, BANKS U. S. Dept. Agric. Ent. Techn. 22.

Acanthonotiphila gen. n. *Notiphilinae*, *coriacea* sp. n. Seychelles, p. 316, LAMB Tr. Linn. Soc. London 15.

Actoceles gen. n. nahe *Paractora* p. 43, *abscondita* p. 44 pl. iii ff. 33-34 Falkland-Inseln, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3.

Actora rufina minor n. var. Feuerland, ENDERLEIN p. 97 T.c.

Adrama austeni sp. n. Ceylon, HENDEL Wien ent. Zeit. 31 pp. 1-20.

Agromyza pubicornis p. 344, *funebri*, *candidipennis*, p. 345, *similis* p. 346, Seychelles, spp. n., LAMB Tr. Linn. Soc. London 15.—*A. davisii* sp. n. Indiana p. 463, WALTON Ent. News 23.

Allotrichoma argentiprætexta sp. n. Seychelles p. 324, LAMB Tr. Linn. Soc. London 15.—*A. litoralis* sp. n. p. 160 f. 92 California, COLE Rep. Laguna Mar. Lab. 1.

Anthracophaga infumata sp. n. Hungary, BECKER p. 77 Arch. Zool. 1.—*A. dorsalis* Brasilia, *insignis* Peru, *declinata* Michigan, *interrupta* Kansas, spp. n., BECKER Ann. Mus. Hung. 10 pp. 43-45.

Assuania tuberifera sp. n. Formosa, BECKER p. 254 T.c.

Balioptera opaca sp. n. Deutschl., DAHL p. 456 Beitr. Naturdenkmalpfl. 3.

Camilla glabra var. n. *atrimana*, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Campylocera marmorata sp. n. Madagascar p. 62, ENDERLEIN Stettin. ent. Zeit. 73.

Canace mahensis sp. n. Seychelles p. 328, LAMB Tr. Linn. Soc. London 15.

Capnoptera breviantennata sp. n. Syria p. 54, BECKER Arch. Zool. 1.

Carnus hemapterus, MEIJERE Königsberg Schr. physik. Ges. 53 pp. 1-18.

Centorisoma gen. n. p. 106, *elegantulum* sp. n. Hungary p. 107, BECKER Arch. Zool. 1.

Ceratitis capitata, QUAINANCE Circ. 160 U. S. Dept. Agric. Ent. 25 pp.; flight, SEVERIN & HARTUNG Ann. Ent. Soc. Amer. 5 pp. 400-407 pls. xxix xxx.

Cetema monticula sp. n. Pyrenees, BECKER p. 58 Arch. zool. 1.—*C. hypocera* sp. n. Wisconsin, BECKER Ann. Mus. Hung. 10 p. 27.

Chloropisca angustigenis, *cicatricosa*, *secunda*, Abyssinia, pp. 241-243, *monticola* Colorado, *punctum* Texas, pp. 29-35, *gemina* Bolivia, *glabrina* Peru, pp. 138-139, spp. n., BECKER Ann. Mus. Hung. 10.—*C. elongata* sp. n. Italy, BECKER p. 70 Arch. zool. 1.

Chlorops laevicollis Irkutsk p. 89, *adjuncta* Hungary p. 90, *lunifer* Russia, *berlinensis* Germany, p. 91, *varsoviensis* Poland p. 92, *syriaca* Beirut p. 94, *horrida* Mehadia p. 95, *alpicola*, *finitima*, Centr. Eur., p. 96, *magnicornis* Siberia, *triangularis* Russia, p. 97, *rectifrons*, *angustifrons*, p. 99, *eutrophaeformis* p. 103, Hungary, spp. n., BECKER Arch. zool. 1.—*C. brunnipennis* N. Jersey, *constricta* Michigan, *egregia* Corvallis, *fossae* Michigan, *genarum* Brookings, *horrida* Texas, *integra* Massachusetts, *laevis* Washington, *languida* Pennsylvania, *oblita* Galatin, *quadrinaculata* S. California, *rectinervis* Washington, *ruginosa* Michigan, *sabulona* California, *seminigra* Montreal, *sordidella* Colorado, *stigmata* Washington, *tarsalis* Michigan, pp. 46-68, *adpropinqua* Abyssinia p. 244, *bisignata* Bosnien, *pallidior* Klein-Asien, *socia* Bosnien, pp. 235-236, *boliviensis* Bolivia, *coeruleifrons* Brasilien, *columbiana* Columbia, *grandicornis* Bolivia, *pubicollis* Peru, *rufipectus* Paraguay, pp. 145-150, spp. n., BECKER Ann. Mus. Hung. 10.—*C. megacera* für *grandicornis*, *pilosula* für *horrida*, *stigmatalis* für *quadrinaculata*, nn. n., BECKER p. 645 T.c.—*C. strigula*, Pflanzengallen am *Agropyrum repens*, BAUDYŠ Čas. České Spol. Entomolog. Prag 9 p. 120.

Chrysomyza azurea sp. n. Seychellen, HENDEL Wien ent. Zeit. 31 pp. 1-20.

Cladiscophleps gen. n. *Richardiinae*, *ramulosa* sp. n. Brasilia, ENDERLEIN pp. 107-108 SB. Ges. Naturfr. 1912.

Conradtina acroleuca, HENDEL Wien. ent. Zeit. 31 pp. 1-20.

Cymatozus gen. n. *Pterocallinae* p. 60, *polymorphomyiodes* sp. n. Brazil p. 61, ENDERLEIN Stettin. Ent. Zeit. 73.

Dactylothyrea circularis, *horvathi*, Peru, *incolorata* Süd-Brasilien, *schmusei* Peru, spp. n., BECKER Ann. Mus. Hung. 10 pp. 174-177.

Dacus cilifer p. 15, *dorsalis* p. 18, *scutellatus* p. 20, *parvulus* p. 21, Formosa, *chrysotoxus* p. 24 Key-Ins., spp. n., *caudatus* v. n. *nubibus* p. 16

Formosa, HENDEL Suppl. ent. Berlin 1.

Dichaetophora intermedia sp. n. Darjeeling, Indien, HENDEL Wien ent. Zeit. 31 pp. 1-20.

Dicraeus opacus Kultuk, *nigropilosus* Hungary, spp. n., p. 112, BECKER Arch. zool. 1.

Diptotoxa rectinervis Abyssinia p. 244, *inclinata* Texas, *major* Wauseon, pp. 35-43, spp. n., BECKER Ann. Mus. Hung. 10.

Discomyza similis sp. n. Seychelles p. 320, LAMB Tr. Linn. Soc. London 15.

Drosophila rubrostriata Entwicklung von in Formol, SCHULZE Zool. Anz. 39 pp. 199-202.—*D. repleta*, variation and distribution, KNAB Psyche 19 pp. 106-108.

Ectecephala similis N. Amerika p. 71, *brasiliensis* Süd-Brasilien, *laevifrons* Paraguay, *tincta* Brasilia, pp. 150-154, spp. n., BECKER Ann. Mus. Hung. 10.

Elachiptera graeca Patras p. 124, *hungarica* Kalocsa p. 125, spp. n., BECKER Arch. zool. 1.—*E. aliena* Massachusetts, *nigroscutellata* N. Amerika, pp. 77-81, *rubida* Chile pp. 178-180, *triangularis* Abyssinia p. 245† spp. n., BECKER Ann. Mus. Hung. 10.—*E. punctulata* n. nom. für *nigroscutellata*, BECKER p. 645 T.c.

Elaphaspis gen. n. for *Rhinotora leucopsis* Big., BEZZI p. 82 Rev. Zool. afric. 2.

Ellioptera diplotaxoides sp. n. Idaho, BECKER Ann. Mus. Hung. 10 pp. 26-27 Taf. i fig. 1.

Enchastes gen. n. near *Mosillus* p. 319, *scotti* sp. n. Seychelles p. 320, LAMB Tr. Linn. Soc. London 15.

Enderleiniella gen. n. verwandt mit *Oscinella*, *longiventris* End., BECKER Ann. Mus. Hung. 10 p. 192.

Ephydra gracilis p. 78, *hians* p. 85, *subopaca* p. 93, *millbrae* p. 96, biology, figs., ALDRICH J. New York Ent. Soc. 20.—*E. auripes* sp. n. Utah p. 99, *viridis* p. 100, ALDRICH J. New York Ent. Soc. 20.

Epichlorops gen. n. type *C. puncticollis* Zett., BECKER p. 77 Arch. zool. 1.

Epochra canadensis, habits, life-history, PAINE Psyche 19 pp. 139-144 pls. x & xi.

Eribolus gen. n., *sudeticus*, p. 127, *hungaricus*, *slesvicensis*, p. 128, spp. n., Europe, BECKER Arch. zool. 1.

Euprosopia calyptrata sp. n. Sumatra, ENDERLEIN p. 359 Zool. Jahrb. Syst. 33.

Euribia multiguttata sp. n. Persien, STEIN Ann. mus. zool. Ac. St. Peterb. 17 p. 645.

Eurina nigrifrontata sp. n. Grece, BECKER Arch. zool. 1 p. 48.

Euxesta compta sp. n. p. 158 f. 91 California, COLE Rep. Laguna Mar. Lab. 1.

Gampsocera scutellata sp. n. Seychelles p. 331, LAMB Tr. Linn. Soc. London 15.—*G. trivialis* sp. n. Formosa, BECKER Ann. Mus. Hung. 10 p. 254.

Gaurax interruptus Brasilia, *pennatus* Bolivia, spp. n., BECKER Ann. Mus. Hung. 10 pp. 195-200.—*G. fascipes* sp. n. Hungary, BECKER p. 116 Arch. zool. 1.—*G. seychellensis* sp. n. Seychelles p. 336, LAMB Tr. Linn. Soc. London 15.

Gnathoplasma gen. n., *infestans* sp. n. Columbia, ENDERLEIN p. 99 SB. Ges. Naturfr. 1912.

Hecamede lacteipennis sp. n. Seychelles p. 318, LAMB Tr. Linn. Soc. London 15.

Heloparia gen. n. nahe *Heteromyza* p. 46, *ekeloeffi* sp. n. p. 47 pl. iii f. 35 Falklands-Inseln; ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3.

Hemixantha fasciventris sp. n. Columbia, ENDERLEIN p. 112 SB. Ges. Naturfr. 1912.

Heteroneura caledonica p. 106, *gentilis*, *verticalis*, p. 107, spp. n., Britain, COLLIN Ent. Mag. 48.

Hippelates aequatorialis Ecuador, *annotatus*, *exlineatus*, Peru, *frontalis* Bolivia, *grandiusculus* Peru, *incompletus* Chile, *mellinus*, *metallicus*, Peru, *nigricollis* Paraguay, *peruanus* Argentina, *punctatus* Ecuador, *selectus* Peru, pp. 160-174, *H. impressus* Texas, *lituratus*, *longulus*, Kanada, *partitus* Alabama pp. 85-93, *opacus* Abyssinia, p. 249 spp. n., BECKER Ann. Mus. Hung. 10.—*H. stigmatica*, *longiseta*, p. 334, *nigrescens* p. 335, Seychelles, *femorata*

p. 336 Astove Island, spp. n., LAMB Tr. Linn. Soc. London 15.

Homalura sarudnyi sp. n. Persia, BECKER p. 62 Arch. zool. 1.—*H. chamaeleon* Brasilia, *distincta* Argentina, *incompleta* Paraguay, spp. n., BECKER Ann. Mus. Hung. 10 pp. 139–142 Taf. i figs. 13–14.

Homoneura varifrons p. 314, *atra*, *pulchrifrons*, p. 315, Seychelles, spp. n., LAMB Tr. Linn. Soc. London 15.

Hydrellia varipes sp. n. Seychelles p. 325, LAMB T.C.

Plythea fractivirgata p. 321, *invenata* p. 322, spp. n., Seychelles, LAMB T.C.

Lagaroceras granulorum sp. n. Hungary p. 108, BECKER Arch. zool. 1.

Lasiopleura gen. n. for *Oscinis longepilosa* Str., BECKER p. 130 Arch. zool. 1.

Lasiosina gen. n. p. 73, *littoralis* sp. n. Hungary p. 74, BECKER Arch. zool. 1.—*L. immaculata* sp. n. Ungarn, BECKER Ann. Mus. Hung. 10 p. 237.

Lauxania pacifica sp. n. p. 158 f. 90 California, COLE Rep. Laguna Mar. Lab. 1.

Leptotrigonum gen. n. verwandt mit *Ectcephala*, *cuneatum* sp. n. Argentina, BECKER Ann. Mus. Hung. 10 pp. 155–157.

Leria penicillipes sp. n. Feuerland, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 95 f. 19.

Leucopis atratula, FULMEK Zs. wiss. Insektenbiol. 8 p. 211.

Limtsina munda sp. n. Seychelles, COLLIN Tr. Linn. Soc. London 15.—*L. picturatus* sp. n. Philippine Is. p. 653 pl. xlvi f. 1, MALLOCH Proc. U. S. Nation. Mus. 43.—*L. bromeliarum* sp. n. Mexico p. 414 fig., KNAB & MALLOCH Ent. News 23.—*L. fulva* p. 4, *fuscinervis* p. 6, *m-nigrum* p. 7, spp. n., Panama, *discalis* for *scutellaris*, *sublugubrina* for *lugubris* Williston p. 8, nn. n., MALLOCH Smithsonian Misc. Collect. 59 No. 17 Pub. 2133.—*L. mirabilis* Virginia, MALLOCH & KNAB Psyche 19 p. 199 f. 1.

Lipara oscinella sp. n. Berlin, BECKER p. 145 Arch. zool. 1.

Lonchæa plumata p. 303, *longicornis* p. 304 *vibrissifer* p. 305 Seychelles, spp. n., LAMB Tr. Linn. Soc. London 15.

Lule cyanea sp. n. Madagaskar, ENDERLEIN p. 377 Zool. Jahrb. Syst. 33.

Megalothoraca hendeli, *flava* spp. n., Ecuador, ENDERLEIN p. 104 SB. Ges. Naturfr. 1912.

Melanochaeta festina Bolivia, *melaëna* Peru *sublineata* Paraguay, pp. 180–182, *intermedia* Pennsylvania, *melampus* Collins, pp. 81–85, spp. n., BECKER Ann. Mus. Hung. 10.

Melanum gen. n. for *Capnoptera fumipenne*, BECKER p. 50 Arch. zool. 1.

Meliera; Synopsis der palæarktischen Arten pp. 638–640, *nigritarsis* var. p. 636, *limpidipennis* var. p. 637, STEIN Ann. mus. zool. Ac. St. Peterb. 17.

Meracanthomyia antennata sp. n. West-Afrika, HENDEL Wien ent. Zeit. 31 pp. 1–20.

Meromyza inornata sp. n. Irkutsk, BECKER Arch. zool. 1 p. 44.—*M. marginata*, *punctifer*, Idaho, pp. 24–25, *albiseta* Chile p. 136, spp. n., BECKER Ann. Mus. Hung. 10.

Meroscinis æneifrons p. 332, *rugosa* p. 333, Seychelles, spp. n., LAMB Tr. Linn. Soc. London 15.

Mesanopin gen. n., *tephritinum* sp. n. Kamerun, ENDERLEIN p. 369 Zool. Jahrb. Syst. 33.

Metopostigma pleskei Baluchistan, *sabulona* Port Said, spp. n., BECKER p. 64 Arch. zool. 1.

Milichiella nigrella sp. n. California p. 162 f. 94, COLE Rep. Laguna Mar. Lab. 1.

Mycterella gen. n. verwandt mit *Lauxania*, *jovis* sp. n. Creta, KERTÉSZ Ann. Mus. Hung. 10 pp. 541–543.

Nearomyia gen. n., *flavovaria* sp. n. p. 646 pl. xiv Persien, STEIN Ann. mus. zool. Ac. St. Peterb. 17.

Notonaulax trisulcata sp. n. Seychelles p. 338, LAMB Tr. Linn. Soc. London 15.—*N. brunnicollis* sp. n. Washington, BECKER Ann. Mus. Hung. 10 p. 102.

Oxyapium gen. n. Verwandt mit *Oscinella*, *longinerve* sp. n. Abyssinia, BECKER Ann. Mus. Hung. 10 p. 250 fig. 2.

Odontomera canonigra Columbia p. 110, *flavipennis* Bras. p. 111, spp. n., ENDERLEIN SB. Ges. Naturfr. 1912.

Odontomerella gen. n. *Richardiinae*, *oxyptera* sp. n. Amazonas, HENDEL Wien ent. Zeit. 31 pp. 1–20.

Oedesiella gen. n., *discolor* sp. n. Sarepta, BECKER p. 146 Arch. zool. 1.

Ops glaberrima sp. n. Seychelles p. 329, LAMB Tr. Linn. Soc. London 15.

Ortalis; Synopsis der palaearktischen Arten pp. 634–636, *confusa* sp. n. Persien, STEIN Ann. mus. zool. Ac. St. Peterb. 17.

Oscinella n. n. for *Oscinis* p. 150, *pectoralis* Hungary p. 160, *nitidigenis* Canaries p. 162, *kerteszi* Hungary, *elegans* Germany p. 163, *fycoyperda* Corsica p. 164, *kuntzei* Dresden p. 165, spp. n., BECKER Arch. zool. 1.—*O. rugulosa* sp. n. Deutschl., DAHL p. 461 Beitr. Naturdenkmalpfl. 3.—*O. blanda* Bolivia, *delicata* Paraguay, *dimidiata* Bolivia, *foliata* Süd-Brasilien, *improvisa* Bolivia, *inconstans* Peru, *limitata* Hayti, *longipennis* Bolivia, *luteipes* Peru, *nocens* Bolivia, *numerata* Brasilia, *oculata* Paraguay, *rubicunda* Bolivia, *satanas* Peru, *soluta* Paraguay, *tinctipennis* Paraguay, *turbida* Peru, pp. 201–220, *apparens*, *bifurca* Kansas, *difficilis* Washington, *fuscipalpis* Pennsylvania, *incerta* Washington, *infesta* Massachusetts, *magnipalpis* Idaho, *melancholica* Washington, *particeps*, *pilosula* Opelousas, *planicollis* Texas, pp. 103–120, *acuticornis*, *harrari*, *nigripalpis*, *peregrina*, *pernigra*, *pseudofrit*, Abyssinia, pp. 246–249, *pura* Indien p. 255, spp. n., BECKER Ann. Mus. Hung. 10.—*O. pleuralis* n. n. für *nana* Willist., *sexstriata* n. n. für *pectoralis* Beck., BECKER p. 645 T.c.

Oscinis dissimilicornis p. 339, *acuticornis*, *oculata*, p. 340, *longipennis* p. 342, *halterata*, *varicornis*, p. 343, Seychelles, spp. n., LAMB Tr. Linn. Soc. London 15.—*O. frit* und *pusilla*, Unterschiede, Zeit des Auftretens, Parasiten (Russ.), POSPELOV Věstn. sacharn. promyšl. 13 pp. 166–168.

Oscinomima gen. n. *Ephydriidae*, *signatella* sp. n. Formosa, ENDERLEIN pp. 163–164 Stettin. ent. Zeit. 73.

Ozaenina gen. n. *Richardiinae*, *nasuta* sp. n. Brasilia, ENDERLEIN p. 109 SB. Ges. Naturfr. 1912.

Pachycerina seychellensis p. 307, *obscuripennis* p. 308 Seychelles, spp. n., LAMB Tr. Linn. Soc. London 15.

Paragitona gen. n. near *Gitona*, *obscura* sp. n. Deutschland, KRÖBER p. 235 Zeitschr. wiss. Insektbiol. 8.—*P. obscura* = *Cacoxenus indagator*, KRÖBER Zs. wiss. Insektenbiol. 8 p. 329.

Parardelio gen. n. *Platystominae pilosa* sp. n. Seychellen, HENDEL Wien ent. Zeit. 31 pp. 1–20.

Parectecephala gen. n. p. 105 for *Anth. andalusiaca* Strobl, BECKER Arch. zool. 1.—*P. maculiceps* Texas, pp. 68–70, *schineri*, *maculifrons* Brasilia, pp. 154–155, spp. n., BECKER Ann. Mus. Hung. 10.

Parydra tuberculifera sp. n. Seychelles p. 326, LAMB Tr. Linn. Soc. London 15.

Pelmatops gen. n. für *ichneumoniscus* Westw., ENDERLEIN p. 355 Zool. Jahrb. Syst. 33.

Peltacanthina gen. n. p. 363, *excellens* p. 364 Kamerun, *cribrosa* p. 365 Transvaal, spp. n., ENDERLEIN T.c.

Pentanoaulax pubiseta Paraguay, *tecta* Bolivia, spp. n., BECKER Ann. Mus. Hung. 10 pp. 188–191.

Philhygria vittipennis var. n. *alpicola*, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*P. striata* sp. n. Seychelles p. 326, LAMB Tr. Linn. Soc. London 15.

Phlebacrocyma gen. n., *undulosum* p. 105, *ferrugineum* p. 106, spp. n., Ecuador, ENDERLEIN SB. Ges. Naturfr. 1912.

Phortica variegata var. n. *obscuripes*, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Phytomyza thalictri sp. n. Switzerland ROUGEMONT & ESCHER-KÜNDIG Mitt. Schweiz. ent. Ges. 12 pp. 82–87.—*P. obscurella fulvovittata*, *xanthaspis nigroscutellata*, *affinis obscurifrons*, varr. n., STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*P. albiceps* auf *Sonchus laevis* All., *flavoscutellata* auf *Vicia*, VIMMER Prag Čas. Českó Spol. Entomolog. Jg. 9 pp. 139–143.

Piophilila affinis var. n. *nigrifrons*, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*P. casei*, Lebensweise, RÜHL Soc. entomol. 27 p. 15.

Plagiostenoptera cyanosoma Seychelles, *ruficeps* Madagaskar, spp. n., HENDEL Wien. ent. Zeit. 31 pp. 1-20.

Platystoma ruficeps sp. n. Abyssinia, ENDERLEIN p. 370 Zool. Jahrb. Syst. 33.

Poecilomyia longicornis v. n. *columbiana*, ENDERLEIN p. 106 SB. Ges. Naturfr. 1912.

Polistomima gen. n. p. 349, *walkeri* p. 350, *stigma* p. 352, Sumatra, *gigantea* p. 353 Sikkim, spp. n., ENDERLEIN Zool. Jahrb. Syst. 33.

Prosopantrum gen. n. p. 135, *austrinum* sp. n. p. 137 f. 33 Süd-Georgien, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3.

Prothiacanthina gen. n., *compta* sp. n. O.-Afrika, ENDERLEIN p. 367 Zool. Jahrb. Syst. 33.

Pselaphila cornifera sp. n. Abyssinia, BECKER Ann. Mus. Hung. 10 p. 250 fig. 1.

Psilacrum gen. n. Verwandt mit *Aprometopsis*, *giganteum* Enderl., BECKER p. 240 T.c.

Psilopa flavipalpis sp. n. Persien, STEIN Ann. mus. zool. Ac. St. Peterb. 17 p. 650.—*P. nitidissima* p. 322, *longicornis* p. 323, Seychelles, spp. n., LAMB Tr. Linn. Soc. London 15.—*P. petrolei*, anatomy in relation to environment, CRAWFORD Pomona Coll. J. Ent. 4 pp. 687-697 f. 222.

Ptilona? poeciloptera sp. n. China, KERTÉSZ Ann. Mus. Hung. 10 p. 543.

Rhagoletis cingulata and *fausta*, HERRICK Bull. 325 Cornell exp. Stat. pp. 191-204, pls.—*R. pomonella*, natural history, HERRICK Bull. 324 Cornell Agric. exp. Stat. pp. 129-187.

Richardia latibrachium Costa Rica p. 100, *tephritina* Brasilia p. 102, spp. n., ENDERLEIN SB. Ges. Naturfr. 1912.—*R. unifasciata*, HENDEL Wien ent. Zeit. 31 pp. 1-20.

Richardia calcarata, *pectinata*, spp. n., Brasilien, HENDEL Wien ent. Zeit. 31 pp. 1-20.

Richardiodes gen. n. *Richardiinae*, *rectinervis* Amazonas sp. n., HENDEL T.c.

Sapromyza striata p. 308, *funebri-cornis* p. 310, *mahensis*, *nudiuscula*, p. 311, *crassicaput*, *perpunctata*, p. 312,

Seychelles, spp. n., LAMB Tr. Linn. Soc. London 15.

Scatella septemfenestrata sp. n. Seychelles, p. 328, LAMB, T.c.—*S. pauciguttata* nom. n. für *stenhammeri*, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.

Scelacanthina gen. n. für *Herina cyaneiventris* v. d. Wulp, ENDERLEIN p. 348 Zool. Jahrb. Syst. 33.

Scholastes vicarius sp. n. Seychellen HENDEL Wien ent. Zeit. 31 pp. 1-20.

Scoliophthalmus arabicus sp. n. Suez, BECKER p. 129 Arch. zool. 1.

Senopterina meijereana p. 356, *dolleschalli* p. 357, spp. n., Sumatra, ENDERLEIN Zool. Jahrb. Syst. 33.

Sepsis uncta sp. n. Persien, STEIN Ann. mus. zool. Ac. St. Peterb. 17 p. 648.

Simomesia gen. n., *tigrina* sp. n. Fernando Po, ENDERLEIN pp. 373-374 Zool. Jahrb. Syst. 33.

Siphilus laevis sp. n. Paraguay, BECKER Ann. Mus. Hung. 10 p. 142.

Siphonella levicola sp. n. Persien, STEIN Ann. mus. zool. Ac. St. Peterb. 17 p. 649.—*S. triangularis* Tunis p. 138, *parallela* Creta p. 139, *asiatica* Centr.-Asia p. 142, spp. n., BECKER Arch. Zool. 1.—*S. abdominalis* Onega, *acqua* Lawrence, *diabolus*, *excipiens*, Idaho, *extrema* California, *finalis* Alaska, *neglecta* California, *provocans* Massachusetts, *punctifrons* Utah, *pygmaea* Green River, *triangulata* Bellingham, pp. 94-102, *amicalis* Algier, *infans* Ungarn, *pokorny* Osterreich, pp. 237-239, *circumdata* Hayti, *aeniventris* Ecuador, *incolumis* Bolivia, *neotropica* Argentina, *opposita* Chile, pp. 183-187, *longipennis*, *ochracea* N. Guinea, pp. 252-254, spp. n., BECKER Ann. Mus. Hung. 10.

Siphunculina mediana sp. n. Abyssinia, BECKER p. 145 T.c.

Steleocerus neotropicus sp. n. Peru, BECKER p. 178 T.c.

Syringogaster gen. n., *rufa* p. 393 pl. xix ff. 5 & 6, *brunnea* p. 394, spp. n., Costa Rica, CRESSON Ent. News 23.

Systemellodiscus gen. n., *perforatus* sp. n. Fernando Po. ENDERLEIN p. 372 Zool. Jahrb. Syst. 33.

Telostylus vittatus sp. n. British Guiana p. 390 pl. xix ff. 1 & 2, CRESSON Ent. News 23.

Tephritis dioscurea var. n. *nigripes*, STROBL Mitt. Ver. Steierm. 46 p. 45 etc.—*T. finalis*, life history p. 101, HYSLOP Proc. Ent. Soc. Washington 14.

Terellia conjuncta sp. n. Persien, STEIN Ann. mus. zool. Ac. St. Peterb. 17 p. 642.

Traginops pilicornis sp. n. British Guiana p. 395 pl. xix ff. 3 & 4, CRESSON Ent. News 23.

Tricimba palpalis sp. n. Paraguay, BECKER Ann. Mus. Hung. 10 p. 191.

Trigonochorium gen. n. *Trypetidae*, *oculatum* sp. n. Persien, p. 647, pl. xiv f. 38, STEIN Ann. mus. zool. Ac. St. Peterb. 17.

Trigonometopus africanus Süd-Afrika, *fuscipennis* Samoa, *albocostatus* Paraguay, *santeri* Formosa, spp. n., HENDEL Wion. ent. Zeit. 81 pp. 1-20.

Trupanea lacerata sp. n. Persien, STEIN Ann. mus. zool. Ac. St. Peterb. 17 p. 644.

Ulidia ruficeps sp. n. Persien, STEIN Ann. mus. zool. Ac. St. Peterb. 17 p. 640.

Urophora spatiosa sp. n. Persien, STEIN p. 643 T.c.

PUPIPARA.

Ascodipteron speiserianum Amboina p. 352 fig., *australiense* North Queensland p. 366 fig., spp. n., MUIR Bull. Mus. Harvard Coll. 54.

Hippobosca fulva sp. n. Rhodesia, AUSTEN p. 417 Bull. ent. research 3.

APHANIPTERA (=Siphonaptera).

Aphanipterenfauna Westdeutschlands, besonderer der achtkammigen *Ischnopsyllus*-Arten, DAMPF Bonn Sitzber. nat. hist. Ver. 1912 E pp. 73-113. 5 Taf.

(N-9210 j)

Amphipsylla pp. 574-575, *rossica* nom. n. Beschreibung p. 575 f. 3, *daera* Transcaspien p. 577 f. 2, *shelkornikovi* Beschreibung p. 578 f. 4, *kuznetzovi* sp. n. Ural auf *Microtus* p. 579 ff. 1 & 5, WAGNER Rev. russ. ent. 12.

Archaeopsylla erinacei maura subsp. n., JORDAN & ROTHSCHILD p. 551 Nov. zool. 18.

Ceratophyllus, Lebensweise, SWELLEN-GREBEL Arch. Schiffshyg. 16 pp. 169-182. — *C. vagabundus* (= *insularis* Rothschild.), ROTHSCHILD p. 67 Ent. Mag. 48.—*C. barbarus* p. 361 figs. 1 & 2, *maurus* p. 362 figs. 3-5, spp. n., Algeria, *henleyi mauretanicus* p. 364 and *farreni meridionalis* p. 365, subsp. n., JORDAN & ROTHSCHILD Nov. zool. 19.

Ctenocephalus canis Larve, HARMS Arch. mikr. Anat. 80 Abt. 1 pp. 167-216 1 Taf.

Ctenophthalmus calceatus sp. n. S. Africa, WATERSTON p. 27 Ent. Mag. 48.—*C. agyrtes curous* subsp. n. p. 59, *obtusus* sp. n. Hungary p. 60, JORDAN & ROTHSCHILD Nov. zool. 19.—*C. russulae* sp. n. Algeria pl. x figs. 12 & 13 p. 365, JORDAN & ROTHSCHILD T.c.

Doratopsylla gen. n. for *Typhlopsylla dasynemus*, JORDAN & ROTHSCHILD p. 62 T.c.

Ischnopsyllus; Morphologic, Phylogenic, Synopsis, *dolosus* sp. n. auf *Plecotus auritus* Kaukasus, DAMPF Rev. russ. ent. 12 pp. 41-59 figs. 1-8.

Leptopsylla algira sp. n. Algeria, JORDAN & ROTHSCHILD p. 370 pl. xii figs. 17-19 Nov. zool. 19.

Palaeopsylla atlantica sp. n. Portugal, JORDAN & ROTHSCHILD p. 552, Nov. zool. 18.

Rhadinopsylla gen. n., *masculana* sp. n. Algeria, JORDAN & ROTHSCHILD Nov. zool. 19.

Rothschildella gen. n., *cryptoclenes* sp. n. Kolumbia, ENDERLEIN p. 72 Zool. Anz. 40.

Spalacopsylla; Weibchen, OUDMANS Ber. Ned. Ent. Ver. 3 p. 237.

Xenopsylla astia, DAMPF Centralbl. Bakt. Abt. 1 65 Originale pp. 352-359.

HEMIPTERA.

Family names and synonymic remarks, BERGROTH *Wien ent. Zeit.* 31 pp. 162-164.

Katalog der palaarktischen Heteroptera, Homoptera-Auchenorrhyncha und Psylloideae, OSHANIN 1912 pp. xvi + 187.

Notules hémiptérologiques. PENEAU *Nantes Bull. soc. sci. nat.* 22 pp. 91-99 av. fig.

Beiträge zur Kenntnis der Hemipterenfauna Steiermarks, SABRANSKY *Mitt. Ver. Steierm.* 48 pp. 308-318.

Complete synonymy of the Provancher coll. of Canadian Hemiptera, VAN DUZEE pp. 317-329 *Canad. Ent.* 44.

Heteroptera.

Mein neues Heteropterensystem, REUTER *Öfvers. Finska Vet. Soc.* 54 A No. 6 pp. 1-62 mit fig.

Additions to C. Stål's "Hemiptera Fabriciana," *Pentatomidae, Reduviidae*, BERGROTH *Köbenhavn Ent. Medd.* 2den Række IV 1912 pp. 359-363.

Heteroptera aus Norwegen, SCHUMACHER *Nyt Mag. Naturv.* 50 pp. 200-207.

Danish Heteroptera (Danish), JENSEN-HAARUP 1912 302 pp. 171 figg.

Heteropteren der Krim (Russ.), KIRIČENKO *Rev. russ. ent.* 12 pp. 361-365.

Hemiptera-Heteroptera der Umgegend von Kaluga (Russ.), KIRIČENKO (186) *Kaluga Izv. Obšč. izue. prir. městn. Kraja* 1 pp. 65-74.

Neue Heteropteren aus Turanien, KIRIČENKO (373) *Rev. russ. ent.* 12 pp. 377-389.

PENTATOMIDAE.

The *Pentatomidae* of Nebraska, ZIMMER *Univ. Stud. Nebr.* 11 pp. 219-251.

Contribution to an annotated list of Long Island, *Pentatomidae*, OLSEN *J. New York Ent. Soc.* 20 pp. 48-58.

Agonoscelis marshalli sp. n. Africa, SCHOUTEDEN p. 104 *Rev. Zool. Afric.* 2.

Amberiana major sp. n. Madagascar, SCHOUTEDEN p. 353 *Ann. Soc. ent. Belgique* 56.

Antestia; african species p. 183, *falsa*, *usambarica*, spp. n., p. 184, SCHOUTEDEN T.c.—*A. cederwaldi* sp. n. New South Wales p. 26, BERGROTH *Ent. News* 23.—*A. lineaticollis*, stages, SCHOUTEDEN p. 20 pl. i f. 4 *Rev. zool. afric.* 2.

Bathypoelia natalicola p. 604, *variolaria* p. 605, spp. n., Africa, DISTANT *Ann. Nat. Hist.* 10.—*B. bequaerti* sp. n. Africa, SCHOUTEDEN p. 106 *Rev. zool. afric.* 2.

Brachynema ruficorne = *Cellobius abdominalis*, KIRIČENKO *Rev. russ. ent.* 12 p. 204.

Carbula zoutpansbergensis sp. n. Africa, SCHOUTEDEN p. 103 *Rev. Zool. afric.* 2.

Caridophthalmus corniger sp. n. Nova-Guinea, HORVÁTH *Ann. Mus. Hung.* 10 p. 600.

Caura yalana sp. n. E. Africa, DISTANT p. 88 *Ann. Nat. Hist.* 10.

Ceratocoris dama sp. n. Nigeria, BERGROTH p. 191 *Ann. Nat. Hist.* 10.

Chaubattiana gen. n. near *Piezodorus* p. 603, *rubrovittata* sp. n. Bengal p. 604, DISTANT *Ann. Nat. Hist.* 10.

Cosmocoris cingulatus, Diagnose, BREDDIN p. 76 *Arch. Naturges.* 78 A.

Cyphostethus sinensis sp. n. China, SCHUMACHER p. 40 *Wien. ent. Zeit.* 31.

Damarius bicolor sp. n. Uganda, DISTANT p. 89 *Ann. Nat. Hist.* 10.

Deroploa (Paraderoploa) perkinsi sp. n. Queensland, SCHOUTEDEN p. 354 *Ann. Soc. ent. Belgique* 56.

Diaphyta rosea sp. n. West Australia p. 28, BERGROTH *Ent. News* 23.

Discocera ochroyanea v. n. *bergrothi*, *D. contempta* vv. n. *ochracea* and *semi-violacea*, SCHUMACHER p. 90 *SB. Ges. Naturfr.* 1912.

Edessa io, Diagnose, BREDDIN p. 89 *Arch. Naturges.* 78 A.

Eipeliella gen. n. *Graphosomini*, *braueri* Span.-Guinea, *heymonsi*, Kamerun, spp. n., SCHUMACHER pp. 99-100 *Mitt. Mus. Berlin* 6.

Elemana gen. n. p. 953 near *Ecdicius*, *propria* sp. n. New Guinea p. 594 pl. xlix f. 6, DISTANT Tr. ent. Soc. London 1911.

Euryaspis marshalli sp. n. Nyasaland, BERGROTH p. 193 Ann. Nat. Hist. 10.

Eysarcoris trimaculatus Dist., SCHOUTEDEN p. 356 Ann. Soc. ent. Belgique 56.

Glaucias montivagus sp. n. Borneo, DISTANT p. 252 Entomologist 45.

Gonopsis neavei sp. n. Uganda, DISTANT p. 89 Ann. Nat. Hist. 10.—*G. etiennei* sp. n. Congo, SCHOUTEDEN p. 72 Rev. Zool. afric. 2.

Hippotiscus scutellatus sp. n. Borneo, DISTANT p. 251 Entomologist 45.

Karaibocoris gen. n. für *Stiretrus quinquepunctatus* Germ., SCHUMACHER p. 93 S.B. Ges. Naturf. 1912.

Leptolobus karschi sp. n., SCHUMACHER Ent. Rdsch. 29 p. 22.

Mabusana gen. n. for *Caura durbanensis* Dist., DISTANT p. 602 Ann. Nat. Hist. 10.

Melambyrsus gen. n. near *Ochlerus*, *hoplita* sp. n. Peru, BREDDIN p. 90-91 Arch. Naturges. 78 A.

Menestheus doddi to *Neomenestheus*, SCHOUTEDEN p. 355 Ann. Soc. ent. Belgique 56.

Metonymia dallasi sp. n. Africa, SCHOUTEDEN p. 107 Rev. zool. Afric. 2.

Mimikana gen. n. p. 592 near *Alathetus wollastoni* sp. n. N. Guinea p. 593 pl. xlix f. 4, DISTANT Tr. ent. Soc. London 1911.

Mimulocoris; Synopsis specierum p. 381, *dungana* p. 379, *hohlbecki* p. 380, spp. n. Turkestan ross., KIRIÖENKO Rev. russ. ent. 12.

Mormidea profana sp. n. Brasilia, BREDDIN p. 352 Ent. Mitt. Berlin 1.

Mormidella anacra sp. n. Buchara, KIRIÖENKO Rev. russ. ent. 12 p. 378.

Myrochea inermis sp. n. Angola, DISTANT p. 87 Ann. Nat. Hist. 10.

Neojalla gen. n. für *Jalla sanguineosignata* Blanch., SCHUMACHER p. 97 S.B. Ges. Naturfr. Berlin 1912.

Neomenestheus affinis sp. n. Queensland p. 355, SCHOUTEDEN Ann. Soc. ent. Belgique 56.

(N-9210 j)

Nezara bactriana sp. n. Buchara, KIRIÖENKO Rev. russ. ent. 12 p. 382.—*N. rubripennis* = *Plautia crossota*, KIRIÖENKO p. 204 T.c.

Notius melancholicus sp. n. Tasmania p. 22, BERGROTH Ent. News 23.

Oncodochilus integer sp. n. Brasilia, BREDDIN p. 351 Ent. Mitt. Berlin 1.

Phacidiun gen. n. near *Thyanta*, *euchlorum* sp. n. Costa Rica, BREDDIN p. 92 Arch. Naturges. 78 A.

Phaeocoris alpicola sp. n. Teravshan, KIRIÖENKO Rev. russ. ent. 12 p. 378.

Phimodera galgulina f. n. *denigrata*, SCHUMACHER p. 150 Berlin. ent. Zs. 56.

Plataspis angolensis sp. n. Angola, DISTANT p. 87 Ann. Nat. Hist. 10.

Poecilocoris nigricollis sp. n. Tonkin, HORVÁTH Ann. Mus. Hung. 10 p. 599 fig. 1.

Prionocompastes incisiceps sp. n. Java, BREDDIN p. 77 Arch. Naturges. 78 A.

Pseudapines gen. n. type *Apines geminata* p. 27, BERGROTH Ent. News 23.

Sciocoris rotermundi sp. n. Deutschl., SCHUMACHER Berlin. ent. Zs. 56.

Scribonia pilosa var. n. *tibialis*, SCHOUTEDEN p. 106 Rev. Zool. afric. 2.

Stelgidophora gen. n. type *Euryannus pallida* p. 21, BERGROTH Ent. News 23.

Stibaropus hohlbecki sp. n. Buchara, KIRIÖENKO Rev. russ. ent. 12 p. 377.

Stiretrus loratus vv. n. *abbreviata* and *thoreyi*, *S. decastigmus* vv. n. *flavoguttata*, *mangoldi* and *bicolorata*, p. 94, *S. steinbachi* sp. n. Argentina, *S. rugosus* vv. *cyanea* and *nigra* Brasil p. 95, *S. anchorago* subspp. n. *inflata* and *obesa*, SCHUMACHER SB. Ges. Naturfr. 1912.

Tessaratomya planicarinata p. 70 Flores, *indica* p. 70 Ceylon, *lauti* p. 81 Borneo, spp. n., BREDDIN Arch. Naturges. 78 A.

Thorix natalensis = (*Neocrollius natalensis* Dist., DISTANT p. 605 Ann. Nat. Hist. 10.

COREIDAE.

Mark Brandenburg *Coreidae*, SCHUMACHER Berliner ent. Zs. 56 pp. 128-132.

Notes on African *Mictidae*; VARELA pp. 353-357 Bol. Soc. españ. 12.

Eggs of *Myrmus* and *Chorosoma*, BUTLER pp. 36-38 figs. 1 & 2 Ent. Mag. 48.

Acanthocoris callewaerti sp. n. Congo, SCHOUTEDEN p. 424 Rev. zool. afric. 1.

Agraphopus bergrothi sp. n. Africa, SCHOUTEDEN p. 59 Ann. Soc. ent. Belgique 56.—*A. breviceps* sp. n. Madagascar, BERGROTH p. 90 Ann. Soc. ent. Belgique 56.

Allopeza gen. n. type *Flavius granulipes* Fallow, BERGROTH p. 79 T.c.

Athamastus subterlineatus sp. n. Argentina p. 85, *subfoveolata* Berg to *Dersagrena* p. 86, BERGROTH T.c.

Aurivilliana bayeri sp. n. Congo, SCHOUTEDEN p. 422 Rev. zool. afric. 1.

Calamocoris inermis sp. n. Columbia, BREDDIN p. 87 Arch. Naturges. 78 A.

Ceraleptus sartus sp. n. Turkestan ross., KIRIÖENKO Rev. russ. ent. 12 p. 382.

Cletus orientalis p. 52, *sjostedti* p. 53, spp. n., Africa, SCHOUTEDEN Ann. Soc. ent. Belgique 56.

Coreus bergevini sp. n. Algier, POPPIUS Wien. ent. Zeit. 31 pp. 165-169.

Corizus hirtus sp. n. U.S., TORRE BUENO Ent. News 23 p. 217.

Corynocoris typhaeus, on carrion, ENGELHARDT J. New York Ent. Soc. 20 p. 294.

Cossutia flaveola, variation, VARELA p. 298 Bol. Soc. españ. 12.

Cyllarus sjostedti sp. n. Africa, SCHOUTEDEN p. 54 Ann. Soc. ent. Belgique 56.

Dalader anthracinus sp. n. Borneo, BERGROTH p. 82 Ann. Soc. ent. Belgique 56.

Dasynus occipitalis sp. n. Dahomey, BERGROTH p. 86 T.c.

Dulichius concolor sp. n. Pemba, BERGROTH p. 89 T.c.

Elasmogaster niamensis sp. n. Congo, SCHOUTEDEN p. 423 Rev. zool. afric. 1.

Euthetus wellmani sp. n. Congo, SCHOUTEDEN p. 424 T.c.

Fumua gen. n. *Mictaria centralis* sp. n. Congo, SCHOUTEDEN p. 420 Rev. zool. afric. 1.

Homoeocerus ornatocollis sp. n. Sikim, BREDDIN p. 81 Arch. Naturges. 78 A.

Kennetus alces ♀ = (*Darvela expansa* Schm.), BERGROTH p. 92 Ann. Soc. ent. Belgique 56.

Margus vittidorsis sp. n. Argentina, BERGROTH p. 87 T.c.

Mercennaria div. n. for *Mercennus*, *M. moultoni* sp. n. Borneo, BERGROTH p. 77 T.c.

Mevaniella kilimana sp. n. Africa, SCHOUTEDEN p. 55 Ann. Soc. ent. Belgique 56.

Mevaniomorpha annulipes = (*reuteri* Sch.), SCHOUTEDEN p. 55 T.c.

Mictis militaris sp. n. New Guinea pl. xlix f. 5 p. 505, DISTANT Tr. ent. Soc. London 1911.—*M. metallica* var. = (*loricata* Dist.), BERGROTH p. 81 Ann. Soc. ent. Belgique 56.

Murtula gen. n. *Mictaria* p. 418, *beniensis* sp. n. Congo p. 419, SCHOUTEDEN Rev. zool. afric. 1.

Odontorhopala; characters p. 83, *geminata* sp. n. Madagascar p. 82, BERGROTH Ann. Soc. ent. Belgique 56.

Parabrachytes obscurus to *Odontorhopala*, BERGROTH p. 84 T.c.

Parapetillia gen. n. for *Petillia mormo* St., SCHOUTEDEN p. 109 Rev. zool. afric. 2.

Plectropoda bicolor = (*rothschildi* Court.), BERGROTH p. 92 Ann. Soc. ent. Belgique 56.

Pternistria femoralis sp. n. N. Guinea pl. xlix f. 2 p. 594, DISTANT Tr. ent. Soc. London 1911.

Serinetha flava Dahomey p. 90, *albisolecta* Madagascar p. 91, spp. n., BERGROTH Ann. Soc. ent. Belgique 56.

Sjostedtina gen. n. p. 56, *sjostedti* sp. n. Africa p. 57, SCHOUTEDEN Ann. Soc. ent. Belgique 56.

Stenocephalus pilosus sp. n. E. Africa, BERGROTH p. 88 Ann. Soc. ent. Belgique 56.

Tenosius uniformis sp. n. Africa, SCHOUTEDEN p. 56 Ann. Soc. ent. Belgique 56.—*T. robustus* to *Sjoestedtina*, SCHOUTEDEN p. 111 Rev. zool. afric. 2.

Zenkeria tarsalis sp. n. Congo, SCHOUTEDEN p. 421 Rev. zool. afric. 1.

LYGAEIDAE.

Blissus leucopterus, KELLEY & PARKS, U. S. Dept. Agric. Ent. Bull. 95 Pt. 3 pp. 23-52 ff. 11-15 pls. iv & v.

Camptoletus montandoni, *augustus*. p. 385, spp. n. Turkestan ross., KIRIČENKO Rev. russ. ent. 12.

Coriantipus gen. n. *Henestarinae* p. 147, *inopinatus* sp. n. Argentina p. 148, BERGROTH Ann. Soc. ent. Belgique 56.

Emblethis nox sp. n. Buehara, KIRIČENKO Rev. russ. ent. 12 p. 387.

Holocranum bergevini sp. n. Algier, POPPIUS Wien. ent. Zeit. 31 pp. 165-169.

Lamprodema minuscula sp. n. Dauria, REUTER Öfvers. Finska Vet. Soc. 54 A No. 7 p. 19.

Lethaeus simpsoni sp. n. Nigeria, BERGROTH p. 195 Ann. Nat. Hist. 10.

Leuconysius gen. n., *biskrensis* sp. n. Biskra, POPPIUS Wien. ent. Zeit. 31 pp. 165-169.

Nysius; synonymy of hawaiian pp. 732-734, *haleakalae*, *hiloensis*, p. 735, *comitans*, *delectulus*, p. 736, *sublittoralis* p. 737, spp. n., Hawaii, PERKINS Tr. ent. Soc. London 1911.—*N. desertorum* n. n. pro *Camptonotus maculatus*, KIRIČENKO Rev. russ. ent. 12 p. 205.

Oncopeltus nesioles sp. n. Neu Guinea, BREDDIN p. 83 Arch. Naturges. 78 A.

Piezoscelis valida sp. n. Turkestan ross., KIRIČENKO Rev. russ. ent. 12 p. 386.

Rhyparochromus chiragra tenebrosus var. n. Semiretshje, KIRIČENKO p. 386 T.c.

Spilostethus aequatorialis sp. n. Ecuador, BREDDIN p. 353 Ent. Mitt. Berlin 1.

Symphylax curvispina sp. n. Java, HORVÁTH Tijdschr. Ent. 55 p. 339.

PYRRHOCORIDAE.

Aderrhis aethiopica, Synonymie, BERGROTH Wien. Ent. Ztg. 31 p. 313.

Cenaeus gowdeyi sp. n. Uganda, BERGROTH p. 195 Ann. Nat. Hist. 10.—*C. annulifer*, *argillosus*, spp. n. Guinea, BERGROTH Wien. Ent. Ztg. 31 p. 313.

Dysdercus etc. on cotton, Africa, SCHOUTEDEN pp. 301-312 Rev. zool. afric. 1.—*D. mimus*, on *Iresine paniculata*, COCKERELL Ent. News 23 p. 327.

Indra timarchula India, *orthocephaloides* Borneo, spp. n., BREDDIN p. 87 Arch. Naturges. 78 A.

Odontopus satyrus sp. n. Comoro, BERGROTH Ent. Ztg. Wien 31 p. 313.

Pyrrhocoris sordidus = *apterus* ab., KIRIČENKO Rev. russ. ent. 12 p. 205.

Sericocoris acromelanthes, Synonymie, BERGROTH Ent. Ztg. Wien 31 p. 313.

BERTIDAE.

Capyella etiennei sp. n. Congo, SCHOUTEDEN p. 75 Rev. zool. afric. 2.

Gombora gen. n. p. 73 near *Capyella*, *alberti*, *iturica*, spp. n., Congo, p. 74, SCHOUTEDEN T.c.

Megalomerium tenerrimum sp. n. Madagascar, BERGROTH p. 92 Ann. Soc. ent. Belgique 56.—*M. pusillum* sp. n. Java, HORVÁTH Tijdschr. Ent. 55 p. 338.

TINGITIDAE. ARADIDAE.

Copium hirticorne sp. n. W. Africa, BERGROTH p. 145 Ann. Soc. ent. Belgique 56.—*C. stolidum* sp. n. Congo, HORVÁTH p. 355 Rev. zool. afric. 1.

Dysodius and *Acantharades* distinguished, DISTANT p. 597 Tr. ent. Soc. London 1911.

Habrochila gen. n. p. 353, *placida* sp. n. W. Africa p. 354, HORVÁTH T.c.

Menodora subgn. n. *Stephanitis*, *ambigua* Japonia, *colocasiae* New Guinea, *formosa* Formosa, *matsumorae* Japonia,

propinqua Japonia, spp. n., *pyri sareptana* n. var. *subfasciata* China, *tabidula* Japonia, pp. 319-334 figs. 1-2, *S. sondaica* Java, spp. n., pp. 338-339, HORVÁTH Ann. Hist.-Nat. Mus. Nat. Hung. 10.

Norba subg. n. *Stephanitis*, *aperta*, *exigua*, *mendica*, spp. n., Japonia, HORVÁTH pp. 334-336 T.c.

Omoplax subg. n. *Stephanitis*, *desecta* sp. n. Japonia, HORVÁTH pp. 336-337 fig. 3 T.c.

Phyllontocheila dilatata v. n. *obscura* Kamerun, SCHUMACHER p. 320 Mitt. Mus. Berlin 6.

Physatocheila ferruginea sp. n. W. Africa, BERGROTH p. 146 Ann. Soc. ent. Belgique 56.—*P. gibbula* sp. n. Java, HORVÁTH Tijdschr. Ent. 55 p. 342.

Stephanitis, vide *Menodora*, *Norba*, *Omoplax*.—*S.* sp. Lebensweise, Schaden (Russ.), RADECKIJ Turkest. selisk. choz. 7 pp. 788-793 f. 1.

HEBRIDAE, HYDROMETRIDAE, GERRIDAE.

Merragata lacunifera, BUENO p. 31 Canad. Ent. 44.

Microvelia insignis sp. n. Trinidad, DISTANT p. 437 pl. x figs. 4 & 5 Ann. Nat. Hist. 10.

Naboandelus bergewini sp. n. Egypt, BERGROTH p. 256 Bull. Soc. ent. France 1911 (omitted last year).

Nealardus nom. n. for *Alardus* Dist., DISTANT p. 471 Ann. Nat. Hist. 9.

REDUVIIDAE (incl. *Nabidae* & *Emesidae*).

Cleontes ugandensis sp. n. Africa, DISTANT p. 90 Ann. Nat. Hist. 10.

Coniophyrta gen. n. p. 15, *pulverosa* sp. n. E. Africa p. 16, BREDDIN Rev. zool. afric. 2.

Coranus minusculus sp. n. Ceylon, BREDDIN p. 410 Ann. Soc. ent. Belgique 56.

Ectomocoris lativentris sp. n. Ceylon, BREDDIN p. 408 T.c.

Edocla praecox sp. n. Africa, BERGROTH p. 197 Ann. Nat. Hist. 10.

Eulyes amoena v. n. *mixta*, *nigrigenu*, *nigradorsum*, BREDDIN p. 84 Arch. Naturges. 78 A.

Harpactor geniculatus = *Rhinocoris nigripes*, KIRIČENKO Rev. russ. ent. 12 p. 205.

Helonotus versicolor sp. n. New Guinea pl. xlix f. 3 p. 598, DISTANT Tr. ent. Soc. London 1911.

Ischnobaena brunneiceps sp. n. Ceylon, BREDDIN p. 406 Ann. Soc. ent. Belgique 56.

Macrospongus annulipes sp. n. p. 378 fig. 1 Africa, JEANNEL Bull. Soc. ent. France 1912.—*M. ruficollis* sp. n. p. 393 Mozambique, JEANNEL T.c.

Nagusta bergrothi sp. n. Africa, SCHOUTEDEN p. 113 Rev. zool. afric. 2.

Petalochirus pugil sp. n. Nyasaland, BERGROTH p. 198 Ann. Nat. Hist. 10.

Phonolibes tricolor sp. n. Uganda, BERGROTH p. 196 T.c.

Ploiariodes hirtipes sp. n. Vermont p. 97, BANKS Psyche 19.

Ploiariola morstatti sp. n. Amani, MORSTATT p. 147 Zeitschr. wiss. Insektbiol. 8.

Pristhesancus inconspicuus sp. n. New Guinea pl. xlix f. 1 p. 598, DISTANT Tr. ent. Soc. London 1911.

Pselliopus barberi sp. n. United States p. 21, DAVIS Psyche 19.

Ptilocerus & *Ptilocnemus*; Synonymie notes, MONTANDON Tijdschr. Ent. 55 pp. 249 254.

Reduviolus; synonymy of hawaiian, PERKINS Tr. ent. Soc. London 1911 pp. 728 & 729.—*R. corixipennis* sp. n. Nyasaland, BERGROTH p. 201 Ann. Nat. Hist. 10.—*R. (Stenonabis) jeans* Fernando Po p. 22, *consimilis* Equador p. 23, spp. n., REUTER Öfvers Finska Vet. Soc. 54 A No. 7.

Rhinocoris neavei sp. n. Nyasaland, BERGROTH p. 196 Ann. Nat. Hist. 10.—*R. albopilosus*, maternal care, BEQUAERT pp. 292-296 Rev. zool. afric. 1.

Sphedanolestes nanulus sp. n. Ceylon, BREDDIN p. 412 Ann. Soc. ent. Belgique 56.

Tegellula gen. n. near *Tegea*, *rugosa* sp. n. Ceylon, BREDDIN p. 413 T.c.

Tribelocephala distanti nom. n. = *orientalis* Dist., HORVÁTH Ann. Mus. Hung. 10 p. 609.

Vackiria deserta, distinkte. Species, KIRIČENKO Rev. russ. ent. 12 p. 205.

HENICOCEPHALIDAE.

Henicocephalus fimbria sp. n. W. Africa, BREDDIN p. 17 Rev. zool. afric. 2.—*H. culicis* Georgia, BRADLEY J. New York Ent. Soc. 20 p. 69.

CIMICIDAE.

The sexual segments, ROTHSCHILD Nov. zool. 19 pp. 93–96 cuts.

Subfam. *Clinocorinae*, *Cacodminae* and *Haemosiphoninae*, ROTHSCHILD & JORDAN Nov. zool. 19 p. 352.

Revision of American *Cimicidae*, HORVÁTH Ann. Mus. Hung. 10 pp. 257–262.

Aphrania gen. n. p. 353, *barys* sp. n. Basutoland p. 355, JORDAN & ROTHSCHILD Nov. zool. 19.

Cacodmus ignotus sp. n. on bat, ROTHSCHILD p. 85 Ent. Mag. 48.—*C. indicus* sp. n. Bombay, JORDAN & ROTHSCHILD p. 353 Nov. zool. 19.

Cimex vespertilionis sp. n. Finland, POPPIUS Medd. Soc. Fauna Fenn. 38 p. 56.—*C. lectularius*, endurance, OLSEN Bull. Brooklyn Ent. Soc. 8 p. 24; resistance to re-agents, BLACKLOCK pp. 415–428 Ann. trop. Med. 6; food-habits, GIRAULT pp. 163–188 J. econ. Biol. 7.

Clinocoris peristerae sp. n. India, ROTHSCHILD p. 87 Ent. Mag. 48.

Loxaspis gen. n., *miranda* sp. n. Uganda, ROTHSCHILD p. 363 Bull. ent. research 2.—*L. seminitens* sp. n. Java, HORVÁTH Tijdschr. Ent. 55 p. 344.

Oeciacus vicarius sp. n. United States, HORVÁTH Ann. Mus. Hung. 10 p. 261.

TERMATOPHYLIDAE.

Argyrotelaenus gen. n. *elegans* Ober-Ägypten p. 15, *simoni* Aden p. 16, spp. n., REUTER & POPPIUS Öfvers Finska Vet. Soc. 54 No. 1.

Hesperophylum gen. n., *heidemanni* sp. n. Nordamerika, REUTER & POPPIUS p. 16 T.c.

Termatophylidea gen. n., *pilosa* sp. n. Jamaika, REUTER & POPPIUS p. 4 T.c.

Termatophylum grande Darjeeling p. 8, *ochraceum* Madras p. 11, *obscurum*

Borneo und Ceylon p. 12, spp. n., REUTER & POPPIUS T.c.

POLYCTENIDAE.

Polyctenidae; structure etc., JORDAN pp. 555–565 Nov. zool. 18.

Adroctenes gen. n. p. 576, *horvathi* sp. n. Africa or. p. 577 pl. xiv figs. 10–13, JORDAN T.c.

Polyctenes; viviparous, *spasmae* and *talpa* = one species, JORDAN p. lxiv Proc. ent. Soc. London 1911.

CAPSIDAE or MIRIDAE.

Synopsis der deutschen Plagiognatharia. (Forts.), HÜEBER Stuttgart-Jahreshefte Ver. Natk. 68 p. 175–236.

Acanthopeplus gen. n. verwandt mit *Tridopeplus*, *bergrothi* sp. n. Peru, POPPIUS Ann. Mus. Hung. 10 pp. 43C–432.

Adelphocoris lineolatus v. n. *balticumensis*, SCHUMACHER p. 95 Ent. Rdsh. 29.

Allodapus sibiricus sp. n. Transbaikalien, POPPIUS Öfvers. Finska Vet. Soc. 54 A No. 29 p. 8.

Araspus bicolor, *corrallinus*, *parcepunctatus*, *scutellaris*, spp. n., Neu-Guinea, POPPIUS Wien. ent. Zeit. 31 p. 227–232.

Argyrocoris gen. n. p. 478, *scurrilis* sp. n. Arizona p. 479, VAN DUZEE Bull. Buffalo Soc. 10.

Aristopeplus gen. n. verwandt mit *Hyalopeplus*, *imperialis*, *regalis*, spp. n., Neu-Guinea, POPPIUS Ann. Mus. Hung. 10 pp. 421–424.

Calocoris caucasicus sp. n. Transkaukasiën, POPPIUS Öfvers. Finska Vet. Soc. 54A No. 29 p. 7.—*C. uhleri* nom. n. for *tinctus* Uhler p. 490, VAN DUZEE Bull. Buffalo Soc. 10.

Campylomma lividicornis sp. n. Luzon, REUTER Öfvers. Finska Vet. Soc. 54 A No. 7 p. 65.

Ceratocapsus lividipes sp. n. Blumenau, REUTER p. 58 T.c.

Creontiades caucasicus sp. n. Kaukasus, POPPIUS Öfvers. Finska Vet. Soc. 54 A No. 29 p. 6.

Criocoridae nom. n. for *Strongylotes* Reuter (*Laodamia* Kirkaldy) p. 512, VAN DUZEE Bull. Buffalo Soc. 10.

Criocoris canadensis sp. n. Quebec p. 511, VAN DUZEE T.c.

Cyrtopeltis confusa sp. n. Oahu, PERKINS p. 729 Tr. ent. Soc. London 1911.

Dasycapsus gen. n., *theryi* sp. n. Alger, POPPIUS Wien. ent. Zeit. 31 p. 165-169.

Diaphnidia hamata California p. 489, *capitata* New York p. 490, spp. n., VAN DUZEE Bull. Buffalo Soc. 10.

Dichrooscytus irroratus Colorado p. 482, *maculatus* Florida p. 483, spp. n., VAN DUZEE T.c.

Dicyphus montanus sp. n. Turkestan, POPPIUS Öfvers. Finska Vet. Soc. 54A No. 29 p. 11.

Ephippiocoris gen. n. nahe *Plesiodema*, *lunatus* sp. n. Turkestan, POPPIUS p. 28 T.c.

Eucerocoris horvathi sp. n. Neu-Guinea, POPPIUS Öfvers. Finska Vet. Soc. 54 A No. 30 p. 1.

Eustictus venatorius sp. n. New York and Florida p. 479, VAN DUZEE Bull. Buffalo Soc. 10.

Felisacus nigricornis sp. n. Neu-Guinea, POPPIUS Öfvers. Finska Vet. Soc. 54A No. 30 p. 2.

Ganocapsus gen. n., *filiformis* sp. n. Arizona, p. 481, VAN DUZEE Bull. Buffalo Soc. 10.

Globiceps (*Globiceps*) *handlirschi* Creta p. 53, *G. (Kelidocoris) holtzi* Graecia p. 54, *G. (Kelidocoris) horvathi* Hungaria Graecia p. 55, spp. n., REUTER Öfvers. Finska Vet. Soc. 54 A No. 7.—*G. caucasicus* sp. n. West-Kaukasus, POPPIUS Öfvers. Finska Vet. Soc. 54 A No. 29 p. 12.

Hemisphaerocoris gen. n. nahe *Monalocoris*, *puncticollis* sp. n. Neu-Guinea, POPPIUS Öfvers. Finska Vet. Soc. 54 A No. 30 p. 25.

Heterocordylus malinus and *Lygidea mendax*, CROSBY Agric. Exp. Sta. New York Bull. 291 pp. 211-226 ff. 87-102.

Horcias dislocatus varr. n. *d. scutellatus*, *d. pallipes*, *d. thoracicus*, p. 484, VAN DUZEE Bull. Buffalo Soc. 10.

Hyalopeplodes gen. n. verwandt mit *Hyalopeplus*, *cyanescens* sp. n. Neu-Guinea, POPPIUS Ann. Mus. Hung. 10 pp. 419-421.

Hyalopeplus loriae sp. n. Neu-Guinea, POPPIUS p. 415 T.c.

Isabel beccarii sp. n. Sumatra, POPPIUS p. 417 T.c.

Kosmiomiris modiglianii Sumatra, *scutellaris* Malacca, spp. n., POPPIUS pp. 433-436 T.c.

Laemocoris kiritschenkoi sp. n. Transkasprien, POPPIUS Öfvers. Finska Vet. Soc. 54 A No. 29 p. 10.

Largidea gen. n. Uhler p. 480, *marginata* sp. n. Uhler Colorado p. 481, VAN DUZEE Bull. Buffalo Soc. 10.

Lopidolon pallescens sp. n. Süd. Indien, POPPIUS Öfvers. Finska Vet. Soc. 54A No. 30 p. 14.

Lygus sauteri sp. n. Formosa, POPPIUS p. 303 Ent. Mitt. Berlin 1.—*L. tenellus* sp. n. Uhler, U.S. and Canada p. 484, VAN DUZEE Bull. Buffalo Soc. 10.

Macrocoleus tibialis = *Paredrocoris pectoralis* = *P. tibialis*, KIRIÖENKO Rev. russ. ent. 12 p. 206.

Macropeplus gen. n. verwandt mit *Aristopeplus*, *brunnescens* sp. n. Neu-Guinea, POPPIUS Ann. Mus. Hung. 10 pp. 424-425.

Microphylellus modestus (Uhl.) sp. n. U.S.A., REUTER Öfvers. Finska Vet. Soc. 54 A No. 7 p. 62.

Macrotylus bipunctatus p. 12, *longulus* p. 14, Kaukasus, spp. n., POPPIUS Öfvers. Finska Vet. Soc. 54 A No. 29.

Moroca gen. n. verwandt mit *Hyalopeplus*, *lineatocolle* sp. n. Neu-Guinea, POPPIUS Ann. Mus. Hung. 10 pp. 427-428.

Notostira tricostata, REUTER Medd. Soc. Fauna Fenn. 38 p. 20-21.

Orectoderus niger sp. n. Brasilia, REUTER Öfvers. Finska Vet. Soc. 54 A No. 7 p. 47.

Pachypeltis marginalis Neu-Guinea p. 4, *brevirostris* Sumatra p. 5, *annulipes* Neu-Guinea p. 7, spp. n., POPPIUS Öfvers. Finska Vet. Soc. 54 A No. 30.

Pachypeltopsis gen. n. nahe *Pachypeltis*, *australicus* sp. n. N. S. Wales, POPPIUS p. 8 T.c.

Palaeofurius gen. n. nahe *Neofurius*,
sagittatus sp. n. Neu-Guinea, POPPIUS
p. 19 T.c.

Pararagmus subsinuatus sp. n. Trans-
kasprien, POPPIUS Öfvers. Finska Vet.
Soc. 54 A No. 29 p. 25.

Peltidopeplus gen. n. verwandt mit
Hyalopeplus, *annulipes* sp. n. Neu-
Guinea, POPPIUS Ann. Mus. Hung. 10
pp. 428–430.

Phylus limbattellus sp. n. West-Kau-
kasus, POPPIUS Öfvers. Finska Vet.
Soc. 54 A No. 29 p. 15.

Phytocoris kiritschenkoi Turkestan
p. 1, *issykensis* p. 3, *turkestanicus* p. 4,
Turkestan, spp. n., POPPIUS T.c.

Phytocoris rufus Florida p. 477, van
California p. 478, spp. n., VAN DUZEE
Bull. Buffalo Soc. 10.

Plagiognathus blatchleyi sp. n.
America borealis, REUTER Helsingfors
Öfvers. F. Vet. Soc. 54 A No. 7 p. 61.

Platypeltocoris gen. n. *Bryocorinae*,
planus p. 16, *similis* p. 17, Neu-Guinea,
spp. n., POPPIUS Öfvers. Finska Vet.
Soc. 54 A No. 30.

Poeciloscytus rosaceus sp. n. Colorado
p. 488, VAN DUZEE Bull. Buffalo Soc.
10.

Prodromopsis oculatus sp. n. Neu-
Guinea, POPPIUS Öfvers. Finska Vet.
Soc. 54 A No. 30 p. 10.

Pycnoderes heidemanni sp. n. Porto
Rico, REUTER Öfvers. Finska Vet. Soc.
54 A No. 7 p. 44.

Pycnofurius gen. n. nahe *Palaco-*
furius, *puncticollis* sp. n. Celebes,
POPPIUS Öfvers. Finska Vet. Soc. 54 A
No. 30 p. 21.

Rambea gen. n. verwandt mit
Bryocorinen und Macrolophinen, *graci-*
lipes sp. n. Sumatra, POPPIUS Ann.
Mus. Hung. 10 pp. 440–441.

Resthenia poppiusi sp. n. Ecuador,
REUTER Öfvers. Finska Vet. Soc. 54A
No. 7 p. 39.

Sceodamia gen. n. nahe *Damioscea*,
nigritarsis sp. n. Turkestan, POPPIUS
Öfvers. Finska Vet. Soc. 54 A No. 29
p. 23.

Serrofurius gen. n. *Bryocorinae*,
lutheri sp. n. Ceylon, POPPIUS Öfvers.
Finska Vet. Soc. 54 A No. 30 p. 23.

Serropeltis gen. n. verwandt mit
Hyalopeplus, *strigicollis* sp. n. Men-
tawei, POPPIUS Ann. Mus. Hung. 10
pp. 425–427.

Sixeonotus discoidalis sp. n. Brasilia,
REUTER Öfvers. Finska Vet. Soc. 54 A
No. 7 p. 45.

Sthenaropsis gen. n. nahe *Sthenarus*,
variegatus Syr-Darja p. 21, *obscurus*
Transkasprien p. 22, spp. n., POPPIUS
Öfvers. Finska Vet. Soc. 54 A No. 29.

Systellonotus kiritschenkoi sp. n. Krim,
POPPIUS Rev. russ. zool. 12 p. 202.

Thaumastomiris discoidalis sp. n.
Neu-Guinea, POPPIUS Öfvers. Finska
Vet. Soc. 54 A No. 30 p. 13.

Tichorhinus tantali Oahu p. 730,
kirkaldyi Hawaii p. 731, spp. n.,
PERKINS Tr. ent. Soc. London 1911.

Trigonotylus ruficornis Lebensweise,
Eiablage etc. (Russ.), KURDIUMOV
Poltava Trd. selisk.-choz. opytn. stancii
7 pp. 1–16 pl. i & figs. 1–2.

Tropidosteptes canadensis Ontario
p. 486, *tricolor* New Jersey p. 487,
imperialis Texas p. 488, spp. n., VAN
DUZEE Bull. Buffalo Soc. 10.

Voruchiella gen. n. nahe *Voruchia*,
plagiata sp. n. Buchara, POPPIUS Öfvers.
Finska Vet. Soc. 54 A No. 29 p. 16.

SALDIDAE (*Acanthiidae*), LEPTOPÓDIDAE.

Zur generischen Teilung der palä-
arktischen und nearktischen *Acanthia-*
den, REUTER Öfvers. Finska Vet. Soc.
54 A No. 12 p. 1–24.

Acanthia tadzhika sp. n. Buchara,
KIRIČENKO Rev. russ. ent. 12 p. 388.—
A. pilosa v. n. *picea*, SCHUMACHER p. 95
Ent. Edsch. 29.

Halosalda gen. n., REUTER Öfvers.
Finska Vet. Soc. 54 A No. 12 p. 12.

Toscytus gen. n., REUTER p. 19 T.c.

Lampracanthia gen. n., REUTER p. 21
T.c.

Leptopus assouanensis to *Valleriola*,
HORVATH Annuar. Mus. Napoli 3
No. 20.

Micracanthia gen. n., REUTER Öfvers
Finska Vet. Soc. 54 A No. 12 p. 16.

Pentacora gen. n., REUTER p. 10 T.c.

Salda dixonii v. n. *luteifusula*, BREDIN p. 86 Arch. Naturges. 78 A.

Telolusca gen. n., REUTER Öfvers. Finska Vet. Soc. 54 A No. 12 p. 17.

HYDROCORISAE.

Biologie und Anatomie von *Plea minutissima*, WEFELSCHIED Zool. Jahrb. Syst. 32 p. 389-474 2 Taf.

Hydrocoridae, *Nepidae*, statische Organe, BAUNACKE Zool. Jahrb. Anat. 34 p. 179-346 4 Taf.

Ambrysus mormon sp. n. Utah, MONTANDON p. 48 Bull. Soc. Bucharest 18 1909.—*A. heidemanni* New Mexico p. 188, *dilatatus* Mexico p. 190, spp. n., *pulchellus* var. n. *pallidulus* p. 189, MONTANDON T.c.

Belostoma lutarium = (*aurantiacum* Torre Bueno), MONTANDON p. 187 T.c.

Coptocatus gen. n. *Cheirochelinae* p. 43, *oblongulus* sp. n. Borneo p. 45, MONTANDON T.c.

Curicta schoutedeni sp. n. Brazil p. 143, *tibialis* Martin = (*suspecta* M.) p. 144, MONTANDON T.c.—*C. howardi* sp. n. Texas, MONTANDON p. 181 T.c.

Ectemnostega gen. n., typus *Corixa quadrata* Feuerland, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 115 f. 28.

Enithares indica, fig., NOWROJEE Mem. Dept. Agric. Ind. Ent. Ser. 2 No. 9.

Gestroiella schoutedeni sp. n. Annam, MONTANDON p. 45 Bull. Soc. Bucharest 18 1809.

Heleocoris grandis Borneo p. 52, *nebulosus* Java p. 53, spp. n., MONTANDON T.c.

Kirkaldyia gen. n. for *Belostoma boutareli* and *deyrollei*, MONTANDON p. 138 T.c.

Laccotrephes armipes p. 318, *latimanus* p. 141, spp. n., W. Africa, MONTANDON T.c.

Limnocoris nigropunctatus sp. n. Brazil, MONTANDON p. 49 T.c.

Macrocoris handlirschi Algoa Bay p. 55, *nigropunctatus* Niger p. 58, *laticollis* Angola p. 59, spp. n., MONTANDON T.c.

Notonecta glauca, Atmung, HOPPE Zool. Jahrb. allg. 31 p. 189-244 2 Taf.

Palmaeorixa gen. n., *gillettii* sp. n. Colorado, ABBOTT Ent. News 23 pp. 337-339 pl. xviii.

Ramphocorixa gen. n. p. 120, *balanodis* sp. n. N. America p. 118 pl. iv, life-history, ABBOTT Canad. Ent. 44.

Ranatra heydeni sp. n. Corrientes p. 144, *rabida* B. White = (*annulipes* Mont.) p. 145, MONTANDON Bull. Soc. Bucharest 18 1909.—*R. brevicollis* p. 184, *protensa* p. 185, spp. n., N. America, MONTANDON T.c.—*R. filiformis*, fig., NOWROJEE Mem. Dept. Agric. Ind. Ent. Ser. 2 No. 9.

Homoptera.

Neues und Kritisches über Arten und Varietäten einheimischer Homoptera, HAUPT Berliner ent. Zs. 56 p. 177-196.

CICADIDAE.

Cicadidarum genera palaerctica, Tab. synopt., HORVATH Ann. Mus. Hung. 10 pp. 603-606 figs. 2-3.

Some rhodesian Cicadidae and observations on economic entomology, S. Africa, PEAD Bulawayo Proceed. Rhodes. Scientif. Assoc. (20).

Bijaurana gen. n. near *Taipinga*, *typica*, p. 648, *sita* p. 649, spp. n., India, DISTANT Ann. Nat. Hist. 9.

Champaka harveyi sp. n. Borneo, DISTANT p. 57 Gen. Ins. 142.

Chlorita facialis sp. n. O.-Afrika, JACOBI p. 69 Ent. Rdsch. 29.

Cicada; syn. *Rihana*, type *tibicen* p. 491, VAN DUZEE Bull. Buffalo Soc. 10.—*C. winnemanna* sp. n. Maryland p. 3, DAVIS Bull. Brooklyn Ent. Soc. 8 pp. 2-4.

Cicadatra inconspicua sp. n. India, DISTANT p. 463 Ann. Nat. Hist. 9.—*Cicadatra* vide *Rustavelia*.

Cosmopsaltria fratercula sp. n. Tonkin, DISTANT p. 44 Gen. Ins. 142.—*C. ida* sp. n. Borneo, MOULTON p. 139 J. Straits Asiat. Soc. 57 1911.

Cryptotympana lombokensis sp. n. Flores, DISTANT p. 35 Gen. Ins. 142.

- Cyclochila laticosta* sp. n. Queensland p. 221, ASHTON Proc. R. Soc. Vict. 24.
- Dundubia helena* sp. n. India, DISTANT p. 641 Ann. Nat. Hist. 9.
- Euryphara* gen. n. *typus cantans* Fabr., HORVÁTH Ann. Mus. Hung. 10 p. 606.
- Fidicina sawyeri* sp. n. Brazil, DISTANT p. 643 Ann. Nat. Hist. 9.
- Gudaba maculata* sp. n. Sikkim, DISTANT p. 439 Ann. Nat. Hist. 10.
- Jafuna* gen. n. p. 647 near *Rhinopsalta*, *melichari* sp. n. Madagascar p. 648, DISTANT Ann. Nat. Hist. 9.
- Khimbya immsi* sp. n. Assam, DISTANT p. 642 T.c.
- Lacetas longicollis* p. 69 O.-Afr., *jacobii* p. 70 Togo, *breviceps* p. 72 Galla, spp. n., SCHUMACHER Zool. Anz. 40.
- Lacetasiates* subg. n. zu *Lacetas*, SCHUMACHER p. 69 T.c.
- Larrakeeya* gen. n., *pallida* sp. n. W.A., ASHTON Rec. Austr. Mus. 9 p. 77 pl. vii f. 4.
- Lembeja australis* sp. n. Cape York, ASHTON p. 77 pl. vii f. 3 T.c.
- Lemuriana chandoea* sp. n. Borneo, MOULTON p. 151 J. Straits Asiat. Soc. 57 1911.
- Macrotristria occidentalis* sp. n. Australia, DISTANT p. 438 Ann. Nat. Hist. 10.—*M. doddi* sp. n. Port Darwin p. 223, ASHTON Proc. R. Soc. Vict. 24.—*M. dorsalis* sp. n. Queensland, ASHTON p. 30 Mem. Mus. Melbourne 4.
- Mata rama* sp. n. Bhutan, DISTANT p. 459 Ann. Nat. Hist. 9.
- Maua dohrni* sp. n. Sumatra, SCHMIDT p. 64 Stettin. ent. Zeit. 73.—*M. platygaster* sp. n. Bornéo, ASHTON p. 156 J. Straits Asiat. Soc. 57 1911.
- Meimuna cassandra* sp. n. India, DISTANT p. 642 Ann. Nat. Hist. 9.
- Melampsalta zenobia* sp. n. Nepal, DISTANT p. 649 T.c.—*M. viridicincta* sp. n. W.A., ASHTON Rec. Austr. Mus. 9 p. 78 pl. vii f. 5.—*M. brevis* p. 225, *viridis*, *crucifera*, p. 226, Queensland, spp. n., ASHTON Proc. R. Soc. Vict. 24.—*M. cylindrica* Victoria, *capistrata* Queensland, spp. n., ASHTON Mem. Mus. Melbourne 4 pp. 30-32.
- Odopoea degiacomii* sp. n. Brazil, DISTANT p. 644 Ann. Nat. Hist. 9.
- Onomacritus* gen. n. near *Tettigia*, *sumatranus* sp. n. Deli, DISTANT p. 461 T.c.
- Owra* gen. n., *insignis* sp. n. Queensland, p. 224, ASHTON Proc. R. Soc. Vict. 24.
- Pagiphora* gen. n. *typus annulata* Brull., HORVÁTH Ann. Mus. Hung. 10 p. 604 fig. 3.
- Panka silvestris* sp. n. Ituri, JACOBI p. 24 Ergebn. Zentr.-Afrik. Exp. 4 L. 2.
- Patapius* nom. n. = *Cryptoglena* Horv., HORVÁTH Ann. Mus. Hung. 10 p. 609.
- Pauropsalta elgneri* Queensland p. 227, *subolivacea* N.S. Wales p. 228, spp. n., ASHTON Proc. R. Soc. Vict. 24.
- Platylomia brevis* sp. n. India, DISTANT p. 182 Ann. Nat. Hist. 9.—*P. bangueyensis* sp. n. Banguéy isld., DISTANT p. 48 Gén. Ins. 142.—*P. novaeguinae* sp. n. Ekeikei, DISTANT p. 51 Gen. Ins. 142.
- Platypleura liberiana* sp. n. Liberia, DISTANT p. 200 Entomologist p. 45.—*P. atkinsoni* sp. n. Tenasserim DISTANT p. 181 Ann. Nat. Hist. 9.
- Prasia vitticollis* sp. n. Queensland p. 228, ASHTON Proc. R. Soc. Vict. 24.
- Psaltoda pulchra* Queensland, *fumi-pennis* Port Darwin, p. 222, spp. n., ASHTON Proc. R. Soc. Vict. 24.
- Pycna neavei* sp. n. Nyasaland, DISTANT p. 640 Ann. Nat. Hist. 9.
- Quintilia pomponia* sp. n. India, DISTANT p. 646 T.c.
- Rihana sayi australis* var. n., DAVIS Ent. News 23 p. 261.
- Rustavelia* subg. n. *Cicadatra* Kol., *burriana* sp. n. Transcaucasia, HORVÁTH Ann. Mus. Hung. 10 pp. 603-606-607 fig. 7.
- Scieroptera hyalinipennis* sp. n. Sumba, SCHMIDT p. 102 Stettin. ent. Zeit. 73.
- Tamasa rainbowi* sp. n. N.S.W., ASHTON Rec. Austr. Mus. 9 p. 107 fig. 4.
- Tanna bhutanensis* sp. n. Bhutan, DISTANT p. 182 Ann. Nat. Hist. 9.

- Terpnosia jenkinsi* sp. n. Bengal, DISTANT p. 183 T.c.—*T. versicolor* Burma, *oberthuri* Bhutan, spp. n., DISTANT p. 462 T.c.—*T. crowfooti* sp. n. Darjiling, DISTANT p. 439 Ann. Nat. Hist. 10.
- Tettigia orientalis* sp. n. Cochin China, DISTANT p. 460 Ann. Nat. Hist. 9.
- Thaumastopsaltria glauca* sp. n. North Queensland p. 225, ASHTON Proc. R. Soc. Vict. 24.
- Tibicen cassinii*, SMITH Rep. N. Jersey exp. Stat. 1911 p. 457.—*T. septendecim* p. 68 pls. xix-xxiv, FELT N. Y. St. Mus. Bull. No. 155; DAVIS Proc. Staten Is. Ass. 3 pp. 120-122; pigmentation, GORTNER J. Biol. Chem. 10 pp. 89-94 pl. i.
- Tugelana* gen. n. *Gaeaninae* p. 645, *butleri* sp. n. Zululand p. 46, DISTANT Ann. Nat. Hist. 9.
- Uhleroides* gen. n. p. 644, *Zammararia cubensis* sp. n. Cuba p. 645, DISTANT T.c.
- Urabunana verna* sp. n. Australia, DISTANT p. 440 Ann. Nat. Hist. 10.
- Yanga seychellensis* sp. n. Mahé, DISTANT p. 13 Gen. Ins. 142.
- FULGORIDAE.
- Achorotile foveata* sp. n. California, SPOONER p. 241 Canad. Ent. 44.
- Acroprivesa* gen. n. near *Privesa*, *suturalis* sp. n. O.-Afr., SCHMIDT pp. 77-78 Stettin. ent. Zeit. 73.
- Ambalangoda* gen. n. near *Kosalya* p. 187, *insignis* sp. n. Ceylon p. 188, DISTANT Ann. Nat. Hist. 9.
- Antabhoga* gen. n. near *Epora*, *gardineri* sp. n. Minikoi, DISTANT p. 185 T.c.
- Aphelonema obscura* sp. n. Georgia p. 499, VAN DUZEE Bull. Buffalo Soc. 10.
- Atracis facialis*, *atkinsoni*, p. 468, *haragamensis*, *greeni*, p. 469, Ceylon, *sadeyana* Assam, *hainanensis* Hainan, p. 470, spp. n., DISTANT Ann. Nat. Hist. 9.
- Barunoides* nom. n. for *Baruna* Dist., DISTANT p. 471 T.c.
- Brixioides africanus* sp. n. W. Africa, SCHMIDT p. 358 Rev. zool. afric. 1.
- Bursinia*, BERGÉVIN Alger Bul. soc. sci. nat. 4 pp. 10-13 av. fig.
- Bythopsyrna raapi* sp. n. Nias, SCHMIDT p. 96 Stettin. ent. Zeit. 73.
- Catonia maculifrons* p. 491, *majusculus* p. 492, spp. n., Arizona, VAN DUZEE Bull. Buffalo Soc. 10.
- Cixius nervosus* v. n. *atavus*, SCHUMACHER p. 95 Ent. Rdsch. 29.
- Conflata* gen. n. p. 362 near *Phromnia*, *viridis* sp. n. W. Africa p. 364, SCHMIDT Rev. zool. afric. 1.
- Deferunda* gen. n. near *Faventia*, *stigmatica* sp. n. Bengal, DISTANT p. 186 Ann. Nat. Hist. 9.
- Delhina* gen. n. near *Gelastyra*, *eurybrachydoides* sp. n. Himalaya, DISTANT p. 650 T.c.
- Dictyophora lacustris* sp. n. Tanganyika, JACOBI p. 26 Ergebn. Zentr.-Afrik. Exp. 4 L. 2.
- Eilithyia* gen. n. near *Tambinia*, *insularis* sp. n. Narkondam isld., DISTANT p. 184 Ann. Nat. Hist. 9.
- Epitemna vitrinervis* sp. n. Congo, SCHMIDT p. 359 Rev. zool. afric. 1.
- Epora montana* sp. n. Nilgiri hills, DISTANT p. 185 Ann. Nat. Hist. 9.
- Euphyonarthex* gen. n. p. 461, *phyllostoma* sp. n. p. 462 Kamerun, SCHMIDT Deutsche ent. Zeitschr. 1912.
- Flata*, KERSHAW J. Bombay Soc. 21 pp. 607-609.
- Forculus* gen. n. p. 464 near *Cyarda*, *peculiaris* sp. n. Ceylon p. 465, DISTANT Ann. Nat. Hist. 9.
- Gaetulia montana* sp. n. Himalaya, DISTANT p. 651 T.c.—*G. vittifrons* sp. n. Costa Rica, SCHMIDT p. 89 Stettin. ent. Zeit. 73.
- Geisha distinctissima*, figured, p. 608, KERSHAW J. Bombay Soc. 21.
- Hemithiscia* gen. n. *Acanaloniinae*, *taeniatifrons* sp. n. O.-Afr., SCHMIDT p. 95 Stettin. ent. Zeit. 73.
- Hilavrita discolorata* Bengal, *obliqua* Ceylon, spp. n., DISTANT p. 464 Ann. Nat. Hist. 9.

Homosura gen. n., *braunsi* sp. n. Africa mer., MELICHAR Čas. České Spol. Entomolog. Prag 9 p. 1.

Ketumala sinuata, *farinosa*, spp. n., Ceylon, DISTANT p. 466 Ann. Nat. Hist. 9.

Kinnara maculata, *spectra*, spp. n., India, DISTANT p. 187 T.c.

Lamenia praecox Arizona p. 502, *edentula* Georgia, *maculata* Ontario, p. 503, spp. n., VAN DUZEE Bull. Buffalo Soc. 10.

Liburnia tuckeri sp. n. Florida p. 506, VAN DUZEE Bull. Buffalo Soc. 10.—*L. dolera* sp. n. New York, SPOONER p. 240 Canad. Ent. 44.

Lichenopsis gen. n. für *Lichena incriminata*, SCHMIDT p. 98 Stettin. ent. Zeit. 73.

Lugardia lucida p. 80, *perlucida* p. 82, spp. n., O.-Afr., SCHMIDT T.c.

Malzeytia coelestis n. n. für *jacobii* Strand, JACOBI p. 25 Ergebn. Zentr.-Afrik. Exp. 4 L. 2.

Megaloplastinx gen. n. p. 459, *carinifrons* sp. n. p. 461 Sokaranda, SCHMIDT Deutsche ont. Zeitschr. 1912.

Melicharia obtusangula Ceylon sp. n., DISTANT p. 463 Ann. Nat. Hist. 9.

Mesonitys membranipicta sp. n. Benguela, SCHMIDT p. 356 Rev. zool. africaine 1.

Neomelicharia furtiva, figured, p. 609, KERSHAW J. Bombay Soc. 21.

Occlus borealis, *capitulatatus*, p. 495, *quadrilineatus*, *venosus*, p. 496, spp. n., U.S., VAN DUZEE Bull. Buffalo Soc. 10.

Okenana gen. n. p. 600 near *Halavrita*, *lycaena* sp. n. New Guinea pl. xlix f. 8 p. 601, DISTANT Tr. ent. Soc. London 1911.

Oliarus placitus p. 493, *difficilis* p. 494, spp. n., Florida, *slossoni* nom. n. for *hyalinus* Van D. p. 494, VAN DUZEE Bull. Buffalo Soc. 10.

Orchesma signata sp. n. Ceylon, DISTANT p. 192 Ann. Nat. Hist. 9.

Ormenis barberi Arizona p. 498, *sauacia* Utah p. 499, spp. n., VAN DUZEE Bull. Buffalo Soc. 10.

Paraketumala gen. n. near *Ketumala*, *anomala* sp. n. Bengal, DISTANT p. 467 Ann. Nat. Hist. 9.

Paranotus kamerunensis sp. n. Kamerun, SCHUMACHER p. 321 Mitt. Mus. Berlin 6.—*P. limbatus* p. 467, *maculosus* p. 468, spp. n., Ceylon, DISTANT Ann. Nat. Hist. 9.

†*Petropteron* gen. n., *mirandum* sp. n. cretaceous Manitoba, COCKERELL p. 95 Canad. Ent. 44.

Phleboterum angulinum sp. n. O.-Afr., SCHMIDT p. 97 Stettin. ent. Zeit. 73.

Phromnia bimaculata sp. n. Congo, SCHMIDT p. 362 Rev. zool. afric. 1.—*P. superba*, rest attitude, PARSONS p. lxxxviii P. ent. Soc. London 1912; LAMBORN T.c. p.c.

Pissonotus guttatus p. 233, *foveatus* p. 234, *variegatus* p. 235, *divaricatus* p. 236, *piceus* p. 238, *binotatus* p. 239, spp. n., U.S., SPOONER Canad. Ent. 44.

Pitambara montana p. 188, *dawnana* p. 189, spp. n., Burma, DISTANT Ann. Nat. Hist. 9.

Privesomorphus gen. n. *Nogodinini* p. 86, *sinuatifrons* p. 87, *maculipennis* p. 88, spp. n., O.-Afr., SCHMIDT Stettin. ent. Zeit. 73.

Pseudogergithus gen. n. *Issinae* p. 72, *coccinelloides* sp. n. p. 74 Span. Guinea, SCHMIDT T.c.

Pseudothiscia gen. n. *Acanaloniinae*, *concauifrons* sp. n. Transvaal, SCHMIDT pp. 93-94 T.c.

Pundaluoya insignis, *pulchella*, p. 190, *facialis* p. 191, spp. n., India, DISTANT Ann. Nat. Hist. 9.

Ricanoptera variegata sp. n. Ceylon, DISTANT p. 651 T.c.

Ricanula intermedia sp. n. Togo, SCHMIDT p. 75 Stettin. ent. Zeit. 73.

Salurnis marginellus, figured, p. 607, KERSHAW J. Bombay Soc. 21.

Seliza pusana sp. n. Bengal, DISTANT p. 465 Ann. Nat. Hist. 9.

Serida sherwilli sp. n. Sylhet, DISTANT p. 189 T.c.

Siphanta acuta, anatomy, development, MUIR & KERSHAW *Psyche* 19 pp. 77-89 ff. 1-4.

Sogata pusana, *distincta*, p. 191, *pallescens* p. 192, spp. n., India, DISTANT *Ann. Nat. Hist.* 9.

Tambusana nom. n. for *Tambusa* Dist., DISTANT p. 652 T.c.

Tropidocephala luteola sp. n. Bengal, DISTANT p. 193 T.c.

Vutina sexmaculata vv. n. *quadrimaculata* and *bimaculata*, SCHMIDT p. 85 Stettin. ent. Zeit. 73.

Zuleika gen. n. near *Dicranotropis* p. 193, *bengalensis* sp. n. India p. 194, DISTANT *Ann. Nat. Hist.* 9.

MEMBRACIDAE.

Anchon schubotzi sp. n. Ruwenzori, JACOBI p. 36 *Ergebn. Zentr.-Afrik. Exp.* 4 L. 2.

Centrotus subnodosus sp. n. Ruwenzori, JACOBI p. 35 *Ergebn. Zentr.-Afrik. Exp.* 4 L. 2.

Combophora beski, pronotum, MANN *Psyche* 19 pp. 145-147 pl. xii.

Enchenopa binotata, life history, MATAUSCH J. *New York Ent. Soc.* 20 pp. 58-67 pls. v vi.

Micoutalis calva, life history, MATAUSCH pp. 66-69 pl. v f. 1 T.c.

Telamona subfulcata sp. n. Florida p. 509, VAN DUZEE *Bull. Buffalo Soc.* 10.

CERCOPIDAE.

The genera of *Cercopidae* with lists of the species, LALLEMAND *Gen. Ins.* 143 167 pp. 8 pls.

Aufidus meunieri sp. n. New Guinea, LALLEMAND p. 122 pl. vi f. 6 *Gen. Ins.* 143.

Cephisus jacobii sp. n. Cayenne, LALLEMAND p. 39 pl. i f. 7 *Gen. Ins.* 143.

Cercopis; type *Triecphora sanguinolenta* p. 506, VAN DUZEE *Bull. Buffalo Soc.* 10.

Clastoptera varr. n., *obtusa trisis*, *xanthocephala glauca*, p. 508, VAN DUZEE T.c.

Cosmoscarta mimikensis pl. xlix f. 10 p. 602, *watarkwensis* f. 11 p. 603, spp.

n., New Guinea, DISTANT *Tr. ent. Soc. London* 1911.

Gallicana gen. n. p. 41, *royeri* sp. n. Madagascar, LALLEMAND *Gen. Ins.* 143.

Hemipooophilus gen. n. *Aphrophorinae*, *antaeus* sp. n. Albert-Edw.-See, JACOBI p. 30 *Ergebn. Zentr.-Afrik. Exp.* 4 L. 2.

Ischnorhina binotata sp. n. Ecuador, LALLEMAND p. 89 pl. iv f. 1 *Gen. Ins.* 143.

Leptataspis pirollei sp. n. India and Mahé, LALLEMAND p. 151 pl. vii f. 4 T.c.—*L. intermedia* sp. n. Malacca, SCHMIDT p. 167 *Stettin. ent. Zeit.* 73.

Locris sericans sp. n. Kamerun, SCHUMACHER p. 322 *Mitt. Mus. Berlin* 6.—*L. severini* sp. n. Ukami, LALLEMAND p. 86 pl. iii f. 11 *Gen. Ins.* 143.

Modiglianiella gen. n. *Machaerota* p. 173, *sumatrensis* sp. n. p. 175, SCHMIDT *Stettin. ent. Zeit.* 73.

Neuromachaerota gen. n. p. 175, *vosseleri* sp. n. p. 178 O.-Afr., SCHMIDT T.c.

Notoscarta kollerii sp. n. New Guinea, LALLEMAND p. 123 pl. vi f. 14 *Gen. Ins.* 143.

Philaenus lineatus var. n. *fusca*, HAUPT p. 178 *Berlin ent. Zs.* 56.

Pisidice gen. n. *Cercopinae* p. 27, *coruscans* sp. n. p. 28 Ruwenzori, JACOBI *Ergebn. Zentr.-Afrik. Exp.* 4 L. 2.

Poophilus camerunensis sp. n., SCHMIDT p. 171 *Stettin. ent. Zeit.* 73.

Ptyelus velghei sp. n. Madagascar, LALLEMAND p. 38 pl. i f. 11 *Gen. Ins.* 143.—*P. grossus* vv. n. *fuscoparsa* p. 322 and *obscurata* p. 323, SCHUMACHER *Mitt. Mus. Berlin* 6.—*P. goudoti*, LAMBERTON *Insecta* 2 pp. 44-48 fig.

Tomaspis graueri sp. n. Tanganyika, JACOBI p. 27 *Ergebn. Zentr.-Afrik. Exp.* 4 L. 2.—*T. claricella* sp. n. Kamerun, SCHUMACHER p. 322 *Mitt. Mus. Berlin* 6.

Tremapterus occidentalis sp. n. Kamerun, SCHUMACHER p. 323 T.c.

JASSIDAE.

Leafhoppers affecting cereals, grasses, and forage crops, OSBORN U. S. Dept.

Agric. Ent. Bull. 108 pp. 1–123 pls. i–iv ff. 1–29.

Acocephalus? *falklandicus* sp. n. Falklands-Inseln, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 52.

Agallia rugosa, *montana*, spp. n., India, DISTANT p. 607 Ann. Nat. Hist. 10.

Amberbakia gen. n. type *Petalocephala specularia* Walk., DISTANT p. 443 Ann. Nat. Hist. 10.

Athysanus sejungendus, food-plant, BUTLER p. 13 Ent. Mag. 48.

Deltocephalus bulgaricus n. n. für *horvathi*, OSHANIN p. 107 Katalog.

Dicraneura armata sp. n. Deutschl., HAUPT p. 187 Berlin ent. Zs. 56.—*D. haupti* n. n. für *armata*, OSHANIN p. 112 Katalog.

Durgades gen. n. near *Moonia* p. 608, *nigropictus* sp. n. Himalaya p. 609, DISTANT Ann. Nat. Hist. 10.

Empoasca punctum sp. n. Deutschl., HAUPT p. 189 Berlin ent. Zs. 56.

Eupterix collina California 1p. 51, VAN DUZEE Bull. Buffalo Soc. 10.

Euscelis quadrum f. n. *micropteram* (sic), HAUPT p. 186 Berlin ent. Zs. 56.

Haranga borneensis sp. n. Kuching, DISTANT p. 445 Ann. Nat. Hist. 10.

Idiocerus maculatus sp. n. India DISTANT p. 605 T.c.

Jassus centroafricanus Kiwu-See p. 38, *limus* Alb.-Edw.-See p. 39, spp. n., JACOBI Ergebn. Zentr.-Afrik. Exp. 4 L. 2.

Ledropsis singalensis n. n. for *maculata* Dist., DISTANT p. 446 Ann. Nat. Hist. 10.

Ledrotypa gen. n. near *Petalocephala*, *spatulata* India, p. 442, *greeni* Ceylon p. 443, spp. n., DISTANT T.c.

Leptocentrus limbipennis sp. n. Ruwenzori, JACOBI p. 34 Ergebn. Zentr.-Afrik. Exp. 4 L. 2.

Kolla semipellucida sp. n. Afr. centr., JACOBI p. 37 T.c.

Mapochia gracilis sp. n. Kamerun, SCHUMACHER Wien. ent. Zeit. 31 pp. 245–250.

Metathysanus gen. n. für *Athysanus obsoletus*, DAHL p. 439 Beitr. Naturdenkmalpfl. 3.

Nephoris gen. n. *Jassinæ*, *chalybaea* sp. n. Kissaka, JACOBI p. 39 Ergebn. Zentr.-Afrik. Exp. 4 2.

Odomas gen. n., *myops* sp. n. Ruwenzori, JACOBI p. 32 T.c.

Ozias gen. n. incertae sedis, *pedestris* sp. n. Kissaka, JACOBI p. 40 T.c.

Pachyledra gen. n. *Ledrinae*, *kamerunensis* sp. n. Kamerun, SCHUMACHER Wien. ent. Zeit. 31 pp. 245–250.

Penthimia mudonensis Tenasserim, *nitida* Moulmein, spp. n., DISTANT p. 444 Ann. Nat. Hist. 10.

Petalocephala convexifrons Span. Guinea, *minuta* Kamerun, spp. n., SCHUMACHER Wien. ent. Zeit. 31 pp. 245–250.—*P. raniceps* sp. n. Beni, JACOBI p. 33 Ergebn. Zentr.-Afrik. Exp. 4 L. 2.—*P. bombayensis*, *perakensis*, spp. n., Asia, DISTANT p. 441 Ann. Nat. Hist. 10.

Prolepta tuberculata to *Vangama*, DISTANT p. 446 T.c.

Pseudobalbillus gen. n. *Acocephalinae*, *protrudens* sp. n. Afr. centr., JACOBI p. 37 Ergebn. Zentr.-Afrik. 4 L. 2.

Radhades gen. n. near *Bythoscopus*, *crassus* sp. n. Tenasserim, DISTANT p. 606 Ann. Nat. Hist. 10.

Sitades gen. n. near *Moonia*, *fasciatus* sp. n. Bengal, DISTANT p. 608 T.c.

Tartessus sananas sp. n. New Guinea pl. xlix f. 7 p. 603, DISTANT Tr. ent. Soc. London 1911.

Tettigonia; syn. *Tetigoniella* p. 510, VAN DUZEE Bull. Buffalo Soc. 10.—*T. viridis* var. n. *concolor*, HAUPT p. 184 Berlin ent. Zs. 56.

Tettigoniella sachalinensis n. n. für *fusca* Mats., OSHANIN p. 100 Katalog.—*T. inconspicua* Walk. pl. xlix f. 9, DISTANT p. 603 Tr. ent. Soc. London 1911.

Turitia gen. n. *Ledrinae*, *uniformis* sp. n. Kamerun, SCHUMACHER Wien. ent. Zeit. 31 pp. 245–250.

Typhlocyba comes, HARTZELL Agric. Exp. Sta. New York Geneva Bull. 344 pp. 29–43 pls. i–iv ff. 1–3.—*T.*

rosae, FELT N. Y. St. Mus. Bull. No. 155 p. 65.

Vulturinus ornatus, speciosus, spp. n., Ceylon, DISTANT p. 445 Ann. Nat. Hist. 10.

Xestocephalus agassizi sp. n. Jamaica p. 510, VAN DUZEE Bull. Buffalo Soc. 10.

PSYLLIDAE.

Psyllidarum Catalogus, AULMANN 82 pp.

Beiträge zur Kenntniss der Psyllidae, Böhmisch, ŠULC Rozpr. Česká Ak. Frant. Jos. 19 1910 33 pp. 11 Taf.

Revision der Duda'schen Psylliden-sammlung 3. letzter Teil, ŠULC Čas. Česká Spol. Entomolog. Prag 9 pp. 147-149.

Allotrioza minuta sp. n. p. 433 pl. xxxiv f. 3 & xxxv f. F, CRAWFORD Rec. Ind. Mus. 7.

Apsylla gen. n. type cistellata Buckt. redescribed p. 421 pl. xxxiii figs. C D E K & pl. xxv f. B, CRAWFORD T.c.

Carsidara camerunus sp. n. Kamerun, AULMANN p. 19 Ent. Rdsch. 29.

Diceraopsylla gen. n., brunettii sp. n. E. Himalayas p. 425 pl. xxxiii figs. Q R U & pl. xxxv f. G, CRAWFORD Rec. Ind. Mus. 7.

Euphalerus citri Chota Nagpur and Behar p. 424 pl. xxxiii, *vittatus sp. n.* Calcutta p. 423 figs. I J L M, CRAWFORD T.c.

Eurhinocola gen. n., gravelyi sp. n. Burma p. 422 pl. xxxiii etc., CRAWFORD T.c.

Euryconus gen. n., enderleini sp. n. Neu Guinea, AULMANN p. 117 Ent. Rdsch. 29.

Homotoma distincta sp. n. Behar p. 433 pl. xxxiv, CRAWFORD Rec. Ind. Mus. 7.

Kleiniella gen. n. Ciriacreminae, superba sp. n. O.-Afr., AULMANN pp. 100-101 Ent. Rdsch. 29.

Kwayama hirsuta sp. n. W. Ghats p. 427 pl. xxxiii, CRAWFORD Rec. Ind. Mus. 7.

Livia marginata sp. n. Connecticut p. 8 ff. 3 7, PATCH Psyche 19 pp. 5-8 pls. 1 & 2.

Neotriozella ottawanensis sp. n. p. 231 fig. N. America, PATCH Agric. Exp. Sta. Maine Bull. 202.

Pachypsylla tridentata, dubia, p. 224, *pallida* p. 225, figs., *spp. n.*, N. America, PATCH T.c.

Pauropsylla depressa p. 429 pl. xxxiv, *tuberculata* p. 430 pl. xxxiv, *spp. n.*, Behar, CRAWFORD Rec. Ind. Mus. 7.

Phacopteron p. 419, *lentiginosum* re-described p. 420 pl. xxxiii, CRAWFORD T.c.

Phacosema guineensis Span.-Guinea p. 35, *zimmermanni* O.-Afr. p. 123, *spp. n.*, AULMANN Ent. Rdsch. 29.

Psylla winkleri sp. n. Kamerun, RUEBSAAMEN Marcellia 9 1910 p. 23 fig.—*P. simlae sp. n.* Himalaya p. 426 pl. xxxiii, CRAWFORD Rec. Ind. Mus. 7.—*P. breviata* p. 220, *gilletti* Riley p. 221, *ribis* Riley, *brevistigmata*, p. 222, *cerasi* fig., *coryli*, p. 223, figs., N. America, *spp. n.*, PATCH Agric. Exp. Sta. Maine Bull. 202.—*P. mali*, Lebensweise Entwicklung (Russ.), PORČINSKIJ Trd. b. entom. 9 9 pp. 17-21 f. 1.

Psyllopa obscura p. 432 pl. xxxiv, *punctipennis* p. 431 pl. xxxiv, *spp. n.*, Behar, CRAWFORD Rec. Ind. Mus. 7.

Rhinopsylla stylata sp. n. India p. 426 pl. xxxiii, CRAWFORD T.c.

Tenaphalara elongata sp. n. Behar p. 432 pl. xxxiv, CRAWFORD T.c.

Trioza; Monographia spec. *palae-arcticae*, ŠULC Věstn. Král. Česká Spol. Náuk Prag 1910 No. 27 p. 34 10 Taf.—*T. analis* Himalaya p. 429, *fletcheri* Behar p. 434 pl. xxxiv, *spp. n.*, *fletcheri* var. n. *minor* p. 434 pl. xxxv, *gigantea* p. 428 pl. xxxiii, *hyalina* p. 428 pl. xxxiv, *spp. n.*, *urticae* p. 434, CRAWFORD Rec. Ind. Mus. 7.—*T. aylmeriae* p. 225, *dubia* p. 226, *forcipula* p. 227, *stylifera* p. 229, figs., N. America, *spp. n.*, PATCH Agric. Exp. Sta. Maine Bull. 202.—*T. crawfordi* n. n. für *acutipennis*, *louisianae* für *nigra*, *arizonae* für *marginata*, *pomonae* für *assimilis*, AULMANN p. 144 Ent. Rdsch. 29.

Udamostigma tessmanni sp. n. Span.-Guinea, AULMANN p. 10 Ent. Rdsch. 29.

APHIDAE.

Food plant catalogue of the *Aphidae* of the world, Part 1, PATCH Agric. Exp. Sta. Maine Bull. 202 pp. 179-214.

Williams' "The Aphididae of Nebraska"; a critical review; DAVIS Univ. Nebr. Stud. 11 pp. 253-291 pls. i-viii.

List of the *Aphidae* of the Hawaiian Islands, FULLAWAY Proc. Hawaiian Ent. Soc. 2 pp. 163-165.

Kritische Bemerkungen über exotische *Chermes*-Arten (Russ.), CHOLODKOVSKIJ Rev. russ. ent. 12 pp. 524-530.

Generationswechsls bei einigen Aphididae, KLODNITSKI Zool. Jahrb. Jena Abt. f. Syst. 33 1912 pp. 445-520.

Amphorophora latysiphon sp. n. p. 408 ff. 10-13 California, DAVIDSON J. Econ. Ent. 5.—*A. rubi* p. 411, DAVIDSON T.e.

Aphis pseudohieracii n. n. [? sp. n.] for *hieracii* Buckton nec K., THEOBALD p. 15 Hastings Nat. 2.—*A. idaei* p. 78, *polygona* p. 80, spp. n., Niederlande, VAN DER GOOT Tijdschr. Ent. 55.—*A. abbreviata* sp. n. p. 170 ff. 288-290 & 311 Maine, PATCH Agric. Exp. Sta. Maine Bull. 202.—*A. citricola* p. 273 Chile, *gomphorocarpi* p. 275 Madeira, *betulinus* p. 276 Deutschl.; spp. n., GOOT Jahrb. Hamburg anst. 29.—*A. rumicis*, life-cycle, THEOBALD J. Board Agric. 19 pp. 466-476 pl.—*A. cardui*, *atriplicis* ff. 8 & 9, p. 407, *salicicola*, *maidis*, p. 408, DAVIDSON J. Econ. Ent. 5.—*A. brassicae*, Vermehrung, Verwandlung, Beschreibung, Eiablage, Parasiten (Russ.), DOBROVLIANSKIJ Choziajstvo 7 pp. 128-134 168-177 figs. 1-8; HERRICK & HUNGATE Agric. Exp. Sta. New York Bull. 300 pp. 715-746 ff. 284-292.—*A. papaveris* in Denmark, ROSTRUP København Tids. Landbr. Planteavl 19 pp. 193-213; HEROLD Brömberg Mitt. Inst. Landw. 5 pp. 109-124.

Calaphis betulaecolens p. 404 ff. 1 & 2, *castaneae* p. 405 ff. 3 & 4, DAVIDSON J. Econ. Ent. 5.

Cerataphis insularis sp. n. Java, VAN DER GOOT Tijdschr. Ent. 55 p. 325.—*C. lantaniae* p. 404, DAVIDSON J. Econ. Ent. 5.

(N-9210 j)

Chermes occidentalis, wahrscheinlich = *viridis* mit aberrantem *Cyclus* (Russ.); CHOLODKOVSKIJ Rev. russ. ent. 12 pp. 597-600.

Dryobius amygdali sp. n. Palastina, GOOT p. 280 Jahrb. Hamburg Anst. 29.

Eichochaitophorus gen. n. p. 721, *populifolii* sp. n. p. 722 f. 231 California, ESSIG Pomona Coll. J. Ent. 4.

Eriosoma lanigera, nec *Schizoneura* WILSON p. 219 Canad. Ent. 44.

Euceraphis betulae p. 405 f. 5, *flava* sp. n. p. 406 ff. 6 & 7 California, DAVIDSON J. Econ. Ent. 5.

Forda formicaria, osservaz. morfologiehe e biologiche, LOMBARDI Roma Rend. Acc. Lincei 21 Sem. 1 1912 pp. 809-814.

Fullawaya gen. n. p. 735, *saliciradicis* sp. n. p. 737 ff. 235-237 California, ESSIG Pomona Coll. J. Ent. 4.

Glyphina aculeata, *pilosa*, spp. n., Deutschl.; DAHL p. 434 Beitr. Naturdenkmalpfl. 3.

Hamamelistes tullgreni sp. n. Hilversum, MEIJERE p. 91 Zeitschr. wiss. Insektbiol. 8.

Illinoia osmaroniae p. 153, *macrosiphum* p. 155, spp. n., Oregon, WILSON Canad. Ent. 44.

Lachnus rosarum sp. n. Niederlande, VAN DER GOOT Tijdschr. Ent. 55 p. 89.—*L. curvipes* sp. n. p. 161 ff. 269-276 & 299-301 Maine, PATCH Agric. Exp. Sta. Orono Bull. 202.—*L. pseudotugae* sp. n. Oregon, WILSON p. 302 Canad. Ent. 44.—*L. occidentalis*, WILSON p. 193 T.e.

Macrosiphum circumflexum = (*Siphonophora callae* Henr.), SCHOUTEDEN p. 169 Ann. Soc. ent. Belgique 56.—*M. lineatum* sp. n. Niederlande, VAN DER GOOT Tijdschr. Ent. 55 p. 59.—*M. orientale* sp. n. Java, VAN DER GOOT p. 322 T.e.—*M. chrysanthemigranarium*, *solanifolii*, p. 411, DAVIDSON J. Econ. Ent. 5.

Micrella gen. n. p. 716, *monelli* sp. n. p. 717 f. 230 California, ESSIG Pomona Coll. J. Ent. 4.

Myzus whitei sp. n. England, THEOBALD p. 110 pl. iii. f. 6 J. econ. Biol. 7.—*M. fragariae* sp. n. England, THEOBALD p. 223 Entomologist 45.

M. mespili p. 64, *pilosus* p. 68, *lamii* p. 69, spp. n., Niederlande, VAN DER GOOT Tijdschr. Ent. 55.—*M. varians* sp. n. p. 409 ff. 14-19 California, DAVIDSON J. Econ. Ent. 5.

Neoprociphilus gen. n. type *Pemphigus attenuatus* p. 174 ff. 293-297 & 314, PATCH Agric. Exp. Sta. Maine Bull. 202.

Pemphigus mordwilkoii p. 493 ff. 3 & 4, *nainitalensis* p. 494 ff. 5-7, *imaicus* p. 495 ff. 8-10, spp. n., auf *Populus ciliata* Himalaya, CHOLODKOVSKIJ Rev. russ. ent. 12.

Phorodon carduinum p. 409, DAVIDSON J. Econ. Ent. 5.

Phyllaphis coweni (*Cryptosiphum tahoense*) p. 404, DAVIDSON T.c.

Phylloxera crassirostris sp. n. Deutschl., DAHL p. 435 Beitr. Naturdenkmalpf. 3.—*P. vastatrix*, biologia, FOÀ in Grassi Contributo conosc. Filloserie pp. i-lxxv 12 figs. 1 tav.; *Phylloxera galle inversées*, PICARD C. R. soc. biol. Paris 73 pp. 559-561.

Phylloxerinae, contributi, GRASSI Rend. Acc. Lincei Roma 21 Semestre 2 pp. 543-548; e *P. vastatrix*: studi anatomici, sistematici, dietologici, etc., GRASSI, FOÀ, GRANDORI, BONFIGLI & TOPPI Roma 1912 pp. A-L + 1-456 18 fig. 19 tav.

Prociphilus tessellata, stages, PERGANDE U. S. Dept. Agric. Ent. Techn. 24 pp. 1-28 ff. 1-12.

Pterocallis minimus sp. n. Niederlande, VAN DER GOOT Tijdschr. Ent. 55 p. 83.

Rhopalisiphum brittenii sp. n. England, THEOBALD p. 107 pl. ii f. 2 J. econ. Biol. 7.—*R. aconiti* p. 73, *ribesina* p. 75, spp. n., Niederlande, VAN DER GOOT Tijdschr. Ent. 55.—*R. solani*, forms, life-history, THEOBALD pp. 165-168 Entomologist 45.

Schizoneura lanigera americana, habits, PATCH J. Econ. Ent. 5 pp. 395-398 pl. x; life history, PATCH Agric. Exp. Sta. Maine Bull. 203 pp. 235-256 ff. 438-462; life history, PATCH Science 36 p. 30; migration, PATCH J. econ. Ent. 5 pp. 375-398.

Syndobius macrostachyae p. 727 f. 233, *salicicorticis* p. 731 f. 234, California, spp. n., ESSIG Pomona Coll. J. Ent. 4.

Tetraneura africana sp. n. Kairo, GOOT p. 282 Jahrb. Hamburg Anst. 29.

Thomasia crucis sp. n. p. 741 ff. 238 & 239 California, ESSIG Pomona Coll. J. Ent. 4.

Toxoptera muhlenbergiae sp. n. U.S. p. 1 ff. 1-5, life history p. 9, PHILLIPS & DAVIS U. S. Dept. Agric. Ent. Techn. No. 25 Pt. 1 pp. 1-16 ff. 1-9 pl. i.—*T. graminum*, WEBSTER & PHILLIPS U. S. Dept. Agric. Ent. Bull. 110 pp. 1-153 pls. i-ix ff. 1-48.

Tullgrenia gen. n. for *Tychea phaseoli*, VAN DER GOOT Tijdschr. Ent. 55 p. 96.

ALEURODIDAE.

Aleyrodes cardini p. 148, *trachoides* p. 151, spp. n., Cuba, BACK Canad. Ent. 44.—*A. citri*, natural history, MORRILL & BACK Bull. 102 U. S. Dep. Agric. Ent.

COCCIDAE.

Catalogue of recently described *Coccidae*, 4, SASSER U. S. Dept. Agric. Ent. Techn. 16 Pt. 6 pp. 83-97.

Die Schildläuse (*Coccidae*) Europas, Nordafrikas und Vorderasiens, einschliesslich der Azoren, der Kanaren und Madciras. Mit Anleitung zum Sammeln, Bestimmen und Aufbewahren, LINDINGER Stuttgart (E. Ulmer) 1912 (8 + 388). 19 cm. Geb. 9 M.

Coccidae Bohemiae, ŠULC Čas. Česk. Spol. Entomolog. Prag 9 pp. 30-39.

Catalogue des cochenilles observées en Algérie, TRABUT Alger Bul. soc. 1911 pp. 51-64 fig.

Coccidae in Maine, JOHANNSEN Bull. 207 Maine Exp. Stat. pp. 431-448 2 pls.

Some scale insects of Mississippi, with notes on certain species from Texas, HERRICK Agric. Exp. Sta. Mississippi Tech. Bull. 2 pp. 1-78 pls. i-xxxiii.

Preliminary list of the scale insects of South Carolina with some notes on the behavior of *Lecanium quercifex* Fitch, GEE J. Econ. Ent. 5 pp. 484-486.

Histoire de la cochenille au Mexique, DIGUET Paris Bul. soc. nat. acclim. 58 1911 pp. 330-334.

Aclerda signoreti sp. n. Mittel-Europa, LINDINGER Schildläuse p. 170.

Aspidiotus bavaricus sp. n. Europa, LINDINGER p. 31 Zeitschr. wiss. Insektbiol. 8.—*A. ephedrarum* p. 139 Sardinien, *lenticularis* p. 149 Dalmatien, *maderensis* p. 189 Madeira, *tastranus* p. 229 Kanaren, spp. n., LINDINGER Schildläuse.—*A. reticulatus* p. 17, *euphorbiae*, *schultzei*, p. 18, spp. n., S.-W.-Afr., NEWSTEAD Denkschr. Ges. Jena 16.—*A. perniciosus*, HASEMAN Agric. Exp. Sta. Missouri Bull. 98 pp. 61–116 ff. 1–16.—*A. uvae*, genitalia, natural history, ZIMMER Bull. U. S. Dep. Agric. Ent. 97 pt. 7.

Chionaspis austriaca sp. n. Österreich, LINDINGER Schildläuse p. 252.—*C. mytilaspiformis*, *africana*, *subnudata*, spp. n., S.-W.-Afr., NEWSTEAD pp. 19–20 Denkschr. Ges. Jena 16.—*C. nigerensis* sp. n. p. 308 f. 3, VAYSSIÈRE Bull. Soc. ent. France 1912.

Chrysomphalus aurantii, QUAYLE Agric. Exp. Sta. California Bull. 222 pp. 99–150 ff. 1–37.

Cissococcus ? *oahuensis* sp. n. Hawaii p. 149 pl. v, EHRHORN Proc. Hawaiian Ent. Soc. 2.

Coccus cacti, forms, *confusus capensis* f. n., GREEN pp. 79–93 pl. i J. econ. Biol. 7.—*C. mangiferae* and *C. acuminatus* p. 147, EHRHORN Proc. Hawaiian Ent. Soc. 2.

Colobopyga gen. n. p. 279, *magnani* sp. n. Buenos Ayres p. 281, BRÉTHES An. Mus. Buenos Aires 23.

Diaspis syriaca sp. n. Syria, LINDINGER Schildläuse p. 264.—*D. pentagona*, *nemici*, BERLESE Piaciensa 1910 30 pp. fig. tav.; nuovi endofagi, RIBAGA Coltivatore 56 p. 46.

Epidiaspis subterranea sp. n. Frankr., LINDINGER Schildläuse p. 174.

Eriococcus greeni Parasiten, KURDIUMOV Rev. russ. ent. 12 pp. 329–335 ff. 1–8.—*E. borealis* Colorado, COCKERELL J. Econ. Ent. 5 p. 295.

Erium lichtensioides syn. *Eriococcus artemisiae* p. 398, SASSCER Ent. News 23.

Fiorinia; spp. United States, *theae* p. 76 pls. x & xi, *floriniae* p. 79 pls. xii & xiii, *japonica* p. 81, SASSCER U. S. Dept. Agric. Ent. Techn. 16 Pt. 5.

(N-9210 j)

Heliococcus gen. n., *bohemicus* sp. n. Böhmen, ŠTULO Čas. České Spol. Entomolog. Prag 9 p. 39 Taf.

Hemichionaspis minor, enemies, TOWNSEND J. Econ. Ent. 5 pp. 256–263.

Icerya jacobsoni sp. n. Java, GREEN Tijdschr. Ent. 55 p. 316.—*I. purchasi*, origine ed evoluzione degli elementi sessuali femminili, PIERANTONI Archivio zool. ital. 5 pp. 321–400 7 tav.; anatomy, JOHNSTON Ann. Ent. Soc. Amer. 5 pp. 383–388 pl. xxviii.

Kermes cordiformis sp. n. Triest, LINDINGER Schildläuse p. 286.

Lecanium opimum sp. n. Java, GREEN Tijdschr. Ent. 55 p. 313.

Lepidosaphes juniperi sp. n. Anatolien, LINDINGER Schildläuse p. 188.—*L. beckii*, QUAYLE Agric. Exp. Sta. California Bull. 226 pp. 310–340 ff. 1–12.

Lophococcus mirabilis var. n. *tricornis*, NEWSTEAD p. 16 Denkschr. Ges. Jena 16.

Margarodes; synonymy, list of recognized species and distribution, p. 65, *indicus* p. 69 pl. ii figs. 1–8 pl. iii figs. 9–14, 19, 23 Nepal, *papillosus* p. 74 S. India, *niger* p. 75 S. India, spp. n., *capensis* pl. iii fig. 21, *formicarium* pl. iii fig. 20, *rileyi* nymphal cysts figd. pl. iii f. 18, *trimeni* adult female, nymphal cysts and anterior limb, pl. iii figs. 15, 16–17 & 22, GREEN Rec. Ind. Mus. 7 pt. 1 1912.

Monophlebus africanus sp. n. S.-Afr., NEWSTEAD p. 15 Ergebn. Sudafrik. Denkschr. Ges. Jena 14.

Orthezia urticae Entwicklungsgeschichte und Lebensweise von, KIRCHNER Stuttgart Jahreshefte Ver. Natk. 68 pp. 1–17.

Phenacoccus betheli sp. n. Arizona, COCKERELL p. 301 Canad. Ent. 44.

Pseudococcus calluneti sp. n. Deutschl., LINDINGER Schildläuse p. 90.—*P. marchali* sp. n. Africa occ. p. 306 figs. 1–2, VAYSSIÈRE Bull. Soc. ent. France 1912.—*P. lounsburyi* p. 179 ff. 2 & 3 pl. xiv ff. 4–6 pl. xvi f. 2, *capensis* p. 182 pl. xvi f. 3, *wachendorfae* p. 183 f. 4, *muraltiae* p. 184 pl. xiv ff. 1 & 2 pl. xvi f. 5, *fragilis*
d 43–2

p. 186 pl. xvi f. 6, spp. n., South Africa, BRAIN Ann. Ent. Soc. Amer. 5,

Pulvinaria innumerabilis, COCKERELL Auk 29 p. 400.

Ripersia glandulifera sp. n. S.-W.-Afr., NEWSTEAD p. 17 Denkschr. Ges. Jena 16.

Saissetia oleae, QUAYLE & RUST Agric. Exp. Sta. California Bull. N. 223 pp. 151-200 ff. 1-24 pls. i-viii.

Targionia laurina sp. n. Madeira, LINDINGER Schildläuse p. 198.

ELLIPOPTERA or ANOPLURA.

Notes sur les Pédiculidés, NEUMANN Paris Bul. zool. 87 1912 pp. 143-145 av. fig. et Arch. parasit. Paris 14 1911 pp. 401-414 av. fig.

Enderleinellus gen. n. für *Sphaerocephalus* Burm., FAHRENHOLZ p. 56 Zool. Anz. 39.

Haematopinus incisus sp. n. O.-Afr., HARMS p. 290 Zool. Anz. 40.—*H. longus* p. 141 figs. 1-4, *H. (Polyplax) aculeatus* p. 143 figs. 5-6, spp. n., NEUMANN Bull. Soc. Zool. France 37.—*H. (Linognathus) squamulatus* p. 401 figs. 1-3, *aulacodi* p. 403 figs. 4-7, spp. n., *L. adventicius* n. subsp. p. 406 fig. 8, NEUMANN Arch. parasit. 14.—*H. phacochoeri*, syn. *peristicus*, PAINE Ent. News 23 p. 468.—*H. ventricosus*, WATERSTON p. 116 Ent. Mag. 48.

Pedicinus rhesi sp. n. on *Macacus rhesus*, FAHRENHOLZ p. 54 Zool. Anz. 39.

Pediculus vestimenti, natural history, FANTHAM pp. 36 & 37 Ann. trop. Med. 6; feeding habits, GIRAULT Ent. News 23 pp. 339-344.

Phthirpedicinus gen. n. near *Pedicinus*, *micropilosus* sp. n. on *Macacus rhesus*, FAHRENHOLZ pp. 54-55 Zool. Anz. 39.

THYSANOPTERA.

Nowe formy Przyzleńców; z 1 tablicą. [Thysanopterorum genera et species novae cum tabula una.] SCHILLE Kraków Spraw. Kom. fizyogr. 45 1911 (dział II) pp. 3-10 (no names have been received for this paper).

Revision of classification, *Polystigmata* new suborder, and four new families, BAGNALL pp. 220-222 Ann. Nat. Hist. 10.

Thysanoptern, Metamorphose, Nahrungsaufnahme (Russ.), KURDIUMOV Mess. entomol. Kiev 1 pp. 89-96 ff. 1-4.

Acanthothrips nodicornis, HOOD p. 142 Canad. Ent. 44.

Aeolothrips nasturtii sp. n. California p. 2 pl. i ff. 1-4, JONES U. S. Dept. Agric. Ent. Techn. No. 23 Pt. 1.—*A. vittipennis* p. 129 pl. iv ff. 1 & 2, *crassus* p. 130 ff. 5 & 6, spp. n., U.S., HOOD Proc. Ent. Soc. Washington 14.

Anaphothrips litoralis ff. n. *macroptera* and *brachyptera*, SCHILLE p. 237 Ent. Zeitschr. 25.—*A. zeue* p. 15, *albus* sp. n. California p. 16 pl. iv ff. 5-8, JONES U. S. Dept. Agric. Ent. Techn. 23 Pt. 1.

Aneurothrips gen. n., *punctipennis* sp. n. Java, KARNY Marcellia 11 p. 117.

Anthothrips tritici sp. n., *aculeata* Gouv. Poltava, Schadlinge des Getroides, Beschreibung, Lebensweise, Metamorphose etc. (Russ.), KURDIUMOV Poltava Trd. selisk.-choz. opytn. stancii 6 pp. 1-44 pl. i & figs. 1-9.—*A. aculeata*, *tritici*, sp. Metamorphose (Russ.), KURDIUMOV Mess. entomol. Kiev 1 pp. 94-96 f. 3 4.—*A. nigricornis* p. 17 pl. v ff. 1-4, *flavipes* p. 18 ff. 5-7, spp. n., California, JONES U. S. Dept. Agric. Ent. Techn. 23 Pt. 1.

Bactrothrips gen. n., *longiventris* sp. n. Span. Guinea, KARNY p. 131 Ent. Rdsch. 29.

Bagnallia agnessae, male of (*B. halidayi* ♀), BAGNALL p. 193 J. econ. Biol. 7.

Bregmatothrips gen. n. p. 66, *venustus* sp. n. U.S. and Mexico p. 67 pl. iv f. 2, HOOD Proc. Biol. Soc. Washington 25.

Cephalothrips monilicornis f. n. *macroptera*, SCHILLE p. 245 Ent. Zeitschr. 25.

Chaetothrips gen. n., *uzeli* sp. n. Galizien, SCHILLE p. 242 T.c.

Cephalothrips traegardhi sp. n. Natal. TRYBOM Ark. Zool. 7 No. 33 p. 23 ff. 27-29.

Chirothrips manicata f. n. *aptera*, SCHILLE p. 233 Ent. Zeitschr. 25.

Cricothrips gen. n. nahe *Ctenothrips* p. 2, *karnyi* sp. n. p. 3 ff. 1-4 Zululand, TRYBOM Ark. Zool. 7 No. 33.

Cryptothrips fuliginosa, *unicolor*, spp. n., Galizien, SCHILLE p. 245 Ent. Zeitschr. 25.—*C. tenuicornis* p. 140, *fuscipennis* p. 142, *intorquens* p. 145, spp. n., Java, KARNY Marcellia 11.—*C. reticulata* p. 9 ff. 6-13 Natal and Zululand, *fuscicauda* p. 13 ff. 14-15 Natal, spp. n., TRYBOM Ark. Zool. 7 No. 33.—*C. junctus* sp. n. Michigan, HOOD p. 139 Canad. Ent. 44.—*C. salicis* sp. n. California p. 20 pl. vi ff. 1-3, JONES U. S. Dept. Agric. Ent. Techn. 23 Pt. 1.—*C. longiceps* p. 153 pl. viii f. 5, *exiguus* p. 154 pl. viii f. 4, spp. n., U.S., HOOD Proc. Ent. Soc. Washington 14.

Dicaiothrips fulcatus sp. n. W.-Afr., KARNY p. 150 Ent. Rdsch. 29.

Diceratothrips harti p. 12 ff. 1 & 3, *longipes* p. 14 ff. 2 & 4, spp. n., Texas, HOOD Proc. Biol. Soc. Washington 25.

Dolerothrips laticauda p. 124, *crassicornis* p. 126, spp. n., Java, KARNY Marcellia 11.

Dolichothrips gen. n., *longicollis* sp. n. Java, KARNY p. 299 Zool. Anz. 40.

Docessissophothrips major sp. n. [S. America?], BAGNALL p. 215 Ann. Nat. Hist. 9.

Euthrips flavicinctus sp. n. Java, KARNY Marcellia 11 p. 115.—*E. chrhornii* ♂, *longirostrum*, p. 12 pl. iii ff. 6-9, *costalis* p. 13 pl. iv ff. 1-4, spp. n., California, JONES U. S. Dept. Agric. Ent. Techn. No. 23 Pt. 1.—*E. pyri*, PARROTT Agric. Exp. Sta. New York Bull. No. 343 pp. 1-28 ff. 1-5 pls. i-iv; PARROTT J. Econ. Ent. 5 pp. 184-188.

Frankliniella stylosa sp. n. Maryland p. 134 pl. v f. 7, HOOD Proc. Ent. Soc. Washington 14.

Franklinothrips gen. n. type *Aelothrips vespiformis* p. 75 ff. 1-3, BACK Ent. News 23.

Gastrothrips gen. n., *ruficauda* p. 156 pl. viii ff. 6 & 7, *texanus* p. 157 pl. iv f. 7, spp. n., U.S., HOOD Proc. Ent. Soc. Washington 14.

Glyptothrips gen. n., *flavescens* sp. n. N. Amer. p. 116, HOOD Psyche 19.

Gynaikothrips litoralis p. 133 fig., *crassipes* p. 137, spp. n., Java, KARNY Marcellia 11.

Haplothrips exiguus sp. n. Austria p. 326, *jonesii* n. n. für *Anthothrips nigricornis* Jones 1912 p. 344, KARNY Zool. Ann. 4.—*H. graminis* sp. n. Texas and Mexico p. 69 f. 3, HOOD Proc. Biol. Soc. Washington 25.

Heliothrips phaseoli sp. n. Texas and Mexico p. 113 pl. viii ff. a-c, HOOD Psyche 19.—*H. punctipennis* Mexico and Texas p. 135, *marginipennis* Mexico p. 136, *cinctipennis* Illinois p. 137, spp. n., HOOD Proc. Ent. Soc. Washington 14.—*H. rubrocinctus*, RUSSELL U. S. Dept. Agric. Ent. Bull. 99 Pt. 2 pp. 17-29 pls. iv v.—*H. fasciatus*, RUSSELL U. S. Dept. Agric. Ent. Bull. No. 118 pp. 1-45 ff. 1-11.—*H. haemorrhoidalis*, life-history, RUSSELL Circ. 151 U. S. Dep. Agric. Ent.

Hoodia bagnalli sp. n. (= *L. hradeensis* of Bagn.), KARNY p. 470 Tr. ent. Soc. London 1912.

Hoplandrothrips subgen. n. (*Phloeothrips*) p. 145, HOOD Proc. Ent. Soc. Washington 14.

Hoplothrips? natalensis sp. n. Natal, TRYBOM Ark. Zool. 7 No. 33 p. 17 ff. 16-21.—*H. grandis* sp. n. Argentina, KARNY p. 324 Zool. Ann. 4.

Hydatothrips gen. n., *adolphi-friderici* sp. n. Bolero-See, KARNY p. 281 Ergebn. Zentr. Afrik. Exp. 4 10.

Hystriothrips gen. n., *phasgonura* sp. n. Span. Guinea, KARNY p. 132 Ent. Rdsch. 29.

Idolothrips nigricornis sp. n. Sp. Guinea, KARNY p. 139 T.c.

Leeuwenia gen. n., *gladiatrix* sp. n. Java, KARNY Marcellia 11 p. 161 figs.

Leptogastrothrips gen. n. nahe *Leurothrips* p. 28, *reuteri* sp. n. p. 29 ff. 30-32 Zululand, TRYBOM Ark. Zool. 7 No. 33.

Leptothrips reticulatus sp. n. Madoira, KARNY p. 22 Fauna exot. 2.—*L. constrictus* sp. n. Java, KARNY Marcellia 11 p. 150.

Limothrips denticornis, Metamorphose (Russ.), KURDIUMOV Mess. entomol. Kiev 1 pp. 94-96 ff. 1 2.—*L. cerealium*, parasite des pois, PROSSEN Journ. Hort. Vitic. Suisse 7 1911 p. 120; Massenhaftes Auftreten, LUDWIG Zs. wiss. Insektenbiol. 8 p. 71.—*L. setariae* sp. n. California p. 8 pl. iii ff. 1-5, JONES U. S. Dept. Agric. Ent. Techn. No. 23 Pt. 1.

Liothrips longirostris p. 154, *brevitubus* p. 156, spp. n., Java, KARNY Marcellia 11.—*L. varicornis* sp. n. Mexico p. 74 f. 6, HOOD Proc. Biol. Soc. Washington 25.—*L. seticollis* sp. n. Paraguay, KARNY p. 471 Tr. ent. Soc. London 1912.

Machatothrips braueri sp. n. Kamerun, KARNY p. 23 Fauna exot. 2.

Mecynothrips simplex sp. n. Philippines, BAGNALL p. 216 Ann. Nat. Hist. 9.

Merothrips gen. n., *morgani* sp. n. Illinois p. 132 pl. v ff. 1-3, HOOD Proc. Ent. Soc. Washington 14.

Mitothrips gen. n. (*Aeolothripidae*), *megalops* sp. n. Brit. Ostafrika, TRYBOM Entomol. Tidskr. 33 pp. 145-151 Taf.

Neoheegeria mendax sp. n. Java, KARNY Marcellia 11 p. 122.

Pachythrips phaeoptera sp. n. Galizien SCHILLE p. 236 Ent. Zeitschr. 25.

Pactothrips flavescens sp. n. Illinois p. 116 pl. ix ff. a-c, HOOD Psyche 19.

Panchaetothrips gen. n., *indicus* sp. n. Madras, BAGNALL Rec. Ind. Mus. 7 p. 257.

Panurothrips inermis sp. n. Sp. Guinea, KARNY p. 138 Ent. Rdsch. 29.—*P. coriaceus* sp. n. India, BAGNALL p. 216 Ann. Nat. Hist. 9.

Phloeothrips albovittata sp. n. Galizien, SCHILLE p. 245 Ent. Zeitschr. 25.—*P. jennei* Georgia p. 21 pl. vi ff. 4-6, *armiger* California p. 23 pl. vii ff. 1-4, JONES U. S. Dept. Agric. Ent.

Techn. 23 Pt. 1.—*P. vittatus* sp. n. Michigan p. 11, HOOD Proc. Biol. Soc. Washington 25.—*P. (Hoplandrothrips) xanthopus* p. 145 pl. vi ff. 6 & 7a b, *juniperinus* p. 146 pl. vii ff. 5 & 6, *junebris* p. 148 ff. 1-4, *microps* p. 150 ff. 7 & 8, *insolens* p. 152 pl. v f. 4 & viii ff. 1-3, spp. n., U.S., HOOD Proc. Ent. Soc. Washington 14.

Prionothrips gen. n. p. 229, *niezabitowskii* sp. n. p. 232 Galizien, SCHILLE Ent. Zeitschr. 25.

Physopus basicornis sp. n. loc. ? REUTER Marcellia 8 1909 p. 35 1 fig.

Physothrips latus sp. n. England, BAGNALL p. 191 J. econ. Biol. 7.

Rhopalothrips gen. n. p. 72, *bicolor* sp. n. Mexico p. 73 f. 5 & pl. iv, HOOD Proc. Biol. Soc. Washington 25.

Rhynchothrips gen. n., *tenuirostris* sp. n. Java, KARNY p. 297 Zool. Anz. 40.

Rhynchothrips gen. n. p. 141, *pruni* p. 142 pl. vi f. 4, *dentifer* p. 143 f. 3, spp. n., U.S., HOOD Proc. Ent. Soc. Washington 14.

Scopaeothrips gen. n. p. 70, *unicolor* sp. n. Texas p. 71 f. 4, HOOD Proc. Biol. Soc. Washington 25.

Sericothrips apteris ♂ p. 6 pl. ii f. 1, *albus* p. 6 ff. 2-5, *moultoni* p. 7 ff. 6-9, spp. n., U.S., JONES U. S. Dept. Agric. Ent. Techn. No. 23 Pt. 1.

Stephanothrips gen. n. nahe *Bebolothrips* p. 42, *buffai* sp. n. p. 43 ff. 43-54 Natal, TRYBOM Ark. Zool. 7 No. 33.

Stomatothrips gen. n. p. 63, *flavus* sp. n. U.S. and Mexico p. 64 f. 1, HOOD Proc. Biol. Soc. Washington 25.

Thrips kroli sp. n. Galizien, SCHILLE p. 241 Ent. Zeitschr. 25.—*T. alni tenella* n. subsp. Natal, TRYBOM Ark. Zool. 7 No. 33 p. 6 f. 4.—*T. femoralis* sp. n. Georgia p. 4 pl. i ff. 5-8, JONES U. S. Dept. Agric. Ent. Techn. No. 23 Pt. 1.—*T. pallicornis* sp. n. Illinois p. 138 pl. v ff. 5 & 6, HOOD Proc. Ent. Soc. Washington 14.

Trichothrips zuluensis sp. n. Zululand, TRYBOM Ark. Zool. 7 No. 33 p. 20 ff. 22-26.—*T. anomocerus* sp. n. Maryland, HOOD p. 137 Canad. Ent. 44.

Urothrips bagnalli sp. n. Natal, TRYBOM Ark. Zool. 7 No. 33 p. 33. ff. 33-44.

Zygothrips americanus sp. n. United States p. 114 pl. viii f. d, HOOD Psycho 19.—*Z. pallidus* Texas p. 140 sp. n., HOOD Proc. Ent. Soc. Washington 14.

PSOCOPTERA.

Anopistoscena gen. n., *specularifrons* sp. n. Seychellen, ENDERLEIN pp. 298-299 Zool. Anz. 39.

Archipsocus sp., notes, figures in text of male and female, plate of web, pp. 71-72, GREEN Spolia Zeylan 8.—*A. recens*, Gespinnste, ENDERLEIN Notes Mus. Leiden 34 pp. 157-160.

Ectopsocus strauschi = (*Peripsocus opulentus* NAV.), NAVÁS p. 70 Mem. Ac. Barcelona 10 No. 9.

Empheriella gen. n., *denervosa* sp. n. Seychellen, ENDERLEIN p. 305 Zool. Anz. 39.

Pentathyrus gen. n., *vespertilio* sp. n. Madagascar, ENDERLEIN p. 300 T.c.

Peripsocus umbrosus sp. n. Granada, NAVÁS p. 210 pl. iv f. 5 Bol. Soc. Aragon. 10 1911.

Scoliopsyllopsis gen. n., *latreillei* sp. n. Frankreich, ENDERLEIN p. 304 Zool. Anz. 39.

Thylacomorpha gen. n., *symmetrolepis* sp. n. Seychellen, ENDERLEIN p. 303 T.c.

Titella gen. n. near *Amphigerontia* p. 196, *rufus* sp. n. Peru p. 197, NAVÁS Broteria 10.

Udamolepis gen. n., *pilipennis* sp. n. O.-Africa, ENDERLEIN pp. 301 & 302 Zool. Anz. 39.

Vulturops gen. n. p. 267 subf. n., *termitorum* sp. n. Peru p. 269 ff. 1-3, TOWNSEND Ent. News 23.

LIPOPTERA or MALLOPHAGA.

Metamorphosis, OUDEMANS Ber. Nederl. ent. Ver. 3 p. 278.

Mallophaga on *Lagopus mutus*, EVANS p. 280 Ann. Scott. Nat. Hist. 1912.

Mallophaga on *Alle alle*, EVANS pp. 265 & 266 P. Physic. Soc. Edinburgh 18.

Colpocephalum painei sp. n. Texas, MCGREGOR Ent. News 23 p. 305 f. 1.—*C. morsitans* sp. n. p. 15 f. 3 Alaska, KELLOGG & MANN Ent. News 23.—*C. dominicanum* p. 63, *tigrum* p. 64, Mexico, spp. n., KELLOGG & MANN Ent. News 23.

Degeeriella oliveri sp. n. p. 367 Kermadec Islands, JOHNSTON & HARRISON Trans. N. Zeal. Inst. 44.

Docophorus; notes and criticisms, WATERSTON pp. 126-128 Trans. Perthsh. Soc. 5.—*D. merguli*, EVANS p. 265 Pr. R. Physic. Soc. Edinburgh 18.—*D. melanocephalus*, on *Tringa*, WATERSTON p. 262 Ann. Scott. Nat. Hist. 1912.—*D. nirmoides* var. n. *major*, WATERSTON p. 62 Ent. Mag. 48.—*D. californiensis quadripustulatus* var. n. p. 57, KELLOGG & MANN Ent. News 23.

Goniodes corpulentus sp. n. p. 14 ff. 1 & 2 Alaska, KELLOGG & MANN T.c.

Gyropus porcelli perfoliatus n. subsp. p. 216, *decurtatus* p. 216 fig. 3, *lineatus* p. 218 figs. 4 & 5, *forficulatus* p. 220 figs. 8-6, *longus* p. 222 figs. 9 & 10, *amplexans* p. 224 fig. 13, spp. n., NEUMANN Bull. Soc. zool. France 37.—*G. setosus* sp. n. p. 372 figs. 18-19, NEUMANN Arch. Parasit. 15.—*G. bicaudatus* sp. n. Peru p. 441 pl. xx f. 3, PAINE Ent. News 23.

Heterodoxus; characters p. 360, *macropus* p. 361 ff. c-g, *armiferus* sp. n. California p. 362 ff. a-d, PAINE Ent. News 23.

Laemobothrion Nitzsch., NEUMANN Bull. Mus. Paris 1912 pp. 339-342.

Liotheum scopularirum sp. n. p. 370 fig. 16, NEUMANN Arch. Parasit. 15.

Lipeurus gracilis sp. n. p. 377 figs. 21-22, *radiatus* n. subsp. p. 380,

variegatus sp. n. p. 381 figs. 26-28, NEUMANN T.c.—*L. baculoides* sp. n. California p. 174 f. 95, PAINE Rep. Laguna Mar. Lab. 1.—*L. kermadecensis* sp. n. p. 365, *diversus* var. n. *excavatus* p. 366, Kermadec Islands, JOHNSTON & HARRISON Trans. N. Zeal. Inst. 44.—*L. confusus* n. n. for *brevicornis* Piag., BAGNALL & HALL p. 9 J. econ. Biol. 7.—*L. pullatus* = (*L. staphylinoides* and *Docophorus bassanae*), WATERSTON Proc. Physic. Soc. Edinb. 18 p. 250.

Mackayia gen. n., *dimorpha* sp. n. from *Puffinus* on Eigg, WATERSTON p. 252 Ann. Scott. Nat. Hist. 1912.—*M. heteracanthus* sp. n. S. Africa, Id. p. 258 T.c.

Menacanthus subg. n. in gen. *Menopon* type *M. robustum* Kellog 1896, *pallidulum* p. 361 figs. 7-9, *hamatum* p. 365 figs. 13-14, *ralli* p. 366, spp. n., NEUMANN Arch. Parasit. 15.

Menopon sp. p. 364 Kermadec Islands, JOHNSTON & HARRISON Trans. N. Zeal. Inst. 44.—*M. pectinatum* p. 368 fig. 15, NEUMANN Arch. Parasit. 15.

Metopleuron mathisi sp. n. p. 382 fig. 29, NEUMANN T.c.

Nirmus cameratus var. n. *nigrescens*, EVANS p. 280 Ann. Scott. Nat. Hist. 1912.—*N. caracarensis* p. 59, *lucidus*, *nesiotes*, p. 60, Mexico, spp. n., *N. infectus connexus* var. n. p. 13, KELLOGG & MANN Ent. News 23.

Philopterus capistratus sp. n. p. 375 fig. 20, NEUMANN Arch. Parasit. 15.—*P. fuscoclypeatus* p. 368, *wallacei* p. 369, *armatus* p. 370, *numenicola* p. 372, spp. n., Kermadec Islands, JOHNSTON & HARRISON Trans. N. Zeal. Inst. 44.

Physostomum fasciatus arcuatus var. n. p. 65, KELLOGG & MANN Ent. News 23.

Trichodectes octomaculatus p. 438 pl. xx f. 1, *minutus* p. 439 f. 4, spp. n., U.S., PAINE Ent. News 23.—*T. longicornis*, Parasit. des Rehes, ECKSTEIN Jahrb. Inst. Jagdk. Neudamm 1 p. 181.

ISOPTERA.

Systematik der Termiten. Fam. *Metatermitidae*, HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4.

Termites; introductory notes, FLETCHER J. Agric. India 7 21 pp. 3 pls.

Observations sur les Termites, Différenciation des castes, BUGNION Paris C. R. soc. biol. 72 pp. 1091-1094 av. fig.

Termite lucifuge, anatomie, fondation de colonies nouvelles, FEYTAUD Arch. anat. microsc. 13 pp. 481-607.

Rhythmic activity in termite communities, ANDREWS & MIDDLETON Johns Hopkins Univ. Cir. No. 2 1911 pp. 26-34 ff. 1 2.

List of species known in India pp. 774-775, HOLMGREN J. Bombay Soc. 21.

Allodoterme gen. n. p. 2, *tenax* sp. n. Africa p. 3, SILVESTRI Annuar. Mus. Napoli No. 22.

Ancistrotermes gen. n. p. 4 for *T. crucifer* Sj., SILVESTRI T.c.

Apicotermes gen. n., *tragardhi* sp. n. Süd-Afrika, HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4 p. 104 pl. iv f. 2 textf. 72.

Apilitermes gen. n. für *A. longiceps* Kamerun, HOLMGREN p. 103 pl. iv f. 3. textf. 71 T.c.

Basidentitermes subg. n. vide *Mirotermes*.

Caloterme (*Neoterme*) *arthurimoelleri* sp. n. Rio de Janeiro, VON ROSEN p. 222 Zool. Anz. 39.—*C. marianus* p. 281 Marianen, *samoanus* p. 282 Samoa, spp. n., HOLMGREN Ent. Mitt. Berlin 1.—*C. flavicollis* Abchasien (Russ.), ZAICEV Rev. russ. ent. 12 p. 360.

Capritermes subgg. n. *Neocapritermes*, *Capritermes* s. str., HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4 p. 115.—*C. magnificus* sp. n. Brazzaville, SILVESTRI Ann. Mus. Genova 45 p. 254.—*C. alienus* sp. n. Africa?, VON ROSEN p. 229 Zool. Anz. 39.

Cephaloterme gen. n. p. 232 for *Eut. rectangularis* Sj., SILVESTRI Ann. Mus. Genova 45.

Ceylonitermes subg. n. vide *Eutermes*.
Coarctatotermes subg. n. vide *Eutermes*.

Coptotermes intermedius sp. n. Africa, SILVESTRI Ann. Mus. Genova 45 p. 218.

Cornitermes subgg. n. *Labiotermes*, *Cornitermes* s. str., HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4 p. 50.

Crenetermes gen. n. p. 245 for *Eut. albotarsalis* Sj., SILVESTRI Ann. Mus. Genova 45.

Cubitermes bilobatodes p. 247, *weissi* p. 249, spp. n., Africa, SILVESTRI Ann. Mus. Genova 45.—*C. bilobatus inclitus* subsp. n., SILVESTRI p. 5 Annuar. Mus. Napoli 3 No. 22.

Diversitermes subg. n. vide *Eutermes*.

Eremotermes gen. n., *indicatus* sp. n. Tunisia, SILVESTRI Boll. Lab. Portici 6 p. 108 fig.

Euhamitermes subg. n. vide *Hamitermes*.

Eurytermes ceylonicus sp. n. (nicht beschrieben), HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4 p. 83.—*E. macrophthalmus* p. 240, *doriae* p. 242, spp. n., Africa, SILVESTRI Ann. Mus. Genova 45.—*E. gestroanus* p. 12 Abessinien, *kulloensis* p. 13 Erithrea, *somaliensis* p. 15 Somali-Land, *tripolitanius* p. 16 Tripolis, spp. n., SJÖSTEDT Ark. Zool. 7 No. 27.—*E. lacustris* sp. n. Ceylan, BUGNION Revue Suisse Zool. 20 pp. 487–505 2 Taff.—*E. ellenriederi* Brazil, *holmgreni* Liberia, spp. n., VON ROSEN p. 224 Zool. Anz. 39.

Eutermellus gen. n. p. 243, *convergens* sp. n. Africa p. 245, SILVESTRI Ann. Mus. Genova 45.

Eutermes; Übersicht der Untergattungen, subgg. n. *Ceylonitermes*, *Coarctatotermes*, *Diversitermes*, *Eutermes* s. str., *Grallatotermes*, *Hirtitermes*, *Hospitalitermes*, *Lacessititermes*, *Longipeditermes*, *Occasitermes*, *Subulitermes*, *Temirostritermes*, *Trinervitermes*, *Tumulitermes*, *Velocitermes*, HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4 pp. 59–62.—*Eutermes* spp. n. (nicht beschrieben) (*Hirtitermes*) *hirtiventris* Sarawak p. 62, (*Eutermes*) *celebensis* Celebes, *flavicans* Sarawak, *greeni* Ceylon, *javanicus* Java, *kraepelini* Singapoie, *longi-*

cornis Ceylon, *longinasus*, *longirostris* Sarawak, *metangensisiformis* Sarawak, Nikobaren, *piciceps* Formosa, *timoriensis* Timor, *watasei* Formosa, p. 63, *E. (Subulitermes) inaniformis* Ostindien p. 64, (*Lacessititermes*) *breviarticulatus*, *lacessitiformis*, *piliferus* Borneo, p. 65, *ransoneti* Malacca p. 66, (*Hospitalitermes*) *lividiceps* Borneo p. 66, HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4.

Foraminitermes gen. n., *tubifrons* sp. n. Kamerun, HOLMGREN p. 125 T.c.

Globitermes subg. n. vide *Hamitermes*.

Glyptotermes parvulus insulanus subsp. n., SILVESTRI p. 216 Ann. Mus. Genova 45.

Grallatotermes subg. n. vide *Eutermes*.

Hamitermes evuncifer sp. n. Guinea, SILVESTRI Ann. Mus. Genova 45 p. 231.—*H. santschi* sp. n. Tunisia, SILVESTRI Boll. Lab. Portici 6 p. 105 fig.—*H. (Euhamitermes) hamatus* sp. n. p. 89 f. 57 Singapore, (*Synhamitermes*) *ceylonicus* sp. n. p. 91 Ceylon, HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4.—*Hamitermes* subgg. n. *Euhamitermes* p. 89, *Hamitermes* s. str., *Synhamitermes* p. 91, *Globitermes*, HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4.

Hirtitermes subg. n. vide *Eutermes*.

Hodothermes erithreensis sp. n. Erithrea, SJÖSTEDT Ark. Zool. 7 No. 27 p. 2.—*H. turkestanicus* Schwärmen, Ersatzkönigin (Russ.), VASILJEV Rev. russ. ent. 12 pp. 241–243.

Hospitalitermes subg. n. vide *Eutermes*.

Labiotermes subg. n. vide *Cornitermes*.

Lacessititermes subg. n. vide *Eutermes*.

Longipeditermes subg. n. vide *Eutermes*.

Microcerotermes eugnathus sp. n. Tunisia, SILVESTRI Boll. Lab. Portici 6 p. 106 fig.—*M. dolichognathus* sp. n. Africa p. 237, *parvus* var. n. *solidus* p. 235, SILVESTRI Ann. Mus. Genova 45.—*M. havilandi* sp. n. (nicht beschrieben) Borneo, HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4 p. 122.—*M. libericus* with var. *transiens* Africa p. 227, *neglectus* Australia p. 228, spp. n., VON ROSEN Zool. Anz. 39.

Microtermes latinotus Luapula, madagascariensis, spp. n. (nicht beschrieben), HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4 p. 42.—*M. feae* sp. n. Fernando Po, SILVESTRI Ann. Mus. Genova 45 p. 229.—*M. (?) incertus* Hag. p. 788, *obcsi* sp. n. p. 787 Bombay, HOLMGREN J. Bombay Soc. 21.

Mirotermes holmgreni sp. n. Guinea, SILVESTRI Ann. Mus. Genova 45 p. 252.—*M. (Cubitermes) sjoestedti* p. 230, *schereri* p. 231, spp. n., Liberia, VON ROSEN Zool. Anz. 39.—*M. bellicosi* sp. n. Kilimandjaro, WASMANN p. 85 Zeitschr. wiss. Zool. 101.—*Mirotermes* subgg. n. *Basidentitermes*, *Mirotermes* s. str. p. 107, *Protocapritermes*, *Tuberculitermes*, p. 108, HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4.

Neocapritermes subg. n. vide *Capritermes*.

Neotermes gestri sp. n. Africa, SILVESTRI Ann. Mus. Genova 45 p. 213.

Occasitermes subg. n. vide *Eutermes*.

Odontotermes subg. n. *Xenotermes*, HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4 p. 36.

Porotermes grandis sp. n. Australia, HOLMGREN p. 281 Ent. Mitt. Berlin 1.

Procapritermes gen. n. für *atypus* sp. n. (nicht beschrieben) und *minutus* Hav. und *setiger* Hav. Borneo, HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4 p. 113 pl. iv f. 14 16 textf. 81.

Prohamitermes gen. n. p. 78 pl. iv ff. 18–19, für *Termes mirabilis* and *hosei* Borneo, HOLMGREN T.c.

Protocapritermes subg. n. vide *Mirotermes*.

Protohamitermes gen. n. p. 77, *globiceps* sp. n. p. 78, pl. iv f. 36, Sarawak, HOLMGREN T.c.

Psammotermes assuanensis sp. n. Ober-Ägypten und Erithrea, SJÖSTEDT Ark. Zool. 7 No. 27 p. 3.

Pseudomicrotermes gen. n. für *Microtermes alboniger* Wasm., HOLMGREN Stockholm Vet.-Ak. Handl. 48 No. 4 p. 126 pl. iv ff. 32–33.

Sphaericermes gen. n., typus *Eutermes sphaerotherax*, HOLMGREN p. 33 pl. i f. 10 T.c.

Subulitermes subg. n. vide *Eutermes*.

Synhamitermes subg. n. vide *Hamitermes*.—*Synhamitermes* subg. n. of *Hamitermes* p. 792, to include *brevicorniger* and *quadriceps*, HOLMGREN J. Bombay Soc. 21.

Tenuirostritermes subg. n. vide *Eutermes*.

Termes ostentans p. 221, *pauperans* p. 224, spp. n., Africa, *crucifer guineensis* subsp. n. p. 227, SILVESTRI Ann. Mus. Genova 45.—*T. bottegoanus* p. 6 Galla-Land, *ebeni* p. 7 Abessinien and Somali-Land, *classicus* p. 9 Erithrea, spp. n., SJÖSTEDT Ark. Zool. 7 No. 27.—*T. michelli* sp. n. Congo, VON ROSEN p. 223 Zool. Anz. 39.—*T. flavipes*, queen, SCHAEFFER Bull. Brooklyn Ent. Soc. 8 p. 30; SNYDER Proc. Ent. Soc. Washington 14 p. 107 pl. iii.

Trinervitermes subg. n. vide *Eutermes*.

Tuberculitermes subg. n. vide *Mirotermes*.

Tumulitermes subg. n. vide *Eutermes*.

Velocitermes subg. n. vide *Eutermes*.

Xenotermes subg. n. vide *Odontotermes*.

EMBIOPTERA.

Regeneration experiments, RIMSKY-KORSAKOFF Verh. 8 Internat. Zool. Kongr. pp. 609–620.—*Embioptera*; monograph of the Order *Embiidina* of the Superorder *Aetioptera*, ENDERLEIN Coll. Selys fasc. 3 120 pp. 4 pls.

Mundteilregeneration *Haploembia solieri*, RIMSKY-KORSAKOW Zs. wiss. Insektenbiol. 8 pp. 17–19.

Antipaluria gen. n., *aequicercata* sp. n. Colombia, ENDERLEIN p. 63 Coll. Selys 3.

Dihybocercus subg. n. of *Embia* p. 109, *severini* p. 110, *fibulatoria* p. 111, spp. n., W. Africa, ENDERLEIN T.c.

Embia lurididiceps Erythraea p. 42, *kraussi* E. Africa p. 113, spp. n., *brasiliensis* var. n. *flavicercatus* p. 49, ENDERLEIN T.c.

Oligotoma greeniana p. 82, *ceylonica* p. 83, Ceylon, *minuscule* Africa or. p. 87, spp. n., *michaeli* var. n. *javana* p. 89, *heymonsi* sp. n. Mexico p. 114, ENDERLEIN T.c.—*O. jacobsoni* sp. n. Java, SILVESTRI Tijdschr. Ent. 55 p. 334.

Rhagadochir gen. n. type *Embia vosseleri* p. 54, *oligotomoides* sp. n. S. America, *tenuis* var. n. *flaviceps*, p. 61, ENDERLEIN Coll. Selys 3.

PLECOPTERA.

Monograph of fam. *Perlodidae*, KLAPÁLEK Coll. Selys Fasc. 4 66 pp.

Plecoptera, KLAPÁLEK wiss. Ergebn. deutsch. Zentr.-Afrik. Exp. 3 13 pp. 447-452.

Zur Biologie und Morphologie einiger *Perla*-Arten, SCHOENEMUND Zool. Jahrb. Anat. 34 pp. 1-56 2 Taf.

Plecoptera norvegica, KLAPÁLEK Nyt Mag. Naturv. 50 pp. 2-14.

Plecopteren von Rheinland-Westfalen, LE ROI Bonn SitzBer. nathist. Ver. 1912 pp. 25-51.

Parauotoperla australica, ENDERLEIN Fauna Südwest. Australiens 4 Lfg 4 pp. 57-61.

Amphinemura flavicollis sp. n. Formosa, KLAPÁLEK p. 347 Ent. Mitt. Berlin 1.

Arcynopteryx americana Colorado p. 21, *minor* Arctic America, spp. n., KLAPÁLEK Coll. Selys 4.

†*Chalcorychus* gen. n., *walchiae* sp. n. Orenburg, HANDLIRSCH Mitt. Geol. Ges. Wien 2 p. 382 etc.

Dictyopterygella gracilis p. 44, *majuscula* p. 45, spp. n., Siberia, KLAPÁLEK Coll. Selys 4.

Isogenoides subg. n. of *Isogenus* type *frontalis* Newm., KLAPÁLEK p. 57 T.c.

Isogenus scriptus Jesso sp. n., KLAPÁLEK T.c.

Kaminúria schenklingi sp. n. Formosa, KLAPÁLEK p. 342 Ent. Mitt. Berlin 1.—*K. amoena* p. 86, *fulvescens* p. 89, *laticornis* p. 91, *chinensis* p. 92, *coarctata* p. 93, *kelantonica* p. 95, *atricornis* p. 96, *schenklingi* p. 97, *circumscripta* p. 98, *præeusta* p. 99, *similis* p. 100, China, Japan, spp. n., KLAPÁLEK Čas. České Spol. Entomolog. Prag 9.

Megarcys gen. n., *ochracea* sp. n. Transbaikal and Hokodate, KLAPÁLEK Coll. Selys 4.

Nemura jacobsoni sp. n. Java, KLAPÁLEK Notes Mus. Leiden 34 p. 194.

Neoperla sauteri sp. n. Formosa, KLAPÁLEK p. 344 Ent. Mitt. Berlin 1.

Paragnetina brevipennis sp. n. Chabarovsk, NAVÁS Rev. russ. ent. 12 p. 417 f. 3.

Perlodes macrura Alps p. 39, *transversa* Rheinwald p. 40, spp. n., KLAPÁLEK Coll. Selys 4.

Perlodinella gen. n., *kozlovi*, p. 28, *unimacula* p. 29, spp. n., Tibet, KLAPÁLEK T.c.

Protonemura brevilobata sp. n. Formosa, KLAPÁLEK p. 346 Ent. Mitt. Berlin 1.

Protarcys gen. n., *caudata* Szo-tschwan, p. 8, *caudata* Moupin p. 9, spp. n., KLAPÁLEK Coll. Selys 4.

Rhopalopsale gen. n. near *Leuctra*, *dentata* sp. n. Formosa, KLAPÁLEK pp. 348 & 349 Ent. Mitt. Berlin 1.

Skobeleva gen. n. type *D. olgae* MacL., KLAPÁLEK p. 23 Coll. Selys 4.

Togoperla extrema sp. n. Süd-Ussuri-Gebiet, NAVÁS Rev. russ. ent. 12 p. 417.

EPHEMEROPTERA.

Analysis of the Scandinavian species of *Ephemerida* descr. by older authors, BENGTSSON Ark. Zool. 7 No. 36.

Homologies in the wing-veins of May-flies, with bibliography, MORGAN Ann. Ent. Soc. Amer. 5 pp. 89-106 pls. v-ix.

Untersuchungen über die Larve von *Heptagenia sulphurea*, LEUE Arch. Natg. 77 (1911) Bd 1 Suppl. 3 pp. 202-231 3 Taf.

Acentrella gen. n. nahe *Baëtis* p. 110, *lapponica* sp. n. p. 111 Lappland, BENGTSOON Entomol. Tidskr. Stockholm 33.

Andromina gen. n. *grisea* sp. n. Vladivostok, NAVÁS Rev. russ. ent. 12 p. 416 f. 2.

Baëtis wallengreni p. 112, *pusillus* p. 113, *digitatus* p. 114, *incurvus* p. 115, spp. n., Schweden, BENGTSOON Entomol. Tidskr. Stockholm 33.—*B. andalusicus* sp. n. Granada, NAVÁS p. 206 pl. iv f. 1 Bol. Soc. Aragon 10. 1911.—*B. comes* Brasil, *abundans*, p. 194, *inops* p. 195, Paraguay, spp. n., NAVÁS Broteria 10.

Caenis incus p. 107, *tumida* p. 108, spp. n., Schweden, BENGTSOON Entomol. Tidskr. Stockholm 33.

Callibaëtis jocosa sp. n. Brasil, NAVÁS p. 195 Broteria 10.—*C. trifasciatus* sp. n. Argentina, PETERSEN p. 339 Deutsche ent. Zeitschr. 1912.

Campsurus joergenseni p. 333, *argentinus* p. 334, spp. n., Argentina, PETERSEN T.c.

Chironetes formosanus sp. n. Formosa, ULMER p. 371 Ent. Mitt. 1.

Cloëon bifidum sp. n. Schweden, BENGTSOON Entomol. Tidskr. Stockholm 33 p. 109.

Ecdyurus hyalinus p. 372, *parvus* p. 374, spp. n., Formosa, ULMER Ent. Mitt. 1.

Epeurus levis sp. n. Amur, NAVÁS Rev. russ. ent. 12 p. 415 f. 1.

Ephemera amurensis sp. n. Amur, NAVÁS Rev. russ. ent. 12 p. 414.—*E. sauteri* sp. n. Formosa, ULMER p. 369 Ent. Mitt. 1.

Heptagenia dalecarlica sp. n. Schweden, BENGTSOON Entomol. Tidskr. Stockholm 33 p. 116.—*H. interpunctata*, behavior, WODSEDALEK Ann. Ent. Soc. Amer. 5 pp. 31-40.

Leptophlebia sp., Massenflug bei Saratov (Russ.), BOLDYREV Saratov Trd. Obsč. jest. 6 1 pp. 1-8.

Oligoneuria dobbsi sp. n. E. Africa, EATON p. 243 Ann. Nat. Hist. 10.

Povilla gen. n., *adusta* sp. n. Congo, NAVÁS p. 402 Rev. zool. afric. 1.

Siphurus sp., Massenflug bei Saratov (Russ.), BOLDYREV Saratov Trd. Obsč. jest. 6 1 pp. 1-8.

Thraulius valdermari p. 335, *bomplandi* p. 336, *haurupi* p. 337, *misionensis* p. 339, spp. n., Argentina, PETERSEN Deutsche ent. Zeitschr. 1912.

PARANEUROPTERA or ODONATA.

Odonaten der Umgebung von Frankfurt a. M., LEONHARDT Bonn SitzBer. nathist. Ver. 1912 pp. 3-14.

Odonaten-Fauna von Ober-Elsass, LEONHARDT Bonn SitzBer. nathist. Ver. 1912 pp. 14-16.

Odonaten des Kaukasus (Russ.), BARTENEV Mitt. Kaukas. Mus. 7 1 pp. 107-116.

Odonaten der Umgebung von Orenburg, Beschreibungen (Russ.), VORONCOVSKIJ Izv. Orenb. otd. russ. geogr. Obsč. 23 pp. 100-114.

Odonaten der paläarktischen Asiens (Russ. + engl. Diagn.), BARTENEV Ann. mus. zool. 17 pp. 289-310.

Odonaten aus Transbaikalien, BARTENEV Zool. Jahrb. Syst. 32 pp. 221-284.

Monograph of *Aeshna* of North America, WALKER 213 pp. 28 pls.

Dragon flies of the Cumberland valley in Kentucky and Tennessee, WILSON Proc. U. S. Nation. Mus. 43 pp. 189-200.

Dragon flies of Jamaica; WILSON Baltimore Johns Hopkins Univ. Cir. No. 2 pp. 47-51.

Early stages of British Odonata; LUCAS Rep. Lancash. ent. Soc. 35 pp. 17-24.

Larven javanischer Odonaten, RIS Tijdschr. Ent. 55 pp. 168-182.

Aeschna juncea und *cyanea*, Punktaugen, TÜMPPEL Zs. wiss. Insektenbiol. 8 p. 167 etc.

Lebensweise der Libellen (Norweg.), LIE-PETTERSEN Bergen Naturen 36 pp. 257-272 5 figs.

Observations on the ecology of dragon-fly nymphs; Reactions to light and contact, RILEY Ann. Ent. Soc. Amer. 5 pp. 273-292.

Histologische Studien über Insekten. Das sensible Nervensystem der *Aeschnalarven*; ZAWARZIN Zs. wiss. Zool. 100 pp. 245-286 3 Taf.

Birds attacking *Odonata*; CODINA pp. 66-69 Bol. Soc. Aragon. 11.

Aeschna; North American, general biology, key to species pp. 57-69, descriptions pp. 72-202, *umbrosa occidentalis* subsp. n. p. 174; WALKER Univ. Toronto Biol. Series No. 11 213 pp. 28 plates.—*A. diffinis* var. *risi* n. var. Feuerland, ENDERLEIN Stockholm Vet.-Ak. Handl. 48 No. 3 p. 119.

Aethriananta aethra sp. n. Java, RIS Tijdschr. Ent. 55 p. 166.

Agrion spp., PERKINS Proc. Hawaiian Ent. Soc. 2 p. 180.—*A. scitulum*, Krim Beschreibung (Russ.), BARTENEV Ann. mus. zool. 17 p. 286.

Amphicnemis remiger sp. n. Borneo, LAIDLAW p. 96 J. Straits Asiat. Soc. 63.

Argia moesta variation, syn. *putrida*, *intruda* sp. n. Oklahoma, WILLIAMSON Ent. News 23 p. 200.

Austrothemis gen. n. for *Diplax nigrescens* Martin, RIS p. 738 Coll. Selys 14.

Bayadera melanopteryx sp. n. China, RIS p. 49 Suppl. ent. Berlin 1.

Burmagomphus jacobsoni sp. n. Java, RIS Tijdschr. Ent. 55 p. 162.

Calaeschna microstigma, Habitat, BARTENEV Rev. russ. ent. 12 p. 78.

Calopteryx melli sp. n. China, RIS p. 55 Suppl. ent. Berlin 1.—*C. virgo* u. *splendens*; Abnorme Flügelbildung, SCHOLZ Zs. wiss. Insektenbiol. 8 p. 148.

Celebothemis gen. n. p. 829, *delecollei* sp. n. Celebes p. 830, RIS Coll. Selys 14.

Coeliccia (*Trichocnemis*) *nemoricola* sp. n. Borneo, LAIDLAW J. Straits Asiat. Soc. 63 pp. 92-99.—*C. brachysticta* p. 63 Philippinen, *flavicauda* p. 64, *cyanomelas* p. 66, Formosa, spp. n., RIS Suppl. ent. Berlin 1.

Coenagrion angulatum sp. n. Canada, WALKER p. 256 Canad. Ent. 44.—*C. resolutum*, syn. *walkeri*; variation in venation, MUTTKOWSKI Bull. Wisconsin Soc. 9 p. 166.

Cordulegaster charpentieri, ♀ p. 144 f. 5 sp. ? p. 145 f. 6 (Russ.), BARTENEV Varšava Rab. zool. Kob. Univ. 1912.

Diphlebia hybridoides Kuranda, *nymphoides* N. S. Wales, spp. n., TILLYARD Proc. Linn. Soc. N. S. Wales 36 pp. 587-590 pl. xx.

Disparoneura moultoni sp. n. Borneo, LAIDLAW p. 98 J. Straits Asiat. Soc. 63.

Epallage fatime amazina (Russ.), BARTENEV Mitt. Kaukas. Mus. 7 1 pp. 113-114.

Erpetogomphus tristana sp. n. Costa Rica p. 290 pl. xvii, CALVERT Ent. News 23.

Gomphoides infumata Ramb., RIS pp. 103-106 figs. Mem. Soc. ent. Belgique 19.

Gomphus zebra, pilosus, spp. n., p. 485, Africa, MARTIN Ann. Soc. ent. France 1911.

Hetaerina titia; syn. *tricolor* p. 101, WILLIAMSON Ent. News 23.

Idionyx philippa p. 81 Philippinen, *claudia* p. 83 China, spp. n., RIS Suppl. ent. Berlin 1.

Lanthanusa gen. n. p. 746, *cyclopica* sp. n. New Guinea p. 747, RIS Coll. Selys 14.

Leptetrum rubrum sp. n. Transkaukasien (Russ.), BARTENEV Varšava Rab. zool. Kob. Univ. 1912 p. 136 f. 1-4.—*L. quadrimaculatum* var. *praenubila* Farbenvarietäten (Russ.); BARTENEV Mitt. Kaukas. Mus. 7 108.

Leptogomphus retroflexus p. 69 Tonkin, *scorpio* p. 72, *perforatus* p. 73, China, *sauteri* p. 75 Formosa, spp. n., RIS Suppl. ent. Berlin 1.

Lestes unicolor, RIS Sitzber. Ak. Wien 121 Abt. 1 p. 149.

Lestinogomphus gen. n., *angustus* sp. n. Africa, MARTIN p. 484 Ann. Soc. ent. France 1911.

Leucorrhinia intermedia sp. n. Transbaikalien, BARTENEV p. 230 Zool. Jahrb. Syst. 32.

Leptogomphus williamsoni sp. n. Borneo, LAIDLAW p. 94 J. Straits Asiat. Soc. 63.

Libellula incesta, aberration, DAVIS J. New York Ent. Soc. 20 p. 68.

Metaphya gen. n. *Corduliina* p. 65, *micans* sp. n. Sarawak p. 66 pl., LAIDLAW J. Mus. Sarawak 1 No. 2.

Mnais pruinosa, *costalis*, p. 305, Japan, *decolorata* sp. n. Kansu p. 306 (russ. + engl. Diagn.), BARTENEV Ann. mus. zool. 17.

Olpogastra fuelleborni occidentis subsp. n. p. 826, *lachesis* sp. n. Africa p. 828, RIS Coll. Selys 14.

Olthiothemis palustris sp. n. p. 95, MARTIN Feuille Natural, 42.

Onychogomphus fulvipennis sp. n. Transkaukasien (Russ.), BARTENEV Varšava Rab. zool. Kab. Univ. 1912 pp. 147-152 f. 7-12.

Onychothemis tonkinensis ceylanica p. 835, *culminicola celebensis* p. 836, subsp. n., RIS Coll. Selys 14.

Orogomphus dyak sp. n. Sarawak, LAIDLAW p. 192 J. Straits Asiat. Soc. 57 1911.

Orthetrum anceps, var. Montenegro, BARTENEV Rev. russ. ent. 12 p. 76 figs. 1-6.

Philoganga vetusta sp. n. China, RIS p. 47 Suppl. ent. Berlin 1.

Phyllomacromia bifasciata sp. n. p. 96, MARTIN Feuille Natural. 42.

Planiplax phoenicura p. 731, *arachne* p. 732, spp. n., S. America, RIS Coll. Selys 14.

Platynemesis congolensis sp. n. p. 98, MARTIN Feuille Natural. 42.

Progomphus auropictus p. 109, *lepidus* p. 111, *recurvatus* p. 114, *basistictus* p. 117, spp. n., S. America, RIS Mem. Soc. ent. Belgique 19.

Pseudagrion ? dubium sp. n. Borneo. LAIDLAW p. 97 J. Straits Asiat. Soc. 63.

Pseudagrionoptera gen. n. p. 747, *diotima* sp. n. Borneo p. 748, RIS Coll. Selys 14.

Pseudomacromia eusebia sp. n. S. America, RIS p. 814 T.c.

Psilocnemis sikassoensis sp. n. p. 98, MARTIN Feuille Natural. 42.

Rhipidolestes gen. n. *Agrionidae* p. 57, *aculeata* p. 59 sp. n. Formosa, RIS Suppl. ent. Berlin 1.

Somatochlora exuberata sp. n. Transbaikalien, BARTENEV p. 236 Zool. Jahrb. Syst. 32.—*S. charadraea* p. 153, *linearis* p. 155, Indiana, WILLIAMSON Ent. News 23.

Sympetrum nigrescens sp. n. Scotland, LUCAS p. 171 Entomologist 45.—*S. vulgatum* var. n. *grandis*, BARTENEV p. 234 Zool. Jahrb. Syst. 32.—*S. danae*, CAMPION p. 151 Entomologist 45.

Sympycna; Synonymie, Classification, Verbreitung, Varietäten, BARTENEV Ann. mus. zool. Ac. sc. 17 pp. 144-164 figs. 1-11.

Teinobasis rajah sp. n. Borneo, LAIDLAW p. 97 J. Straits Asiat. Soc. 63.

Thalassothemis gen. n. for *L. marchali* Ramb., RIS p. 752 Coll. Selys 14.

Thecodiplax parvula sp. n. Südussuri-Gebiet (russ. + engl. Diagn.), BARTENEV Ann. mus. zool. 17 pp. 294-295.

Trithemis weneri sp. n. Gondokoro, RIS Sitzber. Ak. Wien 121 Abt. 1 p. 149.

Trithemis weneri Uganda p. 765, *persephone* Madagascar p. 768, spp. n., *donaldsoni basitincta* subsp. n. p. 784, *hecute* p. 787, *aureola* p. 788, spp. n., Madagascar, RIS Coll. Selys 14.

Vestalis smaragdina subsp. n. *velata*, RIS p. 56 Suppl. ent. Berlin 1.

Zygonyx ilia sp. n. Celebes, RIS p. 817 Coll. Selys 14.

†PALAEODICTYOPTERA.

For fossil Blattidae and allies see that family.

Notes on previously described *Palaeodictyoptera*, MEUNIER Ann. paléont. 1912 pp. 1-19.

Fossile Insekten, Jahresbericht für 1908-1911, PAX Zeitsehr. wiss. Insektbiol. 8.

Cryptovenidae fam. n. of *Palaeodictyoptera* for the following:—

Cryptovenia gen. n., *moyseyi* sp. n. Derbyshire coal measures, BOLTON p. 315 pl. xxxii figs. 4-6 Quart. J. Geol. Soc. 68.

Lithomantidae; fossil from Falkland islands, HOLM Bull. geol. Inst. Upsala 11 p. 183 f. 14.

Orthocostidae fam. n. of *Palaeodictyoptera* for the following:—

Orthocosta gen. n., *splendens* sp. n. Derbyshire coal measures, BOLTON p. 310 pl. xxxi figs. 1-3 Quart. J. Geol. Soc. 68.

Pteronidiae fam. n. of *Palaeodictyoptera* for the following:—

Pteronidia gen. n., *plicatula* sp. n. Derbyshire coal measures, BOLTON p. 313 T.e.

Stenodictyoncura gen. n. *Dictyoncuridae*, *belgica* sp. n. Westphalian of Hainhault, LERICHE p. 193 pl. xii Ann. Soc. géol. Belgique 38.

ORTHOPTERA.

Fixation of single type, lectotypic, REHN, HEBARD & CAUDELL Proc. Ac. Philadelph. 64 pp. 60-128 & 157-168.

Notes orthoptérologiques, BERENQUIER Nimes Bul. soc. étud. sci. nat. 37 1910 pp. 44-64 av. fig. and 38 pp. 76-97.

Orthopteronfauna von Griechenland, EBNER Verh. z.-b. Ges. Wien 62 pp. 108-113.

Orthopteren von Turkestan (Russ.), UVAROV Rev. russ. ent. 12 pp. 207-215.

Orthopteren, im Kamerongebirge von R. Rohde gesammelt, SJOSTEDT Ark. Zool. 7 No. 37.

On the Orthoptera found on the Florida Keys and in extreme southern Florida, 1, REHN & HEBARD Proc. Acad. Philadelph. 64 pp. 235-276 ff. 1-22.

Variation in the stridulations of Orthoptera, ALLARD Ent. News 23 pp. 460-462.

FORFICULIDAE OF DERMAPTERA,

The genera of Dermaptera with lists of the species, BURR Gen. ins. 122 112 pp. 9 pls.

Das männliche Copulationsorgan und das System der Eudermaptera, ZACHER Zs. wiss. Insektenbiol. 8 pp. 276-284.

Interesting *Dermaptera* in the Budapest Museum, BURR Ann. Mus. Hungar. 10 pp. 281-284.

Dermaptera der Sammlung von MOTSCHOULSKY (Russ.), ŠÖERBAKOV Rev. russ. ent. 12 pp. 349-355.

Notes on British *Forficulidae*, LUCAS Proc. S. London ent. Soc. 1912 pp. 21-26 pls. iv & v.

Dermaptera, BURR Wiss. Ergebn. D. Zentral-Afrika-Exp. 3 Lfg. 14 pp. 455-460.

Beobachtungen an Dermapteren auf Sardinien, KRAUSSE - HELDRUNGEN Arch. Natg. Berlin 78 Abt. A H. 1 pp. 60-64.

Über Dermapteren. 7. Aufs.: Zur Kenntnis der Brutpflege unserer Ohrwürmer, VERHOEFF Zs. wiss. Insektenbiol. 8 pp. 381-385.

Anechura stolizkae sp. n. Nordindien, BURR Ann. Hofmus. Wien 26 p. 63 etc.

Anisolabis penetrans sp. n. Comoro-Inseln, BURR Ann. Hofmus. Wien 26 p. 63 etc.—*A. westralica* sp. n. Australia, BURR p. 30 Gen. ins. 122.—*A. horvathi* sp. n. German New Guinea, BURR Ann. Mus. Hung. 10 p. 281.

Arixenia jacobsoni sp. n. Java, BURR p. 105 fig. Ent. Mag. 48.

Blandex gen. n. ex aff. *Anataelinae*, *selvendus* sp. n. Sudafrika, BURR Ann. Hofmus. Wien 26 p. 331 etc.

Bormansia orientalis sp. n. p. 221, *meridionalis* var. n. *pallida* p. 223, BORELLI Bull. Mus. Paris 1912.

Chelisochea formosanus sp. n. Formosa, BURR Ann. Hofmus. Wien 26 p. 331 etc.

Doru leucopteryx sp. n. Venezuela, BURR T.c. p. 63 etc.—*D. platensis* sp. n. Argentina, BORELLI Boll. Mus. Torino 27 No. 660 2 fig.

Echinosoma dentiferum sp. n. p. 223, BORELLI Bull. Mus. Paris 1912.

Eparchus oberthuri sp. n. p. 239 fig. 4, BORELLI T.c.

Forcipula decolyi var. n. *longipennis*, *pugnax* var. n. *parallela*, p. 224, BORELLI T.c.

Forficula sjoestedti var. n. *fusca* p. 240, BORELLI T.c.

Forficula auricularia, Biologie, BRAUNS Rostock SitzBer. natf. Ges. 3 1911 Abh. pp. 391–395; proportions of sexes, BRINDLEY Pr. Cambridge Phil. Soc. 16 p. 674.

Guanchia gen. n. *Forficulinae* type *cabreræ* Bol., BURR p. 80 Gen. ins. 122.

Heterolabis gen. n. p. 230 fig. 2 voisin de *Anisolabis*, *brasiliensis* sp. n. p. 232 fig., BORELLI Bull. Mus. Paris 1912.

Kalocrania semenoffi West-Asien p. 312, *grotei* O.-Afr. p. 313, spp. n., BURR S. B. Ges. Naturfr. 1912.

Kleiduchus gen. n. near *Chelisochea* for *australicus* Le Guill., BURR Gen. ins. 122 p. 64 pl. v f. 18.

Labia pyropi sp. n. p. 235 fig. 3, BORELLI Bull. Mus. Paris 1912.

Lamprophorus gen. n. near *Chelisochea*, type *kervillei* Burr, BURR p. 66 Gen. ins. 122.

Metasparatta gen. n., *chacoensis* sp. n. Argentina, BORELLI Boll. Mus. Torino 27 No. 649 2 figs.

Narberia gen. n. *Opisthocosmiinae* type *biroi* Burr, BURR p. 94 Gen. ins. 122.

Neolobophora handlirschi sp. n. Brasilien, BURR Ann. Hofmus. Wien 26 p. 63 etc.

Pareparchus gen. n. *Opisthocosmiinae* for *minusculus* Borm., BURR p. 92 Gen. ins. 122.

Parlax gen. n. *Forficulinae* for *nieuwenhuisi* Burr, BURR p. 79 T.c.

Perirrhytus gen. n. *Anechurinae* type *edentulus* Woll., BURR p. 72 T.c.

Phaulex gen. n. *Forficulinae* for *albipes* Fabr., BURR p. 78 T.c.

Prolabia hildebrandti sp. n. Madagaskar, BURR p. 324 S.B. Ges. Naturfr. 1912.

Psalis haenschi sp. n. Ecuador, BURR p. 317 T.c.—*P. insulana* sp. n. p. 225, BORELLI Bull. Mus. Paris 1912.

Pyge sauteri sp. n. Formosa, BURR p. 314 S.B. Ges. Naturfr. 1912.

Sarakas borellii sp. n. Peru, BURR Ann. Hofmus. Wien 26 p. 63 etc.

Spongovostox alter Panama, *basalis* El Zumbador, *parvus* Britisch-Guiana, *recurrens* Brasilien, *vicinus* Bahia, spp. n., BURR Ann. Hofmus. Wien 26 p. 331 etc.

Syntonus ensifer sp. n. Peru, BURR T.c. p. 63 etc.

Thalperus gen. n. *Opisthocosmiinae* type *kuhlgatzi* Burr, BURR p. 92 Gen. ins. 122.

Vostox dugueti sp. n. p. 233 fig., BORELLI Bull. Mus. Paris 1912.

HEMIMERIDAE.

Über den Genitalapparat und die Entwicklung von *Hemimerus talpoides*, HEYMONS Zool. Jahrb. Suppl. 15 Bd 2 pp. 141–184 5 Taf.

BLATTIDAE.

Distributional notes, genera of *Blattidae*, SHELFORD pp. 238–240 Ent. Rec. 24.

Cosmopolitan *Blattidae*, list, SHELFORD p. 218 Ent. Rec. 24.

Oothecae; classification etc., SHELFORD pp. 283–287 Ent. Rec. 24.

†*Protoblattinae* and *Mylacrinae*, Commentary, notes, MEUNIER Ann. Soc. Sci. Bruxelles 36 pp. 187–189.

Les *Blattidæ* des houillères de Com-
mentry, MEUNIER Paris C. R. Ac. sci.
153 1911 pp. 845-847.

Anaplecta calosoma sp. n. Neu Guinea,
SHELFORD p. 51 Ent. Rdsch. 29.—
A. ikonnikovi Peru, SHELFORD Rev.
russ. ent. 12 p. 27 f. 1.

†*Apophthegma* gen. n. *anale*, *saxoni-*
cum, *sterzeli*, spp. n., Erzgebirge, HAND-
LIRSCH Mitt. Geol. Ges. Wien 2 p. 373
etc.

Apteroblatta obscura sp. n. Central-
Afr., SHELFORD p. 501 Ergebn. D.
Zentr.-Afrik. Exp. 3 L 16.

†(*Archimylacridae*) *pelzi* sp. n.
Lugau, HANDLIRSCH Mitt. Geol. Ges.
Wien 2 p. 373 etc.

Blatta ducalis sp. n. N.W. vom
Tanganyika, SHELFORD p. 502 Ergebn.
D. Zentr.-Afrik.-Exp. 3 L 16.

Blattella schubotzi sp. n. Kongo,
SHELFORD p. 499 T.c.

†(*Blattoidea lobata*) sp. n. Reinsdorf,
HANDLIRSCH Mitt. Geol. Ges. Wien
2 p. 373 etc.

Ceratinoptera producta sp. n. Peru,
SHELFORD Rev. russ. ent. 12 p. 31 f. 5.

Chorisoneura thalassina sp. n. Peru,
SHELFORD p. 34 T.c.

†*Etoblattina texana* and *robusta*, Texas
Permian, COCKERELL Ent. News 23
pp. 228-229.

Eunycitibora magnifica sp. n. Peru,
SHELFORD Rev. russ. ent. 12 p. 32.

Eutheganopteryx gen. n. *Ectobii-*
darum p. 56, *mirabilis* sp. n. p. 57
fig. 42 Madagascar, SHELFORD Ann.
mus. zool. Ac. sc. 17.

Gyna simplicissima sp. n. Central-
Afr., SHELFORD p. 503 Ergebn. D.
Zentr.-Afrik. Exp. 3 L 16.

Heminauphoeta picea sp. n. Mada-
gascar, SHELFORD Ann. mus. zool. Ac.
sc. 17 p. 59.

Hemithyrsocera peruana sp. n. Peru,
SHELFORD Rev. russ. ent. 12 p. 31.

Homalopteryx scotti sp. n. Trinidad,
SHELFORD p. 431 pl. x f. 1 Ann Nat.
Hist. 10.

Ischnoptera vittata sp. n. Central-
Afr., SHELFORD p. 498 Ergebn. D.
Zentr.-Afrik. Exp. 3 L 16.—*I. neglecta*
p. 28 f. 2, *ikonnikovi*, *moxa*, p. 29 f. 3,

(N-9210 j)

anisopygia p. 30 f. 4, spp. n., Peru,
SHELFORD Rev. russ. ent. 12.

Lupparia inconspicua sp. n. Neu
Guinea, SHELFORD p. 52 Ent. Rdsch.
29.

Mareta abdominalis sp. n. Kongo,
SHELFORD p. 499 Ergebn. D. Zentr.-
Afrik. Exp. 3 L 16.

Melyroidea gen. n. *Oxyhaloinae* p.
374, *mimetica* pl. xviii f. 17, *magnifica*
f. 18, spp. n., S. America p. 375, SHEL-
FORD P. Zool. Soc. London 1912.

Panchlora nigriventris sp. n. Tablazo,
SHELFORD Ann. mus. zool. Ac. sc. 17
p. 59.

Paraceratinoptera funebris sp. n.,
Peru, SHELFORD Rev. russ. ent. 12
p. 32.

†*Phylloblatta*; spp., p. 321 pl. xxxiii
BOLTON Quart. J. Geol. Soc. London
68.

Prosoplecta nigroplagiata p. 370 pl.
xlviii f. 9, *semperi* p. 371 f. 13, *nigra*
p. 372 f. 6, *mimas* f. 15, Philippines,
coelophoroides Celebes f. 19, p. 373,
spp. n., SHELFORD P. Zool. Soc. London
1912.

Pseudomops rufescens sp. n. Peru,
SHELFORD Ann. mus. zool. Ac. sc. 17
p. 58.

†*Somylacris (Etoblattina) burri* sp. n.
Dover coalfield, BOLTON p. 318 pl. xxxiii
figs. 1 & 2 Quart. J. Geol. Soc. London
68.

Steleopyga; the type, CAUDELL p. 23,
SHELFORD p. 24, Ent. Rec. 24.

Stilpnoblatta minuta sp. n. O.-Afr.,
SHELFORD p. 504 Ergebn. D. Zentr.-
Afrik.-Exp. 3 L 16.

Stylopyga nana sp. n. Central-Afr.,
SHELFORD p. 501 T.c.—*S. schultzei*
sp. n. Neu Guinea, SHELFORD p. 52 Ent.
Rdsch. 29.

Temnopteryx schubotzi sp. n. Kongo,
SHELFORD p. 500 Ergebn. D. Zentr.-
Afrik.-Exp. 3 L 16.

PHASMIDAE.

Notes orthoptérologiques, BÉREN-
GUIER Nimes Bul. soc. sci. nat. 38
pp. 76-97.

Anisomorpha buprestoides, egg,
RUSSELL Proc. Ent. Soc. Washington
14 p. 117.

Arphax michaelsoni sp. n. Australia, WERNER p. 57 Fauna Sudw. Austral. 4 3.

Bacillus rossii, alimentary canal, parthenogenesis, CAMERON P. Zool. Soc. London 1912 pp. 172-182 3 pls.

Bacteria 4-lobata p. 343 fig., *crassipes* p. 344, *maroniensis* p. 345 fig., spp. n., Guiana, CHOPARD Ann. Soc. ent. France 80.

Carausius gardineri, BOLIVAR p. 296, *scotti*, FERRIÈRE p. 297, f. 1, spp. n., Seychelles Tr. Linn. Soc. London 15.

Denhama gen. n., *aussa* sp. n. Australia, WERNER p. 53 Fauna Sudw. Austral. 4 3.

Diapheromera femorata, Zucht, MEISSNER Intern. ent. Zs. Guben 6 pp. 154-155 & 186-187; metamorphosis, CORFE p. 350 Ann. Nat. Hist. 9.

Diura schultzei sp. n. Neu-Guinea GIGLIO-TOS p. 94 Ent. Rdsch. 29.

Dixippus morosus, Färbung, DOBKIEWICZ Biol. Centralbl. 32 p. 661; Färbungsänderung, MEISSNER Soc. entomol. 27 p. 79; Zucht, MEISSNER Intern. Ent. Zs. 6 p. 13.

Graeffea seychellensis sp. n. Seychelles, FERRIÈRE p. 299 f. 2 Tr. Linn. Soc. London 15.

Gratida pulchripes p. 472 ff. 13-15, *cryptocercata* p. 474 ff. 16 & 17, spp. n., Kongo, REHN Proc. U.S. Nation. Mus. 42.—*G. angolensis* sp. n. Angola, REHN p. 123 Arch. Naturges. 78A.—*G. adelungi*, UVAROV Hor. Soc. ent. ross. 40 3 p. 9.

Hirtuleius caudatus sp. n. p. 346 fig. Guiana, CHOPARD Ann. Soc. ent. France 80.

Isageras affinis sp. n. p. 341 Guiana, CHOPARD T.c.

Leptynia cerviformis sp. n. Angola, REHN p. 125 Arch. Naturges. 78 A.

Metriotes pallidus sp. n. p. 341 Guiana, CHOPARD Ann. Soc. ent. France 80.

Neopromachus schultzei, *sepikanus*, spp. n., Neu Guinea, GIGLIO-TOS pp. 93-94 Ent. Rdsch. 29.

Phasma flavipes sp. n. p. 339 fig. Guiana CHOPARD Ann. Soc. ent. France 80.

Phibalosoma gibbosa sp. n. p. 347 fig. Guiana, CHOPARD T.c.

Phyllium pulchrifolium, Entwicklung, Lebensweise und Fortpflanzung, DORRIES Intern. ent. Zs., Guben 6 pp. 52-55.

Prexaspes olivaceus p. 339, *nigromaculatus* p. 340, spp. n., Guiana, CHOPARD Ann. Soc. ent. France 80.

Prisopus; supposed aquatic habits discussed, p. 50, *fisheri* sp. n. Amazons p. 54, GAHAN Entomologist 45.—*P. minimus* sp. n. p. 342 fig. Guiana, CHOPARD Ann. Soc. ent. France 80.

Pulchriphyllium schultzei sp. n. Neu Guinea, GIGLIO-TOS p. 56 Ent. Rdsch. 29.

Rhabdoceratites nom. n. pro. *Ceratites* preocc., REHN & HEBARD Ent. News 23 p. 232.

Tropidoderus michaelsoni sp. n. Australia, WERNER p. 55 Fauna Sudw. Austral. 4 3.

MANTIDAE.

Mantidae esotici; *Mantes*, *Tenoderae*, *Hierodulae*, *Rhomboderae*; GIGLIO-TOS Boll. Soc. Entom. ital. 43 (1911) 1912 pp. 3-167.

Acontista gracilis p. 317 fig., *maroniensis* p. 318 fig., spp. n., Guiana, CHOPARD Ann. Soc. ent. France 80.

Amphecostephanus gen. n., *rex* sp. n. Angola, REHN p. 120 Arch. Naturges. 78 A.

Bantia fusca sp. n. Guiana p. 328 fig., CHOPARD Ann. Soc. ent. France 80.

Calidomantis hoshia sp. n. Kongo p. 464 f. 7, REHN Proc. U. S. Nation. Mus. 42.

Danuria contorta sp. n. Brit. Ost-Afrika, SJÖSTEDT Ark. Zool. 7 No. 38 p. 3 pl. i f. 1 & 1A.—*D. angolensis* sp. n. Angola p. 470 f. 12. REHN Proc. U. S. Nation. Mus. 42.

Ephierodula gen. n. typ. *Polyspilota heteroptera* Werner, GIGLIO-TOS Boll. Soc. ent. ital. 43 p. 3 etc.

Galepsus conigicus sp. n. Kongo p. 455 ff. 3 & 4, REHN Proc. U. S. Nation. Mus. 42.

Gonatista major sp. n. San Domingo p. 161, CAUDELL Psyche 19.

Hierodula giraffa Sumatra p. 72, *pulchra* Nuova Guinea p. 73, *togiana* Isola Togian p. 74, *tenuis* Sumatra p. 76, *formosana* Formosa p. 77, *siporana* Mentawai p. 79, *keiana* Isole Kei p. 81, *vitreoides* Engano p. 82, *ventralis* Bombay p. 82, *peracana* Malacca p. 84, *chamoana* Birmania p. 92, *crassa* India or. p. 93, *manillana* Manilla p. 96, spp. n., (*Rhomboderula*) *italii* n. n. pro *basalis* Ital., (*R.*) *javana* n. n. pro *basalis* Saussure, GIGLIO-TOS Boll. Soc. ent. ital. 43.

Hierodulella gen. n. typ. *Hierodula reticulata* Br., GIGLIO-TOS T.c. p. 3 etc.

Hoplocorypha perplexa Kongo p. 460 f. 5, *boviformis* Angola p. 462 f. 6, spp. n., REHN Proc. U. S. Nation. Mus. 42.

Humbertiella africana sp. n. Kamerun, REHN p. 106 Arch. Naturges. 78 A.

Leptococe maculata sp. n. p. 104, CHOPARD Bull. Soc. ent. France 1912.

Leptomiopteryx gen. n. p. 329, voisin de *Miopteryx*, *dispar* sp. n. p. 330, Guiana, CHOPARD Ann. Soc. ent. France 80.

Macrodanuria baculiformis sp. n. Kamerun, SJÖSTEDT Ark. Zool. 7 No. 37 p. 3 Taf. 1.

Mantis nyassana p. 16, *togana* p. 18, *mitiana* p. 21, spp. n., Africa, GIGLIO-TOS Boll. Soc. ent. ital. 43.—*M. pusilla* zu *Armene* p. 6, *M. wagneri* zu *Oxythespis* p. 7, UVAROV Hor. Soc. ent. ross. 40 3.

Mionyx maculosus p. 332 fig., *fuscescens* p. 333, *lineatus* p. 334 fig., spp. n., Guiana, CHOPARD Ann. Soc. ent. France 80.

Oxypiloidea margarethae sp. n. Absinia, WERNER p. 17 Berlin. ent. Zeitschr. 57.

Panurgica liberiana p. 466 ff. 8 & 9, *fratercula* p. 468 ff. 10 & 11, spp. n., Liberia, REHN Proc. U. S. Nation. Mus. 42.

Parastagmatoptera flavoguttata immaculata n. var. p. 337, CHOPARD Ann. Soc. ent. France 80.

Parhierodula gen. n. typ. *Mantis venosa* Ol., *malaccana* Malacca p. 113, *schantzei* p. 115, *brevis* p. 116, *simbanganana* p. 119, *sorongana* p. 120, *jobina* p. 121, *ansusana* p. 122, *kapaurana* p. 122, *morokana* p. 123, Nova Guinea,

lamosonga Neu Mecklemburg p. 125, *dubia* Borneo p. 127, *wernerii* Isole Kei p. 128, *sapitina* Lombok p. 129, spp. n., GIGLIO-TOS Boll. Soc. ent. ital. 43.—*Parhierodula* (*Rhomboderula* subgen. nov.) *katawana*, *dilena*, p. 131, *andaina* p. 134, Nova Guinea, spp. n. GIGLIO-TOS T.c.

Photina pilosa, viridescens, spp. n., p. 324, Guiana, CHOPARD Ann. Soc. ent. France 80.

Polyspilota fallax sp. n. Grande Comoro p. 106, GIGLIO-TOS Boll. Soc. ent. ital. 43.

Pseudomantis hartmeyeri sp. n. Australia, WERNER p. 51 Fauna Sudw. Austral. 4 3.

Pseudomiopteryx guyanensis sp. n. p. 329 fig., CHOPARD Ann. Soc. ent. France 80.

Pseudoxyops latipennis sp. n. p. 336 fig. Guiana, CHOPARD T.c.

Pyrgomantis wellmani sp. n. Angola, REHN p. 110 Arch. Naturges. 78 A.

Rhomboderula subg. n. vide *Parhierodula*.

Sibylla graciosa sp. n. Kamerun, REHN p. 118 Arch. Naturges. 78 A.

Sphodromantis fenestrata p. 149, *nebina* p. 150, *fulva* p. 151, *andreinii* p. 157, *gestri* p. 158, spp. n., Africa, GIGLIO-TOS Boll. Soc. ent. ital. 43.—*S. pupillata* sp. n. Congo, BOLIVAR p. 65 Rev. zool. afric. 2.—*S. ugandanus* sp. n. Uganda, REHN p. 115 Arch. Naturges. 78 A.

Stagmomantis dimidiata = (*Leptococe maculosa* Chop.), CHOPARD Bull. soc. ent. France 1912 p. 394.

Stenomantis novae-guineae subsp. n. *brevis*, WERNER p. 52 Fauna Sudw. Austral. 4 3.

Tarachodes ugandensis sp. n. Uganda, WERNER p. 15 Berlin. ent. Zeitschr. 57.—*T. fratercula* sp. n. O.-Afrika, REHN p. 109 Arch. Naturges. 78A.—*T. wernerii* nom. n. for *perloides* Wern. p. 452, *pilosipes* sp. n. Kongo p. 453 ff. 1 & 2, REHN Proc. U. S. Nation. Mus. 42.

Tarachomantis confusa sp. n. Madagascar p. 26, GIGLIO-TOS Boll. Soc. ent. ital. 43.

Tenodera blanchardi Nuova Guinea p. 46, *madimbana* p. 48, *ibana* p. 50, *iringana* p. 51, Africa, spp. n., GIGLIOTTOS T.c.

Thespis infusata sp. n. p. 320 Guiana, CHOPARD Ann. Soc. ent. France 80.

GRYLLIDAE.

Observations on the *Gryllidae*: 3. Notes on the classification and on some habits of certain crickets, BAUMGARTNER Bull. Univ. Kans. pp. 307-319; 4. Copulation, BAUMGARTNER T.c. pp. 321-345 pl. xlv.

Über den Thorax von *Gryllus domesticus*. Tl 5. Die nachembryonale Metamorphose im ersten Stadium, VOSS Zs. wiss. Zool. 101 pp. 445-578.

Anaxipha exigua, pulicaria, p. 412, REHN & HEBARD, Ent. News 23.

Brachytrupes achaetinus, fig., IYER Calcutta For. Bull. No. 11 1912 and GHOSH p. 161 pl. Mem. Dept. Agric. Ind. Ent. Ser. 4 No. 3.

Cryptoptilum gen. n. type *Ectatoderus antillarum* p. 192, *hesperum* p. 194 f. 4, *tubulatum* p. 201 f. 9 Mexico, *contectum* Hayti p. 203 f. 10, *trigonalpalpum* Bahamas Is. and U.S. p. 204 ff. 11 & 12, spp. n., REHN & HEBARD Proc. Ac. Philadelphia.

Ectatoderus nigriceps p. 281, *squamiger* p. 282, spp. n., Aldabra, BOLIVAR Tr. Linn. Soc. London 15.

Fryeria gen. n. *aphonoides* sp. n. Aldabra pl. xiv f. 23, BOLIVAR p. 291 T.c.

Glaphyropus gen. n. type *Cycloptilum americanum* p. 189, REHN & HEBARD, Proc. Ac. Philadelphia.

Gryllapterus gen. n. p. 284, *tomentosus* sp. n. Seychelles p. 285, BOLIVAR Tr. Linn. Soc. London 15.

Gryllodes macropterus p. 41 pl i f. 7, *lateralis* p. 43 Beschreibung, *bolivari* sp. n. p. 43 Transcaspien, UVAROV Hor. Soc. ent. ross. 40 3.

Guasacris gen. n. p. 6, *variegata* sp. n. p. 7 pl. i ff. 3 & 3A, Brit. Ostafrika, SJÖSTEDT Ark. Zool. 7 No. 38.

Heterotrypus insularis sp. n. Seychelles, BOLIVAR p. 290 Tr. Linn. Soc. London 15.

Hoplosphyrum gen. n. type *Mogoplistes occidentalis* p. 222, REHN & HEBARD Proc. Ac. Philadelphia 64.

Liogryllus campestris Gehör, REGEN Zool. Anz. pp. 305-316.

Myrmecophila acervorum, ♂, SZOBÓ Allatt. Közlem. 11 pp. 116-125 158-159 figs.—*M. acervorum*, VICHET Miscell. entom. 20 pp. 19-20.

Myrmophilina gen. n. di Orthoptera myrmecophila, ex gen. *Myrmecophila*, typ. *Myrmophilina ochracea* Fisch. partim, SILVESTRI Portici Boll. Lab. zool. agr. 6 1912 p. 231.

Nemobius adelungi sp. n. Transcaspien, UVAROV Hor. Soc. ent. ross. 40 3 p. 39.

Oecanthus pellucens turanicus subsp. n., UVAROV p. 38 T.c.

Oligacanthopus gen. n. p. 218, *prograptus* sp. n. Florida p. 219 ff. 21-23, REHN & HEBARD Proc. Ac. Philadelphia 64.

Ornebius syrticus Farquhar isld., *elegantulus*, p. 280, *succineus* p. 281, Seychelles, spp. n., BOLIVAR Tr. Linn. Soc. London 15.

Pentacentrus nigrifrons sp. n. Seychelles, BOLIVAR p. 282 T.c.

Phaeogryllus gen. n. p. 285, *fuscus* sp. n. Seychelles p. 286, BOLIVAR T.c.

Schizodactylus monstrosus, distribution; TUNISON J. Bombay Soc. 21 p. 1001.

Scottia gen. n. p. 278, *chagosensis* Chagos islds., *salticiformis* Seychelles; spp. n., p. 279 pl. xiii figs. 10 & 11, BOLIVAR Tr. Linn. Soc. London 15.

Seychellesia gen. n., *nitidula*, p. 286, *patellifera. longicercata*, p. 287, spp. n., Seychelles, BOLIVAR T.c.

Trigonidium perpusillum p. 288, *vittaticolle* p. 289, spp. n., Seychelles, BOLIVAR T.c.

Zarceus major sp. n. Seychelles, BOLIVAR p. 290 T.c.

LOCUSTIDAE.

The genera of *Listroscelinae* with lists of the species and 3 plates, KARNY Gen. ins. 131.

Conoccephalinac; the genera with lists of the species, KARNY Gen. ins. 135 17 pp. 2 pls. For subgen. n. vide *Neoxiphidion* and *Thcoxiphidion*.

The genera of *Mcconeminae*, *Phyllophorinae*, *Tympanophorinae*, *Phasgonurinae*, *Phasmodinae*, *Bradyporinae*, with lists of species, CAUDELL Gen. ins. 137 25 pp. 2 pls.

The genera of *Copiphorinae* with lists of the species, KARNY Gen. ins. 138 50 pp. 7 pls.

The genera of *Ephippigerinae* with lists of the species, CAUDELL Gen. ins. 140 10 pp. 1 pl.

The genera of *Agraeciinae* with lists of the species, KARNY Gen. ins. 141 47 pp. 8 pls.

Grillaeriti del K. Zoolog. Museum di Berlino, 78 specie e sottospecie; 2 spp. n., GRIFFINI Milano Atti Soc. ital. se. nat. 50 fasc. 2-3 1911 pp. 187-246.

Gryllacridae; prospectus of Bornean, GRIFFINI J. Mus. Sarawak 1 No. 2 16 pp.

Locustodeen; Genitalapparat, Uebertragung des Samens (Russ. + deutsch. Rés.); CHOLODKOVSKIJ Bull. Soc. nat. Crimée 1 pp. 57-72 figs. 1-14.

Regeneration of legs, GRIFFINI Natura Milano 2 1911 Nos. 1 & 2.

Note on a pink locustid, GLASER, Psyche 19 p. 159.

Amblycorypha oblongifolia, pink, DAVIS J. New York Ent. Soc. 20 p. 294.

Amytta straminea sp. n. Kamerungebirge, SJÖSTEDT Ark. Zool. 7 No. 37 p. 15 f. 1.

Anostostoma merayi sp. n. p. 16, GRIFFINI Bull. Mus. Paris 1912.

Anthracites nigrifrons sp. n. Neu Guinea, KARNY p. 7 Abh. Mus. Dresden 14 No. 2.

Aphroptera schultzei sp. n. Neu Guinea, GIGLIO-TOS p. 149 Ent. Rdsch. 29.

Atlanticus glaber sp. n. p. 269 ff. 20-22 Florida, REHN & HEBARD Proc. Ac. Philadelphia 64,

Beloccephalus sabalis, *hebardei*, p. 123, *rehni* p. 124. spp. n., Florida, DAVIS J. New York Ent. Soc. 20.

(N-9210 j)

Bueacola gen. n. nahe *Corymeta* p. 7 *cornigera* sp. n. p. 8 Taf. 2 ff. 3 & 3A Kamerungebirge, SJÖSTEDT Ark. Zool. 7 No. 37.

Carcinopsis rothschildi sp. n. Madagascar, GRIFFINI p. 4 No. 662 Boll. Mus. Torino.

Conocephaloides chagosensis sp. n. Chagos Isld., BOLIVAR p. 275 Tr. Linn. Soc. London 15.

Derallimus gen. n. *Bradyporinae* type *Locusta armadillo* Thunb., CAUDELL p. 20 Gen. ins. 137.

Diestrammena elcgantissima sp. n. p. 19 fig. 1, GRIFFINI Bull. Mus. Paris 1912.

Dithela acuticercus sp. n. Kamerungebirge, SJÖSTEDT Ark. Zool. 7 No. 37 p. 5 Taf. 3 ff. 4-5.

Echidnogryllacris gen. n., sp. typ. *Gryllacris sanguinolenta* Br., GRIFFINI Monit. zool. ital. 23 p. 29.

Eremus brunni sp. n. Ovest Africa, GRIFFINI Redia 8 p. 309.—*E. chimacra* sp. n. Caput Bonae Spei, GRIFFINI p. 240 Atti Soc. ital. 50.

Eugaster speciosus sp. n. Brit. Ostafrika, SJÖSTEDT Ark. Zool. 7 No. 38 p. 8 pl. ii f. 1.

Gryllacris; notes and synonymy pp. 79-140, *manteri* Sumatra sp. n., GRIFFINI Ann. Mus. Genova 45 p. 107.—*G. grassii* sp. n. Borneo, GRIFFINI Atti Soc. ital. 51 p. 129 fig.—*G. holdhausi* sp. n. Ovest Africa, GRIFFINI Redia 8 p. 298.—*G. fryeri* sp. n. Aldabra, BOLIVAR p. 277 Tr. Linn. Soc. London 15.—*G. buyssoniana* sp. n. p. 23 fig. 2, GRIFFINI Bull. Mus. Paris 1912.—*G. la-baumei* sp. n. Lombok, GRIFFINI p. 225 Atti Soc. ital. 50.

Habetia imitatrix sp. n. Bongu, KARNY p. 7 Abh. Mus. Dresden 14 No. 2.

Heminicsara gen. n., *jacobi* sp. n. Neu Guinea, KARNY p. 9 T.c.

Heteromallus tournoueri sp. n. Patagonia, GRIFFINI p. 11 Boll. Mus. Torino No. 662.

Isophya taurica, Lebensweise, Copulation, Eiablage, Entwicklung (Russ. + d. R.), MOKRZECKI Boll. Soc. nat. Crimée 1 pp. 73-83 figs. 1-15.

d 44-2

- Keniicola* gen. n. nahe *Euthyphlebia* p. 13, *gracilis* sp. n. p. 14 pl. ii ff. 3 3a 3b 3c Brit. Ostafrika, SJÖSTEDT Ark. Zool. 7 No. 38.
- Locusta danica*, oviposition, GIRAULT, Ent. News 23 p. 355.—*L. viridissima*, biologisches und anatomisches, TÜMPFEL Bonn SitzBer. nathist. Ver. 1912 pp. 56–60; *L. viridissima meridionalis* var. n. (Russ.), ŠUGUROV Rev. russ. ent. 12 p. 222.
- Medecticus* gen. n. pro *Decticus assimilis*, UVAROV Rev. russ. ent. 12 p. 214.
- Meruterrana* gen. n. nahe *Dionconema* p. 10, *elegans* sp. n. p. 12 pl. ii f. 2 2a–c Brit. Ostafrika, SJÖSTEDT Ark. Zool. 7 No. 38.
- Metrioptera roeselii*, LUCAS p. 224 fig. Entomologist 45.
- Microsalomona* gen. n., *cornuta* sp. n. Neu Guinea, KARNY p. 16 Abh. Mus. Dresden 14 No. 2.
- Neanias harmandi* sp. n. p. 21, GRIFFINI Bull. Mus. Paris 1912.
- Neoxiphidion* subg. n. of *Conocephalus*, KARNY p. 8 Gen. ins. 135.
- Nicsara tessellata* p. 10, *schlaginhausenii* p. 11, *viridipes* p. 13, spp. n., Neu Guinea, KARNY Abh. Mus. Dresden 14 No. 2.
- Paradrymadusa maculata* sp. n. Diarbekir, EBNER Ann. Hofmus. Wien 26 p. 441 etc.
- Parahexacentrus* gen. n. for *Hexacentrus paradoxus* K., KARNY p. 14 Gen. ins. 131.
- Paraphisis* gen. n. p. 17, *helleri* sp. n. p. 18 Neu Guinea, KARNY Abh. Mus. Dresden 14 No. 2.
- Phisis visenda* sp. n. Seychelles, BOLIVAR p. 277 Tr. Linn. Soc. London 15.
- Pholidoptera pietschmanni* sp. n. Mesopotamien, EBNER Ann. Hofmus. Wien 26 p. 441 etc.
- Plangia ovalifolia* sp. n. Seychelles, BOLIVAR p. 274 Tr. Linn. Soc. London 15.
- Platycleis barrettii* sp. n. Madeira, BURR p. 31 pl. i f. 3 Ent. Rec. 24.—*P. semenovi* sp. n. Turkestan (Russ. + lat. Diagn.), UVAROV Rev. russ. ent. 12 p. 213.—*P. squamiptera* p. 36 pl. i f. 6, *fatima* p. 37, spp. n., Transcaspien, UVAROV Hor. Soc. ent. ross. 40 3.
- Poecilimon distinctus*, ŠUGUROV Rev. russ. ent. 12 p. 106.
- Pseudonicsara* subg. n. zu *Salomona*, KARNY p. 14 Abh. Mus. Dresden 14 No. 2.
- Psorodonotus specularis* Schwarzmeergebiet p. 62, *inflatus* sp. n. Caucasus p. 63, UVAROV Rev. russ. ent. 12.
- Saga serrata*, HUGUES Feuille jeunes natural. 42 p. 12.
- Schultessinia* gen. n. nahe *Kenimontana*, typus *Conchotopoda ruspolii* Schult., SJÖSTEDT Ark. Zool. 7 No. 38 p. 15.
- Spizaphilus kirbyi* sp. n. Madagascar, GRIFFINI Atti Soc. ital. 50 pp. 303–314.
- Tachycines asynamorus* Begattung, Spermatophoren (Russ. + deutsch. Rés.), BOLDYREV Rev. russ. ent. 12 pp. 552–570 ff. 1–4.
- Thecoxiphidion* subg. n. of *Conocephalus*, KARNY p. 12 Gen. ins. 135.
- Xiphidium spartinae* p. 110 pl. viii, *nigropleuroides* p. 116 pl. ix, spp. n., U.S., FOX Ent. News 23.—*X. spartinae*, *nigropleuroides*, types, FOX p. 232 T.c.

ACRIDIIDAE.

Cytology and taxonomy of *Acridiidae*, McCLUNG Proc. 7 Internat. Congr. Zool. pp. 291–305.

Abila smaragdipes sp. n. p. 96 Brazil, BRUNER Ann. Carnegie Mus. 8.

Abracris chapadensis p. 109, *meridionalis* p. 111, *conspersipennis* sp. n. p. 110 Brazil, BRUNER T.c.

Acridella sheffieldi, *stigmatica*, spp. n., Congo, BOLIVAR p. 75 Mem. Soc. ent. Belgique 19.

Acridium (*Cyrtacanthacris*) *sanguineum* sp. n. Brit. Ostafrika, SJÖSTEDT Ark. Zool. 7 No. 38 p. 23 pl. iii ff. 3 & 3a.

Acrotylus trigrammus sp. u. Katanga, BOLIVAR p. 87 Mem. Soc. ent. Belgique 19.

Acteana neavei sp. n. Katanga, BOLIVAR pl. 79 T.c.

Adelotettix brunneus sp. n. p. 98 Brazil, BRUNER Ann. Carnegie Mus. 8.

Aeolopus laticosta Chagos p. 268, *aldabrensis* Aldabra, *dociostauroides* Seychelles, p. 269, *fasciatus* Farkuhar Atoll, *perpusillus* Seychelles, p. 270, spp. n., BOLIVAR Tr. Linn. Soc. London 15.

Alcamenes lobipennis sp. n. p. 45, *marginipennis* sp. n. (?) p. 46, Brazil, BRUNER Ann. Carnegie Mus. 8.

Aleuas curtipennis sp. n. p. 101 Brazil, BRUNER T.c.

Amblytropidia geniculata p. 26, *minor* p. 27, *corumbae* p. 28, *interior* p. 29, Brazil, spp. n., BRUNER T.c.

Amphicremna flavipennis sp. n. Katanga, BOLIVAR p. 76 Mem. Soc. ent. Belgique 19.

Anabylis (?) *fusco-maculata* sp. n. p. 118 Brazil, BRUNER Ann. Carnegie Mus. 8.

Atrachelacris gramineus sp. n. Argentina p. 129, BRUNER T.c.

Berengueria obliquifrons p. 82, *rotundifrons* p. 83, spp. n., Katanga, BOLIVAR Mem. Soc. ent. Belgique 19.

Brachytypus burri sp. n. Angola p. 262, REHN Ent. News 23.

Bucephalacris fuscipennis p. 91, *corallipes* p. 93, Brazil, spp. n., BRUNER Ann. Carnegie Mus. 8.

Calliptamus reticulatus = *Euprepocnemis plorans*, UVAROV Hor. Soc. ent. ross. 40 3 p. 34.

Caloscirtus gen. n., *rubripennis* sp. n. British Guiana p. 66, BRUNER Ann. Carnegie Mus. 8.

Cardenius gen. n. near *Catantops*, *chloronotus*, p. 95, *dubiosus*, *sheffieldi*, spp. n., Katanga, BOLIVAR Mem. Soc. ent. Belgique 19.

Catantopsis gen. n. p. 98 near *Catantops*, *opomaliformis* sp. n. Katanga p. 99, BOLIVAR T.c.

Chlorohippus gen. n. p. 87, *roseipennis* sp. n. p. 88 Brazil, BRUNER Ann. Carnegie Mus. 8.

Chlorus brunneus sp. n. p. 137 Brazil, BRUNER T.c.

Chrysopsacris; type *Gryllus bucephalus* p. 111, BRUNER T.c.

Cladoramus squalus, *monstrosus*, spp. n., Katanga, BOLIVAR p. 74 Mem. Soc. ent. Belgique 19.

Columbacris gen. n. p. 76, *caudata* sp. n. p. 77 Brazil, BRUNER Ann. Carnegie Mus. 8.

Coptacroides sheffieldi sp. n. Katanga, BOLIVAR p. 95 Mem. Soc. ent. Belgique 19.

Coptotettix indicus Bombay p. 144, *parvulus* Behar p. 145, *curtipennis* E. Himalayas p. 146, spp. n., HANCOCK Mem. Dept. Agric. Ind. Ent. Ser. 4.

Coptottigia gen. n., *cristata* sp. n. Seychelles, BOLIVAR Tr. Linn. Soc. London 15 p. 267.

Coryacris conspersipennis sp. n. (?) Sao Lorenzo Rio p. 54, BRUNER Ann. Carnegie Mus. 8.

Criotettix extremus Madras p. 132, *montanus* Punjab p. 133, *aequalis* Bengal and E. Himalayas p. 135, *grandis* Assam p. 134, spp. n., HANCOCK Mem. Dept. Agric. Ind. Ent. Ser. 4.

Cymochtha prasina sp. n. Katanga, BOLIVAR p. 77 Mem. Soc. ent. Belgique 19.

Cyphocerastis tricolor sp. n. Katanga, BOLIVAR p. 94 T.c.

Derocorys gibbosa, *roseipennis* und *curvipes* Lebensgewohnheiten, Schutzfärbung, UVAROV Hor. Soc. ent. ross. 40 3 pp. 27-28.

Dichroplus gracilis p. 130, *olivaceus* p. 133, Brazil, spp. n., BRUNER Ann. Carnegie Mus. 8.

Diedronotus strigatus sp. n. p. 50, *fuscipennis* p. 51, spp. n., Montevideo, BRUNER T.c.

Dnopherula laticosta sp. n. Katanga, BOLIVAR p. 81 Mem. Soc. ent. Belgique 19.

Duronia kalmyka = *fracta* subsp., UVAROV Hor. Soc. ent. ross. 40 3 p. 13.

Elaeochlora brevipennis sp. n. p. 55 Brazil, BRUNER Ann. Carnegie Mus. 8.

Epigrypa brevicornis sp. n. Peru p. 12, CAUDELL Psyche 19.

Eucoptacra torquata p. 91, *exigua*, *pallida*, p. 92, spp. n., Katanga, BOLIVAR Mem. Soc. ent. Belgique 19.

Eujivarus gen. n. p. 144, *fusiformis* p. 145, *meridionalis* p. 147, Brazil, spp. n., BRUNER Ann. Carnegie Mus. 8.

Eumastusia gen. n. type *Mastusia koebelei* p. 85, BRUNER T.c.

- Euparattix*, notes and key to Indian species pp. 150-151, *tenuis*, *corpulentus*, *crassipes*, p. 153, *bengalensis* p. 154, *nodulosus* p. 155, spp. n., India, *personatus* p. 152, *parvus* synonymy p. 156, HANCOCK Mem. Dept. Agric. Ind. Ent. Ser. 4.
- Euplectrotettix scyllinaeformis* sp. n. p. 34 Brazil, BRUNER Ann. Carnegie Mus. 8.
- Eurotettix robustus* sp. n. p. 135 Brazil, BRUNER T.c.
- Eusitalces* gen. n. p. 142, *vittatus* sp. n. British Guiana p. 143, BRUNER T.c.
- Gelastorrhinus sagitta* sp. n. Transcaspian, UVAROV Hor. Soc. ent. ross. 40 pp. 10-13 pl. i ff. 1 & 2.
- Hedetettix costatus* Bengal p. 147, *diminutus* Bombay p. 148, spp. n., HANCOCK Mem. Dept. Agric. Ind. Ent. Ser. 4.
- Hesperotettix*; peculiar cytology, taxonomy, McCLUNG Proc. 7 Internat. Congr. Zool. pp. 291-305.
- Heteropternis antennata*, *longicornis*, p. 84, *affinissima*, *pugnax*, p. 85, *citrina* p. 86, spp. n., Katanga, BOLIVAR Mem. Soc. ent. Belgique 19.
- Hisychius brasiliensis* sp. n. p. 68 Brazil, BRUNER Ann. Carnegie Mus. 8.
- Jamesonia dimidiata* sp. n. Katanga, BOLIVAR p. 79 Mem. Soc. ent. Belgique 19.
- Jodacris chapadensis* p. 105 Brazil, *intermedia* Santarem p. 106, spp. n., BRUNER T.c.
- Kalooa tabellifera* sp. n. Katanga, BOLIVAR p. 78 Mem. Soc. ent. Belgique 19.
- Leptomerinthoprora gracilicornis* sp. n. p. 114 Brazil, BRUNER Ann. Carnegie Mus. 8.
- Leptyisma intermedia* Uacarizal p. 72, *uniformis* p. 73, *grossa* p. 74, Brazil, spp. n., BRUNER T.c.
- Leptysmia gracilis* p. 78 Brazil, *tenuipennis* Rio Paraguay p. 79, spp. n., BRUNER T.c.
- Leurocerus* gen. n. type *Cocytotettix linearis* p. 23, BRUNER T.c.
- Linoceratium australe* sp. n. p. 20 Brazil, BRUNER T.c.
- Mastusia caeruleipennis* sp. n. p. 86 Brazil, BRUNER Ann. Carnegie Mus. 8.
- Masyntes brasiliensis* p. 6, *chapidensis* p. 8, Brazil, spp. n., BRUNER T.c.
- Maura antennata*, *sobrina*, spp. n., Katanga, BOLIVAR p. 88 Mem. Soc. ent. Belgique 19.
- Mazarredia latifrons* Bengal and E. Himalayas p. 139, *chinensis* Tonkin p. 140, *dubia* Bengal and E. Himalayas p. 141, spp. n., HANCOCK Mem. Dept. Agric. Ind. Ent. Ser. 4.
- Melanophus* etc., in Minnesota, WASHBURN Rep. Minnesota 14 pp. 1-41 pls i-iii.
- Mioscirtus varentzovi* = *wagneri* ab., UVAROV Hor. Soc. ent. ross. 40 p. 20.
- Mizonocara* gen. n., *deserti* sp. n. Transcaspian, UVAROV p. 18 T.c.
- Nautia ornatipes* p. 64, *vitta-genae* p. 65, BRUNER Ann. Carnegie Mus. 8.
- Ocytettix populus* p. 264, *nymphula* p. 265, spp. n., Seychelles, BOLIVAR Tr. Linn. Soc. London 15.
- Odontomelus pallidus* sp. n. Brit. Ostafrika, SJÖSTEDT Ark. Zool. 7 No. 38 p. 16 pl. ii f. 4.
- Oedipoda fedtshenkoi* Farbenvarietäten p. 208, ab. *coeruleipennis* ab. n., *jaxartensis* subsp. n., *coerulescens*, p. 209, Turkestan (Russ. + lat. Daign.), UVAROV Rev. russ. ent. 12.
- Ommatolampis collaris* sp. n. p. 120 Brazil, BRUNER Ann. Carnegie Mus. 8.
- Omura congrua brunneri* var. n. British Guiana p. 42, BRUNER T.c.
- Opsomala stali* sp. n. p. 80 Brazil, BRUNER T.c.
- Orbillus indecisus* sp. n. Katanga, BOLIVAR p. 94 Mem. Soc. ent. Belgique 20.
- Orphulella peruna* nom. n. p. 16, *interrupta* p. 12, *elongata* p. 14, *crassa* p. 17, *grossa* p. 18, *compacta* p. 19, Brazil, spp. n., BRUNER Ann. Carnegie Mus. 8.
- Orthochtha trivittata* sp. n. Katanga, BOLIVAR p. 77 Mem. Soc. ent. Belgique 19.
- Oxya turanica* sp. n. Transcaspian, UVAROV Hor. Soc. ent. ross. 40 3 p. 28 pl. i ff. 4 & 5.

Oxyrrhepes flavovittata p. 19 pl. i ff. 4 4a 4b, *ochracea* p. 21 pl. iii ff. 2 & 2a, spp. n., Brit. Ostafrika, SJÖSTEDT Ark. Zool. 7 No. 38.

Paracaloptenus caloptenoides, CZIŽEK Wien ent. Zeit. 31 p. 224.

Paracardenius gen. n. near *Catantops*, *schoutedeni*, p. 97, *confusus* p. 98, spp. n., Katanga, BOLIVAR Mem. Soc. ent. Belgique 19.

Paracornops longicorne p. 82, *dorsatum* p. 84, Brazil, spp. n., BRUNER Ann. Carnegie Mus. 8.

Paradichroplus rubripes p. 138, *geniculatus* p. 139, Brazil, spp. n., BRUNER T. c.

Paraleuas longipennis sp. n. (?) p. 103 Brazil, BRUNER T.c.

Parasitalces gen. n. p. 124, *serenotata* sp. n. p. 125 Brazil, BRUNER T.c.

Parasphena keniensis sp. n. Brit. Ostafrika, SJÖSTEDT Ark. Zool. 7 No. 38 p. 18 pl. iii f. 1.

Paratettix chagosensis sp. n. Chagos islds., BOLIVAR Tr. Linn. Soc. London 15.

Parepistaurus stigmaticus sp. n. Katanga, BOLIVAR p. 94 Mem. Soc. ent. Belgique 19.

Pargaella luctuosa sp. n. Katanga, BOLIVAR p. 76 T.c.

Parorphula latipennis sp. n. p. 21 Brazil, BRUNER Ann. Carnegie Mus. 8.

Parossa nom. n. for *Ossa* Gig.-Tos. p. 38, BRUNER T.c.

Pelopedon obscurum sp. n. (?) p. 37 Brazil, BRUNER T.c.

Pelusca gen. n. near *Prototettix*, *neavei* sp. n. Katanga, BOLIVAR p. 73 Mem. Soc. ent. Belgique 19.

Phorenula dorsata p. 81, *cruciata* p. 82, spp. n., Katanga, BOLIVAR T.c.

Pnorisa fasciatipes sp. n. Katanga, BOLIVAR p. 80 T.c.

Procylettix gen. n. p. 265, *fusiformis* sp. n. Seychelles p. 266, BOLIVAR Tr. Linn. Soc. London 15.

Prorocorypha gen. n. p. 300, *snowi* sp. n. p. 301 pl. lxiii Arizona, REHN Bull. Kans. Univ. 5.

Prototettix sublaevis sp. n. Katanga, BOLIVAR p. 74 Mem. Soc. ent. Belgique 19.

Psiloscirtus gen. n. p. 141, *olivaceus* sp. n. p. 142 Brazil, BRUNER Ann. Carnegie Mus. 8.

Radinotatum brevipenne peninsulare subsp. n. p. 246 ff. 1-10, REHN & HEBARD Proc. Ac. Philadelphia 64.

Rhabdoscirtus gen. n. p. 116, *vittatus* sp. n. British Guiana p. 117, BRUNER Ann. Carnegie Mus. 8.

Rhynchotettix gen. n. p. 271, *gardineri* sp. n., Seychelles, p. 272, BOLIVAR Tr. Linn. Soc. London 15.

Rodunia acuminata sp. n. Katanga, BOLIVAR p. 78 Mem. Soc. ent. Belgique 19.

Saussurella; key pp. 156-157, *indica* Himalayas p. 157, *curticornu* Bihar p. 158, *cornifrons* Sumatra p. 159, *borneensis* Borneo p. 160, spp. n., HANCOCK Mem. Dept. Agric. Ind. Ent. Ser. 4.

Schistocerca formosa sp. n. p. 127 Brazil, BRUNER Ann. Carnegie Mus. 8.—*S. damnifica calidior* subsp. n. p. 258 ff. 14 & 16 Florida, REHN & HEBARD Proc. Ac. Philadelphia 64.—*S. paranensis*, enemies etc., GAILLARDO An. Mus. Buenos Aires 23 pp. 155-165.

Scirtetica ritensis sp. n. p. 303 pl. 63 Arizona, REHN Bull. Kans. Univ. 5.

Sitalces robustus p. 121, *nudus* p. 122, *infuscatus* p. 123, BRUNER Ann. Carnegie Mus. 8.

Spadotettix p. 141, *provertex* sp. n. Madras p. 142, HANCOCK Mem. Dept. Agric. Ind. Ent. Ser. 4.

Spathalium bolivari sp. n. p. 39 Brazil, BRUNER Ann. Carnegie Mus. 8.

Sphingonotus cyanopterus in Schweden, WAHLGREN Zs. wiss. Insektenbiol. 8 pp. 176-179.

Stauronotus moroccanus, Ei, erste Entwicklungsstadien, Einfluss ausserer Faktoren auf die Entwicklung (Russ.), PLOTNIKOV Turkest. selisk. choz. 7 pp. 36-50 figs. 1-2; Eiablage Lebensweise, Gewohnzeiten (Russ.), SKVORCOV Turkest. selisk. choz. 7 pp. 202-217.

Staurorhectus intermedius sp. n. p. 31 Brazil, BRUNER Ann. Carnegie Mus. 8.

Stereotettix paralogistes p. 36, BRUNER T.c.

Strumiger desertorum Larve, UVAROV Hor. Soc. ent. ross. 40 3 p. 25.

Sumba roseipennis sp. n. Katanga, BOLIVAR p. 78 Mem. Soc. ent. Belgique 19.

Systolederus lobatus sp. n. E. Himalaya p. 143, HANCOCK Mem. Dept. Agric. Ind. Ent. Ser. 4.

Tanita elongata p. 88, *brachyptera*, *stulta*, p. 89, spp. n., Katanga, BOLIVAR Mem. Soc. ent. Belgique 19.

Tetrix; note, HAY Nimes Bul. soc. 37 1909-1910 pp. 66-78 fig.

Tettix variegatus, synonymy p. 149, HANCOCK Mem. Dept. Agric. Ind. Ent. Ser. 4.

Thericles schoutedeni sp. n. Congo, BOLIVAR p. 66 Rev. zool. afric. 2.—*T. macropygia* sp. n. Congo p. 263 fig., REHN Ent. News 23.

Thoradonta spiculoba sp. n. Bihar p. 138, HANCOCK Mem. Dept. Agric. Ind. Ent. Ser. 4.

Tmethis; Synopsis der turkestanischen Formen pp. 211-212, *bitobus* Beschreibung pp. 210-211, *karatavicus* subsp. n. (Russ. + lat. Diagn.), UVAROV Rev. russ. ent. 12.—*T. semenovi* ♂, UVAROV Hor. Soc. ent. ross. 40 3 p. 26.

Trilophidia nebulosa sp. n. Katanga, BOLIVAR p. 83 Mem. Soc. ent. Belgique 19.

Tristria brachyptera, *dimorpha*, spp. n., Katanga, BOLIVAR T.c.

Tylotropidius loennbergianus sp. n. Brit. Ostafrika, SJÖSTEDT Ark. Zool. 7 No. 38 p. 24 pl. ii ff. 5 & 5a.—*T. didymus* var. n. *violacea*, BOLIVAR p. 99 Mem. Soc. ent. Belgique 19.

Vachushtia gen. n. *Oedipodidarum*, *sancti-davidi* sp. n. Tiflis, ŠUGUROV Rev. russ. ent. 12 p. 105.

Zicra pictipes sp. n. Katanga, BOLIVAR p. 80 Mem. Soc. ent. Belgique 19.

Zoniopoda hempeli p. 58, *collaris*, *robusta*, p. 60, Brazil, spp. n., BRUNER Ann. Carnegie Mus. 8.

Zosperamerus brasiliensis sp. n. p. 94 Brazil, BRUNER T.c.

Zygodistron modestum sp. n. p. 99 Brazil, BRUNER T.c.

APTERA s.l.

Anamerentoma und Holomerentoma, eine neue Einteilung der Hexapoden, PRELL Zool. Anz. 39 pp. 357-365.

THYSANURA s.l.

Campodeidae d'Europa, contribuzione alla loro conoscenza, 16 spp. descritte, 13 spp. n., SILVESTRI Boll. Lab. Portici 6 pp. 110-149 31 figs.

Campodea folsomi Mexico p. 5 fig., *kelloggi* California p. 7 fig., *howardi* p. 9 fig., *montgomeryi* p. 11 fig., Mexico, *morgani* North-Carolina p. 13 figs, spp. n., SILVESTRI Boll. Lab. Portici 6.—*C. redii* Calabria p. 112, *lubbockii* p. 116, *lankesteri* p. 118, Britannia, *giardi* Gallia p. 120, *grassii* p. 122, *gestri* p. 130, *malpighii* p. 132, Italia, *aristopelis* Corfu p. 135, *emeryi* Italia p. 137, *ribauti* Gallia p. 139, spp. n., SILVESTRI Boll. Lab. Portici 6.

†*Campodea darwinii* sp. n. Bernstein Deutsch., SILVESTRI p. 45 Schr. Ges. Königsberg 53.

Eutrychocampa wilsoni sp. n. Los Angeles p. 23 fig., SILVESTRI Boll. Lab. Portici 6.

Grassiella dimorpha sp. n. Vera Cruz, SILVESTRI Boll. Lab. Portici 6 p. 213 figs.

Halomachilis und *Forbicina*, VERHOEFF Zs. wiss. Insektenbiol. Berlin 8 pp. 227-231.

Haplocampa gen. n., *wheeleri* sp. n. California p. 21 fig., SILVESTRI Boll. Lab. Portici 6.

Hemicampa gen. n. *osborni* sp. n. Mexico p. 15 fig., SILVESTRI T.c.

†*Lepisma jubatunum*, bei Königsberg, OLFERS p. 152 Berlin. ent. Zs. 56.

Machilis gravis sp. n. Burma, SILVESTRI p. 1 Zool. Anz. 40.

†*Machilis caestifera* sp. n. Bernstein Deutschl., SILVESTRI p. 62 Schr. Ges. Königsberg 53.

Machilontus gen. n. p. 4, *gravelii* Burma, *javanicus* Java p. 6, spp. n., SILVESTRI Zool. Anz. 40.

Megalopsobius gen. n., *convergens* sp. n. Burma, SILVESTRI pp. 3-4 T.c.

Metriocampa gen. n., *packardi* sp. n. Elbe p. 18 fig., SILVESTRI Boll. Lab. Portici 6.

Nicoletia (*Anelpistina*) *miranda* sp. n. Vera Cruz, SILVESTRI p. 219 figs. T.c.

† *Pachystylus* [gen. n. ?], *moebii* [sp. n.] Bernstein, Deutschl., OLFERS p. 152 Berlin. ent. Zs. 56.

Plusiocampa gen. n. p. 141, *corcyraea* Corfù p. 142, *notabilis* p. 143, *italica* p. 145, Calabria, spp. n., SILVESTRI.

Isotoma (*Isotomina*) *fasciata* sp. n. Nigeria, CARPENTER p. 80 Bull. ent. research 3.—*I. siva* p. 89 pl. vii f. 19, *nigropunctata* p. 90, spp. n., India, IMMS P. zool. Soc. London 1912.—*I. cinerea*, embryology, PHILIPTSCHENKO Zetischr. wiss. Zool. 103 pp. 519-660 5 pls., also (Russ.), FILIFIČENKO St. Peterburg 1912 pp. 1-132 pls. i-v.

Lepidocyrtus zygophorus sp. n., *L. curvicollis* var. n. *cyaneipes*, Galizien, SCHILLE p. 14 Ent. Zeitschr. 26.—*L. robustus* sp. n. India, IMMS p. 94 P. zool. Soc. London 1912.

Neanura corallina Ceylon p. 85 pl. vii f. 23, *pudibunda* Burma p. 86 pl. vi f. 12, *intermedia* India p. 87, spp. n., IMMS T.c.

Pseudachorutes anomalus sp. n. India, IMMS p. 88 T.c.

Paronella boernerii pl. xi f. 75 p. 106, *travancorica* pl. x f. 67 p. 108, *gracilis* p. 109, *phanolepsis* p. 110, *insignis* p. 112 pl. xi f. 80, spp. n., India, IMMS T.c.

Pseudocyphoderus gen. n., *annandalei* sp. n. India, IMMS p. 116 T.c.

Pseudosira indra sp. n. India, IMMS p. 100 T.c.

Seira frigida p. 97, *brahma* p. 99, spp. n., India, IMMS T.c.

Sinella montana sp. n. India, IMMS p. 101 T.c.

Sminthurides appendiculatus sp. n. India, IMMS p. 117 T.c.

Sminthurus bilineatus var. n. *nigriceps*, SCHILLE p. 15 Ent. Zeitschr. 26.

Xenylla obscura sp. n. Simla, IMMS p. 84 P. zool. Soc. London 1912.

COLLEMBOLA.

Catalogue of oriental *Collembola*, IMMS pp. 119-121 P. zool. Soc. London 1912.

La tribù degli *Achorutini* [6 spp. italiano], CAROLI Archivio zool. ital. 6 pp. 349-394 3 tav.

Cremastocephalus indicus p. 104, *montanus* p. 105, spp. n., India, IMMS P. zool. Soc. London 1912.

Cyphoderus simulans sp. n. India, IMMS p. 115 T.c.—*C. albinos* subsp. n. *boernerii* Galizien, SCHILLE p. 10 Ent. Zeitschr. 26.

Dicranocentroides gen. n. *fasciculatus* sp. n. India pl. x f. 68, IMMS p. 102 P. zool. Soc. London 1912.

Dicranocentrus linnaniemi sp. n. Africa, BÖRNER Wiss. Ergebnisse Zentral-Afrika-Exp. 4 Lfg 10 p. 283.

Entomobrya kali p. 95 pl. viii f. 34, *crassa* p. 96, spp. n., India, IMMS P. zool. Soc. London 1912.

Heteromuricus gen. n. *Heteromuricinae* subf. n., *cercifer* sp. n. Calcutta pl. ix f. 52, p. 92, IMMS T.c.

Idiomerus gen. n. near *Cyphoderus* p. 113, *pallidus* sp. n. India p. 114, IMMS T.c.

PROTURA.

Protura, RÜHL Soc. entomol. 27 p. 62.

Eosentomon germanicum sp. n. Deutschl., PRELL p. 35 Zool. Anz. 40.—*E. javanicum* sp. n., provisoria, su larva, Giava, BERLESE Redia 8 p. 321.

XIII. PROCHORDATA

INCLUDING

ENTEROPNEUSTA AND PTEROBRANCHIA

ARRANGED BY

I. B. J. SOLLAS

CONTENTS

	PAGE
I. TITLES	2
II. SUBJECT-INDEX :—	
General	4
Structure	4
Physiology	4
Development	4
Ethology	4
Evolution	4
Geography	4
III. SYSTEMATIC INDEX :—	
Tunicata	5
Cephalochordata	7
Enteropneusta and Pterobranchia	7

I.—TITLES.

- Alder, J. and Hancock, A.** The British Tunicata. Vol. iii. Edited by J. Hopkinson. Ray Society London 1912 (1-113) 15 pls. 8vo. **1**
- Apstein, C.** Tunicata. Résumé des observations sur le Plankton des Mers explorées par le conseil pendant les années 1902-1908. Copenhague Bul. explor. mer. 1911 Pt. ii (150-162) **1a**
- Brément, E.** Sur une variété méditerranéenne de l'*Aplidium coeruleum* Lahille, Synascidie de la Manche. (Note préliminaire.) Bul. Inst. Océan. Monaco 1912 No. 250. **2**
- Brément, E.** *Polycitor (Eudistoma) banyulensis* nov. sp., Synascidie nouvelle du Golfe du Lion. (Note préliminaire.) Bul. Inst. Océan. Monaco 1912 No. 248 (1-8) **3**
- Chatton, Édouard.** Diagnoses préliminaires de Péridiniens parasites nouveaux. Paris Bul. soc. zool. **37** 1912 (85-93). **4**
- Conklin, E. G.** Organisation and cell-lineage of the ascidian egg. Philadelphia Pa. J. Acad. Nat. Sci. **13** 1905 (1-119) 12 pls. **5**
- Conklin, Edwin G[rant].** The organisation of the egg and the development of single blastomeres of *Phallusia mamillata*. J. Exp. Zool. Philadelphia **10** 1911 (393-407). **6**
- Delsman, H. C.** Weitere Beobachtungen über die Entwicklung von *Oikopleura dioica*. Helder Tijdschr. Ned. dierk. Ver. (Ser. 2) **12** 1912 (199-205). **7**
- Dober, Gerhard.** Beiträge zur Kenntnis des Nervensystems der Salpen. Zs. wiss. Zool. Leipzig **101** 1912 (387-444) 1 Taf. **8**
- Goodrich, Edwin S.** A case of hermaphroditism in *Amphioxus*. Anat. Anz. Jena **42** 1912 (318-320). **9**
- Gravier, Ch.** Sur un Copépode (*Zanclopus antarcticus* n. sp.) parasite d'un Céphalodine recueilli par la deuxième expédition antarctique française et sur l'évolution du genre *Zanclopus* Calman. Bul. Muséum Paris **1912** (240-245). **10**
- Gravier, Ch.** Sur la répartition géographique des espèces actuellement connues du genre *Cephalodiscus* MacIntosh. Bul. Muséum Paris **1912** (151-153). **11**
- Gravier, Ch.** Sur une espèce nouvelle de *Cephalodiscus* (*C. anderssoni* n. sp.), provenant de la deuxième expédition antarctique française. Bul. Muséum Paris **1912** (146-150). **12**
- Hartmeyer, R. [in] Crawshay, R.** On the fauna of the outer western area of the English Channel. Plymouth J. Mar. biol. Ass. **9** 1912 (292-393). Tunicata (379-383). **13**
- Hartmeyer, R.** Ascidiens aus dem Skagerrak, dem Trondhjemsfjord und von den Fär Öer. Kopenhagen Nath. Medd. **63** 1912 (261-286). **14**
- Hartmeyer, R.** Die Ascidiens der Deutschen Tiefsee-Expedition. (Wiss. Ergebnisse d. D. Tiefsee-Exp. Bd 16 H. 3.) Jena (G. Fischer) 1912 (223-392) 10 Taf. **15**
- Hartmeyer, R.** Zur Verbreitung nordischer Ascidiens. Berlin SitzBer. Ges. natf. Freunde **1911** 1912 (439-440). **16**
- Hartmeyer, R.** Die Formenkreise der arktisch - nordatlantisch-mediterranen *Caesira (Molgula)*-Arten. Berlin SitzBer. Ges. natf. Freunde **1912** 1912 (13-20). **17**
- Hensen, V.** Amphioxides. Das Leben im Ozean. Ergebn. Plankt.-Exped. Humboldt-Stiftung &c. **5** 1911 (349-350). **18**
- Hensen, V.** Die Copelaten, die Oikopleuren, Stegosoma und Appendicularia, die Pyrosomen, Doliolum, die

- Salpen. Das Leben im Ozean &c. Ergebn. Plankt.-Exped. Humboldt-Stiftung **5** 1911 (339-349). **19**
- Hensen, V. Echinodermen und deren Larven sowie Larven von *Balanoglossus*. Das Leben im Ozean, &c. Ergebn. Plankt.-Exped. Humboldt-Stiftung &c. Bd V 1911 (253-254). **20**
- Henze, M. Untersuchungen über das Blut der Ascidien. 2. Mitt. Hoppe-Seylers Zs. physiol. Chem. Strassburg **79** 1912 (215-228). **21**
- Herdman, W. A. The Tunicata of the Scottish National Antarctic Expedition, 1902-1904. Edinburgh Trans. R. Soc. **48** 1912 (305-320). **22**
- Huntsman, A. G. Ascidians from the coasts of Canada. Toronto Trans. Canad. Inst. **9** 1912 (111-148). **23**
- Ihle, J. E. W. Tunicata. Salpae I. Desmomyaria. (Das Tierreich, hrsg. v. F. E. Schulze, Lfg 32.) Berlin (R. Friedländer & S.) 1912 (xi + 67). **24**
- Julin, Charles. Les caractères histologiques spécifiques des cellules lumineuses de *Pyrosoma giganteum* et de *Cyclosalpa primata*. Paris C. R. Acad. sci. **155** 1912 (525-527). **25**
- Julin, Ch. The luminous cells of *Pyrosoma* and *Cyclosalpa*. Nature London **90** 1912 (449). **26**
- Julin, Charles. Recherches sur le développement embryonnaire de *Pyrosoma giganteum* Les. Zool. Jahrb. Jena Suppl. **15** Bd 2 1912 (775-863) 5 Taf. **27**
- Krüger, Paul. Ueber einige Appendicularien und Pyrosomen des Mittelmeers. Bul. Inst. océan. Monaco No. 223 **1912** 1912 (6). **28**
- Krüger, P. Pyrosomes et Appendiculaires provenant des Campagnes de l'Hirondelle et de la Princesse-Alice. Résultats des Campagnes Scientifiques du Prince de Monaco 1912 (35 pp.) 3 pls. **29**
- Maser, Otto. Zur Eibildung der Enteropneusten. Zool. Jahrb. Jena Suppl. **15** Bd 2 1912 (533-544) 1 Taf. **30**
- Massy, A. L. Report of a survey of Trawling Grounds on the coasts of Counties Down, Louth, Meath and Dublin. Pl. iii. Invert. Fauna. Tunicata. Fisheries Ireland Scientific Invest. 1911 1 [1912] (1-225). **31**
- Michaelsen, W. Die Tethyiden (Styeliden) des Naturhistorischen Museums zu Hamburg, nebst Nachtrag und Anhang, einige andere Familien betreffend. Hamburg Jahrb. wiss. Anst. **28** Beih. 2 1912 (109-186). **32**
- Morris, Ethel Remfrey and Raff, Janet [Watson]. Notes on the structure of *Asymmetron bassanum*, Günther. Melbourne Proc. R. Soc. Vict. N.S. **22** pt. 1 1909 (85-90) pls. xviii-xx. **33**
- Možejko, B. Über das Gefässsystem von *Amphioxus*. Anat. Anz. Jena **42** 1912 (477). **34**
- Van Name, Willard G. Simple ascidians of the coasts of New England and neighbouring British provinces. Boston Proc. Soc. Nat. Hist. **34** 1912 (439-619) pls. xliii-lxxiii. **35**
- Neumann, Günther. Ueber Bau und Entwicklung des Stolo prolifer der Pyrosomen. Zool. Anz. Leipzig **39** 1912 (13-21). **36**
- Oka, Asajiro. Eine neue phylogenetisch interessante Synascidie. (*Cyathocormus mirabilis* n. g. n. sp.) Zool. Anz. Leipzig **40** 1912 (257-261). **37**
- Patten, W. The evolution of the Vertebrates and their kin. ii. Tunicates (415-421); iv. Enteropneusta (431-439). 8vo. London 1912. **38**
- Raff, Janet *vide* Morris Ethel Remfrey.
- [Redikorcev, V.] Редикорцевъ, В. Асциди арктическихъ морей. [Die Ascidien der arktischen Meere.] St. Peterburg Trav. Soc. nat. Sect. zool. **41** 2 1911 (85-175). **39**
- Ritter, William E. Quantity and adaptation of the deep-sea ascidian fauna. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (949-955). **40**
- Ritter, W. E. and Johnson, M. E. The growth and differentiation of the chain of *Cyclosalpa affinis* (Chamisso). J. Morph. Philadelphia Pa. **22** 1911 (395-444) 4 pls. **41**
- Schepotieff, A. Acrania, Tunicata für 1910. Arch. Natg. Berlin **77** (1911) Bd 6=Ber. Natg. nied. Tiere **1910**; H. 1 1912 (1-27). **42**
- Sigl, A. Adriatische Thaliaceenfauna. Wien SitzBer. Ak. Wiss. **121** 1912 (463-508) maps. **44**

Sigl, M. Aquina. *Cyclosalpa polae* n. sp. aus dem östlichen Mittelmeere. Zool. Anz. Leipzig **39** 1912 (66-74). **45**

Simroth, H. Über die Entstehung der Tunikaten. Verh. D. zool. Ges. Leipzig **22** 1912 (116-150). **46**

Sluiter, C. Ph. Les Ascidiens de l'Expédition antarctique française du Pourquoi-Pas? commandée par le Dr. Charcot 1908-1909. Bul. Muséum Paris 1912 (452-460). **47**

Stiasny, Gustav. Die Sandwirbel (Faeceshäufchen) des *Balanoglossus clavigerus* Delle Chiaje. Zool. Anz. Leipzig **39** 1912 (488-492). **48**

Entwicklung von *Oikopleura dioica*; **Delsman, 7.**

Embryonic development, *Pyrosoma giganteum*; **Julin, 27.**

Zur Eibildung der Enteropneusten; **Maser, 30.**

Ueber Bau und Entwicklung des Stolo prolifer der Pyrosomen; **Neumann, 36.**

Growth and differentiation of chain, *Cyclosalpa affinis* Chamisso; **Ritter & Johnson, 41.**

ETHOLOGY.

Abyssal Ascidian fauna, composition, origin, and horizontal and vertical distribution; **Hartmeyer, 15.**

Ascidiens from Canadian Coasts, biological notes; **Huntsman, 23.**

Dependence of Pyrosomas on currents of water and on density of water; **Krüger, 29.**

Quantity and adaptation of the deep-sea ascidian fauna; **Ritter, 40.**

EVOLUTION.

Über die Entstehung der Tunikaten **Simroth, 46.**

GEOGRAPHY.

Distribution of species of *Cephalodiscus*; **Gravier, 11.**

Distribution in the oceans of *Copelatae*, *Oikopleura*, *Stegosoma*, *Appendicularia*, *Pyrosoma*, *Doliolum*, *Salpa*, *Amphioxides*; **Hensen, 18 & 19.**

Zur Verbreitung nordischer Ascidiens; **Hartmeyer, 16.**

Arctic Ocean.

Ascidia; **Redikorzev, 39.**

Indian Ocean.

Madagascar and Scyhelles *Pandocia* 2 sp. n.; **Michaelsen, 32.**

Atlantic Ocean and Mediterranean Sea.

Atlantic, *Pyrosoma Agassizi*, new to this ocean; **Krüger, 29.**

South Atlantic, E. Patagonian Bank, *Agnesia* sp. n.; **Michaelsen, 32.**

II.—SUBJECT INDEX.

GENERAL.

Acrania, Tunicata für 1910; **Schepotieff, 42.**

STRUCTURE.

Structure of *Asymmetron bassanum*; **Morris & Raff, 33.**

General structure *Megalocercus abyssorum*; **Krüger, 28.**

Über das Gefäßsystem von *Amphioxus*; **Mozejko, 34.**

Anatomie der arktischen Ascidiens (Russ.); **Redikorzev, 39.**

Nervous system, Salpidae; **Dober, 8.**

Luminous cells, histology, *Pyrosoma giganteum*, *Cyclosalpa*; **Julin, 25 & 26.**

Hermaphroditism *Amphioxus*; **Goodrich, 9.**

PHYSIOLOGY.

Blood of ascidiens, chemical characters; **Henze, 21.**

DEVELOPMENT.

The organisation of the egg and the development of single blastomeres of *Phallusia mamillata*; **Conklin, 6.**

Organisation and cell-lineage of Ascidian egg; **Conklin (1905), 5.**

Canadian coasts, *Ascidacea* 16 spp. n.; **Huntsman, 23.**

New England coasts and coasts of neighbouring British provinces. Simple ascidians 8 spp. n.; **Van Name, 35.**

North Sea, *Tethyum* sp. n.; **Hartmeyer, 14.**

Tunicata, free swimming, distribution near European coasts; **Apstein, 1a.**

Channel Is., *Apliolium* 2 spp. n.; **Alder & Hancock, 1.**

English Channel, outer area, Tunicata list; **Hartmeyer, 13.**

British coasts, *Botrylloides* 1 sp. n., *Botryllus* 3 spp. n.; **Alder & Hancock, 1.**

Coasts of counties Down, Louth, Meath and Dublin, characteristic Tunicate fauna (3 species *Ascidacea*); **Massy, 31.**

Atlantic and Mediterranean, horizontal and vertical distribution of *Pyrosoma*; **Krüger, 29.**

Mediterranean, localities of *Pyrosoma*; **Krüger, 28.**

Mediterranean, *Cyclosalpa* sp. n.; **Sigl, 45.**

Adriatic, review of *Thaliacea*, with records of species new to this sea; **Sigl, 44.**

Antarctic Ocean.

Antarktis, *Ascidia* 2 spp. n.; **Hartmeyer, 15.**

Antarctic *Caesira*, sp. n.; **Hartmeyer, 15.**

Antarctic, *Tunicata* 1 sp. n.; **Herdman, 22.**

Kergueland, *Eugyrioides* sp. n.; **Hartmeyer, 15.**

Antarctic, *Cephalodiscus* sp. n.; **Gravier, 12.**

Antarctic, *Ascidacea* 13 spp. n.; **Sluiter, 47.**

Coasts of "Capland" (southern end of Africa) 22 spp. n.; **Hartmeyer, 15.**

Pacific Ocean.

Japan, *Pandocia* sp. n.; **Michaelsen, 32.**

Samoa, *Pandocia* sp. n.; **Michaelsen, 32.**

New Zealand coasts, *Styelidae* 1 sp. n., *Caesina* 2 spp. n.; **Michaelsen, 32.**

Canadian coasts, *Ascidacea* 16 spp. n.; **Huntsman, 23.**

Sagami Bay, *Synascidia* 1 sp. n.; **Oka, 37.**

III.—SYSTEMATIC INDEX.

(1) TUNICATA = UROCHORDATA.

Tunicates derived from a stock similar to that of copepods and cirripedes, **PATTEN** The evolution of the vertebrates and their kin. 8vo. London 1912 p. 415.

Die Ascidien der Deutschen Tiefsee-Expedition, **HARTMEYER** (Wiss. Ergebnisse d. D. Tiefsee-Exp. Bd 16 H. 3) Jena (G. Fischer) 1912 pp. 223-332 mit 10 Taf.

Tunicata. Salpae I. *Desmomyaria*, **IMLE** (Das Tierreich hrsg. v. F. E. Schulze Lfg 32) Berlin (R. Friedländer & S.) 1912 (xi+67). 26 cm. 6 M.

Ascidien der arktischen Meere, Beschreibung, Synopsis, Verbreitung (Russ.), **REDIKORCEV** St. Peterburg Trav. Soc. nat. 41 2 pp. 85-175 figs. 1-50.

Thaliacea of Adriatic, systematic descriptions of 4 spp. of *Salpa* and 4 spp. of *Doliolum*, **SIGL** Wien SitzB. Ak. Wiss. 121 p. 403.

Quantity and adaptation of the deep-sea ascidian fauna, **RITTER** Proc. 7th Int. Zool. Cong. pp. 949-955.

Agnesia septentrionalis sp. n. Stephen Island, Canada, **HUNTSMAN** Toronto Trans. Canad. Inst. 9 1912 p. 118.

Agnesia krausei spp. n. Ostpatagonische Bank, **MICHAELSEN** Hamburg Jahrb. wiss. Anst. 28 p. 181.

Allococarpa capensis sp. n. Francisbay, **HARTMEYER** Wiss. Ergebn. d. D. Tiefsee Exp. 16 p. 261.

Amaroucium galeritum p. 344, *claviforme* 348, *circulatum* 349 um Süd-Africa, *violaceum* 354 Dar-es-Salam,

spp. n., HARTMEYER T.c.—*A. vastum*, *longicaudatum*, Antarctic **spp. n.**, SLUITER Bul. Muséum Paris 1912 p. 458.

Aplidium agulhaense **sp. n.** Agulhasbank, HARTMEYER Wiss. Ergeb. d. D. Tiefsee Exp. 16 p. 356.—*A. coeruleum* Lahille, *argelesensis* var. n. Gulf of Lyons, BRÉMENT Bull. Inst. Océan. Monaco 1912 No. 250.—*A. melleum*, *glomeratum*, **spp. n.** Channel Is., ALDER & HANCOCK The British Tunicata Ray Society 3 p. 27.

Asciidiopsis nanaimoensis, *columbiana*, *paratropa*, **spp. n.** Coasts of Canada, HUNTSMAN Toronto Trans. Canad. Inst. 9 p. 120.

Botrylloides nigrum v. n. *magnicoecum* p. 171, *B. translucidum* p. 272 **sp. n.** Cap, HARTMEYER Wiss. Ergebn. d. D. Tiefsee Exp. 16.—*B. vinosa* **sp. n.** Northumberland, ALDER & HANCOCK The British Tunicata Ray Society 3 p. 82.

Botryllus badius, I. of Man, *calyculatus* Peterhead Scotland, *miniatus* Cornwall, **spp. n.**, ALDER & HANCOCK T.c. p. 70.

Caesira, Die Formenkreise der arktisch-nordatlantisch-mediterranean *C. (Molgula)* Arten, HARTMEYER Berlin SitzBer. Ges. natf. Freunde 1912 p. 13.

Caesira lutulenta p. 468, *intumescens* p. 482, *robusta* p. 505, *verrilli* p. 516, *singularis* p. 518, **spp. n.** Atlantic coast, north-eastern N. Amer., VAN NAME Boston Proc. Soc. Nat. Hist. 34.—*C. apoploa*, *hecateia*, *pacifica*, *cooperi*, **spp. n.** Canada, HUNTSMAN Toronto Trans. Canad. Inst. 9 p. 124.—*C. canadensis* **sp. n.** Canada, HUNTSMAN Toronto Trans. Canad. Inst. 9 p. 140.—*C. enodis* **sp. n.** Antarctic, SLUITER Bul. Muséum Paris p. 452.—*C. bathybia* **sp. n.** Antarktik, HARTMEYER Wiss. Ergeb. d. D. Tiefsee Exp. 16 p. 240.—*C. novaeselandiae* Neu-Seeland p. 166, *biedermanni* Ceylon p. 170, **spp. n.**, MICHAELSEN Hamburg Jahrb. wiss. Anst. 28.

Chelyosoma columbianum **sp. n.** Canada, HUNTSMAN Toronto Trans. Canad. Inst. 9 p. 124.

Cnemidocarpa **gen. n.** *joannae* Herdman Canada, HUNTSMAN Toronto Trans. Canad. Inst. 9 p. 133.

Corella rugosa, *inflata*, **spp. n.** Canada, HUNTSMAN Toronto Trans. Canad. Inst. 9 p. 122.

Cyathocormus **gen. n.**, *mirabilis* **sp. n.** Sagami Bucht, OKA Zool. Anz. Leipzig 40 p. 257.

Cyclosalpa polae **sp. n.** Mittelmeer, SIGI. Zool. Anz. Leipzig 39 p. 66.—*C. affinis* Chamisso, growth of chain, RITTER & JOHNSON J. Morph. Philadelphia Pa. 22 1911 p. 395.

Cystodites antarcticus **sp. n.** Antarctic, SLUITER Bul. Muséum Paris 1912 p. 459.—*C. roseolus* **sp. n.** Algoa Bay, HARTMEYER Wiss. Ergebn. d. D. Tiefsee Exp. 16 p. 310.

Dendrodoa kükenhali var. n. *pectenicola* New Foundland Bank, MICHAELSEN Hamburg Jahrb. wiss. Anst. 28 p. 132.

Diplosomoides capense **sp. n.** Cap, HARTMEYER Wiss. Ergebn. d. D. Tiefsee Exp. 16 p. 329.

Eugyrioides antarctica **sp. n.** Kerguelen, HARTMEYER T.c. p. 231.

Fungulus antarcticus **sp. n.** Antarctic, HERDMAN Edinburgh Trans. R. Soc. 48 p. 308.

Goniocarpa **gen. n.**, *coccodes* **sp. n.** Canada, HUNTSMAN Toronto Trans. Canad. Inst. 9 p. 131.

Leptoclinum (Diplosoma) longinquum **spp. n.** Antarctic, SLUITER Bul. Muséum Paris 1912 p. 460.

Macroclinum pererratum **sp. n.** Antarctic, SLUITER Bul. Muséum Paris 1912 p. 458.

Megalocercus abyssorum Chun, described and figured, KRÜGER Bul. Inst. océan Monaco No. 223 1912 p. 6 av. fig.

Metandrocarpa dermatina, *taylori*, **spp. n.** Canada, HUNTSMAN Toronto Trans. Canad. Inst. 9 p. 128.

Microcosmus confluxus **sp. n.** Antarctic, SLUITER, Bul. Muséum. Paris p. 454.—*M. nacreus* **sp. n.** p. 537, Atlantic coast, north-eastern N. Amer., VAN NAME Boston Proc. Soc. Nat. Hist. 34.

Oikopleura dioica Entwicklung, DELSMAN Helder Tijdschr. Ned. dierk. Ver. (Ser. 2) 12 1912 pp. 199–205.

Pandocia madagascariensis Madagascar p. 139, *botryllifera* Samoa 143, *seychellensis* Seychellen 148, *japonica* Japan 153, **spp. n.**, MICHAELSEN Hamburg Jahrb. wiss. Anst. 28.—*P. albatarossi* **sp. n.** p. 579, Atlantic coast,

north-eastern N. Amer., VAN NAME Boston Proc. Soc. Nat. Hist. 34.

Phallusia ceratodes sp. n. Departure Bay, HUNTSMAN Toronto Trans. Canad. Inst. 9 p. 121.—*P. multitentaculata* sp. n. Francisbay, HARTMEYER Wiss. Ergeb. d. D. Tiefsee Exp. 16 p. 279.

Phallusioides gen. n. for *Ascidia obliqua* Alder Grand Manan, HUNTSMAN Toronto Trans. Canad. Inst. 9 p. 138.

Polycitor (*Eudistoma*) *banyulensis* sp. n. Gulf of Lyons, BRÉMENT Bull. Inst. Océan. Monaco 1912 No. 248.—*P. psammorphus* p. 300 Agulhasbank, *renieri* p. 309 Francisbay, spp. n., HARTMEYER Wiss. Ergeb. d. D. Tiefsee Exp. 16.

Polyclinum neptunium sp. n. Capstadt, HARTMEYER T.c. p. 331.

Polysyncraton spongioides p. 323, *chuni* 326, spp. n. Cap, HARTMEYER T.c.

Pyrosoma: Entwicklung des Stolo prolifer, NEUMANN Zool. Anz. Leipzig 39 p. 13.

Pyrosoma giganteum, embryology, JULIN Zool. Jahrb. Jena. Suppl. 15 Bd 2 p. 775.

Pyrosoma giganteum Lesueur and *P. atlanticum* Péron extreme terms of one species or one a variety of the other; proposes to name the species *P. giganteum* and the var. *atlanticum* p. 6, *P. agassizi* found for first time in Atlantic p. 13, KRÜGER Res. Campagnes Sci. Prince de Monaco 1912.

Pyura lionvillia, obesa, spp. n. Antarctic, SLUITER Bul. Muséum Paris p. 453.

Pyropsis gen. n. (Styelidae) *novae-selandiae* sp. n. Neuseeland, MICHAELSEN Hamburg Jahrb. wiss. Anst. 28 pp. 110-111.

Sycozoa arborescens sp. n. Capstadt, HARTMEYER Wiss. Ergeb. d. D. Tiefsee Exp. 16 p. 316.

Tethyum asymmetron sp. n. Capstadt, HARTMEYER T.c. p. 253.—*T. vollbarthi* China-See p. 118, *godeffroyi* p. 124, *australiense* p. 127, Australia spp. n., *T. loveni* f. n. *kupfferi* Ostsee p. 122, MICHAELSEN Hamburg Jahrb. wiss. Anst. 28.—*T. atlanticum* sp. n. p. 552 Atlantic coast, north-eastern N. Amer., VAN NAME Boston Proc. Soc. Nat. Hist. 34.—*T. pyriforme*, Rathke, subsp. n. *americanum* Canada, HUNTSMAN Toronto Trans. Canad. Inst. 9 p. 148.—*T. tholiforme*, *serpentinum*, *quidni*, *insinuosum*, spp. n. Antarctic, SLUITER Bul. Muséum Paris p. 455.

Tethyum (*Styela*) *mortenseni* sp. n. North Sea, HARTMEYER København Nath. Medd. 63 1912 pp. 261-268 with 3 figg.

(2) CEPHALOCHORDATA.

Amphioxus hermaphroditism, GOODRICH Anat. Anz. Jena 42 p. 318.

Asymmetron bassanum, Günther, structure of, MORRIS & RAFF Melbourne Proc. R. Soc. Vict. N.S. 22 Pt. 1 1909 p. 85.

(3) ENTEROPNEUSTA AND PTEROBRANCHIA.

Balanoglossus, Die Sandwirbel (Faeceshäufchen) des *B. clavigerus* Delle Chiaje, STIASNY Zool. Anz. Leipzig 39 1912 p. 488.

Balanoglossus larvae found 300 sea miles E. of Fernando and 780 sea miles W. of Ascension, HENSEN Ergebn. Exped. Humboldt Stiftung 5 p. 253.

Cephalodiscus anderssoni sp. n. Antarctic, GRAVIER Bul. Muséum Paris 1912 p. 146.

Zur Eibildung der Enteropneusten, MASER Zool. Jahrb. Jena Suppl. 15 p. 533.

XIV. VERTEBRATA

(GENERAL)

i.e., complementary to Mammalia, Aves, Reptilia, and Pisces

ARRANGED BY

D. SHARP

CONTENTS

	PAGE
I. TITLES	2
II. SUBJECT INDEX:—	
General = 5203	7
Structure = 5207	7
Physiology = 5211.. .. .	8
Development = 5215	9
Ethology = 5219	9
Variation and Evolution = 5223	9
Geography = 5227	10
Taxonomy = 5231	10

I.—TITLES.

- Abel, O.** Grundzüge der Palaeobiologie der Wirbeltiere. Stuttgart (E. Schweizerbart) 1912 (xv+708) 1 Taf. 25 cm. Geb. 18 M. 1
- Abel, O.** Kämpfe, Verletzungen und Kampfanpassungen bei fossilen Wirbeltieren. Wien Verh. ZoolBot. Ges. 62 1912 2 Heft. ((53)-(54)). 2
- Abel, O.** Ueber die verschiedenen Ursachen des gehäuften Vorkommens von Tierleichen in Gesteinen. Wien Verh. ZoolBot. Ges. 62 1912 2 Heft. ((57)-(61)). 3
- Anderson, R. J.** Some aspects of variation. Verh. intern. ZoolKongr. Jena 8 (1910) 1912 (914-921). 4
- Annandale, N.** The Madras aquarium. Bombay J. Nat. Hist. Soc. 21 1912 (693-694). 5
- Anthony, R.** Contribution à l'étude morphologique générale des caractères d'adaptation à la vie arboricole chez les Vertébrés. Ann. sci. nat. (zool.) Paris (sér. 9) 15 1912 (101-342 av. fig.). 6
- Ariens Kappers, C. U.** Weitere Mitteilungen über Neurobiotaxis. vii Die phylogenetische Entwicklung der motorischen Wurzelkerne in Oblongata und Mittelhirn. Folia Neurobiologica Haarlem 6 1912 (Sommersupplementheft 1-142). 7
- Augier, Marius.** Les os frontaux accessoires. Paris C. R. ass. anatomistes 14 1912 (22-30). 8
- Barbieri, N.** Etude anatomique sur la terminaison arétinienne du nerf optique dans la série des Vertébrés. Paris C. R. soc. biol. 72 1912 (1532-1535). 9
- Baum, Hermann** vide Ellenberger, Wilhelm.
- [Bëlogolovy], J. A.]** Бëлоголовый, Ю. А. Сегментальное положение границы черепа у *Sauropsida*. Опыт анализа сравнительного метода въ морфологии. [Die segmentale Lage der Schädelgrenze bei den *Sauropsida*. Ein Versuch der Analyse der vergleichenden Methode in der Morphologie.] Moskva Zap. Univ. 28 1911 (1-239) 58 Abbild. u. Taf. i & ii. 10
- Bialaszewicz, K.** Über das Verhalten des osmotischen Druckes während der Entwicklung der Wirbeltierembryonen. Teil 1 u. 2: Versuche an Hühner- und Froschembryonen. Arch. EntwMech. Leipzig 34 1912 (489-540). 11
- Bianchi, Vincenzo.** Sulle prime fasi di sviluppo dei centri nervosi nei Vertebrati. Ann. nevrol. Napoli 25 1907 (16 pp.) 2 tav. 12
- Biondi, Giosuè.** Sulla minuta struttura del nucleo della cellula nevroglica. Roma Ric. Lab. anat. norm. 16 fasc. 1-2 1911 (91-105) 1 tav. 13
- Boettcher, F. L. J.** Preservation of osseous and horny tissues. Washington D.C. Smithsonian Inst. Proc. U. S. Nation. Mus. 41 1912 (697-705). 14
- Broom, R.** The morphology of the coracoid. Anat. Anz. Jena 41 1912 (625-631). 15
- Bruni, Angelo.** Über die evolutiven und involutiven Vorgänge der Chorda dorsalis in der Wirbelsäule mit besonderer Berücksichtigung der Amnioten. Vergleichend histologische Untersuchungen. Anat. Hefte Wiesbaden 45 1912 (307-469) 4 [2] Taf. 16
- Bruni, A. C.** Stato attuale della dottrina dell'istogenesi delle fibre connettive ed elastiche. Ophthalmologia Torino 1 fasc. 2 1909 (169-216). 17

- Buxton, B. H.** The origin of the vertebrate eye. Arch. vergl. Ophthalm. Leipzig 2 1912 (405-423) 12 Taf. 18
- Buxton, B. H.** Answer to Mr. Gaskell's Note. Arch. vergl. Ophthalm. Leipzig 3 1912 (227). 19
- Calcar, R. P. van.** Ueber die Kenntnis des anaphylaktischen Zustandes des tierischen und menschlichen Organismus. Folia microbiologica Delft 1 1912 (409-421). 20
- Cary, Merritt.** A biological survey of Colorado. Washington D.C. U. S. Dept. Agric. Bur. Biol. Surv. N. Amer. Fauna No. 33 1911 (1-256) pls. i-xii figs. 1-39. 21
- Cesaris-Demel, A.** Sulla natura leucocitaria delle così dette piastrine degli Ovipari. Archivio sc. med. Torino 35 1911 (263-285) 2 tav. 22
- Cesaris-Demel, A.** Sulle così dette piastrine degli Ovipari. Torino Giorn. Acc. med. 74 1911 (228-237). 23
- Chaine, J.** La nomenclature myologique et les travaux de la Commission internationale de réforme. Rev. sci. Paris (2. semest.) 1911 (289-294). 24
- Champy, Christian.** Sur les phénomènes cytologiques qui s'observent dans les tissus cultivés en dehors de l'organisme. 1. Tissus épithéliaux et glandulaires. Paris C. R. soc. biol. 72 1912 (987-988). 25
- Civalleri, A.** Sullo sviluppo della guaina midollare nelle fibre nervose centrali. Torino Mem. Acc. sc. 61 1911 (199-230) 1 tav. 26
- Corti, Alfredo.** Studi sulla minuta struttura della mucosa intestinale dei Vertebrati in riguardo ai suoi diversi momenti funzionali. Archivio ital. Anat. Embriol. Firenze 11 1912 (1-189) 9 tav. 27
- Cronheim, Walter.** Gesamtstoffwechsel der kaltblütigen Wirbeltiere, im besonderen der Fische. Zs. Fischerei Berlin 15 1911 (319-370). 28
- Dehaut, E. G.** Considérations générales sur les formes de Vertébrés actuels et Pléistocènes de la Corse et de la Sardaigne. Paris Matériaux pour la zoologie et la paléontologie de la Corse fasc. 1 1911 (20). 29
- De Carteret, St. G.** Preservation of game. Bombay J. Nat. Hist. Soc. 21 1912 (1843-1345). 30
- D'Erchia, Florenzo.** Esiste una perfetta omologia nella placenta dei Vertebrati? Archivio ostetricia Napoli 13 1906 (265-273) fig. 31
- Döderlein, L.** Über einige interessante Wirbeltiere in Elsass-Lothringen. Mitt. philomath. Ges. Strassburg Bd 4 H. 4 = Jg 19 (1911) 1912 (533-542). 32
- Edinger, Ludwig.** Einführung in die Lehre vom Bau und den Verrichtungen des Nervensystems. 2. verb. u. verm. Aufl. Leipzig (F. C. W. Vogel) 1912 (v + 234). 26 cm. 6 M. 33
- Ellenberger, W. und Baum, H.** Handbuch der vergleichenden Anatomie der Haustiere. 13. Aufl. der in der 1.-4. von Gurlt . . . bearb. Anatomie der Haustiere. Berlin (A. Hirschwald) 1912 (xv + 1070). 26 cm. 30 M. 34
- Eward, Walther.** Über helle und trübe Muskelfasern bei Wirbeltieren und beim Menschen. Frankfurt a. M. Abh. Senckenb. Ges. 31 1912 (107-150) 5 Taf. 35
- Favaro, G.** Sviluppo delle valvole atrioventricolari nei Mammiferi e negli Uccelli. Monitore zool. ital. Firenze 23 1912 (222-226). 36
- Fleischmann, A.** Die Kopfregion der Amnioten. Morphogenetische Studien. (9. Forts.) Morph. Jahrb. Leipzig 44 1912 (623-625). 37
- Fragnito, O.** Le fibrille e la sostanza fibrillologena nelle cellule ganglionari dei Vertebrati. Ann. nevrol. Napoli 25 fasc. 3 1907 (Estratto di 16 pp.) 1 tav. 38
- Francini, Metello.** Sulla struttura e la funzione dei plessi coroidei. Sperimentale Firenze 61, 1907 (415-435) 1 tav. 39
- Franz, V.** Über das Kleinhirn im Bereich der Wirbeltiere. Aus d. Natur Leipzig 8 1912 (36-44). 40
- Franz, V.** Gehirn und Geist bei Mensch und Tier. Natur Leipzig 1912 (463-467). 41
- Franz, Victor.** Histogenetische Theorie des Glaskörpers. Arch. vergl. Ophthalm. Leipzig 3 1912 (217-226). 42

- Gaskell, W. H.** Note on B. H. Buxton's paper „On the origin of the Vertebrate eye.“ Arch. vergl. Ophthalm. Leipzig 3 1912 (84-85). 43
- Geerts, J.** Dégénérescence précoce des cylindraxes. Paris C. R. ass. anatomistes 13 1911 (15-21 av. fig.). 44
- Gelle.** Über die Entwicklung der Langerhansschen Inseln bei den Wirbeltieren in normaler, experimenteller und pathologischer Hinsicht. [Jahresber.] Anat. Hefte Wiesbaden Abt. 2 20 (1911) 1912 (1042-1085) 4 Taf. 45
- Gemelli, Agostino.** Sulla fine struttura del sistema nervoso centrale. Riv. fis. mat. sc. nat. Pavia 13 1906 (passim) 14 1906 (340-359). 46
- Gladstone, Hugh.** A catalogue of the vertebrate fauna of Dumfriesshire. Dumfries (Maxwell & Son) 1912 (xiv + 80) map. 47
- Golgi, Camillo.** Di una minuta particolarità di struttura dell'epitelio della mucosa gastrica ed intestinale di alcuni Vertebrati. Pavia Boll. Soc. med. chirurg. 23 1909 (1-22) tav. 48
- Golgi, Camillo.** Di una minuta particolarità di struttura dell'epitelio della mucosa gastrica ed intestinale di alcuni Vertebrati. Archivio sc. med. Torino 33 1909 (1-37) 2 tav. 49
- Haempel, Oskar** *vide* Hilzheimer, Max.
- Henn, Arthus W.** The range of size in the vertebrates. Amer. Nat. New York 46 1912 (157-162). 50
- Henshaw, H. W.** Number of species of living vertebrates. Science New York 36 1912 (317-318). 51
- Henshaw, Samuel and others.** Some Chinese vertebrates. Introduction by S. Henshaw. Pisces by S. Garman. Amphibia and Reptilia by T. Barbour. Aves by J. E. Thayer and O. Bangs. Mammalia by G. M. Allen. Cambridge Mass. Mem. Mus. Comp. Zool. Harvard Coll. 40 1912 (103-247) pls. i-vi. 52
- Hertwig, O.** Les méthodes physiologiques dans les recherches sur l'histoire du développement de l'homme et des Vertébrés. Rev. sci. Paris (2. semest.) 1910 (545-550). 53
- Hess, O.** Untersuchungen zur vergleichenden Physiologie und Morphologie des Ciliarringes. [Vögel, Rept., Fische.] Zool. Jahrb. Jena Suppl. 15 Bd 3 1912 (155-176) 2 Taf. 54
- Hess, C.** Demonstrationen zur vergleichenden Physiologie des Sehorgans. Würzburg SitzBer. physik. Ges. 1911 (52-54). 55
- Hilzheimer, M.** Handbuch der Biologie der Wirbeltiere. Unter Mitwirkung von O[skar] Haempel. Hälfte 1: Fische [v. Haempel]; Amphibien, Reptilien [v. Hilzheimer]. Stuttgart (F. Enke) 1912 (374). 25 cm. 14 M. 56
- Hubrecht, A. A. W.** The foetal membranes of the vertebrates. (Address.) Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (426-434). 57
- Huntington, Geo. S.** The phylogenetic relations of the lymphatic and blood vascular systems in vertebrates. Anat. Rec. Philadelphia 4 1910 (1-14). 58
- Jaekel, Otto.** Die Wirbeltiere. Eine Übersicht über die fossilen und lebenden Formen. Berlin (Gebr. Borntraeger) 1911 (viii+252). 27 cm. 59
- Jarricot, Jean.** Les états d'hypnose provoqués chez les animaux. Lyon Ann. soc. linn. 55 1911 (101). 60
- Kerz, Friedr.** Das Sammeln, Präparieren und Aufstellen der Wirbeltiere. Eine gemeinverständliche Anleitung . . . Stuttgart (Strecker u. Schröder) 1912 (148) 1 Taf. 18 cm. 2,40 M. 61
- Kingsley, J. S.** Comparative anatomy of vertebrates. Philadelphia (Blakiston) 1912 (ix+401) 346 figs. 23 cm. 62
- Klieneberger, Carl und Walter, Carl.** Die Blut-Morphologie der Laboratoriumstiere. Leipzig (J. A. Barth) 1912 (vi+109) 14 Taf. 25 cm. 10 M. 63
- [Kovalevskij, S. K.] Ковалевский, С. К. Различіе между сперматозоидами разныхъ видовъ животныхъ и человека. [Die Unterschiede zwischen den Spermatozoen verschiedener Arten von Tieren und denen des Menschen.] Arch. veterin. nauk St. Peterburg 42 1912 (38-40) 1 Taf. 64
- Kuiper, K.** Sur les ferments de la salive de divers animaux. Haarlem Arch. Néerl. Sci. Soc. Holl. (Sér. III B) 1 1912 (235-241). 65

- Kuntz, Albert.** The evolution of the sympathetic nervous system in vertebrates. *J. Comp. Neur. Philadelphia* **21** 1911 (215-236) 1-6 figs. **66**
- Lange, S. J. de.** De phylogenese van het striatum. [Die Phylogenese des Striatums.] Amsterdam Werk. Gen. Nat. Genees. Heelk. (Ser. 2) **7** 1912 (83-89). **67**
- Lapicque, Louis.** Sur l'attitude des animaux de la ménagerie pendant l'éclipse de Soleil. *Bul. Muséum Paris* **1912** 1912 (197-198). **68**
- Lapicque, Louis.** Le poids du cerveau et la grandeur du corps. *Biologica Paris* **2** 1912 (257-265) av. fig. **69**
- Laurens, Henry.** The reactions of amphibians to monochromatic lights of equal intensity. Cambridge Mass. Bnll. Mus. Comp. Zool. Harvard Coll. **53** 1911 (251-302) figs. 1-6. **70**
- Lellèvre, Aug. vide Retterer, Ed.**
- Limon, M. vide Marceau, F.**
- Luna, Emerico.** La retina dei Vertebrati; ricerche istologiche ed istochimiche. Roma Ric. Lab. anat. norm. **16** fasc. 3-4 1912 (121-133) 1 tav. **71**
- Luna, E.** I lipoidi nelle cellule nervose. *Folia Neurobiologica Haarlem* **6** 1912 (385-399). **72**
- Luther, Alexander.** Om assimilering af kotor med skallen. [Über Einverleibung von Wirbeln mit dem Schädel.] Helsingfors Öfvers. F. Vet. Soc. **53** C No. 4 1911 (42-44). **73**
- Lydekker, R. [and others].** Reptiles, Amphibia, Fishes and lower Chordata. London 1912. Methuen & Co. (xvi+510). **74**
- McMurrich, J. Playfair.** The problem of the vertebrate head in the light of comparative anatomy. (Address.) Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (167-176). **75**
- Magnan, A.** Le régime alimentaire et la variation du foie chez les animaux. Paris C. R. ass. franç. avanc. sci. **40** (Dijon) 1911 (521-523). **76**
- Marceau, F. et Limon, M.** Recherches sur l'élasticité musculaire à l'état d'activité. Paris C. R. ass. franç. avanc. sci. **40** (Dijon) 1911 (553-556). **77**
- Marcora, Ferruccio.** Sui rapporti tra apparato reticolare interno e corpi di Nissl negli elementi nervosi. Pavia (N-9210 a)
- Boll. Soc. med. chirurg.* **23** 1909 (171-176) fig. **78**
- Mawas, J.** Granulations lipoides des cellules fixes de la cornée et de certaines cellules conjonctives des Vertébrés. Paris C. R. ass. anatomistes **14** 1912 (136-141) av. fig. **79**
- Meek, Alexander.** The segments of the head. Verh. intern. ZoolKongr. Jena **8** 1912 (212-215). **80**
- Meek, A.** Early stages in the development of the Vertebrata. Newcastle Proc. Univ. Durham Phil. Soc. **4** 1912 (129-133) pl. **80a**
- Negro, C.** Ricerche istologiche sulla terminazione nervosa motrice. Torino Giorn. Acc. med. **74** 1911 (254-269) 8 figs. **81**
- Noyons, A. und Uexküll, J. von.** Die Härte der Muskeln. Utrecht Onderz. Physiol. Lab. (Ser. 5) **12** 1911 (99-184) Fig. **82**
- Noyons, A. K. M.** Ueber den Autotonus der Muskeln. Utrecht Onderz. Physiol. Lab. (Ser. 5) **12** 1911 (185-290) Fig. **83**
- Orrù, Efsio.** Nuove osservazioni sulle forme reticolari della sostanza nervosa centrale. Cagliari Boll. Sc. med. nat. **13** 1908 (71-75). **84**
- Paladino, Giovanni.** La dottrina della continuità nella organizzazione del nevrasso nei Vertebrati ed i mutui ed intimi rapporti tra nevroglia e cellule e fibre nervose. Napoli Rend. Acc. sc. fis. mat. Ser. III **17** fasc. 7-9 1911 (302-325) 2 tav. **85**
- Palmén, J. A.** Statistique. Vertébrés supérieurs [de la Finlande]. Helsingfors Atlas de Finlande 1910 [Fennia **30**] I No. 21b 1911 (1-26). **86**
- Patella, Vincenzo.** La genesi endoteliale dei leucociti mononucleati del sangue. Siena (Tip. S. Bernardino) **1907** (338 pp) figg. **87**
- Patten, William.** The evolution of the vertebrates and their kin. Philadelphia (Blakiston) 1912 (xxi + 486) 309 illus. 25 cm. **88**
- Peck, Frederick B.** The Atlantosaur and Titanotherium beds of Wyoming. Proceedings and Collections of the Wyoming Historical and Geological Society for the years 1902-1903. Wilkes-Barré Pa. **8** 1904 (25-41) 5 pls. **89**

- Figache, R. et Worms, I.** Du thymus considéré comme glande à sécrétion interne. Paris C. R. Acad. sci. **151** 1912 (234-236). **90**
- Pitzorno, Marco.** Su alcune pretese anastomosi fra cellule di gangli simpatici. *Monitore zool. ital.* Firenze **23** 1912 (77-79). **91**
- Pitzorno, Marco.** Contributo allo studio della cresta apicale degli arti nei Rettili e negli Uccelli. *Archiv. ital. Anat. Embriol.* Firenze **10** 1912 (329-338). **92**
- Postel, Georges.** Note sur quelques cas tératologiques concernant des poulets et un levraut. Rouen Bul. soc. sci. nat. **46** 1911 (25-26). **93**
- Radasch, Henry Erdmann.** A contribution to the teratology of the domestic animals; Incomplete duplication. *Anat. Anz. Jena* **42** 1912 (481-498). **94**
- Retterer, Ed. et Lelièvre, Aug.** De la nature et de l'histoire du leucocyte de Stöhr (réponse à Franz Weidenreich). Paris C. R. soc. biol. **73** 1912 (163-166). **95**
- Retzius, Gustaf.** Zur Kenntnis der Hüllen und besonders des Follikel-epithels an den Eiern der Wirbeltiere. [*In: Retzius, Biolog. Untersuchungen, N.F. xvii.*] Jena (G. Fischer) 1912 (1-52) 8 Taf. **96**
- Ritter, W. E.** Patten on the origin of vertebrates, and the general question of the value of speculations on the phylogeny of organic beings. *Amer. Nat. New York* **46** 1912 (623-632). **97**
- Rossi, Umberto.** Per la rigenerazione dei neuroni. Perugia Ann. Fac. Med. Ser. IV **1** fasc. 1-2 1911 (63-69) 1 tav. **98**
- Rossi, Umberto.** Il probabile significato morfologico della tasca faringea di Seessel. Perugia Ann. Fac. Med. Ser. 3 **4** (1904) fasc. 4 1906 (147-150). **99**
- Rossi, Umberto.** Lo sviluppo, la regressione, la funzione e il significato morfologico della ipocorda. Perugia Ann. Fac. Med. Ser. 3 **4** (1904) fasc. 4 1906 (151-158). **100**
- Rossi, Umberto.** Sopra lo sviluppo della ipofisi e sui primitivi rapporti della corda dorsale e dell'intestino. Sauropsidi e Mammiferi. Perugia Ann. Fac. Med. Ser. 3 **4** (1904) 1906 (159-223) 8 tav. **101**
- Salkind, J.** Sur l'organisation du thymus. Note préliminaire. *Anat. Anz. Jena* **41** 1912 (145-155). **102**
- Schultze, Oskar.** Über den direkten Zusammenhang von Muskelfibrillen und Sehnenfibrillen. *Arch. mikr. Anat. Bonn* **79** Abt. 1 1912 (307-331) 3 Taf. **103**
- [Sévercov, A. N.] Сѣверцовъ, А. Н.** Къ вопросу о происхождении позвоночныхъ. [Zur Frage über die Abstammung der Wirbeltiere.] *Kiev Prot. Obsč. jest.* **1911** (1912) (31-34). **104**
- Sinigaglia, Giorgio.** Osservazioni sulla struttura dei globuli rossi. *Archivio sc. med. Torino* **34** 1910 (191-199) 1 tav. **105**
- Spemann, H.** Zur Entwicklung des Wirbeltierauges. *Zool. Jahrb. Jena* Abt. f. allg. Zool. **32** 1912 (1-98) 6 Taf. **106**
- Sterzi, G.** Lo sviluppo della scissura interemisferica ed il significato del terzo ventricolo. *Monitore zool. ital. Firenze* **23** 1912 (213-217) 1 tav. **107**
- [Světlov, G. I.] Свѣтловъ, Г. И.** Анатомія и физиологія домашнихъ животныхъ. Зоогигіена и Зоотехнія. Болѣзни животныхъ и ихъ лечение. [Anatomie und Physiologie der Haustiere. Zoohygiene und Zootechnik. Krankheiten der Tiere und deren Heilung.] St. Peterburg (Russische Veterinär-Gesellschaft) 1911 (viii + 736) 478 Figs. 25 cm. 3,00 Rub. **108**
- Thorndike, E. L.** Animal intelligence: experimental studies. New York 1911 (viii + 297). **108a**
- Uexküll, J. von** vide Noyons, A.
- Van Bambeke, C.** Sur la genèse du névraxe, spécialement sur celle observée chez le Pelobate brun (*Pelobates fuscus* Wagl.). Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (225-228). **109**
- Versluys, J.** Das Streptostylie-Problem und die Bewegungen im Schädel bei Sauropsiden. *Zool. Jahrb. Jena Suppl.* **15** Bd 2 1912 (545-716) 1 Taf. **110**
- Vialleton, L.** Éléments de morphologie des Vertébrés (anatomie et embryologie comparées, paléontologie et classification). Paris (Doin) 1911 (700) av. fig. 25.5 cm. **111**

- Walter, Carl** *vide* Klieneberger, Carl.
- Walter, Richard.** Über die „Stomata“ der serösen Höhlen. Anat. Hefte Wiesbaden Abt. 1 **46** 1912 (273-341) 3 Taf. **112**
- Weidenreich, Franz.** Die Lokalisation des Pigmentes und ihre Bedeutung in Ontogenie und Phylogenie der Wirbeltiere. Zs. Morph. Stuttgart Sonderheft **2** 1912 (59-140) 3 Taf. **113**
- Weigl, Rudolf.** O aparacie Golgiego-Kopscha komórek nabłonkowych w jelicie kręgowców i stosunku jego do innych struktur; z 1 tablicą. [Sur l'appareil de Golgi-Kopsch dans les cellules épithéliales de l'intestin des vertébrés; ses relations avec les autres structures cytologiques; avec 1 planché.] Lvów Księga Pamiątkowa ku uczczeniu Prof. J. Nusbauma (H. Altenberg) 1911 (267-289) pl. **114**
- Wilder, Burt G.** The name and brain of the gar. Science New York **35** 1912 (691-693). **115**
- Williston, S. W.** Evolutionary evidences. [Symposium on ten years' progress in vertebrate paleontology.] Bull. Geol. Soc. Amer. Washington **23** 1912 (257-262). **116**
- Worms, I.** *vide* Pigache, R.
- Zavattari, Edoardo.** I muscoli ioidei dei Sauri in rapporto con i muscoli ioidei degli altri Vertebrati. Parte I. Torino Mem. Acc. sc. **60** 1910 (351-392) 1 tav.; Parte II. op. cit. **61** 1911 (55-122) 1 tav. **117**

II.—SUBJECT INDEX.

GENERAL, MISCELLANEOUS.

5203

- Reptiles, amphibia, fishes and lower Chordata; **Lydekker** and others, **74**.
- Sammeln, Präparieren und Aufstellen der Wirbeltiere; **Kerz**, **61**.
- Preservation of osseous and horny tissues; **Boettcher**, **14**.
- Preservation of game; **De Carteret**, **30**.

STRUCTURE.

5207

General.

- Comparative anatomy of vertebrates; **Kingsley**, **62**.
- Eléments de morphologie; **Vialleton**, **111**.
- Handbuch der vergleichenden Anatomie der Haustiere; **Ellenberger & Baum**, **34**.
- Anatomie der Haustiere (Russ.); **Světlov**, **108**.
- Lokalisation des Pigmentes und ihre Bedeutung; **Weidenreich**, **113**.
- Das Streptastylie-Problem; **Versluys**, **110**.
- Morphologie des caractères d'adaptation à la vie arboricole; **Anthony**, **6**.

Histology.

- Epitelio della mucosa gastrica e intestinale di alcuni Vertebrati, particolarità di struttura; **Golgi**, **48**.
- Apparato reticolare interno delle cellule epiteliali del tubo intestinale; **Golgi**, **49**.
- L'appareil de Golgi-Kopsch dans les cellules épithéliales de l'intestin (Polish); **Weigl**, **114**.

- Dégénérescence précoce des cylindres; **Geerts**, **44**.

Tegument, Skeleton.

- The problem of the vertebrate head; **McMurrich**, **75**.

- Die Kopfregion der Amnioten; **Fleischmann**, **37**.

- Wirbeln und Schädel; **Luther**, **73**.

- Segmentale Lage der Schädelgrenze bei den Amniota (Russ.); **Bélogolovj**, **10**.

- Les os frontaux accessoires; **Augier**, **8**.

- Morphology of the coracoid; **Broom**, **15**.

Nervous System, Sense-organs.

- Neurologic nomenclature; **Wilder**, **115**.

- Einführung in die Lehre des Nervensystems; **Edinger**, **33**.

Le poids du cerveau et la grandeur du corps; **Lapicque, 69.**

Das Kleinhirn; **Franz, 40.**

Beziehungen der cranialen Nerven zu den Segmenten (Russ.); **Bélogolovj, 10.**

Evolutiven und involutiven Vorgänge der Chorda dorsalis; **Bruni, 16.**

Phylogenetische Entwicklung der motorischen Wurzelkerne in Oblongata und Mittelhirn; **Ariens Kappers, 7.**

Fine struttura del sistema nervoso centrale; **Gemelli, 46.**

Minuta struttura del nucleo della cellula nevroglica; **Blondi, 13.**

Plessi coroidei: struttura e funzione; **Francini, 39.**

Struttura della mucosa intestinale nei diversi momenti funzionali; **Corti, 27.**

Granulations lipoïdes des cellules fixes de la cornée et de certaines cellules conjonctives; **Mawas, 79.**

I lipoidi nelle cellule nervose; **Luna, 72.**

Fibrille e sostanza fibrillogena in cellule ganglionari; **Fraguito, 38.**

Forme reticolari della sostanza nervosa centrale; **Orrù, 84.**

Rapporti tra apparato cellulare interno e corpi di Nissl in elementi nervosi; **Marcora, 78.**

Terminazioni nervose motrici; **Negro, 81.**

Continuità nella organizzazione del nevrasso e rapporti tra nevroglia e cellule e fibre nervose; **Paladino, 85.**

Phylogense des Striatums; **Lange, 67.**

Origin of the vertebrate eye; **Buxton, 18.**

Buxton's paper „On the origin of the Vertebrate eye“; **Gaskell, 43.**

Answer to Mr. Gaskell's Note; **Buxton, 19.**

Terminaison arétinienne du nerf optique; **Barbieri, 9.**

Physiologie und Morphologie des Ciliarringes; **Hess, 54.**

Histogenetische Theorie des Glaskörpers; **Franz, 42.**

Retina, ricerche istologiche ed istochimiche; **Luna, 71.**

Pretese anastomosi fra cellule di gangli simpatici; **Pitzorno, 91.**

Rigenerazione dei neuroni; **Rossi, 98.**

Myology.

Nomenclature myologique; **Chaine, 24.**

Helle und trübe Muskelfasern; **Ewald, 35.**

Zusammenhang von Muskelfibrillen und Sehnenfibrillen; **Schultze, 103.**

Muscoli ioidei; **Zavattari, 117.**

Circulatory and Respiratory Organs.

„Stomata“ der serösen Höhlen; **Walter, 112.**

Blood, Lymph.

Blut-Morphologie; **Klieneberger & Walter, 63.**

Genesi endoteliale dei leucociti mononucleati; **Patella, 87.**

Leucocyte de Stöhr; **Retterer & Lelièvre, 95.**

Apparato reticolare interno nei globuli rossi; **Sinigaglia, 105.**

Piastrine degli Ovipari; **Cesaris-Demel, 23.**

Natura leucocitaria delle piastrine in Ovipari; **Cesaris-Demel, 22.**

Excretory Organs, Special Glands.

Thymus comme glande à sécrétion interne; **Pigache & Worms, 90.**

Thymus, nach Untersuchung, sämtlicher Wirbeltierklassen; **Salkind, 102.**

Le régime alimentaire et la variation du foie; **Magnan, 76.**

PHYSIOLOGY 5211

Phénomènes cytologiques dans les tissus cultivés en dehors de l'organisme; **Champy, 25.**

Physiologie des Sehorgans; **Hess, 55.**

Reactions to monochromatic lights; **Laurens, 70.**

Autotonus der Muskeln; **Noyons, 83.**

Die Härte der Muskeln; **Noyons & Uexküll, 82.**

Elasticité musculaire à l'état d'activité; **Marceau & Limon, 77.**

Ferments de la salive; **Kuiper, 65.**

Hypnose; **Jarricot, 60.**

Gesamtstoffwechsel; **Cronheim, 28.**

Thymus considéré comme glande à sécrétion interne; **Figaché & Worms, 90.**

DEVELOPMENT. 5215

Méthodes physiologiques dans les recherches du développement; **Hertwig, 53.**

Early stages; **Meek, 80a.**

The segments of the head; **Meek, 80.**

Verhalten des osmotischen Druckes während der Entwicklung; **Bialaszewicz, 11.**

Centri nervosi, prime fasi di sviluppo; **Bianchi, 12.**

Die heterometamere Entwicklung der Hinteshauptsgelenkung. (Russ.); **Bëlogolovj, 10.**

Evolutiven und involutiven Vorgänge der Chorda dorsalis; **Bruni, 16.**

Istogenesi delle fibre connettive ed elastiche; **Bruni, 17.**

Sviluppo della guaina midollare in fibre nervose centrali; **Civalleri, 26.**

Sviluppo delle valvole atrioventricolari in Mammiferi e Uccelli; **Favaro, 36.**

Cresta apicale degli arti in Rettili e Uccelli; **Pitzorno, 92.**

Tasca faringea di Seessel, probabile suo significato morfologico; **Rossi, 99.**

Sviluppo, regressione, significato della ipocorda; **Rossi, 100.**

Sviluppo dell'ipofisi e primitivi rapporti tra corda dorsale e intestino; **Rossi, 101.**

Entwicklung des Wirbeltierauges; **Spemann, 106.**

Sviluppo della scissura interemisferica e significato del terzo ventricolo; **Sterzi, 107.**

Entwicklung der Langerhansschen Inseln; **Gelle, 45.**

Genèse du névraxe; **Van Bambeke, 109.**

Gestalt und Bau des Spermatozoen verschiedener Wirbeltiere (Russ.); **Kovalevskij, 64.**

Hüllen und besonders des Follikelepithels an den Eiern; **Retzius, 96.**

Foetal membranes; **Hubrecht, 57.**

Omologia nella placenta; **D'Erchia, 31.**

ETHOLOGY. 5219

Handbuch der Biologie der Wirbeltiere; **Hilzheimer, 56.**

Psychology; **Thorndike, 108a.**

Attitude des animaux de la ménagerie pendant l'éclipse de Soleil; **Lapicque, 68.**

Gehirn und Geist; **Franz, 41.**

Anaphylaktischer Zustand des Organismus; **Calcar, 20.**

Adaptation à la vie arboricole; **Anthony, 6.**

The Madras Aquarium; **Annandale, 5.**

AETIOLOGY AND VARIATION. 5223

Evolutionary evidences; **Williston, 116.**

Speculations on the phylogeny of organic beings; **Ritter, 97.**

Evolution of the vertebrates; **Patten, 88.**

Abstammung der Wirbeltiere (Russ.); **Sëvercov, 104.**

Evolution of the sympathetic nervous system; **Kuntz, 66.**

Phylogenetic relations of the lymphatic and blood vascular systems; **Huntington, 58.**

Grundzüge der Palaeobiologie der Wirbeltiere; **Abel, 1.**

Ursachen des gehäuften Vorkommens von Tierleichen in Gesteinen; **Abel, 3.**

Kämpfe, Verletzungen und Kampf-anpassungen bei fossilen Wirbeltieren; **Abel, 2.**

Origin of vertebrate eye; **Buxton, 18; Gaskell, 43; Buxton, 19.**

Aspects of variation; **Anderson, 4.**

Range of size; **Henn, 50.**

Le régime alimentaire et la variation du foie; **Magnan, 76.**

Teratology of the domestic animals; **Radasch, 94.**

Cas tératologiques; **Postel, 93.**

Chinese vertebrates; **Henshaw and others, 52.**

Colorado; **Cary, 21.**

Atlantosaur and Titanotherium beds, Wyoming; **Peck, 89.**

GEOGRAPHY. 5227

Vertébrés supérieurs, Finlande; **Palmén, 86.**

Dumfriesshire; **Gladstone, 47.**

Wirbeltiere in Elsass-Lothringen; **Döderlein, 32.**

Vertébrés actuels et Pléistocènes de la Corse et de la Sardaigne; **Dehaut, 29.**

TAXONOMY. 5231

Die Wirbeltiere. Eine Übersicht über die fossilen und lebenden Formen; **Jaekel, 59.**

Number of species of living vertebrates; **Henshaw, 51.**

Vertébrés actuels et Pléistocènes de la Corse et de la Sardaigne; **Dehaut, 29.**

XV. PISCES

ARRANGED BY

C. TATE REGAN.

CONTENTS

	PAGE.
I. TITLES	3
II. SUBJECT INDEX	23
General, Economics, Etc.	23
Structure	24
Physiology	26
Development	26
Ethology	27
Variation and Aetiology	28
Distribution	29
Marine	29
Fresh Water	30
Fossil	31
III. SYSTEMATIC	32
General Works	32
Marsipobranchii	32
Selachii	32
Euselachii	32
Pleurotremata	32
Hypotremata	33
Holocephali	34

	PAGE
Pisces	34
Palaeopterygii	34
Neopterygii	34
Protospondyli	34
Isospondyli	34
Ostariophysii	36
Iniomi	41
Apodes	42
Lyomeri	42
Microcyprini	42
Synentognathi	43
Anacanthini	43
Solenichthyes	43
Berycomorphi	44
Zeomorphi	44
Percomorphi	44
Scleroparei	49
Heterosomata	50
Plectognathi	51
Discocephali	51
Xenopterygii	51
Pediculati	51
Symbranchii	52
Opisthomi	52
Rhipidistia	52
Actinistia	52
Dipneusti	52
Ostracodermi	52
Arthrodira	52

I.—TITLES.

- Aagaard, B. Den kunstige Udclækning af Inlandsfisk. [Künstliche Zucht von Süßwasserfischen.] Bergen Norsk Fisket 31 1912 pp. 29-35 221-231 504-510. 1
- Allee, W. C. *vide* Shelford, V. E.
- Allen, W. F. Notes on the breeding season and young of *Polyodon spathula*. Journ. Washington Acad. Sci. Washington D.C. 1 1911 (280-282). 2
- Allen, W. F. Distribution of the lymphatics in the tail region of *Scorpaenichthys marmoratus*. Amer. J. Anat. Philadelphia 11 1910 (1-53). 3
- Allis, E. P. The pseudobranchial and carotid arteries in *Esox*, *Salmo* and *Gadus*, together with a description of the arteries in the adult *Amia*. Anat. Anz. Jena 41 1912 (113-142). 4
- Allis, E. P. The branchial, pseudo-branchial and carotid Arteries in *Chimaera (Hydrolagus) colliei*. Anat. Anz. Jena 42 1912 (10-18). 5
- Allis, E. P. The branchial, pseudo-branchial and carotid Arteries in *Heptanchus (Notidanus) cinereus*. Anat. Anz. Jena 41 1912 (478-492). 6
- Allis, E. P. The branchial, pseudo-branchial and carotid Arteries in *Raja radiata*. Anat. Anz. Jena 41 1912 (579-589). 7
- Anisits, J. D. Ein neues Vorkommen von *Gyrinurus batrachostoma* Mir. Ribeiro. Berlin SitzBer. Ges. natf. Freunde 1912 (465-468). 8
- Anisits, J. D. Eine seltene Missbildung bei einem Rochen. Berlin SitzBer. Ges. natf. Freunde 1912 (223-245) 3 Taf. 9
- Ariola, V. Nuovo pesce abissale del Golfo di Genova (*Cubiceps capensis* (Smith)). Riv. mens. Pesca Pavia 7 (14) 1912 N. 10-12 (185-192) 1 tav. 10 (N-9210 b)
- Ayers, H. and Worthington, J. The finer anatomy of the brain of *Bdellostoma dombeyi*. 2. The fasciculus communis system. J. Comp. Neur. Philadelphia 21 1911 (593-617). 11
- Babák, E. und Hepner, J. Die Synchronie des Atem- und Herzrhythmus bei den Fischembryonen und der Einfluss der Temperatur. Folia Neurobiologica Haarlem 6 1912 (367-373). 12
- Ballowitz, E. Über chromatische Organe in der Haut von Knochenfischen. Anat. Anz. Jena 42 1912 (186-190) 2 Taf. 13
- Bancroft, P. L. On a weak point in the life history of *Neoceratodus forsteri*, Krefft. Brisbane Proc. R. Soc. Queensland 23 1912 (251-256). 14
- Barbieri, C. Gli Agoni [*Alosa finta*] dei laghi dell'Italia settentrionale, ed alcune brevi considerazioni intorno alla loro origine. Riv. fis. mat. sc. nat. Pavia 18 1908 (273-286). 15
- Barbieri, C. Pesca d'acqua dolce e marina. Milano (Vallardi edit.) 1907 (198 pp.). 16
- Barbour, T. Two preoccupied names. Washington D.C. Proc. Biol. Soc. 25 1912 (187). 17
- Bean, T. H. Descriptions of new fishes of Bermuda. Washington D.C. Proc. Biol. Soc. 25 1912 (121-126). 18
- Bean, B. A. and Weed, A. C. Notes on a collection of Fishes from Java, made by Owen Bryant and William Palmer in 1909, with description of a new species. Washington D.C. Smithsonian Inst. Nat. Mus. Proc. 42 1912 (587-611) figs. 19
- Beaufort, L. F. de. On some new Gobiidae from Ceram and Waigeu. Zool. Anz. Leipzig 39 1912 (136-143). 20
- Beaufort, L. F. de *vide* Weber, M. e 3-2

- [Behning, A. L.] Бенингъ, А. Л. О питаніи стерляди. [Ueber die Nahrung des Sterlets.] Saratov Arb. biol. Wolga-Station 4 1 1912 (57-71 75-93 + deutsch. Rés. 73-74 mit Taf. iii iv). 21
- Beigel, C. Regeneration der Barteln bei Siluroiden. Arch. EntwMech. Leipzig 34 1912 (363-370) 1 Taf. 22
- Beigelówna, C. Przyczynę do regeneracyi skóry u ryb kostnoszkieletowych; z 1 tablicą. [Zur Regeneration der Haut bei den Teleostiern; mit 1 Tafel.] Lwów Księga Pamiątkowa ku uczczeniu Prof. J. Nusbauma (H. Altenberg) 1911 (235-247). 23
- Belling, D. E. Der Bau der vorderen paarigen Extremitäten und des Schultergürtels der *Trigla* im Zusammenhang mit dem Bau entsprechender Organe bei anderen Teleostei. Moskva Bull. Soc. nat. 1911 (1912) 1-3 (46-92) Taf. ii u. iii. 24
- Bellini, A. Aalzucht-Versuche. Zs. Fischerei Berlin 15 1911 [1910] (136-181). 25
- Bellini, A. Esperienze di Anguillicultura. Milano (tip. degli Operai) 1907. 26
- Belt, A. On the occurrence of *Raia undulata* Lacep. on the Sussex Coast. Hastings and E. Sussex Nat. 1912 (8a-8b). 27
- Berg, L. S. Faune de la Russie et des pays limitrophes. Poissons (*Marsipobranchii* et *Pisces*) Vol. III. Pt. 1 (1-336) pls. i & ii. St. Petersburg 1912. 28
- Berg, L. S. Ueber die Zusammensetzung und Herkunft der Fischfauna des Amur-Flusses mit Bezug auf die Frage von den zoogeographischen Regionen für die Süßwasserfische. Zool. Jahrb. Jena 1912 (475-520) pl. xvi. 29
- [Berg, L. S.] Бергъ, Л. С. Экземпляръ *Lampetra fluviatilis japonica* (Mart.) съ зап. берега Камчатки. [Sur un specimen de la *Lampetra fluviatilis japonica* (Mart.) provenant de la côte occidentale de Kamtchatka.] St. Peterburg Ann. mus. zool. Ac. sc. 17 1912 (III). 30
- [Berg, L. S.] Бергъ, Л. С. О рыбахъ рѣкъ Сары-су и Чуры въ Акмолинской области. [Sur les poissons des fleuves Sary-su et Noura, prov. d'Akmolinsk.] St. Peterburg Ann. mus. zool. Ac. sc. 17 1912 (53-55). 31
- [Berg, L. S.] Бергъ, Л. С. Замѣтка о *Percottus glehni* Dyb. (сем. *Gobiidae*). [Note sur le *Percottus glehni* Dyb. (fam. *Gobiidae*.)] St. Peterburg Ann. mus. zool. Ac. sc. 17 1912 (I-III). 32
- [Berg, L. S.] Бергъ, Л. С. Рыбы бассейна Кубани. [Les poissons du bassin du fleuve Kuban, Ciscaucasie.] St. Peterburg Ann. mus. zool. Ac. sc. 17 1912 (116-122). 33
- [Berg, L. S.] Бергъ, Л. С. Списокъ рыбъ бассейна р. Камы. [Verzeichnis der Fische des Stromgebietes der Kama.] In: Süzev (211) Illustrierter Führer etc. Perm 1911 (72-74). 34
- Bertini, E. Le ossa basali del cranio dei Pesci in rapporto con la teoria vertebrale del cranio. Genova (tip. A. Ciminago) 1907 (31 pp.). 35
- Biedl, A. Die funktionelle Bedeutung des Interrenalorganes der Selachier. Verh. intern. ZoolKongr. Jena 8 (1910) 1912 (505-511). 36
- Billiard, G. Allongement inusité des nageoires chez une Tanche vulgaire. Paris Bul. soc. zool. 37 1912 (276-278). 37
- Boulenger, E. G. Notes on the breeding habits of the "Millions" Fish (*Girardinus poecilioides*). London Proc. Zool. Soc. 1912 (906-908). 38
- Boulenger, G. A. Description d'un Poisson nouveau du genre *Haplochilus* provenant du Katanga. Rev. Zool. Afr. 2 1912 (47-48). 39
- Boulenger, G. A. Poissons recueillis dans la Région du Bas Congo par M. le Dr. W. J. Ansorge. Ann. Mus. Congo Bruxelles Zool. ser. 1 2 fasc. 3 (1-25) 6 pls. 40
- Boulenger, G. A. Descriptions of two new Fishes from the Nile System. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (601-602). 42
- Boulenger, G. A. Descriptions of three new African Cichlid Fishes of the genus *Tilapia*, preserved in the British Museum. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (138-140). 43
- Boulenger, G. A. Description of a new Fish from British Central Africa. Ann. Mag. Nat. Hist. London ser. 8 9 1912 (519-521). 44

- Boulenger, G. A.** A Synopsis of the fishes of the genus *Mastacembelus*. Philadelphia Pa. J. Acad. Nat. Sci. ser. 2 15 1912 (197-203). 45
- Boulenger, G. A.** On a collection of Fishes made by Mr. A. Blayncy Percival in British East Africa to the East of Lake Baringo. London Proc. Zool. Soc. 1912 1912 (672-676) 3 pls. 46
- Boulenger, G. A.** Description of a new Cichlid Fish from the Lower Niger. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (263). 47
- Bounhiol.** Sur la détermination de l'âge de la Sardine algérienne. Paris C. R. Acad. sci. 154 1912 (1721-1723). 48
- Bounhiol, J. P.** Les mœurs ambulatoires du Thon commun en Méditerranée. Alger Bul. soc. hist. nat. 1911 (149-151). 49
- Bowers, G. M.** Report of the Commissioner of fisheries for the fiscal year ended June 30, 1908. Washington D.C. Rep. U. S. Comm. Fish. 1908 (Bur. Fish. Doc. No. 642) 1908 (1-21). 50
- Bowers, G. M.** Report of the Commissioner of fisheries for the fiscal year ended June 30, 1909. Washington D.C. Rep. U. S. Comm. Fish. 1909 (Bur. Fish. Doc. No. 727) 1910 (1-38). 51
- Brachet, A.** Recherches sur la gastrulation et l'origine de l'hypoblaste du tube digestif chez *Amia calva*. Zool. Jahrb. Jena Suppl. 15 Bd 2 1912 (425-456) 1 Taf. 52
- [**Brauner, A.**] Браунеръ, А. Замѣтки о сельдяхъ (*Clupeidae*) чернаго и Азовскаго морей. [Die Häringe (*Clupeidae*) des Schwarzen und des Azowschen Meeres.] Kišinev Trd. Obs. jest. 2 1909-1910 u. 1910-1911 (1912) (115-134) 2 Tab. 53
- Brauner, A.** Bestimmungstabelle und Verbreitung der Häringe im Schwarzen und Azowschen Meere. Nachtrag zu der Arbeit „Die Häringe (*Clupeidae*) des Schwarzen und des Azowschen Meeres“. Kišinev Trd. Obšč. jest. 2 1909-1910 u. 1910-1911 (1912) (217-221). 54
- Brofeldt, P.** Epämuodostuncista hauenpäistä. [Über missgebildete Köpfe von *Esox lucius*.] Helsingfors Medd. Soc. Fauna et Fl. Fenn. 38 1912 (13-16). [Deutsches Ref. 199-200.] 55
- Brookover, C. and Jackson, T. S.** The olfactory nerve and the nervus terminalis of *Ameiurus*. J. Comp. Neur. Philadelphia 21 1911 (237-259). 56
- Buist, T. P.** On the development of the pectoral girdle in the Pipefish (*Syngnathus acus*). Ann. Mag. Nat. Hist. London ser. 8 10 1912 (613-621) pl. xiii. 57
- Bullen, G. E.** Some notes upon the feeding habits of Mackerel and certain Clupeoids in the English Channel. Plymouth J. Mar. Biol. Ass. 9 1912 (394-403). 58
- Burke, C. V.** Note on the Cyclogasteridae. Ann. Mag. Nat. Hist. London ser. 8 9 1912 (507-513). 59
- Burke, C. V.** A new genus and six new species of the family Cyclogasteridae. Washington D.C. Smithsonian Inst. Nat. Mus. Proc. 43 1912 (567-574). 60
- Burke, C. V.** The relation between the coloration and the bathymetrical distribution of the *Cyclogasteridae*. Science New York 34 1911 (447-453). 61
- Burke, C. V. vide Gilbert, C. H.**
- Chapman, F.** On the occurrence of the Selachian genus *Corax* in the Lower Cretaceous of Queensland. Melbourne Proc. R. Soc. Vict. N.S. 21 Pt. 2 1909 (452-453). 62
- Chaudhuri, B. L.** Descriptions of some new species of freshwater fishes from North India. Rec. Ind. Mus. Calcutta. 7 1912 (437-444) pls. xxxviii-xli. 63
- Chaudhuri, B. L.** *Macrones menoda*, var. *trachacanthus* (Cuv. et Val.). Rec. Ind. Mus. Calcutta 7 1912 (210-212). 64
- Chaudhuri, B. L. vide Sewell, R. B. S.**
- Clark, R. S.** Notes on some freshwater fishes from Buenos Aires. Edinburgh Sci. Res. Scottish Nat. Antarctic Exped. 4 1912 (107-110) pl. 65
- Clarke, W. J.** *Cottus bubalis* at Scarborough. Naturalist London 1912 1912 (191). 66

- Clarke, W. J. Plauer's Lamprey near Scarborough. *Naturalist* London 1912 1912 (185). 67
- Oigny, A. Un nouveau *Zeidae* du Maroc *Parazenopsis argenteus* n. g., n. sp. Boulogne-sur-Mer Ann. stat. aquic. 2 1912 (82-88). 68
- Oigny, A. Migration marine de l'anguille communc. Paris C. R. Acad. sci. 154 1912 (727-729). 69
- Oigny, A. Le stationnement du hareng et du maquereau sur le fond avant la ponte, et son importance pour la pêche au chalut. Boulogne-sur-Mer Ann. stat. aquic. 2 1912 (121-141). 70
- Oigny, A. Deux Clupéides à supprimer de la nomenclature *Harengula latulus* C. et V. et *Meletta phalerica* Risso. Boulogne-sur-Mer Ann. stat. aquic. 2 1912 (65-72). 71
- Oigny, A. Les prétendues migrations du hareng. Boulogne-sur-Mer Ann. stat. aquic. 2 1912 (49-54). 72
- Oigny, A. Captures d'anguilles en pleine mer. Boulogne-sur-Mer Ann. stat. aquic. 2 1912 (142-148). 73
- Oigny, A. Migration marine de l'anguille commune. Paris C. R. Acad. sci. 154 1912 (727-729). 74
- Oigny, A. Le *Liparis liparis* Linné dans le Pas-de-Calais. Boulogne-sur-Mer Ann. stat. aquic. 2 1912 (115-120). 75
- Oigny, A. Note sur quelques *Zeidae* rares ou peu connus. Boulogne-sur-Mer Ann. stat. aquic. 2 1912 (97-106). 76
- Oigny, A. La truite de mer. Boulogne-sur-Mer Ann. stat. aquic. 2 1912 (13-47). 77
- Oigny, A. Contribution à l'étude de nos Scorpénides: *Helicolenus dactylopterus* Delaroche 1809 et les espèces dites *Maderensis*. Boulogne-sur-Mer Ann. stat. aquic. 2 1912 (73-81). 78
- Oigny, A. *Psettodes erumei* des côtes mauritaniennes. Boulogne-sur-Mer Ann. stat. aquic. 2 1912 (107-110). 79
- Cobb, J. C. *vide* Marsh, M. C.
- Cockerell, T. D. A. Note on the scales of the osteoglossid fishes. Washington D.C. Proc. Biol. Soc. 24 1911 (39). 80
- Cole, F. J. A monograph of the general morphology of the Myxinoid Fishes, based on a study of *Myxine*. Pt. IV. On some peculiarities of the afferent and efferent branchial arteries of *Myxine*. Edinburgh Trans. R. Soc. 48 1912 (215-230) pl. 81
- Collett, R. *Lepidopus atlanticus* (Goode and Beane). En pelagisk Trichiuride, fundet ved Finmarken. Kristiania Forh. Vid. selsk. 1912 No. 4 (5) 1 pl. 82
- Conseil permanent international pour l'exploration de la mer. Bulletin statistique des pêches maritimes des pays du nord de l'Europe. Vol. 6 pour l'année 1909. Copenhague (Høst & fils) 1912 (100). 26½ x 21 cm. Price 2 Kr. 83
- Coward, T. A. The Smelt in Ros-therne Mere. Manchester Mem. Lit. Phil. Soc. 56 No. 15 1912 (1-2). 84
- Cronheim, W. Gesamtstoffwechsel der kaltblütigen Wirbeltiere, im besonderen der Fische. Zs. Fischerei Berlin 15 1911 (319-370). 85
- Cronheim, W. Beiträge zur Kenntnis der Nahrungsaufnahme der Karpfen. Zs. Fischerei Berlin 15 1911 [1910] (111-119). 86
- Cuénot, L. Les néphrophagocytes du cœur des Poissons osseux. Zool. Jahrb. Jena Suppl. 15 Bd 3 1912 (241-252) 1 Taf. 87
- Dagry, A. Dispositions à prendre pour l'acclimatation et le transport de poissons exotiques provenant des régions lointaines. Paris Bul. soc. nat. acclim. 58 1911 (417-426). 88
- Dahl, K. Nogle Opgaver for Studiet af Fiskens Tilvækst i vore Ferskvand. [Aufgaben des Studium des Wachstums unserer Süßwasserfische.] Bergen Norsk Fisket. 31 1912 (135-151). 89
- Damiani, Giacomo. Di un *Regalecus gladius* Walb. all' Isola d'Elba, con note sui *Regalecus mediterranei*. Roma Boll. Soc. zool. ital. Ser. 3 1 1912 (329-333). 90
- Dean, B. Additional Notes on the living specimens of the Australian Lung-fish (*Ceratodus forsteri*) in the Collection of the Zoological Society of London. London Proc. Zool. Soc. 1912 1912 (607-612). 91

- Dean, B. Changes in the behavior of the eel during transformation. New York N.Y. Ann. Acad. Sci. 22 1912 (321-326). 92
- Dean, B. Note on the Ohio placoderm *Dinichthys terrelli*. Science New York 34 1911 (801). 93
- Derjugin, K. Bemerkungen über den Bau und die Entwicklung der paarigen Extremitäten der Knochenfische. Anat. Anz. Jena 41 1912 (457-460). 94
- Derjugin, K. und Zozhdestvensky, E. Über den Bau und die Entwicklung der Bauchflossen bei den Teleostiern. (Vorl. Mitt.) Anat. Anz. Jena 41 1912 (643-647). 95
- Despax, R. *vide* Roule, L.
- Dietz, P. A. Mededeeling over de plaats der Gadiden in het systeem. [Mitteilung über die Stellung der Gadiden im System.] Helder Tijdschr. Ned. Dierk. Ver. (Ser. 2) 12 1912 (lxxxvi-lxxxvii). 96
- Dietz, P. A. Vergelijkende anatomie van de kaak- en kieuwboogspieren der Teleostei. [Vergleichende Anatomie der Kiefer- und Kiemenbogenmuskeln der Teleostei.] Leiden (Ed. IJdo) 1912 (196). 24 cm. 97
- Drzewina, A. Cellules géantes dans l'épithélium intestinal des Téléostéens à jeun. Paris C. R. soc. biol. 78 1912 (18-19). 98
- Drzewina, A. Contribution à l'étude des leucocytes granuleux du sang des poissons. Arch. anat. microsc. Paris 13 1911 (319-376). 98a
- Duncker, G. On some Syngnathids (Pipe Fish) from Ceylon. Spolia Zeylan. Colombo 7 Pt. 25 1910 (25-34) pl. 99
- Duncker, G. Die Gattungen der Syngnathidae. Hamburg Jahrb. wiss. Anst. 29 1912 (219-240). 100
- Duncker, G. Die Süßwasserfische Ceylons. Hamburg Jahrb. wiss. Anst. 29 1912 (241-272) pl. 101
- Eastman, C. R. Triassic fishes of Connecticut. Connecticut Geol. Nat. Hist. Surv. Bull. Hartford No. 18 1911 (1-77) pls. i-xi. 102
- Eastman, C. R. Jurassic saurian remains ingested within fish. Pittsburg Pa. Ann. Carnegie Mus. 8 1911 (182-187) pls. x-xi. 103
- Eastman, C. R. Tertiary fish remains from Spanish Guinea. Pittsburg Pa. Ann. Carnegie Mus. 8 1912 (370-378) pls. xxiii-xxiv. 104
- Eastman, C. R. Mesozoic and Cenozoic Fishes. New York N.Y. Bull. Geol. Soc. Amer. 23 1912 (228-232). 105
- Ehrenbaum, E. Report on the mackerel. Preliminary account. Copenhagen, Conseil permanent international pour l'exploration de la mer. Rapports et procès-verbaux des réunions 14 1912 (10). 106
- Eigenmann, C. H. New Characins in the collection of the Carnegie Museum. Pittsburg Pa. Ann. Carnegie Mus. 8 1911 (164-181) pls. iv-ix. 107
- Eigenmann, C. H. The freshwater fishes of British Guiana, including a study of the ecological grouping of species, and the relation of the fauna of the plateau to that of the lowlands. Pittsburg Pa. Mem. Carnegie Mus. 5 1912 (i-xix 1-578) 103 pls. 108
- Eigenmann, C. H. Some results of an ichthyological reconnaissance of Colombia, South America. Indiana Univ. Studies 1912 No. 8 (1-27). 109
- Ekman, S. Om Torneträsks röding, Sjöns naturförhållanden och dess fiske. (Vetenskapl. och prakt. undersökningar i Lappland anordnade af Luossavaara-Kiirunavaara aktiebolag.) [The char (*Salmo alpinus*) of Torneträsk.] Stockholm 1912 (vi+54) map. 110
- Ellis, M. D. On the species of *Hasemania*, *Hyphessobrycon*, and *Hemigrammus* collected by J. D. Haseman for the Carnegie Museum. Pittsburg Pa. Ann. Carnegie Mus. 8 1911 (148-163) pls. i-iii. 111
- Elmhirst, R. Notes from the Millport Marine Biological Station. Observations on the behaviour of Fish. Zoologist London 1912 1912 (15-20). 112
- Engelhardt, R. Über einige neue Selachier-Formen. Zool. Anz. Leipzig 39 1912 (643-648). 113
- d'Erasmus, G. Appunti sui fossili del Monte Libano. Riv. ital. Pal. 18 1912 (91-101) pl. iii. 114
- Esdaille, P. C. Intensive study of the scales of three specimens of *Salmo*

- salar*. Manchester Mem. Lit. Phil. Soc. 56 Pt. 1 No. 3 (1-22). 115
- Facciola, L. Scoperta di un individuo maschio del *Conger vulgaris* L. Roma Boll. Soc. zool. ital. Ser. 3 1 1912 (164-187). 116
- Fage, L. L'acclimatation du Saumon dans le bassin de la Méditerranée. Paris C. R. soc. biol. 72 1912 (851-852). 117
- Fage, L. Sur une collection de Poissons provenant de la côte méditerranéenne du Maroc. Paris C. R. ass. franç. avanc. sci. 40 (Dijon) 1911 (578-582). 118
- Fage, L. Sur une collection de poissons provenant de la côte méditerranéenne du Maroc. Paris Bul. soc. zool. 36 1912 (215-220). 119
- Fage, L. Sur les races locales de l'Anchois (*Eugraulis encrassicholus* Linné.) Réponse à M. Pietro Lo Giudice. Arch. zool. Paris 8 1911 (notes et revues lxxii-lxxx). 120
- Farr, C. C. and Macleod, D. B. Further experiments on the influence of artesian water on the hatching of Trout. Wellington Trans. and Proc. N. Zeal. Inst. 23 1911 (55-57). 121
- Fehlmann, J. W. Ein mundloser Karpfen. Intern. Rev. Hydrobiol. Leipzig biol. Suppl. Ser. 4 H. 2 1912 II (1-6) 1 Taf. 122
- Ferguson, J. S. The anatomy of the thyroid gland of Elasmobranchs, with remarks upon the hypobranchial circulation in these fishes. Amer. J. Anat. Philadelphia 11 1911 (151-210). 123
- Fiore, G. Influenza dei centri visivi (lobi ottici e retina) sul pigmento della cute dei Pesci colorati. Ann. oftalm. Pavia 35 1906 (145-146). 124
- Fortuyn, A. B. D. Notiz über den Eintritt der motorischen Nervenwurzeln in die Medulla oblongata und über die Lage der motorischen Kerne bei *Amia calva* L. Folia neurobiologica Haarlem 6 1912 (27-30). 125
- Fowler, H. W. Descriptions of nine new eels, with notes on other species. Philadelphia Proc. Acad. Nat. Sci. 64 1912 (8-33). 126
- Fowler, H. W. Notes on salmonoid and related fishes. Philadelphia Proc. Acad. Nat. Sci. 63 (1911) 1912 (551-571). 127
- Fowler, H. W. Records of fishes for the middle Atlantic states and Virginia. Philadelphia Proc. Acad. Nat. Sci. 64 1912 (34-59). 128
- Fowler, H. W. Some features of ornamentation in fresh-water fishes. Amer. Nat. New York 46 1912 (470-476) pl. 129
- Fowler, H. W. New fresh-water fishes from western Ecuador. Philadelphia Proc. Acad. Nat. Sci. 63 1911 (493-520). 130
- Fraipont, C. Sur les Ostracophores belges. Bruxelles Bul. soc. géol. 26 1912 (66-69). 131
- Franz, V. Beitrag zur Kenntnis des Ependyms im Fischgehirn. Biol. Centralbl. Leipzig 32 1912 (375-383). 132
- Franz, V. Über Ortsgedächtnis bei Fischen und seine Bedeutung für die Fischwanderungen. Ergebnisse einer Umfrage. Arch. Hydrobiol. Stuttgart 7 1912 (637-674). 133
- Franz, V. Über das Kleinhirn und die statische Funktion bei den planktonischen Fischlarven. Verh. intern. ZoolKongr. Jena 8 (1910) 1912 (516-519). 134
- Franz, V. Ueber das Lernvermögen der Fische. Allg. Fischereiztg München 37 1912 (361-364). 135
- Franz, V. Beiträge zur Kenntnis des Mittelhirns und Zwischenhirns der Knochenfische. Folia Neurobiologica Haarlem 6 1912 (402-441). 136
- Frisch, K. v. Sind die Fische farbenblind? Zool. Jahrb. Jena Abt. f. allg. Zool. 33 1912 (107-126). 137
- Frisch, K. v. Über die Farbanpassung des *Crenilabrus*. Zool. Jahrb. Jena Abt. f. allg. Zool. 33 1912 (150-164). 138
- Frisch, K. v. Über farbige Anpassung bei Fischen. Zool. Jahrb. Jena Abt. f. allg. Zool. 32 1912 (171-230) 2 Taf. 139
- Frisch, V. Ueber das Parietalorgan der Fische als funktionierendes Organ. München SitzBer. Ges. Morph. 27 (1911) 1912 (16-18). 140
- Fusari, R. Sulla terminazione dei nervi nell'apparecchio branchiale e nel velo boccale di *Ammocoetes*

- branchialis*. Archivio sc. med. Torino 31 1907 (190-201) 1 tav. 141
- Ganfini, C. Sui nervi spino-occipitali di *Amia calva*. Monitore zool. ital. Firenze 23 1912 (15-22). 142
- Ganfini, C. Lo sviluppo del sistema nervoso simpatico in alcuni Pesci. Archivio ital. Anat. Embriol. Firenze 10 1912 (574-645) 5 tav. 143
- Garman, S. Some Chinese vertebrates. Pisces. Cambridge Mass. Mem. Mus. Comp. Zool. Harvard Coll. 40 1912 (111-123). 144
- Gemmell, J. F. The Teratology of Fishes. 4to. Glasgow, 1912. 145
- Giacomini, E. Anatomia microscopica e sviluppo del sistema interrenale e del sistema cromaffine (sistema feocromo) dei Salmonidi. Parte I. Anatomia microscopica. Bologna Mem. Acc. sc. Cl. sc. fis. Scr. vi 8 (1910-11) 1911 (367-387) 2 tav. 146
- Giacomini, E. Il sistema interrenale e il sistema cromaffine (s. feocromo) dei Lofobranchi. Bologna Rend. Acc. sc. Cl. sc. fis. N.S. 15 (1910-11) 1911 (108-109). 147
- Giacomini, E. Il sistema interrenale e il sistema cromaffine (s. feocromo) dei Ciprinidi. Bologna Rend. Acc. sc. Cl. sc. fis. N.S. 15 (1910-11) 1911 (109-110). 148
- Giacomini, E. Anatomia microscopica e sviluppo del sistema interrenale e del sistema cromaffine (feocromo) dei Salmonidi. Riassunto. Bologna Rend. Acc. sc. Cl. sc. fis. N.S. 15 (1910-11) 1911 (107-108). 149
- Gibian, A. Beiträge zur Kenntnis des Hyobranchialskeletes der Haie. Eine vergleichend-embryologische Untersuchung. Morph. Jahrb. Leipzig 45 1912 (57-95). 150
- Gilbert, C. H. and Burke, C. V. Fishes from Bering Sea and Kamchatka. Washington D.C. Dept. Comm. Lab. Bull. Bur. Fish. 30 (1910) 1912 (31-96). 151
- Gilbert, C. H. and Burke, C. V. New Cyclogasterid Fishes from Japan. Washington D.C. Smithsonian Inst. National. Mus. Proc. 42 1912 (351-380) 8 pls. 152
- Glaser, O. C. Die Entwicklungsarbeit im *Fundulusei*. VIII. Beitrag zur Energetik der Ontogenese. Biochem. Zs. Berlin 44 1912 (180-184). 153
- Goldsmith, M. Contribution à l'étude de la mémoire chez les Poissons. Paris Bul. Inst. psychol. 12 1912 (161-176). 153a
- Grassi, B. Contribuzione allo studio dello sviluppo dei Murenoidi. I. *Muraena helena*. II. Di alcune uova e prolarve, che si potrebbe supporre appartenenti ad *Anguilla anguilla*. Memorie del Comitato talassografico italiano Roma Mem. 1 1910 (1-16) 1 tav. 154
- Grassi, B. Nuova contribuzione alla storia dello sviluppo dei Murenoidi. Roma Rend. Acc. Lincei 21 Semestre 2 1912 (15-20). 155
- Grassi, B. Ricerche sulle Anguille argentine allevate forzatamente in vasche di acqua dolce. Roma Rend. Acc. Lincei 21 Semestre 2 1912 (675-677). 156
- Grochmalicki, J. Zur Entwicklung des Gefäßsystems bei den Knochenfischen. Verh. intern. ZoolKongr. Jena 8 (1910) 1912 (929-932). 157
- Grunelius, A. von. Über die Entwicklung der Haut des Karpfens. Jenaische Zs. Natw. 49 1912 (119-148) 3 Taf. 158
- Gudger, E. W. Natural History notes on some Beaufort, N.C., Fishes, 1910-11. No. I. Elasmobranchii—with special reference to Uterogestation. Washington D.C. Proc. Biol. Soc. 25 1912 (141-156). 159
- Gudger, E. W. Natural History notes on some Beaufort, N.C., Fishes, 1910-11. No. II. Teleostomi. Washington D.C. Proc. Biol. Soc. 25 1912 (165-176). 160
- Guitel, F. Sur les reins du *Crystallogobius nilssonii* Duben et Kiren. Rennes Bul. soc. sci. nat. 19 1910 (255-267). 161
- Guitel, F. Sur les reins de *Cottus gobio* et *bubalis*. Rennes Bul. soc. sci. méd. 21 1912 (75-78). 161a
- Guitel, Frédéric. Sur les reins des *Cottus gobio* et *bubalis*. Paris C. R. ass. anatomistes 14 1912 (92-94). 161b
- Haempel, O. Über das Hörvermögen der Fische. Aus d. Natur Leipzig 8 1912 (169-176). 162

- Haempel, O.** Leitfaden der Biologie der Fische. Stuttgart (F. Enke) 1912 (viii + 180). 25 cm. 7 M. [Abdr. aus M. Hilzheimer Handb. d. Biol. d. Wirbeltiere.] 163
- Haffner, K.** Eine Kreuzung zwischen *Xiphophorus helleri* var. *güntheri* und *Platypoecilus maculatus* var. *pulchra*. Bl. Aquarierkunde Stuttgart 23 1912 (595-596). 164
- Hall, R.** Note on *Trachinops taeniatus*. Hobart Proc. R. Soc. Tasmania 1911 (32). 166
- Hay, O. P.** On an important specimen of *Edestus*; with description of a new species, *Edestus mirus*. Washington D.C. Smithsonian Inst. Proc. U. S. Nation. Mus. 42 1912 (31-38) pls. i & ii. 167
- [**Heide, E. Ju.**] Гейде, Э. Ю. Определение возраста ряпушки и значение такового для озерного хозяйства. [Die Bestimmung des Alters der Marenco (*Coregonus albula*) und deren Bedeutung für die Teichwirtschaft.] Arb. d. 3-ten allruss. Fischerei-Congresses in St. Petersburg i. J. 1910. Lief. 3. St. Peterburg 1912 (105-116). 168
- Heilig, K.** Zur Kenntnis der Seitenorgane von Fischen und Amphibien. Arch. Anat. Physiol. Leipzig Anat. Abt. 1912 (117-150) 2 Taf. 169
- Hein, W. und Winter, F. W.** Süßwasserfische Mittel-Europas, hrsg. im Auftrag des Deutschen Fischerei-Vereins Berlin. Leipzig (G. A. Rietzschel) [1912] (2 Taf.). Je 114 x 154 cm. Je 12 M. 170
- Heinen, A.** Die planktonischen Fischeier und Larven der Ostsee. Wiss. Meeresunters. Kiel Abt. Kiel N.F. 14 1912 (129-189). 171
- Hennig, E.** Die Fischfauna der Kreidezeit. Berlin SitzBer. Ges. natf. Freunde 1912 (483-493). 172
- Hensen, V.** Über die Bestimmung des Fischbestandes im Meer. Wiss. Meeresunters. Kiel Abt. Kiel N.F. 14 1912 (1-32). 173
- Hepner, J.** vide Babák, E.
- Herwerden M. A. van en Ringer, W. E.** Over den aard van het zuur van het maagsap van *Scyllium stellare*. [Ueber die Natur der Säure des Magensaftes von *Scyllium stellare*.] Utrecht Onderzoekingen Physiologisch Laboratorium (Ser. 5) 12 1911 (37-58). 174
- Hess, C.** Untersuchungen zur Frage nach dem Vorkommen von Farbensinn bei Fischen. Zool. Jahrb. Jena Abt. f. allg. Zool. 31 1912 (629-646). 175
- Heuscher, [T.].** Ein Karpfinmopskopf. Schweiz. FischereiZtg 19 1911 (262-265). 176
- Hildebrand, S. F.** vide Meek, S. E.
- Hirsch, J.** Über das Gehirn, Rückenmark und Augen der Varietäten des Goldfisches (*Carassius auratus*). Arch. EntwMech. Leipzig 35 1912 (56-63). 177
- Hjort, J. u. Lea, E.** Einige Resultate der internationalen Heringsuntersuchungen. Berlin Mitt. D. Seefischereiver. 28 1912 (9-22). 178
- Hoek, P. P. C.** Over leeftijdsbepaling en groei bij de visschen. [Ueber Altersbestimmung und Wachstum bei den Fischen.] Med. Vissch. Helder 19 1912 (194-201). 179
- Hoek, P. P. C.** Duitse en Fransche namen van te IJmuiden aangevoerde zeevisschen. [Deutsche und französische Namen zu IJmuiden angeführter Seefische.] Med. Vissch. Helder 19 1912 (114-117). 180
- Hoek, P. P. C.** Les clupéides (le Hareng excepté) et leurs migrations. Copenhagen, Conseil permanent international pour l'exploration de la mer. Rapports et procès-verbaux des réunions 14 1912 (40) map. 181
- Hofer, B.** Die Ergebnisse der neueren exakten Vererbungslehre in ihrer Bedeutung für die Fischzucht. Allg. Fischereiztg München 37 1912 (2-6 30-34 92-96 334-338). 182
- Hoffmann, L.** Zur Kenntniss des Neurocraniums der Pristiden/und Pristiophoriden. Zool. Jahrb. Jena Abth. f. Anat. 1912 (239-360) pls. xiii-xxiv. 183
- Hussakof, L.** The spawning habits of the Sea Lamprey (*Petromyzon marinus*). Amer. Nat. New York N.Y. 46 1912 (729-740). 184
- Hussakof, L.** The Cretaceous Chimaeroids of North America. New York N.Y. Bull. Amer. Mus. Nat. Hist. 31 1912 (195-228) pls. xix-xx. 185
- Hussakof, L.** Note on an embryo of *Pristis cuspidatus*. New York N.Y. Bull. Amer. Mus. Nat. Hist. 31 1912 (327-330). 186

- Hussakof, L. Notes on Devonian Fishes from Scaumenac Bay, Quebec. New York N.Y. Bull. State Mus. 158 1912 (127-139). 187
- Hussakof, L. and Welken, W. H. Chemical notes on the egg capsules of two species of Sharks. Biochem. Bull. I 1911 (216-221) pl. iv. 188
- Iches, J. Principaux Poissons comestibles de l'Argentine. Paris Bul. soc. nat. acclim. 58 1911 (321-329). 189
- Jackson, T. S. *vide* Brookover, C.
- [Jakimov, Vas. L. u. Kohl-Jakimova, Nina †.] Якимовъ, Вас. Л. и Колю-Якимова, Нина. О величинѣ эритроцитовъ морскихъ рыбъ. [Ueber die Grösse der Erythrocyten der Seefische.] Jurjev Zeitschr. wiss. u. prakt. Veterin. med. 6 1912 (73-75). 190
- Johansen, A. C. Om Rødspætten og Rødspættfiskeriet i Beltfarvandet med nogle Bemærkninger om de øvrige Flynderarter og Flynderfiskeriet i samme Farvand. [On the plaice and the other flounders in the Belt sea.] København Skrifter Havunders. Nr. 7 1912 (1-158) with 23 plates. 25½ × 17 cm. 3 Kr. 191
- Johansen, A. C. Contributions to the biology of the plaice, with special regard to the Danish plaice-fishery. V. The supposed migrations of plaice from the Kattegat and the Belt sea to the true Baltic. København Medd. Havunders. Ser. Fiskeri 4 Nr. 1 1912 (1-34) with 5 figg. (34 × 27 cm.) 192
- Johansen, A. C. Dritter Bericht über die Eier, Larven und älteren Stadien der Pleuronectiden in der Ostsee nach Zahl, Grösse, Alter und Geschlecht. Copenhagen, Conseil permanent international pour l'exploration de la mer. Rapports et procès-verbaux des réunions 14 1912 (57). 193
- Johansen, A. C. and Neergaard-Møller, E. Biologisk-statistiske Oplysninger om det danske Saltvandsfiskeri i 1909. [Biological statistics of the Danish salt-water fishery for the year 1909.] København Medd. Havunders. Ser. Fiskeristatistik 1 1912 (1-99) 2 maps. 194
- Johansen, Fr. The fishes of the Danmark Expedition. København, Danmark-Ekspeditionen til Grønlands Nordøstkyst 1906-1908 5 Nr. 12.
- Reprint of Medd. Grønland. XLV 1912 (633-675) 3 pls. 195
- Johnson, R. D. O. Notes on the habits of a climbing Catfish (*Arges marmoratus*) from the Republic of Colombia. New York N.Y. Ann. Acad. Sci. 22 1912 (327-333). 196
- Johnston, J. B. Upon the morphology of the forebrain in fishes. Anat. Anz. Jena 40 1912 (531-540). 197
- Johnston, J. B. The telencephalon of ganoids and teleosts. J. Comp. Neur. Philadelphia 21 1911 (489-501). 198
- Johnston, J. B. The telencephalon of selachians. J. Comp. Neur. Philadelphia 21 1911 (1-113). 199
- Jordan, D. S. Description of a collection of fossil fishes from the bituminous shales at Riacho Doce, State of Alagoas, Brazil. Pittsburg Pa. Ann. Carnegie Mus. 7 1910 (23-34) pls. v-xiii. 200
- Jordan, D. S. Note on the generic name *Sajole*, replacing *Boulengerina*, for a genus of Kuhluid Fishes. Washington D.C. Smithsonian Inst. Nation. Mus. Proc. 42 1912 (655). 201
- Jordan, D. S. and Metz, C. W. Descriptions of two new species of fishes from Honolulu, Hawaii. Washington D.C. Smithsonian Inst. Nation. Mus. Proc. 42 1912 (525-527) pl. 202
- Jordan, D. S. and Thompson, W. F. A Review of the Sparidae and related families found in the waters of Japan. Washington D.C. Smithsonian Inst. Nat. Mus. Proc. 41 1912 (521-601). 203
- Kappers, C. U. Ariens. De rangschikking van de motorische kernen in de oblongata en middenhersenen van *Chimaera monstrosa* vergeleken bij die van andere visschen. [The arrangement of the motor nuclei in *Chimaera monstrosa* compared with other fishes.] Amsterdam Versl. Wis. Nat. Afd. K. Akad. Wet. 20. 1912 (1141-1148) (Dutch); Amsterdam Proc. Sci. K. Akad. Wet. 14 1912 (1176-1180) (English). 204
- Kató, H. Ueber die peripherischen Endigungen des Nervus acusticus beim *Leucopsarion petersi* Hilgendorf. Folia neuro-biologica Haarlem 5 1911 (425-435). 205

- Kendall, W. C.** American catfishes: habits, culture and commercial importance. Washington D.C. Rep. U. S. Comm. Fish. 1908 (Bur. Fish. Doc. No. 733) 1910 (3-39) pls. i-x. 206
- Kendall, W. C.** Notes on a new species of flatfish from off the coast of New England. Washington D.C. Dept. Comm. Lab. Bull. Bur. Fish. 30 (1910) 1912 (389-394) pl. lvii. 207
- Kendall, W. C. and Radcliffe, L.** The shore fishes. (Reports on the scientific results of the expedition to the eastern tropical Pacific, in charge of Alexander Agassiz, by the U.S. Fish commission steamer "Albatross," from October, 1904, to March, 1905, Lieut. Commander L. M. Garrett, U.S.N., commanding. 25.) Cambridge Mass. Mem. Mus. Comp. Zool. Harvard Coll. 35 1912 (75-171) pls. i-viii. 208
- Kirk, H. B.** Some features of the circulatory system of *Heptatrema cirrata* Forster. Wellington Trans. and Proc. N. Zool. Inst. 44 1912 (241-244) pls. xvi xvii. 209
- Krebs, W.** Vulkanische Tiefseebohrung und Aalbrut. Berlin Mitt. D. Seefischeriver. 28 1912 (258-263). 210
- Kschischkowsky, K.** Beiträge zur Physiologie des N. terminalis bei den Selachiern. Arch. ges. Physiol. Bonn 148 1912 (585-607). 211
- Kuntz, A.** The development of the sympathetic nervous system in certain fishes. J. Comp. Neur. Philadelphia 21 1911 (177-214). 212
- Kwietniewski, C.** Ricerche intorno alla struttura istologica dell'integumento dei Selachi. Padova (Drucker edit.) 1905 (156 pp.) 6 tav. 213
- Lanine.** Des globules blancs éosinophiles dans le sang des Poissons d'eau douce. Paris C. R. ass. anatomistes 13 1911 (228-229). 214
- Lea, E. vide Hjort, J.**
- [**Lebedincev, A. u. Nedošivin, A.** Лебединцевъ, А. и Недошивинъ, А. Опытъ оплодотворенія икры молоками, консервированными въ спиртѣ. [Versuch einer Befruchtung mit in Alkohol aufbewahrter Milch.] Ryboprom. žizni St. Peterburg 1912 (84-85). 215
- Lee, R. M.** An investigation into the methods of growth determination in fishes. Copenhagen Publ. de circ. 63 1912. (36). 25 × 17 cm. Price 75 Øre. 216
- Léger, L.** Principes de la méthode rationnelle du peuplement des cours d'eau à Salmonides. Paris Bul. soc. aquicult. 22 1910 (241-269). 217
- Leriche, M.** Deuxième note sur les fossiles de la Craie phosphatée de la Picardie. Bruxelles Bul. soc. géol. 25 1911 (297-310). 218
- Leriche, M.** Sur la présence d'un Pteraspis dans le Coblentzien du massif de Dour.—Les niveaux à Ostracophores de l'Ardenne et des régions limitrophes. Bruxelles Bul. soc. géol. 26 1912 (49-56) pl. E. 219
- Leriche, M.** Sur quelques Poissons du Crétacé du Bassin de Paris. Paris Bul. soc. géol. ser. 4 10 1910 (455-471) pl. vi. 220
- Levi-Morenos, D.** Per organizzare la pesca nella Libia. Memorie del R. Comitato talassografico italiano. Venezia Mem. 16 1912 (1-35) 2 tav. 1 carta. 221
- Lillenthal, G.** Versuche mit einem Vogelmodell und Beobachtungen an Möven und fliegenden Fischen. Zs. Flugtechnik München 2 1911 (297-300). 222
- Lo-Bianco, S.** Risultato delle indagini sul pesce novello nel Tirreno. Ann. Agric. (1910) Atti Comm. consult. per la pesca (Ser. Dic. 1909) Roma 1911 (220-240). 223
- Loman, J. C. C.** Über die Naturgeschichte des Bachneunauges *Lampetra planeri* (Bloch). Zool. Jahrb. Jena Suppl. 15 Bd 1 1912 (243-270) mit 1 Taf. 224
- Lühe, M.** Fänge von Welsen in Masuren. Königsberg Sch. physik. Ges 53 1912 (85-89). 225
- Lund, Oscar.** Investigation on the sprat in Norse waters. Aarsb. Norges Fiskerier Bergen 1910 (1911) (357-473) 1 pl. 2 charts. 226
- McCulloch, A. R.** Notes on some Western Australian Fishes. Rec. W. Austral. Mus. Perth 1 1912 (78-97). 227
- McCulloch, A. R.** Notes on some Australian Atherinidae. Brisbane Proc. R. Soc. Queensland 24 1912 (47-53). 228

- McIntosh, W. C. On Scottish marine fisheries, 1898-1912. Zoologist London 1912 1912 (361-380). 229
- Macleod, D. B. *vide* Farr, C. C.
- Magnan, A. Influence de différents régimes alimentaires sur la croissance des Truites arc-en-ciel. Bul. Muséum Paris 1912 (392-394). 230
- [Maksimov, N.] Максимовъ, Н. *Blennius macropteryx* [recti *macropteryx*] Rüpp. въ черномъ морѣ. [*Blennius macropteryx* Rüpp. im Schwarzen Meere.] Charikov Prot. Obšč. isp. priir. 1 1912 (3-4). 231
- Marcinkiewiczówna, Marya. Przyczynki do anatomii pęcherza pławnego wielopletwa (*Macropodus viridi-auratus*). [Contribution à l'anatomie de la vessie natatoire de *Macropodus viridi-auratus*.] Lwów Księga Pamiątkowa ku uczeniu Prof. J. Nusbauma (H. Altenberg) 1911 (107-111). 232
- Marsh, M. C. and Cobb, J. C. The fisheries of Alaska in 1909. Washington D.C. Rep. U. S. Comm. Fish. 1909 (Bur. Fish. Doc. No. 730) 1910 (1-58). 233
- Mast, S. O. *vide* Reighard, J.
- Masterman, A. T. 3. Report on later stages of Pleuronectidae. Copenhagen Rapp. et procèsverb. explor. mer. 14 1912 (34). 234
- Maurer, Fr. Die ventrale Rumpfmuskulatur der Fische (Selaehier, Ganoiden, Teleostier, Crossopterygier, Dipnoer). Jenaische Zs. Natw. 49 1912 (1-118) 8 Taf. 235
- Maximow, A. Untersuchungen über Blut und Bindegewebe. V. Über die embryonale Entwicklung der Thymus bei Selachiern. Arch. mikr. Anat. Bonn 80 1912 (39-88) 5 Taf. 236
- Mayhoff, H. Über das „monomorphe“ Chiasma opticum der Pleuronectiden. Zool. Anz. Leipzig 39 1912 (78-86). 237
- Mazza, F. Risultato di esperimenti fatti sopra alcune Anguille argentine (*Filatrotas*) vissute forzatamente in acqua dolce. Roma Rend. Acc. Lincei 21 Semestre 2 1912 (730-735). 239
- Mazzarelli, G. Studi sui Pesci batipelagici dello stretto di Messina. I. Larve stiloftalmoidi (periscopiche di Holt e Byrne) di Scopelidi e loro metamorfosi iniziale. Riv. mens. Pesca Pavia 7 1912 (1-26) 4 tav. 240
- Mazzarelli, G. Studi sui Pesci batipelagici dello stretto di Messina. II. Intorno allo *Eretmophorus Kleinenbergi* Gigl. Riv. mens. Pesca Pavia 7 1912 (129-134). 241
- Mazzullo, L. Monografia della pesca del pesce spada (*Xiphias gladius*) nel canale di Messina. Messina (tip. Alico) 1906 (26 pp.). 242
- Meek, S. E. New species of Fishes from Costa Rica. Chicago Ill. Field Mus. Publ. Zool. 10 1912 (69-75). 243
- Meek, S. E. and Hildebrand, S. F. Descriptions of new Fishes from Panama. Chicago Ill. Field Mus. Pub. Zool. Ser. 10 1912 (67-68). 244
- Menzies, W. J. M. The infrequency of spawning in the Salmon. Glasgow Rep. Fish. Board Salmon Fisheries 1911 1912 I (1-7) 1 pl. 245
- Metz, C. W. *vide* Jordan, D. S.
- Minkiewicz, R. Recherches sur la formation des habitudes, le sens des couleurs et la mémoire chez les Poissons. Ann. Inst. océan. Paris 5 1912 (53). 245a
- Moenkhaus, W. J. Cross fertilization among fishes. Indianapolis Ind. Proc. Acad. Sci. 1910 1911 (353-393). 246
- Moodie, R. L. A contribution to the soft anatomy of Cretaceous fishes and a new primitive herring-like fish from the Texas Cretaceous. Lawrence Univ. Kans. Sci. Bull. 5 1911 (275-287) pls. lx-lxii. 247
- Możejko, B. Ist das Cyclostomenauge primitiv oder degeneriert? Anat. Anz. Jena 42 1912 (612-620). 248
- Możejko, B. Zatoki Dohrna u minogów i stosunek ich do układu żylnego ogona. [Les sinuses dits "de Dohrn" chez les pétromyzones et leurs rapports avec le système veineux de la queue.] Warszawa Spraw. Tow. Nauk. 4 1911 (400-401). 249
- Możejko, B. Badania nad akladem naczyniowym minoga. [Untersuchungen über das Gefäss-System von *Petromyzon*.] Kosmos Lwów 36 1911 (1063-1072). 250

- Mozejko, B. Untersuchungen über das Vaskularsystem von *Petromyzon fluviatilis*. Vorl. Mitt. 2: Ueber die Vaskularisation des Schwanzes. 3: Ueber den Bau und den morphol. Wert des Vaskularsystems der Petromyzonten. Anat. Anz. Jena 40 1912 (469-486 506-513). 251
- Mozejko, B. Untersuchungen über das Vaskularsystem der Petromyzonten. (4. vorl. Mitt.) Nochmals über die Dohrnischen Sinusse. Anat. Anz. Jena 41 1912 (454-457). 252
- Müller, E. Untersuchungen über ein faseriges Stützgewebe bei den Embryonen von *Acanthias vulgaris*. Stockholm Vet.-Ak. Handl. 49 No. 6 1912 (18) 4 Taf. 253
- Murdoch, J. *Fundulus* and fresh water. Science New York 35 1912 (417). 254
- Nachtrieb, H. F. The lateral line system of *Polyodon*. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (215-220). 255
- [Nedošivin, A. Ja.] Недошивинъ, А. Я. Развитие плавательного пузыря у *Clupea Kessleri*. [Zur Entwicklungsgeschichte der Schwimmblase der *Clupea Kessleri*.] Saratov Trd. Obsč. jest. 6 1 1909 (1912) (19-32) Taf. i-iii. 256
- Nedošivin, A. vide Lebedincev, A.
- Neergaard-Møller, E. vide Johansen, A. C.
- Nemiloff, A. Über die subpiale Schicht des Rückenmarks der Fische. Arch. mikr. Anat. Bonn Abt. 1 80 1912 (587-608) 1 Taf. 257
- Nichols, J. T. Notes on West Indian Fishes. New York N.Y. Bull. Amer. Mus. Nat. Hist. 31 1912 (109-111). 258
- Nichols, J. T. Notes on Cuban Fishes. New York N.Y. Bull. Amer. Mus. Nat. Hist. 31 1912 (179-194). 259
- Ninni, E. Di un caso di metacromatismo in una Anguilla. Riv. mens. Pesca Pavia 7 1912 (207-208). 260
- Ninni, E. Straordinaria comparsa di Pesci piloti, *Naucrates ductor* L., in Venezia. Neptunia Venezia 21 1906 (208-209). 261
- Ninni, E. I pesci e la pesca d'acqua dolce nelle province di Venezia e Treviso. Venezia (tip. Orfanotrofio di A. Pellizzato) 1907 (76 pp.). 262
- Ninni, E. Catalogo dei Pesci del Mare Adriatico. Venezia (Tip. Carlo Bertotti) 1912 (vii+271 pp.). 263
- Njedoschiwin, A. vide Nedošivin, A. Ja.
- Nusbaum, J. Notes préliminaires sur l'anatomie comparée des poissons provenant des campagnes de S. A. S. le Prince de Monaco. Fragments sur l'anatomie de *Cyclothone signata* Garn. Bul. Inst. océan. Monaco 1912 no. 246 (13). 264
- Ogilby, J. D. Note on *Blanfordia maculata*. Casteln. Brisbane Mem. Queensland Mus. 1 1912 (216). 265
- Ogilby, J. D. Descriptions of new or insufficiently described Fishes from Queensland waters. Brisbane Ann. Queensland Mus. 10 1911 (36-58). 266
- Ogilby, J. D. On the genus "Gonorrhynchus" (Gronovius). Brisbane Ann. Queensland Mus. 10 1911 (30-35). 267
- Ogilby, J. D. On some Queensland Fishes. Mem. Queensland Mus. Brisbane 1 1912 (26-65) pls. xii-xiv. 268
- Orsenigo, L. Sulla introduzione di Pesci stranieri nelle nostre acque dolci. Riv. mens. Pesca Pavia 7 1912 (100-102; 135-153). 269
- [Ostroumov, A.] Остроумовъ, А. А. Второй годъ роста стерляди. [Das zweite Jahr des Wachstums des Sterlets.] Kazan' Trd. Obsč. jest. 45 1 1912 (1-24). 270
- Otterstrom, C. V. Fisk. I. Pigfinnefisk. Danmarks Fauna VI København 1912 (1-198 pp.). 271
- Oxner, M. Expériences sur la faculté d'apprendre chez les poissons marins. Paris C. R. Acad. sci. 154 1912 (455-457). 272
- Oxner, M. Expériences sur la mémoire et la nature chez un poisson marin (*Serranus scriba* Cuv.) Paris C. R. Acad. sci. 154 1912 (832-835). 273
- Oxner, M. Nouvelles expériences sur la nature de la mémoire chez *Coris julis* exécutées d'après la méthode de substitution. Paris C. R. Acad. sci. 154 1912 (1186-1187 1312-1314). 274

- Oxner, M. Expériences sur la mémoire et sa durée chez les Poissons. Paris C. R. Acad. sci. **154** 1912 (659-662). 275
- Oxner, M. Résultats des expériences sur la mémoire, sa durée et sa nature chez les Poissons marins. *Coris julis* Gthr. et *Serranus scriba* Car. Bul. Inst. océan. Monaco **1912** no. 232 (30). 276
- Paolucci. Risultati delle indagini sul pesce novello dell'Adriatico. Ann. Agric. (1910) Atti Comm. consult. per la pesca (Tess. Dic. 1909) Roma **1911** (241-251). 277
- Pappenheim, P. Die Fische der Deutschen Südpolar-Expedition 1901-1903. 1. Die Fische der Antarktis und Subantarktis. Deutsche Südpolar-Exped. 1901-1903, **13** Zool. **5** (163-182) 2 pls. 278
- Parker, G. H. Sound as a directing influence in the movements of fishes. Washington D.C. Dept. Comm. Lab. Bull. Bur. Fish. **30** 1912 (97-104). 279
- Parker, G. H. The olfactory reactions of the common killifish, *Fundulus heteroclitus* (Linn.). J. Exp. Zool. Philadelphia **10** 1911 (1-5). 280
- Parona, C. Intorno al programma di ricerche sul Tonno proposto al Comitato talassografico italiano. Considerazioni. Riv. mens. Pesca Pavia **7** 1912 (154-159). 281
- Patterson, A. H. Supplementary Fish-notes from Great Yarmouth. Zoologist London **1912** (29-32). 282
- Pellegrin, J. Poissons du Musée de Naples provenant des expéditions du "Vetta Pisani" et du "Dogali" et de la Mer Rouge. Napoli Annuario Museo zool. **3** 1912 No. 27 (1-11). 283
- Pellegrin, J. Sur la dentition des Diabes de Mer. Paris Bul. soc. philom. ser. 10 **4** 1912 No. 1-2 (1-8), 284
- Pellegrin, J. Les poissons d'eau douce d'Afrique et leur distribution géographique. Paris C. R. ass. franç. avanc. sci. **1911** 1912 (1-13). 285
- Pellegrin, J. Reptiles, Batraciens et Poissons du Maroc. Paris Bul. soc. zool. **37** 1912 (255-262). 286
- Pellegrin, J. Description d'un poisson nouveau de l'Orénoque appartenant au genre *Xenocara*. Paris Bul. soc. zool. **37** 1912 (271-272). 287
- Pellegrin, J. Sur une collection de Poissons des Nouvelles-Hébrides du Dr. Cailliot. Bul. Muséum Paris **1912** No. 4 (1-3). 288
- Pellegrin, J. Description d'un poisson nouveau de l'Afrique Australe appartenant au genre *Barbus*. Paris Bul. soc. zool. **37** 1912 (107-108). 289
- Pellegrin, J. Poissons de l'Équateur recueillis par M. le Dr. Rivet. Mission de l'Équateur **9** fasc. 2 (1-15) 1 pl. 290
- Pellegrin, J. Sur un poisson nouveau pour la Faune Française, le *Centrolophus britannicus* Günther. Paris Bul. soc. zool. **37** 1912 (20-23). 291
- Pellegrin, J. Sur quelques poissons intéressants du marché de Paris. Paris Bul. soc. zool. **37** 1912 (14-16). 292
- Pellegrin, J. Sur la présence d'un banc de *Ranzania truncata* à la Martinique. Paris Bul. soc. zool. **37** 1912 (228-230). 293
- Pellegrin, J. Poissons des côtes de l'Angola. Mission de M. Gruvel. Paris Bul. soc. zool. **37** 1912 (290-296). 293a
- Pellegrin, J. Sur la faune ichthyologique des côtes de l'Angola. Paris C. R. Acad. sci. **155** 1912 (1114-1116). 293b
- Petersen, C. G. Joh. Über Menge und Jahresproduktion der Benthospflanzen an den westeuropäischen Küsten. Intern. Rev. Hydrobiol. Leipzig **5** 1912 (47-52). 294
- Phelps, J. *vide* Reighard, J.
- Pictet, A. Histologie de la muqueuse buccale et intestinale des Poissons cyprinoïdes (*Leuciscus rutilus*, *Barbus fluviatilis*, *Cyprinus carpio*, *Carassius auratus* et *Tinca vulgaris*). Genève C.R. Soc. Phys. Nat. **26** 1909 (35-38). 295
- Pietschmann, V. Ueber *Neopercis macrophthalmia* n. sp. und *Heterognathodon doederleini*, Ishikawa, zwei Fische aus Formosa. Wien Ann. Nat.-Hist. Hofmus. **25** 1911 (431-435). 296
- Pietschmann, V. Eine neue *Mugil*-Art aus dem Schatt el Arab. Wien Anz. Ak. Wiss. **49** 1912 (268-270). 297
- Pogonowska, I. Przyczynek do znajomości budowy histologicznej serca, stożka i nabrzmięcia tętniczego u ryb, z szczególnem uwzględnieniem elementów elastycznych; z 1 tablicą. [Contribu-

- tion à la connaissance de la structure histologique du cœur, du cône et bulbe artériel chez les poissons avec l'étude approfondie des éléments élastiques.] *Lwów Księga Pamiątkowa ku uczczeniu Prof. J. Nusbauma (H. Altenberg) 1911 (133-151).* 298
- Police, G.** La pesca nel golfo di Napoli. Roma Boll. Uff. Min. Agric. Anno 9 Ser. C Vol. 1 fasc. 4 1910 (4-21). 299
- Police, G.** Elenco dei nomi dialettali dei principali pesci di mare e di acqua dolce del distretto peschereccio e del mercato di Napoli col corrispondente nome scientifico. Riv. mens. Pesca Pavia 7 1912 (81-88). 300
- Police, G.** Contributo allo studio della pesca con le sorgenti luminose. Riv. mens. Pesca Pavia 7 1912 (27-42 73-80). 301
- Polimanti, O.** Über die Asphyxie der Fische an der Luft und ihre postmortale Herz- und Muskeleerregbarkeit. (1. Abh.). Arch. Anat. Physiol. Leipzig Physiol. Abt. 1911 (1912) (287-338). 302
- Polimanti, O.** Das Kaudalherz der Muraeniden als Exponent der spinalen Erregbarkeit betrachtet. (Experimente an *Conger vulgaris* L.) Zs. Biol. München 59 1912 (173-231). 303
- Polimanti, O.** Contributo alla fisiologica del sistema nervoso centrale e del movimento dei pesci. II. Batoidei . . . III. Teleostei . . . Zool. Jahrb. Jena Abt. f. allg. Zool. 32 1912 (311-584) 4 Taf. 304
- Polimanti, O.** Sopra i movimenti che si determinano nei pesci per una anormale illuminazione degli occhi. Zs. allg. Physiol. Jena 13 1912 (348-366). 305
- Polimanti, O.** Einfluss der Augen und der Bodenbeschaffenheit auf die Farbe der Pleuronektiden. Biol. Centralbl. Leipzig 32 1912 (296-307). 306
- Popta, C. M. L.** Ichthyographische Übersicht von Lombock. Verh. Ges. D. Natf. Leipzig 83 (1911) ii 1 1912 (418-423). 307
- Popta, C. M. L.** La fonction de la vessie aérienne des poissons. Verh. intern. ZoolKongr. Jena 8 (1910) 1912 (575-577). 308
- Popta, C. L.** Die geographische Verbreitung der Süßwasserfische zwischen Asien und Australien. Elbert. Die Sunda-Expedition 2 1912 (315-326). 309
- Popta, C. M. L.** Fortsetzung der Beschreibung von neuen Fischarten der Sunda-Expedition. Leiden Notes Mus. Jentink 34 1912 (185-193). 310
- Priem, F.** Sur des otolithes de Poissons fossiles (des terrains tertiaires supérieurs de France. Paris Bul. soc. géol. sér. 4 11 1911 (39-46). 311
- Quijada, B.** Catálogo de la Colección de los Peces Chilenos i Etranjeros del Museo Nacional. Santiago Bol. Mus. Nac. 4 No. 1 1912 (69-109). 312
- Radcliffe, L.** Descriptions of fifteen new Fishes of the family Chilodipteridae from the Philippine Islands and contiguous waters. Washington D.C. Smithsonian Inst. Nat. Mus. Proc. 41 1912 (431-446) pls. xxxiv-xxxviii. 313
- Radcliffe, L.** New Pediculate Fishes from the Philippine Islands and contiguous waters. Washington D.C. Smithsonian Inst. Nat. Mus. Proc. 42 1912 (199-214) pls. xvi-xxvii. 314
- Radcliffe, L.** Description of a new family, two new genera and twenty-nine new species of Anacanthine Fishes from the Philippine Islands and contiguous waters. Washington D.C. Smithsonian Inst. Nat. Mus. Proc. 43 1912 (105-140) pls. xxii-xxxii. 315
- Radcliffe, L.** *vide* Kendall, W. C.
- Radcliffe, L.** *vide* Smith, H. M.
- Raveret-Wattel.** Le Black-bass et son élevage. Paris Bul. soc. nat. acclim. 58 1911 (103-110 138-147). 316
- Razzauti, A.** Sopra la minuta innervazione degli organi a fossetta e dei bottoni terminali cutanei dei Petromizonti. Monitore zool. ital. Firenze 23 1912 (250-254). 317
- Redeke, H. C.** Over vischrassen. [Ueber Fischrassen.] Med. Vissch. Helder 19 1912 (64-69 84-86 100-105 117-122 140-143). 318
- Redeke, H. C.** Op de grens. [Auf der Grenze.] Med. Vissch. Helder 19 1912 (183-187 201-207). 319
- Redeke, H. C.** Ueber den gegenwärtigen Stand unserer Kenntniss von den Rassen der wichtigsten Nutz-

- fische. I. Allgemeiner Teil. Copenhagen Rapp. et procès-verb. explor. mer. 14 1912 (35). 320
- Redeke, H. C. Bijdragen tot de fauna der zuidelijke Noordzee. IX. Visschen verzameld op de tochten met de „Wodan“ 1902-1911. [Beiträge zur Fauna der südlichen Nordsee. IX. Fische auf den Exkursionen mit dem „Wodan“ gesammelt 1902-1911.] Helder Jaarb. Onderz. Zee 1911 (63-85). 321
- Regan, C. T. The origin of the chimacroid fishes. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (836-837). 322
- Regan, C. T. The Twaite Shad in Killarney Lakes. Irish Nat. Dublin 21 1912 (63). 323
- Regan, C. T. New fishes from Aldabra and Assumption, collected by Mr. J. C. F. Fryer. London Trans. Linn. Soc. 15 1912 (301-302). 324
- Regan, C. T. Descriptions of new fishes of the family Loricariidae in the British Museum Collection. London Proc. Zool. Soc. 1912 1912 (666-670) 3 pls. 325
- Regan, C. T. The osteology of the Teleostean Fishes of the order Opisthomi. Ann. Mag. Nat. Hist. London ser. 8 9 1912 (217-219). 326
- Regan, C. T. The classification of the Teleostean Fishes of the order Pediculati. Ann. Mag. Nat. Hist. London ser. 8 9 1912 (277-289). 327
- Regan, C. T. The anatomy and classification of the Symbranchoid Eels. Ann. Mag. Nat. Hist. London ser. 8 9 1912 (387-390) pl. ix. 328
- Regan, C. T. A synopsis of the Myxinoids of the genus *Heptatretus* or *Bdellostoma*. Ann. Mag. Nat. Hist. London ser. 8 9 1912 (534-536). 329
- Regan, C. T. Descriptions of new Cichlid Fishes from South America in the British Museum. Ann. Mag. Nat. Hist. London ser. 8 9 1912 (505-507). 330
- Regan, C. T. Description of a new Characid Fish from the Amazon. Ann. Mag. Nat. Hist. London ser. 8 9 1912 (682-683). 331
- Regan, C. T. A revision of the South American Siluroid Fishes of the genus *Corydoras*, with a list of the specimens in the British Museum (Natural History). Ann. Mag. Nat. Hist. London ser. 8 10 1912 (209-220). 332
- Regan, C. T. The classification of the Blennioid Fishes. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (265-280). 333
- Regan, C. T. Description of two new Eels from West Africa, belonging to a new genus and family. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (323-324). 334
- Regan, C. T. The anatomy and classification of the Teleostean Fishes of the order Lyomeri. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (347-349). 335
- Regan, C. T. The osteology and classification of the Teleostean Fishes of the order Apodes. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (377-387). 336
- Regan, C. T. A revision of the South American Characid Fishes of the genera *Chalceus*, *Pyrrhulina*, *Copeina*, and *Pogonocharax*. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (387-395). 337
- Regan, C. T. A revision of the Poeciliid Fishes of the genera *Rivulus*, *Pterolebias* and *Cynolebias*. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (494-508). 338
- Regan, C. T. The anatomy and classification of the Teleostean Fishes of the order Discocephali. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (634-637). 339
- Regan, C. T. The Caristiidae, a family of Berycomorphous Fishes. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (637-638). 340
- Regan, C. T. Sexual differences in the Poeciliid Fishes of the genus *Cynolebias*. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (641-642). 341
- Regan, C. T. Philippine Sharks. Science New York N.Y. 36 1912 (81). 342
- Regan, C. T. Discussion on Wallace's Line. London Rep. Brit. Ass. 1911 1912 (433-435). 343
- Reighard, J. An experimental study of color discrimination, association, and memory in the gray snapper

- (*Lutianus griseus* Linn.) and of warning coloration in coral reef fishes. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (154-155). 344
- Reighard, J. and Mast, S. O. Studies on ganoid fishes. 2. The development of the hypophysis of *Amia*. J. Morph. Philadelphia 19 1908 (497-509) pl. 345
- Reighard, J. and Phelps, J. The development of the adhesive organ and head mesoblast of *Amia*. J. Morph. Philadelphia 19 1908 (469-496) pl. 346
- Reisowa, K. O kształtowaniu się zarodka u ryb kostnoszkieletowych; z 1 tablicą. [Sur la formation de l'embryon chez les téléostiens; avec 1 planche.] Lwów Księga Pamiątkowa ku uczczeniu Prof. J. Nusbauma (H. Altenberg) 1911 (249-265). 347
- Rendall, P. Flight of the flying-fish. Zoologist London 1912 1912 (39). 348
- Ringer, W. E. *vide* Herwerden, M. A. van.
- Rosén, N. Contributions to the fauna of the Bahamas. 1-3. Lund Univ. Årsskr. N.F. 7 Afd. 2 No. 5 [= Fysiogr. Sällsk. Handl. N.F. 22 No. 5] 1911 (72) pl. maps. 349
- Rosén, N. Studies on the Plectognaths. 1. The blood-vascular system. Ark. Zool. Stockholm 7 No. 25 1912 (24) 2 pls. 350
- Rosén, N. Studies on the Plectognaths. 2. The air-sac, with notes on other parts of the intestines. Ark. Zool. Stockholm 7 No. 30 1912 (23) pls. 351
- Roule, L. Notice sur les Sélaciens conservés dans les collections du Musée Océanographique. Bul. Inst. Ocean. Monaco 1912 No. 243 (1-36). 352
- Roule, L. Sur la répartition des Poissons bathypélagiques dans l'Océan Atlantique et la Méditerranée. Paris C. R. Acad. sci. 154 1912 (1656-1658). 353
- Roule, L. La vie des Poissons dans les grandes profondeurs de la mer. Rev. sci. Paris 50 1912 (515-524). 354
- Roule, L. et Despax, R. Note préliminaire sur les poissons antarctiques. Expédition antarctique française du *Pourquoi-Pas?* dirigée par le Dr. J. B. Charcot (1908-1910). Bul. Muséum Paris 1911 (276-281). 355
- Roule, L. et Despax, R. Larves lisuriennes de poissons recueillis par le Thor. Bul. Muséum Paris 1911 (403). 356
- Van Rynberk, G. Piccoli contributi di Fisiologia comparata. 1. L'importanza della qualità fisica del suolo per i cambiamenti riflessi del colorito cutaneo nei Pleuronettidi. Archivio Farmac. Siena 10 1911 (187-190). 357
- Sachs, M. M. Die Weber'schen Knöchelchen bei den Cyprinoiden der schweizerischen Fauna. Revue Suisse Zool. Genève 20 1912 (725-759) 3 Taf. 358
- Sanzo, L. Uova di Sternoptychidae. Boll. bimestr. del R. Comitato talassogr. ital. Venezia 1912 (384-386). 359
- Sanzo, L. Embrione di *Carcharodon Rondeletii* M. Hle. (?) con particolare disposizione del sacco vitellino. Memorie del R. Comitato talassografico italiano Venezia Mem. 11 1912 (1-10) 2 tav. 360
- Sanzo, L. Larva di *Stomias boa* Risso. Memorie del R. Comitato talassografico italiano Venezia Mem. 10 1912 (1-6) 1 tav. 361
- Sanzo, L. Comparsa degli organi luminosi in una serie di larve di *Gonostoma denudatum* Raf. Memorie del R. Comitato talassografico italiano. Venezia Mem. 9 1912 (1-24) 1 tav. 362
- Sanzo, L. Studi sulla biologia del Tonno (*Orcynus thynnus*). Roma Boll. Uff. Min. Agric. Anno 9 Ser. iii 1 1910 (40-45). 363
- Sauvage, H. E. La partie antérieure du pneumogastrique chez le Poisson-Lune. Autun Bul. soc. sci. nat. 28 1910 (1-4). 364
- [Savčenko, A. S.] Савченко, А. О. О палеогеновых рыбах Мангышлака. [Ueber die palaeogenen Fische von Mangyschlak.] Kiev Prot. obšč. jest. 1911 1912 (47). 365
- [Savčenko, A. S.] Савченко, А. О. *Elasmobranchii* мангышлакского периода. [*Elasmobranchii* de l'éocène de Manguichlak.] Kiev Zap. Obšč. jest. 22 1912 (149-184 + rés. fr. 185-186) pl. xiii. 366

- Savouré, P. Note sur l'anatomie microscopique de l'encéphale de *Carassius auratus* Linné. Rennes Bul. soc. sci. méd. 20 1911 (232-235). 367
- Savouré, P. Généralités sur l'anatomie microscopique de l'encéphale des principales espèces de Cyprinidés des eaux françaises. Paris C. R. ass. anatomistes 14 1912 (181-190). 367a
- Savouré, P. Généralités sur l'anatomie microscopique de l'encéphale des principales espèces de Cyprinidés des eaux françaises. Paris C. R. ass. anatomistes 14 1912 (181-190). 367b
- Savouré, P. Note sur les lobes olfactifs de quelques Cyprinidés de la faune française. Rennes Bul. soc. sci. méd. 21 1912 (92-100). 367c
- Savouré, P. La face supérieure du bulbe rachidien chez les Cyprinidés des eaux françaises. Rennes Bul. soc. sci. méd. 21 1912 (20-29). 367d
- Savtchenko, A. vide Savčenko, A. S.
- Scheljuzhko, L. Ueber eine gelungene Kreuzung zwischen *Poecilia mexicana* Männchen und *Molliensia latipinna* Weibchen. [Mit Zusatz v. W. Wolterstorff.] Bl. Aquarienkunde Stuttgart 23 1912 (486). 368
- Schlesinger, G. Die Locomotion der tänioformen Fische. Zool. Jahrb. Jena Abt. f. Syst. 31 1911 (469-490) 1 Taf. 369
- Schmalhausen, J. Zur Morphologie der unpaaren Flossen. I. Die Entwicklung des Skelettes und der Muskulatur der unpaaren Flossen der Fische. Zs. wiss. Zool. Leipzig 100 1912 (509-587) 4 Taf. 370
- Schmidt, J. Five years' Danish investigations on the biology of the Eel. London Rep. Brit. Ass. 1911 1912 (409-412). 371
- Schmidt, J. Ueber die Fortpflanzung des Aals und seine Laichplätze, eine zusammenfassende Uebersicht. Fischerbote Hamburg 4 1912 (201-209). 372
- Schmidt, J. Contributions to the biology of some North Atlantic species of Eels. København Reprint of Nath. Medd. 64 1912 (39-51) 1 pl. 373
- Schmidt, J. Danish researches in the Atlantic and Mediterranean on the life-history of the Freshwater-Eel (*Anguilla vulgaris* Turt.). With notes on other species. Intern. Rev. Hydrobiol. Leipzig 5 1912 (317-342) 6 Taf. 374
- Schmidt, J. The Reproduction and Spawning-Places of the Freshwater Eel (*Anguilla vulgaris*). Nature London 89 1912 (633-636). 375
- Schmidt, J. Danske Undersøgelser i Atlanterhavet og Middelhavet over Ferskvandsaalens Biologi. [Danish investigations in the Atlantic and the Mediterranean of the biology of the eel.] København Skrifter Havunders. Nr. 8 1912 (1-33) 3 pls. 376
- [Schneider, G.] Шнейдеръ, Гвидо. Предварительный отчетъ объ изслѣдованіи озера Вирпервъ лѣтомъ 1911-го года. [Vorläufiger Bericht über die Untersuchung des Wirzjärw im Sommer 1911.] Jurjev Sitzb. Naturf. Ges. 20 3-4 1911 (25-36). 377
- Schubert, R. J. Die Fischfauna der Schliermergel von Bingia Fargeri (bei Fangario) in Sardinien. Wien Verh. Geol. Reichsanst. 1912 (160-165). 378
- Schütz, R. Eine Kreuzung zwischen einem *Heros facetus*-Weibchen und einem *Geophagus gymnocephalus*-Männchen. Wochenschr. Aquarienkunde Braunschweig 9 1912 (323-325). 379
- Scott, W. The regenerated scales of *Fundulus heteroclitus* Linné, with a preliminary note on their formation. Indianapolis Ind. Proc. Acad. Sci. 1911 1912 (439-444) pls. 380
- Seale, A. Some poisonous Philippine Fishes. Philippine J. Sci. Manila D. 7 1912 (289-291). 381
- Searle, A. Description of a new *Acanthocybium* from the Philippine Islands. Philippine J. Sci. Manila D. 7 1912 (283-285) 382
- Sěčerov, S. Weitere Farbwechsel- und Hauttransplantationsversuche an der Bartgrundel (*Nemachilus barbatula* L.). Arch. EntwMech. Leipzig 33 1912 (716-722). 383
- Sella, M. Alcuni appunti sulla pesca del Pesce nolla Libia. Memorie del R. Comitato talassografico italiano Venezia Mem. 18 1912 (1-29) 1 tav. 384
- Sella, M. Sullo sviluppo dello scheletro assiale dei Murenoidi. Memorie del R. Comitato talassografico e 4-2

- italiano Venezia Mem. 3 1912 (1-92)
3 tav. 385
- Sella, M. Contributo alla conoscenza della riproduzione e dello sviluppo del Pesce spada, *Xiphias gladius* L. Memorie del R. Comitato talassografico italiano Venezia Mem. 2 1911 (1-16)
1 tav. 388
- Sewell, R. B. S. Notes on the deep-sea fish obtained by the R.I.M.S.S. "Investigator" during the survey season 1910-11. Rec. Ind. Mus. Calcutta 7 No. 1 1912 (1-14). 387
- Sewell, R. B. S. and Chaudhuri, B. L. Indian Fish of proved utility as Mosquito-destroyers. Calcutta 1912 (1-24). 388
- Sheldon, R. E. The sense of smell in Selachians. J. Exp. Zool. Philadelphia 10 1911 (51-62). 390
- Shelford, V. E. and Allee, W. C. An index of fish environments. Science New York (N. Ser.) 36 1912 (76-77). 391
- Shepherd, C. E. The pharyngeal teeth of fishes. Zoologist London 1912 (201-209 450-459). 392
- Schufeldt, R. W. Professor Robert Collett on *Pterycombus brama* Fries. [Translation from the Norwegian.] Washington D.C. Proc. Biol. Soc. 25 1912 (39-50) pls. ii-iii. 393
- Sjöberg, H. R. A. Tvåkönad strömming. [Zwitteriges Exemplar von *Clupea harengus* var. *membras*.] Fisk. Tidskr. Finl. Helsingfors 20 1911 (200). 394
- [Smirnov, N.] Смирновъ, Н. Къ вопросу о дѣленіи рыбъ на биологическія группы. [Ein Beitrag zur Einteilung der Fische in biologische Gruppen.] Věstn. rybopromyšl. St. Peterburg 27 1912 (173-178). 395
- Smith, E. *Fundulus* and fresh water. Science New York 35 1912 (144-145). 396
- Smith, H. M. Note on the occurrence of the whale shark, *Rhinodon typicus*, in the Philippine Islands. Washington D.C. Proc. Biol. Soc. 24 1911 (97). 397
- Smith, H. M. Description of a new Notidanoid Shark from the Philippine Islands, representing a new family. Washington D.C. Smithsonian Inst. Nation. Mus. Proc. 42 1912 (489-491) 1 pl. 398
- Smith, H. M. The Chimaeroid Fishes of the Philippine Islands, with description of a new species. Washington D.C. Smithsonian Inst. Nation. Mus. Proc. 42 1912 (231-232) 1 pl. 399
- Smith, H. M. The Squaloid Sharks of the Philippine Archipelago, with descriptions of new genera and species. Washington D.C. Smithsonian Inst. Nat. Mus. Proc. 42 1912 (677-685) 5 pls. 400
- Smith, H. M. and Radcliffe, L. Description of a new family of Pediculate Fishes from Celebes. Washington D.C. Smithsonian Inst. Nation. Mus. Proc. 42 1912 (579-582) 1 pl. 401
- Snyder, J. O. Japanese shore fishes collected by the United States Bureau of Fisheries steamer "Albatross" Expedition of 1906. Washington D.C. Smithsonian Inst. Nation. Mus. Proc. 44 1912 (399-450) 11 pls. 402
- Snyder, J. O. The fishes of Okinawa, one of the Riu Kiu Islands. Washington D.C. Smithsonian Inst. Nation. Mus. Proc. 42 1912 (487-519) 9 pls. 403
- [Sokolov, A. Ja.] Соколовъ, А. Я. Къ исторіи развитія Thymus у стерлядей. [Zur Entwicklungsgeschichte der Thymusdrüse bei den Sterletten.] Kazanî Zap Univ. 79 1912 4 (1-33). 404
- [Soldatov, V. K.] Солдатовъ, В. К. Изслѣдованіе біологіи лососевыхъ Амура. Часть первая. (Рыбные промыслы Дальняго Востока. VII.) [Untersuchungen über die Biologie der Salmoniden des Amur. Erster Teil. (In: Die Fischereien des Fernen Ostens. vii.)] St. Peterburg (Ausg. des Depart. des Landwirtschaft) 1912 (1 + 1-223) 14 Taf. 405
- Staff, F. Mechanika ruchu ryb. [Les éléments mécaniques du mouvement des poissons.] Wszechniactwo Warszawa 30 1911 (641-647 659-663.) 406
- Stefano, G. de. La Ittiofauna del mare pliocenico Italiano. Riv. ital. Pal. 18 1912 (74-82). 407
- Stefano, G. de. Studio sui pesci fossili della pietra di Bismantova. Roma Boll. Soc. Geol. 30 1912 (351-422) pls. xii-xiv. 408

- Steindachner, F.** Ueber einige neue Characinenarten aus dem Orinoco und dem oberen Surinam. Wien Anz. Ak. Wiss. 1910 (265-270). 409
- Steindachner, F.** Zur Fischfauna des Dscha, eines sekundären Nebenflusses des Congo im Bezirke Molundu des südlichen Kamerun. Wien Anz. Ak. Wiss. 1912 (443-449). 410
- Sterzi, G.** Il sistema nervoso centrale dei Vertebrati. Vol. II, Pesci; Libro I, Selaci; Parte II, sviluppo. Padova-Pisa (Draghi e Spoerri edit.) 1912 (i-vii + 987-1361). 411
- Struck, H.** Die Wirkung von Wind, Wasserbewegung und Durchlichtung auf die Fische und die Fischerei. Zs. Fischerei Berlin 15 1911 [1908] (8-16). 412
- Studnička, F. K.** Die Otoconien, Otolithen und Cupulae terminales im Gehörorgan von *Ammocoetes* und von *Petromyzon*. Nebst Bemerkungen über das „Otosoma“ des Gehörorgans der Wirbeltiere überhaupt. Anat. Anz. Jena 42 1912 (529-562). 413
- Studnička, F. K.** Ueber die Entwicklung und die Bedeutung der Seitenaugen von *Ammocoetes*. Anat. Anz. Jena 41 1912 (561-578). 414
- Studnička, F. K.** Über Regenerationserscheinungen im caudalen Ende des Körpers von *Petromyzon fluviatilis*. Arch. EntwMech. Leipzig 34 1912 (187-238) 1 Taf. 415
- Sumner, F. B.** The causes of the death of marine fishes in fresh water and vice versa. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (284-288). 416
- Sumner, F. B.** The adjustment of flatfishes to various backgrounds: a study of adaptive color change. J. Exp. Zool. Philadelphia 10 1911 (409-505) pls. i-xiii. 417
- Sumner, F. B.** *Fundulus* and fresh water. Science New York 34 1911 (928-931). 418
- Supino, F.** Il cranio dei Pesci. Roma (Lux edit.) 1907 (XI + 100). 419
- Supino, F.** Cenni morfologici e biologici sopra alcuni Percoidi (*Perca*; *Persico-trota*; *Persico-sole*; *Sandra*). Milano Atti Soc. ital. sc. nat. 51 fasc. 2 1912 (191-206). 420
- [**Suvorov, E.**] Суворовъ, Е. Работы Балтійской Экспедиции 1909 г. Предварительный отчетъ по ихтиологii. [Arbeiten der Ostsee-Expedition. Vorläufiger Bericht über ichthyologische Ergebnisse.] Arb. russ. Ostsee-Exped. St. Peterburg [Depart. d. Landwirtsch.] 1 1910 (88-119). 421
- Tanaka, S.** Figures and Descriptions of the Fishes of Japan. Tokyo 5-10 1912 (71-186). 422
- [**Tereščenko, K. K.**] Терещенко, К. К. Материалы по росту и скату рыбъ еѣ молоди въ дельтѣ о. Волги и предустьевомъ пространствѣ въ 1912 г. [Beiträge zur Kenntnis des Wachstums und der Rückwanderung der Jungfische im Wolgadelta und dem vor der Mündung liegenden Meeresteile im Jahre 1912.] Astrachanī Arb. Ichth. labor. 3 1 1912 (28-52 + deutsch. Rés. 53-56). 423
- Thienemann, A.** Die Silberfelchen des Laacher Sees. Die Ausbildung einer neuen Corregonenform in einem Zeitraume von 40 Jahren. Zool. Jahrb. Jena Abt. f. Syst. 32 1912 (173-220) 4 Taf. 424
- Thienemann, A.** Das Vorkommen der Flunder (*Pleuronectes flesus* L.) im Main. Arch. Hydrobiol. Stuttgart 7 1912 (675-676). 425
- Thompson, d'A. W.** 3rd report on the distribution, etc., of the cod, haddock and other round fishes. Copenhagen Rapp. et procès-verb. explor. mer. 14 1912 (52). 426
- Thompson, W. F.** vide Jordan, D. S.
- Thomson, J. S.** The Dorsal Vibratile Fin of the Rockling (*Motella*). London Rep. Brit. Ass. 1911 1912 (413). 427
- [**Tichij, M.**] Тихій, М. Бѣлужій промыселъ у юго-западнаго берега Крыма въ сезонъ 1910-1911 гг. Часть вторая. Къ вопросу о питанii бѣлуги. [Der Hausenfang am südwestlichen Ufer der Krim während der Saison 1910-1911. 2-ter Teil. Zur Frage über die Nahrung des Hausens.] Věstn. ryboprom. St. Peterburg 27 1912 (59-80). 428
- Tona, A.** Osservazioni intorno agli effetti fisiologici sul Pesce del cangiamento nella densità dell' acqua. Neptunia Venezia 23 1908 (51-52). 429

- De Toni, G. B. La nutrizione della Sardina. *Neptunia Venezia* 23 1908 (24-25). 430
- Traquair, R. H. The Ganoid Fishes of the British carboniferous formations. *Palaeoniscidae*. London Monogr. Palaeont. Soc. 1912 Pt. 1 No. 6 (159-180) pls. 431
- Tur, J. Sur le développement des œufs de *Scyllium* (*S. canicula* Cuv.) exposés à l'action du radium. Paris C. R. ass. anatomistes 13 1911 (26-31). 432
- Vaillant, L. Sur la disposition de l'appareil branchial chez un Céphaloptère (*Mobula olfersii* Müller). *Bul. Muséum Paris* 1912 (287-291). 433
- Vis, C. W. de. Cestraciontidae. *Brisbane Ann. Queensland Mus.* 10 1911 (18). 434
- Vis, C. W. de. A second species of *Enoplosus*. *Brisbane Ann. Queensland Mus.* 10 1911 (29). 435
- Wagner, G. On the present status of *Lepisosteus sinensis* Bleeker. *Zool. Anz. Leipzig* 39 1912 (738-741). 436
- Waite, E. R. Notes on New Zealand Fishes: No. 2. *Wellington Trans. N. Zeal. Inst.* 44 1912 (194-202) pls. x-xii (1912). 437
- Waite, E. R. Additions and corrections to the basic list of the Fishes of New Zealand. *Rec. Canterbury Mus.* 1 1912 (313-322). 438
- Waite, E. R. Additions to the fish fauna of the Kermadec Islands. *Wellington Proc. N. Zeal. Inst.* 1 1911 (28). 439
- Weber, M. Versuch einer Revision der indopacifischen Anguillidae. *Zool. Jahrb. Jena Suppl.* 15 Bd 1 1912 (563-596). 440
- Weber, M. and Beaufort, L. F. de. Contributions to the knowledge of Indo-Australian Fishes. *Amsterdam Verh. K. Akad. Wet. 2^o Sect.* 17 No. 3 (1-21). 441
- Weber, M. and Beaufort, L. F. de. "Fische" in Maass, "Durch Zentral. Sumatra" 2 (1-20). 442
- Weber, M. and Beaufort, L. F. de. On the freshwater Fishes of Timor and Babber. *Amsterdam Proc. Sci. K. Akad. Wet.* 15 1912 (235-240). 443
- Weed, A. C. *vide* Bean, B. A.
- Welker, W. H. *vide* Hussakof, L.
- Wenig, J. Vývoj blánitého labyrinthu ryb kostnatých. [Ueber die Entwicklung des häutigen Labyrinthes bei Knochenfischen.] *Prag Věstn. Král. České Spol. Náuk* 1911 No. 6 (40) 1 Taf. 444
- Wilder, B. G. The name and brain of the gar. *Science New York* 35 1912 (691-693). 445
- Winter, F. W. *vide* Hein, W.
- Wintrebert, P. Le déterminisme de l'éclosion chez le Cyprin doré (*Carassius auratus* L.). *Paris C. R. soc. biol.* 73 1912 (70-73). 446
- Wintrebert, P. Le mécanisme de l'éclosion chez la truite arc-en-ciel. *Paris C. R. soc. biol.* 72 1912 (724-727). 447
- Woodland, W. N. F. On the systematic position of the Marsipobranchii. *London Rep. Brit. Ass.* 1911 1912 (422-424). 448
- Woodland, W. N. F. On the physiology of gas production in connection with the gas bladders of Teleostean Fish. *London Rep. Brit. Ass.* 1911 1912 (546-548). 449
- Woodward, A. S. On the snout of a Pachycormid Fish (*Protosphyraena stebbingi*) from the lower chalk of S. Ferriby, Lincolnshire. *Naturalist London* 1912 (329-330) pl. xix. 450
- Woodward, A. S. The Fossil Fishes of the English Chalk. Pt. VII (225-264) pls. *London Monogr. Palaeont. Soc.* 451
- Woodward, A. S. Notes on some Fish-remains from the Lower Trias of Spitzbergen. *Bull. Geol. Inst. Upsala* 11 1912 (291-297) pl. xiv. 452
- Worthington, J. *vide* Ayers, H.
- [Zavadskij, A. M.] Завадскій, А. М. Морфогенезис рта и глотки стерляди. [Die Morphogenese des Mundes und des Schlundes des Sterlets.] *Kazanĭ Prot. Obšč. jist.* 43 1912 (34-36). 453
- Zozhdestvensky, E. *vide* Derjugin, K.
- Zugmayer, E. On a new genus of Cyprinoid Fishes from High Asia. *Ann. Mag. Nat. Hist. London ser.* 8 9 1912 (682). 454

Zugmayer, E. Eight new Fishes from Baluchistan. *Ann. Mag. Nat. Hist. London ser. 8* 10 1912 (595-599). 455

II.—SUBJECT INDEX.

GENERAL WORKS, ECONOMICS, ETC. 5403

- Bulletin statistique des pêches maritimes des pays du nord de l'Europe pour l'année 1909; 83.
- Scottish marine fisheries, 1898-1912; McIntosh, 229.
- Report of U.S.A. Commissioner of fisheries for 1908 and 1909; Bowers, 50, 51.
- Biological statistics of the Danish Salt-water fishery for the year 1909. (Danish); Johansen & Neergaard-Møller, 194.
- 3rd report on the distribution, etc., of the cod, haddock and other round fishes; Thompson, 426.
- Pesca d'acqua dolce e marina; Barbieri, 16.
- Künstliche Zucht von Süßwasserfischen (Norweg.); Aagard, 1.
- Über die Bestimmung des Fischbestandes im Meer; Hensen, 173.
- Die Ergebnisse der neueren exakten Vererbungslehre in ihrer Bedeutung für die Fischzucht; Hofer, 182.
- Gesamtstoffwechsel der Fische; Cronheim, 85.
- Ichthyologische Arbeiten des Ostsee expedition i. J. 1908 (Russ.); Suvorov, 421.
- Leitfaden der Biologie der Fische; Haempel, 163.
- Die Wirkung von Wind, Wasserbewegung und Durchlichtung auf die Fische und die Fischerei; Struck, 412.
- Wanderung und Wachstum der Fisch im Wolgadelta (Russ + deutsch. R.); Tereščenko, 423.
- Wachstum unserer Süßwasserfische (Norweg.); Dahl, 89.
- Rassen der wichtigsten Nutzfische; Redeke, 318, 320.
- Altersbestimmung und Wachstum bei den Fischen; Hoek, 179.
- Growth determination in fishes; Lee, 216.
- Künstliche Befruchtung mit im Alkohol aufbewahrtun Sperma (Russ.); Lebedincev, 215.
- Benthos pflanzen als Fischnahrung; Petersen, 294.
- Fische der südlichen Nordsee; Redeke, 321.
- Paris Market, rare fishes; Pellegrin, 292.
- Indagini sul pesce novello nel Tirreno; Lo Bianco, 223; nell' Adriatico; Paolucci, 277.
- Pesca del Pesce nella Libia; Levi-Morenos, 221; Sella, 384.
- Pesca del *Xiphias gladius* nel canale di Messina; Mazzullo, 242.
- Pesci e pesca d'acqua dolce nelle province di Venezia e Treviso; Ninni, 262.
- Pesca nel golfo di Napoli; Police, 299.
- Pesca con le sorgenti luminose; Police, 301.
- Erforschung des Wirzjärw in Bezug auf seim Fischerei (Russ.); Schneider, 377.
- The fisheries of Alaska in 1909; Marsh & Cobb, 233.
- Poissons comestibles de l'Argentine; Iches, 189.
- Indian Fish as mosquito-destroyers; Sewell & Chaudhuri, 389.
- Poisonous Philippine Fishes; Seale, 381.
- Sprat in Norse waters; Lund, 226.
- Biology of the Plaice; Johansen, 191, 192.
- Bericht ueber die Eier, Larven und aelteren Stadien der Pleuronectiden; Johansen, 193.
- Report on later stages of Pleuronectidae; Mastermån, 284.
- Preliminary report on the mackerel; Ehrenbaum, 106.

La ponte du hareng et du maquereau; Cligny, 70.

Biology of the Eel (*Anguilla vulgaris*); Schmidt, 371-376.

Anguillicultura; Bellini, 25, 26.

The char (*Salmo alpinus*) of Torneträsk; Ekman, 110.

Bestimmung des Alters von *Coregonus albula* (Russ.); Heide, 168.

Herring investigations; Hjort & Lea, 178.

American catfishes: habits, culture, and commercial importance; Kendall, 206.

Orcynus thynnus, biologia; Parona, 281; Sanzo, 363.

Biologie der Salmoniden des Amur (Russ.); Soldatov, 405.

Influence de différents régimes alimentaires sur la croissance des Truites arc-en-ciel; Magnan, 230.

Nahrungsaufnahme der Karpfen; Cronheim, 86.

Nutrizione della Sardina; De Toni, 430.

Ernährung des Hausens; Tichij, 428.

L'acclimatation et le transport de poissons exotiques; Dagry, 88.

L'acclimatation du Saumon dans le bassin de la Méditerranée; Fage, 117.

Le peuplement des cours d'eau à Salmonides; Léger, 217.

Introduzione di Pesci stranieri nelle nostre acque dolci; Orsenigo, 269.

Le Black-bass et son élevage; Raveret-Wattel, 316.

Deutsche und Französische Namen zu IJmuiden angeführter Seefische; Hoek, 180.

Nomi dialettali dei pesci di Napoli; Police, 300.

Ornamentation in fresh-water fishes; Fowler, 129.

STRUCTURE. 5407

General Anatomy.

Perca fluviatilis, *Grystes salmoides*, *Pomotis aureus*, *Lucioperca sandra*: cenni morfologici e biologici; Supino, 420.

Studio sull' *Eretmophorus Kleinenbergi*; Mazzarelli, 241.

Dinichthys terrelli anatomy; Dean, 98.

Soft anatomy of Cretaceous fishes; Moodie, 247.

Structure of paired fins; Belling, 24; Derjugin, 94; Derjugin & Zozhdestvensky, 95.

Tegumentary System.

Struttura istologica dell' integumento dei Selachi; Kwietniewski, 213.

Über chromatische Organe in der Haut von Knochenfischen; Ballowitz, 13.

Scales of Salmon; Esdaile, 115; of Osteoglossidae; Cockerell, 80.

Cyclothone signata, organes lumineux; Nusbaum, 264.

Nervous System.

Cyprinidés des eaux françaises, l'anatomie microscopique de l'encéphale, 367a; les lobes olfactifs, 367b, c; le bulbe rachidien, 367d; Savouré.

L'anatomie microscopique de l'encéphale de *Carassius auratus*; Savouré, 367.

Brain of *Lepidosteus*; Wilder, 445.

Brain of *Bdellostoma fasciculatum* system; Ayers & Worthington, 11.

Morphology of forebrain; Johnston, 197.

Telencephalon of ganoids and teleosts, 198; of selachians, 199; Johnston.

Gehirn, Rückenmark und Augen der Varietäten des Goldfisches (*Carassius auratus*); Hirsch, 177.

Mittelhirn und Zwischenhirn der Knochenfische; Franz, 136.

Kleinhirn und die statische Funktion bei den planktonischen Fischlarven; Franz, 134.

Ependym im Fischgehirn; Franz, 132.

Monomorphe Chiasma opticum der Pleuronectiden; Mayhoff, 237.

Subpiale Schicht des Rückenmarks; Nemiloff, 257.

Eintritt der motorischen Nervenwurzeln bei *Amia calva*; **Fortuyn, 125.**

Motor nuclei in *Chimaera monstrosa*; **Kappers, 204.**

Olfactory nerve and nervus terminalis of *Ameiurus*; **Brookover & Jackson, 56.**

Nervi spino-occipitali di *Amia calva*; **Ganfini, 142.**

Le pneumogastrique chez le Poisson-Lune; **Sauvage, 364.**

Innervation des vorderen paarigen Extremitäten von *Trigla*; **Belling, 24.**

Minuta innervazione degli organi a fossetta e dei bottoni terminali cutanei dei Petromizonti; **Razzauti, 317.**

Peripherische Endigungen des Nervus acusticus beim *Leucopsarion petersi*; **Kato, 205.**

Terminazioni nervose in apparecchio branchiale di *Ammocoetes*; **Fusari, 141.**

Sense Organs.

Die Otoconien, Otolithen und Cupulae terminales im Gehörorgan von *Ammocoetes* und von *Petromyzon*; **Studnička, 413.**

Entwicklung und Bedeutung der Seitenaugen von *Ammocoetes*; **Studnička, 414.**

Seitenorgane von Fischen und Amphibien; **Heilig, 169.**

Lateral line system of *Polyodon*; **Nachtrieb, 255.**

Alimentary System.

Pharyngeal teeth; **Shepherd, 392.**

Morphology of the air-sac in Plectognaths; **Rosén, 351.**

Thyroid gland of Elasmobranchs; **Ferguson, 123.**

Säure des Magensaftes von *Scyllium stellare*; **Herwerden & Ringer, 174.**

Histologie de la muqueuse buccale et intestinale des Poissons cyprinoïdes; **Pictet, 295.**

Cellules géantes dans l'épithélium intestinal des Téléostéens à jeun; **Drzewina, 98.**

L'anatomie de la vessie natatoire de *Macropodus viridi-auratus*; **Marcinkiewiczówna, 232.**

Myology.

Die ventrale Rumpfmuskulatur der Fische; **Maurer, 235.**

Anatomie der Kiefer- und Kiemenbogenmuskeln der Teleostei; **Dietz, 97.**

Muscles of pectoral fins of *Trigla*; **Belling, 24**: of unpaired fins; **Schmalhausen, 370.**

Osteology.

Osteology and classification of Opisthomi, 326; Pediculati, 327; Symbranchii, 328; Blennioidea, 333; Lyomeri, 335; Apodes, 336; Discocephali, 339; **Regan.**

Skeleton of *Pterycombus brama*; **Shufeldt, 393.**

Bau und Entwicklung der paarigen Extremitäten der Knochenfische; **Derjugin, 94**: **Derjugin & Zozhdestvsky, 95.**

Ossa basali del cranio dei Pesci in rapporto con la teoria vertebrale; **Bertini, 35.**

Cranio dei Pesci; **Supino, 419.**

Skull of *Pristis* and *Pristiophorus*; **Hoffmann, 183.**

Die Weber'schen Knöchelchen bei den Cyprinoiden der schweizerischen Fauna; **Sachs, 358.**

Hyobranchialskelet der Haie; **Gibian, 150.**

Skeleton of pectoral fins of *Trigla*; **Belling, 24.**

Morphologie der unpaaren Flossen; **Schmalhausen, 370.**

Vascular and Respiratory Systems.

Circulatory system of *Heptatrema*; **Kirk, 209.**

Gefäß-System von *Petromyzon*; **Mozejko, 250, 251.**

Blood-vascular system of the Plectognaths; **Rosén, 350.**

Branchial, pseudobranchial and carotid Arteries; **Allis, 4-7.**

Branchial arteries of *Myxine*; **Cole, 81.**

Les sinuses dits "de Dohrn" chez les pétromyzones; **Mozejko, 249, 252.**

Lymphatics in tail region of *Scorpaenichthys marmoratus*; Allen, 3.

Kaudalherz der Muraeniden; Polimanti, 303.

Structure histologique du coeur, du cône et bulbe artérielle; Pogonowska, 298.

Des globules blancs éosinophiles dans le sang des Poissons d'eau douce; Lanine, 214.

Les leucocytes granuleux du sang des poissons; Drzewina, 98a.

Grässe der Erythrocyten von See-fischen (Russ.); Jakimov & Kohl-Jakimova, 190.

Les néphrophagocytes du coeur des Poissons osseux; Guénot, 87.

L'appareil branchial chez un Céphaloptère (*Mobula olfersii* Müller); Vaillant, 433.

Excretory and Reproductive Organs.

Les reins du *Crystallogobius nilssonii*, 161; des *Cottus gobio* et *bubalis*, 161a, 161b; Guitel.

Sistema interrenale e cromaffine dei Salmonidi, 146, 149; dei Lofobranchii, 147; dei Ciprinidi, 148; Giacomini.

Organi riproduttori di Anguille argentine allevate in acqua dolce; Grassi, 156; Mazza, 239.

PHYSIOLOGY. 5411

Effetti fisiologici sul Pesce della cambiante densità dell'acqua; Tona, 429.

Les éléments mécaniques du mouvement des poissons; Staff, 406.

Sound, influence on movement of fishes; Parker, 279.

Sopra i movimenti che si determinano nei pesci per una anormale illuminazione degli occhi; Polimanti, 305.

Experiments on memory in fishes; Oxner, 272-276.

Recherches sur la formation des habitudes, le sens des couleurs et la mémoire chez les Poissons; Minkiewicz, 245a.

Colour changes; Frisch, 139; Fiore 124; Secerov, 383.

Colour vision; Frisch, 137; Hess 175; Reighard, 344.

Sense of smell in Selachians; Sheldon 390.

Olfactory reactions of *Fundulus heteroclitus*; Parker, 280.

Fisiologica del sistema nervoso centrale e del movimento dei pesci; Polimanti, 304.

Physiologie des N. terminalis bei den Selachiern; Kschischkowsky, 211.

Das Parietalorgan der Fische; Frisch, 140.

Bedeutung des Interrenalorganes der Selachier; Biedl, 36.

Physiology of the air-sac in Plectognaths; Rosén, 351.

La fonction de la vessie aérienne; Popta, 308.

Gas production in gas bladder; Woodland, 449.

Synchronie des Atem- und Herzrhythmus bei Fischembryonen und Einfluss der Temperatur; Babák & Hepner, 12.

Über die Asphyxie der Fische an der Luft und ihre postmortale Herz- und Muskererregbarkeit; Polimanti, 302.

DEVELOPMENT. 5415

General.

Oncorhynchus keta, gorbuscha, embryology; Soldatov, 405.

Xiphias gladius, riproduzione e sviluppo; Sella, 386.

Sviluppo dei Murenoidi; Grassi, 155.

Recherches sur la gastrulation et l'origine de l'hypoblaste du tube digestif chez *Amia calva*; Brachet, 52.

La formation de l'embryon chez les téléostiens; Reisowa, 347.

Selachian utero-gestation; Gudger, 159.

Carcharodon Rondeletii, sacco vitellino; Sanzo, 360.

Faseriges Stützgewebe bei den Embryonen von *Acanthias vulgaris*; Müller, 253.

Pristis cuspidatus, embryo; Hussakof, 186.

Die planktonischen Fischeier und Larven der Ostsee; Heinen, 171.

Muraena helena, *Anguilla vulgaris*, eggs and larvae; Grassi, 154.

Larves lisuriennes de poissons; Roule et Despax, 356.

Gonostoma denudatum, comparsa degli organi luminosi nelle larve; Sanzo, 362.

Stomias boa, larva; Sanzo, 361.

Scopelidae, larve stiloftalmoidi e loro metamorfosi; Mazzarelli, 240.

Ovum and Oogenesis.

Sternoptychidae: uova; Sanzo, 359

Chemical composition of Selachian egg-capsules; Hussakof & Welken, 188.

Sur le développement des œufs de *Scyllium* exposés à l'action du radium; Tur, 432.

Fundulus—ei; Energetik der Ontogenese; Glaser, 153.

Artesian water and hatching of Trout; Farr & Macleod, 121.

Organogeny.

Morphogenese des Mundes und Schlundes bei *Acipeuser ruthenus* (Russ.); Zavadskij, 453.

Entwicklung der Haut des Karpfens; Grunelius, 158.

Amia; development of hypophysis; Reighard & Mast, 345: of adhesive organ and head mesoblast; Reighard & Phelps, 346.

Entwicklung der Thymus bei Selachiern; Maximow, 236: bei *Acipenser*; Sokolov, 404.

Entwicklung der Schwimmblase bei *Clupea Kessleri* (Russ.); Nedošivin, 256.

Entwicklung des Gefäßsystems bei den Knochenfischen; Grochmalicki, 157.

Sistema interrenale e cromaffine dei Salmonidi; Giacomini, 149.

Development of sympathetic nervous system in fishes; Ganfini, 143; Kuntz, 212.

Sviluppo del sistema nervoso centrale dei Selaci; Sterzi, 411.

Entwicklung der Seitenaugen von *Ammocoetes*; Studnička, 414.

Entwicklung des häutigen Labyrinthes bei Knochenfischen (Czechisch); Wenig, 444.

Sviluppo dello scheletro assiale dei Murenoidi; Sella, 385.

Hyobranchialskeletos der Haie; Gibian, 150.

Entwicklung des Skelettes und der Muskulatur der unpaaren Flossen der Fische; Schmalhausen, 370.

Entwicklung der paarigen Extremitäten der Knochenfische; Derjugin, 94: Derjugin & Zozhdestvensky, 95.

Pectoral arch in *Syngnathus acus*; Buist, 57.

Post-Embryological.

Acipenser ruthenus Periodicität im Wachstum (Russ.); Ostroumov, 270.

Regeneration.

The regenerated scales of *Fundulus heteroclitus*; Scott, 380.

Regeneration—erscheinungen im caudalen Ende des Körpers von *Petromyzon fluviatilis*; Studnička, 415.

Regeneration of barbels in Siluroids; Beigel, 22.

Regeneration der Haut bei den Teleostiern; Beigelówna, 23.

ETHOLOGY.

5419

General.

An index of fish environments; Shelford & Allee, 391.

Classification der Fische nach deren Biologie (Russ.); Smirnov, 395.

Notes on N. Carolina Fishes; Gudger, 159, 160.

Notes on behaviour of fish; Elm-hirst, 112.

La vie des Poissons dans les grandes profondeurs de la mer; Roule, 354.

Naturgeschichte des Bachneunauges
Lampetra planeri; Loman, 224.

Oncorhynchus keta, gorbusha, habits,
life-history, etc.; Soldatov, 405.

Life history of *Neoceratodus forsteri*;
Bancroft, 14: Dean, 91.

Climbing habits of *Arges marmoratus*;
Johnson, 196.

Vandellia, parasitic habits; Pellegrin, 290.

Biology of Eels; Schmidt, 371-376:
Dean, 92.

Ueber undulatorische Bewegung bei
Fischen; Schlesinger, 369.

Exocoetus flight; Rendall, 348.

Versuche mit einem Vogelmodell und
Beobachtungen an Möven und fliegen-
den Fischen; Lilienthal, 222.

Memory in fishes; Oxner, 272-276:
Franz, 135: Goldsmith, 153a: Haempel,
162: Minkiewicz, 245a.

Coloration and bathymetrical dis-
tribution of the *Oyclogasteridae*; Burke,
61.

Color changes; Fiore, 124: Frisch,
139: of *Perocottus*; Berg, 32: of
Orenilabrus; Frisch, 138: of *Ne-
machilus*; Secerov, 383: of *Pleuro-
nectidae*; Polimanti, 306: Rynberk,
357: Sumner, 417.

Sind die Fische farbenblind?; Frisch,
137.

Color discrimination, association, and
memory in *Lutianus griseus*; warning
coloration in coral reef fishes; Reig-
hard, 344.

Smelt in Rostherne Mere; Coward,
84.

Clupea finta wintering in Killarney
Lakes; Regan, 323.

Fundulus and fresh water; Murdoch,
254: Smith, 396: Sumner, 418.

Causes of death of marine fishes in
fresh water and vice versa; Sumner,
416.

Migration.

Migration of Planer's Lamprey;
Clarke, 67: of *Anguilla vulgaris*;
Cligny, 69, 73, 74: of *Olupea harengus*;
Cligny, 72: of *Engraulis encrasicolus*;
Hoek, 181: of *Naucrates ductor*,
Ninni, 261.

Les mœurs ambulatoires du Thon
commun en Méditerranée; Bounhiol,
49.

Über Ortsgedächtnis bei Fischen und
seine Bedeutung für die Fischwande-
rungen; Franz, 133.

Food.

Feeding habits of Mackerel; Bullen,
58.

Influence de différents régimes ali-
mentaires sur la croissance des Truites
arc-en-ciel; Magnan, 230.

Dern jungen Sterlet zur Nahrung
dienende Tiese (Russ. + deutsch.
Rés.); Behning, 21.

Breeding, Oviposition, Parental Care.

Salmo salar, infrequency of spawn-
ing; Menzies, 245.

Breeding habits of *Petromyzon
marinus*; Hussakof, 184: of *Girardi-
nus poecilioides*; Boulenger, 38: of
Polyodon, Allen, 2.

Reproduction of *Anguilla vulgaris*;
Schmidt, 371-376: Krebs, 210.

L'éclosion chez le Cyprin doré
(*Carassius auratus*), 446; chez la
truite arc-en-ciel; 447, Wintrebert.

VARIATION AND ÆTIIOLOGY.

5423

Variation, Teratology, Hybrids.

Cynolebias sexual differences;
Regan, 341.

Teratology of Fishes; Gemmill, 145.

Gehirn, Rückenmark und Augen der
Varietäten des Goldfisches; Hirsch,
177.

Karpfenmopokopf; Heuscher, 176.

Ein mundloser Karpfen; Fehlmann,
122.

Missgebildete *Esox*-Köpfe; Bro-
feldt, 55.

Allongement des nageoires chez une
Tanche; Billiard, 37.

Missbildung bei einem Rochen;
Anisits, 9.

Anguilla vulgaris, metacromatismo;
Ninni, 260.

Clupea harengus, hermaphroditism; Sjöberg, 394.

Cross fertilization among fishes; Moenkhaus, 246.

Hybrids; *Heros facetus* × *Geophagus gymnogenys*; Schütz, 379: *Poecilia mexicana* × *Mollienia latipinna*; Scheljuzhko, 368: *Xiphophorus Helli* × *Platypoecilus maculatus*; Haffner, 164.

Heredity and Evolution.

Die Ausbildung einer neuen Corregonenform; Thienemann, 424.

DISTRIBUTION. 5427

(a) MARINE.

Europe (including Mediterranean).

Lepidopus atlanticus at Finmarken, Norway; Collett, 82.

Great Yarmouth, notes; Patterson, 282.

Sussex, *Raia undulata*; Belt, 27.

Atlantic and Mediterranean, Selachians; Roule, 352, 353.

France, *Centrolophus britannicus*; Pellegrin, 291.

Mediterranean coast of Morocco; Fage, 118, 119.

Italy, *Stomias* sp. n.; Fowler, 127.

Cubiceps capensis nel Golfo di Genova; Ariola, 10.

Clupeiden des Schwarzen und Azow'schen Meeres; Brauner, 54.

America.

Danish expedition to Greenland; Johansen, 195.

Atlantic coast of U.S.A. *Atopichthys*, *Antennarius* spp. n.; Fowler, 128: Cyclopteridae, notes and sp. n.; Burke, 59.

New England, *Paraliparis* sp. n.; Burke, 60: *Pseudopleuronectes* sp. n.; Kendall, 207.

Bahamas, list, spp. n.; Rosén, 349.

W. Indies, *Synodus* sp. n.; Fowler, 127: *Carcharias*, sp. n.; Engelhardt, 113.

Mexico and W. Indies, Apodes spp. n.; Fowler, 126.

Cuba, *Siphostoma*, *Xystaema*, spp. n.; Nichols, 259.

Martinique, *Ranzania truncata*; Pellegrin, 293.

Bermuda, spp. n.; Bean, 18.

Barbadoes, *Antennarius* sp. n.; Nichols, 258.

Bering Sea and Kamchatka, spp. n.; Gilbert & Burke, 151.

Alaska, Liparidinae spp. n.; Burke, 60.

Chile, *Heptatretus* sp. n.; Regan, 329.

Africa.

Morocco; Pellegrin, 286: Zeidae sp. n., 68; *Psettodes erumei*, 79; Cligny.

West Africa, Apodes gen. and spp. n.; Regan, 334.

Angola, *Diagramma* sp. n.; Pellegrin, 293a, 293b.

Aldabra and Assumption, spp. n.; Regan, 324.

Asia.

Baluchistan, *Platycephalus* sp. n.; Zugmayer, 455: *Torpedo* sp. n.; Engelhardt, 113.

Indian deep-sea fish, notes; Sewell, 387.

India, *Aphthalmichthys* sp. n.; Fowler, 126.

Ceylon, Syngnathidae, spp. n.; Duncker, 99.

Java, notes, *Agonostomus* sp. n.; Bean & Weed, 19.

Celebes, *Fierasfer* n. sp.; Popta, 310: Pediculati gen. and sp. n.; Smith & Radcliffe, 401.

Waigeu, Gobiidae spp. n.; Beaufort, 20.

Philippines, Selachians spp. n.; Smith, 397-400: Regan, 342: Chlodipteridae spp. n., 313; Pediculati spp. n., 314; Anacanthini spp. n., 315; Radcliffe: *Chlevastes* sp. n.; Fowler, 126: *Acanthocybium* n. sp.; Seale, 382.

Formosa, *Neopercis* n. sp.; Pietschmann, 296.

Riu Kiu Islands, *Myrichthys* sp. n.; Snyder, 403.

Japan, spp. n.; Tanaka, 422; Snyder, 402; Selachii spp. n.; Engelhardt, 113; Liparidinae spp. n.; Gilbert & Burke, 152; Sparidae and related families revised; Jordan & Thompson, 203.

Australia, Polynesia, etc.

New Guinea and Aru Is. Clupeidae spp. n.; Weber & Beaufort, 441.

New Hebrides; Pellegrin, 288.

Hawaii, Apodes spp. n.; Fowler, 126.

Honolulu, *Holacanthus*, *Chromis*, spp. n.; Jordan & Metz, 202.

Eastern tropical Pacific, spp. n.; Kendall & Radcliffe, 208.

Australia, *Atherina* sp. n.; McCulloch, 228.

Western Australia, notes, *Gymnothorax* sp. n.; McCulloch, 227.

Queensland, spp. n.; Ogilby, 266, 268; *Enoplosus* sp. n.; de Vis, 435.

Australia and New Zealand, *Gonorrhynchus* spp. n.; Ogilby, 267.

Kermadec Islands, additions to fish fauna; Waite, 439.

New Zealand; Waite, 437, 438.

Antarctic.

Cyclopteridae, notes; Burke, 59; spp. n.; Pappenheim, 278; Roule & Despax, 355.

(b) FRESHWATER.

General.

Zoogeographical regions for freshwater fishes; Berg, 29.

Palaeartic.

Russian Empire, Cyprinidae; Berg, 28.

Amur R., 29; Sary-su and Nura, 31; Kubau, 33; Berg.

Kamtschatka, *Lampetra fluviatilis japonica* (Russ.); Berg, 30.

Baluchistan, Cyprinoidea spp. n.; Zugmayer, 455.

Thian Shan Mts. Cyprinidae gen. and sp. n.; Zugmayer, 454.

China, spp. n.; Garman, 144.

Japan; Tanaka, 422.

Ethiopian.

Africa; Pellegrin, 285.

Africa, *Tilapia* spp. n.; Boulenger, 43, 44.

Morocco; Pellegrin, 286.

Niger, *Pelmatochromis* sp. n.; Boulenger, 47.

S. Cameroon, spp. n.; Steindachner, 410.

Congo spp. n.; Boulenger, 39, 41.

Nile, *Alestes*, *Amphilius* spp. n.; Boulenger, 42.

Brit. E. Africa, spp. n.; Boulenger, 46.

S. Africa, *Barbus* sp. n.; Pellegrin, 289.

Indian.

India, spp. n.; Chaudhuri, 63.

Ceylon, spp. n.; Duncker, 101.

Sumatra, spp. n.; Weber & Beaufort, 442.

Malay archipelago, transition from Indian to Australian regions; Popta, 309; Regan, 343.

Lombok; Popta, 307.

Timor and Babber; Weber & Beaufort, 443.

Celebes, Hemirhamphidae spp. n.; Popta, 310.

Neotropical.

Loricariidae spp. n., 325; Cichlidae spp. n., 330; *Corydoras* spp. n., 332; Regan.

Revision of *Chalceus*, *Pyrrhulina*, etc spp. n.; Regan, 337.

Revision of *Rivulus*, *Cynolebias*, etc. spp. n.; Regan, 338, 341.

Costa Rica, spp. n.; Meek, 243.

Panama, Characidae, *Eleotris* spp. n.; Meek & Hildebrand, 244.

Ecuador, spp. n.; Fowler, 130; Pellegrin, 290.

Colombia, spp. n.; Eigenmann, 109.

Orinoco, *Xenocara* sp. n.; Pellegrin, 287.

Orinoco and Surinam, *Curimatus* and *Leporinus* spp. n.; Steindachner, 409.

British Guiana spp. n.; Eigenmann, 108.

Brazil, Characidae spp. n.; Eigenmann, 107; Ellis, 111.

Amazon, *Iguanodectes* n. sp.; Regan, 331.

Buenos Aires, notes; Clark, 65.

Australian.

(See also Indian).

Ceram, Gobiidae spp. n.; Beaufort, 20.

Australia, Atherinidae sp. n.; McCulloch, 228.

(c) FOSSIL.

General.

Mesozoic and Cenozoic Fishes; Eastman, 105.

Devonian.

Scaumenac Bay, Quebec, notes on *Coccosteus*, *Eusthenopteron*, *Scaumenacia*; Hussakof, 187.

Pteraspis in Coblentzian of Belgium; Leriche, 219; Fraipont, 131.

Carboniferous.

Palaeoniscidae of British Carboniferous; Traquair, 431.

Iowa, *Edestus* sp. n.; Hay, 167.

Triassic.

Spitzbergen, spp. n.; Woodward, 452.

Triassic Fishes of Connecticut; Eastman, 102.

Jurassic.

France, *Oenoscopus* sp. n.; Eastman, 103.

Cretaceous.

Die Fischfauna der Kreidezeit; Hennig, 172.

Fishes of English Chalk; Woodward, 451.

Lower Chalk of Lincolnshire, *Protosphyraena stebbingi*, snout; Woodward, 450.

Craie phosphatée de la Picardie; Leriche, 218.

Fishes of Cretaceous of Paris Basin; Leriche, 220.

Mt. Libanon spp. descr. and figs.; Erasmo, 114.

Texas, *Thrissopater* sp. n.; Moodle, 247.

N. American Chimaeroids; Hussakof, 185.

Lower Cretaceous of Queensland, *Hybodus* sp. n.; de Vis, 434; *Corax* sp. n.; Chapman, 62.

Eocene.

Fische des oberen Eocäns von Mangyschlak (Russ.); Savchenko, 365, 366.

Benito, W. Africa, *Diplomystus* n. sp.; Eastman, 104.

Bituminous shales of Alagôas, Brazil, Clupeidae spp. n.; Jordan, 200.

Oligocene.

Selachians of Bismantova; Stefano, 408.

Miocene.

France, otoliths; Priem, 311.

Sardinia, otoliths; Schubert, 378.

Pliocene.

Fish-fauna of Pliocene sea of Italy; Stefano, 407.

Corsica, otoliths; Priem, 311.

III.—SYSTEMATIC. 5431

GENERAL WORKS.

BERG, Faune de la Russie, Poissons, vol. iii pt. i.

DUNCKER, The Freshwater Fishes of Ceylon, Jahrb. Wiss. Anst. 29 1912 pp. 241-272 1 pl.

EASTMAN, Mesozoic and Cenozoic Fishes, Bull. Geol. Soc. America 23 1912 pp. 228-232.

EIGENMANN, The Freshwater Fishes of British Guiana, Mem. Carnegie Mus. 5 1912 pp. 1-578 103 pls.

HEIN & WINTER, Süßwasserfische Mittel-Europas, Leipzig.

JOHANSEN, The fishes of the Denmark Expedition. København Danmark-Ekspeditionen til Grønlands Nordøstkyst 1906-1908 5 Nr. 12.

OTTERSTROM, Danmarks Fauna, Fisk, I Pigfinnefisk. pp. 1-198 figs. Copenhagen 1912.

PAPPENHEIM, Fishes of the German Antarctic Expedition, Deutsche Südpolar Exped. 13 Zool. 5 pp. 163-182 2 pls.

QUIJADA, List of fishes in the Santiago Museum, Bol. Mus. Nac. Santiago 4 No. 1.

ROSÉN, Fishes of the Bahamas, list, Lund Univ. Årsskr. N.F. 7 Afd. 2 No. 5 pp. 46-72.

TANAKA, Figures and descriptions of the Fishes of Japan, pp. 71-186.

WAITE, Additions and corrections to list of New Zealand fishes, Rec. Canterbury Mus. 1 1912 pp. 313-322.

WOODWARD, Fossil fishes of English chalk, Monogr. Palaeont. Soc. pp. 225-264 pls.

MARSIPOBRANCHII.

Systematic position, WOODLAND Rep. Brit. Ass. 1911 pp. 422-424; MOŽEJKO Anat. Anz. 42 1912 pp. 612-620.

PETROMYZONIDAE.

Petromyzon marinus, spawning habits, HUSSAKOF Amer. Nat. 46 1912 pp. 729-740 figs.

Vaskularsystem von *Petromyzon fluviatilis*, MOŽEJKO Anat. Anz. 40 1912 pp. 469-486 506-513.

Lampetra fluviatilis japonica Kamtschatka (Russ.), BERG Ann. mus. zool. Ac. sc. 17 p. iii.

Lampetra planeri migration, CLARKE Naturalist 1912 p. 185; biology, LOMAN Zool. Jahrb. Suppl. 15 1 1912 pp. 243-270 1 pl.

MYXINIDAE.

Heptatretus, synopsis of the species, REGAN Ann. Mag. Nat. Hist. (8) 9 1912 pp. 534-536.—*H. decatrema* sp. n. Chile, REGAN t.c. p. 535.

Heptatrema cirrata, circulatory systems, KIRK Trans. N. Zeal. Inst. 44 pp. 241-244 pls. xvi xvii (1912).

Bdellostoma dombeyi, brain, AYERS & WORTHINGTON J. Comp. Neur. 21 pp. 593-617 with 37 ff.

Myxine, branchial arteries, COLE Trans. R. Soc. Edinburgh 48 Pt. I 1912 pp. 215-230 c. pl.

SELACHII.

Ricerche intorno alla struttura istologica dall'integumento dei Selachi, KWIETNIEWSKI Padova 1905 156 pp. 6 pls.

Selachians in the Musée Oceanographique at Monaco, ROULE Bul. Inst. Ocean. 1912 No. 243 pp. 1-36.

Selachians of Oligocene of Bismantova, STEFANO Boll. soc. geol. Ital. 30 1912 pp. 351-422 pls. xii-xiv.

Chemical composition of egg-capsules, HUSSAKOF & WELKER Biochem. Bull. 1 1911 pp. 216-221.

Natural history notes, utero-gestation, GUDGER Proc. Biol. Soc. Washington 25 1912 pp. 141-155.

EUSELACHII.

PLEUROTREMATA.

HEXANCHIDAE.

†*Notidanus primigenius* Eocän von Mangyschlak, Beschreibung (Russ.), SAVČENKO Kiev Zap. Obšč. jest. 22 2 pp. 168-170 pl. xiii f. 11-12.

ODONTASPIDAE.

†*Odontaspis winkleri* Eocän von Mangyschlak Beschreibung (Russ.), SAVČENKO Kiev Zap. Obšč. jest.

22 2 pp. 178-179.—*O. arenarius* sp. n. Queensland, OGILBY Ann. Queensland Mus. 10 1911 p. 37.—*Triglochis* M. & H. 1837 antedates *Odontaspis* Agass. 1838, OGILBY t.e. p. 38.

Scapanorhynchus dofleini sp. n. Japan, ENGELHARDT Zool. Anz. 39 1912 p. 644.

LAMNIDAE.

†*Corax australis* sp. n. Cretaceous of Queensland, CHAPMAN Proc. R. Soc. Viet. 21 1909 p. 452.

†*Carcharodon auriculatus* pp. 171-172 pl. xiii f. 5 6 sp. pp. 172-173 pl. xiii f. 8-10, Eocän von Mangyschlak Beschreibung (Russ.), SAVČENKO Kiev Zap. Obšč. jest. 22 2.

†*Otodus macrotus* Eocän von Mangysehlak Beschreibung (Russ.), SAVČENKO t.c. pp. 173-174 pl. xiii f. 16-10 (sie).

†*Lamna vincenti* pp. 174-175 pl. xiii f. 24-27, *elegans* pp. 175-176, *verticalis* pp. 176-177, *crassidens* pp. 177-178 pl. xiii f. 20-23 Eocän von Mangyschlak Beschreibung (Russ.), SAVČENKO t.c.

†*Oxyrhina sismonda flandrica* pp. 179-180 pl. xiii f. 29-30, *biflexa* p. 180 pl. xiii f. 28 33 39, *brevidens* p. 181 Eocän von Mangyschlak Beschreibung (Russ.), SAVČENKO t.c.

†*Alopias exigua* p. 181 pl. xiii f. 34-38, *latidens* p. 182 pl. xiii f. 40-45 Eocän von Mangysehlak Beschreibung (Russ.), SAVČENKO t.c.

SCYLORHINIDAE.

Pentanchus gen. n. *profundicolus* sp. n. Philippines, SMITH Proc. U. S. Nat. Mus. 12 1912 p. 489 pl. xlii = *Scylorhinus* sp. Regan, Science 36 1912 p. 81.

Pristiurus hertwigi sp. n. Japan, ENGELHARDT Zool. Anz. 39 1912 p. 644.

CARCHARIIDAE.

Scoliodon affinis p. 29, *longmani* p. 30, spp. n. Queensland, OGILBY Mem. Queensland Mus. 1 1912.

Carcharias stevensi sp. n. Queensland, OGILBY Ann. Queensland Mus. 10 1911 p. 38.—*C. sancti-thomae* West-Indien p. 646, *marianensis* Marianen 647, spp. n., ENGELHARDT Zool. Anz. 39 1912.

(N-9210 b)

Calliscyllium gen. n. *venustum* sp. n. Japan, TANAKA Fish. Japan p. 171 pl. xlvi.

†*Galeocerdo minor* Eocän von Mangyschlak Beschreibung (Russ.), SAVČENKO Kiev Zap. Obšč. jest. 22 2 p. 170 pl. xiii f. 13-15.

†HYBODONTIDAE.

†*Hybodus incussidens* sp. n. Lower Cretaceous of Queensland, DE VIS Ann. Queensland Mus. 10 1911 p. 18 pl. ii f. 3.

†*Edestus mirus* sp. n. Iowa Carboniferous p. 36, HAY Proc. U. S. Nat. Mus. 42 1912 p. 36 pls. i & ii.

SQUALIDAE.

Squalus philippinus sp. n. Philippines, SMITH Proc. U. S. Nat. Mus. 42 1912 p. 677 pl. li.

Nasisqualus gen. n. *profundorum* sp. n. Philippines, SMITH t.e. p. 681 pl. liii.

Squaliolus gen. n. *laticaudus* sp. n. Philippines, SMITH t.c. p. 684 pls. l liv.

Etmopterus brachyurus sp. n. Philippines, SMITH t.c. p. 679 pl. lii.

Spinax unicolor sp. n. Japan, ENGELHARDT Zool. Anz. 39 1912 p. 645.

Centrophorus drygalskii sp. n. Japan, ENGELHARDT t.c. p. 645.

Heteroscymnus gen. n. *longus* sp. n. Japan, TANAKA Fish. Japan p. 102 pl. xxvi.

Cirrhigaleus gen. n. *barbifer* sp. n. Japan, TANAKA t.c. p. 151 pl. xli.

PRISTIOPHORIDAE.

Structure of skull, HOFFMANN Zool. Jahrb. Abth. f. Anat. 1912 pp. 239-360 pls. xiii-xxiv.

HYPOTREMATA.

TORPEDINIDAE.

Torpedo zugmayeri sp. n. Beludschistan, ENGELHARDT Zool. Anz. 39 1912 p. 617.

PRISTIDAE.

Structure of skull, HOFFMANN Zool. Jahrb. Abth. f. Anat. 1912 pp. 239-360 pls. xiii-xxiv.

Pristis cuspidatus embryo, HUSSAKOF
Bull. Amer. Mus. 31 1912 pp. 327-330
figg.

RAIIDAE.

Raia undulata on Sussex coast,
BELT Hastings Nat. 1912 p. 8a fig.

DASYBATIDAE.

Trygon hystrix var. n. *ocellata* Brasilia,
ENGELHARDT Zool. Anz. 39 1912 p. 647.

MYLIOBATIDAE.

Rhinoptera neglecta sp. n. Queensland,
OGILBY Mem. Queensland Mus. 1
1912 p. 32.

Myliobatis hamlyni sp. n. Queensland,
OGILBY Ann. Queensland Mus. 10
1911 p. 40; (†) *M. owenii* p. 167
pl. xiii f. 4 sp. pp. 167-168 pl. xiii
f. 1-3 Beschreibung, Eocän von Man-
gyschlak (Russ.), SAVÖENKO Kiev
Zap. Obšč. jest. 22 2.

†*Ptychodus* spp. of English Chalk,
WOODWARD Monogr. Palaeont. Soc.
pp. 225-245 figs.

MOBULIDAE.

Dentition, PELLEGRIN Bull. Soc.
Philom. (10) 4 1912 No. 1-2 pp. 1-8.

HOLOCEPHALI.

CHIMAERIDAE.

†Cretaceous Chimaeroids of N.
America, HUSSAKOF Bull. Amer. Mus.
31 1912 pp. 195-228 pls. xix-xx.

Chimaera deani sp. n. Philippines,
SMITH Proc. U. S. Nat. Mus. 42 1912
p. 232 pl. xxix.

Rhinochimaera, egg-case and embryo,
SEWELL Rec. Ind. Mus. 7 1912 Pt. 1
No. 1 pp. 2-6 fig.

PISCES.

PALAEOPTERYGII.

†PALAEONISCIDAE.

Palaeoniscidae of British Carboni-
ferous, TRAQUAIR Monogr. Paleont.
Soc. pp. 159-180 pls. xxxvi-xl 1912.

†*Acrolepis arctica* sp. n. Trias of
Spitzbergen, WOODWARD Bull. geol.
inst. Upsala 11 1912 p. 292 pl. xiv f. 2.

ACIPENSERIDAE.

Acipenser mikadoi figured, TANAKA
Fish. Japan pl. xxxiii; *A. huso*, Nahrung
im Schwarzen Meere (Russ.), TICHIJ
Véstrn. ryboprom. 27 pp. 59-80 figs.
1-25.

POLYODONTIDAE.

Polyodon spathula breeding habits,
ALLEN Journ. Washington Acad. 1
pp. 280-282.

†BELONORHYNCHIDAE.

†*Belonorhynchus wimani* sp. n. Trias
of Spitzbergen, WOODWARD Bull. geol.
inst. Upsala 11 1912 p. 293 pl. xiv
ff. 3-6.

NEOPTERYGII.

PROTOSPONDYLI.

†DAPEDIIDAE.

†*Colobodus altilepis* sp. n. Trias of
Spitzbergen, WOODWARD Bull. geol.
inst. Upsala 11 1912 p. 296 pl. xiv f. 7.

†PACHYCORMIDAE.

†*Protosphyraena stebbingi*, snout,
WOODWARD Naturalist 1912 p. 329
pl. xix.

ISOSPONDYLI.

†OLIGOPLEURIDAE.

†*Oenoscopus elongatus* sp. n. France
Jurassic p. 185 pl. xi, EASTMAN Ann.
Carnegie Mus. 8.

ELOPIDAE.

Elops, number of vertebrae, BEAN
& WEED Proc. U. S. Nat. Mus. 42
1912 p. 589; *E. hawaiiensis* figured,
TANAKA Fish. Japan pl. 1.

†*Pachyrhizodus* sp. figured, WOOD-
WARD Monogr. Palaeont. Soc. pl. liv
f. 2.

†*Thrissopater intestinalis* sp. n. Cre-
taceous of Texas, MOODIE Univ. Kans.
Sci. Bull. 5 p. 281 pl. lxi.

†CTENOTHRISSIDAE.

†*Aulolepis typus* figured, WOOD-
WARD Monogr. Palaeont. Soc. pl. liii
f. 2.

†CHIROCENTRIDAE.

†*Chiromystus alagoensis* sp. n. Eocene of Alagoas, Brazil, JORDAN Ann. Carnegie Mus. 7 1910 p. 32 pls. ix f. 15 xii xiii.

CLUPEIDAE.

Clupeidae des Schwarzen u. Azowschen Meeres, BRAUNER Kišinev Trd. Obšč. jest. 2 pp. 115-134 217-221 2 Tabellen.

Scales of *Alosa*, *Pomolobus*, *Harengula*, *Brevoortia* and *Ilisha* figured, BEAN & WEED Proc. U. S. Nat. Mus. 42 1912 pls. lxxiii-lxxv.

Alosa finta, dei laghi dell'Italia settentrionale, BARBIERI Riv. fis. mat. sc. nat. 18 pp. 273-286; wintering in Killarney, REGAN Irish Nat. 21 1912 p. 63.

Clupeoides venulosus sp. n. New Guinea, WEBER & BEAUFORT Verh. Akad. Amsterdam 17 No. 3 p. 3 fig.

Clupeoides, *Clupeichthys* and *Corica* notes, WEBER & BEAUFORT l.c. *Pristigaster*, *Odontognathus* and *Opisthopterus* notes, WEBER & BEAUFORT t.c. p. 9.

Clupea, validity and synonymy of some spp., WEBER & BEAUFORT t.c. pp. 10-19; *C. (Harengula) koningsbergii* sp. n. Aru Is., WEBER & BEAUFORT t.c. p. 14; *C. suhia* sp. n. N. India, CHAUDHURI Rec. Ind. Mus. 7 1912 p. 437 pl. xxxviii f. 1; *C. harengus*, growth, etc., HJORT & LEA Mitt. D. Seefischereiv. Berlin 28 1912 pp. 9-22.

Sardinella pinnula sp. n. Bermuda Is., BEAN Proc. Biol. Soc. Washington 25 p. 122.

Rhinosardinia gen. n. *serrata* sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 445 pl. lxii ff. 3 4.

†*Ellipes branneri* p. 25 pls. viii ff. 3-5 ix f. 6, *riacensis* p. 28 pl. x, spp. n. Eocene of Alagoas, Brazil, JORDAN Ann. Carnegie Mus. 7 1910.

†*Dastilbe* gen. n. p. 20, *crandalli* sp. n. p. 30 pl. ix ff. 9-13, Eocene of Alagoas, Brazil, JORDAN t.c.

†*Diplomystus goodii* sp. n. Eocene of Benito, W. Africa, EASTMAN Ann. Carnegie Mus. 8 1912 p. 375 pls. xxiii xxiv f. 2.

(N-9210 b)

Engraulis encrasicholus, local races, FAGE Arch. zool. ser. 5 8 1911, notes et revues pp. lxxii-lxxx; migrations, HOEK Rapp. et procès-verb. explor. mer. 14 1912 p. 40.

Stolephorus should be used for an Engrauline, WEBER & BEAUFORT t.c. p. 20; *S. guianensis* sp. n. Brit. Guiana, EIGENMANN t.c. p. 447 pl. lxii f. 5; *S. viridis* sp. n. Bermuda Is., BEAN Proc. Biol. Soc. Washington 25 p. 122.

SALMONIDAE.

Oncorhynchus keta, *gorbuscha* Biologie, Entwicklung, Beschreibung (Russ.); SOLDATOV St. Peterburg 1912.

Salmo alpinus, the Char of Lapland, EKMAN Stockholm 1912.

Coregonus fera var. n. *sancti benedicti*, Maria Laach, THIENEMANN Zool. Jahrb. Abt. f. Syst. 32 1912 p. 176.

OSMERIDAE.

Osmerus eperlanus in Rostherne Mere, COWARD Mem. Lit. Phil. Soc. Manchester 56 Pt. 2 No. 15.

HAPLOCHITONIDAE.

Jenynsellia weatherilli = *Protoctroctes semoni*, OGILBY Mem. Queensland Mus. 1 1912 p. 32.

GALAXIIDAE.

Galaxias o'connori sp. n. Queensland, OGILBY Mem. Queensland Mus. 1 1912 p. 33.

MORMYRIDAE.

Petrocephalus haullevillii sp. n. Congo, BOULENGER Ann. Mus. Congo Zool. ser. 1 2 fasc. 3 1912 p. 5 pl. xvii f. 1.

Mormyrus habereri sp. n. Cameroon, STEINDACHNER Anz. Akad. Wien 1912 p. 443.

GONORHYNCHIDAE.

Gonorhynchus revision of genus pp. 30-35, *G. forsteri* New Zealand, *parvimanus* E. Australia, spp. n., p. 34, OGILBY Ann. Queensland Mus. 10 1911.

e 5-2

OSTARIOPHYSI.

CHARACIDAE.

Brit. Guiana species described and figured, EIGENMANN Mem. Carnegie Mus. 5 1912 pp. 309-422.

Piabucina aureoguttata sp. n. W. Ecuador, FOWLER Proc. Acad. Philad. 63 1911 p. 513 f. 6.

Acestrocephalus gen. n. (nr. *Oligosarcus*) type *A. anomalus* Stdr., EIGENMANN Indiana Univ. Studies 1912 No. 8 p. 21.

Acestrorhynchus nasutus sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 411 pl. lxi f. 4.

Chalceus macrolepidotus, Guiana, and *erythrurus*, Upper Amazon, redescribed, REGAN Ann. Mag. Nat. Hist. (8) 10 1912 p. 388.

Pyrhulina, revision of the genus, REGAN t.c. pp. 389-392; *P. vittata* sp. n. Obidos, REGAN t.c. p. 391.

Copeina, revision of the genus, REGAN t.c. pp. 392-395; *C. arnoldi*, *callolepis*, Amazon, *eigenmanni*, Amazon, Guiana, Colombia, p. 393, *carsevennensis*, French Guiana, p. 394, spp. n., REGAN t.c.

Alestes schontedeni sp. n. Congo, BOULENGER Ann. Mus. Congo. Zool. ser. 1 2 fasc. 3 1912 p. 7 pl. xviii f. 1; *A. jacksonii* sp. n. Malawa R., BOULENGER Ann. Mag. Nat. Hist. (8) 10 1912 p. 601.

Brycon siebenthalae sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 372 pl. liv f. 3; *B. scapularis* sp. n. W. Ecuador, FOWLER Proc. Acad. Philad. 63 1911 p. 502 f. 3.

Creagrutus notropoides sp. n. Panama, MEEK & HILDEBRAND Publ. Field Mus. Zool. 10 1912 p. 68.—*C. beni* sp. n. Rio Beni, EIGENMANN Ann. Carnegie Mus. 8 1911 p. 172 pl. vi f. 2.

Genycharax gen. n. *tarpon* sp. n. Colombia, EIGENMANN Indiana Univ. Studies 1912 No. 8 p. 22.

Psalidodon gen. n. (nr. *Henochilus*) p. 165, *gymnodontus* sp. n. p. 166 pl. iv ff. 2 3 Rio Iguassu, EIGENMANN Ann. Carnegie Mus. 8 1911.

Spintherobolus gen. n. *papilliferus* sp. n. San Paulo, EIGENMANN Ann.

Carnegie Mus. 8 1911 p. 167 pl. v ff. 1-4.

Glandulocauda gen. n. (nr. *Brycon-americanus*) *melanogenys* p. 168 pl. v f. 6 San Paulo, *inaequalis* p. 169 pl. v f. 5 Porto Alegre *melanopleura* p. 170 pl. v f. 7 R. Iguassu, spp. n., EIGENMANN Ann. Carnegie Mus. 8 1911.

Hysteronotus gen. n. *megalostomus* sp. n. Rio das Velhas, EIGENMANN Ann. Carnegie Mus. 8 1911 p. 171 pl. vi f. 1.

Gephyrocharax gen. n. (nr. *Hysteronotus*) *chocoensis* p. 23, *caucanus*, *melanochir*, p. 24, spp. n., Colombia, EIGENMANN Indiana Univ. Studies 1912 No. 8.

Phenacogaster franciscoensis p. 173 pl. vi f. 3 Rio San Francisco, *beni* p. 174 pl. vi f. 4 R. Beni and R. Guaporé, spp. n., EIGENMANN Ann. Carnegie Mus. 8 1911.

Vesicatrux gen. n. (nr. *Phenacogaster*) *tegatus* sp. n. Upper Paraguay, EIGENMANN Ann. Carnegie Mus. 8 1911 p. 174 pl. vii f. 1.

Probolodus gen. n. (nr. *Astyanax*) *heterostomus* sp. n. Campos and Iporangu, EIGENMANN Ann. Carnegie Mus. 8 1911 p. 164 pl. iv f. 1.

Tetragonopterus (Astyanax) riveti descr. & fig., PELLEGRIN Mission de l'Équateur 9 fasc. 2 p. 6 pl. i f. 1.

Astyanax notemigonoides p. 500 f. 4, *scierus* p. 509 f. 5, spp. n., W. Ecuador, FOWLER Proc. Acad. Philad. 63 1911; *A. bimaculatus novae* var. n. p. 175 pl. vii f. 2 Bahia and Goyaz, *marionae* p. 175 pl. vii f. 3 Upper Paraguay, *guaporensis* p. 176 pl. vii f. 4 R. Guaporé, *paranahybae* p. 177 pl. viii f. 1 R. Paranahyba, *ribeirae* p. 177 pl. viii f. 2 Xirisica, *gymnogenys* p. 179 pl. ix R. Iguassu, spp. n., EIGENMANN Ann. Carnegie Mus. 8 1911; *Astyanax grandis* sp. n. Panama, MEEK & HILDEBRAND Publ. Field Mus. Zool. 10 1912 p. 67; *A. robustus* sp. n. Costa Rica, MEEK Field Mus. Publ. Zool. 10 1912 p. 69.

Parastremma gen. n. near *Astyanax*, *sardina* sp. n. Colombia, EIGENMANN Indiana Univ. Studies 1912 No. 8 p. 20.

Rhoadsia gen. n. p. 497, *altipinna* sp. n. p. 498 f. 2 W. Ecuador, FOWLER Proc. Acad. Philad. 63 1911.

Deuterodon acanthogaster sp. n. Upper Paraguay, EIGENMANN Ann. Carnegie Mus. 8 1911 p. 179 pl. viii f. 3; *D. atricaudata* sp. n. Panama, MEEK & HILDEBRAND Publ. Field Mus. Zool. 10 1912 p. 68.

Moenkhausia profunda sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 322 pl. xlvi f. 1.

Hasemania gen. n. p. 148, *maxillaris* p. 148 pl. i f. 1, *melanura* p. 149 pl. i f. 2, *bilineata* p. 150 pl. i f. 3, spp. n., Central South America, ELLIS Ann. Carnegie Mus. 8.

Hypessobrycon taurocephalus p. 151 pl. i f. 4, *parvellus* p. 153 pl. ii f. 1, *reticulatus* p. 153 pl. ii f. 2, *duragenys* p. 155 pl. ii f. 3, *bifasciatus* p. 156 pl. ii f. 4 pl. iii f. 1, *melanopleurus* p. 157 pl. iii f. 2, spp. n., Central South America, ELLIS Ann. Carnegie Mus. 8.

Hemigrammus marginatus p. 159 pl. iii f. 3, *brevis* p. 161 pl. iii f. 4, spp. n., Central South America, ELLIS Ann. Carnegie Mus. 8. *H. minutus* sp. n. Panama, MEEK & HILDEBRAND l.c.

Aphyocharax melanotus p. 312, *erythrurus* p. 313 pl. xlv f. 4, spp. n., Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912.

Aphyodite gen. n. *grammica* sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 314 pl. xlv f. 5.

Odontostilbe melandetus sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 312 pl. xlv f. 3.

Cheirodon eigenmanni sp. n. Costa Rica, MEEK Publ. Field. Mus. Zool. 10 1912 p. 70.

Iguanodectes rachovii sp. n. Amazon, REGAN Ann. Mag. Nat. Hist. (8) 9 1912 p. 682.

Roeboides thurni sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 399 pl. lx f. 2.

Charax rupununi sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 402.

Asiphonichthys hemigrammus sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 403 pl. lx f. 4.

Cynopotamus essequibiensis sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 403.

Acanthocharax gen. n. *microlepis* sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 405 pl. lxi f. 1.

Heterocharax gen. n. *macrolepis* sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 406 pl. lxi f. 2.

GASTROPELECIDAE.

Thoracocharax brevis, magdalenae, spp. n., Colombia, EIGENMANN Indiana Univ. Studies 1912 No. 8 p. 25.

ANOSTOMIDAE.

Anostomus plicatus sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 296 pl. xli f. 3.

Schizodontopsis laticeps sp. n. Brit. Guiana, EIGENMANN t.c. p. 299 pl. xli f. 4.

Leporinus arcus p. 300 pl. xlii f. 3, *granti* p. 307 pl. xliii f. 3. *alternus* p. 307, spp. n., Brit. Guiana, EIGENMANN t.c.; *L. latofasciatus* Orinoco, *pellegrinii* Surinam, spp. n., STEINDACHNER Anz. Akad. Wien 1910 pp. 265-270.

Tylobronchus gen. n. *maculosus* sp. n. Brit. Guiana, EIGENMANN t.c. p. 271 pl. xxxv f. 2.

Curimatus bolivarensis Orinoco, *helleri, surinamensis*, Surinam, spp. n., STEINDACHNER Anz. Akad. Wien 1910 pp. 265-270.

C. morawhannae pl. xxiv f. 3, *issoroensis* pl. xxxiv f. 4, spp. n., Brit. Guiana, EIGENMANN t.c. p. 266.

C. atratoensis sp. n. Colombia, EIGENMANN Indiana Univ. Studies 1912 No. 8 p. 19.

Prochilodus stigmaturus sp. n. W. Ecuador, FOWLER Proc. Acad. Philad. 63 1911 p. 494 f.

P. maripicru sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 271 pl. xxxv f. 2.

Bivibranchia gen. n. *protractila* sp. n. Brit. Guiana, EIGENMANN t.c. p. 258 pl. xxxiii.

HEMIODONTIDAE.

Nannostomus marginatus pl. xxxvi f. 4, *minus* pl. xxxvi f. 5, *simplex* pl. xxxvi f. 6, figured, EIGENMANN Mem. Carnegie Mus. 5 1912.

Poecilobrycon harrisonii f. 1, *trifasciatus* f. 2, *erythrurus* f. 3, *ocellatus* f. 4, figured, EIGENMANN t.c. pl. xxxvii.

Archicheir minutus figured, EIGENMANN t.c. pl. xxxvii f. 5.

Characidium laterale, *vintoni*, *blennioides*, *fasciatum*, *pellucidum*, *pteroides*, *catenatum*, figured, EIGENMANN t.c. pls. xxxvii-xxxix.

C. caucanum p. 25, *phoxocephalum* p. 26, spp. n., Colombia, EIGENMANN Indiana Univ. Studies 1912 No. 8.

Parodon bifasciatus sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 274 pl. xxxvi f. 1.

CITHARINIDAE

Neolebias ansorgii p. 8 pl. xvii f. 3, *spilotaenia* p. 9 pl. xvii f. 4, spp. n. Congo, BOULENGER Ann. Mus. Congo Zool. ser. 1 2 fasc. 3 1912.

RHAMPHICHTHYIDAE.

Gymnorhamphichthys gen. n. *hyposomus* sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 436.

STERNARCHIDAE.

Sternarchus leptorhynchus sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 439.

Porotergus gen. n. *gymnotus*, *gimbeli*, spp. n., Brit. Guiana, EIGENMANN t.c. p. 441.

CYPRINIDAE.

Die Weber'schen Knöchelchen bei den Cyprinoiden der schweizerischen Fauna, SACHS Revue Suisse Zool. 20.

Synopsis of genera of Russian Empire, BERG Faune de la Russe Poiss. 3 pp. 24-39.

Zezenia hilgendorfi figured, TANAKA Fish. Japan pls. xix f. 71 & xxi ff. 78 79.

Eustira maassi sp. n. Sumatra, WEBER & BEAUFORT in Maass Durch Zentral Sumatra 2 Fische p. 10.

Nuria danrica var. *grahami*, var. n. Meerut, CHAUDHURI Rec. Ind. Mus. 7 1912 p. 440 pl. xxxix f. 3.

Barilius bonarensis sp. n. W. Himalayas, CHAUDHURI t.c. p. 440 pl. xxxix f. 4.

Danio naganensis sp. n. Manipur, CHAUDHURI t.c. p. 441 pl. xl f. 1.

Amblypharyngodon saranensis sp. n. Saran, CHAUDHURI Rec. Ind. Mus. 7 1912 p. 440 pl. xxxix f. 2.

Aspiopsis gen. n. *merzbacheri* sp. n. Thian-Shan Mts. ZUGMAYER Ann. Mag. Nat. Hist. ser 8 9 1912 p. 682.

Aspius, on the Russian spp. BERG Faune de la Russe Poiss. 3 pp. 302-324 ff. 24-26.

Leucaspis delineatus descr. and fig., BERG t.c. p. 329 f. 27.

Pseudaspis leptocephalus descr. and fig., BERG t.c. p. 294 f. 22.

Aspiolucius esocinus descr. and fig., BERG t.c. p. 300 f. 32.

Rutilus, Russian spp. descr., BERG Faune de la Russe Poiss. 3 pp. 40-80.

R. rutilus caspicus f. 2a, *pigus* f. 2b, figured, BERG t.c.

Pararutilus subgen. n. (*Rutilus*) pro *R. frisio* (Russ. + lat. Diagn.), BERG (403) Faune de la Russie etc. St. Peterburg 1912 p. 43.

Acanthorutilus gen. n. (type *Oreoleuciscus dsapchynensis* Warp.), BERG t.c. p. 80.

Oreoleuciscus, Russian spp. descr., BERG t.c. pp. 80-90.

Leuciscus, Russian spp. descr. and fig., BERG Faune de la Russe Poiss. pp. 90-189 pls. i ff. 2-5 ii ff. 1-4.

Phoxinus, Russian spp. descr. and fig., BERG Faune de la Russe Poiss. pp. 189-268 pls. i ff. 6-9 ii ff. 5-9; *P. czekanowskii czerskii* subsp. n. Ussuri-Gebiet pp. 225-226 pl. i f. 6 6a, *brachyurus* Kreis Wernyj pp. 241-243 Textf. 16, *issykkulensis* Issyk-kul pp. 243-246 Textf. 17, spp. n. (Russ. + lat. Diagn.), BERG t.c.

Ctenopharyngodon idella descr. and fig., BERG Faune de la Russe Poiss. 3 p. 288 f. 20.

Myloleuciscus, gen. n. *atripinnis* sp. n., China, GARMAN Mem. Mus. Comp. Zool. 40 1912 p. 116.

Xenocypris nitidus sp. n. China, GARMAN t.c. p. 117.

Varicorhinus sandersi sp. n. Congo, BOULENGER Ann. Mus. Congo Zool. ser. 1 2 fasc. 3 1912 p. 11 pl. xix f. 11.

Barbus sauvagei sp. n. S. Africa, PELLEGRIN Bull. soc. zool. 37 1912 p. 107; *B. cardozoi* p. 12 pl. xx, *roylii* p. 13 pl. xxi, *aspius* p. 14 pl. xxii f. 1, *carens* p. 15 pl. xxii f. 2, spp. n., Congo, BOULENGER Ann. Mus. Congo Zool. ser. 1 2 fasc. 3 1912; *B. taricus cubanicus* subsp. n. Kuban, BERG Ann. Mus. zool. Ac. sc. 17 p. 120; *B. singhala* sp. n. Ceylon, DUNCKER Jahrb. Wiss. Anst. 29 1912 p. 263 fig.; *B. argyrotaenia* f. 1, *mimus* f. 2, spp. n., Brit. E. Africa, BOULENGER Proc. Zool. Soc. 1912 p. 674 pl. lxxix; *B. de Zwaani* p. 4, *hexazona* p. 6, spp. n., Sumatra, WEBER & BEAUFORT in Maass Durch Zentral. Sumatra 2 Fische; *B. habereri*, *squamosissimus*, spp. n., Cameroon, STEINDACHNER Anz. Akad. Wien 1912 p. 444.

Labeo percivali sp. n. Brit. E. Africa, BOULENGER Proc. Zool. Soc. 1912 p. 673 pl. lxxviii; *L. almorae* p. 438 pl. xxxviii f. 2, *kunki* p. 438 pl. xxxviii f. 3, *rilli* p. 439 pl. xxxviii f. 4, *tezpurensis* p. 439 pl. xxxix f. 1, spp. n., N. India CHAUDHURI Rec. Ind. Mus. 7 1912; *L. macmahoni* p. 597, *gedrosicus* p. 598, spp. n., Baluchistan, ZUGMAYER Ann. Mag. Nat. Hist. ser. 8 10 1912.

Scaphiodon daukesi sp. n. *watsoni belense* subsp. n. Baluchistan, ZUGMAYER Ann. Mag. Nat. Hist. ser. 8 10 1912 p. 596.

Ageneiogarra subgen. n. (*Garra imberba* sp. n. China, GARMAN t.c. p. 114.

Coripareius gen. n. type *C. cetopsis*, KNER, GARMAN t.c. p. 120.

Pseudogobio filifer sp. n. China, GARMAN, t.c. p. 121.

COBITIDAE.

Nemachilus manipurensis sp. n. Assam, CHAUDHURI Rec. Ind. Mus. 7 1912 p. 443 pls. xl f. 4 xli f. 1.

Nemachilus brahui p. 598, *baluchiorum* p. 599, spp. n., Baluchistan, ZUGMAYER Ann. Mag. Nat. Hist. ser. 8 10 1912.

Vaillantella maassi sp. n. Sumatra, WEBER & BEAUFORT in Maas Durch Zentral. Sumatra 2 Fische p. 11.

Botia lohachata sp. n. Bihar, CHAUDHURI Rec. Ind. Mus. 7 1912 p. 441 pl. xl f. 2.

Lepidocephalichthys annandalii sp. n. N. India, CHAUDHURI t.c. p. 442 pl. xl f. 3.

BAGRIDAE.

Parauchenoglanis ansorgii sp. n. Congo, BOULENGER Ann. Mus. Congo Zool. ser. 1 2 fasc. 3 1912 p. 20 pl. xxii f. 3.

Gephyroglanis habereri sp. n. Cameroon, STEINDACHNER Anz. Akad. Wien 1912 p. 449.

Chrysichthys filamentosus sp. n. Congo, BOULENGER Ann. Mus. Congo Zool. ser. 1 2 fasc. 3 1912 p. 19 pl. xviii f. 2; *C. habereri* p. 445, *thonneri* p. 446, spp. n., Cameroon, STEINDACHNER Anz. Akad. Wien 1912 p. 447.

Macrones menoda var. *trachacanthus*, synonymy and description pp. 210-211, CHAUDHURI Rec. Ind. Mus. vii pt. ii 1912.

Liocassis liacanthus sp. n. Sumatra, WEBER & BEAUFORT in Maass Durch Zentral. Sumatra 2 Fische p. 15.—*L. naso* sp. n. China, GARMAN Mem. Mus. Comp. Zool. 40 1912 p. 123.

Olyra kempfi sp. n. Assam, CHAUDHURI Rec. Ind. Mus. 7 1912 p. 443 pl. xli f. 4.

AMIURIDAE.

American catfishes: habits, culture and commercial importance, KENDALL Rep. U. S. Comm. Fish. 1908 pp. 3-39 pls. i-x.

AMPHILIIDAE.

Amphilius oxyrhinus sp. n. Brit. E. Africa, BOULENGER Proc. Zool. Soc. 1912 p. 675 pl. lxxx; *A. jacksonii* sp. n. Ruwenzori, BOULENGER Ann. Mag. Nat. Hist. (8) 10 1912 p. 602.

SCHILBEIDAE.

Schilbe congolensis sp. n. Cameroon, STEINDACHNER Anz. Akad. Wien 1912 p. 445.

Pseudeutropius atherinoides var. *Walkerii* var. n. Bihar, CHAUDHURI Rec. Ind. Mus. 7 1912 p. 444 pl. xli f. 3.

Ansorgia gen. n. *vittata* sp. n. Congo, BOULENGER Ann. Mus. Congo Zool. ser. 1 2 fasc. 3 1912 p. 17 pl. xix f. 2.

Physailia villiersi sp. n. Congo, BOULENGER l.c. pl. xvii f. 6.

PANGASIIDAE.

Pangasius de zwaani sp. n. Sumatra, WEBER & BEAUFORT in Maass Durch Zentral. Sumatra 2 Fische p. 14.

MOCHUCHIDAE.

Synodontis pfefferi sp. n. Cameroon, STEINDACHNER Anz. Akad. Wien 1912 p. 447.

Euchilichthys habereri sp. n. Cameroon, STEINDACHNER t.c. p. 447.

PIMELODIDAE.

Megalonema gen. n. *platycephalum* sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 150 pl. x f. 2; *M. xanthum* sp. n. Colombia, EIGENMANN Indiana Univ. Studies 1912 No. 8 p. 16.

Pseudopimelodus villosus p. 152 pl. x f. 1, *albomarginatus* p. 153 pl. xi f. 1, spp. n., Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912.

Microglanis gen. n. *poecilus* sp. n. Brit. Guiana, EIGENMANN t.c. p. 155 pl. xii f. 2.

Brachyglanis gen. n. *frenata*, p. 156, *melas* p. 157 pl. xi f. 2, *phalacra* p. 157 pl. xii f. 1 & xiii f. 1, spp. n., Brit. Guiana, EIGENMANN t.c.

Leptoglanis gen. n. *essequibensis* sp. n. Brit. Guiana, EIGENMANN t.c. p. 158 pl. xiii f. 2.

Myoglanis gen. n. *potaroensis* sp. n. Brit. Guiana, EIGENMANN t.c. p. 159 pl. xiv f. 1.

Chasmocranus gen. n. *longior* p. 160 pl. xiv f. 2, *brevior* p. 162 pl. xv f. 1, spp. n., Brit. Guiana, EIGENMANN t.c.

Pimelodella megalops p. 169 pl. xv f. 2, *macturki* p. 170 pl. xvi f. 1, spp. n., Brit. Guiana, EIGENMANN t.c.

Pimelodus heteropleurus sp. n. Brit. Guiana, EIGENMANN t.c. p. 176 pl. xvi f. 2.

DORADIDAE.

Leptodoras linnelli sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 191 pls. xvii f. 1 & xviii f. 2.

Hemidoras microstomus p. 193 pl. xviii f. 2, *micropoeus* p. 195, *leporhinus* p. 195 pl. xix f. 1, *notospilus* p. 196 pl. xix f. 2, spp. n., Brit. Guiana, EIGENMANN t.c.

Auchenipterus demerarae p. 202 pl. xxi f. 1, *brevior* p. 202, spp. n., Brit. Guiana, EIGENMANN t.c.

Tympanopleura gen. n. *piperata* sp. n. Brit. Guiana, EIGENMANN t.c. p. 203 pl. xx f. 3.

Ageniosus guianensis p. 204 pl. xxi f. 2, *marmoratus* p. 206 pl. xxii f. 1, spp. n., Brit. Guiana, EIGENMANN t.c.

ASPREDINIDAE.

Chamaigenes gen. n. type *Aspredo filamentosus* C. V., EIGENMANN Mem. Carnegie Mus. 5 1912 p. 120.

Xiliphius gen. n. *magdalenae* sp. n. Colombia, EIGENMANN Indiana Univ. Studies 1912 No. 8 p. 10.

Bunocephalus colombianus sp. n. Colombia, EIGENMANN l.c.—*B. amaurus* p. 126 pl. i f. 2, *chamaizelus* p. 127 pl. ii f. 1, spp. n., Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912.

Agmus gen. n. *lyriiformis* sp. n. British Guiana, EIGENMANN t.c. p. 128 pl. iii.

TRICHOMYCTERIDAE.

Hemicetopsis othonops sp. n. Colombia, EIGENMANN Indiana Univ. Studies 1912 No. 8 p. 17.—*H. macilentus* pl. xxiii f. 1, *minutus* pl. xxiii f. 2, spp. n., Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 211.

Gyrinurus batrachostoma descr., ANISITS Sitzungsber. Ges. natf. Freunde 1912 p. 465.

Vandellia wieneri, notes, PELLEGRIN Mission de l'Equateur 9 fasc. 2 p. 10 pl. i f. 2.

Pygidium bogotense, *caliense*, *chapmani*, p. 18, *banneai* p. 19, spp. n., Colombia, EIGENMANN Indiana Univ. Studies 1912 No. 8.—*P. conradi* p. 212, *gracilior* p. 213, spp. n., Brit. Guiana,

EIGENMANN Mem. Carnegie Mus. 5
1912.

Ochmacanthus gen. n. *flabellifer* sp. n.
Brit. Guiana, EIGENMANN t.c. p. 213.

CALLIOPTHYIDAE.

Corydoras, revision of the genus,
REGAN Ann. Mag. Nat. Hist. (8) 10
1912 pp. 209-220.—*C. micracanthus*
Argentina, *microcephalus* La Plata
p. 211, *polystictus* Upper Paraguay,
melanistius Essequibo p. 216, *undu-*
latus La Plata, *melanotaenia* Colombia,
p. 217, *macrosteus* San Paulo p. 219,
spp. n.; REGAN t.c.—*C. punctatus* Bl.
descr. and fig., EIGENMANN Mem. Car-
negie Mus. 5 1912 p. 220 pl. xxiv f. 3.

LORICARIIDAE.

Plecostomus hondae sp. n. Colombia,
REGAN Proc. Zool. Soc. 1912 p. 666
pl. lxxvi f. 3.—*P. hemiurus* sp. n.
Brit. Guiana, EIGENMANN Mem. Car-
negie Mus. 5 1912 p. 224 pl. xxv f. 1.

Hemiancistrus braueri sp. n. Brit.
Guiana, EIGENMANN t.c. p. 232 pl.
xxviii ff. 1-2.—*H. mayotoi* p. 10,
daguae p. 11, spp. n., Colombia, EIGEN-
MANN Indiana Univ. Studies 1912 No. 8.

Lasiancistrus caucanus sp. n. Colom-
bia, EIGENMANN t.c. p. 11.

Pseudancistrus nigrescens sp. n. Brit.
Guiana, EIGENMANN Mem. Carnegie
Mus. 5 1912 p. 234 pl. xxv f. 2.

Lithogenes villosus figured pl. xxvi
ff. 2-4, EIGENMANN t.c.

Corymbophanes andersoni figured pl.
xxvii ff. 1-3, EIGENMANN t.c.

Ancistrus lithurgicus sp. n. Brit.
Guiana, EIGENMANN t.c. p. 241 pl.
xxv f. 3.

Chaetostomus palmeri pl. lxxv f. 3.
lepturus pl. lxxv f. 1, *paucispinis*
pl. lxxv f. 2, spp. n. Colombia, REGAN
Proc. Zool. Soc. 1912 p. 667.—*C.*
aequinotialis fig., PELLEGRIN Mission
de l'Equateur 9 fasc. 2 p. 2 pl. i f. 3.

Xenocara heterorhynchus pl. lxxvi
f. 2 Peru, *multispinis* pl. lxxvi f. 1
Sta. Catherina, spp. n., REGAN t.c.
p. 668.—*X. macrophthalma* sp. n.
Orinoco, PELLEGRIN Bull. soc. zool.
37 1912 p. 271 fig.

Lithoxus gen. n. *lithoides* sp. n.
Brit. Guiana, EIGENMANN t.c. p.
242 pl. xxix ff. 1-4.

(N-9210 b)

Otocinchus maculipinnis sp. n. La
Plata, REGAN t.c. p. 668 pl. lxxvii
f. 3.

Loricaria gymnogaster, fimbriata, p. 12,
spp. n., *filamentosa seminuda, latiora*,
p. 13, subspp. n., Colombia, EIGEN-
MANN Indiana Univ. Studies 1912 No. 8.

Loricariichthys microdon pls xxx. f 1
& xxxii f. 1, *griseus* pls. xxx f. 2 &
xxxii f. 2, *brunneus* pls. xxx f. 3 &
xxxii f. 4, *platyurus* pls. xxx f. 4 & xxxi
f. 3, *stewarti* pl. xxx f. 5, figured,
EIGENMANN Mem. Carnegie Mus. 5
1912.

Oxyloricaria tamanae pl. lxxvii f. 1,
leightoni pl. lxxvii f. 2, spp. n., Colombia,
REGAN t.c. p. 669.

Farlowella hargreavesii sp. n. Brit.
Guiana, EIGENMANN t.c. p. 252 pl.
xxxii f. 3.

Arges cirratus sp. n. Colombia, REGAN
t.c. p. 670.—*A. regani* p. 3 pl. i f. 5,
vaillanti p. 8 pl. i f. 4 descr. and fig.,
PELLEGRIN Mission de l'Equateur 9
fasc. 2.—*A. marmoratus*, climbing
habits, JOHNSON Ann. N. Y. Acad. 22
1912 pp. 327-333 figs.

Cyclopium chapmani p. 13, *trifas-*
ciatum p. 14, *unifasciatum, ventrale*,
p. 15, spp. n., Colombia, EIGENMANN
Indiana Univ. Studies 1912 No. 8.

INIOMI.

MYCTOPHIDAE.

†*Otolithus (Scopelus) pulcher* sp. n.
Pliocene of Corsica, PRIEM Bull. soc.
géol. France ser. 4 11 1911 p. 45 f. 9.

†DERCETIDAE.

†*Anguillavus quadripinnis* may belong
to this family, REGAN Ann. Mag.
Nat. Hist. (8) 10 1912 p. 380.

ALEPIDOSAURIDAE.

†*Apatcodus striatus* figured, WOOD-
WARD Monogr. Palacont. Soc. pl. liv
f. 4.

ATELEOPIIDAE.

Parateleopus gen. n. *microstomus*
sp. n. Makyan Is., RADCLIFFE Proc.
U. S. Nat. Mus. 43 1912 p. 139 fig.

e 5-3

APODES.

Osteology and classification, REGAN Ann. Mag. Nat. Hist. (8) 10 1912 pp. 377-387 figs.

Biology of N. Atlantic species of Eels, SCHMIDT Nath. Medd. 64 1912 pp. 39-51 figs.

†URENCHELIDAE.

†*Anguillavus* restricted to *A. bathshebae*, REGAN Ann. Mag. Nat. Hist. (8) 10 1912 p. 380.

ANGUILLIDAE.

Anguilla vulgaris, spawning places, SCHMIDT Fischerbote Hamburg 4 1912 pp. 201-209; Nature 89 1912 p. 633; biology, SCHMIDT Skr. Havunders. Kobenhavn 1912 No. 8 pp. 1-33 figs.; Intern. Rev. Hydrobiol. Leipzig 5 1912 pp. 317-342 6 pls.

A. anguilla, uova e prelarve, GRASSI Mem. Com. talassogr. ital. 1 1910 pp. 1-16 pl. i.—*A. spengeli* n. n. für *malgumora* Schlegel, WEBER Zool. Jahrb. Suppl. 15 1912 p. 591.

XENOCONGRIDAE.

Xenoconger gen. n. *fryeri* sp. n. Assumption, REGAN Trans. Linn. Soc. 15 pt. 2 1912 p. 301.

HETERENCHELIDAE.

Heterenchelys gen. n. *microphthalmus*, *macrurus*, spp. n., W. Africa, REGAN Ann. Mag. Nat. Hist. (8) 10 1912 p. 323.

MURAENIDAE.

Gymnothorax woodwardi sp. n. W. Australia, MCCULLOCH Rec. W. Austral. Mus. 1 p. 80 fig.—*G. odiosus* pl. li f. 2, *chlamydatus* pl. lxii f. 1, figured, SNYDER Proc. U. S. Nat. Mus. 42 1912.

Muraena helena, sviluppo, GRASSI Mem. com. talassogr. ital. 1 1910 pp. 1-16.

CONGRIDAE.

Leptocephalus flavirostris figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. li f. 1.

Conger (*Leptocephalus*) *malabaricus*, *metamorphosis*, DEAN New York N.Y.

Ann. N. York Acad. 22 pp. 321-326 ff. 1-9.

Uroconger lepturus, note, SEWELL Rec. Ind. Mus. 7 1912 pl. i No. 1 p. 12.

OPHIOTHYIDAE.

Myrichthys rupestris sp. n. Riu Kiu Is., SNYDER Proc. U. S. Nat. Mus. 42 1912 p. 490.

Callechelys guichenoti Kaup re-described, PELLEGRIN Bul. Mus. Paris 1912 No. 4 p. 2.

LYOMERI.

Osteology and classification, REGAN Ann. Mag. Nat. Hist. (8) 10 1912 pp. 347-349 figg.

MICROCYPRIINI.

POECILIIDAE.

Rivulus, revision of the genus, REGAN Ann. Mag. Nat. Hist. (8) 10 1912 pp. 495-505.—*R. strigatus* Amazon p. 502, *brevis* Colombia p. 504, spp. n., REGAN t.c.; Brit. Guiana spp. figured, EIGENMANN Mem. Carnegie Mus. 5 1912 pls. lxiii lxiv.

Cynolebias, revision of the genus, REGAN t.c. pp. 505-508; sexual differences, REGAN t.c. pp. 641-642.—*C. melanotaenia* p. 506, Paranagua, *nigripinnis* p. 508, La Plata, spp. n., REGAN t.c.

Cynopoecilus gen. n. type *Cynolebias melanotaenia*, REGAN t.c. p. 642.

Haplochilus katangae sp. n. Katanga, BOULENGER Rev. Zool. Af. 2 1912 p. 47.

Gambusia umbratilis p. 70, *turru-barensis*, *parismina*, p. 71, spp. n., Costa Rica, MEEK Field Mus. Publ. Zool. 10 1912.—*G. nigroventralis* sp. n. Colombia, EIGENMANN Indiana Univ. Studies 1912 No. 8 p. 26.

Heterandria colombianus sp. n. Colombia, EIGENMANN t.c. p. 27.

Poecilia pittieri sp. n. Costa Rica, MEEK t.c. p. 71.

Acanthophaelus melanzonus, *bifurcus*, figured, EIGENMANN t.c. pls. lxiv lxv.

Girardinus poecilioides, breeding habits, BOULENGER Proc. Zool. Soc. 1912 p. 906.

Petalurichthys gen. n. = *Petalosoma*
Regan nec Lewis, REGAN t.c. p. 494.

Tomeurus gracilis figured, EIGEN-
MANN t.c. pl. lxxv ff. 7 8.

Alfaro gen. n. near *Tomeurus acu-*
tiventralis sp. n. Costa Rica, MEEK
t.c. p. 72.

SYNENTOGNATHI.

SCOMBRESOCIDAE.

Cololabis saira figured, TANAKA
Fish. Japan pl. xvii.

HEMIRHAMPHIDAE.

Hemirhamphus (Dermatogenys) chr-
hardtii p. 187, *hageni* p. 190, spp. n.,
Celebes, POPTA Notes Leyden Mus.
34 1912.

Dermatogenys pusillus, anal fin of
male, BEAN & WEED Proc. U. S. Nat.
Mus. 42 1912 p. 596 fig.

Hemirhamphus (Zenarchopterus)
rasori sp. n. Celebes, POPTA t.c. p. 192.

ANACANTHINI.

GADIDAE.

†*Otolithus (Gadus)* aff. *elegans* var.
sculpta figured, PREM Bull. soc. géol.
France ser. 4 11 1911 p. 40 ff. 2 3.

Physiculus nigrescens sp. n. Philip-
pines, RADCLIFFE Proc. U. S. Nat.
Mus. 43 1912 p. 105 pl. xxii f. 1.

MACRURIDAE.

Regania filamentosa p. 107 pl. xxii
f. 2 Borneo, *sulcata* p. 108 pl. xxii f. 3
Jolo Sea, spp. n.; RADCLIFFE Proc.
U. S. Nat. Mus. 43 1912.

Coelorhynchus macrorhynchus p. 127
pl. xxix f. 1, *commutabilis* p. 128 pl.
xxix f. 2, *platorhynchus* p. 133 pl.
xxx f. 1, *acutirostris* p. 134 pl. xxx f. 2,
notatus p. 136 pl. xxx f. 3, *argentatus*
p. 137 pl. xxxi f. 1, spp. n., Philippines,
RADCLIFFE t.c.

Mataeocephalus nigrescens p. 125
pl. xxviii f. 2, *adustus* p. 126 pl. xxviii
f. 3, spp. n., Philippines, RADCLIFFE
t.c.

Macrurus lucifer p. 113 pl. xxiv f. 1,
nigromarginatus p. 114 pl. xxiv f. 2,
macronemus p. 115 pl. xxiv f. 3, *para-*
doxus p. 115 pl. xxv f. 1, *microps* p.

116 pl. xxv f. 2, *dubius* p. 117 pl. xxv
f. 3, *asprellus* p. 118 pl. xxvi f. 1,
proximus p. 119 pl. xxvi f. 2, *aequatoris*
p. 120 pl. xxvi f. 3, *hyostomus* p. 121
pl. xxvii f. 1, *camurus* p. 122 pl. xxvii
f. 2, *orthogrammus* p. 123 pl. xxvii f. 3,
parvipes p. 124 pl. xxviii f. 1, spp. n.,
Philippines, RADCLIFFE t.c.—*M. brevi-*
rostris = *nasutus*, SEWELL Rec. Ind.
Mus. 7 1912 Pt. 1 No. 1 p. 9.

Hymenocephalus longipes p. 109
pl. xxiii f. 1, *torvus* p. 110 pl. xxiii f. 2,
longiceps p. 111 pl. xxiii f. 3, spp. n.,
Philippines, RADCLIFFE t.c.

Chalinura spinulosa sp. n. Kamchatka
GILBERT & BURKE Bull. U. S. Bur.
Fish. 30 p. 92 f. 36.

Ateleobrachium gen. n. *pterotum* sp. n.
Kamchatka, GILBERT & BURKE t.c.
p. 94 f. 37.

Macruroides gen. n. *inflaticeps* sp. n.
Philippines, RADCLIFFE Proc. U. S.
Nat. Mus. 43 1912 p. 139 pl. xxxi f. 2.

SOLENICHTHYES.

AMPHISILIDAE.

Centriscus [Amphisile] cristatus
descr., OGILBY Ann. Queensland Mus.
10 1911 p. 41.

SYNGNATHIDAE.

Syngnathidae of Ceylon, DUNCKER
Spolia Zeylan. 7 pt. 25 1910 pp. 25-34
1 pl.

On the subfamilies and genera,
DUNCKER Jahrb. wiss. Anst. Hamburg
29 1912 pp. 219-240.

Acanthognathus gen. n. type *A.*
dactylophorus Bleek., DUNCKER t.c. p.
228.

Micrognathus gen. n. type *M.*
brevirostris Rüpp., DUNCKER t.c. p. 235.

Doryichthys ocellatus sp. n. Ceylon,
DUNCKER *Spolia Zeylan.* 7 pt. 25 1910
p. 28 fig.—*D. stictorhynchus* sp. n.
Queensland, OGILBY Mem. Queensland
Mus. 1 1912 p. 34.

Siphostoma torrei sp. n. Cuba, NICHOLS
Bull. Amer. Mus. 31 1912 p. 183 fig.

Urocampus southwelli sp. n. Ceylon,
DUNCKER t.c. p. 30 fig.

Corythoichthys quinquarius figured,
SNYDER Proc. U. S. Nat. Mus. 42

1912 pl. lii f. 1.—*C. poecilolaemus* figured, McCULLOCH Rec. W. Austral. Mus. 1 1912 p. 81 f. 2.

Syngnathus tigris figured, McCULLOCH t.c. p. 83 pl. xi f. 2.—*S. yoshi* figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. li f. 3.—*S. spicifer*, *argyrostictus*, notes, DUNCKER t.c. p. 31.—*S. acus*, development of pectoral arch, BUIST Ann. Mag. Nat. Hist. ser 8 10 1912 pp. 613-621 pl. xiii.

Microphis extensus pl. lxii f. 2, *ocellatus* pl. lxiii f. 1, figured, SNYDER Proc. U. S. Nat. Mus. 42 1912.

Ichthyocampus nox figured, SNYDER t.c. pl. lxii f. 2.

Nannocampus nanus sp. n. Bahama Is., ROSÉN Lund Univ. Årsskr. N.F. 7 Afd. 2 No. 3 p. 50 fig. 4.

BERYCOMORPHI.

POLYMIXIIDAE.

†*Omosoma sahelamae* descr. and fig., ERASMO Riv. ital. Pal. 18 1912 p. 97 pl. iii f. 5.

†*Pycnosterinx russegeri*, *auratus*, descr. and fig., ERASMO Riv. ital. Pal. 18 1912 pp. 93-97 pl. iii ff. 1-4.

†BERYCOPSIDAE.

†*Berycopsis elegans* figured, WOODWARD Monogr. Palaeont. Soc. pl. liii f. 1.

CARISTIIDAE.

Platyberyx = *Caristius*, REGAN Ann. Mag. Nat. Hist. (8) 10 1912 p. 637.

ZEOMORPHI.

ZEIDAE.

Oreosoma atlanticum descr. fr. N. Zealand, WAITE Trans. N. Zeal. Inst. 44 p. 197 pl. xi.

Parazenopsis gen. n. *argenteus* sp. n. Morocco, CLIGNY Ann. stat. aquic. Boulogne-sur-Mer 2 1912 p. 82 = *Zeus conchifer*, Lowe, CLIGNY, t.c. p. 104.

PERCOMORPHI.

PERCOIDEA.

SERRANIDAE.

†*Otolithus (Percidarum) aequalis* var. *burdigalensis* var. n. Miocene of Bordeaux, PRIEM Bull. soc. géol. France ser. 4 11 1911 p. 41 f. 4.

Epinephelus estuarius descr., OGILBY Ann. Queensland Mus. 10 1911 p. 50.

Siniperca kneri sp. n. Ichang, GARMAN Mem. Mus. Comp. Zool. 40 1912 p. 112.

Bostockia hemigramma figured, McCULLOCH Rec. W. Austral. Mus. 1 1912 pl. x f. 3.

Anthias louisi sp. n. Bermuda Is., BEAN Proc. Biol. Soc. Washington 25 p. 124.

Pseudanthias venator figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. liii f. 1.

KUHLIDAE.

Kuhlia, Japanese spp., JORDAN & THOMPSON Proc. U. S. Nat. Mus. 41 1912 pp. 521-526.—*K. humilis* descr. and fig., OGILBY Ann. Queensland Mus. 10 1911 p. 46.

Sajole nom. n. = *Boulengerina* Jordan nec Dollo, JORDAN Proc. U. S. Nat. Mus. 42 1912 p. 655.

Edelia vittata figured, McCULLOCH Rec. W. Austral. Mus. 1 1912 pl. x f. 2.

PLESIOPIDAE.

Paraplesiops meleagris figured, McCULLOCH Rec. W. Austral. Mus. 1 1912 pl. ix.

Trachinops taeniatus, occurrence in Tasmania, HALL Proc. Roy. Soc. Tasmania 1911 p. 32.

Acanthoclinus is related to *Plesiops*, REGAN Ann. Mag. Nat. Hist. (8) 10 1912 p. 266.

Acanthoplesiops gen. n. type *Acanthoclinus indicus* Day, REGAN l.c.

PRIACANTHIDAE.

Japanese spp., JORDAN & THOMPSON Proc. U. S. Nat. Mus. 41 1912 pp. 527-535.

CHILODIPTERIDAE.

Apogonichthys najae figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. lxiii f. 2.

Amia berthae p. 47 pl. v f. 1, *nigripes* p. 49 pl. v f. 2, spp. n., Queensland, OGILBY Ann. Queensland Mus. 10 1911.—*Amia diencaea* p. 431 pl. xxxiv f. 1 *parvula* p. 432 pl. xxxiv f. 2, *hyalina* p. 433 pl. xxxvi f. 3, *diversa*

p. 434 pl. xxxvii f. 1, *nigrocincta* p. 435 pl. xxxvii f. 2, *uninotata* p. 436 pl. xxxiv f. 3, *striata* p. 437 pl. xxxv f. 1, *albomarginata* p. 438 pl. xxxv f. 2, *atrogaster* p. 439 pl. xxxv f. 3, spp. n., Philippines, RADCLIFFE Proc. U. S. Nat. Mus. 41 1912.

Amioides subgen. n. (*Amia*) *gros-sidens* sp. n. Philippines, RADCLIFFE t.c. p. 440 pl. xxxvi f. 1.

Neamia gen. n. *octospina* sp. n. Philippines, RADCLIFFE t.c. p. 441 pl. xxxvi f. 2.

Chilodipterus nigrotaeniatus p. 442 pl. xxxvii f. 3, *zonatus* p. 443 pl. xxxviii f. 1, spp. n., Philippines, RADCLIFFE t.c.

Synagrops serratospinosa sp. n. Philippines, RADCLIFFE t.c. p. 444 pl. xxxviii f. 2.

Hynnodus megalops sp. n. Philippines, RADCLIFFE t.c. p. 445 pl. xxxviii f. 3.

Parasphyraenops gen. n. *atrimanus* sp. n. Bermuda Is., BEAN Proc. Biol. Soc. Washington 25 p. 124.

CARANGIDAE.

Eleria philippina = *Scombroides lysan*, BEAN & WEAD Proc. U. S. Nat. Mus. 42 1912 p. 602.

Caranx, notes on Cuban spp., NICHOLS Bull. Amer. Mus. 31 1912 p. 185.

LATILIDAE.

Latilus ruber Kishinouye descr., SNYDER Proc. U. S. Nat. Mus. 42 1912 p. 417.

SILLAGINIDAE.

Sillago bostockii figured, McCULLOCH Rec. W. Austral. Mus. 1 1912 pl. x f. 1.

ERYTHRICHTHYIDAE.

Erythrichthys scintillans sp. n. Hawaii, JORDAN & THOMPSON Proc. U. S. Nat. Mus. 41 1912 p. 599.

LUTIANIDAE.

Platynius amoenus figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. lxiii f. 3.

NEMIPTERIDAE.

Heterognathodon doederleini Beschreibung, PIETSCHMANN Ann. Hofmus. Wien 25 1911 p. 431.

POMADASIDAE.

Japanese spp., JORDAN & THOMPSON Proc. U. S. Nat. Mus. 41 1912 pp. 542-557.

LIOGNATHIDAE.

Xystaema havana sp. n. Cuba, NICHOLS Bull. Amer. Mus. 31 1912 p. 189.

Liognathus hastatus p. 58, *moretoniensis* p. 59, spp. n., Queensland, OGILBY Mem. Queensland Mus. 1 1912.

SCIAENIDAE.

†*Otolithus (Sciaenidarum) corii* var. *Cossmanni* var. n. p. 42 ff. 5 6, *pyrenaicus* sp. n. p. 43 f. 7, Helvetian Basses-Pyrénées, PRIEM t.c.

†*Otolithus (Sciaena)* aff. *ovatus* var. *Grossourei* var. n. Miocene of France, PRIEM Bull. soc. géol. France ser. 4 11 1911 p. 39 fig. 1.

LETHRINIDAE.

Lethrinus laticaudis redescr., OGILBY Mem. Queensland Mus. 1 1912 p. 52.

Pentapus formosulus figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. lxiv f. 1.

SPARIDAE.

Japanese spp., JORDAN & THOMPSON Proc. U. S. Nat. Mus. 41 1912 pp. 557-588.

Evynnis gen. n. type *Pagrus cardinalis*, JORDAN & THOMPSON Proc. U. S. Nat. Mus. 41 1912 p. 573.

KYPHOSIDAE.

Japanese spp., JORDAN & THOMPSON Proc. U. S. Nat. Mus. 41 1912 pp. 588-597.

Kyphosus gibsoni sp. n. Queensland, OGILBY Mem. Queensland Mus. 1 1912 p. 50.

PEMPHERIDAE.

Catalufa umbra figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. lii f. 3.

CHAETODONTIDAE.

Chaetodon aurora De Vis = *falcula* Bl. *nigripes* De Vis = *citrinellus* C. & V. *germanus* De Vis = *pelewensis* Kner, OGILBY Mem. Queensland Mus. 1 1912 p. 54.

Holacanthus spynx De Vis = *cyanotis*
Gthr., OGILBY l.c.

H. potteri sp. n. Honolulu, JORDAN
& METZ Proc. U. S. Nat. Mus. 42 1912
p. 525 pl. lxxi f. 1.

ENOPLOSIDÆ.

Enoplosus serotinus sp. n. Queensland,
DE VIS Ann. Queensland Mus. 10
1911 p. 29.

CICHLIDÆ.

Nannacara taenia sp. n. Amazon,
REGAN Ann. Mag. Nat. Hist. (8) 9
1912 p. 505.—*N. bimaculata* sp. n.
Brit. Guiana, EIGENMANN Mem. Car-
negie Mus. 5 1912 p. 488 pl. lxvi f. 1.

Aequidens potaroensis sp. n. Brit.
Guiana, EIGENMANN t.c. p. 490 pl. lxvi
f. 2.—*A. azurifer* sp. n. W. Ecuador,
FOWLER Proc. Acad. Philad. 63 1911
p. 515 f. 7.

Acarichthys gen. n. type *Acara*
heckelii M. & T., EIGENMANN, t.c. p. 500.

Heterogramma ortmanni sp. n. Brit.
Guiana, EIGENMANN t.c. p. 506 pl.
lxviii f. 1.

Geophagus pellegrini p. 505, *hondae*
p. 506, spp. n., Colombia, REGAN t.c.

Crenicichla alta sp. n. Brit. Guiana,
EIGENMANN t.c. p. 516 pl. lxviii f. 3.

Cichlosoma (Parapetenia) atromacu-
latum sp. n. Colombia, REGAN t.c. p.
507.

Cichlasoma tuba, spilotum, spp. n.,
Costa Rica, MEEK Field Mus. Publ.
Zool. 10 1912 p. 73.

Neetroplus fluviatilis sp. n. Costa
Rica, MEEK t.c. p. 74.

Pelmatochromis arnoldi sp. n. Niger,
BOULENGER Ann. Mag. Nat. Hist.
(8) 10 1912 p. 263.

Paratilapia habereri sp. n. Cameroon,
STEINDACHNER Anz. Akad. Wien 1912
p. 448.

Tilapia kafuensis Rhodesia, *eduar-*
diana Ruwenzori, p. 138, *macrochir*
Zambesi and L. Bangwelu p. 139,
spp. n., BOULENGER Ann. Mag. Nat.
Hist. ser. 8 10 1912.

T. grahami n. sp. Brit. E. Africa,
BOULENGER ib. 9 1912 p. 519.—
T. percivali sp. n. Brit. E. Africa,
BOULENGER Proc. Zool. Soc. 1912
p. 676 pl. lxxix f. 3.

POMACENTRIDÆ.

Chromis verater sp. n. Honolulu,
JORDAN & METZ Proc. U. S. Nat.
Mus. 42 1912 p. 526 pl. lxxi f. 2.

Abudefduf clarki pl. liii f. 2, *richard-*
soni pl. lxiv f. 2, *rex* pl. lxiv f. 3, *rhoma-*
leus pl. lxv f. 1, figured, SNYDER Proc.
U. S. Nat. Mus. 42 1912.

LABRIDÆ.

Pseudolabrus parilus p. 90 pl. xii,
bostockii p. 91 pl. xi f. 1, figured,
McCULLOCH Rec. W. Austral. Mus. 1
1912.

Lepidalois mirabilis figured, SNYDER
Proc. U. S. Nat. Mus. 42 1912 pl. lxvi
f. 1.

Choerodon weberi sp. n. Aru Is.,
OGILBY Ann. Queensland Mus. 10
1911 p. 52.—*C. jordani* figured, SNYDER
Proc. U. S. Nat. Mus. 42 1912 pl. lxv
f. 2.

SCARIDÆ.

Callyodon lunula pl. lxvi f. 2, *bowersii*
pl. lxvi f. 3, *oedema* pl. lxvii f. 1,
figured, SNYDER Proc. U. S. Nat. Mus.
42 1912.

Pseudoscarus plumbeus sp. n. Ber-
muda Is., BEAN Proc. Biol. Soc.
Washington 25 p. 125.

GADOPSIDÆ.

Gadopsis is a Percoid, REGAN Ann.
Mag. Nat. Hist. (8) 10 1912 p. 266.

BATHYMASTERIDÆ.

Bathymaster caeruleofasciatus sp. n.
Bering Sea, GILBERT & BURKE Bull.
U. S. Bur. Fish. 30 p. 84 f. 29.

PARAPERCIDIDÆ.

Neopercis macrophthalma sp. n. For-
mosa, PIETSCHMANN Ann. Hofmus.
Wien 25 1911 p. 431.

CALLIONYMIDÆ.

Draculo mirabilis figured, SNYDER
Proc. U. S. Nat. Mus. 42 1912 pl. lxi
f. 2.

Callionymus macdonaldi sp. n.
Queensland, OGILBY Ann. Queensland
Mus. 10 1911 p. 56 pl. vi f. 2.

BOVICHTHYIDAE.

Cottoperca macrocephala sp. n. Patagonia, ROULE & DESPAX Bull. Mus. Paris 1911 p. 277.

NOTOTHENIIDAE.

Notothenia lepidorhinus sp. n. Kaiser Wilhelm II. Land, PAPPENHEIM Deutsch. Südpolar Exped. 13 Zool. 5 1912 p. 169 pls. ix f. 1 & x f. 1.

Trematomus brachysoma sp. n. Kaiser Wilhelm II. Land, PAPPENHEIM t.c. p. 172.

MUGILOIDEA.

MUGILIDAE.

Agonostomus bryanti sp. n. Java, BEAN & WEED Proc. U. S. Nat. Mus. 42 1912 p. 597 fig.

Mugil pseudotelestes sp. n. Schatt el Arab, PIETSCHMANN Anz. Akad. Wien 1912 p. 268.

ATHERINIDAE.

Atherina pinguis p. 38 pl. xii f. 1, *lacunosa* p. 40 pl. xii f. 2, figured, *A. honoriae* p. 42 pl. xii f. 3 sp. n. Queensland, OGILBY Mem. Queensland Mus. 1 1912; *A. mugiloides* nom. n. = *A. punctata* De Vis nec Bennett, McCULLOCH Proc. R. Soc. Queensland 24 1912 p. 47 fig.

Craterocephalus gen. n. *fluvialitis* sp. n. N.S. Wales, McCULLOCH t.c. p. 48 pl. i f. 1.

C. maculatus Macleay figured, McCULLOCH t.c. pl. i f. 2.

POLYNEMOIDEA.

POLYNEMIDAE.

Polydactylus specularis descr., OGILBY Ann. Queensland Mus. 10 1911 p. 44.

STROMATEOIDEA.

STROMATRIDAE.

Cubiceps capensis nel Golfo di Genova, ARIOLA Rivista mens. Pesca 7 pp. 185-192 1 tav.

Eurumetopos johnstonii descr. fr. Chatham Is., WAITE Trans. N. Zeal. Inst. 44 p. 200 pl. xii.

Centrolophus britannicus descr. fr. France, PELLEGRIN Bull. soc. zool. 37 1912 pp. 20-23.

Eucrotus gen. n. *ventralis* sp. n. Bermuda Is., BEAN Proc. Biol. Soc. Washington 25 p. 123.

ANABANTOIDEA.

ANABANTIDAE.

Anabas ansorgii sp. n. Congo, BOULENGER Ann. Mus. Congo Zool. ser. 1 2 fasc. 3 1912 p. 23 pl. xvii f. 7.

TRICHUIROIDEA.

GEMPYLIDAE.

Jordanidia raptoria figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. lii f. 2.

SCOMBROIDEA.

SCOMBRIDAE.

Acanthocybium forbesi sp. n. Philippines, SEALE Philippine Journ. Sci. D. 7 No. 4 1912 p. 283 fig.

SIGANOIDEA.

SIGANIDAE.

Siganus consobrinus p. 54 pl. xiii. *aurolineatus* p. 56, spp. n. Queensland, OGILBY Mem. Queensland Mus. 1 1912.

GOBIODEA.

ELEOTRIDAE.

Eleotris fortis sp. n. Formosa, TANAKA Fish. Japan p. 106 pls. xxvii ff. 108 & 109 xxviii f. 113.—*E. latifasciatus* sp. n. Panama, MEEK & HILDEBRAND Publ. Field Mus. Zool. 10 1912 p. 68.

Parioglossus gen. n. *taeniatus* sp. n. Aldabra, REGAN Trans. Linn. Soc. 15 pt. 2 1912 p. 302.

Dormitator gymnocephalus sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 523.

Xenisthmus proriger figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. lxxviii f. 3.

GOBIIDAE.

Nematogobius ansorgii figured, BOULENGER Ann. Mus. Congo Zool. ser. 1 2 fasc. 3 pl. xvii f. 8.

Awaous macropterus sp. n. Ceylon, DUNCKER Jahrb. wiss. Anst. 29 1912 p. 252 fig.

Garmannia rubra sp. n. Bahama Is., ROSÉN Lund Univ. Årsskr. N.F. 7 Afd. 2 No. 5 p. 63 fig. 1.

Mucogobius gen. n. type *Gobius mucosus* Günth., McCULLOCH Rec. W. Austral. Mus. 1 1912 p. 93.

Gobius (Cryptocentrus) stigmatophorus sp. n. Waigeu, BEAUFORT Zool. Anz. 39 1912 p. 136.

Gobius (Rhinogobius) scapulopunctatus sp. n. Waigeu, BEAUFORT t.c. p. 137.

Schismatogobius gen. n. *bruynisi* sp. n. R. Eme, Ceram, BEAUFORT t.c. p. 139.

Sicyopterus longifilis p. 140, *brevis* p. 141, spp. n., Ceram, BEAUFORT t.c.

Sicyopus multisquamatus sp. n. Ceram, BEAUFORT t.c. p. 142.

Doryptena okinawae, pl. lxxvii f. 2, *tanegasimae* pl. lix f. 2, figured, SNYDER Proc. U. S. Nat. Mus. 42 1912.

Heteroleotris arenarius figured, SNYDER t.c. pl. lxxvii f. 3.

Zonogobius boreus figured, SNYDER t.c. pl. lix f. 3.

Gnatholepis sindonis figured, SNYDER t.c. pl. lxxviii f. 1.

Amblygobius naraharæ figured, SNYDER t.c. pl. lxxviii f. 2.

Clariger exilis figured, SNYDER t.c. pl. lx f. 1.

Inu koma f. 2, *ama* f. 3, figured, SNYDER t.c. pl. lx.

Expedio parvulus figured, SNYDER t.c. pl. lxi f. 1.

Aspasma minima f. 2, *misakia* f. 3, figured, SNYDER t.c. pl. lxix.

BLENNIOIDEA.

Osteology and classification, REGAN Ann. Mag. Nat. Hist. (8) 10 pp. 265-280 figg.

BLENNIIDAE.

Alticus margaritarius pl. lxi f. 3, *novemmaculosus* pl. lxix f. 3, figured, SNYDER Proc. U. S. Nat. Mus. 42 1912.

Salarias aldabrensis sp. n. Aldabra, REGAN Trans. Linn. Soc. 15 pt. 2 1912

p. 302.—*S. muscarus* f. 1, *sinuosus* f. 2, figured, SNYDER t.c. pl. lxx.

Enchelyurus hepburni figured, SNYDER t.c. pl. lxx f. 3.

CONGROGADIDAE.

Synopsis of the genera, REGAN Ann. Mag. Nat. Hist. (8) 10 1912 p. 268.

NOTOGRAPTIDAE.

Blanchardia maculata Casteln. = *Notograptus guttatus* Günth., OGILBY Mem. Queensland Mus. 1 1912 p. 216.

CLINIDAE.

Calliblennius nom. n. for *Zacalles* Jord. & Snyder, BARBOUR Proc. Biol. Soc. Washington 25 p. 187.

Emblemaria markii sp. n. Bermuda Is., BEAN Proc. Biol. Soc. Washington 25 p. 126.

Auchenopterus grandicornis sp. n. Bahama Is., ROSÉN Lund Univ. Årsskr. N.F. 7 Afd. 2 No. 5 p. 69 fig.

XIPHIDIONTIDAE.

Xiphistes versicolor sp. n. Bering Sea, GILBERT & BURKE Bull. U. S. Bur. Fish. 30 p. 88 f. 33.

STICHAEIDAE.

Gumnoclinus gen. n. type *cristulatus* sp. n. Bering Sea, GILBERT & BURKE Bull. U. S. Bur. Fish. 30 p. 86 f. 30.

Alectridium gen. n. near *Alectrias* type *aurantiacum* sp. n. Bering Sea, GILBERT & BURKE t.c. p. 87 f. 31.

Anoplarchus insignis sp. n. Bering Sea, GILBERT & BURKE t.c. p. 88 f. 32.

ZOAROIDAE.

Lycodes bothriocephalus p. 178 pl. x f. 2, *brachycephalus* p. 179 pl. x f. 3, spp. n. Kaiser Wilhelm II Land, PAPPENHEIM Deutsch. Südpolar Exped. 13 Zool. 5 1912.—*L. concolor* sp. n. Antarctic, ROULE & DESPAX Bull. Mus. Paris 1911 p. 280.—*L. camchaticus* sp. n. Kamchatka, GILBERT & BURKE Bull. U. S. Bur. Fish. 30 p. 89 f. 34.

Lycodichthys antarcticus figured, PAPPENHEIM t.c. pls. ix f. 6 & x f. 4.

FIERASFERIDAE.

Fierasfer frantii sp. n. Celebes, POPTA Notes Leyden Mus. 34 1912 p. 185.

SCLEROPAREI.

SCORPAENIDAE.

Scorpaena, key to Australian species, p. 94, *S. sumptuosa* figured pl. xiii, McCULLOCH Rec. W. Austral. Mus. 1 1912.

Sebastes tanakae figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. liv f. 2.

Pontinus microlepis sp. n. Bermuda Is., BEAN Proc. Biol. Soc. Washington 25 p. 125.

Apistops gen. n. type *Apistus caloundra*, OGILBY Ann. Queensland Mus. 10 1911 p. 54.

TRIGLIDAE.

Trigla Morphologie der vorderen paarigen Extremitäten, BELLING Moskva Bull. Soc. nat. 1911 1-3 pp. 46-92 pl. ii-iii textf. 1-3.

Lepidotrigla kishinouyi figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. lvi f. 3.

Paratrigla gen. n. type *Trigla pleuracanthica*, OGILBY Ann. Queensland Mus. 10 1911 p. 56.

HEXAGRAMMIDAE.

Hexagrammus aburaco = *otakii*, SNYDER Proc. U. S. Nat. Mus. 42 1912 p. 429 pl. lv f. 1.

PLATYCEPHALIDAE.

Platycephalus platysoma sp. n. Baluchistan, ZUGMAYER Ann. Mag. Nat. Hist. ser. 8 10 1912 p. 595.

COTTIDAE.

Cottus nozawae figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. lv f. 2; *C. bubalis* 12 inches long, CLARKE Naturalist 1912 p. 191.

Ocynectes modestus figured, SNYDER t.c. pl. lvi f. 1.

Bero zancus figured, SNYDER t.c. pl. lvi f. 2.

Archaulus gen. n. near *Archistes biseriatus* sp. n. Bering Sea, GILBERT

& BURKE Bull. U. S. Bur. Fish. 30 p. 36 f. 1.

Icelus uncinalis Bering Sea p. 39 f. 2, *spatula* Kamchatka p. 41 f. 3, spp. n., GILBERT & BURKE t.c.

Thyriscus gen. n. near *Icelus anoplus* sp., n. Bering Sea, GILBERT & BURKE t.c. p. 43 f. 4.

Artediellus ochotensis p. 44 f. 5, *camchaticus* p. 46 f. 6, *miacanthus* p. 47 f. 7, spp. n., Kamchatka, GILBERT & BURKE t.c.

Triglops metopias sp. n. Bering Sea, GILBERT & BURKE t.c. p. 50 f. 8.

Stelgistrum beringianum sp. n. Bering Sea, GILBERT & BURKE t.c. p. 52 f. 9.

Hemilepidotus zapus sp. n. Bering Sea, GILBERT & BURKE t.c. p. 54 f. 10.

Myoxocephalus batrachoides Kamchatka p. 58 f. 11, *parvulus* Bering Sea p. 59 f. 12, spp. n., GILBERT & BURKE t.c.—*M. yesoensis* figured, SNYDER t.c. pl. lv f. 3.

Gymnocanthus detrisus sp. n. Kamchatka, GILBERT & BURKE t.c. p. 61 f. 13.

Eurymen gen. n. near *Gilbertidia gyrinus* sp. n. Kamchatka, GILBERT & BURKE t.c. p. 64 f. 14.

AGONIDAE.

Podothecus xyztes figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. lvii f. 2.

CYCLOPTERIDAE.

Cyclolumpus gen. n. *asperrimus* sp. n. Japan, TANAKA Fish. Japan p. 86 pl. xxi.

Eumicrotremus phrynoides sp. n. Bering Sea, GILBERT & BURKE Bull. U. S. Bur. Fish. 30 p. 69 f. 15.

Crystallichthys cyclospilus sp. n. Bering Sea, GILBERT & BURKE t.c. p. 74 f. 19.

Cyclogaster, key to N. Atlantic spp., BURKE Ann. Mag. Nat. Hist. ser. 8 9 1912 p. 509.—*C. bristolense* p. 568, *megacephalus* p. 569, spp. n., Alaska, BURKE Proc. U. S. Nat. Mus. 43 1912.—*C. curilensis* p. 353 pl. xli f. 1, *simushirae* p. 354 pl. xli f. 2, *tesselatus* p. 355 pl. xli f. 3, *frenatus* p. 356 pl. xlii

f. 1, *tanakae* p. 357 pl. xlii f. 2, *ingens* p. 360 pl. xliii f. 1, spp. n., Japan, *ochotensis* figured pl. xlii f. 3, GILBERT & BURKE Proc. U. S. Nat. Mus. 42 1912.—*C. (Neoliparis) micraspidophorus* p. 71 f. 16, *beringianus* p. 72 f. 17, spp. n., Bering Sea, GILBERT & BURKE Bull. U. S. Bur. Fish. 80.

Careproctus, key to N. Atlantic spp., notes on Antarctic spp.; *C. longipinnis* sp. n. Faroes, BURKE Ann. Mag. Nat. Hist. ser. 8 9 1912 pp. 510–513.—*C. gilberti* sp. n. Alaska, BURKE Proc. U. S. Nat. Mus. 43 1912 p. 570.—*C. rastrinus* p. 362 pl. xliii f. 2 *acanthodes* p. 363 pl. xliii f. 3, *trachysoma* p. 364 pl. xlv f. 1, *rhodomelas* p. 365 pl. xlv f. 2, *pellucidus* p. 366 pl. xlv f. 3, *segaliensis* p. 367 pl. xlv f. 1, *bathycetus* p. 368 pl. xlv f. 2, *roseofuscus* p. 369 pl. xlv f. 3, *sinensis* p. 371 pl. xlvi f. 2, *pycnosoma* p. 372 pl. xlvi f. 3, *curilanus* p. 373 pl. xlvii f. 1, *homopterus* p. 374 pl. xlvii f. 2, *entomelas* p. 374 pl. xlvii f. 3, *entargyreus* p. 375 pl. xlvii f. 4, spp. n., Japan, *colletti* figured pl. xlvi f. 1, GILBERT & BURKE Proc. U. S. Nat. Mus. 42 1912.—*C. bowersianus* p. 76 f. 20, *mollis* p. 77 f. 21, *candidus* p. 77 f. 22, *opisthotremus* p. 78 f. 23, *attenuatus* p. 79 f. 24, *furcellus* p. 80 f. 25, spp. n., Bering Sea, GILBERT & BURKE Bull. U. S. Bur. Fish. 30.

Elassodiscus gen. n. near *Careproctus tremebundus* sp. n. Kamchatka, GILBERT & BURKE Bull. t.c. p. 81 f. 26.

Paraliparis deani p. 571 Alaska, *garmani* p. 572 New England, spp. n., BURKE Proc. U. S. Nat. Mus. 43 1912; *P. atramentatus* p. 377 pl. xlviii f. 1, *melanobranchus* p. 378 pl. xlviii f. 2, *entochloris* p. 378 pl. xlviii f. 3, spp. n., Japan, GILBERT & BURKE Proc. t.c.

Nectoliparis gen. n. near *Paraliparis pelagicus* sp. n. Bering Sea, GILBERT & BURKE Bull. t.c. p. 82 f. 27.

Acantholiparis gen. n. *opercularis* sp. n. Kamchatka, GILBERT & BURKE Bull. t.c. p. 83 f. 28.

Rhinoliparis attenuatus sp. n. Bering Sea, BURKE Proc. U. S. Nat. Mus. 43 1912 p. 573.

Polypera gen. n. type *P. greeni* Jord. & Starks, BURKE Proc. t.c. p. 567

DACTYLOPTERIDAE.

Dactyloptena gilberti figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. lvii f. 1.

HETEROSOMATA.

†*Otolithus (Pleuronectidarum?) jangariensis* sp. n. Miocene of Sardinia, SCHUBERT Verh. Geol. ReichsAnst. Wien 1912 pp. 160–165.

Über das „monomorphe“ Chiasma opticum der Pleuronectiden, MAYHOFF Zool. Anz. 39 1912 pp. 78–86.

Ueber die Eier, Larven und aelteren Stadien der Pleuronectiden, JOHANSEN Rapp. et procès-verb. explor. mer. 14 1912.

Later stages of Pleuronectidae, MASTERMAN Rapp. et procès verb. explor. mer. 14 1912.

PLEURONECTIDAE.

Hippoglossoides katakurae figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. lviii f. 1.

Lepidopsetta mochigarei figured, SNYDER t.c. pl. lviii f. 2.

Glyptocephalus sasae figured, SNYDER t.c. pl. lix f. 1.

Pleuronectes platessa, biology, JOHANSEN Skr. Havunders 1912 No. 7 & Medd. Havunders Fiskeri 4 1912 No. 1.

Pseudopleuronectes dignabilis sp. n. New England, KENDALL Bull. U. S. Bur. Fish. 30 p. 392.

Boopsetta maculosa = praelonga, SEWELL Rec. Ind. Mus. 7 1912 pl. i No. 1 p. 10.

BOTHIDAE.

Pseudorhombus, synopsis of Queensland spp., p. 45, *P. elevatus* p. 45, *cartwrighti* p. 47, *anomalous* p. 48, spp. n., Queensland, OGILBY Mem. Queensland Mus. 1 1912.

SOLEIDAE.

Soleonasmus gen. n. *finis* sp. n. Brit. Guiana, EIGENMANN Mem. Carnegie Mus. 5 1912 p. 528 pl. lxx ff. 2 3.

†*Otolithus (Solea) cottreawi* sp. n. Miocene, Alpes Maritimes, PRIEM Bull. soc. géol. France ser. 4 11 1911 p. 44 f. 8.

CYNOGLOSSIDAE.

Trulla itina figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. lxxix f. 1.

PLECTOGNATHI.

On the vascular system and the air-sac, ROSÉN Ark. Zool. Stockholm 7 1912 Nos. 25 & 30.

BALISTIDAE.

Cantherines nigromaculosus sp. n. Japan, TANAKA Fish. Japan p. 144 pls. xxxviii f. 145 xxxix f. 148 xl f. 155.

Pseudomonacanthus amphioxys figured, NICHOLS Bull. Amer. Mus. 31 1912 p. 110 fig.

OSTRACIANTIDAE.

Lactophrys tritropis figured, SNYDER Proc. U. S. Nat. Mus. 42 1912 pl. liv f. i.

TETRODONTIDAE.

Spheroides tuberculifer sp. n. Queensland, OGILBY Mem. Queensland Mus. 1 1912 p. 61 pl. xiv f. 1.—*S. sceleratus*, poisonous effects, SEALE Philippine Journ. Sci. D. 7 1912 pp. 289–291.

MOLIDAE.

Ranzania truncata at Martinique, PELLEGRIN Bull. soc. zool. France 37 1912 pp. 228–230 fig.

DISCOCEPHALI.

Anatomy and classification, REGAN Ann. Mag. Nat. Hist. (8) 10 1912 pp. 634–637 figg.

XENOPTERYGII.

GOBIESOCIDAE.

Gobiesox costaricensis sp. n. Costa Rica, MEEK Field Mus. Publ. Zool. 10 1912 p. 74.—*G. androsiensis* sp. n. Bahama Is., ROSÉN Lund Univ. Årsskr. N.F. 7 Afd. 2 No. 5 p. 65.

PEDICULATI.

Osteology and classification, REGAN Ann. Mag. Nat. Hist. (8) 9 1912 pp. 277–289 figg.

LOPHIIDAE.

Sladenia remiger sp. n. Celebes, RADCLIFFE Proc. U. S. Nat. Mus. 42 1912 p. 199 pl. xvi f. 1.

Lophiodes olivaceus p. 200 pl. xvi f. 2, *infrabrunneus* p. 202 pl. xvi f. 3, spp. n., Philippines, RADCLIFFE t.c.

ANTENNARIIDAE.

Antennarius rosaceus p. 203 pl. xvii f. 2, *altipinnis* p. 204 fig. *subteres* p. 205 pl. xvii f. 1, spp. n., Philippines, RADCLIFFE Proc. U. S. Nat. Mus. 42 1912.—*A. astroscopus*, sp. n. Barbadoes, NICHOLS Bull. Amer. Mus. 31 1912 p. 109 fig.—*A. stigmaticus* sp. n. Queensland, OGILBY Mem. Queensland Mus. 1 1912 p. 63 pl. xiv f. 2.

ONCOCEPHALIDAE.

Matthopsis ocellata sp. n. Philippines, RADCLIFFE Proc. U. S. Nat. Mus. 42 1912 p. 207 pls. xviii f. 1 xix f. 1.

Halicmetus reticulatus sp. n. Philippines, RADCLIFFE t.c. p. 208 pls. xx f. 2 xxi f. 2.

Haliutopsis vermicularis sp. n. Philippines, RADCLIFFE t.c. p. 209 pls. xx f. 1 xxi f. 1.

Dibranchus stellifer p. 210 pls. xxii f. 2 xxiii f. 2 Celebes, *simulus* p. 211 pls. xxii f. 1 xxiii f. 1 Luzon, spp. n., RADCLIFFE t.c.

Coelophrys mollis p. 212 pls. xxiv f. 1 xxvi f. 5 xxvii f. 5 Palawan, *arca* p. 213 pls. xxiv f. 2 xxvi f. 4 xxvii f. 4 Verde Is., *brevipes* p. 213 pls. xxv f. 2 xxvi f. 2 xxvii f. 2, *oblonga* p. 214 pls. xxv f. 1 xxvi f. 3 xxvii f. 3 Celebes, spp. n., RADCLIFFE t.c.

HIMANTOLOPHIDAE.

Synopsis of the genera, REGAN Ann. Mag. Nat. Hist. (8) 9 1912 p. 287.

Aegoconichthys appeli, notes, figure, WAITE Trans. N. Z. Inst. 44 p. 194 pl. x.

Dermatias gen. n. *platynogaster* sp. n. Philippines, RADCLIFFE Proc. U. S. Nat. Mus. 42 1912 p. 206 pl. xvii f. 3.

THAUMATICHTHYIDAE.

Thaumatichthys gen. n. *pagidostomus* sp. n. Celebes, SMITH & RADCLIFFE Proc. U. S. Nat. Mus. 42 1912 p. 579 pl. lxxii.

CAULOPHRYNIDAE.

Melanocetus pelagicus Brauer is a *Caulophryne*, REGAN Ann. Mag. Nat. Hist. (8) 9 1912 p. 288.

ACERATIDAE.

Haplophryne gen. n. type *Aceratias mollis*, REGAN Ann. Mag. Nat. Hist. (8) 9 1912 p. 289.

SYMBRANCHII.

Osteology and classification, REGAN Ann. Mag. Nat. Hist. (8) 9 1912 pp. 387-390 pl. ix.

SYMBRANCHIDAE.

Macrotrema gen. n. type *Symbranchus caligans*, REGAN Ann. Mag. Nat. Hist. (8) 9 p. 390.

OPISTHOMI.

Osteology, REGAN Ann. Mag. Nat. Hist. (8) 9 pp. 217-219 figg.

MASTACEMBELIDAE.

Mastacembelus, synopsis of the species, BOULENGER J. Acad. Philad. (2) 15 1912 pp. 197-203.

† ACTINISTIA.

† COELACANTHIDAE.

† *Coelacanthus guttatus* sp. n. Trias of Spitzbergen, WOODWARD Bull. geol. inst. Upsala 11 1912 p. 291 pl. xiv f. 1.

† RHIPIDISTIA.

† RHIZODONTIDAE.

† *Eusthenopteron fordii* descr. and fig., HUSSAKOF Bull. New York State Mus. 158 1912 p. 131.

DIPNEUSTI.

† PHANEROPLEURIDAE.

† *Scaumenacia curta*, notes on anatomy, HUSSAKOF Bull. New York State Mus. 158 1912 p. 134 figs. pls. ii & iii.

CERATODONTIDAE.

Neoceratodus forsteri, life history, BANCROFT Proc. R. Soc. Queensland 23 pp. 251-256; DEAN Proc. Zool. Soc. 1912 pp. 607-612 figg.

† OSTRACODERMI.

† *Pteraspis dunensis* from Lower Devonian of Belgium, LÉRICHE Bull. soc. géol. Belge 26 1912 p. 49 pl. E.

† ARTHRODIRA.

† *Coccosteus canadensis* descr. and fig., HUSSAKOF Bull. State Mus. New York 158 1912 p. 127 fig. pl. i.

† *Dinichthys terrelli* anatomy, DEAN Science 34 p. 801.

XVI. REPTILIA AND BATRACHIA

ARRANGED BY

C. L. BOULENGER

CONTENTS

I. TITLES	2
II. SUBJECT INDEX:—	
Comprehensive and Miscellaneous=5603.. .. .	17
Structure=5607	17
Physiology=5611	19
Development=5615	20
Ethology=5619	21
Variation, Heredity, Evolution=5623	22
Faunae=5627	22
Actual	22
Fossil	24
III. SYSTEMATIC=5631:—	
General	24
Reptilia	25
Lacertilia	25
Pythonomorpha	27
Ophidia	27
Pterosauria	28
Ichthyosauria	28
Plesiosauria	28
Crocodilia	29
Dinosauria	29
Chelonia	29
Theromorpha	29
Rhynchocephalia	30
Batrachia	30
Ecaudata	30
Caudata	31
Apoda	32
Stegocephala	32

I.—TITLES.

- Agharkar, S. P.** The diet of a bullfrog (*Rana tigrina*). Bombay J. Nat. Hist. Soc. **21** 1912 (687). **1**
- Aimé, Paul.** Note sur le thymus chez les Chéloniens. Paris C. R. soc. biol. **72** 1912 (889-890). **2**
- Aimé, P.** L'évolution périodique du thymus des Chéloniens. Paris C. R. soc. biol. **73** 1912 (115-116). **3**
- Andersson, Lars Gabriel.** Notes on *Hemidactylus tropidolepis* Mocq. Wiesbaden Jahrb. Ver. Natk. **65** 1912 (227-231). **4**
- André, E.** Recherches parasitologiques sur les Amphibiens de la Suisse. Revue Suisse Zool. Genève **20** 1912 (471-485). **5**
- Andrews, C. W.** *Bothriceps huxleyi* in South Africa. Zoologist London **70** 1912 (115-116). **6**
- Andrews, W. Horner.** Die Wirkung des Bisses gewisser Opisthoglyphenarten. Zs. InfektKrankh. Haustiere Berlin **12** 1912 (423-433). **7**
- Annandale, N.** Notes on the distribution of some Indian and Burmese Lizards. Rec. Ind. Mus. Calcutta **7** pt. 1 1912 (90-91). **8**
- Annandale, N.** The Indian Mud-Turtles (Trionychidae). Rec. Ind. Mus. Calcutta **7** 1912 (151-178) 2 pls. **9**
- Annandale, N.** The Aquatic Chelonia of the Mahanadi and its tributaries. Rec. Ind. Mus. Calcutta **7** 1912 (261-266). **10**
- Annandale, N.** Zoological results of the Abor Expedition, 1911-1912. I. Batrachia. Rec. Ind. Mus. Calcutta **8** 1912 (7-36) 3 pls. **11**
- Annandale, N.** Zoological results of the Abor Expedition, 1911-1912. II. Reptilia. Rec. Ind. Mus. Calcutta **8** 1912 (37-55) 1 pl. **12**
- Annandale, N.** Some recent advances in our knowledge of the freshwater fauna of India. Calcutta J. As. Soc. Beng. **8** 1912 (39-53) 3 pls. **13**
- Annandale, N.** The rupture of the egg-shell in the genus *Calotes*. Bombay J. Nat. Hist. Soc. **21** 1912 (1099-1100). **14**
- Annandale, N.** A rare Ceylon Lizard (*Lepidodactylus ceylonensis*). Spolia Zeylan. Colombó **8** 1912 (134-135). **15**
- Annandale, N.** Eggs and young of the lizard *Calotes nigrilabris*. Spolia Zeylan. Colombo **8** 1912 (135-136). **16**
- Babák, Edward.** Über die Temperaturempfindlichkeit der Amphibien. Zugleich ein Beitrag zur Energetik des Nervengeschehens. Unter der Mitwirkung des Herrn cand. med. V. Dýšek. Zs. Psychol. Leipzig Abt. 2 **47** 1912 (34-45). **17**
- Backman, E. Louis.** Die Einwirkung der Befruchtung auf den osmotischen Druck der Eier von *Bufo vulgaris* und *Triton cristatus*. Arch. ges. Physiol. Bonn **148** 1912 (141-166) 2 Taf. **18**
- Backman, E. L. und Runnström, J.** Der osmotische Druck während der Embryonalentwicklung von *Rana temporaria*. Arch. ges. Physiol. Bonn **144** 1912 (287-345). **19**
- Backman, E. L. und Sundberg, Carl Gustav.** Der osmotische Druck bei *Rana temporaria* während der Entwicklung nach dem Ausschlüpfen der Embryonen. Arch. ges. Physiol. Bonn **146** 1912 (212-230 605) 1 Taf. **20**
- Backman, E. L. und Sundberg, C. G.** Das Verhalten der Amphibien in verschieden konzentrierten Lösungen. Arch. ges. Physiol. Bonn **148** 1912 (396-440). **21**
- Bage, F.** On the histological structure of the retina of the lateral eyes of *Sphenodon punctatus*, with special

- reference to the sense-cells. Q. J. Micr. Sc. London **57** 1912 (305-328) 3 pls. **22**
- Bannerman, W. B. und Pocha, J. P.** Cobra breeding at Paul. Bombay J. Nat. Hist. Soc. **21** 1912 (1337-1339). **23**
- Banta, A. M.** The influence of cave conditions upon pigment development in larvae of *Amblystoma tigrinum*. Amer. Nat. New York **46** 1912 (244-248). **24**
- Barański, J.** Rozwój tylnych serc limfatycznych kumaka (*Bombinator*). [Le développement des cœurs lymphatiques postérieurs chez *Bombinator igneus*.] Kraków Rozpr. Akad. **11 B** 1911 (43-54). **25**
- Barbour, Thomas.** New lizards and a new toad from the Dutch East Indies, with notes on other species. Washington D.C. Proc. Biol. Soc. **24** 1911 (15-21). **26**
- Barbour, T.** A new race of chameleons from British East Africa. Washington D.C. Proc. Biol. Soc. **24** 1911 (219-220). **27**
- Barbour, T.** Some West African amphibians. Cambridge Mass. Bull. Mus. Comp. Zool. Harvard Coll. **54** 1911 (127-136) pls. i & ii. **28**
- Barbour, T.** *Physignathus cocincinus* and its subspecies. Washington D.C. Proc. Biol. Soc. **25** 1912 (191-192). **29**
- Barbour, T.** Some Chinese vertebrates. Amphibia and Reptilia. Cambridge Mass. Mem. Mus. Comp. Zool. Harvard Coll. **40** 1912 (125-136) pls. i & ii. **30**
- Barbour, T.** A contribution to the zoogeography of the East Indian islands. Cambridge Mass. Mem. Mus. Comp. Zool. Harvard Coll. **44** 1912 (1-203) pls. i-viii. **31**
- Bataillon, E.** Nouvelles recherches analytiques sur la parthénogenèse expérimentale des Amphibiens. Paris C. R. Acad. sci. **154** 1912 (1440-1443). **32**
- Bataillon, E.** La parthénogenèse des amphibiens et la fécondation chimique de Loeb (Etude analytique). Ann. sci. nat. (zool.) Paris (sér. 9) **16** 1912 (249-307). **33**
- Bataillon, E.** Parthénogenèse expérimentale des Amphibiens. Rev. gén. sci. Paris **22** 1911 (786-792). **34**
(N-9210 d)
- Baumann, F.** Brasilianische Batrachier des Berner Naturhistorischen Museums nebst Untersuchungen über die geographische Verbreitung der Batrachier in Brasilien. Zool. Jahrb. Jena Abt. f. Syst. **33** 1912 (87-172) 1 Taf. u. 2 Kart. **35**
- Beccari, Nello.** La costituzione, i nuclei terminali e le vie di connessione del nervo acustico nella *Lacerta muralis*. Archivio ital. Anat. Embriol. Firenze **10** fasc. 4 (1911) 1912 (646-698). **36**
- [**Bedriaga, Ja. V.**] Бедряга, Я. В. Земноводныя и пресмыкающіяся. Вып. 4. [Amphibien und Reptilien. Lief. 4.] (In: Przewalski N. M., Wissenschaftliche Resultate des von N. M. Przewalski nach Centralasien unternommenen Reisen etc. Zool. Theil. Bd. III. Abth. 1.) St. Peterburg 1912 (i-iv + 503-769) Taf. viii-x (Russisch + Deutsch). **37**
- Bender, Otto.** Über die Entwicklung des Visceralskelettes bei *Testudo graeca*. I: Die Entwicklung des Kiefer- und des Zungenbeinbogens (*Columella auris*) und der Paukenhöhle. München Abh. Ak. Wiss. math.-phys. Kl. **25** 1912 Abh. 10 (1-62) 7 Taf. **38**
- Bernardi, Pio.** Ricerche sulla variazione della *Lacerta muralis* (Laur.). Monitore zool. ital. Firenze **23** 1912 (226-230). **39**
- Blanksma, J. J.** Meteoreengelei. [Meteoreengelee.] Amsterdam Chem. weekbl. **9** 1912 (177). **40**
- Blatter, Edelbert.** Die Schlangen und ihre Feinde. Natur u. Kultur München **9** 1912 (462-465 490-495 517-524). **41**
- [**Bogoliubov, N. N.**] Боголюбовъ, Н. Н. Замѣтка о русской верхне-юрской фаунѣ плезиозавровъ. [Note sur les Plésiosaures du Jura supérieur de la Russie.] Ann. géol. minér. Novo-Alexandria **17** 1912 (1-4 + rés. franç. 4-7). **42**
- [**Bogoliubov, N. N.**] Боголюбовъ, Н. Н. О предполагаемомъ позвонокѣ динозавра изъ Оренбургской губернии. [Sur une vertèbre présumée de Dinosaurien du gouv. d'Orenbourg.] Ann. géol. minér. Novo-Alexandria **14** 1912 (62-63). **43**
- [**Bogoliubov, N. N.**] Боголюбовъ, Н. Н. О нахождении *Elasmosaurus* и *Polycotylus* въ русскихъ отложенияхъ. [Sur la présence de l'*Elasmosaurus* et du

- Polycotylus* dans les dépôts de la Russie.] Ann. géol. minér. Novo-Alexandria **14** 1912 (174-176). **44**
- [Bogolubov, N. N.] Боголюбовъ, Н. Н. Изъ исторіи плезиозавровъ въ Россіи. [Aus der Geschichte der Plesiosaurier in Russland.] Moskva Zap. Univ. **31** 1912 (i-viii + 1-400) Taf. i-xvi. **45**
- Bogolubow, N. N. *vide* Bogolubov, N. N.
- Bogrova, Valentina. Contributo allo studio della conformazione e dello sviluppo dell' organo dell' olfatto nella *Salamandrina perspicillata*. Archiv. ital. Anat. Embriol. Firenze **10** (1911) fasc. 2 1912 (339-382). **46**
- Boldt, Martin. Die Hornhöcker an den vorderen Extremitäten von *Leptodactylus ocellatus* (L.). Arch. Natg. Berlin **77** (1911) Bd 1 Suppl. 4 [1912] (80-86). **47**
- Bolk, L. Over de structuur van het reptiliengebitt. [On the structure of the dental system of reptiles.] Amsterdam Versl. Wis. Nat. Afd. K. Akad. Wet. **20** 1912 (874-886) (Dutch); Amsterdam Proc. Sci. K. Akad. Wet. **14** 1912 (950-962) (English). **48**
- Bolk. Ueber die Struktur des Reptiliengebisses. Anat. Anz. Jena **41** ErgH. 1912 (58-68). **48a**
- Bolkay, Stefan. On the systematic value of *Rana chinensis* Osbeck. Washington D.C. Proc. Acad. Sci. **13** 1911 (67-84) pl. vi. **49**
- Boreau, G. Faits histologiques indiquant une fonction endocrine dans la glande à venin des Ophidiens. Paris C. R. soc. biol. **72** 1912 (880-881). **50**
- Boulenger, G. A. A Vertebrate Fauna of the Malay Peninsula from the Isthmus of Kra to Singapore, including the adjacent Islands. Reptilia and Batrachia. London 1912 (1-294). **51**
- Boulenger, G. A. Some remarks on the habits of British frogs and toads, with reference to Mr. Cumming's recent communication on distant orientation in Amphibia. London Proc. Zool. Soc. **1912** 1912 (19-22). **52**
- Boulenger, G. A. Descriptions of new African batrachians preserved in the British Museum. Ann. Mag. Nat. Hist. London **10** 1912 (140-142). **53**
- Boulenger, G. A. Descriptions of new batrachians from the Andes of South America preserved in the British Museum. Ann. Mag. Nat. Hist. London **10** 1912 (185-191). **54**
- Boulenger, G. A. Descriptions of new reptiles from the Andes of South America preserved in the British Museum. Ann. Mag. Nat. Hist. London **10** 1912 (420-424). **55**
- Boulenger, G. A. Observations sur l'accouplement et la ponte de l'Alyte accoucheur, *Alytes obstetricans*. Bruxelles Bull. Acad. roy. Belgique Nos. 9-10 **1912** (570-579) pl. **56**
- Boulenger, G. A. On some treefrogs allied to *Hyla caerulea*, with remarks on noteworthy secondary sexual characters in the family Hylidae. Zool. Jahrb. Jena Suppl. **15** Bd 1 1912 (211-218). **57**
- Boulenger, G. A. Missione per la Frontiera Itala-Etiopica sotto il Comando del Capitano Carlo Citerni. Risultati zoologici. List of the Reptiles and Batrachians. Genova Ann. Mus. Civ. Storia Nat. **5** 1912 (1-4). **58**
- Brachet, A. La polyspermie expérimentale dans l'œuf de *Rana fusca*. Arch. mikr. Anat. Bonn **79** Abt. 2 1912 (96-112). **59**
- Brimley, C. S. Notes on the salamanders of the North Carolina mountains, with descriptions of two new forms. Washington D.C. Proc. Biol. Soc. **25** 1912 (135-140) pls. vi & vii. **60**
- Broil, F. Zur Osteologie des Schädels von *Placodus*. Palaeontographica Stuttgart **59** 1912 (147-155) 1 Taf. **61**
- Broman, Ivar. Über die Entwicklung der „Bursa omentalis“ bei den Gymnophionen. Stockholm Vet.-Ak. Handl. **49** No. 5 1912 (18) 3 Taf. **62**
- Broom, R. On the structure of the internal ear and the relations of the basicranial nerves in *Dicynodon*, and on the homology of the Mammalian auditory ossicles. London Proc. Zool. Soc. **1912** 1912 (419-425) 1 pl. **63**
- Broom, R. On some new fossil reptiles from the Permian and Triassic beds of South Africa. London Proc. Zool. Soc. **1912** 1912 (859-875) 4 pls. **64**

- Bruner, Henry L.** The cephalic veins of reptiles. (Abstract.) Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (237). **65**
- Bruner, H. L.** A moulting mechanism in lizards. (Abstract.) Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (238-241). **66**
- Bruni, Angelo Cesare.** Sullo sviluppo delle formazioni cromaffini in *Rana esculenta*, Linn. Anat. Anz. Jena **42** 1912 (153-160). **67**
- Burlend, T. H.** Observations on the development of the kidney in Chelonia. Anat. Anz. Jena **41** 1912 (497-510). **68**
- Camus, René.** Über die Entwicklung des sympathischen Nervensystems beim Frosch. Arch. mikr. Anat. Bonn **81** Abt. 1 1912 (1-52) 4 Taf. **69**
- Case, E. C.** Paleozoic Reptilia and Amphibia. [Symposium on ten years' progress in vertebrate paleontology.] Bull. Geol. Soc. Amer. Washington **23** 1912 (200-204). **70**
- Case, E. C. and Williston, S. W.** A description of the skulls of *Diadectes lentus* and *Animasaurus carinatus*. Amer. J. Sci. New Haven Conn. (Ser. 4) **33** 1912 (339-348). **71**
- Chaudhuri, B. L.** Aquatic tortoises of the middle Ganges and Brahmaputra. Réc. Ind. Mus. Calcutta **7** 1912 (212-214). **72**
- Cockerell, T. D. A.** The scales of *Dermophis*. Science New York (N. Ser.) **36** 1912 (681). **73**
- Cotronei, Giulio.** Sulla morfologia comparata del tessuto insulare del pancreas. Sulla questione di un suo equivalente nel pancreas dei Cheloni. Archivio zool. Napoli **6** 1912 (1-20) 1 tav. **74**
- Cotronei, G.** Sullo sviluppo e sullo accrescimento degli Anfibi. I. Le azioni morfogenetiche e il movimento. Roma Rend. Acc. Lincei **21** Semestre 2 1912 (782-788). **75**
- Cummings, B. F.** Distant orientation in Amphibia. London Proc. Zool. Soc. **1912** 1912 (8-19). **76**
- Cummings, B. F.** Occurrence of the Small Red Viper in North Devon. Zoologist London **70** 1912 (38). **77**
- Cunningham, J. T. vide Lydekker, R.**
- D'Abreu, E. A.** Do snakes swallow stones? Bombay J. Nat. Hist. Soc. **21** 1911 (281). **78**
- D'Abreu, E. A.** Rate of growth of a dhaman (*Zamenis mucosus*) hatchling. Bombay J. Nat. Hist. Soc. **21** 1912 (1099). **79**
- D'Abreu, E. A.** Is *Lycodon gammici* (Blandford) an aberrant specimen of *Lycodon fasciatus* (Anderson)? Bombay J. Nat. Hist. Soc. **21** 1912 (1335-1336). **80**
- Dacqué, E.** Die fossilen Schildkröten Aegyptens. Geol. u. palaeont. Abh. Jena **10** 1912 (65 mit 2 Taf.). [Auch Münchener Hab.-Schr.] **81**
- Davis, Wm. T.** The corn snake in New Jersey. Science New York **35** 1912 (416-417). **82**
- Dehaut, E. G.** Études zoologiques sur les Batraciens de la Corse et de la Sardaigne suivies de considérations anatomo-physiologiques sur la reproduction et la circulation chez les Salamandridés apneumones. Paris Matériaux pour la zoologie et la paléontologie de la Corse fasc. 2 **1911** (21-52). **83**
- Despax, R.** Sur trois collections de Reptiles et de Batraciens provenant de l'archipel Malais. Bul. Muséum Paris **1912** (198-205). **84**
- Dohrer, Johann.** Die Metamorphose der Mundrachenwand der Schildkröte „*Chelydra serpentina*“. (A. Fleischmann, Kopfreion der Amnioten, IX, 2.) Morph. Jahrb. Leipzig **44** 1912 (661-705) 3 Taf. **85**
- Dollo, L.** Sur les premiers restes de tortues fossiles recueillis au Congo. Bruxelles Bull. Acad. roy. No. 1 **1912** (8-9). **85a**
- Donaldson, Henry H.** The nervous system of the American leopard frog, *Rana pipiens*, compared with that of the European frogs, *Rana esculenta* and *Rana temporaria (fusca)*. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (229-236). **86**
- Drzewina, A. et Bohn, Georges.** Variations de la résistance à l'inhibition des oxydations chez *Rana fusca* aux divers stades larvaires. Paris C. R. soc. biol. **72** 1912 (908-910). **87**
- Drzewina, A. et Bohn, G.** Effets de l'inhibition des oxydations chez les

- embryons des têtards de *Rana fusca*. Paris C. R. soc. biol. **72** 1912 (970-972). **88**
- Dürken, Bernhard.** Ueber frühzeitige Exstirpation von Extremitätenanlagen beim Frosch. Ein experimenteller Beitrag zur Entwicklungsphysiologie und Morphologie der Wirbeltiere unter besonderer Berücksichtigung des Nervensystems. Zs. wiss. Zool. Leipzig **99** 1911 (189-355) 1 Taf. **89**
- Dustin, M.** Les greffes thymiques. Paris C. R. ass. anatomistes **13** 1911 (10-14). **90**
- Dziurzyński, A.** Badania nad regeneracją naczyń krwionośnych i limfatycznych w ogonie kijanek żab; z 1 tabl. [Untersuchungen über die Regeneration der Blut- und Lymphgefäße im Schwanz von Froschlarven; mit 1 Tafel.] Kraków Rozpr. Akad. **11** 1911 (91-119). **91**
- Eastman, C. R.** Jurassic saurian remains ingested within fish. Pittsburg Pa. Ann. Carnegie Mus. **8** 1911 (182-187) pls. x & xi. **92**
- Ekman, Gunnar.** Die Entstehung des Peribranchialraumes und seine Beziehungen zur Extremitätenanlage bei *Bombinator*. (Vorl. Mitt. über experimentelle Untersuchungen.) Anat. Anz. Jena **40** 1912 (580-586). **93**
- Fejérváry, Baron G. J. von.** Über *Ablepharus pannonicus* Fitz. Zool. Jahrb. Jena. Abt. f. Syst. **33** 1912 (547-574) 2 Taf.; **34** (222). **94**
- Fellzet, J.** Recherches sur les glandes fémorales de *Lacerta muralis*. J. anat. physiol. Paris **47** 1911 (333-370) 1 pl. **95**
- Fletcher, T. Bainbrigge.** Vibration of the tails of snakes. Spolia Zeylan. Colombo **8** 1912 (67). **96**
- Forsyth, W.** Habits of the Python (*Python molurus*). Bombay J. Nat. Hist. Soc. **21** 1911 (277-278). **97**
- Franz, V.** Ringelnatter und Frosch. [Lähmung durch den Blick der Schlange.] Zool. Beob. Frankfurt a. M. **53** 1912 (119-122). **98**
- Franz, V.** Tritonbeobachtungen. Zool. Beob. Frankfurt a. M. **53** 1912 (161-165). **99**
- Franz, V.** Ueber den Ortssinn der Kreuzkröte. Wochenschr. Aquarienkunde Braunschweig **9** 1912 Beilage Lacerta (34-35). **100**
- Fry, Dene B.** Description of *Austrochaperina*, a new genus of Engystomatidae from North Australia. Sydney N.S.W. Rec. Austr. Mus. **9** 1912 (87-106). **101**
- Fuchs, H.** Ueber einige Ergebnisse meiner Untersuchungen über die Entwicklung des Kopfskelettes von *Chelone imbricata* (Material Voeltzkow). Anat. Anz. Jena **41** ErgH. 1912 (81-106). **101a**
- Gaisch, Alois.** Ein weiterer Beitrag zur künstlichen Schwarzfärbung des gefleckten Salamanders (*Salamandra maculosa* Laur.). Wien Verh. ZoolBot. Ges. **62** 1912 2. Heft. (54-57). **102**
- Gaupp, E.** Nachträgliche Bemerkungen zur Kenntnis des Unterkiefers der Wirbeltiere, insbesondere der Amphibien. Anat. Anz. Jena **40** 1912 (561-569). **103**
- Gélin, H.** Reptiles et Batraciens des Deux-Sèvres et région voisine. Nart Mém. soc. vulg. sci. nat. **2** 1911 (65-86). **104**
- Gilmore, Charles W.** A new mosasauroid reptile from the Cretaceous of Alabama. Washington D.C. Smithsonian Inst. Proc. U. S. Nation. Mus. **41** 1912 (479-484) pls. xxxix & lx. **105**
- Gilmore, C. W.** The mounted skeletons of *Camptosaurus* in the United States National Museum. Washington D.C. Smithsonian Inst. Proc. U. S. Nation. Mus. **41** 1912 (687-690) pls. lvi-lxi. **106**
- Gilmore, C. W.** Fossil crocodiles from the Canal Zone. Washington D.C. Proc. Biol. Soc. **25** 1912 (94). **107**
- Glaser, Otto.** Note on the development of amphibian larvae in sea-water. Science New York **36** 1912 (678-681). **108**
- Griffin, Lawrence Edmonds.** A checklist and key of Philippine snakes. Philippine J. Sci. Manila D. Gen. Biol. Eth. Anthrop. **6** 1911 (253-269). **109**
- Gudernatsch, J. F.** Feeding experiments on Tadpoles. 1. The influence of specific organs given as food on growth and differentiation. A contribution to the knowledge of organs with internal secretion. Arch. EntwMech. Leipzig **35** 1912 (456-483) 1 Taf. **110**

- Haecker, Valentin.** Über Lernversuche bei Axolotln. Arch. ges. Psychol. Leipzig **25** 1912 (1-35). **111**
- Hahn, A.** Einige Beobachtungen an Riesenlarven von *Rana esculenta*. Arch. mikr. Anat. Bonn **80** 1912 (1-38) 3 Taf. **112**
- Hargitt, C. W.** Behavior and color changes of tree frogs. J. Anim. Behav. Boston **2** 1912 (51-78). **112a**
- Harms, W.** Beeinflussung der Daumenballen des Kastraten durch Transplantation auf normaler *Rana fusca* (Rös.). Zool. Anz. Leipzig **39** 1912 (146-151). **113**
- Harms, W.** Ueber den Einfluss des kastrierten auf den normalen Komponenten bei Parabiose von *Rana*. Marburg SitzBer. Ges. Natw. **1911** 1912 (51-59). **114**
- Hay, Oliver P.** Chelonia. [Symposium on ten years' progress in vertebrate paleontology.] Bull. Geol. Soc. Amer. Washington **23** 1912 (212-220). **115**
- Hay, O. P.** A fossil specimen of the alligator snapper (*Macrochelys temminckii*) from Texas. Philadelphia Proc. Amer. Phil. Soc. **50** 1911 (452-455) pls. xviii & xix. **116**
- Hay, O. P.** American Permian vertebrates. [By Samuel W. Williston. Review.] Amer. Nat. New York **46** 1912 (561-565). **117**
- Heilig, Karl.** Zur Kenntnis der Seitenorgane von Fischen und Amphibien. Diss. Berlin (H. Blanke) 1912 (57). **118**
- Heilig, K.** Zur Kenntnis der Seitenorgane von Fischen und Amphibien. Arch. Anat. Physiol. Leipzig Anat. Abt. **1912** (117-150) 2 Taf. **119**
- Henderson, J. R.** Preliminary note on a new Tortoise from South India. Rec. Ind. Mus. Calcutta **7** 1912 (217-218). **120**
- Henry, A. vide** Bailliet, A.
- Henry, George M.** Notes on the food of the jackal (*Canis aureus*) and that of the Talagoya (*Varanus bengalensis*). Spolia Zeylan. Colombo **8** 1912 (70). **121**
- Heritsch, Franz.** Ein Jugendexemplar von *Trionyx Petersi* R. Hoernes aus Schöneegg bei Wies. Graz Mitt. Natw. Ver. Steierm. **48** 1909 [1912] (348-355). **122**
- Hewitt, J.** Notes on the specific characters and distribution of some South African Ophidia and Batrachia. Graham's Town Rec. Alban. Mus. **2** 1912 (264-281). **123**
- Hewitt, J. and Methuen, P. A.** Descriptions of some new Batrachia and Lacertilia from South Africa. Trans. Roy. Soc. S. Afric. **3** 1913 (107-111) pl. vii. **124**
- Hewitt, J. vide** Methuen, P. A.
- Hilton, William A.** The laryngeal cartilages of *Amblystoma*. Anat. Rec. Philadelphia **5** 1911 (557-561). **125**
- Holland, W. J.** Jurassic dinosaurs. [Symposium on ten years' progress in vertebrate paleontology.] Bull. Geol. Soc. Amer. Washington **23** 1912 (204-207). **126**
- Hooker, Davenport.** Der Hermaphroditismus bei Fröschen. Arch. mikr. Anat. Bonn **79** Abt. 2 1912 (181-200) 1 Taf. u. 1 Tab. **127**
- Hooker, D.** Die Nerven im regenerierten Schwanz der Eidechsen. Arch. mikr. Anat. Bonn **80** Abt. 1 1912 (217-222). **128**
- Hooker, D.** The reactions of the melanophores of *Rana fusca* in the absence of nervous control. Zs. allg. Physiol. Jena **14** 1912 (93-104). **129**
- Hooley, R. W.** On the discovery of remains of *Iguanodon mantelli* in the Wealden Beds of Brightstone Bay, I. of Wight. Geol. Mag. London **9** 1912 (444-449). **130**
- Hooley, R. W.** On the discovery of remains of *Iguanodon mantelli* in the Wealden Beds of Brightstone Bay, I. W., and the adaptation of the pelvic girdle in relation to an erect position and bipedal progression. London Rep. Brit. Ass. **1911** 1912 (390). **131**
- Howard, Arthur Day.** The visual cells in vertebrates, chiefly in *Necturus maculosus*. J. Morph. Philadelphia **19** 1908 (561-631) pls. **132**
- Hoyer, A.** Zur Entwicklung der Lymphgefäße bei Wirbeltieren. Verh. intern. ZoolKongr. Jena **8** (1910) 1912 (485-490). **133**
- Hoyer, H. und Udziela, S.** Untersuchungen über das Lymphgefäßsystem

- von Salamanderlarven. Morph. Jahrb. Leipzig **44** 1912 (535-556) 2 Taf. **134**
- Huene, Friedrich von.** Beiträge zur Kenntnis des Schädels von *Eryops*. Anat. Anz. Jena **41** 1912 (98-104). **135**
- Huene, F. von.** Der Unterkiefer von *Diplocaulus*. Anat. Anz. Jena **42** 1912 (472-475). **136**
- Huene, F. von.** Die Cotylosaurier der Trias. Palaeontographica Stuttgart **59** 1912 (69-102) 6 Taf. **137**
- Huntington, Geo. S.** The development of the lymphatic system in the reptiles. Anat. Rec. Philadelphia **5** 1911 (261-276). **138**
- Hurter, Julius, sen.** Herpetology of Missouri. St. Louis Mo. Trans. Acad. Sci. **20** 1911 (59-274) pls. xviii-xxiv. **139**
- Hurter, J.** Reptiles and batrachians of Laguna beach [Cal.]. Claremont Cal. Pomona Coll. Rep. Laguna Mar. Lab. **1** 1912 (67). **139a**
- Ishikawa, C.** Note on the gastrulation of the 'giant salamander, *Megalobatrachus sieboldii*. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (530-534). **140**
- Jaekel, O.** Die ersten Halswirbel. Anat. Anz. Jena **40** 1912 (609-622). **141**
- Johnson, R. D. O.** Reversion of *Amblystoma*. Science New York **36** 1912 (594-595). **142**
- Jolly, G. G.** Habitat of *Echis carinata*. Bombay J. Nat. Hist. Soc. **21** 1912 (1340). **143**
- Kammerer, Paul.** Experimente über Fortpflanzung, Farbe, Augen und Körperreduktion bei *Proteus anguinus* Laur. (zugleich: Vererbung erzwungener Farbveränderungen, Mitt. 3). Arch. EntwMech. Leipzig **33** 1912 (349-461) 4 Taf. **144**
- Kammerer, P.** Direkt induzierte Farbanpassungen und deren Vererbung. Verh. intern. ZoolKongr. Jena **8** (1910) 1912 (263-271). **145**
- Kampen, P. N. van.** Javanische Amphibien gesammelt von Edw. Jacobson. Leiden Notes Mus. Jentink **34** 1912 (75-79). **146**
- [**Kaščenko, N. F.**] Кащенко, Н. О. Сибирский Четырехпалый Тритонъ (*Salamandrella Keyserlingii* Dyb.). Věstn. ěub. akv. i terr. Kiev **1** 1911 (215-220 235-237 252-253). **147**
- Kennerl, Pierre.** Les corps adipo-lymphoïdes des Batraciens. Paris C. R. Acad. sci. **154** 1912 (1378-1380). **148**
- King, Helen Dean.** The oögenesis of *Bufo lentiginosus*. J. Morph. Philadelphia **19** 1908 (369-438) pls. **149**
- King, H. D.** The structure and development of Bidder's organ in *Bufo lentiginosus*. J. Morph. Philadelphia **19** 1908 (439-465) pls **150**
- Kingsbury, B. F.** Amphibian tonsils. Anat. Anz. Jena **42** 1912 (593-612). **151**
- Kinnear, N. B.** Notes on the size and breeding of the common green whipsnake (*Dryophis mycterizans*). Bombay J. Nat. Hist. Soc. **21** 1912 (1336). **152**
- Kinnear, N. B.** Breeding of the common green viper (*Lachesis gramineus*). Bombay J. Nat. Hist. Soc. **21** 1912 (1339). **153**
- Kollmann, Max.** Anomalie des voies biliaires chez une Tortue (*Clemmys leprosa*). Paris Bul. soc. zool. **37** 1912 (101-106). **154**
- Kollmann, M.** Observations sur les leucocytes granuleux des Sauropsidés. Ann. sci. nat. (zool.) Paris (sér. 9) **15** 1912 (43-83). **155**
- Kreff, P.** Zur Kenntnis der Lurche-fauna Usambaras. Wochenschr. Aquarienkunde Braunschweig **9** 1912 Beilage Lacerta (13-15). **156**
- Kremmling, Wilhelm.** Beitrag zur Kenntnis von *Rhamphorhynchus Gemmingi* H. v. Meyer. Nach einem in Halle befindlichen Exemplar. Halle Nova Acta Leop. **96** 1912 (345-370). 1 Taf. **157**
- Kressmann, Margarete.** Schuppenreste bei Sireniden. Jenaische Zs. Natw. **48** 1912 (399-432) 1 Taf. **158**
- Kükenthal, Willy.** On the hair-like appendages in the frog *Astylosternus robustus* (Blgr.). Cambridge Mass. Bull. Mus. Comp. Zool. Harvard Coll. **53** 1912 (369-376) pls. i-v. **159**
- Kuntz, Albert.** The development of the sympathetic nervous system in turtles. Amer. J. Anat. Philadelphia **11** 1911 (279-312) ff. 1-13. **160**
- Kuntz, A.** The development of the sympathetic nervous system in the Amphibia. J. Comp. Neur. Philadelphia **21** 1911 (397-416) ff. 1-7. **161**

- Kurz, Oskar.** Die beinbildenden Potenzen entwickelter Tritonen. (Experimentelle Studien.) Arch. EntwMech. **34** 1912 (588-617) 1 Taf. **162**
- [**Laister, A. F.**] Ляйстеръ, А. Ф. Къ вопросу о взаимоотношенияхъ между *Phrynocephalus helioscopus* Pall. и *Phrynocephalus persicus* De-Fil. и ихъ распространении на Кавказѣ. [Zur Frage über die gegenseitigen Beziehungen zwischen *Phrynocephalus helioscopus* Pall. und *Phrynocephalus persicus* De-Fil., sowie deren Verbreitung im Kaukasus.] Char'kov Trav. Soc. nat. **45** 1911-1912 (1912) (73-93). **163**
- Lange, Dan. de, jr.** Mitteilungen zur Entwicklungsgeschichte des japanischen Riesensalamanders (*Megalobatrachus maximus* Schlegel). Anat. Anz. Jena **42** 1912 (321-346). **164**
- Lange, S. J. de.** De nucleus ruber bij reptilien. [The red nucleus in reptiles.] Amsterdam Versl. Wis. Nat. Afd. K. Akad. Wet. **20** 1912 (1256-1264) (Dutch); Amsterdam Proc. Sci. K. Akad. Wet. **14** 1912 (1082-1090) (English). **165**
- Lantz, Louis.** Beitrag zur Biologie von *Molge* (= *Triton*) *vittata* Gray forma *ophrytica* Berthold. Bl. Aquarienkunde Stuttgart **23** 1912 (181-188). **166**
- Laville, A.** Couleuvre vipérine et couleuvre à collier dans la vallée de la Mauldre. Feuille jeunes natural. Paris **42** 1912 (155-156). **167**
- Leege, Otto.** Die Lurche und Kriechtiere Ostfrieslands. Emden Jahresber. natf. Ges. **96** (1911) 1912 (42-100). **168**
- Lehrs, Ph.** Reptilienleben auf Leukas. Verh. Ges. D. Natf. Leipzig **83** (1911) II 1 1912 (448-449). **169**
- Lenhossék, M. v.** Das Ciliarganglion der Reptilien. Arch. mikr. Anat. Bonn **80** 1912 (89-116) 2 Taf. **170**
- Lenhossék, M.** A hüllók sugárducza. [Über des Ganglion ciliare der Reptilien.] Math. Term. Ért. Budapest **30** 1912 (419-429). **170a**
- Lepri, Giuseppe.** Aggiunte alla Collezione Erpetologica del Museo zool. di Roma. Roma Boll. Soc. zool. ital. Ser. III **1** 1912 (273-286). **171**
- Levi, Giuseppe.** I condriosomi dei gonociti. Monitore zool. ital. Firenze **23** 1912 (116-121). **172**
- Levi, G.** I condriosomi nell'ooite degli Anfibi. Monitore zool. ital. Firenze **23** 1912 (149-163) 3 tav. **173**
- Levi, G. e Terni, Tullio.** Studi sulla grandezza delle cellule. II. Le variazioni dell'indice plasmaticonucleare durante l'intercinesi. Archivio ital. Anat. Embriol. Firenze **10** fasc. 4 (1911) 1912 (545-554) 1 diagramma. **174**
- Lewis, Warren H.** The relation of the myotomes to the ventro-lateral musculature and to the anterior limbs in *Amblystoma*. Anat. Rec. Philadelphia **4** 1910 (183-190) ff. 1-8. **175**
- Lewis, W. H.** Localization and regeneration in the neural plate of amphibian embryos. Anat. Rec. Philadelphia **4** 1910 (191-198). **176**
- Loos, Kurt.** Die Reptilien in Böhmen. Prag Lotos **60** 1912 (254-256 257-274). **177**
- Lull, Richard S.** *Stegosaurus unguulatus* Marsh, recently mounted at the Peabody Museum of Yale University. Amer. J. Sci. New Haven Conn. (Ser. 4) **30** 1910 (361-377) pl. ii. **178**
- Lull, R. S.** Cretaceous dinosaurs. [Symposium on ten years' progress in vertebrate paleontology.] Bull. Geol. Soc. Amer. Washington **23** 1912 (208-212). **179**
- Lull, R. S.** The Reptilia of the Arundel formation. Md. Geol. Surv. Lower Cretaceous Baltimore 1911 (173-178). **180**
- Lull, R. S.** Vertebrata. (Systematic paleontology of the Lower Cretaceous deposits of Maryland.) Md. Geol. Surv. Lower Cretaceous Baltimore 1911 (183-211) pls. xi-xx. **181**
- Lull, R. S.** The evolution of the Ceratopsia. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (771-777). **182**
- Lydekker, R., Cunningham, J. T., Boulenger, G. A. and Thomson, J. A.** Reptiles, Amphibia, Fishes and Lower Chordata. London 1912 (xvi+510). **183**
- Maggiore, Luigi.** Ricerche morfologiche sull'apparato palpebrale degli Anfibi. Roma Ric. Lab. anat. norm. **16** 1912 (155-194) 1 tav. **184**
- Mannu, Andrea.** Sulla formazione dei recessi mesenteriali e del cosiddetto paramesenterio nei Rettili (*Gongylus*

- ocellatus*). Intern. Monatschr. Anat. Leipzig **29** 1912 (1-69) 3 Taf. **185**
- Marcus, H.** Ueber die Beziehungen zwischen dem Lymph- und Blutgefäßsystem. München SitzBer. Ges. Morph. **27** (1911) 1912 (97-103) 1 Taf. **186**
- Maximow, Alexander.** Untersuchungen über Blut und Bindegewebe. 4. Über die Histogenese der Thymus bei Amphibien. Arch. mikr. Anat. Bonn **79** Abt. 1 1912 (560-611) 3 Taf. **187**
- McKibben, Paul S.** The nervus terminalis in urodele Amphibia. J. Comp. Neur. Philadelphia **21** 1911 (261-309) ff. 1-46. **188**
- Meisenheimer, Johannes.** Experimentelle Studien zur Soma und Geschlechtsdifferenzierung. Beitrag 2: Über den Zusammenhang zwischen Geschlechtsdrüsen und sekundären Geschlechtsmerkmalen bei Fröschen. Zool. Jahrb. Jena Suppl. **15** Bd 3 1912 (191-218). **189**
- Merk-Buchberg, M.** Zur Ernährungsweise der Ringelnatter, *Tropidonotus natrix*. [Trinkt Milch.] Zool. Beob. Frankfurt a. M. **53** 1912 (210-212). **190**
- Merriam, John C.** Marine reptiles. [Symposium on ten years' progress in vertebrate paleontology.] Bull. Geol. Soc. Amer. Washington **23** 1912 (221-223). **191**
- Methuen, P. A. and Hewitt, J.** On a collection of reptiles from Madagascar made during the year 1911. Ann. Transv. Mus. Pretoria **3** (). **192**
- Methuen, P. A. vide Hewitt, J.**
- Meyns, R.** Transplantationen embryonaler und jugendlicher Keimdrüsen auf erwachsene Individuen bei Anuren nebst einem Nachtrag über Transplantationen geschlechtsreifer Froschhoden. Arch. mikr. Anat. Bonn **79** Abt. 2 1912 (148-176) 1 Taf. **193**
- Mochi, Alberto.** Dispnea asittica e dispnea riflessa nella *Rana*. Folia neurobiologica Haarlem **6** 1912 (769-786). **194**
- Möllendorff, Wilhelm v.** Über Anlage und Ausbildung des Kiemenlungenkreislaufs bei Anuren (*Bombinator pachypus*). Anat. Hefte Wiesbaden Abt. I **47** 1912 (249-275). **195**
- Moodie, Roy L.** A new labyrinthodont from the Kansas coal measures. Washington D.C. Smithsonian Inst. Proc. U. S. Nation, Mus. **39** 1911 (489-495). **196**
- Moodie, R. L.** The lateral line system in extinct Amphibia. J. Morph. Philadelphia **19** 1908 (511-540). **197**
- Moodie, R. L.** An American Jurassic frog. Amer. J. Sci. New Haven Conn. (Ser. 4) **34** 1912 (286-288). **198**
- Moodie, R. L.** The temnospondylous Amphibia and a new species of *Eryops* from the Permian of Oklahoma. Lawrence Univ. Kans. Sci. Bull. **5** 1911 (233-253) pls. xlix-liv. **199**
- Moodie, R. L.** An armored dinosaur from the Cretaceous of Wyoming. Lawrence Univ. Kans. Sci. Bull. **5** 1911 (255-273) pls. lv-lix. **200**
- Moodie, R. L.** An embryonic plesiosaurian propodial. Topeka Trans. Kansas Acad. Sci. **23-24** 1911 (95-101) pl. i. **201**
- Moodie, R. L.** The "stomach stones" of reptiles. Science New York **35** 1912 (377-378). **202**
- Morgan, T. H.** Is the change in the sex-ratio of the frog, that is affected by external agents, due to partial fertilization? Amer. Nat. New York **46** 1912 (108-109). **203**
- Morgulis, Sergius.** Studien über Inanition in ihrer Bedeutung für das Wachstumsproblem. II. Experimente an *Triton cristatus*. Arch. EntwMech. Leipzig **34** 1912 (618-679). **204**
- Morgulis, S.** The effect of inanition and a return to normal diet upon the organic substance, salts and water content in *Diemyctylus viridescens*. Verh. intern. ZoolKongr. Jena **8** (1910) 1912 (636-638). **205**
- Mosse, A. H. E.** Saw-scaled viper (*Echis carinata*) as a tree-snake. Bombay J. Nat. Hist. Soc. **21** 1912 (1339-1340). **206**
- Mourgues, Marcel.** Sur l'anatomie du Platyductyle et de l'Hémidactyle. Marseille Bul. soc. linn. **3** 1911 (143). **207**
- Mullan, J. P.** The food of a bull-frog (*Rana tigrina*). Bombay J. Nat. Hist. Soc. **21** 1912 (1341). **208**
- Munson, J. P.** A comparative study of the structure and origin of the yolk nucleus. Arch. Zellforschg Leipzig **8** 1912 (663-716) 6 Taf. **209**

- Namiye, Motokichi.** Okinawa san yamori-rui ni tsuite. [On the Geckonidae of the Loochoos.] Dobuts. Z. Tokyo **24** 1912 (442-445) pl. **210**
- [**Nesterov, P. V.**] Нестеровъ, П. В. Къ герпетологии юго-западнаго Закавказья и пограничной части Малой Азии. [Contributions à la faune herpétologique de la Transcaucasie S.-O. et de la partie adjacente de l'Asie Mineure.] St. Peterburg Ann. mus. zool. Ac. sc. **17** 1912 (61-85). **211**
- Nick, Ludwig.** Das Kopfskelet von *Dermochelys coriacea* L. Zool. Jahrb. Jena Abt. f. Anat. **33** 1912 (1-238) 12 Taf. **212**
- Nieden, Fr.** Amphibia. (Wiss. Ergebnisse d. D. Zentral-Afrika Exp., Bd 4, Lfg 8.) Leipzig (Klinkhardt & Biermann) 1912 (165-195) 1 Taf. **213**
- Nieden, F.** Übersicht über die afrikanischen Schleichenlurche (Amphibia apoda). Mit e. Bestimmungstabelle. Berlin SitzBer. Ges. natf. Freunde **1912** (186-214). **214**
- Nopcsa, F.** Notes on British Dinosaurs. Part V. *Craterosaurus* (Seeley). Geol. Mag. London **9** 1912 (481-484). **215**
- Norris, H. W.** The cranial nerves of *Siren lacertina*. Des Moines Proc. Iowa Acad. Sci. **17** 1910 (223-226). **216**
- Nowikoff, M.** Über die Entwicklung und morphologische Bedeutung des Parietalauges bei Sauriern. Verh. intern. ZoolKongr. Jena **8** (1910) 1912 (334-338). **217**
- Nussbaum, M.** Über den Bau und die Tätigkeit der Drüsen. Mitt. **6**. [Bau u. cyclische Veränderungen der Samenblasen v. *Rana fusca*.] Arch. mikr. Anat. Bonn **80** 1912 Abt. 2 (1-59) 2 Taf. **218**
- O'Donoghue, C. H.** The circulatory system of the common Grass-Snake (*Tropidonotus natrix*). London Proc. Zool. Soc. **1912** 1912 (612-647) 3 pls. **219**
- Osawa, Gakutaro.** Beiträge zur Kenntniss über den Verdauungstractus des *Cryptobranchus japonicus*. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (221-224). **220**
- Oshima, Masamitsu.** Description of a new *Gecko* from Botel Tobago island. Philippine J. Sci. Manila D. Gen. Biol. Ethnol. Anthropol. **7** 1912 (241-243) pls. i & ii. **221**
- Ouwens, P. A.** On a large *Varanus* species from the Island of Komodo. [Malay Archipelago near Flores.] Buitenzorg Bull. Jard. bot. **6** 1912 (1-3). **222**
- Ouwens, P. A.** On a *Chlamydosaurus* from Dutch South New Guinea. Buitenzorg Bull. Jard. bot. **6** 1912 (4). **223**
- Paris, Paul.** Changement de coloration chez un lézard gris (*Lacerta muralis*). Paris Bul. soc. zool. **37** 1912 (75-76). **224**
- Pearse, A. S.** Concerning the development of frog tadpoles in sea water. Philippine J. Sci. Manila D. Gen. Biol. Eth. Anthropol. **6** 1911 (219-220). **225**
- Pellegrin, Jacques.** Reptiles, Batraciens et Poissons du Maroc (Mission de Mme. Camille du Gast). Paris Bul. soc. zool. **37** 1912 (255-262). **226**
- Pellegrin, J.** Reptiles, Batraciens et Poissons du Maroc (récoltés par le Dr. H. Millet). Paris Bul. soc. zool. **37** 1912 (262-264). **227**
- Peyer, Bernhard.** Die Entwicklung des Schädelskeletts von *Vipera aspis*. Morph. Jahrb. Leipzig **44** 1912 (563-621) 3 Taf. **228**
- Phisalix, Marie.** Immunité naturelle du hérisson vis-à-vis du venin de l'*Heloderma suspectum* Cope. Paris C. R. Acad. sci. **154** 1912 (1434-1437). **229**
- Phisalix, M.** Note sur les effets mortels réciproques des morsures de l'*Heloderma suspectum* Cope et de la *Vipera aspis* Laur. et sur les caractères différentiels de leurs venins. Bul. Muséum Paris **1911** (485-491). **230**
- Phisalix, M.** Structure et travail sécrétoire de la glande venimeuse de l'*Heloderma suspectum*. Bul. Muséum Paris **1912** (184-190). **231**
- Phisalix, M.** La peau et la sécrétion muqueuse chez le Protée anguillard et la Sirène lacertine. Bul. Muséum Paris **1912** (191-193). **232**
- Phisalix, M.** Modifications que la fonction venimeuse imprime à la tête osseuse et aux dents chez les serpents. Ann. sci. nat. (zool.) Paris (sér. 9) **16** 1912 (161-205). **233**

- Phisalix, M.** Effets réciproques des morsures de l'*Heloderma suspectum* et de la *Vipera aspis*. Paris Bul. soc. path. exot. **4** 1911 (631-635). **234**
- Phisalix, M.** Répartition des glandes cutanées et leur localisation progressive, en fonction de la disparition des écailles chez les Batraciens apodes. Verh. intern. ZoolKongr. Jena **8** (1910) 1912 (605-609) 1 Taf. **235**
- Pocha, J. P.** *vide* Bannerman, W. B.
- Polus, J.** *vide* Spehl, G.
- Pozzi, S.** The garden of serpents, Butantan, Brazil. [Abstract of a lecture given at the Henri de Rothschild Polyclinic, Mar. 29, 1911. Translated from Revue Scientifique, Paris, Apr. 22, 1911.] Washington D.C. Smithsonian Inst. Rep. **1911** 1912 (441-446). **236**
- Prosser, Dean T.** Habits of "*Amblystoma tigrinum*" at Tolland, Colorado. Boulder Univ. Coll. Stud. **8** 1911 (257-263). **237**
- Rainaldi, Benedetto.** Contributo allo studio dell'apparecchio respiratorio della *Lacerta muralis*. Riv. fis. mat. sc. nat. Pavia **16** 1907 (256-270 325-334) 1 tav. **238**
- Reagan, Albert B.** Notes on the flora and fauna of the Rosebud reservation, west of Gregory county. South Dakota Bull. Geol. Surv. Vermilion No. **4** [1909] (143-167). **239**
- X **Reck, H.** Les découvertes de Sauriens fossiles gigantesques dans l'Afrique orientale allemande. Rev. zool. Africaine Bruxelles **1** 1912 (397-400). **240**
- Reese, Albert M.** The embryology of the Florida alligator (*A. mississippiensis*). Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (535-537). **241**
- Reese, A. M.** Food and chemical reactions of the spotted newt, *Diemyctylus viridescens*. J. Anim. Behav. Boston **2** 1912 (190-208). **241a**
- [**Riabinin, A.**] Рябининъ, А. Позвонки ихтиозавра изъ Киммериджа Печорскаго Края. [Wirbel eines *Ichthyosaurus* aus dem Kimmeridge des Petschora-Gebietes.] St. Peterburg Trd. geol. Muz. Ak. nauk **6** 1912 (43-48) Taf. 1. **242**
- Ribbing, L.** Kleinere Muskelstudien. 4. Die distale Extremitätenmuskulatur von *Gecko verticillatus*. Lund. Univ. Årsskr. N.F. **8** Afd. 2 No. 8 [=Fysiogr. Sällsk. Handl. N.F. **23** No. 8] 1912 (15). **243**
- Richardson, C. H., jun.** The distribution of *Hyla arenicolor* Cope, with notes on its habits and variation. Amer. Nat. New York **46** 1912 (605-611). **244**
- Röthig, Paul.** Beiträge zum Studium des Centralnervensystems der Wirbeltiere. 5. Die Zellenordnungen im Vorderhirn der Amphibien, mit besonderer Berücksichtigung der Septumkerne und ihr Vergleich mit den Verhältnissen bei *Testudo* und *Lacerta*. Amsterdam Verh. K. Akad. Wet. (Sect. 2) **17** No. 1 1912 (23) 25 Taf. **245**
- Rosén, Nils.** Contributions to the fauna of the Bahamas. 1-3. Lund Univ. Årsskr. N.F. **7** Afd. 2 No. 5 [=Fysiogr. Sällsk. Handl. N.F. **22** No. 5] 1911 (72) 1 pl. maps. **246**
- Rossi, Umberto.** Ricerche sperimentali sullo sviluppo della ipofisi negli Anfibi anuri (*Rana esculenta*). Perugia Annali Fac. Med. Ser. 3 **4** (1904) 1906 (137-140). **247**
- Roule, Louis.** Revue de zoologie (Reptiles, Batraciens et Poissons). Rev. gén. sci. Paris **23** 1912 (934-945). **248**
- Rudolph, A.** Der Springfrosch (*Rana agilis*) im Südharz. [Mit Zusatz v. W. Wolterstorff.] Bl. Aquarienkunde Stuttgart **23** 1912 (466). **249**
- Runnström, J.** *vide* Backman, E. L.
- Ruthven, Alexander G.** Description of a new salamander from Iowa. Washington D.C. Smithsonian Inst. Proc. U. S. Nation. Mus. **41** 1912 (517-519). **250**
- Ruthven, A. G.** Description of a new *Anolis* from Brazil. Washington D.C. Proc. Biol. Soc. **25** 1912 (163-164). **251**
- Ruthven, A. G.** Notes on Michigan reptiles and amphibians. 2. Rep. Mich. Acad. Sci. Lansing **12** 1910 (59). **252**
- Ruthven, A. G.** Contributions to the herpetology of Iowa. Des Moines Proc. Iowa Acad. Sci. **17** 1910 (198-209). **253**
- Ruthven, A. G.** The Amphibians and Reptiles collected by the University of Michigan-Walker Expedition in southern Vera Cruz, Mexico. Zool. Jahrb. Jena Abt. f. Syst. **32** 1912 (295-332) 6 Taf. **254**

- Ruthven, A. G., Thompson, Crystal and Thompson, Helen.** The herpetology of Michigan. Michigan Geol. Biol. Surv. Pub. Lansing No. **10** (Biol. Ser. No. **3**) 1912 (11-166) pls. i-xviii. **255**
- Sarasin, Paul.** Über die zoologische Schätzung der sogenannten Haarmenschen und über larvale Formen bei Säugetieren und Reptilien. Zool. Jahrb. Jena Suppl. **15** Bd 2 1912 (289-328). **256**
- [**Satunin, K. A.**] Сатуниинъ, К. А. Животный миръ Муганской степи. Изв.: Муганская степь. I, 3. [Die Tierwelt der Mугan-Steppe. In: Die Mугan-Steppe. I, 3.] Tiflis (Verwaltung des Uebersiedlerwesens im Kaukasus) 1912 (i-iii + 1-85) 1 Taf. **257**
- Saunders, H. F.** Poisonous lizards in India. Bombay J. Nat. Hist. Soc. **21** 1912 (1340-1341). **258**
- Sauvage, H. E.** Les organes génitaux urinaires chez le Pleurodèle de Walt. Autun Bul. soc. sci. nat. **23** 1910 (5-8). **259**
- Sauvage, H. E.** Les branches d'origine du plexus brachial et crural chez le Léopard ocellé. Autun Bul. soc. sci. nat. **23** 1910 (Proc.-verb. 135-136). **260**
- Schmidt, W. J.** Studien am Integument der Reptilien. I. Die Haut der Geckoniden. Zs. wiss. Zool. Leipzig **101** 1912 (139-258) 5 Taf. **261**
- Schmidt, W. J.** Studien am Integument der Reptilien. ii. Die Hautverknöcherungen von *Heloderma*. Zool. Jahrb. Jena Suppl. **15** Bd 2 1912 (219-228) 1 Taf. **262**
- Schmidt, W. J.** Studien am Integument der Reptilien. iii. Über die Haut der Gerrhosauriden. Zool. Jahrb. Jena Abt. f. Anat. **35** 1912 (75-104) 1 Taf. **263**
- Schöppler, Hermann.** Über das Verschwinden der Eidechse aus der Umgebung von Regensburg. Regensburg Ber. natw. Ver. **13** (1910-11) 1912 (131-134). **264**
- Schreiber, Egid.** Herpetologia europaea. Eine systematische Bearbeitung der Amphibien und Reptilien, welche bisher in Europa aufgefunden sind. 2. gänzl. umgearb. Aufl. Jena (G. Fischer) 1912 (X + 960). 26 cm. **265**
- Schuster, E. vide Smith, G.**
- Seale, Alvin.** The fishery resources of the Philippine islands. Part 4. Miscellaneous marine products. [Sea turtles (*Chelonia*) pp. 291-295 pls. iv-vi.] Philippine J. Sci. Manila D. Gen. Biol. Eth. Anthropol. **6** 1911 (283-320) pls. i-xii. **266**
- Šečerov, Slavko.** Die Umwelt des Keimplasmas. II. Der Lichtgenuss im *Salamandra*-Körper. Arch. Entw. Mech. Leipzig **33** 1912 (682-702) 2 Taf. **267**
- Šečerov, S.** Die Umwelt des Keimplasmas. IV. Der Lichtgenuss im *Lacerta*-Körper. Arch. Entw. Mech. Leipzig **34** 1912 (742-748) 1 Taf. **268**
- Schapitz, Reinhold.** Die Urgeschlechtszellen von *Amblystoma*. Ein Beitrag zur Kenntnis der Keimbahn der Urodelen Amphibien. Arch. mikr. Anat. Bonn **79** Abt. 2 1912 (41-78) 3 Taf. **269**
- Shiino, K.** Beitrag zur Kenntnis der Gehirnnerven der Schildkröten. Anat. Hefte Wiesbaden Abt. 1 **47** 1912 (1-34). **270**
- Shimada, K.** Über die Segmentierung des eigentümlichen Rückenmarksbandes und die Hofmann'schen Kerne (Kölliker) des Rückenmarkes von einigen Schlangen (*Trionocephalus*; *Tropidonotus tigrinus*). Anat. Anz. Jena **42** 1912 (417-430). **271**
- Siebenrock, F.** Über den Dimorphismus bei *Emydura novae guineae* Meyer. Zool. Anz. Leipzig **40** 1912 (301-304). **272**
- Siebenrock, F.** *Testudo chilensis* Gray and *Testudo sulcata* Mill. Wien Verh. ZoolBot. Ges. **62** 1912 (214-219). **273**
- Siebs, Benno Eide.** Ein seltenes Reptil in Niedersachsen. [*Cistudo lutaria*.] Hannoverland Hannover **1912** (8-9). **274**
- Smith, G. and Schuster, E.** Studies in the experimental analysis of sex. Part 8. On the effects of the removal and transplantation of the gonad in the frog (*Rana fusca*). Q. J. Micr. Sc. London **57** 1912 (439-471) 4 pls. **275**
- Smith, O. A.** Large common and banded Kraits. Bombay J. Nat. Hist. Soc. **21** 1911 (283-284). **276**
- Spehl, G. et Polus, J.** Premières ébauches génitales chez l'Axolotl. Paris C. R. ass. anatomistes **13** 1911 (22-25). **277**
- Spemann, H.** Über die Entwicklung umgedrehter Hirnteile bei Amphibi-

bienembryonen. Zool. Jahrb. Jena Suppl. **15** Bd 3 1912 (1-48) 3 Taf. **278**

Spemann, H. Zur Entwicklung des Wirbeltierauges. Zool. Jahrb. Jena Abt. f. allg. Zool. **32** 1912. (1-98) 6 Taf. **279**

Stamm, R. H. Eine überwinterte Larve des kleinen Wassersalamanders (*Triton punctatus* Latr.) aus Dänemark. Intern. Rev. Hydrobiol. Leipzig biol. Suppl. Ser. **4** H. 2 1912 II (9-10). **280**

Stejneger, Leonhard. Description of a new amphisbaenoid lizard from Peru. Washington D.C. Smithsonian Inst. Proc. U. S. Nation. Mus. **41** 1911 (283-284). **281**

Stejneger, L. Descriptions of three new batrachians from Costa Rica and Panama. Washington D.C. Smithsonian Inst. Proc. U. S. Nation. Mus. **41** 1911 (285-288). **282**

Sternfeld, Richard. Reptilia. (Wiss. Ergebnisse d. D. Zentral-Afrika Exp., Bd 4, Lfg 9.) Leipzig (Klinkhardt & Biermann) 1912 (197-279) 4 Taf. **283**

Sternfeld, R. Eine neue Scinciden-gattung aus Südafrika und eine neue Amphisbaenide aus Kamerun. Berlin SitzBer. Ges. natf. Freunde **1912** (248-250). **284**

Sternfeld, R. Die Reptilien und Amphibien Mitteleuropas. (Schmeils naturwiss. Atlanten.) Leipzig (Quelle & Meyer) 1912 [1913] (81) 30 Taf. **285**

Sternfeld, R. Der Formenkreis des *Chamaeleon bitaeniatus*. Berlin SitzBer. Ges. natf. Freunde **1912** (379-384) 5 Taf. **286**

Sternfeld, R. Die Reptilienausbeute der Expedition Prof. Hans Meyers nach Deutsch-Ostafrika. Berlin SitzBer. Ges. natf. Freunde **1912** (384-388). **287**

Stromsten, Frank A. The development of the posterior lymph hearts of the loggerhead turtle. Des Moines Proc. Iowa Acad. Sci. **17** 1910 (227-228). **288**

Sundberg, Carl Gustaf *vide* Backman, E. Louis.

Symons, C. T. Note on the arboreal habits of the Kabaragoya (*Varanus salvator*) and the Talagoya (*V. bengalensis*). Spolia Zeylan. Colombo **8** 1912 (65-66). **289**

Taylor, Walter P. Field notes on amphibians, reptiles and birds of north-

ern Humboldt county, Nevada, with a discussion of some of the faunal features of the region. Berkeley Univ. Cal. Pub. Zool. **7** 1912 (319-436) pls. vii-xii. **290**

Terni, Tullio. Sul comportamento dei condriosomi durante le divisioni di maturazione [nel testicolo di *Geotriton fuscus*]. Archivio ital. Anat. Embriol. Firenze **10** (1911) 1912 (555-573). **291**

Terni, Tullio *vide* Levi, Giuseppe.

Thäter, Karl. Der Einspruch von Hugo Fuchs. Erdwiderung. Morph. Jahrb. Leipzig **44** 1912 (707-711). **292**

Thompson, Crystal *vide* Ruthven, A. G.

Thompson, Helen *vide* Ruthven, A. G.

Thompson, J. C. Description of a new genus and species of salamander from Japan. San Francisco Proc. Cal. Acad. Sci. (Ser. 4) **3** 1912 (183-186) pl. xiv. **293**

Thompson, J. C. Prodrome of a description of a new genus of *Ranidae* from the Loo Choo islands. Herpetological Notices San Francisco No. **1** 1912 (1-3). **294**

Thompson, J. C. Prodrome of descriptions of new species of Reptilia and Batrachia from the Far East. Herpetological Notices San Francisco No. **2** 1912 (1-4). **295**

Thompson, J. C. On reptiles new to the island arcs of Asia. Herpetological Notices San Francisco No. **3** 1912 (1-5). **296**

Trench, C. Chevenix. Notes on the Indian Chamæleon (*Chamaeleon calcaratus*). Bombay J. Nat. Hist. Soc. **21** 1912 (687-689). **297**

Trinci, Giulio. Il sistema cromaffine cardiaco-cervicale nei Sauri. Archiv. ital. Anat. Embriol. Firenze **10** (1911) 1912 (197-260) 3 tav. **298**

Tucker, Henry. Scale variations in *Stilosoma extenuatum* (A. E. Brown). Philadelphia Proc. Acad. Nat. Sci. **63** (1911) 1912 (549-550). **299**

Udziela, S. Badania nad układem limfatycznym larw salamandry. (*Salamandra maculosa* Laur.). [Untersuchungen über das Lymphgefäßsystem von Salamanderlarven (*Salamandra maculosa* Laur.).] Kraków Bull. Intern. Acad. **1911 B** (742-744). **300**

Udziela, S. Badania nad układem limfatycznym larw salamandry (*Sala-*

- mandra maculosa* Laur.) z 1 tabl. [Recherches sur le système lymphatique de la Salamandre; avec une planche.] Kraków Rozpr. Akad. Um. **11 B** 1911 (483-503). **301**
- Udziela, S.** *vide* Hoyer, H.
- Uhlenhuth, Eduard.** Die Transplantation des Amphibiensauges. Arch. EntwMech. Leipzig **33** 1912 (723-747) 2 Taf. **302**
- [**Усов, С. А.**] Усовъ, С. А. Сравнительная эмбриология осевого скелета *Anura*. [Vergleichende Anatomie des Axenskelettes der *Anura*.] Moskva 1912 (252) 14+5 Taf. 26 cm. **303**
- Van Denburgh, John.** Expedition of the California Academy of Sciences to the Galapagos Islands, 1905-1906. 4. The snakes of the Galapagos Islands. San Francisco Proc. Cal. Acad. Sci. (Ser. 4) **1** 1912 (323-372) pls. xxii-xxx. **304**
- Van Denburgh, J.** Expedition of the California Academy of Sciences to the Galapagos Islands, 1905-1906. 6. The geckos of the Galapagos Archipelago. San Francisco Proc. Cal. Acad. Sci. (Ser. 4) **1** 1912 (405-430). **305**
- Van Denburgh, J.** Notes on a collection of reptiles from southern California and Arizona. San Francisco Proc. Cal. Acad. Sci. (Ser. 4) **3** 1912 (147-154). **306**
- Van Denburgh, J.** Notes on some reptiles and amphibians from Oregon, Idaho and Utah. San Francisco Proc. Cal. Acad. Sci. (Ser. 4) **3** 1912 (155-159). **307**
- Van Denburgh, J.** Concerning certain species of reptiles and amphibians from China, Japan, the Loo Choo Islands, and Formosa. San Francisco Proc. Cal. Acad. Sci. **3** 1912 (187-257). **308**
- Van Denburgh, J.** Notes on *Ascaphus*, the discoglossoid toad of North America. San Francisco Proc. Cal. Acad. Sci. **3** 1912 (259-264). **309**
- Venning, F. E. W.** Snake eating a snipe. Bombay J. Nat. Hist. Soc. **21** 1912. (689-690). **310**
- Venning, F. E. W.** Some notes on the hatching of the Agamoid lizard (*Calotes jerdoni*). Bombay J. Nat. Hist. Soc. **21** 1912 (690-692). **311**
- Versluys, J.** Das Streptostylie-Problem und die Bewegungen im Schädel bei Sauropsiden. Zool. Jahrb. Jena Suppl. **15** Bd 2 1912 (545-716) 1 Taf. **312**
- Versluys, J.** Über Streptostylie und ähnliche Zustände bei Sauropsiden, in Zusammenhang mit Bewegungen im Schädel. Verh. intern. ZoolKongr. Jena **8** (1910) 1912 (490-505). **313**
- Viguiet, G. et Weber, A.** Altération des hématies chez le *Gongylus ocellatus* sous l'influence d'une Hémogrégarine. Paris C. R. soc. biol. **73** 1912 (44-46). **314**
- Vogt, Theodor.** Beitrag zur Reptilien- und Amphibienfauna der Südseeinseln. Berlin SitzBer. Ges. natf. Freunde **1912** (1-13). **315**
- Vogt, T.** Reptilien und Amphibien aus Holländisch-Neu-Guinea. Berlin SitzBer. Ges. natf. Freunde **1912** (355-359). **316**
- Wall, F.** Reptiles collected in Chitral. Bombay J. Nat. Hist. Soc. **21** No. 1 1911 (132-145). **317**
- Wall, F.** A new snake from the Western Himalayas, *Trachischium quinquelabialis*. Bombay J. Nat. Hist. Soc. **21** No. 1 1911 (201-202). **318**
- Wall, F.** Remarks on two rare blind snakes. Bombay J. Nat. Hist. Soc. **21** 1911 (278-279). **319**
- Wall, F.** On the occurrence of the snake *Dipsadomorphus nuchalis* (Beddome) in Berhampur, Orissa. Bombay J. Nat. Hist. Soc. **21** 1911 (279). **320**
- Wall, F.** Is *Lycodon gammiei* (Blanford) an aberrant specimen of *Lycodon fasciatus* (Anderson)? Bombay J. Nat. Hist. Soc. **21** 1911 (279-280). **321**
- Wall, F.** Remarks on the greater and lesser black Kraits (*Bungarus niger* and *B. lividus*). Bombay J. Nat. Hist. Soc. **21** 1911 (281-283). **322**
- Wall, F.** The development of embryo in the eggs of the oviparous viper, *Lachesis monticola*, prior to oviposition. Bombay J. Nat. Hist. Soc. **21** 1911 (284-285). **323**
- Wall, F.** A popular treatise on the common Indian Snakes. Bombay J. Nat. Hist. Soc. **21** 1911 (1-19 with 1 pl. and 2 maps) 1912 (447-475 with 1 pl.) (1009-1021) 1 pl. diagram and map. **324**

- Wall, F.** A new snake, *Psammophis triticeus*, from Baluchistan. Bombay J. Nat. Hist. Soc. **21** 1912 (634-636). **325**
- Wall, F.** Food of the snake *Rhabdops bicolor*. Bombay J. Nat. Hist. Soc. **21** 1912 (686). **326**
- Wall, F.** The breeding of the false Himalayan viper (*Psammodynastes pulverulentus*). Bombay J. Nat. Hist. Soc. **21** 1912 (686). **327**
- Wall, F.** Breeding of Maclelland's coral snake (*Callophis maclellandi*). Bombay J. Nat. Hist. Soc. **21** 1912 (693). **328**
- Walter, F. K.** Ueber den Einfluss des Nervensystems auf das regenerative Wachstum. Rostock SitzBer. natf. Ges. N.F. **3** 1911 (9-11). **329**
- Warren, John.** The development of the paraphysis and pineal region in Reptilia. Amer. J. Anat. Philadelphia **11** 1911 (313-392) 13 pls. **330**
- Watson, D. M. S.** On some reptilian lower jaws. Ann. Mag. Nat. Hist. London **10** 1912 (573-587). **331**
- Watson, D. M. S.** The skeleton of *Lystrosaurus* (Anomodontia). Graham's Town Rec. Alban. Mus. **2** 1912 (287-293) pls. xv-xvi. **332**
- Watson, D. M. S.** *Mesosuchus browni* gen. and sp. n. (Rhynchocephalia). Graham's Town Rec. Alban. Mus. **2** 1912 (296-297). **333**
- Watson, D. M. S.** *Eosuchus colleti* gen. and sp. n. (? Rhynchocephalia). Graham's Town Rec. Alban. Mus. **2** 1912 (298-299). **334**
- Weber, A. vide** Viguier, G.
- Werner, F.** Die Lurche und Kriechtiere von Alfred Brehm (neubearbeitet). Brehms Tierleben Bd. **4** Leipzig 1912 (1-572). **335**
- Werner, F.** Reptilia. Lacertilia. Eublepharidae, Uroplatidae, Pygopodidae. (Das Tierreich, hrsg. v. F. E. Schulze, Lfg 33.) Berlin (R. Friedländer & S.) 1912 (x+33). **336**
- Werner, F.** Über die Aufblähbarkeit des Körpers beim fliegenden Drachen (*Draco*) und der Hinterhauptslappen bei *Chamaeleon dilepis*. [Gegen K. Deninger 1910 u. G. Tornier 1904.] Zool. Anz. Leipzig **39** 1912 (523-529). **337**
- Werner, F.** Beiträge zur Kenntnis der Reptilien und Amphibien Griechenlands. Arch. Natg. Berlin **78** Abt. A H. 5 1912 (167-180). **338**
- Wieland, G. R.** Note on the dinosaur-turtle analogy. Science New York (N. Ser.) **36** 1912 (287-288). **339**
- Wilder, Harris Hawthorne.** The appendicular muscles of *Necturus maculosus*. Zool. Jahrb. Jena Suppl. **15** Bd 2 1912 (383-424) 5 Taf. **340**
- Williston, Samuel W.** American Permian vertebrates. Chicago (Univ. Chicgo Press) [1911] (v+145) pls. i-xxxviii. **341**
- Williston, S. W.** Restoration of *Limnoscelis*, a cotylosaur reptile from New Mexico. Amer. J. Sci. New Haven Conn. (Ser. 4) **34** 1912 (457-468). **342**
- Williston, S. W.** The wing-finger of the pterodactyls, with restoration of *Nyctosaurus*. J. Geol. Chicago **19** 1911 (696-705). **343**
- Williston, S. W. vide** Case, E. C.
- Wiman, Carl.** Über *Mixosaurus Cornalianus* Bass. sp. Upsala Bull. Geol. Inst. **11** 1912 (230-241) Taf. xi. **344**
- Wintrebert, P.** Les enveloppes protectrices de l'œuf et le mécanisme de l'éclosion chez l'Axolotl (*Amblystoma tigrinum*). Paris C. R. soc. biol. **72** 1911 (799-802). **345**
- Wolf, Friedrich.** Legt die Kreuzotter Eier? D. Jäger München **34** 1912 (649 708 748). **346**
- Wolterstorff, W.** Über die Auffindung des Springfrosches (*Rana agilis*) im Südharz. Zool. Anz. Leipzig **40** 1912 (254). **347**
- Wolterstorff, W.** Zur Kenntnis der europäischen Tritonen. Die Gruppe *Triton* (= *Molge*) *vulgaris* und *palmatus* Schneid. Bl. Aquarienkunde Stuttgart **23** 1912 (188-191 208-209) 1 Taf. **348**
- Young, Robert T.** *Cryptobranchus alleghaniensis* and *Larus marinus* in North Dakota. Science New York **35** 1912 (308-309). **349**
- Yung, Emile.** Influence d'un jeûne expérimental prolongé sur la longueur de l'intestin chez *Rana fusca* et *R. esculenta*. Verh. intern. ZoolKongr. Jena **8** (1910) 1912 (602-604). **350**
- Zimmer, Carl.** Das Vorkommen der europäischen Sumpfschildkröte in der preussischen Provinz Schlesien. Zool. Ann. Würzburg **4** 1912 (297-311) 1 Karte. **351**

II.—SUBJECT INDEX.

COMPREHENSIVE AND
MISCELLANEOUS. 5603

Brehms Tierleben, Lurche und Kriechtiere; **Werner, 335.**

Die Reptilien und Amphibien Mitteleuropas; **Sternfeld, 285.**

Herpetologia europaea. Eine systematische Bearbeitung der Amphibien und Reptilien, welche bisher in Europa aufgefunden sind; **Schreiber, 265.**

Natural History of Reptiles and Amphibia; **Lydekker & Cunningham, 183.**

Revue de zoologie (Reptiles, Batraciens et Poissons); **Roule, 248.**

Études zoologiques sur les Batraciens de la Corse et de la Sardaigne suivies de considérations anatomo-physiologiques sur la reproduction et la circulation chez les Salamandridés apneumones; **Dehaut, 83.**

Aggiunte alla Collezione Erpetologica del Museo zool. di Roma; **Lepri, 171.**

A popular treatise on the common Indian snakes; **Wall, 324.**

On some treefrogs allied to *Hyla caerulea*, with remarks on noteworthy secondary sexual characters in the family Hylidae; **Boulenger, 57.**

American Permian vertebrates; **Williston, 341.**

Marine reptiles. [Symposium on ten years' progress in vertebrate paleontology]; **Merriam, 191.**

Chelonia. [Symposium on ten years' progress in vertebrate paleontology]; **Hay, 115.**

STRUCTURE. 5607

General.

Anatomy of *Ascaphus*; **Van Denburgh, 309.**

L'anatomie du Platydictyle et de l'Hemidictyle; **Mourgues, 207.**

Nervous System and Sense Organs.

The nervous system of the American leopard frog, *Rana pipiens*, compared with that of the European frogs, *Rana esculenta* and *Rana temporaria (fusca)*; **Donaldson, 86.**

(N-9210 d)

Zellenordnungen im Vorderhirn der Amphibien; **Röthig, 245.**

Beitrag zur Kenntnis der Gehirnnerven der Schildkröten; **Shiino, 270.**

The cranial nerves of *Siren lacertina*; **Norris, 216.**

Über die Segmentierung des eigentümlichen Rückenmarksbandes und die Hofmann'schen Kerne (Kölliker) des Rückenmarkes von einigen Schlangen (*Trigonocephalus*; *Tropidonotus tigrinus*); **Shimada, 271.**

Les branches d'origine du plexus brachial et crural chez le Lézard ocellé; **Sauvage, 260.**

The nervus terminalis in urodele Amphibia; **McKibben, 188.**

Über die Entwicklung des sympathischen Nervensystems beim Frosch; **Camus, 69.**

The development of the sympathetic nervous system in turtles; **Kuntz, 160.**

Das Ciliarganglion der Reptilien; **Lenhossék, 170, 170a.**

Nervo acustico in *Lacerta muralis*; **Beccari, 36.**

Internal ear and the relations of the basicranial nerves in *Dicynodon*; **Broom, 63.**

Retina of lateral eyes of *Sphenodon*; **Bage, 22.**

The visual cells in vertebrates, chiefly in *Necturus maculosus*; **Howard, 132.**

Über die Entwicklung und morphologische Bedeutung des Parietalauges bei Sauriern; **Nowikoff, 217.**

Salamandrina perspicillata, conformazione e sviluppo dell'organo dell'olfatto; **Bogrova, 46.**

Apparato palpebrale degli Anfibi; **Maggiore, 184.**

Zur Kenntnis der Seitenorgane von Amphibien; **Heilig, 119.**

The lateral line system in extinct Amphibia; **Moodie, 197.**

Integument.

Über die Haut der Gerrhosauriden; **Schmidt, 263.**

Die Haut der Geckoniden; **Schmidt, 261.**

Die Hautverknöcherungen von *Heloderma*; Schmidt, 262.

La peau et la sécrétion muqueuse chez le Protée anguillard et la Sirène lacertine; Phisalix, 232.

Répartition des glandes cutanées et leur localisation progressive, en fonction de la disparition des écailles chez les Batraciens apodes; Phisalix, 235.

On the hair-like appendages in the frog *Astylosternus robustus* (Blgr.); Kükenthal, 159.

Schuppenreste bei Sireniden; Kressmann, 158.

The scales of *Dermophis*; Cockerell, 73.

Scale variations in *Stilosoma extenuatum*; Tucker, 299.

A moulting mechanism in lizards; Bruner, 66.

Myology.

The relation of the myotomes to the ventro-lateral musculature and to the anterior limbs in *Amblystoma*; Lewis, 175.

Distale Extremitätenmuskulatur von *Gecko verticillatus*; Ribbing, 243.

The appendicular muscles of *Necturus maculosus*; Wilder, 340.

Osteology.

Skeleton of *Lystrosaurus*; Watson, 332; of *Camptosaurus*; Gilmore, 106; of *Stegosaurus unguatus*; Lull, 178.

Skull of *Dermochelys coriacea* L.; Nick, 212; of *Eryops*; Huene, 135; of *Placodus*; Broili, 61; of *Diadectes lentus* and *Animasaurus carinatus*; Case & Williston, 71.

Development of skull of *Vipera aspis*; Peyer, 228.

Das Streptostylie-Problem und die Bewegungen im Schädel bei Sauropsiden; Versluys, 312.

Modifications que la fonction venimeuse imprime à la tête osseuse et aux dents chez les serpents; Phisalix, 233.

Auditory region in *Dicynodon*; Broom, 63.

Zur Kenntnis des Unterkiefers der Amphibien; Gaupp, 103.

Der Unterkiefer von *Diplocaulus*; Huene, 136.

The lower jaws of fossil reptiles and amphibians; Watson, 331.

Die ersten Halswirbel; Jaekel, 141.

Dinosaurier-Wirbel; Bogoljubov, 43.

The wing-finger of the pterodactyls, with restoration of *Nyctosaurus*; Williston, 343.

An embryonic plesiosaurian propodial; Moodie, 201.

Gelenkflächen propodiales Knochen von Plesiosauriern; Bogoljubov, 42.

The laryngeal cartilages of *Ambystoma*; Hilton, 125.

Alimentary System, Etc.

Verdauungstractus des *Cryptobranchus japonicus*; Osawa, 220.

Struttura del pancreas dei Cheloni e questione del tessuto insulare; Cotronei, 74.

Anomalie des voies biliaires chez une Tortue (*Clemmys leprosa*); Kollmann, 154.

Dental system of reptiles; Bolk, 48.

Circulatory and Respiratory Organs.

Circulatory system of the Grass-Snake (*Tropidonotus natrix*); O'Donoghue, 219.

Über Anlage und Ausbildung des Kiemenlungenkreislaufs bei Anuren (*Bombinator pachypus*); Möllendorff, 195.

The cephalic veins of reptiles; Bruner, 65.

Ueber die Beziehungen zwischen dem Lymph- und Blutgefäßsystem; Marcus, 186.

Untersuchungen über die Regeneration der Blut- und Lymphgefäße im Schwanz von Froschlärven; Dziurzyński, 91.

Untersuchungen über das Lymphgefäßsystem von Salamanderlarven; Hoyer & Udziela, 134.

Recherches sur le système lymphatique de la Salamandre; Udziela, 300, 301.

The development of the lymphatic system in the reptiles; Huntington, 138.

Observations sur les leucocytes granuleux des Sauropsidés; **Kollmann, 155.**

Apparocchio respiratorio della *Lacerta muralis*; **Rainaldi, 238.**

Considérations anatomo-physiologiques sur la reproduction et la circulation chez les Salamandridés apneumones; **Dehaut, 83.**

Urinogenital Organs.

Les organes génitaux urinaires chez le Pleurodèle de Walt; **Sauvage, 259.**

Der Hermaphroditismus bei Fröschen; **Hooker, 127.**

Premières ébauches génitales chez l'Axolotl; **Spehl & Polus, 277.**

Bau u. cyclische Veränderungen der Samenblasen v. *Rana fusca*; **Nussbaum, 218.**

Über den Zusammenhang zwischen Geschlechtsdrüsen und sekundären Geschlechtsmerkmalen bei Fröschen; **Meisenheimer, 189.**

The structure and development of Bidder's organ in *Bufo lentiginosus*; **King, 150.**

Special Glands, etc.

Amphibian tonsils; **Kingsbury, 151.**

Recherches sur les glandes fémorales de *Lacerta muralis*; **Fellzet, 95.**

Thymus of Chelonians; **Aimé, 2 & 3:** of Amphibians; **Maximow, 187.**

Les greffes thymiques; **Dustin, 90.**

Sistema cromaffine cardiaco-cervicale nei Sauri; **Trinci, 288.**

Sullo sviluppo delle formazioni cromaffini in *Rana esculenta*; **Bruni, 67.**

Les corps adipo-lymphoïdes des Batraciens; **Kennel, 148.**

PHYSIOLOGY. 5611

Variations de la résistance à l'inhibition des oxydations chez *Rana fusca* aux divers stades larvaires; **Drzewina & Bohn, 87.**

Dispnea asfittica o dispnea riflessa; **Mochi, 194.**

Influence d'un jeûne expérimental prolongé sur la longueur de l'intestin chez *Rana fusca* et *R. esculenta*; **Yung, 350.**

(N-9210 d)

The effect of inanition and a return to normal diet upon the organic substance, salts and water content in *Diemyctylus viridescens*; **Morgulis, 205.**

Feeding experiments on Tadpoles. 1. The influence of specific organs given as food on growth and differentiation. A contribution to the knowledge of organs with internal secretion; **Guderatsch, 110.**

Das Verhalten der Amphibien in verschieden konzentrierten Lösungen; **Backman & Sundberg, 21.**

Experimente über Fortpflanzung, Farbe, Augen und Körperreduktion bei *Proteus anguinus* Laur.; **Kammerer, 144.**

Der osmotische Druck bei *Rana temporaria* während der Entwicklung nach dem Ausschlüpfen der Embryonen; **Backman & Sundberg, 19.**

The reactions of the melanophores of *Rana fusca* in the absence of nervous control; **Hooker, 129.**

The influence of cave conditions upon pigment development in larvae of *Amblystoma tigrinum*; **Banta, 24.**

Der Lichtgenuss im *Salamandra*-Körper; **Šečerov, 267.**

Der Lichtgenuss im *Lacerta*-Körper **Šečerov, 268.**

Die Transplantation des Amphibienauges; **Uhlenhuth, 302.**

The effects of the removal and transplantation of the gonad in the frog; **Smith & Schuster, 275.**

Über den Zusammenhang zwischen Geschlechtsdrüsen und sekundären Geschlechtsmerkmalen bei Fröschen; **Meisenheimer, 189.**

Beeinflussung der Daumenballen des Kastraten durch Transplantation auf normaler *Rana fusca* (Rös); **Harms, 113.**

Ueber den Einfluss des kastrierten auf den normalen Komponenten bei Parabiose von *Rana*; **Harms, 114.**

Transplantationen embryonaler und jugendlicher Keimdrüsen auf erwachsene Individuen bei Anuren nebst einem Nachtrag über Transplantationen geschlechtsreifer Froschhoden; **Meyns, 193.**

Faits histologiques indiquant une fonction endocrine dans la glande à venin des Ophidiens; **Boreau, 50.**

Die Wirkung des Bisses gewisser Opisthoglyphenarten; **Andrews, 7.**

Structure et travail sécrétoire de la glande venimeuse de l'*Heloderma suspectum*; **Phisalix, 231.**

Effets des morsures de l'*Heloderma*; **Phisalix, 229, 230, 234.**

DEVELOPMENT. 5615

General.

The embryology of the Florida alligator (*A. mississippiensis*); **Reese, 241.**

Mitteilungen zur Entwicklungsgeschichte des japanischen Riesensalamanders (*Megalobatrachus maximus* Schlegel); **Lange, 164.**

Note on the gastrulation of the giant salamander, *Megalobatrachus sieboldii*; **Ishikawa, 140.**

The development of embryo in the eggs of the oviparous viper, *Lachesis monticola*, prior to oviposition; **Wall, 323.**

The development of amphibian larvae in sea-water; **Glaser, 108: Pearse, 225.**

Influenza delle azioni morfogeniche e del movimento sopra lo sviluppo e l'accrescimento degli Anfibi; **Cotronel, 75.**

Eggs and young of the lizard *Calotes nigrilabris*; **Annandale, 16.**

Les enveloppes protectrices de l'œuf et le mécanisme de l'éclosion chez l'Axolotl (*Amblystoma tigrinum*); **Wintrebert, 345.**

Oogenesis, Spermatogenesis, Fertilization, &c.

Die Urgeschlechtszellen von *Amblystoma*. Ein Beitrag zur Kenntnis der Keimbahn der Urodelen Amphibien; **Schapitz, 269.**

Condriosomi dei gonociti; **Levi, 172, 173.**

The oögenesis of *Bufo lentiginosus*; **King, 149.**

Chemische Zusammensetzung des Meteorengelees [Gallerte des Froscheies]; **Blankema, 40.**

A comparative study of the structure and origin of the yolk nucleus; **Munson, 209.**

Comportamento dei condriosomi durante la maturazione nel testicolo di *Geotriton fuscus*; **Terni, 291.**

Is the change in the sex-ratio of the frog, that is affected by external agents, due to partial fertilization?; **Morgan, 203.**

La polyspermie expérimentale dans l'œuf de *Rana fusca*; **Brachet, 59.**

Parthénogenèse expérimentale des Amphibiens; **Bataillon, 32, 34.**

La parthénogenèse des amphibiens et la fécondation chimique de Loeb; **Bataillon, 33.**

Organogeny.

Sviluppo della ipofisi in *Rana esculenta*; **Rossi, 247.**

The development of the paraphysis and pineal region in Reptilia; **Warren, 330.**

The development of the sympathetic nervous system in the Amphibia; **Kuntz, 161: Camus, 69.**

Über die Entwicklung und morphologische Bedeutung des Parietalauges bei Sauriern; **Nowikoff, 217.**

Zur Entwicklung des Wirbeltierauges; **Spemann, 279.**

Sviluppo dell'organo dell'olfatto in *Salamandrina perspicillata*; **Bogrova, 46.**

Embryologie des Axenskelettes der Anura; **Usov, 303.**

Die Entwicklung des Schädelskeletts von *Vipera aspis*; **Peyer, 228.**

Die Metamorphose der Mundrachenwand der Schildkröte *Chelydra serpentina*; **Dohrer, 85.**

Über die Entwicklung des Visceralskelettes bei *Testudo graeca*; **Bender, 38.**

Sulla formazione dei recessi mesenteriali e del cosiddetto paramesenterio nei Rettili (*Gongylus ocellatus*); **Mannu, 185.**

Entwicklung der „Bursa omentalis“ bei den Gymnophionen; **Broman, 62.**

Zur Entwicklung der Lymphgefäße; **Hoyer, 133.**

Le développement des cœurs lymphatiques postérieurs chez *Bombinator igneus*; **Barański, 25.**

The development of the posterior lymph hearts of the loggerhead turtle; **Stromsten, 288.**

Über Anlage und Ausbildung des Kiemenlungenkreislaufs bei Anuren (*Bombinator pachypus*); **Möllendorff, 195.**

Die Entstehung des Peribranchialraumes und seine Beziehungen zur Extremitätenanlage bei *Bombinator*; **Ekman, 93.**

The development of the kidney in Chelonia; **Burlend, 68.**

The development of Bidder's organ in *Bufo lentiginosus*; **King, 150.**

Metamorphosis and Postembryonic.

Postembryonale Entwicklung und Wachstum von *Salamandrella keyserlingii*; **Kaščenko, 147.**

Riesenlarven von *Rana esculenta*; **Hahn, 112.**

Eine überwinterte Larve des kleinen Wassersalamanders (*Triton punctatus* Latr.) aus Dänemark; **Stamm, 280.**

Rate of growth of *Zamensis mucosus* hatchling; **D'Abreu, 79.**

Experimental.

Reversion of *Amblystoma* from adult to larval axolotl stage; **Johnson, 142.**

Effets de l'inhibition des oxydations chez les embryons des têtards de *Rana fusca*; **Drzewina & Bohn, 87, 88.**

Derosmotische Druck während der Embryonalentwicklung von *Rana temporaria*; **Backman & Runnström, 19.**

Über die Entwicklung umgedrehter Hirnteile bei Amphibienembryonen; **Spemann, 278.**

Studien über Inanition in ihrer Bedeutung für das Wachstumsproblem. Experimente an *Triton cristatus*; **Morgulis, 204.**

Die Einwirkung der Befruchtung auf den osmotischen Druck der Eier von *Bufo vulgaris* und *Triton cristatus*; **Backman, 18.**

La parthénogénèse expérimentale des amphibiens; **Bataillon, 32, 33 & 34.**

Regeneration.

Localization and regeneration in the neural plate of amphibian embryos; **Lewis, 176.**

Ueber frühzeitige Exstirpation von Extremitätenanlagen beim Frosch; **Dürken, 89.**

Die beinbildenden Potenzen entwickelter Tritonen; **Kurz, 162.**

Ueber den Einfluss des Nervensystems auf das regenerative Wachstum; **Walter, 329.**

Die Nerven im regenerierten Schwanz der Eidechsen; **Hooker, 128.**

Untersuchungen über die Regeneration der Blut- und Lymphgefäße im Schwanz von Froschlärven; **Dziurzyński, 91.**

ETHOLOGY.

5619

Lobensweise der Plesiosaurier (Russ.); **Bogoliubov, 42.**

Habits of "*Amblystoma tigrinum*" at Tolland, Colorado; **Prosser, 237.**

Habits of *Hyla arenicolor*; **Richardson, 244**: of *Python molurus*; **Forsyth, 97.**

Behavior and color changes of tree frogs; **Hargitt, 112a.**

Tritonbeobachtungen; **Franz, 99.**

Biologie von *Molge* (= *Triton*) *vittata* Gray forma *ophrytica* Berthold; **Lantz, 166.**

Über Lernversuche bei Axolotln; **Haecker, 111.**

Orientation and Migration of Amphibians; **Cummings, 76**: **Boulenger, 52.**

Ortssinn der Kreuzkröte; **Franz, 100.**

Über die Temperaturempfindlichkeit der Amphibien; **Babák, 17.**

Ringelnatter und Frosch, Lähmung durch den Blick der Schlange; **Franz, 98.**

Arboreal habits of *Varanus salvator* and *V. bengalensis*; **Symons, 289**: of *Echis carinata*; **Moss, 206.**

Plumatella testudinicola symbiotic on carapace of *Kachuga dhongoka*; **Annandale, 13.**

Vibration of the tails of snakes; **Fletcher, 96.**

Food and chemical reactions of the newt, *Diemyctylus viridescens*; Reese, 241a.

Food of *Varanus bengalensis*; Henry, 121; of *Rhabdops bicolor*; Wall, 326; of *Zamenis mucosus*; Venning, 310; of *Tropidonotus natrix*; Merk-Buchberg, 190; of *Rana tigrina*; Mullan, 208; Agharkav, 1.

The "stomach stones" of reptiles; Moodie, 202.

Do snakes swallow stones?; D'Abreu, 78.

Observations sur l'accouplement et la ponte de l'Alyte accoucheur, *Alytes obstetricans*; Boulenger, 56.

Breeding of *Callophis macclellandi*; Wall, 328; of *Dryophis mycterizans*; Kinnear, 152; of the Cobra; Bannerman & Pocha, 23; of *Psammodynastes pulverulentus*; Wall, 327; of *Lachesis gramineus*; Kinnear, 153.

Legt die Kreuzotter Eier?; Wolf, 346.

Some notes on the hatching of *Calotes jerdoni*; Venning, 311.

The rupture of the egg-shell in the genus *Calotes*; Annandale, 14.

Parasites des Amphibiens Suisses; André, 5.

VARIATION, HEREDITY, EVOLUTION. 5623

Variatione della *Lacerta muralis*; Bernardi, 39.

Variation of *Hyla arenicolor*; Richardson, 244.

Scale variations in *Stilosoma extenuatum*; Tucker, 299.

The evolution of the Ceratopsia; Lull, 182.

Zur künstlichen Schwarzfärbung des gefleckten Salamanders (*Salamandra maculosa* Laur.); Gaisch, 102.

Direkt induzierte Farbanpassungen und deren Vererbung; Kammerer, 145.

Experimente über Fortpflanzung, Farbe, Augen und Körperreduktion bei *Proteus anguinus* Laur.; Kammerer, 144.

FAUNAE. 5627

A. ACTUAL.

Europe.

Herpetologia europaea. Eine systematische Bearbeitung der Amphibien und

Reptilien, welche bisher in Europa aufgefunden sind; Schreiber, 265.

Die Lurche und Kriechtiere Ostfrieslands; Leege, 168.

Südharz, *Rana agilis*; Wolterstorff, 347; Rudolf, 249.

Regensburg, das Verschwinden der Eidechse aus der Umgebung; Schöppler, 264.

Niedersachsen, *Cistudo lutaria*; Siebs, 274.

Die Reptilien in Böhmen; Loos, 177.

Études zoologiques sur les Batraciens de la Corse et de la Sardaigne; Dehaut, 83.

Reptilien und Amphibien Griechenlands; Werner, 338.

Asia and Malay Archipelago.

Kaukasus, *Phrynocephalus*-Arten; Laister, 163.

Transkaukasien, Amphibia u. Reptilia; Nesterov, 211.

Amphibien und Reptilien der Mugan-Steppe; Satunin, 257.

Buchara, Amphibien u. Reptilien; Bedriaga, 37.

Baluchistan, new snake; Wall, 325.

China, Japan, Loo Choo Islands and Formosa, Reptiles; Van Denburgh, 308.

Chinese Amphibia and Reptilia; Barbour, 30.

Physignathus cocincinus and its subspecies; Barbour, 29.

Japan, *Pachypalaminus* gen. n. (Amblystomatidae); Thompson, 293.

New Reptilia and Batrachia from the Far East; Thompson, 295.

On reptiles new to the island arcs of Asia; Thompson, 296.

Loo Choo Islands, Geckonidae; Namiye, 210; new genus of Ranidae; Thompson, 294.

Abor Expedition, Batrachia; Annandale, 11; Reptilia; Annandale, 12.

Western Himalayas, new snake; Wall, 318.

Indian Mud-Turtles (Trionychidae); Annandale, 9.

A popular treatise on the common Indian snakes; Wall, 324.

Middle Ganges and Brahmaputra, Aquatic tortoises; **Chaudhuri, 72.**

Mahanadi and its tributaries, Aquatic Chelonia; **Annandale, 10.**

Reptiles collected in Chitral; **Wall, 317.**

S. India, new tortoise from; **Henderson, 120.**

Distribution of some Indian and Burmese Lizards; **Annandale, 8.**

Ceylon, rare lizard (*Lepidodactylus ceylonensis*); **Annandale, 15.**

Malay Peninsula, catalogue of Reptilia and Batrachia; **Boulenger, 51.**

Malay Archipelago, collections of Reptiles and Batrachians; **Despax, 84**: *Varanus* sp. n.; **Ouwens, 222.**

Philippine Islands, fishery resources (Chelonia); **Seale, 266**: Check-list of snakes; **Griffin, 109**: *Gecko* sp. n.; **Oshima, 221.**

East Indian Islands, zoögeography; **Barbour, 31.**

Dutch East Indies, new lizards and a new toad; **Barbour, 26.**

Africa and Madagascar.

New African batrachians; **Boulenger, 53.**

Afrikanische Schleichenlurche (*Apoda*) spp. n.; **Nieden, 214.**

Eine neue Scincidengattung aus Südafrika und eine neue Amphisbaenide aus Kamerun; **Sternfeld, 284.**

Morocco, Reptiles and Batrachians; **Pellegrin, 226, 227.**

Missione per la Frontiera Italo-Etiopica, Reptiles and Batrachians; **Boulenger, 58.**

British East Africa, new Chameleon; **Barbour, 27.**

Deutsch-Ostafrika, Reptilien; **Sternfeld, 287.**

Zentral-Afrika, Reptilia; **Sternfeld, 283**: Amphibia; **Nieden, 213.**

South Africa, Ophidia and Batrachia; **Hewitt, 123**: Reptilia and Batrachia spp. n.; **Hewitt & Methuen, 124.**

West African amphibians sp. n.; **Barbour, 28.**

Madagascar, new reptiles; **Methuen & Hewitt, 192.**

North America.

Oregon, Idaho and Utah, notes on reptiles and amphibians; **Van Denburgh, 307.**

Nevada, field notes on amphibians, reptiles and birds of northern Humboldt county, with a discussion of some of the faunal features of the region; **Taylor, 290.**

California and Arizona, notes on a collection of reptiles; **Van Denburgh, 306.**

North Dakota, *Cryptobranchus alleghaniensis*; **Young, 349.**

Iowa, herpetology; **Ruthven, 253**: new Salamander, *Ambystoma stejnegeri* sp. n.; **Ruthven, 250.**

Illinois, *Chrysemys treleasei* sp. n.; **Hurter, 139.**

Herpetology of Missouri; **Hurter, 139.**

Michigan, herpetology; **Ruthven, Thompson & Thompson, 255**: notes on reptiles and amphibians; **Ruthven, 252.**

New Jersey, *Coluber guttatus*; **Davis, 82.**

North Carolina, notes on salamanders, with descriptions of two new forms; **Brimley, 60.**

Central and South America and West Indies.

Mexico, Amphibian and Reptiles collected in Vera Cruz; **Ruthven, 254.**

Costa Rica and Panama, three new batrachians; **Stejneger, 282.**

Peru, new amphisbaenoid lizard; **Stejneger, 281.**

Brasilianische Batrachier des Berner Naturhistorischen Museums nebst Untersuchungen über die geographische Verbreitung der Batrachier in Brasilien; **Baumann, 35.**

Brazil, new *Anolis*; **Ruthven, 251.**

Andes, new reptiles; **Boulenger, 55**: new batrachians; **Boulenger, 54.**

Galapagos Islands, snakes, spp. n.; **Van Denburgh, 304**: geckos, spp. n.; **Van Denburgh, 305.**

Bahama Islands, list of reptiles, 1 sp. n.; **Rosén, 246.**

Australia, New Guinea, etc.

Australia, new frogs, with a critical list of Australian frogs described since the publication of the British Museum Monograph; **Fry, 101.**

Dutch New Guinea, reptiles and amphibia, spp. n.; **Vogt, 316.**

Dutch South New Guinea, *Chlamydosaurus* sp.; **Ouwens, 223.**

Südseeinseln, Reptilien- und Amphibienfauna, spp. n.; **Vogt, 315.**

B. FOSSIL.**Cainozoic.**

Pleistocene, Panama, fossil Crocodiles; **Gilmore, 107.**

Pleistocene, Texas, fossil alligator snapper (*Macrochelys temminckii*); **Hay, 116.**

Mesozoic.

Cretaceous dinosaurs (Symposium on ten years' progress in vertebrate paleontology); **Lull, 179.**

Cretaceous deposits of Maryland, new fossil reptiles; **Lull, 181.**

Cretaceous of Wyoming, armored Dinosaur (*Stegopelta*); **Moodie, 200.**

Cretaceous of Alabama, new mosasauroid reptile; **Gilmore, 105.**

Obere Kreide Russlands, *Plesiosauria* spp. n.; **Bogolubov, 45.**

Obere Kreide, Orenburg, Plesiosaurierknochen (Russ); **Bogolubov, 45.**

Lower. Cretaceous, reptilia of the Arundel formation; **Lull, 180.**

Crétacé inférieur, découvertes de Sauriens fossiles dans l'Afrique Orientale; **Reck, 240.**

Wealden of Brightstone Bay, I.W., remains of *Iguanodon mantelli*; **Hooley, 130, 131.**

Jurassic, Wyoming, *Eobatrachus agilis*; **Moodie, 198.**

Jurassic saurian remains ingested within fish; **Eastman, 92.**

Jurassic dinosaurs (Symposium on ten years' progress in vertebrate paleontology); **Holland, 126.**

Plesiosaurier des oberen Jura in Russland; **Bogolubov, 42.**

Trias, Lombardey, *Mixosaurus Cornalianus*; **Wiman, 344.**

Die Cotylosaurier der Trias; **Huene, 137.**

Palaeozoic.

Paleozoic Reptilia and Amphibia (Symposium on ten years' progress in vertebrate paleontology); **Case, 70.**

Permo-triassic, *Bothriceps huxleyi* in S. Africa; **Andrews, 6.**

Permian and Triassic of S. Africa, Reptiles, genn. et spp. n.; **Broom, 64.**

S. Africa, new genera of fossil reptiles; **Watson, 333, 334.**

American Permian vertebrates; **Williston, 341.**

Permian, Colorado, new Cotylosauria; **Case & Williston, 71.**

Permian of Oklahoma, temnospondylous Amphibia and a new species of *Eryops*; **Moodie, 199.**

Permian of Illinois and New Mexico, Stegocephala and Cotylosauria spp. n.; **Williston, 341.**

Carboniferous, Kansas, new labyrinthodont; **Moodie, 196.**

Carboniferous, New Mexico, restoration of *Limnoscelis paludis*; **Williston, 342.**

III.—SYSTEMATIC. 5631**GENERAL WORKS.**

Herpetologia europaea, SCHREIBER Jena 1912 pp. x + 960.

Amphibia und Reptilia der Mugan-Steppe, SATUNIN Tiflis 1912 pp. 52-59.

Amphibien und Reptilien von S.-W.-Transkaukasien und den anliegenden Kleinasien, NESTEROV. Ann. mus. zool. Ac. sc. 17 pp. 61-85.

Amphibien und Reptilien aus Centralasien, BEDRIAGA (In Przewalski Wissenschaftl. Resultate Zool. Theil Bd. III Abt. 1 Lief. 4) St. Peterburg 1912 pp. i-ix 503-769 pl. viii-x.

Prodrome of descriptions of new species of Reptilia and Batrachia from the Far East, THOMPSON Herpetological Notices No. 2 pp. 1-4.

Concerning certain species of reptiles and amphibians from China, Japan, the Loo Choo islands, and Formosa, VAN DENBURGH Proc. Cal. Acad. Sci. (Ser. 4) 3 pp. 187-257.

Some Chinese Amphibia and Reptilia, BARBOUR Mem. Mus. Comp. Zool. Harvard Coll. 40 pp. 125-136 pls. i. & ii.

Reptiles and batrachians, Missione per la Frontiera Italo-Etiopica, BOULENGER Ann. Mus. Civ. Storia. Nat. Genova 5 pp. 1-4.

Notes on the specific characters and distribution of some South African Ophidia and Batrachia, HEWITT Graham's Town Rec. Alban. Mus. 2 pp. 264-281.

Reptilia and Batrachia of the Malay Peninsula, BOULENGER London 1912.

Sur trois collections de Reptiles et de Batraciens provenant de l'archipel Malais, DESPAX Bul. Muséum Paris 1912 pp. 198-205.

New lizards and a new toad from the Dutch East Indies, with notes on other species, BARBOUR Washington Proc. Biol. Soc. 24 pp. 15-21.

Reptilien und Amphibien aus Holländisch-Neu-Guinea, VOGT Berlin SitzBer. Ges. natf. Freunde 1912 pp. 355-359.

The herpetology of Michigan [With bibliography], RUTHVEN, THOMPSON & THOMPSON Michigan Geol. Biol. Surv. Pub. No. 10 (Biol. Ser. No. 3) pp. 11-166 pls. i-xviii.

Herpetology of Missouri, HURTER St. Louis Trans. Acad. Sci. 20 pp. 59-274 pls. xviii-xxiv.

Notes on some reptiles and amphibians from Oregon, Idaho and Utah, VAN DENBURGH Proc. Cal. Acad. Sci. (Ser. 4) 3 pp. 155-159.

Beitrag zur Reptilien- und Amphibienfauna der Südseeinseln, VOGT Berlin SitzBer. Ges. natf. Freunde 1912 pp. 1-13.

Paleozoic Reptilia and Amphibia [Symposium on ten years' progress in vertebrate paleontology], CASE Bull. Geol. Soc. Amer. 23 pp. 200-204.

American Permian vertebrates, WILLISTON Chicago (Univ. Chicago Press pp. v + 145, pls. i-xxxviii.

REPTILIA.

Die Reptilien in Böhmen, Loos Lotos 60 p. 251.

On reptiles new to the island arcs of Asia, THOMPSON Herpetological Notices San Francisco No. 3 1912 pp. 1-5.

Reptilia (Wiss. Ergebnisse d. D. Zentral-Afrika Exp. Bd 4 Lfg 9), STERNFELD Leipzig (Klinkhardt & Biermann) 1912 pp. 197-272 mit 4 Taf.

List of Reptiles occurring in the Bahamas, ROSÉN Lund Univ. Årsskr. N.F. 7 Afd. 2 No. 5 pp. 26-45.

Notes on a collection of reptiles from southern California and Arizona, VAN DENBURGH Proc. Cal. Acad. Sci. (Ser. 4) 3 pp. 147-154.

Marine reptiles [Symposium on ten years' progress in vertebrate paleontology], MERRIAM Bull. Geol. Soc. Amer. 23 pp. 221-223.

The Reptilia of the Arundel formation, LULL Md. Geol. Surv. Lower Cretaceous pp. 173-178.

LACERTILIA.

Lacertilia : Eublepharidae, Uroplatidae, Pygopodidae, WERNER (Das Tierreich hrsg. v. F. E. Schulze Lfg 33) Berlin 1912 pp. x + 33.

CHAMAELEONTIDAE.

Chamaeleo tenuis subsp. n. *excubitor*, British East Africa, BARBOUR Washington Proc. Biol. Soc. 24 pp. 219-220.

Chamaeleon bitaeniatus subsp. n. *graueri* p. 250, *schubotzi*, *bergeri*, p. 252; *C. adolfi-friderici* sp. n. p. 258; *C. oweni* subsp. n. *cristata* p. 259; *C. johnstoni* subsp. n. *affinis* p. 262, Afr. centr, STERNFELD Wiss. Ergebn. D. Zentral-Afrika Exp. 4.—*C. bitaeniatus* subsp. n. *tornieri*, Lendu Plateau, STERNFELD p. 383.—*C. rhinoceratus* Gray *lineatus* var. n. p. 190, *chauvini* sp. n. p. 191, *parsoni* Cuv. *cristifer* var. n. p. 191, Madagascar, METHUEN & HEWITT Ann. Transv. Mus. 3.

SCINCIDAE.

Mabuia maculilabris subsp. n. *major*, Afr. Centr., STERNFELD Wiss. Ergebn. D. Zentral-Afrika Exp. 4 p. 233.

Lygosoma potanini Beschreibung pp. 665-669 pl. viii f. 9, *przewalskii* sp. n. oberer Chuanche pp. 669-672 pl. viii f. 7, BEDRIAGA St. Peterburg 1912.—*L. courcyanum* sp. n. Abor Country, ANNANDALE p. 43.—*L. laterale* subsp. n. *formosensis*, *ishigakienis*, Eastern Asia, THOMPSON Herp. Notices 3 p. 2.—*L. incognita*, *okinavensis* spp. n. Eastern Asia, THOMPSON Herp. Notices 2 pp. 3-4.—*L. graueri* sp. n. Afr. centr., STERNFELD Wiss. Ergebn. D. Zentral Afrika Exp. 4 p. 240.—*L. moszkowskii* sp. n. Neu Guinea, VOGT Sitzber. Ges. natf. Freunde 1912 p. 357.—*L. schædei* sp. n., *cyanurum* var. n. *wernerii*, Bismarck-Archipel., VOGT t.c. pp. 5-6.

Leiolepisma pullum sp. n. Dutch East Indies, BARBOUR Washington Proc. Biol. Soc. 24 p. 15.

Dasia smaragdinum subsp. n. *moluccarum*, Dutch East Indies, BARBOUR Washington Proc. Biol. Soc. 24 p. 17.

Cryptoblepharus boutonii subsp. n. *balinensis* p. 18, *cursor* p. 18, Dutch East Indies, BARBOUR Washington Proc. Biol. Soc. 24.

Eumeces stimpsonii sp. n. *marginatus* subsp. n. *oskimensis* Loo Choo Is., THOMPSON Herp. Notices No. 2 p. 4.

Scelotes astrolabi Tet. fig., METHUEN & HEWITT Ann. Transv. Mus. 3 p. 189.

Acontophiops gen. n. near *Acontias*, *lineatus* sp. n., Transvaal, STERNFELD Sitzber. Ges. natf. Freunde 1911 p. 248.

GERRHOSAURIDAE.

Tetradactylus eastnoodae sp. n. S. Africa, HEWITT & METHUEN Trans. Roy. Soc. S. Afric. 3 p. 189.

LACERTIDAE.

Lacerta, Charakteristik der transkaukasischen Formen, NESTEROV Ann. mus. Zool. Ac. sc. 17 pp. 75-85.—*L. agilis* varr. n. *eremioides*, *concolor*, p. 482 Südrussland; *bosnica* p. 483 Bosnia; *L. major* var. n. *subocellata* p. 502 Dalmatien; *L. muralis* varr. n. *hesperica* p. 943 Spanien; *chrysochlora* Europa 420; *fumana* var. n. *bocchensis* Dalmatien p. 435, *jonica* varr. n. *olivicolor* Ionische

Inseln p. 439, *serpa* varr. n. *subcampes- tris*, *pelagosae*, p. 452; *cazzae* p. 454, *argus* p. 455, Gebeit der Adria, SCHREIBER.

Adolfus gen. n. near *Algiroides*, *fridericianus* sp. n. Afr. centr., STERNFELD Wiss. Ergebn. D. Zentral. Afrika Exp. 4 p. 220.

Eremias, Synopsis der asiatischen Arten, pp. 503-505; *velox* varr. n. *pleskei*, *roborowskii*, pp. 505-536; *regeli* sp. n. p. 544; Centralasien, BEDRIAGA St. Peterburg 1912.

AMPHISBAENIDAE.

Amphisbaena townsendi sp. n. Peru, STEJNEGER Smithsonian Inst. Proc. U.S. Nation. Mus. 41 pp. 283-284.

Geocalamus acutus sp. n. O.-Afr. STERNFELD Wiss. Ergebn. D. Zentral Afrika Exp. 4 p. 209.

Chirindia schaeferi sp. n. Kamerun, STERNFELD Sitzber. Ges. natf. Freunde 1912 p. 250.

VARANIDAE.

Varanus komodoensis sp. n. Komodo (Malay Archipelago), OUWENS Buitenzorg Bull. Jard. bot. 6 1912 pp. 1-3.

HELODERMATIDAE.

Heloderma suspectum, structure et travail sécrétoire de la glande venimeuse, PHISALIX Bul. Mus. Paris 1912 p. 184.

ZONURIDAE.

Zonurus caeruleopunctatus sp. n. S. Africa, METHUEN & HEWITT Trans. Roy. Soc. S. Afric. 3 p. 110.

IGUANIDAE.

Anolis distichoides sp. n. Bahama Is., ROSÉN Lund. Univ. Årsskr. N.F. 7 Afd. 2 No. 5 p. 29 figs. 12 a-d.—*A. lindeni* sp. n. Brazil, RUTHVEN Washington Proc. Biol. Soc. 25 p. 163.

Tropidurus holotropis sp. n. Ecuador, BOULENGER Ann. Mag. Nat. Hist. 10 p. 420.

AGAMIDAE.

Draco cryptotis sp. n. Malay Arch., DESPAX Bul. Mus. Paris 1912 p. 202.

Calotes versicolor, Chitral, notes, p. 132, WALL. Bombay J. Nat. Hist. Soc.

21.—*C. nigrilabris*, eggs and young, ANNANDALE Spolia Zeylan **8** p. 135.

Phrynocephalus persicus, *helioscopus*, *helioscopus-persicus*, **subsp. n.** Kaukasus, Charakteristik, Verbreitung, LAISTER Charikov Trav. Soc. nat. **45** pp. 73-93.

Physignathus cocincinus **subsp. n.** *caudicinctus* China, BARBOUR Washington Proc. Biol. Soc. **25** p. 192.

Hydrosaurus (= *Lophura*) *weberi* **sp. n.** Dutch East Indies, BARBOUR Washington Proc. Biol. Soc. **24** p. 20.

GECKONIDAE.

Geckonidae of the Loochoos, NAMIYE Dobuts. Z. Tokyo **24** 1912 pp. 442-445.

The geckos of the Galapagos archipelago, VAN DENBURGH Proc. Cal. Acad. Sci. (Ser. 4) **1** pp. 405-430.

Gonatodes quattuorseriatus **sp. n.** Afr. centr., STERNFELD Wiss. Ergebn. D. Zentral-Afrika Exp. **4** p. 202.

Phyllodactylus barringtonensis **sp. n.** p. 418; *galapagoensis* **subsp. n.** *daphnensis* p. 425, *duncanensis* p. 426; Galapagos Islands, VAN DENBURGH Proc. Cal. Acad. Sci. (Ser. 4) **1**.

Hemidactylus platyceps **sp. n.** Bombay, ANNANDALE Rec. Ind. Mus. **8** p. 56.

Lygodactylus fischeri var. *n. schefleri* Afr. centr., STERNFELD Wiss. Ergebn. D. Zentral-Afrika Exp. **4** p. 206.

Lepidodactylus ceylonensis, ANNANDALE Spolia Zeylan **8** p. 134.

Gecko kikuchii **sp. n.** Philippine Is., OSHIMA Philippine J. Sci. **7** pp. 241-243 pls. i & ii.

Phelsuma standigi **sp. n.** Madagascar, METHUEN & HEWITT Ann. Transv. Mus. **3** p. 187.

PYTHONOMORPHA.

†*Globidens alabamaensis* **sp. n.** Alabama, Cretaceous, GILMORE Proc. U. S. Nation. Mus. **41** pp. 479-484 pls. xxxix-xl ff. 1-3.

OPHIDIA.

A check-list and key of Philippine snakes, GRIFFIN Philippine J. Sci. Manila **6** pp. 253-269.

The snakes of the Galapagos islands, VAN DENBURGH Proc. Cal. Acad. Sci. (Ser. 4) **1** pp. 323-372 pls. xxii-xxx.

TYPHILOPIDAE.

Typhlops diversiceps **sp. n.** Abor district, ANNANDALE Rec. Ind. Mus. **8** p. 44.—*T. graueri* **sp. n.** Afr. Centr., STERNFELD Wiss. Ergebn. D. Zentral-Afrika Exp. **4** p. 264.

GLAUCONIIDAE.

Glauconia latirostris **sp. n.** Tanganyika, STERNFELD Wiss. Ergebn. D. Zentral-Afrika Exp. **4** p. 264.

COLUBRIDAE.

Tropidonotus natrix var. *sparsus* Europe, SCHREIBER Herpet europ. p. 742.

Tropidophorus assamensis **sp. n.** Assam, ANNANDALE p. 58.

Trachischium quinquelabialis **sp. n.** W. Himalayas, WALL Bombay J. Nat. Hist. Soc. **21** p. 201.

Achalinus loochooensis **sp. n.** Loo Choo Is., THOMPSON Herp. Notices No. **3** p. 3.

Zamenis dahlia var. *n. immaculata* Dalmatia, SCHREIBER Herpetologia europaea p. 712.

Coluber guttatus New Jersey, DAVIS Science **35** pp. 416-417.—*C. leopardinus* var. *sparsus* Dalmatian, SCHREIBER T.c. p. 688.

Chlorophis schubotzi **sp. n.** Afr. centr., STERNFELD Wiss. Ergebn. D. Zentral-Afrika Exp. **4** p. 269.

Dromicus hoodensis p. 338 pl. xxiv, *occidentalis* p. 347 pl. xxvii, *slevini* p. 351 pl. xxix, *steindachneri* p. 353 pl. xxx, **spp. n.**; *occidentalis* **subsp. n.** *helleri* p. 349 pl. xxviii, Galapagos Is., VAN DENBURGH Proc. Cal. Acad. Sci. (Ser. 4) **1**.

Coronella austriaca var. *n. Veithii* Kärnthen, SCHREIBER T.c. p. 655.

Simotes annulifer var. *bipartita* n. var. Malay Arch., DESPAX Bul. Mus. Paris **1912** p. 204.

Homalosoma lutrix var. *n. atriventris* Centr. Afrika, STERNFELD Wiss. Ergebn. D. Zentral-Afrika Exp. **4** p. 271.

Ablabes pavo **sp. n.** Abor country, ANNANDALE Rec. Ind. Mus. **8** p. 47.

Stilosoma extenuatum, scale variations, TUCKER Proc. Acad. Nat. Sci. **63** pp. 549-550 1 fig.

Calamaria quinquetaeniata sp. n. Malay Arch., DESPAX Bul. Mus. Paris 1912 p. 203.

Dasypeltis scabra var. n. *atra* Tanganyika, STERNFELD Wiss. Ergebn. D. Zentral-Afrika Exp. 4 p. 272.

Psammophilis triticeus sp. n. Baluchistan, WALL Bombay J. Nat. Hist. Soc. 21 p. 634.

Callophis formosensis sp. n. Formosa, THOMPSON Herp. Notices No. 3 p. 4.

Prospidops gen. n. p. 45, *antecursorum* sp. n. Abor country, ANNANDALE Rec. Ind. Mus. 8 pl. v fig. 2.

AMBLYCEPHALIDAE.

Amblycephalus chinensis sp. n. China, BARBOUR Mem. Amer. Mus. Comp. Zool. Harvard Coll. 40 p. 132 pl. ii, f. 1.

Leptognathus palmeri, *polylepis*, spp. n. Andes, BOULENGER Ann. Mag. Nat. Hist. 10 p. 422.

VIPERIDAE.

Causus rhombeatus var. n. *taeniata* Afr. centr., STERNFELD Wiss. Ergebn. D. Zentral-Afrika Exp. 4 p. 276.

Vipera renardi Beschreibung, BEDRIAGA St. Peterburg 1912 pp. 765-768.

Agkistrodon tibetanus sp. n. China, BARBOUR Mem. Amer. Mus. Comp. Zool. Harvard Coll. 40 p. 133 pl. ii.

Ancistrodon intermedius Beschreibung pp. 713-728, 768-769 pl. x f. 2 6, *strauchi* sp. n. Jantsekiang pp. 728-735 pl. x f. 1, BEDRIAGA St. Peterburg 1912.

Lachesis pleuroxanthus, *chloromelas*, spp. n. Andes, BOULENGER Ann. Mag. Nat. Hist. 10 p. 423.

PTEROSAURIA.

Beitrag zur Kenntnis von *Rhamphorhynchus gemmingi* H. v. Meyer. Nach einem in Halle befindlichen Exemplar, KREMMLING Halle Nova Acta Leop. 96 pp. 345-970 mit 1 Taf.

ICHTHYOSAURIA.

†*Ichthyosaurus trigonus* Wirbel, RIABININ Trd. geol. Muz. Ak. nauk 6 pp. 43-48 pl. i.

PLESIOSAURIA.

Plesiosauria Russlands, Klassifikation, Verbreitung, BOGOLIUBOV Moskva Zap. Univ. 31 pp. i-viii 1-409 pl. i-xvi.

Plesiosauria des oberen Jura in Russland, BOGOLIUBOV Ann. geol. miner. 14 pp. 1-7.

An embryonic plesiosaurian propodial, MOODIE Topeka Trans. Kansas Acad. Sci. 23-24 pp. 95-101 pl. i ff. 1-9.

Propodiale Knochen von Plesiosauriern im Gouv. Orenburg, BOGOLIUBOV (332) Ann. geol. miner. 14 pp. 174-176 f. 1-2.

†*Pliosaurus* pp. 145-149, sp.? pp. 149-152 pl. i f. 1 2, cf. *macromerus* pp. 155-171 pl. ii f. 2 4 5, *mosinskii* pp. 172-176 pl. ii f. 3, *frearsi* pp. 176-196 pl. iv f. 1 2 7, sp.? pp. 196-197 pl. vii f. 3 4, Oberer Jura Russlands, Beschreibung, BOGOLIUBOV Moskva Zap. Univ. 31.

†*Thaumatosaurus calloviensis* sp. n. pp. 200-203 pl. ii f. 1 6, *mosquensis* pp. 203-210 Beschreibung, Oberer Jura Russlands, BOGOLIUBOV Moskva Zap. Univ. 31.

†*Cryptoclidus* pp. 210-213, *simbirskensis* pp. 213-230, sp.? pp. 230-231 Oberer Jura Russlands, Beschreibung, BOGOLIUBOV Moskva Zap. Univ. 31.

†*Muraenosaurus* pp. 231-234, *leedsi* pp. 234-239 pl. iii f. 1 2, sp.? pp. 239-241 pl. iii f. 6 7, *fahrenkohli* pp. 249-253, sp.? pp. 262-264 pl. viii f. 1 5, Beschreibung, *elamosauroides* pp. 241-249 pl. iii f. 3 4 5, *purbecki* pp. 253-262 pl. viii f. 2-4 6-9, spp. nn. Oberer Jura Russlands, BOGOLIUBOV Moskva Zap. Univ. 31.

†*Colymbosaurus* pp. 265-266, cf. *brachistospondylus* pp. 266-269 pl. iv f. 4, cf. *trochanterius* pp. 269-280, Beschreibung, *sklerodirus* sp. n. pp. 280-305 pl. v f. 1-5 8 pl. vi Oberer Jura Russlands, BOGOLIUBOV Moskva Zap. Univ. 31.

†*Polycotylus* pp. 313-316, *epigurgitis* pp. 316-317 pl. ix f. 5 6, *brevispondylus* pp. 317-320 pl. xi f. 1 2, *orientalis* pp. 339-348, *ultimus* pp. 348-351, spp. nn., *ichthyospondylus tanais* var. n. pp. 321-327 pl. ix f. 1-4 7 pl. x, *latipinnis* pp. 327-336 pl. xvi f. 2 3, cf. *balticus* pp. 337-339 pl. xii f. 9-12 Beschreibung,

Obere Kreide Russlands, BOGOLÛBOV Moskva Zap. Univ. **31**.

†*Elasmosaurus* pp. 351–353, *kurskensis* 353–359 pl. xvi, *orskensis* pp. 363–374, *serdobensis* pp. 374–377 pl. xiv f. 4 5, **spp. n.**, *helmerseni* pp. 359–373 Beschreibung, Obere Kreide Russlands, BOGOLÛBOV Moskva Zap. Univ. **31**.

†*Cimoliasaurus* pp. 377–379, sp.? pp. 379 pl. xi f. 3, sp.? pp. 386–387 pl. xii f. 8 Beschreibung, *nazarovi* **sp. n.** pp. 379–386 Obere Kreide Russlands, BOGOLÛBOV Moskva Zap. Univ. **31**.

CROCODILIA.

Fossil crocodiles from the Canal Zone, GILMORE Proc. Biol. Soc. **25** p. 94.

Goniopholis affinis **sp. n.** Maryland, LULL Md. Geol. Surv. Lower Cretaceous p. 211 pl. xx f. 7.

DINOSAURIA.

Note on the dinosaur-turtle analogy, WIELAND Science **36** pp. 287–288.

Jurassic dinosaurs [Symposium on ten years' progress in vertebrate paleontology], HOLLAND Bull. Geol. Soc. Amer. Washington **23** 1912 pp. 204–207.

Cretaceous dinosaurs [Symposium on ten years' progress in vertebrate paleontology], LULL Bull. Geol. Soc. Amer. **23** pp. 208–212.

The evolution of the Ceratopsia, LULL Proc. 7th Int. Zool. Cong. pp. 771–777 1 fig.

†*Dryosaurus grandis* **sp. n.** Maryland p. 204 pl. xix ff. 6 7 pl. xx ff. 1–4, LULL Md. Geol. Surv. Lower Cretaceous.

†*Creosaurus potens* **sp. n.** District of Columbia p. 186 pl. xiv f. 4, LULL Md. Geol. Surv. Lower Cretaceous.

†*Stegopelta*, osteology, MOODIE Lawrence Univ. Kans. Sci. Bull. **5** pp. 255–273 pls. lv–lix.

†*Stegosaurus unguatus*, LULL Amer. J. Sci. **30** pp. 361–377 ff. 1–10 pl. ii.

†*Camptosaurus* spp. skeletons, *browni* p. 688 pls. lvi–lviii *nanus* p. 694 pls. lix–lxi, GILMORE Proc. U. S. Nation. Mus. **41**.

CHELONIA.

Chelonia [Symposium on ten years' progress in vertebrate paleontology], HAY Bull. Geol. Soc. Amer. **23** pp. 212–220.

Die fossilen Schildkröten Aegyptens, DACQUÉ Geol. u. palaeont. Abh. Jena **10** p. 65 2 Taf.

†*Macrochelys temminckii* Texas, Pleistocene, HAY Proc. Amer. Phil. Soc. **50** pp. 452–455 pls. xviii–xix.

Chrysemys treleasei **sp. n.** Illinois, HURTER St. Louis Mo. Trans. Acad. Sci. **20** p. 235 pl. xxiii f. 4 pl. xxiv.

Clemmys caspica östl. Kleinasien, Merkmale, NESTEROV Ann. mus. zool. Ac. sc. **17** p. 67.—*C. caspica* var. n. *obsoleta* Dalmatien, SHREIBER p. 946.

Geoemyda silvatica **sp. n.** Malabar coast, HENDERSON Rec. Ind. Mus. **7** p. 217.

Emydura novae guinae Meyer, sexual dimorphism, SIEBENROCK Zool. Anz. **40** p. 301.

Trionyx, key to Indian species, descriptions; *T. gangeticus* **subsp. n.** *mahanaddicus* Central Provinces; ANNANDALE Rec. Ind. Mus. **7** p. 262.—*T. sinensis* Beschreibung, BEDRIAGA St. Peterburg 1912 p. 730.

Emyda granosa **subsp. n. intermedia** Central Provinces and Madras, ANNANDALE Rec. Ind. Mus. **7** p. 171.

†*Podocnemis congolensis* **sp. n.** Eocene, Congo, DOLLO Bull. Acad. roy. Belgique **1912** p. 8.

THEROMORPHA.

Die Cotylosaurier der Trias, HUENE Palaeontographica **59** pp. 69–102 mit 6 Taf.

†*Placodus*, Osteologie, BROILI Palaeontographica **59** p. 147.

†*Limnoscelis paludis* New Mexico, Carboniferous, restoration of skeleton, WILLISTON Amer. J. Sci. (Ser. 4) **34** pp. 457–468 ff. 1–32.

†*Diadectes lentus* New Mexico, Permian, skull, p. 339 ff. 12, CASE & WILLISTON Amer. J. Sci. (Ser. 4) **34**.

†*Animasaurus* **gen. n. carinatus** **sp. n.** Colorado, Permian, CASE & WILLISTON Amer. J. Sci. (Ser. 4) **34** p. 345 f. 3.

†*Captorhinus illinoiensis* sp. n. Illinois Permian, WILLISTON American Permian Vertebrates p. 69 pl. xxiv ff. 5-7.

†*Varanosaurus brevirostris* sp. n. Permian, Texas, WILLISTON American Permian Vertebrates p. 85 pls. i-xiii ff. 25 26.

†*Scymnognathus* gen. n. near *Gorgonops*, *whaitsi* sp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 p. 861 pl. xc.

†*Aelurosaurus striatidens* sp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 p. 863 pl. xci.

†*Priesterognathus platyrhinus* sp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 p. 863 pl. xci.

†*Alopecorhinus* gen. n. near *Priesterognathus*, *parvidens* sp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 p. 864 pl. xci.

†*Ictidognathus hemburyi* sp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 p. 865 pl. xci.

†*Galeops* gen. n. (Dromasauria) *whaitsi* sp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 p. 860 pl. xci.

†*Emydops* gen. n. *minor* sp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 p. 871 pl. xciii.

†*Prodicynodon beaufortensis* sp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 p. 867 pl. xciii.

†*Dicynodon laticeps* p. 868, *psittacops* p. 869, *lutriceps* p. 870, spp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 pl. xcii.

†*Endothiodon whaitsi*, *platyceps*, spp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 p. 866 pl. xciii.

†*Emydochampsia* gen. n. for *Endothiodon platyceps*, BROOM Proc. Zool. Soc. 1912 p. 875.

†*Nythosaurus browni* sp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 p. 874 pl. xciii.

†*Ictidopsis* gen. n. near *Nythosaurus*, *elegans* sp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 p. 872 pl. xciii.

†*Taurops* gen. n. (Dinocephalia) *macrodon* sp. n. Karroo, S. Africa, BROOM Proc. Zool. Soc. 1912 p. 859 pl. xc.

RHYNCHOCEPHALIA.

†*Mesosuchus* gen. n. *browni*, sp. n. S. Africa, WATSON Graham's Town Rec. Alban. Mus. 2 p. 296.

†*Eosuchus* gen. n. *colleti* sp. n. (Rhynchocephalia) S. Africa, WATSON Rec. Alban. Mus. 2 pp. 298-299.

BATRACHIA.

Études zoologiques sur les Batraciens de la Corse et de la Sardaigne, DEHAUT Matériaux pour la zoologie et la paléontologie de la Corse 1911 pp. 21-52 av. fig.

Batrachia of the Abor Expedition, ANNANDALE Rec. Ind. Mus. 8 pp. 7-36 3 pls.

Amphibia. (Wiss. Ergebnisse d. D. Zentral-Afrika Exp., Bd 4, Lfg 8), NIEDEN 1912 pp. 165-195 mit 1 Taf.

Some West African amphibians, BARBOUR Cambridge Bull. Mus. Comp. Zool. Harvard Coll. 54 pp. 127-136 pls. i & ii.

Brasilianische Batrachier des Berner Naturhistorischen Museums nebst Untersuchungen über die geographische Verbreitung der Batrachier in Brasilien, BAUMANN Zool. Jahrb. Jena Abt. f. Syst. 33 pp. 87-172 mit 1 Taf. u. 2 Kart.

ECAUDATA.

RANIDAE.

Rana agilis in Südharz WOLTERSTORFF Zool. Anz. 40 p. 254.—*R. ventricosus* sp. n. Admiralitäts-Ins., VOGT SitzBer. Ges. natf. Freunde 1912 p. 8.—*R. gerbillus* sp. n. Abor country, ANNANDALE Rec. Ind. Mus. 8 p. 10.

Babina gen. n. type *Rana holsti*, THOMPSON Herpetological Notices No. 1 pp. 1-3.

Phrynoderma moloch sp. n. Abor country, ANNANDALE Rec. Ind. Mus. 8 p. 18.

Pyxicephalus macrotympanum sp. n. Gallaland, BOULENGER Ann. Mag. Nat. Hist. 10 p. 140.

Astylosternus robustus appendages, KÜENTHAL Bull. Mus. Comp. Zool. Harvard Coll. 53 pp. 369-376 pls. i-v ff. a b.

Rhacophorus naso p. 12, *microdiscus* p. 13, **spp. n.**; *maculatus* **subsp. n.** *himalayensis* p. 14, Abor country, ANNANDALE Rec. Ind. Mus. 8.

Ixalus jacobsoni **sp. n.** Java, VAN KAMPEN Leiden Notes Mus. Jentink 34 p. 78.—*I. argus* **sp. n.** Abor country, ANNANDALE Rec. Ind. Mus. 8 p. 16.

Cornufer moszkowskii **sp. n.** Neu Guinea, VOGT Sitzber. Ges. natf. Freunde 1912 p. 358.

Phrynobatrachus francisci **sp. n.** N. Nigeria, BOULENGER Ann. Mag. Nat. Hist. 19 p. 141.—*P. acutirostris* **sp. n.** Centr.-Af., NIEDEN Wiss. Ergebn. D. Zentral-Afrika Exp. 4 p. 173.

Natalobatrachus **gen. n.** near *Phrynobatrachus*, *bonebergi* **sp. n.** S. Africa, HEWITT & METHUEN Trans. R. Soc. S. Africa 3 p. 107.

Arthroleptis rouxi **sp. n.** Afr. centr., NIEDEN Wiss. Ergebn. D. Zentral-Afrika Exp. 4 p. 178.

Hylambates verrucosus p. 141, *christyi* p. 141, **spp. n.** Uganda, BOULENGER Ann. Mag. Nat. Hist. 10.

Hylaxalus chocoensis, *collaris*, **spp. n.** Andes, BOULENGER Ann. Mag. Nat. Hist. 10 p. 190.

Micrixalus borealis **sp. n.** Abor country, ANNANDALE Rec. Ind. Mus. 8 p. 10.

ENGYSTOMATIDAE.

Austrochaperina **gen. n.** near *Chaperina*, *robusta* **sp. n.** Russell River, *ornata* **sp. n.** Russell River, *gracilipes* **sp. n.** Cape York, FRY Rec. Austr. Mus. 9 pp. 89-97.

CYSTIGNATHIDAE.

Elosia lateristrigata **sp. n.** Brasil, BAUMANN Zool. Jahrb. 33 p. 89.

Hylodes ockendeni, *ventrimarmoratus*, p. 187, *taeniatus* p. 187, *palmeri*, *margaritifera*, p. 189, **spp. n.** Andes, BOULENGER Ann. Mag. Nat. Hist. 10.—*H. goeldii* **sp. n.** Brazil, BAUMANN Zool. Jahrb. 33 p. 91.

Edalorhina nasuta **sp. n.** Peru, BOULENGER Ann. Mag. Nat. Hist. 10 p. 190.

BUFONIDAE.

Bufo leptoscelis **sp. n.** Peru, BOULENGER Ann. Mag. Nat. Hist. 10 p. 186.—*B. fenoulheti* **sp. n.** S. Africa, HEWITT & METHUEN Trans. R. Soc. S. Africa 3 p. 108.—*B. cavator* **sp. n.** Dutch E. Indies, BARBOUR Washington Proc. Biol. Soc. 24 p. 21.

†*Eobatrachus agilis* Wyoming, Jurassic, MOODIE Amer. J. Sci. (Ser. 4) 34 pp. 286-288.

HYLIDAE.

Hyla arenicolor, distribution, habits, variation, RICHARDSON Amer. Nat. 46 p. 605.—*H. monticola* **sp. n.** China, BARBOUR Mem. Amer. Mus. Harvard Coll. 40 p. 127.—*H. hallowellii* **sp. n.** Loo Choo Is., THOMPSON Herp. Notices 2 p. 2.—*H. ceratophrys* **sp. n.** Panama, STEJNEGER Proc. U. S. Nat. Mus. 41 p. 286.—*H. melanopleura* **sp. n.** Peru, BOULENGER Ann. Mag. Nat. Hist. 10 p. 185.—*H. spengeli*, *humeralis*, **spp. n.** New Guinea, BOULENGER Zool. Jahrb. 15 p. 215.—*H. salomonensis* **sp. n.** Bougainville, VOGT Sitzber. Ges. natf. Fr. 1912 p. 10.

Gastrotheca (= *Nototrema*) *coronata* **sp. n.** Costa Rica, STEJNEGER Proc. U. S. Nation. Mus. 41 p. 287.

Phyllomedusa loris **sp. n.** Ecuador, BOULENGER Ann. Mag. Nat. Hist. 10 p. 186.

PELOBATIDAE.

Megalophrys kempii **sp. n.** Abor country, ANNANDALE Rec. Ind. Mus. 8 p. 28.

DISCOGLOSSIDAE.

Alytes obstetricans, breeding habits, BOULENGER Bull. Acad. roy. Belgique 1912 pp. 570-579 pl.

Ascaphus truei anatomy, VAN DENBURGH Proc. Cal. Acad. Sci. (Ser. 4) 3 pp. 259-264 1 fig.

CAUDATA.

Notes on the salamanders of the North Carolina mountains, with descriptions of two new forms, BRIMLEY Washington Proc. Biol. Soc. 25 pp. 135-140 pls. vi vii.

Salamandra maculosa var. **n.** *fastuosa* Südwest-Europa p. 131, *speciosa* Deutschl. p. 132, SCHREIBER *Herpetologia europaea* 1912.

Ambystoma stejnegeri sp. n., RUTHVEN
Proc. U. S. Nation. Mus. **41** pp. 517-519.

Pachypalaminus gen. n. (*Amblystomatinae*) p. 183, *boulengeri* sp. n. Japan,
THOMPSON Proc. Cal. Acad. Sci. (Ser. 4)
3 p. 184.

Plethodon metcalfi sp. n. North
Carolina, BRIMLEY Washington D.C.
Proc. Biol. Soc. **25** p. 138 fig.

Spelerpes ruber var. n. *schencki*
North Carolina, BRIMLEY Washington
D.C. Proc. Biol. Soc. **25** p. 139.

Spelerpes picadoi sp. n. Costa Rica
STEJNEGER Proc. U. S. Nation. Mus. **41**
p. 285.

APODA.

Übersicht über die afrikanischen
Schleichenlurche (*Amphibia apoda*).
Mit Bestimmungstabelle, NIEDEN Berlin
SitzBer. Ges. natf. Freunde **1912** pp.
186-214.

Gymnophionen, Entwicklung der
„Bursa omentalis,“ BROMAN Stockholm
Vet.-Ak. Handl. **79** No. 5.

Répartition des glandes cutanées et
leur localisation progressive, en fonction
de la disparition des écailles chez les
Batraciens apodes, PHISALIX Verh. intern.
ZoolKongr. Jena **8** pp. 605-609 mit 1
Taf.

Dermophis mexicanus scales,
COCKERELL Science **36** p. 681.

Herpele multiplicata sp. n. Kamerun,
NIEDEN SitzBer. Ges. nat. Freunde **1912**
p. 210.

Boulengerula denhardti sp. n.
O. Afrika, NIEDEN SitzBer. Ges. natf.
Freunde **1912** p. 199.

STEGOCEPHALA.

The temnospondylous Amphibia and
a new species of *Eryops* from the
Permian of Oklahoma, MOODIE Univ.
Kans. Sci. Bull. **5** 1911 pp. 233-253
pls. xlix-liv.

†*Eryops willistoni* sp. n. Oklahoma
Permian, MOODIE Univ. Kans. Sci. Bull.
5 p. 243 pls. xlix-liv.

†*Aspidosaurus novomexicanus* New
Mexico p. 12 pl. xxxviii f. 1, *peltatus*
Texas p. 13 pl. xxxii f. 7 spp. n.
Permian, WILLISTON American Permian
Vertebrates.

†*Erpetosuchus* gen. n. *kansensis* sp. n.
Kansas, Carboniferous, MOODIE Smith-
sonian Inst. Proc. U. S. Nation. Mus. **39**
p. 491.

†*Bothriceps huxleyi* in S. Africa,
ANDREWS Zoologist **70** p. 115.

XVII. AVES

ARRANGED BY

W. L. SCLATER, M.A.

CONTENTS

	PAGE
I. TITLES	5
II. SUBJECT INDEX :—	
Comprehensive and General = 5803 :—	
History	66
Biography—General	66
„ Obituary Notices	67
General Treatises	67
Bibliography	67
Institutions and Collections	67
Technique	67
Economics	67
Bird-protection	68
Aviculture	68
Acclimatisation	69
Nomenclature	69
Structure = 5807 :—	
Plumage and epithelial structures	69
Nervous system and Sense organs	69
Myology	70
Osteology	70
Alimentary System	70
Circulatory System	70
Respiratory System	70
Reproductive and Excretory Systems	70
Blood	71
Physiology = 5811	71
Embryology = 5815	71
Ethology = 5819 :—	
General	72
Food habits	72
Migration, General	73
„ Regional Observations	73
„ Observations on Single Species	74
„ Bird-marking experiments	75

	PAGE
Flight and other methods of locomotion	76
Parental relations	76
Sexual relations	76
Nidification, General	76
,, Regional Observations	76
,, Observations on single species	77
Oology	79
Voice	79
Psychology	79
Colour and Moulting	79
Parasites and Pathology	80
 Variation and Aetiology = 5823 :—	
Variation	80
Teratology	81
Hybrids	81
Heredity and Evolution	81
Extinct birds	82
 Geography = 5827 :—	
General	82
Palaeartic Region	82
Ethiopian Region	88
Indian Region	89
Australian Region	90
Neotropical Region	91
Nearctic Region	92
The Oceans	95
 III. SYSTEMATIC :—	
Struthioniformes	95
Casuariiformes	95
Tinamiformes	95
Galliformes	95
Turniciformes	97
Pteroclidiformes	97
Columbiformes	97
Ralliformes	98
Podicipediformes	99
Colymbiformes	99
Sphenisciformes	99
Procellariiformes	99
Alciformes	101
Lariformes	101
Charadriiformes	102
Gruiformes	104
Ardeiformes	104
Anseriformes	105

	PAGE
Pelecaniformes	106
Cathartidiformes	107
Accipitriformes	107
Strigiformes	108
Psittaciformes	109
Coraciiformes	111
Coccyges	113
Scansores	113
Eurylaemiformes	115
Menuriformes	115
Passeriformes	115
Conopophagidæ	115
Formicariidæ	115
Dendrocolaptidæ	115
Tyrannidæ	115
Pipridæ	116
Cotingidæ	116
Pittidæ	116
Xenicidæ	116
Hirundinidæ	116
Muscicapidæ	116
Campophagidæ	118
Pycnonotidæ	118
Timeliidæ	119
Troglodytidæ	120
Cinclidæ	120
Mimidæ	120
Turdidæ	120
Sylviidæ	121
Vireonidæ	124
Ampelidæ	124
Artamidæ	124
Vangidae	124
Prionopidæ	124
Laniidæ	124
Paridæ	125
Regulidæ	126
Sittidæ	126
Certhiidæ	126
Zosteropidæ	126
Dicæidæ	126
Nectariniidæ	127
Meliphagidæ	127
Mniotiltidæ	129
Drepanididæ	129
Motacillidæ	129

Passeriformes—*continued.*

Alaudidæ	..	..	..	..	..	..	130
Fringillidæ	..	..	..	..	..	..	130
Cœrebidæ	..	..	..	..	..	..	132
Tanagridæ	..	..	..	..	..	..	132
Ploceidæ	..	..	..	..	..	..	132
Icteridæ	..	..	..	..	..	..	133
Sturnidæ	..	..	..	..	..	..	133
Eulabetidæ	..	..	..	..	..	..	133
Oriolidæ	..	..	..	..	..	..	134
Dicruridæ	..	..	..	..	..	..	134
Paradiseidæ	..	..	..	..	..	..	134
Ptilonorhynchidæ	..	..	..	..	..	..	134
Corvidæ	..	..	..	..	..	..	135
Streperidæ	..	..	..	..	..	..	135

I.—TITLES.

Abbott, C. G. The home-life of the Osprey photographed and described. (1-54) 32 pls. London (Witherby) 1911. 8vo. 1

Abel, W. Further observations on the development of the sympathetic nervous system in the chick. *J. Anat. Physiol.* London 8 1912 (35-72) 35 figs. 2

D'Abreu, E. A. Notes on a bird collecting trip in the Balaghat district of the Central Provinces. *Bombay J. Nat. Hist. Soc.* 21 1912 (1158-1169). 3

Aebi, I. U. Der Kampfläufer (*Machetes pugnax* L.). Zugsbeobachtungen von 1903. *Basel Ornithol. Beob.* 6 1908 (93-95). 4

Aebi, I. U. Feldlerchenzug auf dem Koserfeld bei Burgdorf im Oktober 1910. *Basel Ornithol. Beob.* 8 1910-1911 (41-42). 5

Aharoni, J. *Houbara macqueeni* Gray. *Ornith. Jahrb. Hallein* 23 1912 (1-15). 6

Ainley, J. W. The Parson Bird. *Avicult. Mag.* London 3 1912 (137-138). 7

Aldrich, F. W. The Starling in Illinois. *Bird-Lore Harrisburg Pa.* 14 1912 (113). 8

Alfairo, A. El tijo-tijo ó Zopilotillo (*Crotophaga sulcirostris*). *Boletin de Fomento San José Costa Rica* 2 1912 (725-728). 9

Allen, F. H. Remarks on the case of Roosevelt vs. Thayer, with a few independent suggestions on the concealing coloration question. *Auk Cambridge Mass.* 29 1912 (489-507). 10

Allen, F. H. The White-breasted and Red-breasted Nuthatches. *Bird Lore Harrisburg Pa.* 14 1912 (316-319) 1 pl. 11

Allen, J. A. The determination of genotypes in zoölogy. *Proc. 7th Int. Zool. Cong. Cambridge Mass.* 1912 (807-813). 12

Allen, J. A. and others. Sixteenth supplement to the American Ornithologists' Union check-list of North American birds. *Auk Cambridge Mass.* 29 1912 (380-387). 13

Allen, W. F. The Starling in New Jersey. *Bird-Lore Harrisburg Pa.* 14 1912 (111-112). 14

Allen, O. W. *vide* McWhorter.

Alphonsus, Brother. Tentative list of birds of St. Joseph county, Indiana. *Amer. Midl. Nat. Notre Dame Ind.* 1 1910 (161). 15

Alphonsus, Brother. Migration of our birds in the spring of 1910 and 1911, and in the autumn of 1911. *Amer. Midl. Nat. Notre Dame Ind.* 1 1910 (265-267); 2 1912 (167-168 262-264). 16

Alphonsus, Brother. Our birds at Notre Dame, Indiana. *Amer. Midl. Nat. Notre Dame Ind.* 2 1911-1912 (24-28 54-56 69-70 149-150 165-166 196-200 260-262). 17

Alston, C. H. Wild life in the West Highlands (xii+271) *Glasgow (Maclehose)* 1912. 8vo. 18

Amans. Géométrie comparée des aéroplanes et des oiseaux volants. *Biologica Paris* 1 1911 (325-330) fig. 19

Amsler, M. Breeding of the Hooded Siskin, *Chrysomitris cucullata*. *Avicult. Mag.* London 4 1912 (51-54). 20

Anfric, E. Le Pétrel fulmar (*Procellaria glacialis* L.). *Paris Rev. Fr. d'Orn.* 2 1912 (329). 21

Anfric, E. et Deleuil, R. Sur la dispersion de la Pie bleue (*Cyanopolius cooki* Bp.). *Paris Rev. Fr. d'Orn.* 2 1912 (224-225). (Also **Hugues t.c.** p. 248 **Lavander t.c.** p. 311). 22

- Angelini, G.** Contributo alla conoscenza delle migrazioni in Italia e dei costumi dell' *Eudromias morinellus* L. *Avicula Siena* **10** 1906 (2-9). **23**
- Angelini, G.** Cattura ornitica nuova per l'Italia: il *Larus affinis* Reinhd. nei dintorni di Roma. *Roma Boll. Soc. zool. ital.* **1** 1912 (81-80). **24**
- Angelini, G.** Il *Calcarius lapponicus* (L.) osservato per la prima volta nel Romano. *Roma Boll. Soc. zool. ital.* **1** 1912 (87). **25**
- Angelini, G.** Cattura di un *Larus affinis* Reinhardt presso Roma. *Riv. ital. Orn. Bologna* **1** 1912 (152-155). **26**
- Angelini, G.** Ancora sui resti del *Fregilupus varius* Bodd. *Riv. ital. Orn. Bologna* **1** 1912 (262-267). **27**
- [ANON.] Insectivorous birds of New South, Wales. *Agric. Gaz. Sydney* **22** 1911 (36-38 206-207 316-317 503-504 611-612 842-843 947-948) 14 pls. **28**
- [ANON.] Bescherming van paradisijsvogels in Nederlandsch Nieuw Guinea. [Schutz von Paradiesvögeln in Holländisch Neu-Guinea.] *Amsterdam Tijdschr. K. Ned. Aardr. Gen.* (2) **29** 1912 (828-833). **29**
- [ANON.] АНОНИМЪ. НОВЫЙ ВИДЪ ГАЙЧКИ. [Eine neue Form von *Poecile baicalensis*.] *Ochotn. gazeta Moskva* **40** 1912 (28). **30**
- Anthony, A. W.** Eastern Oregon notes. *Auk Cambridge Mass.* **29** 1912 (253-254). **31**
- Anthony, R. et Gain, L.** Sur le développement du squelette de l'aile chez le pengouin. *Paris C. R. Acad. sci.* **155** 1912 (1264-1266) fig. **32**
- Aplin, O. V.** Dark-throated Quail in Northamptonshire. *Zoologist London* **1912** 1912 (349-350). **33**
- Aplin, O. V.** Habits of the Coot (*Fulica atra*). *Zoologist London* **1912** 1912 (35-36). **34**
- Aplin, O. V.** Supposed occurrence of Scarlet Grosbeak (*Pyrhula erythrina*) in Oxfordshire. *Zoologist* **1912** 1912 (160). **35**
- Appleford, W. G.** The Himalayan snow cock (*Tetrogallus himalayensis*). *Bombay J. Nat. Hist. Soc.* **21** 1912 (1084-1085) fig. **36**
- Arctander, H.** Nogle Varieteter fra Stevns. [Varieties of birds from the peninsula Stevns (Sealand).] *København Ornith. Tids.* **6** 1912 (237-239) fig. **37**
- Arenberg, Prince d'.** Les Oiseaux nuisibles de France et les modes de chasse ou de piégeage propres à leur destruction. *Livre premier. Orléans (H. Tessier)* 1911 (111) fig. 18 cm. **38**
- Arenberg, Prince Ern. d'.** Choses d'autourserie (*Astur¹ palumbarius*). *Paris Rev. Fr. d'Orn.* **2** 1912 (319-322). **39**
- Arnold, E.** A short summer outing in Newfoundland, 1911. *Auk Cambridge Mass.* **29** 1912 (72-79). **40**
- Arnold, W. W.** Bird enemies of the Chinese cotton scale. *Auk Cambridge Mass.* **29** 1912 (113). [See also **Cockerell** t.c. p. 400.] **41**
- Arrigoni degli Oddi, E.** Notizie sopra un ibrido di *Anas boscas* L. e *Spatula clypeata* L. della collezione Contarini. *Avicula Siena* **10** 1906 (33-35). **42**
- Arrigoni degli Oddi, E.** Osservazioni sopra una specie del gen. *Anser* nuova per l'Italia. *Avicula Siena* **10** 1906 (105-109). **43**
- Arrigoni degli Oddi, E.** Le comparse del *Pastor roseus* nel Veneto nella primavera del 1908. *Avicula Siena* **12** 1908 (57-58). **44**
- Arrigoni degli Oddi, E.** Il passo nelle Valli dell'Estuario veneto. *Riv. ital. Orn. Bologna* **1** 1912 (166-169). **45**
- Arrigoni degli Oddi, E.** La comparsa della Nocciolaia (*Nucifraga caryocatactes lephorhynchus*) nel Padovano. *Riv. ital. Orn. Bologna* **1** 1912 (169). **46**
- Arrigoni degli Oddi, E. e Damiani, G.** Note sopra una raccolta di Uccelli dell'Arcipelago toscano. *Riv. ital. Orn. Bologna* **1** 1912 (241-261). **47**
- Ashby, E.** Occurrence of *Myzantha melanotis* Wilson near the Murray. *Birds of the Mallee near Schwetze's Landing, S.A. Emu Melbourne* **12** 1912 (46-48). **48**
- Ashford, W. J.** The Ringed or Bridled Variety of the Common Guillemot. *Zoologist London* **1912** 1912 (233). **49**

- Assheton, R.** Gastrulation in birds. Q. J. Micros. Sci. London **58** 1912 (145-158). **50**
- Astley, H. D.** The Blue Chaffinch of Teneriffe (*Pringilla teydea*). Avicult. Mag. London **3** 1912 (195-197). [Also Meade-Waldo, *ibid.* p. 229.] **51**
- Astley, H. D.** Breeding of Queen Alexandra Parrakeets (*Spathopterus alexandrae*). Avicult. Mag. London **3** 1912 (243-246). **52**
- Aubouër, L.** L'appétit des oiseaux. Rev. sci. Bourbon. Moulins **25** 1912 (62-65). **53**
- D'Aubusson, M.** Sur l'acclimatation de quelques espèces de Francolins. Paris Bul. soc. nat. acclim. **58** 1911 (1-12 48-55). **54**
- D'Aubusson, M.** Sur l'acclimatation du cupidon des prairies. Paris Bul. soc. nat. acclim. **58** 1911 (387-398). **55**
- Austin, T. P.** Bird life near home. Emu Melbourne **12** 1912 (41-42). **56**
- [**Averin, V. (G.)** Аверинъ, В. Г. Бѣлая мухоловка. [Ein Albino des grauen Fliegenschnäppers.] Charïkov Bull. Soc. nat. **1** 1912 3 (26). **57**
- [**Averin, V. G.**] Аверинъ, В. Г. Пѣтухоперая самка варакушки (*Cyanecula suecica suecica* L.) [Ein hahnenfedriges Weibchen des Blaukehlchens (*Cyanecula suecica suecica* L.).] Charïkov Bull. Soc. nat. **1** 1912 (27). **58**
- [**Averin, V. G.**] Аверинъ, В. Г. Степная овсянка—*Emberiza citrinella somovi* n. subsp. [Eine neue Form des Steppengoldammers (sic!)—*Emberiza citrinella somovi* n. subsp.] Charïkov Trav. Soc. nat. **45** 1912 (153-154). **59**
- Babin, R.** Catalogue raisonné des oiseaux du canton de Nemours (Seine et Marne). Paris Rev. Fr. d'Orn. **2** 1912 (233-241 257-260 275-279) carte. **60**
- Babic, K. and Rössler, E.** Beobachtungen über die Fauna von Pelagosa. Wien Verh. ZoolBot. Ges. **62** 1912 (223-233: Aves 230-233). **61**
- Bacmeister, W.** Die sibirischen Tannenbäher in Württemberg im Herbst 1911. Ornith. Jahrb. Hallein **23** 1912 (141-142). **62**
- Bacon, A. R.** L'hivernage des oiseaux indigènes et exotiques en plein air. Paris Rev. Fr. d'Orn. **2** 1912 (340-343). **63**
- Baer, G.** Une partie de chasse aux îles Philippines. Paris Rev. Fr. d'Orn. **2** 1912 (219-220). **64**
- Bagnall, R. S. and Hall, W.** Records of some bird-lice (Mallophaga). J. econ. biol. London **7** 1912 (5-9). **65**
- Bahr, P. H.** Remarks on the drumming of Snipes and Woodcocks. London Bull. Brit. Ornith. Cl. **29** 1912 (79-83). **66**
- Bahr, P. H.** On a journey to the Fiji Islands, with notes on the present status of their avifauna, made during a year's stay in the group 1910-1911; together with a description of a small collection of skins from the same locality by C. B. Ticehurst. Ibis London **1912** 1912 (282-314) pl. v. **67**
- Bailey, B. H.** Two hundred wild birds of Iowa: A handbook for the identification of the common wild birds of Iowa. Adapted to use in schools. Cedar Rapids Iowa (The Superior Press) [1910] (80+2) figs. 18.5 cm. **68**
- Bailey, F. M.** Birds of the cottonwood groves. Condor Hollywood Cal. **14** 1912 (113-116) fig. 42-43. **69**
- Bailey, H. B.** Notes on bird breeding in the mountains of Virginia. Auk Cambridge Mass. **29** 1912 (79-84). **70**
- Bailey, S. W.** Mimicry in the song of the Catbird. Auk Cambridge Mass. **29** 1912 (545-546). **71**
- Baker, E. C. S.** The Paradise Flycatcher, *Terpsiphone paradisaea affinis*. Avicult. Mag. London **3** 1912 (302-307). **72**
- Baker, E. C. S.** The Game Birds of India, Burma and Ceylon, pts. vi-viii. Bombay J. Nat. Hist. Soc. **21** 1912 (303-337 721-739 1109-1128) 7 pls. **73**
- Baker, E. C. S.** The Sooty Tern (*Sterna fuliginosa*) in Cachar. Bombay J. Nat. Hist. Soc. **21** 1912 (684). **74**
- Balducci, E.** Morfologia dello sterno degli Uccelli, con ricerche originali. (84) 28 tav. Prato (tip. Succ. Vestri) 1908. **75**
- Balducci, E.** La cattura di un *Larus audouini* Payr. a Marciana Marina (Elba). Riv. ital. Orn. Bologna **2** 1912 (34-35). **76**
- Balducci, E.** L'*Erythrosterina parva* (Bech.). Riv. ital. Orn. Bologna **2** 1912 (35-36). **77**

- Balducci, E.** Intorno alla pretesa nuova forma del *Corvus sardus* di Kleinschmidt. Riv. ital. Orn. Bologna 1 1912 (225-236) 2 tav. 78
- Bamberg, O.** *Larus ichthyaetus* (Pall.) und deren Eier. Zs. Oologie Berlin 22 1912 (97-103). 79
- Bamberg, O.** Ueber abnormgefärbte palaearktische Vögel. Zs. Oologie Berlin 22 1912 (161-165). 80
- Banfield, E. J.** Metallic Starlings (*Calornis*). Emu Melbourne 12 1912 (22-26). 81
- Bangs, O.** A new subspecies of the Ruffed Grouse. Auk Cambridge Mass. 29 1912 (378-379). 82
- Bangs, O.** The Florida Song Sparrow. Proc. N. England Zool. Club 4 1912 (85-87). 83
- Bangs, O. vide** Thayer.
- [Banikovskij, V. B.] Баньковский, В. Б.** Къ систематическому положению Крымской пищухи. [Neue Form des Baumläufers.] Mess. ornith. Moskva 8 1912 (160-162). 84
- Bannerman, D. A.** On a collection of birds made by Mr. Willoughby P. Lowe on the West coast of Africa and outlying islands; with field-notes by the collector and a description of Ichabo Island also by W. P. Lowe. Ibis London 1912 1912 (219-268) pl. iv text figs. 2 & 3 map. 85
- Bannerman, D. A.** The birds of Gran Canaria. Ibis London 1912 1912 (557-627) pls. ix-xii. 85a
- Banta, A. M.** The distastefulness of *Anosia plexiphus*. [Relation of birds and butterflies.] Nature London 89 1912 (242-243) [also Pocock *ibid* p. 243, Poulton *ibid* pp. 375-376, Evershed *ibid* p. 659 und Poulton *ibid* 90 p. 71]. 86
- Barfurth, D.** Die Hyperdaktylie des Fusses und des Flügels beim Houdanhühnchen. (Nach Präparaten v. Fritz Prein.) Rostock SitzBer. natf. Ges. N.F. 3 1911 (20-24). 87
- Barile, C.** Sur une espèce de trichosome signalée chez le dindon (*Meleagris gallopavo domestica* [L.]). Paris Bul. soc. zool. 87 1912 (126-133) 3 figs. 88
- Barile, C.** Sarcoma rotondo cellulare multiplo nel connettivo sottocutaneo del collo e della testa nel *Gallus domesticus*. Torino Giorn. Acc. med. 75 1912 (156-158). 89
- Barr, M. vide** Craig.
- Barrett, H. L.** The Laughing Gull at Marshfield, Massachusetts. Auk Cambridge Mass. 29 1912 (99). 90
- Barrington, R. M.** Barred Warbler at Rockabill. Wryneck at Aran Island. Irish Nat. Dublin 21 1912 (207). 91
- Barrington, R. M.** The Dartford Warbler in Ireland. Irish Nat. Dublin 21 1912 (232-233) also British Birds London 6 1912 (220-222). 92
- Barrows, W. B.** Michigan bird life: A list of all the bird species known to occur in the state, together with an outline of their classification and an account of the life history of each species, with special reference to its relation to agriculture. Special bulletin of the Department of zoology and physiology of the Michigan Agricultural College, (xiv+822) pls. i-lxx figs. 1-152. Lansing 1912. 24 cm. 93
- Bartelmez, G. W.** The bilaterality of the Pigeon's egg. A study in egg organization from the first growth period of the oocyte to the beginning of cleavage. J. Morph. Philadelphia Pa. 23 1912 (269-328) 8 pls. 94
- Barton, F. T.** Pheasants in covert and aviary. (1-288) 4 Col. and 37 other illustr. London (John Long) 1912. 8vo. 95
- Bau, A.** Der Steinadler als Brutvogel Vorarlbergs und Notizen über die dort vorkommenden Adlerarten. Zs. Oologie Berlin 22 1912 (2-6). 96
- Bau, A.** Ein bemerkenswertes Kohlmeisennest. Zs. Oologie Berlin 22 1912 (76-77). 97
- Baxter, E. V. and Rintoul, L. J.** Report on Scottish Ornithology in 1911 including migration. (1-80) Edinburgh (Oliver & Boyd) 1912. 8vo. 98
- Baxter E. V. and Rintoul, L. J.** Bird notes from the Isle of May in 1911. Scot. Nat. Edinburgh 1912 1912 (53-58). 99
- Baxter, E. V. vide** Rintoul.
- Baynard, O. E.** Food of Herons and Ibises. Wilson Bull. Oberlin Ohio 24 1912 (167-169) pl. 100

- Beal, F. E. L.** Food of our more important Flycatchers. Washington D.C. U. S. Dept. Agric. Biol. Surv. Bull. No. 44 1912 (1-67) pls. i-v. 101
- Beal, F. E. L. and McAtee, W. L.** Food of some well-known birds of forest, farm and garden. Washington D.C. U. S. Dept. Agric. Farmer's Bull. No. 506 1912 (1-35). 102
- Beaufort, L. F. de.** Over de verspreiding van het korhoen (*Lyrurus textrix* L.) in Nederland. [Ueber die Verbreitung des Birkhuhns in den Niederlanden.] Ardea Leiden 1 1912 (50-53). 103
- Beddard, F. E.** On a new genus of Tapeworms (*Otiditaenia*) from the Bustard (*Eupodotis kori*). London Proc. Zool. Soc. 1912 1912 (194-221) 12 figs. 104
- Bedford, [Duchess of].** Female Greenland Wheatear in male plumage. Scot. Nat. Edinburgh 1912 1912 (210). 105
- Beebe, C. W.** Geographical variation in birds, with special reference to humidity. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (699-701). 106
- Beebe, C. W.** New Blood Pheasants. Zoologica New York 1 1912 (189-193). 107
- Behr, H.** Recollections of the Passenger Pigeon. Cassinia Philadelphia Pa. 1911 1912 (24-27). 108
- Béjot, E.** Observations sur l'élevage des faisans et leur cantonnement. Paris Bul. soc. nat. acclim. 59 1912 (129-130). 109
- Bell, R. S.** Breeding habits of white tern (*Gygis alba*) on the Kermadec Group. Emu Melbourne 12 1912 (26-30) pls. i-ii. 110
- Bent, A. C.** A new subspecies of Ptarmigan from the Aleutian islands. Washington D.C. Smithsonian Inst. Misc. Collect. 56 No. 30 1912 (1-2). 111
- Bent, A. C.** Notes on birds observed during a brief visit to the Aleutian islands and Bering sea in 1911. Washington D.C. Smithsonian Inst. Misc. Collect. 56 No. 32 1912 (1-29). 112
- Bent, A. C.** A new subspecies of Crossbill from Newfoundland. Washington D.C. Smithsonian Inst. Misc. Collect. 60 No. 15 1912 (1-3). 113
- Berenberg-Gossler, H. von.** Ueber gitterkapselartige Bildungen in den Urgeschlechtszellen von Vogelembryonen. (Vorl. Mitt.) Anat. Anz. Jena 40 1912 (587-591). 114
- Berenberg-Gossler, H. von.** Die Urgeschlechtszellen des Hühnerembryos am 3. und 4. Bebrütungstage, mit besonderer Berücksichtigung der Kern- und Plasmastrukturen. Arch. mikr. Anat. Bonn 81 Abt. 2 1912 (24-72) 1 Taf. 115
- Bergtold, W. H.** The Snowy Egret (*Egretta c. candissima*) in New Mexico. Auk Cambridge Mass. 29 1912 (237). 116
- Bergtold, W. H.** October birds of the headwaters of the Gila river, New Mexico. Auk Cambridge Mass. 29 1912 (327-336) 1 map. 117
- Berlepsch, H. Graf von.** Beschreibung neuer Vogelformen aus dem Gebiete des unteren Amazonas. Ornith. Monatsber. Berlin 20 1912 (17-21). 118
- Berry, W.** Broadbilled Sandpiper in Fifeshire Scot. Nat. Edinburgh 1912 1912 (212-213). 119
- Bertrand, G. et Medigreceanu, F.** Sur la présence et la répartition du manganèse dans les organes des animaux. Paris C. R. Acad. Sci. 154 1912 (1450-1452). 120
- Besserer, Freiherr von.** Vom Gesichtssinn der Wildente. D. Jäger München 34 1912 (122-124). 121
- Besserer, L. Frhr. von.** Dr. Karl Parrott. München Verh. Ornith. Ges. 11 1912 (1-4). 122
- Besserer, L. Frhr. von.** Gelegenheitsbeobachtungen aus Bad Kissingen und Umgebung. München Verh. ornith. Ges. 11 1912 (5-10). 123
- Besserer, Freiherr v.** Der zweite Markierungsversuch an Lachmöven im Jahre 1911. München Verh. ornith. Ges. 11 1912 (182-186). 124
- Betham, R. M.** Wood snipe (*Galinago nemoricola*) occurring near Bangalore. Bombay J. Nat. Hist. Soc. 21 1912 (677). 125
- Betts, N. De W.** Notes from Boulder County, Colo. Auk Cambridge Mass. 29 1912 (399-400). 126
- Bialaszewicz, K.** Über das Verhalten des osmotischen Druckes während der

Entwicklung der Wirbeltierembryonen. Teil i und ii. Versuche an Hühner- und Froschembryonen. Arch. Entwickl.-Mech. Leipzig **34** 1912 (489-540) 2 figs. **127**

[**Bianchi, V. L.**] Біанки, В. Л. Списокъ птицъ Прикамья. Предварительный списокъ птицъ Пермской губернии. [Verzeichnis der Vögel des Kama-Gebietes. Vorläuf. Verzeichnis der Vögel des Gouv. Perm.] In: СИУЗЕВ (211), Illustrierter Führer &c. Perm 1911 (68-72). 26 x 36 cm. **128**

[**Bianchi, V. L.**] Біанки, В. Л. *Anser brachyrhynchus* Baillon, НОВЫЙ для русской фауны видъ. [*Anser brachyrhynchus* Baillon, espèce nouvelle pour la faune de la Russie.] St. Peterburg Ann. Mus. zool. Ac. Sc. **17** 1912 (xxxix). **129**

[**Bianchi, V. L.**] Біанки, В. Л. Второе дополненіе къ списку птицъ С.-Петербургской губернии 1907 г. и новыя данныя о рѣдкихъ видахъ. [Deuxième supplément à la "Liste des oiseaux du gouv. de St. Pétersbourg 1907 et dates nouvelles concernant quelques espèces rares."] St. Peterburg Ann. Mus. zool. Ac. sc. **17** 1912 (xl-xlviii). **130**

Bickerton, W. The home life of the Terns or Sea-swallows. (1-88) 32 pls. London (Witherby) 1912. 8vo. **131**

Bickerton, W. Aves [of St. Albans and its neighbourhood]. Watford Trans. Herts. Nat. Hist. Soc. **14** 1911 (240-243). **132**

Bickerton, W. Notes on birds observed in Hertfordshire during the year 1910. Watford Trans. Herts. Nat. Hist. Soc. **14** 1912 (271-286). **133**

Biedermann-Imhoof, R. Die Heckenbraunelle (*Accentor modularis*) als Standvogel. Ornith. Monatsber. Berlin **20** 1912 (82-84). **134**

Biedermann-Imhoof, R. Eine Betrachtung über den dunkeln Augenstreifen bei der weiblichen Schwanzmeise (*Acredula caudata*). Ornith. Monatsber. Berlin **20** 1912 (115-118). **135**

Billikevič, S. I. *vide* Zarudnyj, N. A.

Biondi, G. Osservazioni sullo sviluppo e sulla struttura dei nuclei d'origine dei nervi oculomotori e trocleari nel pollo. Riv. Neuropatol. Catania **3** 1910 (302-327). **136**

Birthler, F. Der Tannenhäher—*Caryocatactes nucifraga*. Hermanstadt Verh. Mitt. siebenb. Ver. Naturw. **62** 1912 (33). **137**

Bishop, I. B. An apparently unrecognized race of the Red-shouldered Hawk. Luk Cambridge Mass. **29** 1912 (232-233). **138**

Bishop, W. L. The Canada Grouse (*Dendragapus canadensis*) in captivity; its food, habits, etc. Halifax N.S. Proc. Trans. Nova Scotian Inst. Sci. **13** 1912 (150-153). **139**

Bittner, F. Über die Schläfenregion am Schädel der Vögel und dessen Beziehungen zu dem der Reptilien. Arch. Natg. Berlin **78** Abt A. Heft 7 1912 (1-23) 1 Taf. **140**

Blaauw, F. E. Noordwestelijk Vuurland en zijn vogels. [Nordwestliches Feuerland und seine Vögel.] Ardea Leiden **1** 1912 (2-11). **141**

Blaauw, F. E. On the immature dress of *Anser indicus* and *Dendrocygna arborea*. Ibis London **1912** 1912 (657-659) fig. **142**

Blaauw, F. E. Across South America to Tierra del Fuego and back through the Smith Channel. Leiden Notes Mus. Jentink **35** 1912 (1-74) 2 pls. **143**

Bladen, W. W. Bird notes (1911) chiefly taken at Stone. Stafford Rep. Trans. N.S. Field Cl. **46** 1912 (94-102). **144**

Blanchard, M. *vide* Mesnil.

Blathwayt, F. L. The Birds of Lincolnshire; additions to the County list. Zoologist London **1912** 1912 (60-63). **145**

Blathwayt, F. L. [Report on birds of Lincolnshire for 1911.] Louth Trans. Lincoln Nat. Un. **1911** 1912 (313-316). **146**

Bloomfield, E. N. Annual notes on the local fauna, etc., for 1911. Hastings and East Sussex Nat. **2** 1912 (1-7). **147**

Bohin, L. S. Quelques observations sur le vol des grands planeurs. Paris Rev. Fr. d'Orn. **2** 1912 (221-222). **148**

Bolam, G. Birds of Northumberland and the Eastern Borders. (xviii+726) 27 pls. Alnwick (Hunter Blair) 1912. 8vo. **149**

- Bolles, F.** Notes on Whip-poor-wills and Owls. With a foreword by William Brewster. Auk Cambridge Mass. **29** 1912 (150-159). **150**
- Bonar, H. N.** Some trees in which the Great Spotted Woodpecker (*Dendrocopus major* Linn.) has bored or nested in Scotland. Scott. Nat. Edinburgh **1912** 1912 (81-83). **151**
- Bond, C. J.** The structure of the ciliary and iris muscles in birds. Nature London **90** 1912 (71). **152**
- Bonhote, J. L.** The plumage question and aviculture. Avicult. Mag. London **4** 1912 (61-64). **153**
- Booth, H. B.** The Bearded Tit experiment at Hornsea Mere. Naturalist London **1912** (168-170) fig. **154**
- Booth, H. B.** Nesting of the Common Gull on the Farne Islands. Naturalist London **1912** (237). **155**
- Boring, A. M.** The interstitial cells and the supposed internal secretion of the chicken testis. Biol. Bull. Woods Hole Mass. **23** 1912 (141-153) figs. 1-9. **156**
- Bornstein, F.** Über Regeneration der Federn und Beziehungen zwischen Federn und Schuppen. Arch. Natg. Berlin **77** Bd 1 Suppl. 4 1912 (1-11) 2 Taf. **157**
- Boschetti, G. A.** Appunti per lo studio della Avifauna ligure. Avicula Siena **10** 1906 (24-28 44-53). **158**
- Bowles, J. H.** The Wood Duck at Santa Barbara, California. Condor Hollywood Cal. **14** 1912 (225). **159**
- Bowles, J. H.** Early nesting of Allen Hummingbird at Santa Barbara. Condor Hollywood Cal. **14** 1912 (77). **160**
- Bowles, J. H. and Howell, A. B.** The shore birds of Santa Barbara. Condor Hollywood Cal. **14** 1912 (5-11) 4 figs. **161**
- Boxberger, von.** Über die Eier der paläarktischen Häherarten. Zs. Oologie Berlin **22** 1912 (49-52 116-117). **162**
- Boxberger, von.** Beobachtungen über das Fortpflanzungsgeschäft des mitteleuropäischen Kleibers (*Sitta europaea caesia* Wolf.). Zs. Oologie Berlin **22** 1912 (130-134). **163**
- Boyle, H. S.** Early occurrence of the Saw-whet Owl. Auk Cambridge Mass. **29** 1912 (239). **164**
- Brabourne, Lord and Chubb, C.** The birds of South America. Vol. i List. (xx + 504) map. London (Porter) [1912]. 8vo. **165**
- Brabourne, Lord and Chubb, C.** Notes on Guiana birds. Ann. Mag. Nat. Hist. London **10** 1912 (261-262). **166**
- Braess, M.** Die Raubvögel als Naturdenkmäler. (67.) (Naturdenkmäler. H. 2.). Berlin (Gebr. Borntraeger) 1912 [1913] 22 cm. **167**
- Braess, M.** Besitzen unsere Vögel eine instinktive Furcht vor dem Raubvogel? Eine tierpsychologische Umschau. Kosmos Stuttgart **8** 1912 (321-324). **168**
- Bragg, L. M.** Local fauna. Birds of South Carolina. Supplement. Charleston Bull. Museum **8** 1912 (19-25 27-33). **169**
- Brander, W.** Öfvervintrande flyttfåglar. [Überwinternde Zugvögel.] Helsingfors F. Jakttidn. **6** 1911 (55). **170**
- Brander, W.** Fågelnotiser. [Notizen über Vögel.] Helsingfors F. Jakttidn. **6** 1911 (112 140 194-195 252 288 316 347). **171**
- Brasil, L. and Iredale, T.** On the generic names *Antigone* and *Mathewsia*. Austr. Av. Rec. London **1** 1912 (122-123). **172**
- Braun, F.** Über den Gesang der Vögel. Ornith. Monatsber. Berlin **20** 1912 (89-95). **173**
- Braun, F.** Über anomale Lautäusserungen der Vögel, insonderheit das Sprechenlernen der Papageien. Darzig Ber. bot.-zool. Ver. **34** 1912 (234-238). **174**
- Braun, F.** Bemerkungen zu A. Voigts Problemen der Vogelstimmkunde. Ornith. Monatsber. Berlin **20** 1912 (108-113). **175**
- Braun, F.** Ornithologische Anmerkungen zu einem Besuche der Grazer Parkanlagen. Ornith. Monatsber. Berlin **20** 1912 (141-144). **176**
- Breed, F. S.** The development of certain instincts and habits in chicks. Behavior Monographs Cambridge Mass. **1** (No. 1) 1911 (iii+78) figs. **177**
- Bretscher, K.** Geschichtliches über die Vogelwelt des Zürichseegebietes. Zürich Vierteljahrsh. Natf. Ges. **56** 1912 (479-506). **178**

- Bretscher, K.** Die Wanderstrassen der Zugvögel in Europa. Zürich Vierteljahrschr. Natf. Ges. **57** 1912 (xiii—xv). **179**
- Brewster, W.** In memoriam: Henry Augustus Purdie. Born December 16, 1840—Died March 29, 1911. Auk Cambridge Mass. **29** 1912 (1-14) portr. **180**
- Brewster, W.** Notes on the flight of Gulls. Auk Cambridge Mass. **29** 1912 (85-92). **181**
- Brimont, E.** Trypanosomes d'oiseaux de la Guyane. Observation de F. Mesnil. Paris C. R. soc. biol. **72** 1912 (884-888) 3 figs. **182**
- Brock, H. H.** Recent occurrence of the Egret (*Herodias egretta*) near Portland, Maine. Auk Cambridge Mass. **29** 1912 (236-237). **183**
- Brock, S. E.** The display of the Goosander. Scot. Nat. Edinburgh **1912** (116). **184**
- Brock, S. E.** The Tufted-duck (*Fuligula cristata*) in the nesting season. Scot. Nat. Edinburgh **1912** (265-271). **185**
- Brockway, A. W.** A Catbird (*Dumetella carolinensis*) spending the winter in Connecticut. Auk Cambridge Mass. **29** 1912 (249). **186**
- Brook, A.** The Dipper at the nest. Brit. Birds London **5** 1912 (294-296) 1 pl. 3 figs. **187**
- Brook, E. J.** Hunstein's Bird of Paradise (*Diphylloides hunsteini*). Avicult. Mag. London **3** 1912 (181-182) 1 pl. **188**
- Brooks, A.** Some British Columbia records. Auk Cambridge Mass. **29** 1912 (252-253). **189**
- Brooks, E. A.** Notes from West Virginia. Auk Cambridge Mass. **29** 1912 (111-112). **190**
- Brooks, W. S.** Notes from the Magdalen Islands. Auk Cambridge Mass. **29** 1912 (112). **191**
- Brooks, W. S.** An additional specimen of the Labrador Duck. Auk Cambridge Mass. **29** 1912 (389-390). **192**
- Brooks, W. S. and Cobb, S.** Correction [to "Notes from eastern Alberta"]. Auk Cambridge Mass. **29** 1912 (400). **193**
- Brown, E. J.** Rare Virginia birds. Auk Cambridge Mass. **29** 1912 (399). **194**
- Brown, W. J.** Unusual nesting site of the Pigeon Hawk in Newfoundland. Ottawa Nat. **26** 1912 (70-71). **195**
- Brown, W. J.** Additional notes on the birds of Newfoundland. Ottawa Nat. **26** 1912 (93-98). **196**
- Bruner, S. C. and Field, A. L.** Notes on the birds observed on a trip through the mountains of western North Carolina. Auk Cambridge Mass. **29** 1912 (368-377). **197**
- Bryan, W. A.** The introduction and acclimatization of the Yellow Canary on Midway island. Auk Cambridge Mass. **29** 1912 (339-342). **198**
- Bryan, W. A.** *vide* Dill.
- Bryant, H. C.** Birds in relation to a grasshopper outbreak in California. Berkeley Univ. Cal. Pub. Zool. **11** 1912 (1-20). **199**
- Bryant, H. C.** The present and future status of the California valley Quail. Condor Hollywood Cal. **14** 1912 (131-141) map. **200**
- Bryant, H. C.** Egrets in California. Condor Hollywood Cal. **14** 1912 (199). **201**
- Bryant, H. C.** The numbers of insects destroyed by Western Meadowlarks (*Sturnella neglecta*). Science New York **36** 1912 (873-875). **202**
- Bryant, H. C.** Distaste of birds for butterflies. Nature London **88** 1912 (510). **203**
- Bubner.** Ornithologische Beobachtungen vom Niederrhein. Bonn SitzBer. nat. hist. Ver. **1911** 2tes Heft. 1912 Sec. E (134-139). **204**
- Buch, H.** Beobachtungen an der Taubenleber. Anat. Hefte Wiesbaden **45** 1912 (285-305) 14 fig. **205**
- Buckland, J.** The destruction of wild birds in general throughout the world. Verh. intern. OrnithKongr. Berlin **5** 1911 (847-857 106-108). **206**
- Bunyard, P. F.** Notes on eggs with abnormal colouration and markings. London Bull. Brit. Orn. Cl. **29** 1912 (87-88 109-110). **207**
- Bunyard, P. F.** Exhibition of rare and abnormal eggs. London Bull. Brit. Orn. Cl. **31** 1912 (28). **208**

- Bunyard, P. F. Crossbills breeding in Suffolk for the third year in succession. *Brit. Birds London* **6** 1912 (88-89). 209
- Bunyard, P. F. Tufted Duck and Teal breeding in Surrey. *British Bds. London* **6** 1912 (158) [also Baynes *ibid.* p. 190]. 210
- Bureau, L. *Melizophilus undatus bradfordiensis*. *Nantes Bul. soc. sci.* **2** 1912 (xv-xvi). 211
- Burg, G. von. Die schweizerischen Graumeisen. *Basel Ornithol. Beob.* **6** 1908 (17-19). 212
- Burg, G. von. Die Ringversuche. *Basel Ornithol. Beob.* **7** 1909-1910 (165-170). 213
- Burg, G. de *vide* Fatio.
- Burr, F. F. Note on the Bald Eagle and Osprey. *Auk Cambridge Mass.* **29** 1912 (393). 214
- Burrill, A. C. Anon the reasons for bird migration: A favourite food theory. *Milwaukee Bull. Wis. Nat. Hist. Soc.* **10** 1912 (101-106). 215
- Burrows, M. T. The growth of tissues of the chick embryo outside the animal body, with special reference to the nervous system. *J. exp. zool. Philadelphia* **10** 1911 (63-83) 5 pls. 216
- Burton, R. G. Marbled duck at Baroda. *Bombay J. Nat. Hist. Soc.* **21** 1912 (684). 217
- Büsing. Die Begattung des Mauerseglers. *Ornith. Monatschr. Magdeburg* **37** 1912 (281-282). 218
- Büskens, H. Die französischen Namen der Singvögel. *Diss. Bonn (P. Rost & Co.)* 1911 (78). 22 cm. 219
- Busse, F. Waldrotschwanzzüchtung. *Gefied. Welt Magdeburg* **41** 1912 (1-2 9-10 17-18 25-26). 220
- Bütikofer, E. Der Fichtenkreuzschnabel als Insektenvertilger. *Basel Ornithol. Beob.* **7** 1909-1910 (6-8). 221
- Butler, A. G. Evidence [of protection coloration] afforded by captive birds. *Avicult. Mag. London* **4** 1912 (57-61). 222
- Buturlin, S. H. Les places de ponte de la mouette rose. *Bul. soc. Zool. Genève* **1** 1912 (375-392) pl. 223
- Buturlin, S. H. Breeding grounds of *Eurynorhynchus pygmaeus* Linn. [Russ.] *Mess. ornith. Moskva* **3** 1912 (54-56). 224
- [Buturlin, S. A.] Бутурлинъ, С. А. Туркестанская раса бородатой куропатки. [*Perdix daurica turcomana* Stolz.] *Mess. ornith. Moskva* **3** 1912 (63). 225
- [Buturlin, S. A.] Бутурлинъ, С. А. Ферганская сѣрая синица. [*Parus cinereus ferghanensis* Buturlin.] *Mess. ornith. Moskva* **3** 1912 (163-164). 226
- [Buturlin, S. A.] Бутурлинъ, С. А. Туркестанская рыжепоясничная ласточка. [*Cecropis rufula ferghanensis* subsp. nov.] *Mess. ornith. Moskva* **3** 1912 (242-243). 227
- [Buturlin, S. A.] Бутурлинъ, С. А. Новая для Россіи птица: кашмирская чечетка. [*Acanthis flavirostris stoliczkae* Hart. new for Russia.] *Mess. ornith. Moskva* **3** 1912 (248). 228
- [Buturlin, S. A.] Бутурлинъ, С. А. Къ вопросу о летѣ птицъ противъ вѣтра. [On the flight of birds against the wind.] *Mess. ornith. Moskva* **3** 1912 (251-252). 229
- [Buturlin, S. A.] Бутурлинъ, С. А. Двѣ новыя формы говоковъ. [Zwei neue Formen der Zwergohreule.] *Naša ochota St. Peterburg* **6** 14 (45-46). 230
- Buturlin, S. A. *Dryobates medius transcaucasicus* nom. emend. *Ornith. Monatsber. Berlin* **20** 1912 (64-65). 231
- Buturlin, S. A. *Parus cinereus ferghanensis* nov. subsp. *Ornith. Monatsber. Berlin* **20** 1912 (84-85). 232
- Cahn, A. R. The freezing of Cayuga lake in its relation to bird life. *Auk Cambridge Mass.* **29** 1912 (437-444) pls. xvi-xx. 233
- Calvert, J. F. Bird notes 1912. *Ottawa Nat.* **26** 1912 (115). 234
- Campbell, A. J. New birds for Australia. *Melbourne Bull. R. Austr. Orn. Un. No. 3* 1912 (1-2); also *Emu Melbourne* **12** 1912 (19-21). 235
- Campbell, A. J. Annotations. *Emu Melbourne* **11** 1912 (245-248). 236
- Campehausen, L. *Frrhr.* von. Ornithologische Beobachtungen auf der Insel Oesel. *Ornith. Monatschr. Magdeburg* **37** 1912 (289-302) 1 Taf. 237
- Campehausen, L. *Freiherr* von. Die Küstenornis von Lahhentagge an der Südwestküste der Insel Oesel.

- Wien Mitt. Sect. Natkde. **24** 1912 (25-28). **238**
- Carazzi, D.** La collezione ornitologica Magni Griffi del R. Museo di Zoologia di Roma. Riv. ital. Orn. Bologna **1** 1912 (277-279). **239**
- Cardamatis, J.** Quelques remarques sur l'infection des oiseaux par l'*Halteridium* de Danilewsky. Paris Bul. soc. path. exot. **5** 1912 (171-173). **240**
- Carini, A.** Sur un nouvel hématozoaire du pigeon. Paris C. R. soc. biol. **73** 1912 (396-398) fig. **241**
- Carter, T.** Notes on *Licmetis pastinator* (Western Long-billed Cockatoo). Ibis London **1912** (627-634) 2 figs. **242**
- Carey, M.** A biological survey of Colorado. Washington D.C. U.S. Dept. Agric. Bur. Biol. Surv. N. Amer. Fauna No. **33** 1911 (1-256) 12 pls. **243**
- Cavazza, F.** Per una classificazione elementare dei Passeracei, Rampicanti e Trogoni. Raccolta e ordinamento di alcuni caratteri. (95) Bologna (P. Neri) 1909. **244**
- Cavazza, F.** Studio di sistematica sperimentale sulle variazioni della *Coturnix coturnix*. Archivio zool. Napoli **5** 1912 (29-40) 5 tav. **245**
- Cavazza, F.** Su alcuni esemplari di due speciali forme di *C. coturnix*. Riv. ital. Orn. Bologna **1** 1912 (131-139) 1 tav. **246**
- Cavazza, F.** Il Falco della Regina, *F. eleonorae*, nell'interno d'Italia. Riv. ital. Orn. Bologna **1** 1912 (157-158). **247**
- Cavazza, F.** Catture notevoli nell'Emilia. Riv. ital. Orn. Bologna **2** 1912 (32-34). **248**
- Cavazza, F.** Catalogo di una piccola collezione di uccelli della Colonia Eritrea. Riv. ital. Orn. Bologna **2** 1912 (96-112). **249**
- Cavazza, Conte F.** Studio sperimentale sulle variazioni della *Coturnix coturnix*. Nota preliminare. Verh. intern. ZoolKongr. Jena **8** 1912 (783-791). **250**
- Cave, W. A.** The birds of Columbo. Spolia Zeylan. Columbo **8** 1912 (94-151) 5 pls. **251**
- Cave, W. A. vide Symons.**
- Cecconi, G. vide Passerini.**
- [**Chachlov, V. A.**] Хахловъ, В. А. Новая форма гаички. [Ueber eine neue mattköpfige Sumpfmehse.] Mess. ornith. Moskva **3** 1912 (60-62). **252**
- Chachlov, V. A. vide Hachlov.**
- Chaignon, Vicomte de.** Sur la nourriture de quelques oiseaux. Paris Rev. Fr. d'Orn. **2** 1912 (364-367). **253**
- Chaluseck, R.** Meine zahme Waldschnepfe. (Ein Beitrag zur Biologie unserer Waldschnepfe, *Scolopax rusticola* L.) Gefied. Welt Magdeburg **41** 1912 (89-90 97-98 105-106 113-114 121-122). **254**
- Chandler, L. G.** Field notes on the White-browed Field-wren (*Calamanthus albiloris*). Emu Melbourne **11** 1912 (237-239) pl. xxiv. **255**
- Chandler, L. G.** Notes on the Mistletoe Bird (*Dicaeum hirundinaceum*). Emu Melbourne **12** 1912 (130-133). **256**
- Chapman, A.** Spring-notes on the borders (1911-12). Brit. Birds London **6** 1912 (107-117) 5 figs. **257**
- Chapman, F. M.** Handbook of birds of eastern North America, with introductory chapters on the study of birds in nature. (xxix+530) pls. i-xxiv figs. 1-136. Rev. ed. New York and London (Appleton) 1912. 19.5 cm. **258**
- Chapman, F. M.** Notes on the plumage of the North American Sparrows. Bird Lore Harrisburg Pa. **14** 1912 (47-48 105-106 162 218-219 290 346) 6 pls. **259**
- Chapman, F. M.** Diagnoses of apparently new Columbian birds. New York N.Y. Bull. Amer. Mus. Nat. Hist. **31** 1912 (139-166) pl. xii map. **260**
- Chapman, F. M.** A new Ibis from Mt. Kenia, British East Africa. New York N.Y. Bull. Amer. Mus. Nat. Hist. **31** 1912 (235-238) pls. xxiii xxiv. **261**
- Chappellier, [A.]** Indifférence sexuelle chez les femelles des Fringillidés hybrides. Bul. Inst. psych. internat. Paris **11** 1911 (500-501). **262**
- Chappellier, A.** La cicatrice de l'œuf dans le croisement: Canard de Rouen (*Anas boschas* var. *domestica* L.) ♀ × Canard de Barbarie (*Cairina moschata* L.) ♂ et les espèces parentes. Paris C. R. ass. franç. avanc. sci. **40** 1912 (541-544). **263**

- Chappellier, A.** La segmentation parthénogénétique de l'œuf des hybrides : Canard domestique (*Anas boschas*) ♂ × Canard de Barbarie (*Cairina moschata*) ♀. Paris C. R. soc. biol. **72** 1912 (1010-1012) av. fig. **264**
- Chappellier, A.** L'activité génitale chez les Oiseaux en dehors de la période de reproduction. Paris C. R. soc. biol. **73** 1912 (28-30). **265**
- Charles, F. L.** Some observations on Robin nests. Transactions of the Illinois State Academy of Science Second Annual Meeting Springfield **2** 1909 (27-31) pls. **266**
- Charlton, J. M.** Uncommon birds on the south-east coast of Northumberland. Brit. Birds London **5** 1912 (242-243). **267**
- Charlton, J. M.** A Tengmalm's Owl captured in Northumberland. Its behaviour in captivity. Brit. Birds London **6** 1912 (8-10) fig. **268**
- Charlton, J. M.** Black-headed Gulls following a swarm of flies. Brit. Birds London **6** 1912 (21-22). **269**
- Charlton, J. M.** The Birds of that portion of the North-east coast between Tynemouth and Seaton Sluice, Northumberland. Zoologist London **1912** 1912 (21-28 140-146 254-263 300-303). **270**
- Charlton, J. M.** Migrations of Bernacle-Geese. Zoologist London **1912** 1912 (462). **271**
- Chernel von Chernelháza, S.** Die gesellschaftliche Tätigkeit für praktischen Vogelschutz in Ungarn. Verh. intern. OrnithKongr. Berlin **5** 1911 (814-825 102). **272**
- Chigi, D. F.** Alcune osservazioni sulle fasi del piumaggio nel *Falco feldeggi* Schlegel. Roma Boll. Soc. zool. ital. **1** 1912 (149-152). **273**
- Chigi, F.** Catalogo della Collezione ornitologica romana. Roma Boll. Soc. zool. ital. **1** 1912 (217-243). **274**
- Chigi, F.** Osservazioni intorno alla presenza in Italia del *Lanius pomeranus badius* Hartl. Riv. ital. Orn. Bologna **1** 1912 (140-146). **275**
- Chigi, F.** Cattura del *Larus fuscus affinis* Reinhardt presso Roma. Riv. ital. Orn. Bologna **1** 1912 (161-162). **276**
- Chigi, F.** Le fasi del piumaggio dei Falchi propriamente detti (sottofam. *Falconinae*). Riv. ital. Orn. Bologna **2** 1912 (20-31). **277**
- Chiorino, G. E.** Manuale del moderno Falconiere; descrizione dei Falchi, cattura, educazione, &c. (xv+247) figg. e tav. Milano (Hoepli) 1906. **278**
- Christensen, R.** Billeder af dansk Fugleliv fotograferet i Naturen. Med. Tekst af A. Ditlevsen. ii. Terner. [Photographs of Danish birds. ii. Terns. The text by A. Ditlevsen.] (xxii+13) 32 figg. København (Gad) 1912. **279**
- Christoleit, E.** Mittlere Raubmöven in Ostpreussen. Ornith. Monatsber. Berlin **20** 1912 (69-74). **280**
- Chubb, C.** *vide* Brabourne.
- Chubb, E. C.** On some birds in the Durban Museum. Pretoria J. S. Afric. Ornith. Union **8** 1912 (1-4). **281**
- Cilleuls, J. des.** A propos du déterminisme des caractères sexuels secondaires chez les Oiseaux. Paris C. R. soc. biol. **73** 1912 (371-372). **282**
- Clark, C. H.** Winter breeding of the American Crossbill. J. Maine Ornith. Soc. Portland **13** 1911 (62). **283**
- Clark, E. L.** General observations on early superficial lymphatics in living chick embryos. Anat. Rec. Philadelphia **6** 1912 (247-251). **284**
- Clark, E. L.** Injection and reconstruction of the jugular lymph "sac" in the chick. Anat. Rec. Philadelphia **6** 1912 (261-263) 2 figs. **285**
- Clark, E. R. and Clark, E. L.** Observations on the development of the earliest lymphatics in the region of the posterior lymph heart in the living chick. Anat. Rec. Philadelphia **6** 1912 (253-259). **286**
- Clark, H. L.** Notes on the Laysan Finch. Auk Cambridge Mass. **29** 1912 (166-168). **287**
- Clarke, W. C.** The Duck Hawk on the Palisades. Bird-Lore Harrisburg Pa. **14** 1912 (81-86) 2 figs. **288**
- Clarke, W. E.** Studies in bird migration, with maps, weather charts and other illustrations. 2 vols. (xvi+323 viii+346) London (Gurney & Jackson) 1912. 8vo. **289**

- Clarke, W. E.** Some new Scottish and British Birds. On the occurrence of the Pine Bunting, Thrush, Nightingale and Baird's Sandpiper in Scotland. Scot. Nat. Edinburgh 1912 1912 (8-10). 290
- [**Clarke, W. E.**] The Little Auk visitation of 1911-12. Scot. Nat. Edinburgh 1912 1912 (77-81). 291
- Clarke, W. E.** Notes on the plumage of the Fulmar Petrel. Scot. Nat. Edinburgh 1912 1912 (102-104). 292
- Clarke, W. E.** On a case of hybridism between an Eider and a Wild Duck. Scot. Nat. Edinburgh 1912 1912 (198-201) pl. v. 293
- Clarke, W. J.** The feeding habits of Gulls in the Scarborough district. Naturalist London 1912 1912 (57-58). 294
- Clay, C. I.** The Evening Grosbeak in Humboldt county, California. Condor Hollywood Cal. 14 1912 (74). 295
- Clay, C. I.** Paroquet Auklet in Humboldt county. Condor Hollywood Cal. 14 1912 (196). 296
- Cleland, J. B.** Examination of contents of stomachs and crops of Australian birds. Emu Melbourne 12 1912 (8-18). 297
- Cleland, J. B.** and **Johnston, T. H.** Relative dimensions of the red blood cells of Vertebrates, especially of birds. Emu Melbourne 11 1912 (188-197). 298
- Clodius, G.** 8. Ornithologischer Bericht über Mecklenburg (und Lübeck) für die Jahre 1910 und 1911. Güstrow Arch. Ver. Natg. 66 1912 (14-34) 4 Tab. 299
- Coale, H. K.** Columbian Sharp-tailed Grouse in Wisconsin. Auk Cambridge Mass. 29 1912 (238) [see also **Hollister, t.c.** p. 397]. 300
- Cobb, A. F.** Wild life in the Falkland Islands. 60 photographs with descriptive notes. London and Glasgow (Govans & Gray) 1910. Sm. 8vo. 301
- Cobb, S.** *vide* Brooks.
- Coburn, F.** Blue-winged Teal (*Querquedula discors*) breeding in North Iceland. Zoologist London 1912 1912 (338-341). 302
- Codina, D. A.** Pájaros y Murciélagos que atacan á las libélulas. Zaragoza Bol. Soc. Arag. 11 1912 (66-69). 303
- Cole, L. J.** A trematode parasite of the English Sparrow in the United States. Milwaukee Bull. Wis. Nat. Hist. Soc. 9 1911 (42-48) pl. v. 304
- Cole, L. J.** A case of sex-linked inheritance in the domestic pigeon. Science New York 36 1912 (190-192). 305
- Cole, L. J.** and **Hadley, P. B.** Black-head in Turkeys. A study in Avian Coccidiosis. Kingston R.I. Agri. Exper. St. Rhode Island State Coll. Bull. No. 141 1910 (i-xiv) pl. 306
- Colgan, N.** Gaelic plant and animal names in "Clare Isle Survey." Dublin Proc. R. Irish Acad. 31 1911 (part iv) (21-22). 307
- Collinge, W. E.** The food of nestling birds. Journ. Board Agric. London 19 1912 (460-465). 308
- Collinge, W. E.** The food of the Bullfinch (*Pyrrhula europaea*). J. econ. biol. London 7 1912 (50-57). 309
- Collinge, W. E.** The food of nestling birds. London Journ. Board Agricul. 29 1912 (460-465). 310
- Colthrup, C. W.** The odd egg in a clutch. Brit. Birds London 6 1912 (59-60). 311
- Cook, J. P.** Nidification of the Tweeddale Scimitar Babbler (*Pomatorhinus nuchalis*). Bombay J. Nat. Hist. Soc. 21 1912 (659). 312
- Cook, J. P.** Notes on some of the bird life at Thadoung. Bombay J. Nat. Hist. Soc. 21 1912 (668-675). 313
- Cook, J. P.** Nidification of Burmese Great black Woodpecker (*Thriponax feddeni*). Bombay J. Nat. Hist. Soc. 21 1912 (1081-1082). 314
- Cook, J. P.** Note on the habits of Swinhoe's Reed Warbler (*Urosphena squamiceps*) and on the nesting of the Burmese Great Woodpecker (*Thriponax feddeni*). Bombay J. Nat. Hist. Soc. 21 (1085-1086). 315
- Cooke, W. W.** Passenger Pigeon (*Ectopistes migratorius*) in Alberta. Auk Cambridge Mass. 29 1912 (539). 316
- Cooke, W. W.** Proper name for the Nashville Warbler. Auk Cambridge Mass. 29 1912 (545). 317
- Cooke, W. W.** The migration of North American Sparrows. Bird-Lore

- Harrisburg Pa. **14** 1912 (45-47 98-105 158-161 218 287-290 345-346) 6 pls. **318**
- Cooke, W. W.** The present status of the Colorado check-list of birds. Condor Hollywood Cal. **14** 1912 (147-153). **319**
- Cooper, R. W.** Occurrence of the Goshawk (*Astur palumbarius*) in Sind. Bombay J. Nat. Hist. Soc. **21** 1912 (665). **320**
- Corbin, G. B.** Varieties of Woodcock, Starling, &c., in south-west Hants. Zoologist London **1912** 1912 (107-108). **321**
- Corbin, G. B.** Notes from the Avon Valley, Hampshire. Zoologist London **1912** 1912 (270-272). **322**
- Corona, O.** Sopra una mostruosità in una gallina tripode. Roma Atti Acc. Nuovi Lincei **65** 1912 (171-174) 2 figs. **323**
- Cosgrave, R.** Nesting of the Laughing Kingfisher (*Dacelo gigantea*). Avicult. Mag. London **3** 1912 (89-91) 1 pl. **324**
- Cosgrave, R.** Breeding of hybrid cockatoos. Avicult. Mag. **3** 1912 (269-271). **325**
- Courtois, J.** *Pucrasia joretiana* sp. n. described. London Bull. Brit. Ornith. Cl. **31** 1912 (7). **326**
- Coward, T. A.** The migration of birds. (x+138) 4 maps. Cambridge [Engl.] (University Press) 1912. 8vo. **327**
- Coward, T. A.** Blackcap wintering in Somerset. Brit. Birds London **5** 1912 (243-244). **328**
- Coward, T. A.** A note on the Little Owl, *Carine noctua* (Scop.), and its food. Manchester Mem. Lit. Phil. Soc. **56** No. 8 1912 (1-11). **329**
- Coward, T. A.** and others. British Willow-tits in Cheshire, Lancashire and Warwickshire. Brit. Birds London **5** 1912 (328-329). **330**
- Craig, J.** and Barr, M. The birds of the parish of Beith and neighbourhood. Glasgow Nat. **4** 1912 (97-114). **331**
- Cramm, Freifrau von.** Bastarde von Weisswangengans und Graugans. Ornith. Monatschr. Magdeburg **37** 1912 (81-83) 1 Taf. **332**
- Criddle, N.** Popular and practical ornithology. ii.—The Marsh Hawk. (N-9210 g)
- iii.—The Upland Plover. Ottawa Nat. **25** 1912 (147-151); **26** 1912 (61-65). **333**
- Crosby, M. S.** The Barred Owl at Rhinebeck, N.Y. Bird-Lore Harrisburg Pa. **14** 1912 (87-90) 4 figs. **334**
- Crosby, M. S.** The Golden-winged Warbler at Rhinebeck, N.Y. Bird-Lore Harrisburg Pa. **14** 1912 (145-146) fig. **335**
- Csiki, E.** Die Insektennahrung des Rebhuhns (*Perdix perdix* L.) Aquila Budapest **19** 1912 (202-209). **336**
- Csörgy, T.** Der praktische Vogelschutz in Ungarn im Jahre 1911-12. Aquila Budapest **19** 1912 (373-398). **337**
- Csörgy, T.** Die staatliche Organisation des praktischen Vogelschutzes in Ungarn. Verh. intern. Ornith.-Kongr. Berlin **5** 1911 (801-804 101). **338**
- Cunningham, J. T.** Mendelian experiments on fowls. London Proc. Zool. Soc. **1912** 1912 (241-259). **339**
- Cuony, X.** La colonie des martinets des Alpes à Fribourg. [*Cypselus melba.*] Fribourg Bul. Soc. Sci. Nat. **19** 1911 (65-67). **340**
- Dabbene, R.** Contribución á la Ornitología del Paraguay. Notas sobre las aves colectadas en Villa Rica por el Señor Félix Posner. An. Mus. Nac. Buenos Aires **23** 1912 (283-390). **341**
- Daguin, F.** Les migrations du Martin-Roselin en 1908. Rev. franç. ornith. Paris **2** 1911 (77-78). **342**
- Dahl, F.** Leitfaden zum Bestimmen der Vögel Mittel-Europas, ihrer Jugendkleider und ihrer Nester, nach leicht und sicher erkennbaren Merkmalen. (viii + 162) 55 Abbild. Berlin (Gebr. Borntraeger) 1912. 25 cm. **343**
- Daleau, F.** Migrations d'Hirondelles. Bordeaux Actes soc. linn. **65** 1911 (115-117). **344**
- Damiani, G.** La *Sula bassana* Linn. (ex Gesn.) all'Isola d'Elba e la sua distribuzione in Italia. Riv. ital. Orn. **2** 1912 (89-95) 1 Tav. **345**
- Damiani, G.** vide Arrigoni degli Oddi.
- Dänhardt, W.** Ein Besuch der Vogelschutzstation in Seebach (Kreis Langensalza). Möllers D. Gärtnerztg Erfurt **27** 1912 (124-126). **346**

- Dant, K.** Heimsperling mit merkwürdiger Schnabelbildung. Basel Ornithol. Beob. **6** 1908 (57) 1 Abb. **347**
- Dant, K.** Weiteres über den Steinadler in der Schweiz. Basel Ornithol. Beob. **6** 1908 (177-183) 1 Abb. **348**
- Dant, K.** Das grosse Sterben der Spyren im Jahre 1909. Basel Ornithol. Beob. **7** 1909-1910 (22-25). **349**
- Dant, K.** Neuere vom Steinadler in der Schweiz. Basel Ornithol. Beob. **7** 1909-1910 (59-60). **350**
- Dant, K.** Seltenerer Vertreter der schweizerischen Avifauna. Basel Ornithol. Beob. **7** 1909-1910 (8-11 46-47 135-138) 2 Abb. **351**
- Dant, K.** Seltenerer Vertreter der schweizerischen Avifauna. Der Schlangenanadler—*Circaëtus gallicus* (Gm.). Der nordische Taucher-Sturmvogel—*Puffinus anglorum* (Kuhl). Basel Ornithol. Beob. **8** 1910-1911 (1-3 116-117). **352**
- Dant, K.** Dürfen die Lachtaube und die Schneegans zu den schweizerischen Vögeln gezählt werden? Basel Ornithol. Beob. **8** 1910-1911 (38-39). **353**
- Dant, K.** Albinos vom Hausrotschwanz (*Ruticilla tithys* L.). Basel Ornithol. Beob. **8** 1910-1911 (130-132). **354**
- Dant, K.** Albinotischer Buntspecht. Basel Ornithol. Beob. **8** 1910-1911 (202-203) 1 fig. **355**
- Dantschakoff, W.** Über das erste Auftreten der Blutelemente im Hühnerembryo. Proc. 7th Int. Zool. Congr. Cambridge Mass. 1912 (382-389). **356**
- Darling, S. T.** Some blood parasites (*Haemoproteus* and *Haemogregarina*). Paris Bul. soc. path. exot. **5** 1912 (71-73). **357**
- Davies, C. G.** Random notes on South African Ornithology. Pretoria J. S. Afric. Ornith. Union **8** 1912 (75-82). **358**
- Davies, C. G.** Nesting of the South African Bittern. (*Botaurus stellaris capensis*). Pretoria J. S. Afric. Ornith. Union **8** 1912 (68-69). **359**
- Dawson, W. L.** Recent Santa Barbara records. Condor Hollywood Cal. **14** 1912 (223-224). **360**
- Dedem, F. U. Baron van.** Lijst van vogels, verzameld in Ned. Oost-Indie, gedurende het tijdvak van 15 Mei 1909 tot 16 Maart 1911. [Verzeichnis der Vögel, vom Verfasser in Niederl. Ostindien gesammelt zwischen dem 15 Mai 1909 und dem 16 März 1911.] Amsterdam Versl. Med. Ned. Ornith. Ver. **8** 1912 (45-113). **361**
- Delamain, J.** Note sur les arrivées et départs des hirondelles et martinets en Charente en 1911 et années précédentes. Paris Rev. Fr. d'Orn. **2** 1912 (231-233). **362**
- Delamain, J.** Reproduction des Becs-croisés en Charente au printemps 1911. Paris Rev. Fr. d'Orn. **2** 1912 (298-302 322-325). **363**
- Delamain, J.** La migration en Charente au printemps de 1912. Paris Rev. Fr. d'Orn. **2** 1912 (377-380 384.) **364**
- Delap, A. D.** The autumn migration of swallows at Rosslare harbour. Irish Nat. Dublin **21** 1912 (65-71) [also *Witherby ibid* p. 143]. **365**
- Deleuil, R.** *vide* Anfric.
- Delmas, A.** Catalogue des oiseaux observés dans l'Aveyron. Paris Rev. Fr. d'Ornith. **2** 1912 (212-218) **366**
- Denise, L.** Les volières des Médicis, d'après Montaigne et Aldrovande. Paris Rev. Fr. d'Orn. **2** 1912 (305-308) pl. **367**
- Detmers, E.** Studien zur Avifauna der Emslande. [Schluss.] J. Ornith. Leipzig **60** 1912 (1-68). **368**
- Dewar, J. M.** The evolutions of Waders. Zoologist London **1912** 1912 (161-170). **369**
- Dewey, W. F.** Great Crested Grebes nesting in the County of London. Zoologist London **1912** 1912 (269 316-317). **370**
- Diebold, M.** *Phylloscopus tristis helveticus*? Basel Ornithol. Beob. **7** 1909-1910 (20-22 40-41). **371**
- Dietrich, F.** Die Vogelwelt in der Umgebung von Hamburg. Eine Anleitung zu ornithologischen Beobachtungen. (viii+116). Hamburg (C. Boysen) 1912. 18 cm. **372**
- Dietrich, F.** Bericht über den im Anschluss an die „Heimat“-Versammlung in Keitum unternommenen ornitho-

- logischen Ausflug des Vereins nach List und dem Ellenbogen. Heimat Kiel **22** 1912 (92-100). **373**
- Dietrich, F. Bericht über die Brutergebnisse des Jahres 1911 auf Jordsand, Ellenbogen, Norderoog, Langenwerder und Poel. Ornith. Monatschr. Magdeburg **37** 1912 (33-46) 4 Taf. **374**
- Dietrich, F. Ueber Silbermöven Eier. Zs. Oologie Berlin **22** 1912 (33-37). **375**
- Dietrich, F. Der Austernfischer und seine Eier. Zs. Oologie Berlin **22** 1912 (134-137). **376**
- Dill, H. R. and Bryan, W. A. Report of an expedition to Laysan island in 1911, under the joint auspices of the United States department of agriculture and the University of Iowa. Washington D.C. U. S. Dept. Agric. Biol. Surv. Bull. No. **42** 1912 (1-30) pls. i-ix. **377**
- Disney, H. A. P. Notes on birds in 1911. Marlborough Rep. Coll. Nat. Hist. Soc. **60** 1912 (55). **378**
- Dixon, J. B. The Costa Hummingbird. Condor Hollywood Cal. **14** 1912 (75-77) figs. 27-28. **379**
- Dixon, J. White-winged Dove in the San Diegan district. Condor Hollywood Cal. **14** 1912 (196). **380**
- Dobbrick, L. Ornith. der Tuchler Heide. Danzig Ber. bot.-zool. Ver. **34** 1912 (97-173). **381**
- Dobbrick, L. *Colaeus monedula* west-preussischer Durchzugsvogel 1912. Ornith. Monatsber. Berlin **20** 1912 (119-120). **382**
- Dodd, F. P. A collecting trip to the Herberton district, North Queensland. Vict. Nat. Melbourne **28** 1911 (131-142). **383**
- Dodsworth, P. T. L. Notes on some habits of the Kokla or Wedge-tailed Green Pigeon, *Sphenocercus sphenurus* (Vigors), in confinement. Avicult. Mag. London **3** 1912 (129-135 165-169) pl. **384**
- Dodsworth, P. T. L. Occurrence of *Hemilophus pulverulentus* (Temm.), the Great Slaty Woodpecker in the neighbourhood of Simla, N.W. Himalayas. Bombay J. Nat. Hist. Soc. **21** 1911 (263). **385**
- Dodsworth, P. T. L. The Crag Martin (*Ptyonoprogne rupestris*). Bombay J. Nat. Hist. Soc. **21** 1912 (660-661). **386**
(N-9210 g)
- Dodsworth, P. T. L. Extension of the habitat of the Common Kingfisher (*Alcedo ispida*). Bombay J. Nat. Hist. Soc. **21** 1912 (661). **387**
- Dodsworth, P. T. L. Extension of the habitat of the Brahminy Kite (*Haliastur indus*). Bombay J. Nat. Hist. Soc. **21** 1912 (665-666). **388**
- Dodsworth, P. T. L. Habits, food and nesting of the Great Himalayan Barbet (*Megalæma marshallorum*). Bombay J. Nat. Hist. Soc. **21** 1912 (681-684). **389**
- Dodsworth, P. T. L. Distribution, habits and nesting of the Himalayan Greenfinch (*Hypacanthis spinoides*, Vigors). Bombay J. Nat. Hist. Soc. **21** 1912 (1075-1081). Also *Magrath. ibid* p. 1329. **390**
- Dodsworth, P. T. L. Occurrence of the Common Peafowl (*Pavo cristatus*, Linn.), in the neighbourhood of Simla, N.W. Himalayas. Bombay J. Nat. Hist. Soc. **21** 1912 (1082-1083). **391**
- Dodsworth, P. T. L. Abnormal type of eggs of the Little Forktail (*Microcichla scouleri*, Vigors). Bombay J. Nat. Hist. Soc. **21** 1912 (1327-1328). **392**
- Dodsworth, P. T. L. Nesting of the Western Blue Rock-thrush (*Petrophila cyanus*, Linn.) in the neighbourhood of Simla, N.W. Himalayas. Bombay J. Nat. Hist. Soc. **21** 1912 (1328-1329). **393**
- Dodsworth, P. T. L. Question whether *Gyps fulvus*, Gmelin, the Griffon, occurs in the Himalayan districts of the Punjab. Bombay J. Nat. Hist. Soc. **21** 1912 (1331-1332). **394**
- Dodsworth, P. T. L. Red colouring matter in the feathers of *Gypaëtus barbatus*. Ibis London **1912** 1912 (208-210). **395**
- Dombrowski, R. Ritter von. Ornith. Rumania. Die Vogelwelt Rumänien's systematisch und biologisch-geographisch beschrieben (1-872 + i-liv). Bukarest (Staatsdruckerei) 1912. 1. 8vo. **396**
- [Dorogostajskij, V. Ja.] Дорогостајскій, В. Я. Къ биологія горнаго дупеля (*Scolopax solitaria* Midd.). [Zur Biologie von *Scolopax solitaria* Midd.] Moskva Ornith. et avicult. **3** 1-2 1912 (1-5). **397**
- Dove, H. S. West Devonport (Tasmania) Notes. Emu Melbourne **1912** 1912 (48-49). **398**

- Dove, H. S.** On the connection of Swifts with weather. Hobart Proc. R. Soc. Tasmania **1911** 1912 (99-101). **399**
- Dove, H. S.** Observations on the Striated Field Wren (*Calamanthus fuliginosus*). Ibis London **1912** 1912 (269-273). **400**
- Dow, E. D.** Hooded Warbler at Hartford, Conn. Bird Lore Harrisburg Pa. **14** 1912 (230). **401**
- Drummond, Miss.** Successful breeding of the Grand Eclectus Parrot. Avicult. Mag. London **4** 1912 (49-50). **402**
- Dubois, A.** L'*Otocorys alpestris* en Belgique. Paris Bul. soc. zool. **37** 1912 (119). **403**
- Dubois, A.** Sur les oiseaux européens du genre *Cyanecula*. Paris Rev. Fr. d'Orn. **2** 1912 (411). **404**
- Ducceschi, V. I.** Ueber die Anwesenheit der Ruffinischen Körperchen in der Zunge der Vögel. II. Ueber die Funktion der Ruffinischen Körperchen. Folia Neurobiologica Haarlem **6** 1912 (579-590). **405**
- Ducos, F.** Le vol plané ascendant des grands Oiseaux voiliers et l'aéroplane sans moteur. Toulouse Bul. soc. hist. nat. **45** 1912 (19-44) fig. **406**
- Duke, H. L.** Observations on fowls and ducks in Uganda with relation to *Trypanosoma gallinarum* and *T. gambiense*. London Proc. R. Soc. B **85** 1912 (378-384) pl. ix. **407**
- Dumast, G. de.** Le régime alimentaire de la bondrée apivore (*Pernis apivorus* Bp. ex Linn.). Paris Rev. Fr. d'Orn. **2** 1912 (228-231). **408**
- Duncker, H.** Die Verbreitung der Gattung *Emberiza*, eine ornitho-geographische Studie. J. Ornith. Leipzig **60** 1912 (69-95) Karte. **409**
- Dunlop, E. B. and others.** Blue eggs of Terns and Gulls. Brit. Birds London **5** 1912 (250-252) fig. **410**
- Dunlop, E. B.** On incubation. Brit. Birds London **5** 1912 (322-327). **411**
- Dury, Chas.** Ecological notes on birds. Cincinnati Ohio J. Soc. Nat. Hist. **21** 1910 (57-60). **412**
- Dutcher, W.** Some reasons why international bird protection is necessary. Verh. intern. OrnithKongr. Berlin **5** 1911 (858-862). **413**
- Eder, R.** Ueber das Auftreten des Tannenhähers in Mödling b. Wien. Ornith. Jahrb. Hallein **23** 1912 (149-150). **414**
- Edson, J. M.** White Pelican at Bellingham Bay, Washington. Condor Hollywood Cal. **14** 1912 (225). **415**
- Eecke, R. van.** De vogelfauna van 'Texel. [Die Vogelfauna von 'Texel.] Ardea Leiden **1** 1912 (63-68). **416**
- Ekama, H.** Der Vogelzug in Holland im Jahre 1911. Aquila Budapest **19** 1912 (474-476). **417**
- Ekman, S.** Die Wirbeltiere der arktischen und subarktischen Hochgebirgszone im nördlichsten Schweden. In: Naturwissenschaftliche Untersuchungen des Sarekgebirges in Schwedisch-Lappland geleitet von Dr. Axel Hamberg. Bd iv. Zoologie (Vögel 32-64) figs. 3-14 Stockholm (Fritzes) 1907. 8vo. **418**
- Ekman, S.** Sind die Zugstrassen der Vögel die ehemaligen Ausbreitungsstrassen der Arten? Zool. Jahrb. Jena Abt. f. Syst. **33** 1912 (512-546) 2 Abbild. **419**
- Elliot, E. A. S.** 'Twelve months' notes on birds in the South Hams district. Plymouth Rep. and Trans. Devon Ass. **44** 1912 (605-610). **420**
- Elliott, J. S.** Snipe nesting in Bedfordshire. Zoologist London **1912** 1912 (197). **421**
- Elliott, J. S.** Some notes on the nesting of the Tawny Owl. Zoologist London **1912** 1912 (293-297). **422**
- Evans, W.** Note on Mallophaga from the Little Auk or Rotchie (*Alle alle*), with a list of species taken, on birds and mammals in the Forth area. Edinburgh Proc. R. Physic. Soc. **18** 1912 (265-276). **423**
- Evans, W.** The Continental Song-Thrush and Northern Willow-Wren in Haddingtonshire. Scot. Nat. Edinburgh **1912** 1912 (43-44). **424**
- Evans, W.** The Greater Wheatear in Midlothian. Scot. Nat. Edinburgh **1912** 1912 (115). **425**
- Eykman, C.** De avifauna v. h. zuidwestelijk deel der Prov. Utrecht met I Isselstein als middelpunt. Deventer Club Ned. Vogelk. J. B. No. **2** 1912 (32-47). **426**
- Falconieri di Carpegna, G.** Uno strano Zivolo nero (*Emberiza cirrus*)

- colto nell'Agro romano. Roma Boll. Soc. zool. ital. **1** 1912 (188). **427**
- Fatio, V. et Studer, T. Catalogue des Oiseaux de la Suisse. Livr. 9 Rubiettes; Élaboré par G. de Burg (1407-1724) 1 Map Bâle 1912. 8vo. **428**
- Favaro, G. Sviluppo delle valvole atrioventricolari nei mammiferi e negli uccelli. Monitore zool. ital. Firenze **23** 1912 (222-226). **429**
- Fay, S. P. Yellow Rail (*Coturnicops noveboracensis*) in Massachusetts. Auk Cambridge Mass. **29** 1912 (237). **430**
- Fedüschin, A. W. *vide* Fedüšin, A. V.
- [Fedüšin, A. V.] Федюшинъ, А. В. О нѣкоторыхъ птицахъ Минской губернии. [Ueber einige Vögel des Gouvernements Minsk.] Mess. ornith. Moskva **3** 1912 (297-303). **431**
- Fehring, O. Untersuchungen über die Anordnungsverhältnisse der Vogelfedern, insbesondere der Fadenfedern. Zool. Jahrb. Jena Abt. f. Syst. **33** 1912 (213-248) 31 Abbild. **432**
- Feild, A. L. Notes on the birds of Chapel Hill, N.C., with particular reference to their migrations. Chapel Hill N.C. J. Elisha Mitchell Sci. Soc. **28** 1912 (16-33). **433**
- Feild, A. L. *vide* Bruner.
- Feilden, H. W. Grey Wagtail nesting in East Sussex. Brit. Birds London **6** 1912 (17-18). **434**
- Fernbach, Frau K. von. Vogelschutz in Babaruszta. Aquila Budapest **19** 1912 (399-407). **435**
- Ferragni, O. Uccelli del Piacentino di E. Imparati: aggiunta. Avicula Siena **12** 1908 (82-84). **436**
- Festa, E. *vide* Salvadori.
- Février, S. Une rareté ornithologique: le porphyron bleu. Paris Rev. Fr. d'Orn. **2** 1912 (222-223). **437**
- [Field, G. W.] The heath hen. Report of the Commissioners on Fisheries and Game for the year ending December 31, 1907. Boston 1908 (56-66) 4 pls. **438**
- Finn, F. The Game Birds of India and Asia. (viii + 177) Calcutta (Thacker Spink) 1911. 8vo. **439**
- Finn, F. Notes on sexual selection. Avicult. Mag. London **3** 1912 (209-217 237-242) 2 pls. **440**
- Finn, F. The two Nonpareils *Cyanospiza ciris* and *Erythrura prasina*. Avicult. Mag. London **3** 1912 (325-329) 1 pl. **441**
- F[insch], O. Obituary—Dr. Wilhelm Blasius. Ibis London **1912** 1912 (660-661). **442**
- Finsch, [O.]. *Pitta habenichti* n. sp. Ornith. Monatsber. Berlin **20** 1912 (102-127). **443**
- Finsch, O. Über eine neue Art Zwergohreule von Java. Ornith. Monatsber. Berlin **20** 1912 (156-159). **444**
- Fischer-Sigwart, H. Das Auerwild im schweizerischen Molasseland. Basel Ornithol. Beob. **6** 1908 (20-25). **445**
- Fischer-Sigwart, H. Eine ornithologische Exkursion nach Märkt und Efringen. Basel Ornithol. Beob. **7** 1909-1910 (2-6). **446**
- Fischer-Sigwart, H. Die Sommervögel geordnet nach den mittleren Daten ihrer Ankunft. Basel Ornithol. Beob. **7** 1909-1910 (102-107). **447**
- Fischer-Sigwart, H. Die Reiherkolonie in Schötz im Jahre 1910. Basel Ornithol. Beob. **7** 1909-1910 (149-151). **448**
- Fischer-Sigwart, H. Zur Tabelle über die mittleren Ankunfts- und Wegzugsdaten unserer Nistvögel. Basel Ornithol. Beob. **8** 1910-1911 (165-166). **449**
- Fischer-Sigwart, H. Der Bienenfresser (*Merops apiaster* L.) in der Schweiz. Basel Ornithol. Beob. **8** 1910-1911 (181-182). **450**
- Fischer-Sigwart, H. Zwei Mönchsgeier (*Vultur monachus*) und ein grauer oder Gänsegeier (*Gyps fulvus* L.) in der Schweiz erlegt in Jahr 1912. Verh. Schweiz. Natf. Ges. **95** 1912 (236-240). **451**
- Fitch, E. A. Golden Eagle (*Aquila chrysaëtus*). Zoologist London **1912** 1912 (34). **452**
- Fleming, J. H. The Ancient Murrelet (*Synthliboramphus antiquus*) in Ontario. Auk Cambridge Mass. **29** 1912 (387-388). **453**
- Fleming, J. H. Sabine's Gull on the Mississippi river. Auk Cambridge Mass. **29** 1912 (388-389). **454**

- Fletcher, J. A.** Notes on the Native-Hen (*Tribonyx mortieri*). Emu Melbourne 11 1912 (250-251). 455
- Floericke, K.** Taschenbuch zum Vogelbestimmen. Praktische Anleitung zur Bestimmung unserer Vögel in freier Natur nach Stimme, Flug, Bewegungen usw. nebst Tabellen zur Bestimmung toter Vögel, der Nester und Eier. (260) 10 Taf. 2. Aufl. Stuttgart (Franckh) [o. J.]. 22 cm. 456
- Florence, L.** The food of birds. Edinburgh Trans. Highland and Agric. Soc Scotland 24 1912 (180-219). 457
- Fonck, F.** *Fringilla nivalis*, ein Bewohner der Hoch-Kordillere des südlichen Chile. Verh. intern. Zool.-Kongr. Jena 8 1912 (925-929). 458
- Foot, J. S.** The comparative histology of femoral bones. Trans. Amer. Microsc. Soc. Decatur Ill. 30 1911 (87-140) pls. A & 1-9. 459
- Forbush, E. H.** Third annual report of the State ornithologist. Fifty-eighth annual report of the Secretary of the Massachusetts State Board of Agriculture. Boston 1911 (165-197) pl. 460
- Forbush, E. H.** The Chickadee. Bird-Lore Harrisburg Pa. 14 1912 (372-375) 1 pl. 461
- Ford-Lindsay, H. W. and W[itherby], H. F.** Little Dusky Shearwater (*Puffinus obscurus godmani*) in Sussex. Brit. Birds London 5 1912 (253). 462
- Forrest, H. E.** Slavonian Grebes in Montgomeryshire and Shropshire. Brit. Birds London 5 1912 (286-287). 463
- Forrest, H. E.** [Severn valley bird notes.] Shrewsbury Rec. Caradoc F. Cl. 22 1912 (16-23). 464
- Forrest, H. E.** Zoology, 1910. Shrewsbury Trans. Caradoc F. Cl. 5 1912 (199-200). 465
- Fortune, R.** Fork-tailed Petrel near Harrogate. Naturalist London 1912 1912 (361). 466
- Foster, N. H.** Notes on birds observed at Bundoran. Irish Nat. Dublin 21 1912 (218-219). 467
- França, O.** *Leucocytozoon* du Geai, de l'Epervier et de la Bécasse. Paris Bul. soc. path. exot. 5 1912 (17-21). 468
- França, C.** Contribution à l'étude des *Leucocytozoon* des oiseaux du Portugal. Paris Bul. soc. path. exot. 5 1912 (82-86 173-176). 469
- French, C. J.** Note on the white-headed stilt, *Himantopus leucocephalus*, Gould. Vict. Nat. Melbourne 28 1912 (182). 470
- Frey, P.** Zur Vogelfauna von Wiesdorf, insbesondere der Wuppermündung. Bonn SitzBer. nathist. Ver. 1911 1912 E (139-146). 471
- Frölich, W.** Aerodynamische Betrachtungen über den segelnden Vogel. Leipzig SitzBer. natf. Ges. 38 1912 (1-8). 472
- Fry, J.** Nidification of the Little Grebe or Dabchick (*Podiceps albipennis*). Bombay J. Nat. Hist. Soc. 21 1911 (275). 473
- Fuchs, G.** Verzeichnis der auf der Forschungsreise gesammelten Algen, Insekten und Vögel. [In: K. Futterer, Durch Asien. Bd 3, Lfg 2. Nachtrag.] Berlin (D. Reimer) 1911 (1-17). 474
- Führer, L. v.** Der Zwerghabicht (*Astur brevipes* Sew.) und der krausköpfige Pelikan (*Pelecanus crispus* Bruch) in Siebenbürgen erlegt. Ornith. Jahrb. Hallein 23 1912 (148-149). 475
- Fuhrmann, O.** Ergebnisse der mit Subvention aus der Erbschaft Treitl unternommenen zoologischen Forschungsreise Dr. Franz Werner's nach dem ägyptischen Sudan und Nord-Uganda. xxi. Vogelcestoden. Wien SitzBer. Akad. Wiss. 121 Abt. I 1912 (181-192). 476
- Funk, C.** The preparation from yeast and certain foodstuffs of the substance the deficiency of which in diet occasions polyneuritis in birds. J. Physiol. Cambridge 44 1912 (75-81). 477
- Funkquist, H.** Zur Morphogenie und Histogenese des Pinealorgans bei den Vögeln und Säugetieren. Anat. Anz. Jena 42 1912 (111-123). 478
- Fusco-Rao, A.** Note ornitologica da servire per la compilazione di una Avifauna catanese. Avicula Siena 10 1906 (19-24); 11 1907 (37-38). 479
- Gabriel, J.** Further notes on the Mutton-birds of Bass Strait. Vict. Nat. Melbourne 28 1912 (206-212). 480
- Gabrielson, I. N.** A study of the home life of the Brown Thrasher, *Toxostoma rufum* (Linn.). Wilson

- Bull. Oberlin Ohio 24 1912 (65-94) pls. i-vi. 481
- Gadow, H. On the origin of feathers. Arch. Natg. Berlin 78 Abt. A Heft 7 1912 (210-217). 482
- Gadow, H. The one-sided reduction of the ovaries and oviducts in the Amniota, with remarks on mammalian evolution. London Proc. Zool. Soc. 1912 1912 (808-821). 483
- Gain, L. La vie et les mœurs du Pingouin adélie. Rev. gén. sci. Paris 23 1912 (429-440) fig. 484
- Gain, L. *vide* Anthony.
- Gallenkamp, W. Die Frühjahrsbesiedelung in Bayern 1909 und 1910. München Verh. ornith. Ges. 11 1912 (109-146). 485
- Galli-Valerio, B. A propos des causes qui peuvent jouer un rôle dans la diminution ou la disparition des oiseaux. Basel Ornithol. Beob. 7 1909-1910 (138-141). 486
- Galloway, A. R. Hybridisation of Canaries. Biometrika Cambridge 8 1912 (435-436). 487
- [Gavrilenko, N.] Гавриленко, Н. Замѣтки о нѣкоторыхъ птицахъ Полтавской губерніи. [Bemerkungen über einige Vögel des Gouv. Poltava.] Char'kov Bull. Soc. nat. 1 1912 3 (22-26). 488
- Gebhardt, E. Zur Einbürgerungsfrage. Ornith. Monatschr. Magdeburg 37 1912 (155-156). 489
- Gengler, J. Die Klein'schen Vogelbilder. J. Ornith. Leipzig 60 1912 (570-591) 1 Taf. 490
- Gengler, J. Materialien zur bayerischen Ornithologie. vii. Siebenter Beobachtungsbericht aus den Jahren 1909 und 1910. München Verh. ornith. Ges. 11 1912 (19-146). 491
- Gengler, J. Die Jäckelsche Weihergegend einst und jetzt. München Verh. Ornith. Ges. 11 1912 (167-181). 492
- Gengler, J. Vom Vierwaldstätter See zum Gotthard. Ornith., Jahrb. Hallein 23 1912 (45-58). 493
- Gengler, J. Der Formenkreis *Emberiza citrinella* L. 1758. Ornith. Jahrb. Hallein 23 1912 (88-92). 494
- Gengler, J. Brauchen die jungen Vögel den Unterricht der Eltern? Ornith. Monatsber. Berlin 20 1912 (99-101). 495
- Gengler, J. Der balzende Hausperling. Ornith. Monatsber. Berlin 20 1912 (137-141). 496
- Gengler, J. *Emberiza cirulus* L. Brutvogel in Bayern. Ornith. Monatsber. Berlin 20 1912 (186-187). 497
- Gengler, J. Am Nest des Alpenmauerläufers. Zool. Beob. Frankfurt a. M. 53 1912 (106-110). 498
- Gengler, J. Am Nest der Felsenschwalbe. Zool. Beob. Frankfurt a. M. 53 1912 (144-148). 499
- Gengler, J. Am Nest des Wasserpiepers. Zool. Beob. Frankfurt a. M. 53 1912 (201-204). 500
- Gengler, J. Am Nest des Berglaubsängers. Zool. Beob. Frankfurt a. M. 53 1912 (339-342). 501
- Gengler, J. Am Nest der Ringdrossel. Zool. Beob. Frankfurt a. M. 53 1912 (355-358). 502
- Gerber, K. Zum Vorkommen der Wachholderdrossel im Berner Oberland. Basel Ornithol. Beob. 8 1910-1911 (151). 503
- Germain, R. *L'Orthotomus longicauda* Blyth. Fauvette couturière. Paris Rev. Fr. d'Orn. 2 1912 (211-212) pl. 504
- Germain, R. Sturnidés de la Cochinchine Française. Paris Rev. Fr. d'Orn. 2 1912 (302-305 337-338). 505
- Getty, J. V. The Anthony Vireo (*Vireo huttoni obscurus*). Condor Hollywood Cal. 14 1912 (74-75). 506
- Ghidini, A. Lo Zigolo minore, *Emberiza pusilla* Pallas, nei dintorni del lago di Lugano. Avicula Siena 11 1907 (32-34). 507
- Ghigi, A. Sulla reversione dei caratteri nei Piccioni domestici. Bologna Rend. Acc. sc. Cl. sc. fis. 15 1911 (85-97) 4 tav. 508
- Ghigi, A. Azione spiegata dalla Commissione per la Caccia. Monitore zool. ital. Firenze 23 1912 (230-233). 509
- Ghigi, A. Dimostrazioni intorno ai risultati di alcune ricerche ibridologiche. Monitore zool. ital. Firenze 23 1912 (234-240). 510

- Ghigi, A.** Sulla alimentazione del Gheppio (*Falco tinnunculus*). Riv. ital. Orn. Bologna 1 1912 (268-269). 511
- Ghigi, A.** Sulla riproduzione del *Polyplectron germaini*. Riv. ital. Orn. Bologna 1 1912 (270-271). 512
- Ghigi, A.** Intorno ad una mutazione del *Hierophasis swinhoii*. Riv. ital. Orn. Bologna 1 1912 (272-273). 513
- Ghigi, A.** Descrizione di un ibrido *Graphophasianus soemmeringi* × *Calophasis ellioti*. Riv. ital. Orn. Bologna 1 1912 (273-275). 514
- Ghigi, A.** Sui costumi del *Gallus sonnerati* Temm. Riv. ital. Orn. Bologna 1 1912 (275-276). 515
- Ghigi, A.** L'ibridismo nella genesi delle specie sistematiche. Ricerche ornitologiche. Riv. ital. Orn. Bologna 2 1912 (65-85). 516
- Giaja, J.** Sur l'ablation du pancréas chez l'aigle pygargue (*Haliaeetus albicilla*). Paris C. R. Acad. sci. 155 1912 (306-307). 517
- [Girčič, P. G.] Гирчиць, П. Г. Замѣтки о нѣкоторыхъ птицахъ Харьковской губерніи. [Bemerkungen über einige Vögel des Gouv. Charkov.] Char'kov Bull. Soc. nat. 1 1912 4 (7-14). 518
- [Gladkich, M.] Гладкихъ, М. Интересная аномалія. [Eine interessante Anomalie.] Veterin.-Felidsk. Věst. Moskva 9 1912 (152-153). 519
- Gladstone, H. S.** A catalogue of the Vertebrate Fauna of Dumfriesshire. (xiv + 80 Aves 11-53) 1 map Dumfries (Maxwell) 1912. 520
- Gladstone, H. S.** Addenda and corrigenda to the "Birds of Dumfriesshire." Dumfries Trans. Nat. Hist. Soc. 24 1912 (13-38). 521
- Godfrey, R.** Notes on migratory birds of the Buffalo river basin. Pretoria J. S. Afric. Ornith. Union 8 1912 (4-15). 522
- Godfrey, R.** Die Überwinterung des weissen Storches in Südafrika. Aquila Budapest 19 1912 (19-23). 523
- Goodale, H. D.** Studies in hybrid ducks. J. Exp. Zool. Philadelphia 10 1911 (241-254) 2 pls. 524
- Goodale, H. D.** Sex-limited inheritance and sexual dimorphism in poultry. Science New York N.Y. 33 1911 (939-940). 525
- Goodale, H. D.** Further note on the results of ovariectomy on ducks. Science New York 36 1912 (445-446). 526
- Goodale, H. D.** vide Morgan.
- Gore, F. W.** Baikal or Clucking Teal (*Neltion formosum*) shot in Assam. Bombay J. Nat. Hist. Soc. 21 1912 (1090-1091) also Evans ibid. p. 1091. 527
- Gottberg, H. E. von.** Am Nest der Wacholderdrossel (*Turdus pilaris*) . . . Ornith. Monatschr. Magdeburg 37 1912 (374-378). 528
- Gottschalk, P.** Die Vogelfreistätte des Ornithologischen Vereins „Joh. Friedr. Naumann“ in Cöthen auf den Werder-Inseln. Ornith. Monatschr. Magdeburg 37 1912 (46-52). 529
- Graenicher, S.** On humming-bird flowers. Milwaukee Bull. Wis. Nat. Hist. Soc. 8 1911 (183-186). 530
- Graf, A.** Ein Beitrag zur Ornithologie des Zürichsees. Tierwelt Aarau 21 1911 (119-120 132 142-143 149-150 158 168) 2 Abb. 531
- Grant, C. B.** Notes on some South American birds. Ibis London 1912 1912 (273-280) text figs. 4 5. 532
- Graves, F. S. and Ralfe, P. G.** Manx ornithological notes 1909-12. Brit. Birds London 5 1912 (300-304). 533
- Gregorio, Marchese A. de.** Cattura di un grosso Avoltoio, *Vultur (Gyps) fulvus*. Naturalista Sicil. Palermo 21 1912 (271). 534
- Greppin, L.** Beobachtungen über die Grasmücken in der Umgebung von Solothurn vom 1. Januar 1907 bis zum 15. Oktober 1909. Basel Ornithol. Beob. 7 1909-1910 (27-28). 535
- Greppin, L.** Beobachtungen über die Drosseln in der Umgebung von Solothurn vom 1. November 1906 bis zum 31. Dezember 1909. Basel Ornithol. Beob. 7 1909-1910 (69-74). 536
- Greschik, E.** Mikroskopische Anatomie des Enddarmes der Vögel. Aquila Budapest 19 1912 (210-269) 1 Taf. 29 Abb. 537
- Grevé, C.** Zum Vogelzug und zur Balz im russischen Baltikum. 1912. Zool. Beob. Frankfurt a. M. 53 1912 (193-200). 538

- G[rieg], J. A.** Lidt historik om rypeorren. [*Tetrao tetrix* mas. × *Lagopus* fem.] *Bergen Naturen* **36** 1912 (190-191). **539**
- Grimm, O.** Das Auftreten des sibirischen Tannenhähers in der Leipziger Umgebung im Jahre 1911. *Zool. Beob. Frankfurt a. M.* **53** 1912 (245-252) 1 Karte. **540**
- Grimm, O.** Nest und Gelege von *Muscicapa parva* (Bechst.). *Zs. Oologie Berlin* **22** 1912 (104-107). **541**
- Grimshaw, P. H.** Note on the food of the Common Pheasant. *Scot. Nat. Edinburgh* **1912** 1912 (249-251). **542**
- Grinnell, J.** A name for the Hawaiian Linnet. *Auk Cambridge Mass.* **29** 1912 (24-25). **543**
- Grinnell, J.** The Willow Ptarmigan. *Bird-Lore Harrisburg Pa.* **14** 1912 (376-379) 1 pl. **544**
- Grinnell, J.** An afternoon's field notes. *Condor Hollywood Cal.* **14** 1912 (104-107). **545**
- Grinnell, J.** February bird notes from Palm Springs. *Condor Hollywood Cal.* **14** 1912 (154). **546**
- Grinnell, J.** The Northern Brown Towhee. *Condor Hollywood Cal.* **14** 1912 (199). **547**
- Grinnell, J.** A systematic list of the birds of California. *Cooper Ornithological Club. Pacific Coast Avifauna, No. 8. Hollywood Cal.* 1912 (1-24). **548**
- Griscom, L.** The Connecticut Warbler in Central Park, New York City. *Auk Cambridge Mass.* **29** 1912 (396). **549**
- Gronberger, S. M.** Two new birds for Greenland. *Auk Cambridge Mass.* **29** 1912 (109-110). **550**
- Gross, A. O.** Observations on the Yellow-billed Tropic-bird (*Phaëthon americanus* Grant) at the Bermuda islands. *Auk Cambridge Mass.* **29** 1912 (49-71) pls. iii-xi. **551**
- Grote, H.** Beitrag zur Ornithologie des südöstlichen Deutsch-Ostafrika. *J. Ornith. Leipzig* **60** 1912 (501-529) 2 Taf.; **61** 1913 (125-142). **552**
- Grote, H.** Über die Eier von *Cossypha hauglini* Hartl. *Ornith. Monatsber. Berlin* **20** 1912 (79-80). **553**
- [Grzibowski, A. G.] Гржибовский, А. Г.** Наблюдения надъ прилетомъ и пролетомъ нѣкоторыхъ птицъ въ Смоленской губерніи весною 1911 года. [Bemerkungen über die Ankunft und den Zug einiger Vögel des Gouvernements Smolensk im Frühling des Jahres 1911.] *Mess. ornith. Moskva* **3** 1912 (68-82). **554**
- Gundlach, A.** Der Frühlingszug der Waldschnepfe, *Scolopax rusticola* L., in Mecklenburg-Strelitz. *Güstrow Arch. Ver. Natg.* **65** 1911 (71-73). **555**
- Gundlach, A.** Ergänzungen zur Statistik der Niststätten des weissen Storches, *Ciconia alba* Bechst., im Archiv **56** (1912) für Mecklenburg-Strelitz. *Güstrow Arch. Ver. Natg.* **65** 1911 (74-77). **556**
- Gunn, T. E.** On the presence of two ovaries in certain British birds, more especially the Falconidae. *London Proc. Zool. Soc.* **1912** 1912 (63-79) pls. ii-v. **557**
- Gurney, J. H.** Ornithological report for Norfolk (1911). *Zoologist London* **1912** 1912 (121-139 195) 2 figs. **558**
- Gurney, J. H.** Emigration through Norfolk of the Rook and Grey Crow. *Zoologist London* **1912** 1912 (389-392). **559**
- Gurney, J. H.** An eagle (*Aquila adalberti*) forty years old. *Norwich Trans. Nat. Soc.* **9** 1912 (458) pl. **560**
- Gurney, J. H.** Nutcrackers in Norfolk. *Norwich Trans. Nat. Soc.* **9** 1912 (459-460). **561**
- Guyer, M. F.** Modifications in the testes of hybrids from the Guinea and the Common Fowl. *J. Morph. Philadelphia Pa.* **23** 1912 (45-58) 2 pls. **562**
- Gyldenstolpe, N.** Short notes on a collection of birds from Russian Turkestan. *Ark. Zool. Stockholm* **7** No. 14 1911 (1-26). **563**
- Haag, F.** Ein Spaziergang auf Tromsö. *Zs. Oologie Berlin* **22** 1912 (159-161). **564**
- Haagner, A.** The wild birds of the Pretoria Zoological Gardens. *Pretoria J. S. Afric. Ornith. Union* **8** 1912 (85-92). **565**
- Haagner, A.** The White Stork in South Africa. *Aquila Budapest* **19** 1912 (16-18). **566**

- Hachlow, W.** Ueber eine neue mattköpfige Sumpfwaise. *Ornith. Monatsber. Berlin* **20** 1912 (8-10). **567**
- Hachlow, W. A.** *vide* Chachlov.
- Hadley, P. B.** *vide* Cole.
- Haenel.** Vogelschutz in Bayern. *Forstwiss. Centralbl. Berlin* **34** 1912 (279-285). **568**
- Hagen, W.** Die Sturmmöwen (*Larus canus* L.) des Langen Werders. *Güstrow Arch. Ver. Natg.* **66** 1912 (44-47) 1 Taf. **569**
- Hagen, W.** Über den Vogelzug 1911. bei Lübeck. *J. Ornith. Leipzig* **60** 1912 (470-480). **570**
- Hagen, W.** Zwei interessante Brutvögel von Lübeck. *Ornith. Monatsber. Berlin* **20** 1912 (159). **571**
- Hagen, W.** Ringversuche. *Ornith. Monatsber. Berlin* **20** 1912 (159-160). **572**
- Hagendefeldt, M.** Zum Vogelzug auf der Insel Sylt 1910. *J. Ornith. Leipzig* **60** 1912 (410-428). **573**
- Hagerup, A.** Meddelelser fra de danske ornithologiske Stationer for 1911. [Communications from the Danish ornithological stations for the year 1911.] *København Ornith. Tids.* **6** 1912 (159-211). **574**
- Haigh, G. H. C.** The North American Peregrine (*Falco peregrinus anatum*). A new British bird. *Brit. Birds London* **5** 1912 (219-221) fig. **575**
- Hall, E. H.** Sailing flight of birds. *Nature London* **90** 1912 (161-162) [also **Headley** *ibid.* p. 220]. **576**
- Hall, R.** Distribution of the black-fronted Dottrel (*Ægialitis melanops*). *Emu Melbourne* **11** 1912 (210). **577**
- Hall, R.** The feather-tracts of *Sphenura broadbenti* McCoy. *Hobart Proc. R. Soc. Tasmania* **1911** 1912 (33-37) pl. iv. **578**
- Hall, W.** *vide* Bagnall.
- Hammling, J.** *Carpodacus erythrinus* neuerdings im Warthetal bei Posen. *Ornith. Monatsber. Berlin* **20** 1912 (172-173). **579**
- Hammling, J.** Ornithologische Beobachtungen und Mitteilungen aus der Provinz Posen. *Posen Zs. D. Ges. Wiss. natw. Abt.* **19** 1912 (45-68). **580**
- Hammond, J.** An investigation concerning the food of certain birds. *Norwich Trans. Nat. Soc.* **9** 1912 (316-327) also *J. Agricult. Sci. Cambridge* **4** 1912 (380-409). **581**
- Hargitt, C. W.** Double eggs. *Amer. Nat. New York* **46** 1912 (556-560) 3 figs. **582**
- Harrington, H. H.** Some Maymyo Birds. Pt. II. *Bombay J. Nat. Hist. Soc.* **21** 1912 (585-587). **583**
- Harrington, H. H.** Chinese grey duck in Burma. *Bombay J. Nat. Hist. Soc.* **21** 1912 (1086-1088). **584**
- Harlow, R. C.** The Louisiana Waterthrush and Broad-winged Hawk in southern New Jersey. *Auk Cambridge Mass.* **29** 1912 (105-106). **585**
- Harlow, R. C.** The breeding birds of southern Center county, Pennsylvania. *Auk Cambridge Mass.* **29** 1912 (465-478). **586**
- Harlow, R. C.** The Center Furnace Swamp. *Cassinia Philadelphia Pa.* **1911** 1912 (19-23). **587**
- Härms, M.** *vide* Sarudny.
- Harper, F.** Observations in the Laughing Gull colony. *Bird-Lore Harrisburg Pa.* **14** 1912 (204-209) 4 figs. **588**
- Harris, M.** Albinistic Reed-buntings. *Brit. Birds London* **6** 1912 (61-62). **589**
- Hartert, E.** Die Vögel der paläarktischen Fauna. Systematische Übersicht der in Europa, Nord-Asien und der Mittelmeerregion vorkommenden Vögel. Hft. vii. (Bd II, Hft. i) (833-960). *Berlin (Friedländer)* 1912. 25 cm. **590**
- Hartert, E.** Description of a new Desert-Lark from the central western Sahara. *Ann. Mag. Nat. Hist. London* **10** 1912 (230-231). **591**
- Hartert, E.** Eastern Large-billed Reed-Bunting in Sussex. *British Birds London* **6** 1912 (153-154). **592**
- Hartert, E.** *Serinus angolensis somereni* and *Chiromachaeris manacus trinitatis* subsp. n. described. *London Bull. Brit. Ornith. Cl.* **29** 1912 (63-64). **593**
- Hartert, E.** n. spp. *Phyllergates, Stoparola* and *Cossypha* described. *London Bull. Brit. Orn. Cl.* **31** 1912 (2-3). **594**
- Hartert, E.** *Æthiopsar cristatellus formosanus* subsp. n. described. *London Bull. Brit. Ornith. Cl.* **31** 1912 (14). **595**

- Hartert, E. Notes on the Paradiseidae figured on plates vii. and viii. Nov. Zool. Tring **18** 1912 (604) pls. vii viii. **596**
- Hartert, E. On some unfigured birds. [*Monias benschi*, *Leucopsar rothschildi*, *Gracupica tertia*.] Nov. Zool. Tring **19** 1912 (373-374) pls. i ii. **597**
- Hartert, E. Über die Hauberlerche der Balearen und Pityusen. Ornith. Monatsber. Berlin **20** 1912 (29-30). **598**
- Hartert, E. Über Einiges, was wir sollen und nicht sollen. Verh. intern. OrnithKongr. Berlin **5** 1911 (210-216 68-70). **599**
- Hartert, E., Jourdain, F. C. R., Ticehurst, N. F. and Witherby, H. F. A handlist of British Birds, with an account of the distribution of each species in the British Isles and abroad. (xii+237) London (Witherby) 1912. 8vo. **600**
- Hartert, E. *vide* Rothschild.
- Harting, J. E. The spelling of the vernacular name—Dunlin or Dunling. Ibis London **1912** 1912 (211-212). **601**
- Hausmann, E. Die Waldhühner im Zürcher Oberland. Basel Ornithol. Beob. **7** 1909-1910 (81-85). **602**
- Harvie-Brown, J. A. Habits of the Whimbrel (*Numenius phaeopus*). Zoologist London **1912** 1912 (241-245). **603**
- Harvie-Brown, J. A. The Fulmar: its past and present status in the North Atlantic and in the northern parts of Europe and North America, and some account of its great increase in Great Britain. Zoologist London **1912** 1912 (381-388, 401-416) 2 pls. **604**
- Harvie-Brown, J. A. The Fulmar: its past and present distribution as a breeding species in the British Isles. Scot. Nat. Edinburgh **1912** 1912 (97-102 121-132) pl. iv map. **605**
- Headley, F. W. The flight of birds. (x + 164) 16 pls. 27 text figs. London (Witherby) 1912. 8vo. **606**
- Heeckeren tot Wallén, L. Baron van. Over den Javaanschen Pauw (*Pavo muticus* L.). Ardea Leiden **1** 1912 (13-16). **607**
- Heeckeren tot Wallén, L. Baron van. Overleg bij een Neushoornvogel. Ardea Leiden **1** 1912 (84-86). **608**
- Hegyfoky, J. Wie der Vogelzug „exakt“ zu erforschen wäre. Aquila Budapest **19** 1912 (24-42). **609**
- Hegyfoky, J. Der Vogelzug und die Witterung im Frühling des Jahres 1911. Aquila Budapest **19** 1912 (151-165). **610**
- Heinroth, O. Einige über das Baden der Vögel. Ornith. Monatsber. Berlin **20** 1912 (21-25). **611**
- Heinroth, O. Sind die männlichen Vögel in der Überzahl? Ornith. Monatsber. Berlin **20** 1912 (148-149). **612**
- Heinroth, O. *vide* Wichtrich.
- Hellmayr, C. E. Aves für 1910, 1911. [Jahresbericht.] Arch. Natg. Berlin **77** Bd 2 Hft. 1 [1912] (89-256); **78** Abt. B. Hft. 2 1912 (1-163). **613**
- Hellmayr, C. E. Vögel in: Zoologische Ergebnisse einer Reise in das Mündungsgebiet des Amazonas herausgegeben von Lorenz Müller. München Abh. Ak. Wiss. **26** Abt. 2 1912 (1-142). **614**
- Hellmayr, C. E. Ueber neue und seltene Vögel aus Südperu. München Verh. ornith. Ges. **11** 1912 (159-163). **615**
- Hellmayr, C. E. Bemerkungen über eine wenig bekannte neotropische Ammer (*Zonotrichia strigiceps* Gould). München Verh. Ornith. Ges. **11** 1912 (187-190). **616**
- Hellmayr, C. E. Description of new birds from the Timor group of islands. Nov. Zool. Tring **19** 1912 (210-211). **617**
- Hellmayr, C. E. und Sellern, J. Graf von. Beiträge zur Ornithologie von Venezuela. Arch. Natg. Berlin **78** Abt. A. Heft. 5 1912 (34-166). **618**
- Hellmayr, C. E. and Sellern, Count. *Gralloria guatemalensis aripoensis* and *Geotrygon linearistrinitatis* subsp. n. described. London Bull. Brit. Ornith. Cl. **31** 1912 (13-14). **619**
- Hellmayr, C. E. und Sellern, J. Graf von. Beschreibung eines neuen Dendrocolaptiden aus Venezuela. München Verh. ornith. Ges. **11** 1912 (157-158). **620**
- Helm, F. Beobachtungen über den Zug der Vögel. Cheunnitz Ber. natw. Ges. **18** 1912 (189-197). **621**

- Helm, F.** Ornithologische Beobachtungen an der Nord- und Ostsee. Chemnitz Ber. natw. Ges. **18** 1912 (198-223). **622**
- Helms, O.** Svaler (*Hirundo rustica*) i November. [The presence of *Hirundo rustica* in Denmark in November.] Kjøbenhavn Ornith. Tids. **6** 1912 (90-98). **623**
- Helms, O.** Mindre Meddelelser 1910-12. [Minor notices about Danish birds 1910-12.] Kjøbenhavn Ornith. Tids. **6** 1912 (127-147). **624**
- H[elms], O.** Lidt om Ynglefuglene paa Sanatoriet ved Nakkebølle Fjord i Foraaret 1912. [The breeding birds at Nakkebølle Fjord in the spring of 1912.] Kjøbenhavn Ornith. Tids. **6** 1912 (x-xvii). **625**
- Helmuth, W. T., jun.** Cory's Shearwater in abundance off Long Island. Auk Cambridge Mass. **29** 1912 (234). **626**
- Hennemann, W.** Einiges über den Herbstzug und das Erscheinen der ersten Wintergäste im Sauerlande 1908. Basel Ornithol. Beob. **6** 1908 (158-160 184-186). **627**
- Hennemann, W.** Über den Abzug des Mauerseglers. Basel Ornithol. Beob. **8** 1910-1911 (22-24). **628**
- Hennemann, W.** Ueber das Auftreten des Tannenhähers im Sauerlande im Herbst 1911. Ornith. Jahrb. Hallein **23** 1912 (65-68). **629**
- Hennemann, W.** *Serinus hortulanus* im Sauerlande. Ornith. Monatschr. Magdeburg **37** 1912 (381-382). **630**
- Hennemann, W.** Ueber den Ab- bzw. Durchzug des Mauerseglers im Jahre 1911. Ornith. Monatschr. Magdeburg **37** 1912 (412-414). **631**
- Hennemann, W.** Ueber den Frühjahrszug des Storches und der Rauchschwalbe im Jahre 1911. Ornith. Monatschr. Magdeburg **37** 1912 (459-468). **632**
- Hennicke, C. R.** Handbuch des Vogelschutzes. (viii + 468) Taf. Magdeburg (Creutz) 1912. 25 cm. **633**
- Hennicke, C. R.** Vogelschutzbuch. (vi + 126) 8 Taf. 60 Abbild. Stuttgart (Strecker & Schröder) 1912. 8vo **634**
- Hennicke, C. R.** Vogelschutz und Ueberlandzentralen. Ornith. Monatschr. Magdeburg **37** 1912 (143-151). **635**
- Hennicke, C. R.** Leuchttürme und Vogelschutz. Ornith. Monatschr. Magdeburg **37** 1912 (260-278) 2 Taf. **636**
- Henning, C. L.** Der Untergang des Albatros auf Laysan Island, Hawaiianische Inseln. Natw. Wochenschr. Jena **27** 1912 (729-730). **637**
- Henninger, J.** Ein Beitrag zur geographischen Verbreitung der beiden pazifischen *Numenius*-Arten. Ornith. Monatsber. Berlin **20** 1912 (62-64). **638**
- Henninger, J.** *Circus approximans* Peale auf Samoa. Ornith. Monatsber. Berlin **20** 1912 (185-186). **639**
- Henninger, W. F.** *Florida caerulea* again taken in Ohio. Wilson Bull. Oberlin Ohio **24** 1912 (49). **640**
- Henninger, W. F.** Notes from the Tri-reservoir region in Ohio. Wilson Bull. Oberlin Ohio **24** 1912 (155-156 198). **641**
- Henry, A.** *vide* Railliet.
- Henry, G. M.** Ornithological notes. Spolia Zeylan. Columbo **8** 1912 (55-61). **642**
- Hens, P. A.** Avifauna der Omgeving van Roermond. Deventer Club Ned. Vogelk. J. B. **2** 1912 (21-31). **643**
- Hens, P. A.** Eenige opmerkingen omtrent het voorkomen van den Grooten gelen Kwirkstaart (*Motacilla boarula boarula* L.) in Nederland. Deventer Club Ned. Vogelk. J. B. **2** 1912 (49-52). **644**
- Herrera, A. L.** Ornitologia Mexicana. Naturaleza Mexico **1** 1912 (177-232). **645**
- Herrick, F. H.** Organization of the gull community. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (156-158). **646**
- Hersey, L. J.** Two new birds for Colorado. Condor Hollywood Cal. **14** 1912 (108). **647**
- Hersey, L. J.** A bird new to Colorado. Condor Hollywood Cal. **14** 1912 (154). **648**
- Hess, A.** Erscheinen des Mönchs- oder Kuttengeiers (*Vultur monachus* L.) in der Schweiz. Ornith. Jahrb. Hallein **23** 1912 (228-229). **649**
- Hess, A.** Die St. Petersinsel im Bielersee als Reservation für Sumpfvogel und Wasservogel. Ornith. Monatschr. Magdeburg **37** 1912 (401-405). **650**

- Hess, A.** Vom Steinadler in der Schweiz. Zool. Beob. Frankfurt a. M. **53** 1912 (327-335). **651**
- Hess, A.** Kreuzung zwischen dem dickschnäbeligen und dünnschnäbeligen Tannenhäher? Zs. Oologie Berlin **22** 1912 (53-54). **652**
- Hess, A.** Die Brutvögel des Gebietes von Ranflüh im Emmental. Zs. Oologie Berlin **22** 1912 (71-76). **653**
- Hesse, E.** Kritische Untersuchungen über Piciden auf Grund einer Revision des im K. Zool. Museum zu Berlin befindlichen Spechtmaterials. Berlin Mitt. zool. Mus. **6** 1912 (133-261). **654**
- Hesse, E.** Beobachtungen und Aufzeichnungen während des Jahres 1911. [Gegend um Berlin.] J. Ornith. Leipzig **60** 1912 (298-314). **655**
- Hesse, E.** Über Balzflüge und Stimmen der Weihen und Sumpfohreule. J. Ornith. Leipzig **60** 1912 (481-494). **656**
- Hesse, E.** Nochmals das Erscheinen von Raubmöven im Binnenland während des Herbstes 1909. Ornith. Monatsber. Berlin **20** 1912 (37-38) also **Hagen** ibid p. 98. **657**
- Hesse, E.** Berichtigung. Ornith. Monatsber. Berlin **20** 1912 (82). **658**
- Hesse, E.** *Lagopus lagopus brevirostris* subsp. nov. Ornith. Monatsber. Berlin **20** 1912 (101-102). **659**
- Hesse, E.** Einige nomenklatorische Bemerkungen über Piciden. Ornith. Monatsber. Berlin **20** 1912 (160-163). **660**
- Hesse, E.** *Phylloscopus indicus albigula* subsp. nov. Ornith. Monatsber. Berlin **20** 1912 (163). **661**
- Hesse, E.** Weitere Bemerkungen zu den Raubmöven des Herbstes 1909. Ornith. Monatsber. Berlin **20** 1912 (188-189). **662**
- Heurn, W. C. van.** Verslag van Ornithologische waarnemingen gedaan tijdens een zevendaagsch verblijf aan boord van het Lichtschip "Maas". Ardea Leiden **1** 1912 (92-96). **663**
- Heurn, W. C. van.** Welke vogelsoorten men gedurende een zeereis naar Zuid-Amerika kan waarnemen. [Welche Vogelarten man während einer Seereise nach Süd-Amerika beobachten kann.] Ardea Leiden **1** 1912 (106-115). **664**
- Heurn, W. C. van.** Enkele maanden ornithologiseeren in Suriname 29 Mei—22 October 1911. Deventer Club Ned. Vogelk. J. B. **2** 1912 (69-108). **665**
- Heuss.** Die Notwendigkeit und Form einer permanenten internationalen Verbindung zwischen den Vogelschutzvereinigungen der Kulturstaaten. Verh. intern. OrnithKongr. Berlin **5** 1911 (796-800 100-101). **666**
- Heyder, R.** Zur Erinnerung an August Franz Helm. J. Ornith. Leipzig **60** 1912 (243-248). **667**
- Heyder, R.** *vide* Wichtrich.
- Hildebrandt, H.** Seltene Irrgäste bei Altenburg. Ornith. Monatsber. Berlin **20** 1912 (118-119). **668**
- Hilgert, C.** *Laniarius funebris degener* subsp. n. Tring Nov. Zool. **18** 1912 p. 605. **669**
- Hirtz, M.** Kritische Verbesserungen und Zusätze zum „Verzeichnis der Vögel der kroatischen Fauna.“ Ornith. Jahrb. Hallein **23** 1912 (16-39). **670**
- Hirtz, M.** Zu *Fratercula arctica* auf der Adria. Ornith. Jahrb. Hallein **23** 1912 (150). **671**
- Hix, G. E.** Some bird notes from New York City. Wilson Bull. Oberlin Ohio **24** 1912 (33-35). **672**
- Hocke, H.** Die Vögel der Provinz Brandenburg. Zs. Oologie Goslar **21** 1911 (4-9 33-42). **673**
- Hodge, C. F.** A last word on the Passenger Pigeon. Auk Cambridge Mass. **29** 1912 (169-175). **674**
- Hoffmann, B.** Ein Beitrag zum Gesange unserer Fliegenschnäpper. Ornith. Monatschr. Magdeburg **37** 1912 (433-443). **675**
- Hofmanner, G.** Beobachtungen im Rheintal pro 1909. Tierwelt Aarau **20** 1910 (437 449-450 461 472-473). **676**
- Holdhaus, K.** Kritisches Verzeichnis der borealpinen Tierformen (Glazialrelikte) der mittel- und südeuropäischen Hochgebirge. Wien Ann. Nat. Hist. Hofmus. **26** 1912 (399-440 Aves 431-432). **677**
- Hollister, N.** Some erroneous Wisconsin bird records. Auk Cambridge Mass. **29** 1912 (397-399). **678**
- Hope, L. E. and Thorpe, D. L.** Natural History record bureau, Carlisle Museum:

- Report for 1911. Zoologist London 1912 1912 (181-189). 679
- Hopwood, G.** Notes on some birds from the Chindwin valley. Bombay J. Nat. Hist. Soc. 21 1912 (1089-1090). 680
- Hopwood, C.** A list of birds from Arakan. Bombay J. Nat. Hist. Soc. 21 1912 (1196-1221). 681
- Hørring, R.** Fuglene ved de danske Fyr i 1911. 29de Aarsberetning om danske Fugle. [The birds at the Danish lighthouses in 1911. 29th annual report.] København Nath. Medd. 64 1912 (141-209) 1 chart. 682
- Horsbrugh, B.** The Game-birds and Water-fowl of South Africa. (xii+160) 65 pls. London (Witherby) 1912. 4to. 683
- Horsbrugh, B. R. and St. Quintin, W. H.** Some notes on the Secretary Bird, *Serpentarius secretarius*. Avicult. Mag. London 3 1912 (105-111) 1 pl. 684
- Houssay, F. et Magnan, A.** L'envergure et la queue chez les oiseaux. Paris C. R. Acad. sci. 154 1912 (39-41). 685
- Howard, H. E.** The British Warblers. A history with problems of their lives. Part 7 [separate pages to each species with plates and photogravures]. London (Porter) 1912. 8vo. 686
- Howe, F. E.** New eggs from the Mallee District, Victoria. Emu Melbourne 11 1912 (211). 687
- Howell, A. B.** Another Eastern Fox Sparrow in southern California. Condor Hollywood Cal. 14 1912 (41). 688
- Howell, A. B.** Notes from Todos Santos islands. Condor Hollywood Cal. 14 1912 (187-191). 689
- Howell, A. B.** *vide* Bowles.
- Hull, A. F. B.** Avifauna of New South Wales Islands. Part ii. Emu Melbourne 11 1912 (202-207) pl. xxi. 690
- Husnot, P.** *vide* Léger.
- Huxley, J. S.** A „Disharmony“ in the Reproductive Habits of the Wild Duck (*Anas boschas*, L.). Biol. Centralbl. Leipzig 32 1912 (621-623). 691
- Huxley, J. S.** A first account of the courtship of the Redshank (*Totanus calidris* L.). London Proc. Zool. Soc. 1912 1912 (647-655). 692
- Huxley, J. S.** The Great Crested Grebe and the idea of secondary sexual characters. Science New York 36 1912 (601-602). 693
- Inde.** Über angebliche Zahnanlagen bei Vögeln. Arch. mikr. Anat. Bonn 79 Abt. 1 1912 (247-275). 694
- Illidge, R.** Notes on the Dragoon bird (*Pitta strepitans* Temm.) Queensl. Nat. Brisbane 1 1912 (221). 695
- Ingram, C.** The birds of Yunnan. Nov. Zool. Tring 19 1912 (269-310). 696
- Ingram, C.** The Black-throated and Black-eared Chats. Paris Rev. Fr. d'Orn 2 1912 (392-395). 697
- Ingram, C.** Eider duck breeding in France. Zoologist London 1912 1912 (232). 698
- Ingram, C.** A day in the Esterel hills. Zoologist London 1912 1912 (250-253). 699
- Ingram, C.** On the Furze warblers of France. Zoologist London 1912 1912 (299-299). 700
- Ischreyt, G.** Zur vergleichenden Morphologie des Entenauges. Arch. vergl. Ophthalm. Leipzig 3 1912 (39-76) 2 Taf. 3 fig. 701
- Isely, D.** A list of the birds of Sedgwick county, Kansas. Auk Cambridge Mass. 29 1912 (25-44). 702
- [Ispolatov, E. I.] Исполатовъ, Е. И. Наблюдения надъ птицами Бугурусланскаго уѣзда Самарской губернии за три года (съ 1907 г. до 1910 г.) [Observations faites sur les oiseaux du district Bougourousslane du gouvernement Samara durant trois années (1907-1910).] Mess. ornith. Moskva 3 1912 (31-43); also A. N. Karamsin *t.c.* pp 128-129. 703
- Itzerodt, I.** Die Brutvögel der Insel Trischen. Ornith. Monatschr. Magdeburg 37 1912 (26-30) 1 Taf. 704
- Jackson, A. C.** Continental Song Thrush in the Moray and Solway areas. Northern form of Willow-Wren in Solway. Scot. Nat. Edinburgh 1912 1912 (163). 705
- Jackson, F. J.** The flight of the Maribou Stork. J. E. Afr. and Uganda N.H. Soc. 2 1912 (132) fig. 706
- Jackson, F. J.** *Campophaga martini* sp. n. described. London Bull. Brit. Ornith. Cl. 31 1912 (18). 707
- Jackson, S. W.** Haunts of the Spotted Bower-bird (*Chlamydodera maculata*,

- Gld.). Emu Melbourne **12** 1912 (65-104) pls. vi-xx. **708**
- Jacobi, A. Tannenbäher in Sachsen. Ornith. Monatsber. Berlin **20** 1912 (25). **709**
- Jacobi v. Wangelin, D. Erfahrungen über Tonurnen im Bereiche des Reg.-Bez. Merseburg. Ornith. Monatschr. Magdeburg **37** 1912 (210-212). **710**
- Jander. Vom Kuckuck. [Füttert die Jungen.] Wild und Hund Berlin **18** 1912 (576). **711**
- Jewett, S. G. Western records of the Catbird (*Dumetella carolinensis*). Auk Cambridge Mass. **29** 1912 (106). **712**
- Jewett, S. G. Stray notes from New Brunswick. Auk Cambridge Mass. **29** 1912 (251-252). **713**
- Jewett, S. G. Some birds of the Sawtooth mountains, Idaho. Condor Hollywood Cal. **14** 1912 (191-194). **714**
- [Johansen, H. E.] Иоганзенъ, Г. Э. Замѣтки по орнитологiи Томской губернии. [Mitteilungen über die Ornithologie des Gouvernements Tomsk.] Mess. ornith. Moskva **3** 1912 (287-296). **715**
- Johnson, J. M. A Long Island Brown Pelican (*Pelecanus fuscus*). Bird-Lore Harrisburg Pa. **14** 1912 (226). **716**
- Johnson, W. Wimbledon Common, its geology, antiquities and natural history. (1-304) 4 maps and 25 figs. London (Unwin) 1912. 8vo. **717**
- Johnston, T. H. New species of Cestodes from Australian birds. Brisbane Mem. Queensl. Mus. **1** 1912 (211-215) pls. xv-xvi. **718**
- Johnston, T. H. Internal Parasites recorded from Australian birds. Emu Melbourne **12** 1912 (105-112). **719**
- Johnston, J. H. *vide* Cleland.
- Jolly, J. La bourse de Fabricius et les organes lympho-épithéliaux. Paris C. R. ass. anatomistes **13** 1911 (164-176) fig. **720**
- Jones, A. E. Notes on birds from Lahore. Bombay J. Nat. Hist. Soc. **21** 1912 (1073-1074). **721**
- Jones, L. A study of the avifauna of the Lake Erie islands. (With particular reference to the migration phenomena.) Wilson Bull. Oberlin Ohio **24** 1912 (6-18 95-108 142-153 171-186). **722**
- Jones, L. Brown Thrasher at Grinnell, Iowa, in the years 1870 to 1890. Wilson Bull. Oberlin Ohio **24** 1912 (192-193). 142). **723**
- Jones, S. R. Preliminary report on the flora and fauna of the eastern part of the Rosebud reservation, now known as Gregory County. Vermilion Bull. Geol. Surv. South Dakota No. **4** [1909] (123-142). **724**
- Jordan, H. E. The structure of the heart muscle of the humming bird, with special reference to the intercalated discs. Anat. Rec. Philadelphia **5** 1911 (517-529) 15 figs. **725**
- Jordans, A. *vide* Kurella.
- Jourdain, F. C. R. Notes on the Ornithology of Corsica. Pts. iii & iv. Ibis London **1912** 1912 (63-82 314-332). **726**
- Jourdain, F. C. R. Notice of the eggs of *Anthus richardi* and *Muscicapa latirostris*; on two erythristic eggs of the Magpie (*Pica pica*) with remarks on erythrisism in eggs; on the eggs of *Cinnyris falckensteini* and *C. mediocris*. London Bull. Brit. Orn. Cl. **29** 1912 (98-101). **727**
- Jourdain, F. C. R. On the egg of *Balearica regulorum gibbericeps*. London Bull. Brit. Ornith. Cl. **31** 1912 (24). **728**
- Jourdain, F. C. R. Early laying of the Cuckoo. Brit. Birds London **6** 1912 (18). **729**
- Jourdain, F. C. R. Hybrids between Black-game and Pheasant. British Birds London **6** 1912 (146-149). **730**
- Jourdain, F. C. R. Greenland Wheatear in Derbyshire. Brit. Birds London **6** 1912 (222). **731**
- Jourdain, F. C. R. *vide* Hartert.
- Jourdain, F. C. R. *vide* Wild.
- Joy, N. H. Some results obtained by "ringing" Starlings. Brit. Birds London **5** 1912 (297-299). **732**
- Joy, N. H. A marked Starling reported from Finland. Brit. Birds London **6** 1912 (13). **733**
- Joy, N. H. Observations on Manx Shearwaters and Storm-Petrels at the Scilly Isles. Brit. Birds London **6** 1912 (118-120) fig. **734**
- Jullet, A. Recherches anatomiques, embryologiques, histologiques et comparatives sur le poumon des oiseaux.

- Arch. zool. Paris (5) **9** 1912 (207-371)
18 figs. and pls. xv-xx. **735**
- Juillet, A.** A propos des bronches récurrentes du poumon des oiseaux. Arch. zool. Paris (sér. 5) **10** 1912 (Notes et Revues xxvi-xxviii). **736**
- Jung, O.** Merkwürdiger Nistort eines Rotschwänzchenpaares. [Laufender Eisenbahnwagen.] Pfälz. Heimatk. Kaiserslautern **8** 1912 (183). **737**
- Jurriaanse, J. H.** Iets over den Ooievaar. [A word on the Stork.] Ardea Leiden **1** 1912 (11). **738**
- Jurriaanse, J. H.** Iets over de kwartelvangst in Noord-Egypte. [Etwas über den Wachtelfang in Nord-Aegypten.] Ardea Leiden **1** 1912 (44-45). **739**
- [**Karamzin, A. N.**] **Карамзинъ, А. Н.** *Cygnus bewicki* Jarr. и *Grus leucogeranus* Pallas на зимовьѣ въ восточномъ Закавказьѣ. [*Cygnus bewicki* Yarr. und *Grus leucogeranus* Pall. im Winterquartier am östlichen Transcaucasus.] Mess. ornith. Moskva **3** 1912 (304-305). **740**
- [**Katin, E. Ja.**] **Катинъ, Е. Я.** Перечень птицъ Кълецкой губернии. [Verzeichnis der Vögel des Kjelzer Gouvernements.] Mess. ornith. Moskva **3** 1912 (229-236). **741**
- [**Kajgorodov, D. N.**] **Кайгородовъ, Д. Н.** Къ вопросу о высотѣ полета перелетныхъ птицъ. [Zur Frage über die Zugshöhe der Vögel.] Mess. ornith. Moskva **3** 1912 (165-166). **742**
- Kaygorodoff, D. von.** Zur Frage über die Zugshöhe der Vögel. Aquila Budapest **19** 1912 (454). **743**
- Keibel, F.** Wie zerbricht der ausschlüpfende Vogel die Eischale? Anat. Anz. Jena **41** 1912 (381-382). **744**
- Kemp, R.** New subspecies of New Zealand birds. Austral Av. Rec. London **1** 1912 (124). **745**
- Kempen, C. van.** Contribution à l'étude des oiseaux du Nord de la France. Amiens Bul. soc. linn. **21** 1912 (10-42 55-83). **746**
- Kempen, C. van.** Nouvelle liste d'oiseaux tués dans le département de la Somme. Rev. Fr. d'Orn. Paris **2** 1911 (200-201). **747**
- Kempen, C. van.** Rappel de la capture d'un Rollier (*Coracias garrula*) aux environs de Saint-Omer. Paris Rev. Fr. d'Orn. **2** 1912 (425). **748**
- Kennard, F. H.** A peculiar plumage of the Canada Goose (*Branta canadensis canadensis*). Auk Cambridge Mass. **29** 1912 (391). **749**
- Kennedy, C. H.** Further notes on the fruit-eating habits of the Sage Thrasher (*Oreoscoptes montanus*) in the Yakima valley, Washington. Auk Cambridge Mass. **29** 1912 (224-226). **750**
- Kerbert, C.** Ennige mededeelingen over *Cygnus cygnus* L. [Einige Mitteilungen über *Cygnus cygnus* L.] Ardea Leiden **1** 1912 (87-92) 1 fig. **751**
- Kersten, A.** Die Entwicklung der Blinddärme bei *Gallus domesticus* unter Berücksichtigung der Ausbildung des gesamten Darmkanales. Arch. mikr. Anat. Bonn **79** Abt. 1 1912 (114-174) 1 Taf. **752**
- Kinel, J.** Badania nad regeneracyą kości u ptaków. [Etudes sur la régénération des os chez les oiseaux.] Lwów Księga Pamiątkowa ku uczczeniu Prof. J. Nusbauma (H. Altenberg) 1911 (225-234). **753**
- Kinnear, N. B.** European Great Bustard in Chitral. Bombay J. Nat. Hist. Soc. **21** 1911 (268). **754**
- Kinnear, N. B.** The Masked Booby (*Sula cyanops*) in Bombay Harbour. Bombay J. Nat. Hist. Soc. **21** 1912 (1334-1335). **755**
- Kirchner, A.** Note sur l'arrivée et le départ des hirondelles en 1911. Paris Rev. Fr. d'Orn. **2** 1912 (220). **756**
- Kitzler, G. E.** Schwarze Störche in der Mark. Mark Berlin **9** 1912 (76-77). **757**
- Klein.** Neu interessierende Schnepfenfragen. [Geschlechtsbestimmung.] Verh. pomm. Forstver. Stettin **1911** 1912 (55-61). **758**
- Kleinschmidt, O.** Realgattung *Falco Peregrinus*. Eine Monographie des Wanderfalken und zugleich eine Studie über das Wesen der Rasse in freier Natur. Berajah Halle **1912** (1-6) 6Taf. **759**
- Kleinschmidt, O.** Realgattung *Parus Salicarius*. Eine Monographie der Erbkönigsmeise und zugleich eine kritische Studie über Entwicklungslehre und Artbegriffe. Berajah Halle **1912** (1-6) 2 Taf. **760**

- Kleinschmidt, O.** Stichproben über den Vogelbestand des Kulturlandes. *Falco Halle* **8** 1912 (2-15 16-23 25-40 54-56 59-72 73-81). **761**
- Kleinschmidt, O.** Die von Flückiger in Algerien gesammelten Vogelarten. *Falco Halle* **8** 1912 (43-54) 1 Taf. **762**
- Klinge, M.** Besøg paa Fanø i Pinsen 1911. [The birds of the island Fanø in June, 1911.] Kjøbenhavn Ornith. Tids. **6** 1912 (212-229). **763**
- Kluhs, W.** Über Inzucht speziell bei Gesangskanariern. *Gesied. Welt Magdeburg* **41** 1912 (107-109). **764**
- Knauer, F.** Wissenschaftliche Erfolge der Ringversuche zur Erforschung des Vogelzuges. (Sammelreferat.) *Natw. Wochenschr. Jena* **27** 1912 (177-187). **765**
- Knauer, F.** Das Ringexperiment im Dienste der Vogelzugforschung. *ZentrBl. Forstwis. Wien* **38** 1912 (496-516 568-575). **766**
- Knudsen, V. S.** Fuglelivet paa Aarhus Bugt. *Flora og Fauna Kjøbenhavn* **1912** (9-12). **767**
- Koch, O.** Uebersicht über die Vögel Estlands. Herausgegeben von dem Verein für Naturkunde Estlands. (iv + 89). *Reval-Leipzig* 1911. 21 cm. **768**
- Koch, W.** Die Ornith. der Lüneburger Heide. *Mitt. Vogelwelt Nürnberg* **12** 1912 (158-162 185-191 208-212 234-238). **769**
- Koch, W.** Zur Begattung des Mauerseglers. *Ornith. Monatschr. Magdeburg* **37** 1912 (382). **770**
- Kohler, L. S.** Observations of bird-life in northern New Jersey during the winter of 1910-1911. *Wilson Bull. Oberlin Ohio* **24** 1912 (21-26). **771**
- Kohler, L. S.** Status of the European Starling in Essex county, New Jersey. *Wilson Bull. Oberlin Ohio* **24** 1912 (44-46). **772**
- Kohler, L. S.** New Jersey notes. *Wilson Bull. Oberlin Ohio* **24** 1912 (111-114). **773**
- [**Kohts, A. G.**] Котсь, А. О. Эгитогнаоія, его развитие и таксономическое значение. [Ueber Aegithognathie, deren Entwicklung und taxonomische Bedeutung.] *Moskva Bull. Soc.* (N-9210 g)
- nat. **1911** 1912 (192-252 259-266 + deutsch. Rés. 253-258 mit Taf. iv-vi). **774**
- Koller, O.** Weisse Bekassine. [*Gallinago gallinago.*] *Ornith. Jahrb. Hallein* **23** 1912 (230). **775**
- Kollibay, P.** Neue Häubenlerchenformen. *Ornith. Monatsber. Berlin* **20** 1912 (25-27). **776**
- Kollibay, P.** Bemerkungen über die Häubenlerchen von Suez Sinai und Palästina. *Ornith. Monatsber. Berlin* **20** 1912 (113-115). **777**
- Kollmann, E. M.** Observations sur les leucocytes granuleux des Sauropsidés. *Ann. Sci. Nat. (Zool.) Paris* **15** 1912 (43-83) pl. i. **778**
- Kollmann, M.** Évolution chimique des granulations acidophiles des oiseaux. *Paris C. R. soc. biol.* **72** 1912 (605-606). **779**
- Königl. Ung. Orn. Centr.** Ergänzungsdaten zur Invasion von *Nucifraga caryocatactes macrorhyncha* nach Ungarn im Jahre 1911. *Aquila Budapest* **19** 1912 (462-463). **780**
- Koningsberger, J. C.** Java zoologisch en biologisch. (Vogel 60-76). *Buitenzorg (L. N. en H.)* 1912. 8vo. **781**
- [**Кооли-Волконскій, I.**] Кооль-Волконскій, И. Дрозды Новгородской губернии. [Die Drosseln des Gouv. Novgorod.] *Naturfreund St. Peterburg* **7** 1912 (107-112). **782**
- [**Кооли-Волконскій, I.**] Кооль-Волконскій, И. Утки озеръ Валдайскаго уѣзда Новгородской губернии. [Die Enten der Seen des Kreises Waldai im Gouv. Novgorod.] *Ochotn. věst. Moskva* **12** 1912 (22-23). **783**
- Koske, F.** Tannenhäher im Juni und Juli bei Greifswald. *Ornith. Monatsber. Berlin* **20** 1912 (173-174). **784**
- Kothe, K.** Die Verschiebung des Sternums von *Casuaris bennetti*. *Berlin SitzBer. Ges. natf. Freunde* **1911** (384). **785**
- Kothe, K.** Trennung der Gattungen *Harpyhaliaetus* und *Urubitornis*. *Ornith. Monatsber. Berlin* **20** 1912 (1-5) fig. **786**
- Krause, G.** Oologia universalis palaeartica. Lfg 73-77. Je 2 Taf. mit Text. *Stuttgart (F. Lehman)* 1912. 30 cm. **787**

- Krohn, H.** Ist *Haliaeetus leucocephalus* je in Europa erschienen? Ornith. Monatsber. Berlin **20** 1912 (176-178). **788**
- Krohn, A.** Weiteres über die Gebirgsbachstelze in Schleswig-Holstein. Ornith. Monatschr. Magdeburg **37** 1912 (250-251). **789**
- Krohn, H.** Grosse Rebhuhngelege. Zs. Oologie Berlin **22** 1912 (117-119). **790**
- Kruber, P.** *Fringilla nivalis* in Schlesien. Ornith. Monatsber. Berlin **20** 1912 (127-130). **791**
- Kühlhorn.** Das Auffliegen der Schwäne vom Erdboden. Ornith. Monatschr. Magdeburg **37** 1912 (253-254). **792**
- Kuhlmann, F.** Some preliminary observations on the development of instincts and habits in young birds. Psych. Rev. Monogr. Baltimore **11** No. 1 (Whole No. 44) 1909 (49-84) pls. i-iv. **793**
- Kuntz, A.** The development of the sympathetic nervous system in birds. Des Moines Proc. Iowa Acad. Sci. **17** 1910 (219-222). **794**
- Kuopfi, W.** Ornithologische Beobachtungen im Val de Ruz. Tierwelt Aarau **20** 1910 (100-101 115-116 147-148 179). **795**
- Kurella, H. und Jordans, A. v.** Zum Tannenhäherzug im Jahre 1911. Neudamm Veröff. Inst. Jagdk. **1** 1912 (53-64). **796**
- Kuroda, N.** Iwōjima nite arata ni etaru tori-rui. [On birds newly obtained on Sulphur Island.] Dobuts. Z. Tokyo **24** 1912 (665-669). **797**
- Kuser, J. D.** The Turkey Vulture in New Jersey. Bird Lore Harrisburg Pa. **14** 1912 (14). **798**
- Lacey, H.** Additions to birds of Kerrville, Texas. Auk Cambridge Mass. **29** 1912 (254). **799**
- Lacey, L. A.** A winter oriole. Bird Lore Harrisburg Pa. **14** 1912 (109). **800**
- Lamb, C.** Birds of a Mohave desert oasis. Condor Hollywood Cal. **14** 1912 (32-40). **801**
- Lambrecht, K.** Der Vogelzug in Ungarn im Frühjahr 1911. XVIII Jahresbericht der Königl. Ungar. Ornithologischen Centralc. Aquila Budapest **19** 1912 (43-150). **802**
- Lambrecht, K.** Fossile Vögel des Borsoder Bükk-Gebirges. Aquila Budapest **19** 1912 (270-287) 2 Taf. 4 Abb. **803**
- Lambrecht, K.** Die fossilen Vögel Ungarns. Aquila Budapest **19** 1912 (288-320) 4 Taf. **804**
- Lampe, E.** Katalog der Vogelsammlung des Naturhistorischen Museums der Stadt Wiesbaden. TIV: Chenomorphae et Crypturi und die Ordnungen der Unterklasse Ratitae: Stuthiones, Rhaeae, Casuarii et Apteryges. Wiesbaden Jahrb. Ver. Natk. **65** 1912 (125-148). **805**
- Langdale, H. M.** Nesting of the Grey Wagtail (*Motacilla melanope*) in West Sussex. Zoologist London **1912** 1912 (228). **806**
- Langford, B. C. R.** The South African Lanner Falcon (*Falco biarmicus*) and its congeners. Pretoria J. S. Afric. Ornith. Union **8** 1912 (82-85) pl. **807**
- Lano, A.** White-winged Scoter (*Oidemia deglandi*) in Minnesota. Auk Cambridge Mass. **29** 1912 (236). **808**
- Lano, A.** Painted Bunting (*Passerina ciris*) in Minnesota. Auk Cambridge Mass. **29** 1912 (247). **809**
- La Touche, J. D.** *Acrocephalus tangorum* sp. n. described. London Bull. Brit. Ornith. Cl. **31** 1912 (10-11). **810**
- Laubmann, A.** Zwei neue paläarktische Formen. München Verh. ornith. Ges. **11** 1912 (164-165). **811**
- Laubmann, A.** Die geographische Verbreitung von *Chloris chloris*. Ornith. Jahrb. Hallein **23** 1912 (83-88). **812**
- Laubmann, A.** Über einen neuen Fliegenschnäpper von der Insel Formosa. Ornith. Monatsber. Berlin **20** 1912 (174-175). **813**
- [Launitz, C. V.] Лауницъ, К. В. Материалы для орнитофауны Черноморскаго побережья Кавказа. [Matériaux pour servir à l'étude ornithologique de la côte de la mer Noire du Caucase.] Moskva Ornith. et avicult. **3** 3-4 1912 (1-40). **814**
- Lauterborn, R.** Über das frühere Vorkommen des Schopfbibis (*Geronticus eremita* L.) Gesner's „Waldrapp“ in Mittel-Europa. Mit vergleichenden Ausblicken. Zool. Jahrb. Jena Suppl. **15** Bd 1 1912 (537-562). **815**

Lavalle, A. Die Veränderungen der Hausgeflügelrassen, ihre Ursachen und Wirkungen. Verh. intern. Ornith-Kongr. Berlin 5 1911 (898-924). 816

[Lavrov, S. D.] Лавровъ, С. Д. Нѣсколько замѣчаній къ зоологической коллекциі, собранной въ восточномъ Закавказьѣ. [Einige Bemerkungen in Bezug auf eine im östlichen Transkaukasien zusammengebrachte zoologische Sammlung.] Kasan' Prot. obsč. jest. 46 1912 Boilage No. 275 (1-22). 817

Law, J. E. Wood Ibis near Long Beach. Condor Hollywood Cal. 14 1912 (41). 818

Leege, O. Ornithophänologisches vom Memmert. Ornith. Monatschr. Magdeburg 37 1912 (83-98). 819

Leege, O. Brutergebnis der Vogelkolonie Memmert für 1911. Ornith. Monatschr. Magdeburg 37 1912 (98-112). 820

Léger, A. et Husnot, P. Quelques Hématozoaires d'un Rapace diurne (*Melierax gabar*). Paris Bul. soc. path. exot. 5 1912 (74-77). 821

Lellèvre, A. *vide* Retterer.

Leplat, G. Recherches sur le développement et la structure de la membrane vasculaire de l'œil des oiseaux. Arch. Biol. Paris-Bruxelles 27 1912 (403-524) 4 pls. 1 fig. 822

Lerch, T. Die Nachtigall an der Emme. Basel Ornithol. Beob. 7 1909-1910 (155-156 176-177). 823

Levander, K. M. *Oidemia perspicillata* L. från Ingå. [*Oidemia perspicillata* L. aus dem Kirchspiel Ingå.] Helsingfors Medd. Soc. Fauna et Fl. Fenn. 38 1912 (3 Deutsches Ref. 199). 824

Lewis, H. L. and Lewis, M. R. The cultivation of sympathetic nerves from the intestine of chick embryos in saline solutions. Anat. Rec. Philadelphia 6 1912 (7-32) 27 figs. 825

Lewis, M. R. and Lewis, W. H. The cultivation of tissues from chick embryos in solutions of NaCl, CaCl₂, KCl, and NaHCO₃. Anat. Rec. Philadelphia 5 1911 (277-293) 24 figs. 826

Lewis, W. H. and Lewis, M. R. The cultivation of chick tissues in media of known chemical constitution. Anat. Rec. Philadelphia 6 1912 (207-211). 827
(N-9210 g)

Lie-Pettersen, O. J. Gjøken (*Cuculus canorus* Lin.). [Der Kukuck.] Bergen Naturen 36 1912 (129-145 192) fig. 828

De Lieto-Vollaro, A. Di una particolare disposizione che hanno le fibre elastiche nella cornea del pollo [*Gallus*] e di specie affini. Archivio ottalmol. Napoli 17 1910 (578-583) 1 tav. 829

Lindner, O. Ornithologische Beobachtungen auf Hiddensöe im Mai und Juni 1912. Ornith. Jahrb. Hallein 23 1912 (161-176). 830

Lindner, F. Systematisches Verzeichnis aller bis Juli 1910 nachgewiesenen Vogelarten des Fallsteingebietes mit kurzer Charakteristik ihres Vorkommens (13). Osterwieck a. H. (Zickfeldt) [1912]. 24 cm. 831

Lindner, F. Ornithologischer Bericht über einen sechstägigen Aufenthalt im April 1911 auf Hiddensee. Ornith. Monatschr. Magdeburg 37 1912 (52-63). 832

Lindner, F. Schlussstein zur Ornithologie des Fallsteingebietes. Ornith. Monatschr. Magdeburg 37 1912 (353-369 385-401 417-430). 833

Lipfert, O. List of birds observed on Dorré and Bernier Islands. Perth Rec. W. Austr. Mus. 1 1912 (100-101). 834

Littlejohn, C. Rare takes for San Mateo county, California. Condor Hollywood Cal. 14 1912 (41). 835

Locy, W. A. The fifth and sixth aortic arches in birds and mammals. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (242-249) 10 figs. 836

Loisel, G. Ouverture et étude d'un nid de Talégalle de Latham dans le parc de Woburn Abbey. Paris Bul. soc. nat. acclim. 59 1912 (745-748). 837

Loos, K. Ornithologische Beobachtungen in der Umgebung von Liboch. Aquila Budapest 19 1912 (465-469). 838

Loos, K. Das Auftreten des Tannenhähers in Böhmen während des Herbstes 1911. Ornith. Jahrb. Hallein 23 1912 (133-141). 839

Loos, K. Dr. F. Helm. Ornith. Monatschr. Magdeburg 37 1912 (171-175). 840

Loudon, H. Baron. Zwei neue Drosselformen. Ornith. Monatsber. Berlin 20 1912 (5-6). 841

- Loudon, H. Baron.** Zwei neue paläarktische Formen. *Ornith. Monatsber.* Berlin **20** 1912 (44-45). **842**
- Lowe, P. R.** A naturalist on desert islands. (xii+230) 32 pls. 3 maps. London (Witherby) 1911. 8vo. **843**
- Lowe, P. R.** Observations on the Genus *Coereba*, together with an annotated list of the species. *Ibis* London **1912** 1912 (489-528 683) pls. vii viii. **844**
- Lowe, P. R.** The Lesser Black-backed Gull of the British Isles, *Larus fuscus britannicus* subsp. nov. *Brit. Birds* London **6** 1912 (2-7). **845**
- Lowe, P. R.** On a new species and subspecies of American Creeper (*Coereba pacifica* and *C. chloropyga alleni*). *London Bull. Brit. Orn. Cl.* **29** 1912 (85-86). **846**
- Lowe, P. R.** Remarks on the two races of the Lesser Black-backed Gull. *London Bull. Brit. Orn. Cl.* **29** (119-121); also **Rothschild and Bannerman. t.c.** (121-122). **847**
- Lowe, W. P. vide** Bannerman.
- Loyd, L. R. W.** Breeding habits of the Cuckoo. *Brit. Birds* London **6** 1912 (62-63). **848**
- Lucanus, F. von.** Über die Höhe des Vogelzuges auf Grund aeronautischer Experimente. *Berlin SitzBer. Ges. natf. Freunde* **1912** (333-345). **849**
- Luginbühl, T.** Ornithologische Beobachtungen unter der Geissmontfluh im Lindental. *Basel Ornithol. Beob.* **6** 1908 (119-120) 1 Abb. **850**
- Lühe, [M.].** Entfestigung und Vogel-schutz. *Königsberg Schr. physik. Ges.* **52** 1911 (46-49). **851**
- Lühe, [M.].** Vogelzugsbeobachtungen. *Königsberg Schr. physik. Ges.* **52** 1911 (89-90). **852**
- Lühe, [M.].** Frühjahrsvogelzug 1911 in Ostpreussen. *Königsberg Schr. physik. Ges.* **52** 1911 (228-229). **853**
- [Lukašević, I.] Лукашевичъ, I.** Искусственное разведение дикихъ птицъ отряда куриныхъ. (Alectoridornithes.) [Die künstliche Aufzucht wilder Vögel aus der Ordnung der Hühnerartigen.] *Ochotn. věst. Moskva* **12** 1912 (108-110 126-127 158-159 174-175 192-193 223-224 240 257-258) 2 figs. **854**
- Lunghetti, B.** Sui primi stadi di sviluppo del condotto di Müller negli Uccelli. *Boll. sc. med. Bologna* **80** 1909 (237-242). **855**
- Lynes, H.** Field-notes on a collection of birds from the Mediterranean. With systematic notes by H. F. **Witherby.** *Ibis* London **1912** 1912 (121-187). **856**
- Lynes, H.** Bird-notes in two Andalusian Sierras. *Ibis* London **1912** 1912 (454-489). **857**
- M., R. C.** The birds of Prospect Park, Brooklyn. *Brooklyn N.Y. Museum News* **7** 1912 (113-119). **858**
- McAtee, W. L.** Certain phases of the theory of recognition marks. *Auk* Cambridge Mass. **29** 1912 (226-232). **859**
- McAtee, W. L.** Methods of estimating the contents of bird stomachs. *Auk* Cambridge Mass. **29** 1912 (449-464). **860**
- McAtee, W. L. vide** Beal.
- Macgillivray, W.** Descriptions of nests and eggs from Cape York. *Emu* Melbourne **11** 1912 (213-214). **861**
- Mackie, W. C. vide** Paton.
- M'Lean, J. C.** Bush-birds of New Zealand. Parts iii iv. *Emu* Melbourne **11** 1912 (171-187 223-236) pls. xvi-xvii xxii xiii. **862**
- Macnamara, C.** The Canadian Ruffed Grouse. *Ottawa Nat.* **26** 1912 (101-102). **863**
- McWhorter, J. E. and Allen, O. W.** The development of the blastoderm of the chick in vitro. *Anat. Rec. Philadelphia* **6** 1912 (121-140) 12 figs. **864**
- Madarász, D. J. v.** Drei neue abessinische Vögel. *Ornith. Monatsber.* Berlin **20** 1912 (45-46). **865**
- Madarász, J. von.** *Poicephalus simplex* Rchw. als selbständige Form. *Ornith. Monatsber.* Berlin **20** 1912 (80-81). **866**
- Madarász, J. von.** Beschreibung einer neuen Zwerg-Ohreule aus dem Sudan. *Ornith. Monatsber.* Berlin **20** 1912 (81). **867**
- Madarász, J. v.** Beschreibung eines neuen Spechtes aus Columbien. *Ornith. Monatsber.* Berlin **20** 1912 (97-98). **868**
- Madarász, J. v.** *Pinarochroa rudolphi*, *Cisticola kmunkei* und *Bradypterus*

- elgonensis* spp. n. Ornith. Monatsber. Berlin **20** 1912 (175-176). **869**
- Máday, I. von. Vogelschutz-Bestrebungen in Ungarn. Organisierung der gesellschaftlichen Mitwirkung. Verh. intern. OrnithKongr. Berlin **5** 1911 (953-970). **870**
- Magaud d'Aubusson. Excursions ornithologiques sur les côtes de Bretagne. Paris Bul. soc. nat. acclim. **58** 1911 (717-725 753-763). **871**
- Maggiore, L. L'apparato mitocondriale nel cristallino. Roma Ric. Lab. anat. norm. **16** 1911 (115-120) 1 tav. **872**
- Magnan, A. Essai de morphologie stomacale en fonction du régime alimentaire chez les oiseaux. Ann. Sci. Nat. (Zool.) Paris **15** 1912 (1-41) 19 figs. **873**
- Magnan, A. De la quantité de plumes chez les Oiseaux carinates. Bul. Muséum Paris **1911** 1912 (491-492). **874**
- Magnan, A. Le foie et sa variation en poids chez les oiseaux. Bul. Muséum Paris **1911** 1912 (492-493). **875**
- Magnan, A. Le poids des reins chez les oiseaux. Bul. Muséum Paris **1911** 1912 (493-494). **876**
- Magnan, A. Le poids des ailes chez les Oiseaux carinates. Bul. Muséum Paris **1911** 1912 (580). **877**
- Magnan, A. Recherches organométriques sur le Balbuzard fluviatile (*Pandion haliaëtus* Linn.). Bul. Muséum Paris **1911** 1912 (581-582) 3 figs. **878**
- Magnan, A. Le poids des rémiges chez les Oiseaux. Bul. Muséum Paris **1912** 1912 (13-14). **879**
- Magnan, A. Recherches biométriques sur les membres supérieurs des Oiseaux. Bul. Muséum Paris **1912** 1912 (14-15). **880**
- Magnan, A. Le poids des rectrices chez les Oiseaux carinates. Bul. Muséum Paris **1912** 1912 (182-184). **881**
- Magnan, A. Le poids des tectrices et du duvet chez les Oiseaux. Bul. Muséum Paris **1912** 1912 (388-389). **882**
- Magnan, A. La quantité de sang chez les différents groupes d'Oiseaux. Bul. Muséum Paris **1912** 1912 (389-391). **883**
- Magnan, A. Rapports entre la puissance du vol et le développement des poumons chez les Oiseaux. Bul. Muséum Paris **1912** 1912 (483-485). **884**
- Magnan, A. Le poids du foie après saignée chez les oiseaux. Bul. Muséum Paris **1912** 1912 (485-488). **885**
- Magnan, A. Sur la croissance de canards soumis à quatre régimes alimentaires différents. Paris C. R. Acad. sci. **154** 1912 (1535-1538). **886**
- Magnan, A. Comparaison de la ponte chez les canards soumis à quatre régimes alimentaires différents. Paris C. R. Acad. sci. **154** 1912 (1714-1717). **887**
- Magnan, A. Variations expérimentales du foie et des reins chez les canards en fonction du régime alimentaire. Paris C. R. Acad. sci. **155** 1912 (182-185). **888**
- Magnan, A. Variations du ventricule succenturié et du gésier entraînées chez les canards par divers régimes alimentaires. Paris C. R. Acad. sci. **155** 1912 (1111-1114) fig. **889**
- Magnan, A. Adaptation fonctionnelle de l'intestin chez les canards. Paris C. R. Acad. sci. **155** 1912 (1546-1547). **890**
- Magnan, A. Le régime alimentaire et la variation du foie chez les oiseaux. Paris C. R. ass. franç. avanc. sci. **40** 1912 (521-523). **891**
- Magnan, A. *vide* Houssay.
- Magrath, H. A. F. Bird notes by the way in Kashmir. Bombay J. Nat. Hist. Soc. **21** 1912 (545-552) 2 figs. **892**
- Magrath, H. A. F. The Pintail Duck (*Dafla acuta*) shot in September. Bombay J. Nat. Hist. Soc. **21** 1912 (658). **893**
- Magrath, H. A. F. The Paradise flycatcher (*Terpsiphone paradisi*). Bombay J. Nat. Hist. Soc. **21** 1912 (660). **894**
- Magrath, H. A. F. Note on the common Kingfisher (*Alcedo ispida*). Bombay J. Nat. Hist. Soc. **21** 1912 (661-662). **895**
- Magrath, H. A. F. The notes of Pallas' fishing eagle (*Haliaëtus leucorhynchus*) and some water birds. Bombay J. Nat. Hist. Soc. **21** 1912 (662-663). **896**

- Magrath, H. A. F.** On the occurrence of the common Wood Shrike (*Tephrodornis pondicerianus*) and the Central Asian Blackbird (*Merula maxima*) near Peshawar. *Bombay J. Nat. Hist. Soc.* **21** 1912 (680-681). **897**
- Magrath, H. A. F.** More bird notes by the way in Kashmir. *Bombay J. Nat. Hist. Soc.* **21** 1912 (1304-1314). **898**
- Mailliard, J.** The California Quail. *Bird Lore Harrisburg Pa.* **14** 1912 (312-315) pl. **899**
- Mailliard, J. W.** Concerning nesting sites of the California Jay. *Condor Hollywood Cal.* **14** 1912 (42). **900**
- Mailliard, J.** *Passerella stephensi* in Marin county, California. *Condor Hollywood Cal.* **14** 1912 (63-67) figs. 20-22. **901**
- Mailliard, J. W.** Call note of the female California Quail. *Condor Hollywood Cal.* **14** 1913 (73). **902**
- Mailliard, J.** Notes from San Joaquin valley. *Condor Hollywood Cal.* **14** 1912 (74). **903**
- Mailliard, J.** Breeding of the Band-tailed Pigeon in Marin county, California. *Condor Hollywood Cal.* **14** 1912 (194). **904**
- Mallock, A.** Note on the iridescent colours of birds and insects. *London Proc. R. Soc.* **85 A** 1911 (598-605) 1 pl. ; also Washington D.C. Smithsonian Inst. Rep. **1911** 1912 (425-432). **905**
- Malyshev, S.** Der zoologische Garten von F. E. Falz-Fein. [Russ.] *St. Peterburg Trav. Soc. Nat. (Comptes Rend.)* **42** 1911 (254-270 fr. rés. 271-272). **906**
- Marek, M.** Vom Herbstzug der Rauchschnalbe in Jahre 1911. *Ornith. Jahrb. Hallein* **23** 1912 (58-65). **907**
- Marion, M.** Note sur le Grand-duc en Côte d'Or. *Paris Rev. Fr. d'Orn.* **2** 1912 (355-356). **908**
- Martorelli, G.** Il culbianco del deserto (*Saxicola deserti* Rüppell) in Lombardia. *Avicula Siena* **10** 1906 (36-37). **909**
- Martorelli, G.** Il merlo acquajolo a pancia nera (*Cinclus melanogaster*). *Lugano Boll. Soc. Ticinese Sci. Nat.* **7** 1911 (36-47). **910**
- Martorelli, G.** Sulla costituzione dell'Avifauna italiana e sui mezzi di preservarla. *Milano Rend. Ist. lomb.* **45** 1912 (456-464). **911**
- Martorelli, G.** Sopra una singolare varietà del Fanello (*Cannabina linota*). *Riv. ital. Orn. Bologna* **1** 1912 (121-124). **912**
- Marullaz, M.** Contribution à l'étude des hématozoaires des Oiseaux. *Paris C. R. soc. biol.* **72** 1912 (324-326) fig. **913**
- Masefield, J. R. B.** Report on *Aves*. *Stafford Rep. Trans. N. S. Field A.* **46** 1912 (83-90). **914**
- Mason, C. W. and Maxwell-Lefroy, H.** The food of birds in India. *Calcutta Mem. Dept. Agric. Ind. Ent. Ser.* **3** 1912 (1-371). **915**
- Masse, F.** Pour identifier les oiseaux bagués. *Paris Rev. Fr. d'Orn.* **2** 1912 (227-228). **916**
- Mathews, G. M.** The birds of Australia. Vol. i pt. 6 (287-302) Vol. ii pts. 1-4 (1-476) pls. lxxix-cxx. London (Witherby) 1912 4to. **917**
- Mathews, G. M.** The validity of Brissonian Genera. *Ibis London* **1912** (212-215). **918**
- Mathews, G. M.** A reference list to the birds of Australia. *Tring Nov. Zool.* **18** 1912 (171-455). **919**
- Mathews, G. M.** Additions and corrections to my reference list to the birds of Australia. *London Austral Av. Rec.* **1** 1912 (25-52 73-80 81-103 118-120). **920**
- Mathews, G. M.** The late John Gerard Keulemans. *Brit. Birds London* **6** 1912 (58). **921**
- Mathews, G. M.** Notes on Australian Cuckoos. *London Austral Av. Rec.* **1** 1912 (2-22). **922**
- Mathews, G. M.** Dates of issue of Lear's *Illustr. Psittacidae* and of the *Verhandelingen over de Natuurlijke Geschiedenis: Land- en Volkenkunde*. *London Austral Av. Rec.* **1** 1912 (23-24). **923**
- Mathews, G. M.** Description of new or hitherto undescribed eggs of some Australian birds. *London Austral Av. Rec.* **1** 1912 (53-64). **924**
- Mathews, G. M.** Note on the coloration of the head and neck of the Australian Cassowary. *London Austral Av. Rec.* **1** 1912 (66-67) pl. i. **925**

- Mathews, G. M.** Diggles's new species of Australian birds. London Austral Av. Rec. 1 1912 (68-72). **926**
- Mathews, G. M.** On the generic name of the Barn-Owl. London Austral Av. Rec. 1 1912 (104). **927**
- Mathews, G. M.** New generic names for Australian Birds. London Austr. Av. Rec. 1 1912 (105-117). **928**
- Mathey-Dupraz, A.** Beringte Vögel. Basel Ornithol. Beob. 8 1910-1911 (89-91). **929**
- Mathey-Dupraz, A.** Zweites Verzeichnis der in Colombier (bei Neuenburg) beringten Vögel. Basel Ornithol. Beob. 8 1910-1911 (184). **930**
- Mathey-Dupraz, A.** Contribution à l'étude de la faune ornithologique du Canton de Neuchâtel. Rameau Sapin Neuchâtel 45 1911 (35-37) 46 1912 (25-26 33-35). **931**
- Matthews, R. H.** Reminiscences of Maori life fifty years ago. Pigeon-snaring. Trapping of Hawks. Wellington Trans. and Proc. N. Zeal. Inst. 43 1911 (598-605). **932**
- Maxwell-Lefroy, H.** *vide* Mason.
- Mayhoff, H.** Aus Südwestnorwegen. Ein ornithologisches Tagebuch. Ornith. Monatschr. Magdeburg 37 1912 (193-208 225-237). **933**
- Meade-Waldo, E. G. B.** The British Kites in 1912. London Bull. Brit. Orn. Cl. 31 1912 (24). **934**
- Meade-Waldo, E. G. B.** and others. The food of the Little Owl. Brit. Birds London 6 1912 (64-66). **935**
- Medigreceanu, F.** *vide* Bertrand.
- Meilheurat, V.** Persistence des instincts chez les canards sauvages conservés à l'état domestique. Paris Rev. Fr. d'Orn. 2 1912 (356-359). **936**
- Meinertzhagen, R.** On the birds of Mauritius. Ibis London 1912 1912 (82-108) 1 map. **937**
- Mellor, J. W.** Kangaroo Island reserve. Emu Melbourne 12 1912 (39-40). **938**
- Menegaux, A.** Étude des oiseaux de l'Équateur rapportés par le Dr. Rivet: dans "Mission du service géographique de l'Armée pour la mesure d'un Arc de Méridien Équatorial en Amérique du Sud 1899-1906." Zoologie 1911 (B 1-128) 4 pls. **939**
- Menegaux, A.** Les migrations des Cailles. Bulletin de l'Institut général psychologique Paris 12 1912 (92-94). **940**
- Menegaux, A.** Catalogue des Oiseaux de la collection Marmottan du Muséum d'Histoire naturelle de Paris. Paris Bul. soc. philom. (10) 4 1912 (9-78). **941**
- Menegaux, A.** Contribution à l'étude de la migration des Cailles. Paris Rev. Fr. d'Orn. 2 1912 (251-256); see also Etoc *t.c.* p. 391. **942**
- Menegaux, A.** Reproduction des aigrettes en captivité. Paris Rev. Fr. d'Orn. 2 1912 (279-280). **943**
- Menegaux, A.** Etude d'une collection faite par M. Reinburg aux environs de Baños sur le haut pastaza (Equateur). Paris Rev. Fr. d'Orn. 2 1912 (387-391). **944**
- Menegaux, A.** Les déboires de l'élevage de l'autruche en Algérie. Rev. sci. Paris 50 2. semest. 1912 (44-49). **945**
- Menegaux, A.** Sur les migrations des Cailles. Rev. sci. Paris 50 2. semest. 1912 (394-396). **946**
- Menesdorfer, G.** Vogelzugsdaten vom Frühjahre 1912 aus Budua. Aquila Budapest 19 1912 (469-472). **947**
- Mengel, G. H.** A second winter oriole. Bird-Lore Harrisburg Pa. 14 1912 (109). **948**
- Menier, F.** Sur une anomalie de la couche musculaire superficielle de la région fessière droite chez un moineau commun (*Passer domesticus* Briss.). Paris C. R. soc. biol. 73 1912 (678-679) fig. **949**
- Merk-Buchberg, M.** Vogelleben im Moos. Zool. Beob. Frankfurt a. M. 53 1912 (307-313). **950**
- Merrill, D. E.** Sora Rail (*Porzana carolina*) in New Mexico. Auk Cambridge Mass. 29 1912 (536). **951**
- Mesnil, F. et Blanchard, M.** Infections de poules dues aux *Trypanosoma gambiense* et *T. rhodesiense*. Paris C. R. soc. biol. 72 1912 (938-940). **952**
- Meyere, J. L. F. de.** Over het nest van den goudvink (*Carduelis*). [Ueber das Nest des Goldfinken.] Amsterdam Versl. Med. Ned. Ornith. Ver. 8 1912 (8-12). **953**

- Meyere, J. L. F. de.** Abnormale nesten van de zanglijster. [Abnormale Nester der Singdrossel.] Amsterdam Verh. Med. Ned. Ornith. Ver. **8** 1912 (38-41). **954**
- Meyere, J. L. F. de.** Maken Erksters werkelijk „Fopnesten“? [Does *Pica pica* make false nests?] *Ardea Leiden* **1** 1912 (25-28). **955**
- Meyere, J. L. F. de.** Enkele verschillen van biologischen en vocalen aard. tusschen *Parus palustris longirostris* Kl. en *Parus atricapillus rhenanus* Kl. [Einige Unterschiede biologischer und vokaler Natur zwischen *Parus palustris longirostris* und *Parus atricapillus rhenanus*.] *Ardea Leiden* **1** 1912 (46-48). **956**
- Meyere, J. L. F. de.** De knifleeuweriken te Ede. [*Galerida cristata* at Ede.] *Ardea Leiden* **1** 1912 (77-81). **957**
- Miller, A. M.** The development of the jugular lymph sac in birds. *Amer. J. Anat. Philadelphia* **12** 1912 (473-491) 10 figs. **958**
- Miller, N.** A method for handling chick embryos. *Anat. Rec. Philadelphia* **5** 1911 (391-392) 2 figs. **959**
- Miller, R. F.** The Semipalmated Sandpiper in Philadelphia county, Pa. *Auk Cambridge Mass.* **29** 1912 (101). **960**
- Miller, W. De W.** The European Widgeon at Gardner's island, New York. *Auk Cambridge Mass.* **29** 1912 (235). **961**
- Miller, W. De W.** A revision of the classification of the Kingfishers. *New York N.Y. Bull. Amer. Mus. Hist.* **31** 1912 (239-311). **962**
- Millet-Horsin, Dr.** Notes ornithologiques sur la Tunisie. *Paris Rev. Fr. d'Orn.* **2** 1912 (267-271 315-318 331-334 351-354 367-375). **963**
- Mills, S.** Leucostictes making Cliff Swallows' nests their night abode. *Bird Lore Harrisburg Pa.* **14** 1912 (170). **964**
- Mintus, A.** Ueber den Tannenhäher 1911/12 im Wiener Becken. *Ornith. Jahrb. Hallein* **23** 1912 (210-212). **965**
- Mitchell, I. N.** Winter Robins in Wisconsin. *Bird Lore Harrisburg Pa.* **14** 1912 (165-166). **966**
- Mitchell, J. jun.** Pigeon Hawk in South Carolina in winter. *Auk Cambridge Mass.* **29** 1912 (541). **967**
- [**Molčanov, L. A.**] Молчановъ, Л. А. Лѣтняя орнитофауна дельты Аму-Дарьи. [Die Sommerornithofauna des Deltas vom Amudarjâ.] *Mess. ornith. Moskva* **3** 1912 (261-286). **968**
- Moltschanov, L. A.** *vide* Molčanov.
- Montell, J.** Om jaktfalkens häckande. [Über das Nisten des *Falco gyrfalco*.] *Helsingfors F. Jakttidn* **6** 1911 (18-20). **969**
- Montlezun, A. de.** Notes relatives à quelques Oiseaux rares capturés dans le département de la Haute-Garonne en 1910. *Toulouse Bul. soc. hist. nat.* **43** 1910 (102-104). **970**
- Moore, R. T.** The Least Sandpiper during the nesting season in the Magdalen islands. *Auk Cambridge Mass.* **29** 1912 (210-223) pls. xiii xiv. **971**
- Moore, R. T.** The Bittern (*Botaurus lentiginosus*) wintering in New Jersey. *Auk Cambridge Mass.* **29** 1912 (236). **972**
- Moore, R. T.** The Baltimore Oriole (*Icterus galbula*) wintering in New Jersey. *Auk Cambridge Mass.* **29** 1912 (244-245). **973**
- Morand, P.** Beitrag zur Biologie des Schneehuhns. *Verh. Schweiz. Natf. Ges.* **95** 1912 (233-235). **974**
- Moreillon, M.** Arrivées ou premiers chants de quelques oiseaux à Moncherand près Orbe. *Basel Ornithol. Beob.* **8** 1910-1911 (183). **975**
- Morgan, T. H. and Goodale, H. D.** Sex-linked inheritance in poultry. *New York N.Y. Ann. Acad. Sci.* **22** 1912 (113-133) pls. xvii-xix. **976**
- Mörner, C. T. Graf.** Über Ovumcoid und Zucker in dem Weissen der Vogeleier; eine systematische Untersuchung. *Hoppe-Seylers Zs. physiol. Chem. Strassburg* **80** 1912 (430-473). **977**
- Morris, R. O.** The Starling (*Sturnus vulgaris*) at Springfield, Mass. *Auk Cambridge Mass.* **29** 1912 (243). **978**
- Morse, A. P.** A pocket list of the birds of eastern Massachusetts with special reference to Essex county. (1-92). *Salem Mass. (Peabody Acad. Sci.)* 1912 sm. 8vo. **979**
- Morse, H. G.** Egrets [*Herodias egretta*] at Huron, Ohio. *Wilson Bull. Oberlin Ohio* **24** 1912 (51-52). **980**

- Mortensen, H. C. C.** Fra Fuglemærkningsstationen i Viborg. [The station for bird-marking at Viborg in Jutland.] *København Ornith. Tids.* **6** 1912 (98-127) 9 figs. **981**
- Mühlemann, H.** Eine Krähenstation. *Basel Ornithol. Beob.* **6** 1908 (133-135). **982**
- Mühlemann, H.** Beobachtungen über den Mauersegler (*Cypselus apus* L.) *Basel Ornithol. Beob.* **8** 1910-1911 (6-9). **983**
- Mullens, W. H.** Robert Sibbald and his prodromus. *Brit. Birds London* **6** 1912 (34-57) 1 pl. 2 figs. **984**
- Munn, P. W.** Spring display of the Stone-Curlew. *Brit. Birds London* **5** 1912 (226-227). **985**
- Munn, P. W.** Madeiran Fork-tailed Petrel (*Oceanodroma castro*) in Hampshire. *Brit. Birds London* **5** 1912 (252-253). **986**
- Munsterhjelm, L.** Om fågelfaunan i Turtola och Kolari Kommuner af Uleåborgs Län. *Helsingfors Acta Soc. Fauna et Fl. Fenn.* **33** No 4 1910 (1-92) 1 Karta. **987**
- Munsterhjelm, L.** Om fågelfaunan i Könkämä-dalen uti Lappmarken. *Helsingfors Acta Soc. Fauna et Fl. Fenn.* **34** No. 8 1911 (1-82) 1 Karta. **988**
- Murphy, R. C.** An albino Semipalmated Sandpiper. *Auk Cambridge Mass.* **29** 1912 (238). **989**
- Myers, H. W.** Nesting habits of the Western Bluebirds. *Condor Hollywood Cal.* **14** 1912 (221-222). **990**
- Nehrkorn, A.** Wilhelm Blasius. *J. Ornith.* **60** 1912 (619-620). **991**
- Nelson, E. W.** Descriptions of two new species of Nun Birds from Panama. *Washington D.C. Smithsonian Inst. Misc. Collect.* **56** No. 37 1912 (1-2). **992**
- Nelson, E. W.** Descriptions of new genera, species and subspecies of birds from Panama, Columbia and Ecuador. *Washington D.C. Smithsonian Inst. Misc. Collect.* **60** No. 3 1912 (1-25). **993**
- Nemiloff, A.** Ueber Nervenzellen in der weissen Substanz des Rückenmarkes von Säugethieren und Vögeln. [Russ.] *St. Peterburg Trav. Soc. Nat.* **42** 1912 (Comp. Rend. 122-136 rés. fr. 150-151) 1 pl. 1 fig. **994**
- Dal Nero, V.** Catture di Uccelli rari avvenute nella provincia di Verona (1911). *Riv. ital. Orn. Bologna* **1** 1912 (164-165). **995**
- [Nesterov, P. V.] Нестеровъ, П. В. Забѣтки о закавказскихъ птицахъ. [Mitteilungen über transkaukasische Vögel.] *Mess. ornith. Moskva* **3** 1912 (151-156). **996**
- Nesterov, P. V. et Nikrandrov, J. N.** Sur la migration vernale des oiseaux dans les environs de Pskov. [Russ.] *St. Peterburg Bull. Acad. Sci.* **1912** 1912 (601-602). **997**
- Neumann, L. G.** Sur le genre *Laemobothrion* Nitzsch. *Bul. Muséum Paris* 1912 (339-342). **998**
- Newstead, R.** [The bird enemies of the] Tick and other bloodsucking Anthropoda of Jamaica. *Bull. Dept. Agric. Jamaica* **1** 1910 (145-175 birds 162-165). **999**
- Nichols, J. B. and others.** Three new British Birds. *Brit. Birds London* **5** 1912 (238-241) 1 fig. **1000**
- Nichols, J. B.** Rare birds in Sussex. *British Birds London* **6** 1912 (184). **1001**
- Nichols, J. T.** Notes on recognition marks in certain species of birds. *Auk Cambridge Mass.* **29** 1912 (44-48). **1002**
- Nicoll, M. J.** Wild birds of the Giza gardens. (1-32) *Cairo (Nat. Printing Dept.)* 1912 8vo. **1003**
- Nicoll, M. J.** Contributions to the ornithology of Egypt. No. iii. The birds of the Wadi Nation. *Ibis London* **1912** 1912 (405-453). **1004**
- Nielsen, J. C.** *Mylaea anomala* Jaenn., a parasite of South American birds. *Kjöbenhavn Nat. Med.* **63** 1912 (195-208). **1005**
- Nikandrov, J. N.** *vide* Nesterov,
- Ninni, E.** A proposito della *Sula bassana* L. nel Veneto. *Avicula Siena* **12** 1908 (33-34). **1006**
- Ninni, E.** Sopra due rarissime specie di Uccelli presi nel Veneto. *Avicula Siena* **12** 1908 (108-110). **1007**
- Noble, H.** A distinction between young and old Red-legged Partridges. *Brit. Birds* **5** 1912 (248-249). **1008**
- Noggler, J.** Ankunfts- und Abzugsdaten aus Mariahof. 1911. *Ornith. Jahrb Hallein.* **23** 1912 (212-215). **1009**

- Noll-Tobler, H.** Die Lachmövenkolonie im Linthgebiet bei Uznach. Basel Ornithol. Beob. 7 1909-1910 (33-36) 1 Abb. 1010
- Noll-Tobler, H.** Beobachtungen über die Wasserralle (*Rallus aquaticus* L.) im untern Linthgebiet. Basel Ornithol. Beob. 8 1910-1911 (54-58). 1011
- Noll-Tobler, H.** Über die Vogelwelt des Uznacherriedes. St. Gallen Jahrb. Natw. Ges. 1911 1912 (1-30) 7 figs. 1012
- Noome, F. O.** Field-notes on birds collected at Blaauwberg, N. Transvaal. Pretoria J. S. Afric. Ornith. Union 8 1912 (15-21). 1013
- North, A. J.** Nests and eggs of birds found breeding in Australia and Tasmania. Australian Museum Special Catalogue No. i Vol. iii Parts iv and v (249-362) pls. A15-A17 and Bxvi. Sydney 1912 4to. 1014
- North, A. J.** Descriptions of two new species and a new genus of Australian birds. Ibis London 1912 1912 (118-120). 1015
- North, A. J.** Note on the habitat of Grant's Bird of Paradise (*Paradisaea granti* North.) Vict. Nat. Melbourne 27 1911 (187). 1016
- Norton, A. H.** The Pintail Duck (*Dafila acuta*) in winter near Portland, Maine. Auk Cambridge Mass. 29 1912 (235-236). 1017
- Oberholser, H. C.** The status of *Butorides brunescens* (Lembeye). Washington D.C. Proc. Biol. Soc. 25 1912 (53-56). 1018
- Oberholser, H. C.** Descriptions of one hundred and four new species and sub-species of birds from the Barussan Islands and Sumatra. Washington D.C. Smithsonian Inst. Misc. Collect. 60 No. 7 1912 (1-22). 1019
- Oberholser, H. C.** A revision of the forms of the Edible-nest Swiftlet, *Collocalia fuciphaga* (Thunberg). Washington D.C. Smithsonian Inst. Proc. U. S. Nation. Mus. 42 1912 (11-20). 1020
- Oberholser, H. C.** A revision of the sub-species of the Green Heron (*Butoride virescens* [Linnaeus]). Washington D.C. Smithsonian Inst. Proc. U. S. Nation. Mus. 42 1912 (529-577). 1021
- Oberholser, H. C.** A revision of the forms of the Great Blue Heron (*Ardea herodias* Linnaeus). Washington D.C. Smithsonian Inst. Proc. U. S. Nation. Mus. 43 1912 (531-559). 1022
- Ogilvie-Grant, W. R.** Catalogue of the collection of Bird's Eggs in the British Museum (Natural History) Vol. 5 Carinatae (Passeriformes completed) (xxiv+548) 22 pls. London 1912 8vo. 1023
- Ogilvie-Grant, W. R.** General index to a "Hand-list of the genera and species of Birds [Nomenclator avium tum fossilium tum viventium] vols. i-v." (vi+200) London 1912 8vo. 1024
- Ogilvie-Grant, W. R.** Obituary notice of E. W. Oates. Bombay J. Nat. Hist. Soc. 21 1912 (651-652). 1025
- Ogilvie-Grant, W. R.** On the eggs of certain birds of Paradise. Ibis London 1912 1912 (112-118) pl. iii. 1026
- Ogilvie-Grant, W. R.** Notes on *Laniarius mufumbiri*. Ibis London 1912 1912 (332-334) pl. vi. 1027
- Ogilvie-Grant, W. R.** On the birds of Ngamiland. With itinerary and field-notes by R. B. Woosnam M.B.O.U. Ibis London 1912 1912 (355-404) map. 1028
- Ogilvie-Grant, W. R.** Further notes on the birds of the island of Formosa. Ibis London 1912 1912 (643-657) pls. xiii xiv. 1029
- Ogilvie-Grant, W. R.** *Pytelia chubbi* sp. n. described. London Bull. Brit. Ornith. Cl. 29 1912 (64-65). 1030
- Ogilvie-Grant, W. R.** Remarks on Australian species of *Corvus*. London Bull. Brit. Ornith. Cl. 29 1912 (70-74). 1031
- Ogilvie-Grant, W. R.** Four new species and subspecies described from Formosa. London Bull. Brit. Orn. Cl. 29 1912 (107-109). 1032
- Ogilvie-Grant, W. R.** On a new Flycatcher *Erythrocerus nyasae* from Nyasaland, a new Scops-Owl (*Scops spurrelli*) from Ashanti and note on some rare Francolins from N. E. Africa. London Bull. Brit. Ornith. Cl. 29 1912 (115-117). 1033
- Ogilvie-Grant, W. R.** [edited by]. Report on the immigrations of summer residents in the spring of 1911: also notes on the migratory movements and

- records received from light-houses and light-vessels during the autumn of 1910 by the Committee appointed by the British Ornithologists' Club. London Bull. Brit. Ornith. Cl. **30** 1912 (1-332). **1034**
- Ogilvie-Grant, W. R. *Abrornis albigularis formosana* Laubmann = *Cryptolopha fulvifacies* (Swinh.) juv. London Bull. Brit. Orn. Cl. **31** 1912 (14-15). **1035**
- Ogilvie-Grant, W. R. *Phasianus strauschi chonensis* subsp. n. described. London Bull. Brit. Orn. Cl. **31** 1912 (16). **1036**
- Ogilvie-Grant, W. R. *Polioospiza algonensis* sp. n. described. London Bull. Brit. Ornith. Cl. **31** 1912 (17-18). **1037**
- Ogilvie-Grant, W. R. On the characters differentiating *Clangula glaucion* and *C. islandica* in immature dress. London Bull. Brit. Ornith. Cl. **31** 1912 (18-20 29) fig. **1038**
- Ogilvie-Grant, W. R. Breeding and "eclipse" plumages of the Common Partridge. Brit. Birds London **5** 1912 (234-236) 4 figs. **1039**
- Ogilvie-Grant, W. R. and others. The gun at home and abroad. British Game Birds and Wild Fowl. (xii+444) 30 pls. London (London and Counties Press Assoc.) 1912 4to. **1040**
- Ogilvie-Grant, W. R. *vide* Wollaston.
- Oliver, W. R. B. The geographic relationships of the birds of Lord Howe, Norfolk and the Kermedec Islands. Wellington Trans. N. Zeal. Inst. **44** 1912 (214-221). **1041**
- Olivier, J. Een gevleugeld weerprofeet. [Ein geflügelter Wetterprophet.] Teysmannia Batavia **23** 1912 (706-711) **1042**
- Olsen, R. J. Danmarks ynglende Strandfugle. Faunistiske Undersøgelser. Beretning om en Rejse i Farvandede Syd for Fyn i 1907. [The shore birds breeding in the waters south of Funen 1907.] København Ornith. Tids. **6** 1911 (1-54) 4 figg. **1043**
- Oort, E. D. van. Het ringen van in het wild levende vogels. [Das Beringen der im Freien lebenden Vögel.] Amsterdam Versl. Med. Ned. Ornith. Ver. **8** 1912 (12-20). **1044**
- Oort, E. D. van. Ornithologische waarnemingen, gedaan in Nederland van 1 September 1910 tot en met 31 Augustus 1911. [Ornithologische Beobachtungen in den Niederlanden vom 1 September bis zum 31 August 1911.] Amsterdam Versl. Med. Ned. Ornith. Ver. **8** 1912 (20-38). **1045**
- Oort, E. D. van. Ornithologische waarnemingen in Nederland. [Ornithologische Beobachtungen in den Niederlanden.] Ardea Leiden **1** 1912 (17-24 55-57 97-106). **1046**
- Oort, E. D. van. Over twee voor Nederland miskonde vogelsoorten. [Ueber zwei für die Niederlande verkannte Vogelarten.] Ardea Leiden **1** 1912 (29-30). **1047**
- Oort, E. D. van. Resultaten van het ringonderzoek van het Rijks Museum to Leiden. [Resultate der Ringuntersuchung durch das Reichsmuseum zu Leiden.] Ardea Leiden **1** 1912 (31-36 41-43). **1048**
- Oort, E. D. van. Een uniek exemplaar van "Schlegel—De Vogels van Nederland." Ardea Leiden **1** 1912 (37-38). **1049**
- Oort, E. D. van. Over in Nederland waargenomen voorwerpen van de kleine mantelmeeuw. [In den Niederlanden beobachtete Exemplare von *Larus fuscus*.] Ardea Leiden **1** 1912 (61-62). **1050**
- Oort, E. D. van. On *Aestrelata aterrima* (Bonaparte). Leiden Notes Mus. Jentink **34** 1912 (70). **1051**
- Oort, E. D. van. Bird-marking in the Netherlands. II. Recovery of marked birds. Leiden Notes Mus. Jentink **34** 1912 (243-256). **1052**
- Oort, E. D. van. Report on birds from the Netherlands received from 1 September 1911 to 1 September 1912. Leiden Notes Mus. Jentink **34** 1912 (231-234). **1053**
- Oppel, L. Die Taubheit des Auerhahnes während des Schleifens. D. Jäger München **34** 1912 (401). — Entgegnung darauf v. Wurm *t.c.* (461. 590) u. Antwort v. Oppel (514 631). **1054**
- Osmaston, A. E. Eggs of the Large Hawk-cuckoo (*Hierococcyx sparverioides*). Bombay J. Nat. Hist. Soc. **21** 1912 (1330-1331). **1055**
- [Ostermann, A. I.] Остерманъ, А. И. Замѣтки о птицахъ Бессарабиѣ.

[Notizen über die Vögel Bessarabiens.]
Kišinev Trd. obč. jest. 2 1909-1910 u.
1910-1911 (1912) (165-191 mit deutsch.
Rés.). 1056

[Otto, B. P.] Отто, Б. П. Къ налету
бѣлокрылаго клеста (*Loxia bifasciata*)
осенью 1911 года. [Zum Herbstzuge
des weissbinden Kreuzschnabels (*Loxia*
bifasciata) im Jahre 1911.] Mess.
ornith. Moskva 3 1912 (249-250). 1057

Otto, H. Beiträge zur Vogelfauna
des Niederrheins. Zool. Beob. Frank-
furt a. M. 53 1912 (114-118). 1058

Ottow, B. Eine Masseneinwanderung
von *Loxia bifasciata* in Livland im
Herbste 1911. Ornith. Monatsber.
Berlin 20 1912 (11 62). 1059

Ottow, B. Das Verhalten der Vögel
während der Sonnenfinsternis vom 17.
April 1912. Ornith. Monatsber. Berlin
20 1912 (97). 1060

Owen, J. H. Wrens as foster-parent
to the Cuckoo. Brit. Birds London 6
1912 (91-92). 1061

O[wen], J. H. The nesting season
1910 and 1911. Felsted Rep. Sch. Sci.
Soc. No. 22 1912 (22-29) 2 pls. 1062

Owen, T. A season with the birds of
Anglesey and north Carnarvonshire.
Zoologist London 1912 1912 (304-313
342-348). 1063

Page, W. T. Aviaries and aviary
life. (xii+239) Ashbourne (J. H.
Henstock) 1912 8vo. 1064

Page, W. T. Breeding of the Indian
White-eye *Zosterops palpebrosa*. Avi-
cult. Mag. London 3 1912 (114-117).
1065

Palmén, J. A. Märkt exemplar af
Sturnus vulgaris. [Mit Marke ver-
sehenes Exemplar von *Sturnus vul-
garis*.] Helsingfors Medd. Soc. Fauna
et Fl. Fenn 38 1912 (89 deutsches Ref.
199). 1066

Palmer, T. S. The Man-o'-war-bird
(*Fregata aquila*) on the coast of Georgia.
Auk Cambridge Mass. 29 1912 (531-
532). 1067

Palmer, T. S. The Calaveras Warbler
in the Yellowstone national park. Con-
dor Hollywood Cal. 14 1912 (224-225).
1068

Palmgren, R. *Tetrao tetrix* L. ×
Lagopus lagopus (L.). Helsingfors

Medd. Soc. Fauna et Fl. Fenn. 38 1912
(28-32 deutsches Ref. 198-199) 3 figs.
1069

Paris, P. Pour le Circaète Jean le
blanc. Paris Bul. soc. nat. acclim. 59
1912 (493-497). 1070

Paris, P. Sur la présence des cor-
puscules de Herbst dans la glande
uropygienne des oiseaux. Paris C. R.
Acad. sci. 155 1912 (786-787). 1071

Paris, P. Structure histologique de
la glande uropygienne du *Rhynchotus*
rufescens. Paris C. R. ass. franç.
avanc. sci. 40 1912 (526-528). 1072

Paris, P. Oiseaux fossiles de France.
Paris Rev. Fr. d'Orn. 2 1912 (283-
298). 1073

Paris, P. Le Casse-noix en Côte-d'or.
Paris Rev. Fr. d'Orn. 2 1912 (349-351).
1074

Parkin, T. On a British-killed
example of *Terekia cinerea*. London
Bull. Brit. Orn. Cl. 29 1912 (18-19).
1075

Parkin, T. and others. The Terek
Sandpiper in Kent. A new British Bird.
Brit. Birds London 6 1912 (74-78).
1076

Parkin, T. Red-breasted Sandpiper
in Sussex. Brit. Birds London 6 1912
(95). 1077

Parschtschenka, S. Vogelzugsdaten
aus Jaroslaw. Aquila Budapest 19 1912
(477-478). 1078

Passerini, N. e Cecconi, G. Osser-
vazioni sopra la alimentazione degli
Uccelli. Contributo allo studio della
Bromatologia ornitologica. Firenze
Atti Acc. Georgof. 4 1907 (334-424).
1079

Passig, H. Ein Rauchschwalbennest
ohne Mauerung. Gefied. Welt Magde-
burg 41 1912 (118). 1080

Paterson, D. R. *vide* Proger.

Paterson, J. The return of summer-
birds to the "Clyde" area in 1912.
Glasgow Nat. 4 1912 (66-70). 1081

Paton, D. N. On the extrinsic nerves
of the heart of the bird. J. Physiol.
Cambridge 45 1912 (106-114). 1082

Paton, D. N. and Mackie, W. C. The
liver in relation to creatin metabolism
in the bird. J. Physiol. Cambridge 45
1912 (115-118). 1083

- Patten, C. J.** The vernal plumage-changes in the adolescent Blackbird. (*Turdus merula*) and their correlation with sexual maturity. London Rep. Brit. Ass. **1911** 1912 (404-405). **1084**
- Patten, C. J.** A case of a remarkable egg of *Falco tinnunculus* laid under remarkable circumstances. London Rep. Brit. Ass. **1911** 1912 (405-406). **1085**
- Patten, C. J.** Some birds new to Ireland. Irish Nat. Dublin **21** 1912 (49-51 156 182) pl. i. (also **Barrington** *ibid.* p. 84). **1086**
- Patten, C. J.** White Wagtails at the Tuskar rock. Irish Nat. Dublin **21** 1912 (120). **1087**
- Patten, C. J.** Wrens on migration observed at the Tuskar rock and lighthouse. Irish Nat. Dublin **21** 1912 (125-130). **1088**
- Patten, C. J.** Grasshopper-warblers on migration observed at the Tuskar lighthouse. Irish Nat. Dublin **21** 1912 (137-142). **1089**
- Patten, C. J.** Sandwich Tern at Wexford Bay. Irish Nat. Dublin **21** 1912 (156). **1090**
- Patten, C. J.** Rock-pipits on migration observed at the Tuskar rock. Irish Nat. Dublin **21** 1912 (164-170). **1091**
- Patten, C. J.** Spotted Flycatchers on migration observed at Tuskar rock and lighthouse. Irish Nat. Dublin **21** 1912 (193-200). **1092**
- Patten, C. J.** Yellow Wagtail, adolescent Purple Sandpiper and Grasshopper Warblers from Tuskar rock. Irish Nat. Dublin **21** 1912 (207-208). **1093**
- Patten, C. J.** Discovery of the Tree-Pipit on the Tuskar rock, Co. Wexford. Irish Nat. Dublin **21** 1912 (209-213) pl. iv. (also **Moffat** *ibid.* p. 246). **1094**
- Patten, C. J.** Reported occurrence of the Dartford Warbler at the Tuskar Light Station. Nature London **90** 1912 (306). **1095**
- Paterson, A. H.** Some miscellaneous notes from Great Yarmouth. Zoologist London **1912** 1912 (417-423) [also **Tuck** *ibid.* p. 461]. **1096**
- Peabody, P. B.** Alleged breeding occurrence of the Le Conte Sparrow in Illinois. Wilson Bull. Oberlin Ohio **24** 1912 (36-39). **1097**
- Pearl, R.** The Mendelian inheritance of fecundity in the domestic fowl. Amer. Nat. New York **46** 1912 (697-711). **1098**
- Pearl, R.** Notes on the history of barred breeds of poultry. Biol. Bull. Woods Hole Mass. **22** 1912 (297-308) figs. 1-3. **1099**
- Pearson, C. E.** *vide* Wallis.
- Pearson, T. G.** The White Egrets. Bird Lore Harrisburg Pa. **14** 1912 (62-69) 2 figs. 2 pls. **1100**
- Pelt-Lechner, A. A. van.** Oologia nederlandica. Eggs of birds breeding in the Netherlands. Part 3. 36 pls. with text. The Hague (M. Nijhoff) 1912. 26 cm. **1101**
- Pelt-Lechner, A. A. van.** Over hot waarnemen van *Coracias garrulus*. Ardea Leiden **1** 1912 (49). **1102**
- Pelt-Lechner, A. A. van.** Varia oölogica en nidologica. [Varia oologica und nidologica.] Ardea Leiden **1** 1912 (58-59 82-84). **1103**
- Pelt-Lechner, A. A. van.** Die Eischale von *Upupa epops* (L.). Aus dem Holländischen übersetzt von T. Swart. Zs. Oologie Berlin **22** 1912 (52-53). **1104**
- Pennock, C. J.** Nesting of the Passenger Pigeon (*Ectopistes migratorius*) in New York. Auk Cambridge Mass. **29** 1912 (238-239). **1105**
- Pensa, A.** Osservazioni sulla struttura e sullo sviluppo delle ghiandole linfatiche degli Uccelli. Nota prev. Pavia Boll. Soc. med. chir. **21** 1907 (24-39). **1106**
- Pentland, G. H.** Notes on the increase and decrease of some mammals, birds and insects in the county of Louth during the last fifty years. Irish Nat. Dublin **21** 1912 (145-148). **1107**
- Percival, A. B.** *Cryptospiza borealis* sp. n. London Bull. Brit. Orn. Cl. **29** 1912 (76). **1108**
- Petersen, K.** Aarsegnons Fauna. Flora og Fauna, Kjobenhavn **1911** 1912 (97-100). **1109**
- Petersen, O. G.** En vinters fugle i landbohøjskolens have. [The birds of a Copenhagen garden during the winter.]

- København Ornith. Tids. **6** 1912 (230-232). **1110**
- Petit, I. Note sur l'alouette hausse-col (*Otocoris alpestris* Bp. et Linn.). Paris Bul. soc. zool. **36** 1912 (211). **1111**
- Petit, I. Notes et observations sur les hirondelles et les martinets. Paris Bul. soc. zool. **36** 1912 (204-206) **37** 1912 (187-188). **1112**
- Petit, L. Notes et observations sur la longévité chez les Oiseaux. Paris Bul. soc. zool. **37** 1912 (236-238). **1113**
- Pézard, A. Sur la détermination des caractères sexuels secondaires chez les Gallinacés. Paris C. R. Acad. sci. **154** 1912 (1183-1186). **1114**
- Phelps, F. M. A March bird list from the Caloosahatchee river and Lake Okeechobee, Fla. Wilson Bull. Oberlin Ohio **24** 1912 (117-125) 7 pls. **1115**
- Phillips, J. C. A reconsideration of the American Black Ducks with special reference to certain variations. Auk Cambridge Mass. **29** 1912 (295-306) pl. xv. **1116**
- Phillips, J. C. The Hawaiian Linnet, *Carpodacus mutans* Grinnell. Auk. Cambridge Mass. **29** 1912 (336-338). [also Grinnell, *t.c.* p. 543]. **1117**
- Phillips, J. C. The European Teal (*Nettion crecca*) again returning to Wenham, Mass. Auk Cambridge Mass. **29** 1912 (535). **1118**
- Phillips, J. L. Wintering Cranes in New England. Avicult. Mag. London **3** 1912 (222-224). **1119**
- Phillipps, R. The Naked-throated Bell-bird and his battles. Avicult. Mag. London **3** 1912 (246-248). **1120**
- Phillott, D. C. *Schizodaactylus monstrosus* as bait for birds. Rec. Ind. Mus. Calcutta **7** 1912 (209-210). **1121**
- Picchi, C. British Redbreast in Italy. Brit. Birds London **6** 1912 (121). **1122**
- Picchi, C. L'*Erithacus rubecula melophilus* Hart. in Italia. Riv. ital. Orn. Bologna **1** 1912 (147-151) 2 figs. **1123**
- Picchi, C. Precoce cattura di un *Lanius excubitor homeyeri* (Cab.) nella Val di Chiana. Riv. ital. Orn. Bologna **1** 1912 (237-240) 1 tav. **1124**
- Picchi, C. La dispersione del *Cyanopolius cooki* Bp. fuori della penisola iberica. Riv. ital. Orn. Bologna **2** 1912 (16-19). **1125**
- Pichot, P. A. La capture des Oiseaux de paradis et leur acclimatation. Paris Bul. soc. nat. acclim. **58** 1911 (589-600). **1126**
- Pisani, F. Avifauna calabra (Distretto di Rossano calabro). Avicula Siena **11** 1907 (113-121). **1127**
- Pitman, C. R. S. The Painted Snipe (*Rostratula capensis*). Bombay J. Nat. Hist. Soc. **21** 1912 (666-667). **1128**
- Pitman, C. R. S. Notes on the southern migration of snipe near Calcutta 1911. Bombay J. Nat. Hist. Soc. **21** 1912 (684-685). **1129**
- Pittet, L. L'Ornithophénologie et les résultats obtenus en marquant les oiseaux migrants. Basel Ornithol. Beob. **7** 1909-1910 (118-119 132-135). **1130**
- Pittet, L. A propos du Héron cendré (*Ardea cinerea*). Basel Ornithol. Beob. **8** 1910-1911 (152). **1131**
- Plaček, B. Aviarie variae. Biologische Nachträge und Anregungen. Ornith. Jahrb. Hallein. **23** 1912 (194-210). **1132**
- Plaz, J. Graf. Ueber das Brüten der Wacholderdrossel (*Turdus pilaris* L.) in der Umgebung Salzburgs. Ornith. Jahrb. Hallein **23** 1912 (68-71). **1133**
- Pleske, T. Zur Lösung der Frage, ob *Cyanistes pleskei* Cab. eine selbständige Art darstellt, oder für einen Bastard von *C. coeruleus* (Linn.) und *C. cyanus* (Pall.) angesprochen werden muss. J. Ornith. Leipzig **60** 1912 (96-109). **1134**
- Plimmer, H. G. Report on the deaths which occurred in the Zoological Gardens during 1911. London Proc. Zool. Soc. **1912** 1912 (235-240). **1135**
- Plimmer, H. G. On the blood-parasites found in animals in the Zoological Gardens during the four years 1908-1911. London Proc. Zool. Soc. **1912** 1912 (406-419) pls. xlix-lv. **1136**
- Pocock, R. I. Taste or smell in the Laughing Jackass (*Dacelo*). Nature London **89** 1912 (425). **1137**
- Podenzana, G. Aggiunte all'Avifauna della Lunigiana. Riv. ital. Orn. Bologna **2** 1912 (1-10). **1138**

- Pohl, R. Zur Biologie des Waldkauzes. Ornith. Monatsber. Berlin **20** 1912 (189-190). **1139**
- [Poljakov, G. I.] Поляковъ, Г. И. Къ орнитологической фаунѣ Московской губернии. [Zur ornithologischen Fauna des Moskauer Gouvernements.] Mess. ornith. Moskva **3** 1912 (44-51). **1140**
- [Poljakov, G. I.] Поляковъ, Г. И. Поѣздка на озеро Зайсанъ-норъ и Марка-куль въ 1909 году. [Eine ornithologischer Ausflug nach den Seen Saissan-nor und Marka-kul (in Westsibirien) im Jahre 1909.] Mess. ornith. Moskva **3** 1912 (Beilage 1-92) 41 Abb. **1141**
- Poljakoff, G. I. *vide* Poljakov.
- Poll, H. Mischlingsstudien. VII. Mischlinge von *Phasianus* und *Gallus*. Berlin Sitz Ber. Ak. Wiss. **1912** (864-883) 2 Taf. **1142**
- Poncy, R. Les Palmipèdes hôtes de la rade de la ville de Genève. Bul. soc. Zool. Genève **1** 1912 (394-397). **1143**
- Prebble, E. A. *vide* Seton.
- Primrose, A. M. The Maroon Oriole (*Oriolus traillii*). Bombay J. Nat. Hist. Soc. **21** 1912 (676-677). **1144**
- Prochnow, O. Zur Theorie des Segelfluges der Vögel. Natw. Wochenschr. Jena **27** 1912 (454-457). **1145**
- Proger, T. W. and Paterson, D. R. Ornithological notes. Cardiff Trans. Nat. Soc. **44** 1912 (101-109) 6 figs. **1146**
- Prugnes, R. V. des. Catalogue raisonné des oiseaux observés dans l'arrondissement de Montluçon. Paris Rev. Fr. d'Orn. **2** 1912 (396-403 414-420). **1147**
- Pucci, C. Per una prova di acclimatazione di Nandù in Italia. Agric. colon. Firenze **3** 1909 (392-398). **1148**
- Puhlmann, E. Der Star—ein Standvogel-- ein Ehebrecher. Ornith. Monatschr. Magdeburg **37** 1912 (184-186). **1149**
- Puhlmann, E. Beschmiert der Wiedehopf sein Nest und lässt er seine Jungen im Unrat aufwachsen? Ornith. Monatschr. Magdeburg **37** 1912 (430-433). **1150**
- Punde, A. B. Migration of Baya (*Ploceus baya*). Bombay J. Nat. Hist. Soc. **21** 1912 (675-676). **1151**
- Pycraft, W. P. The infancy of animals (xiv+272) 64 pls. London (Hutchinson) 1912. 8vo. **1152**
- Pycraft, W. P. Remarks on the syrinx of the Scolopacidae. Ibis London **1912** 1912 (334-341) figs. **1153**
- Pycraft, W. P. Comparison of the syrinx of the Jack Snipe with that of the Common Snipe and Woodcock. London Bull. Brit. Ornith. Cl. **29** 1912 (77-79) 3 figs. **1154**
- Railliet, A. et Henry, A. Helminthes recueillies par l'expédition antarctique française du *Pourquoi-Pas?* Cestodes d'oiseaux. Bul. Muséum Paris **1912** (35-39). **1155**
- Railliet, A. et Henry, A. Les helminthes du Nandou. Paris Bul. soc. nat. acclim. **58** 1911 (538-541 573-582) fig. **1156**
- Railliet, A., Henry, A. et Sissoff, P. Sur les affinités des Dispharages (*Acuria* Bremser), Nématodes parasites des oiseaux. Paris C. R. soc. biol. **73** 1912 (622-624). **1157**
- Ralfe, P. G. *vide* Graves.
- Ramsden, C. T. *Phaetusa magnirostris* Licht. in Cuba. Auk Cambridge Mass. **29** 1912 (100). **1158**
- Ramsden, C. T. *Xanthocephalus xanthocephalus* in eastern Cuba. Auk Cambridge Mass. **29** 1912 (103). **1159**
- Ramsden, C. T. Maynard's Cuckoo (*Coccyzus minor maynardi* Ridgway) in Cuba. Auk Cambridge Mass. **29** 1912 (393-394). **1160**
- Ramsden, C. T. The Cuban Whippoorwill *Antrostomus cubanensis* Lawrence) with young. Auk Cambridge Mass. **29** 1912 (394). **1161**
- Ramsden, C. T. Lark Sparrow (*Chondestes grammacus grammacus*) in Cuba. Auk Cambridge Mass. **29** 1912 (395). **1162**
- Ramsden, C. T. Cliff Swallow (*Petrochelidon lunifrons* Say): A Cuban record. Auk Cambridge Mass. **29** 1912 (396). **1163**
- [Rasner, A. G.] Раснеръ, А. Г. Охота на Маркизовой лужѣ. Морская охота подъ Петербургомъ. [Die Jagd auf der Markisova Lusha. Eine Seejagd bei Petersburg.] Naša Ochota St. Petersburg **6** 1912 10(10-18) 11(48-55) 12(45-50) 13(21-36) 14(22-34) 15(23-47) 16(26-38). **1164**

- Raspail, X.** Les nichoirs pour Oiseaux et la protection des nids à l'aide d'un entourage en grillage. Paris Bul. soc. zool. **37** 1912 (170-179). **1165**
- Ray, M. S.** Through Tahoean mountains. Condor Hollywood Cal. **14** 1912 (12-14) figs. 5-7. **1166**
- Ray, M. S.** Nesting of the Canada Goose at Lake Tahoe. Condor Hollywood Cal. **14** 1912 (67-72) figs. 23-26. **1167**
- Ray, M. S.** A journey to the Star lake country and other notes from the Tahoe region. Condor Hollywood Cal. **14** 1912 (142-147) figs 59-61. **1168**
- Ray, M. S.** The discovery of the nest and eggs of the California Pine Grosbeak. Condor Hollywood Cal. **14** 1912 (157-187) figs. 62-78. **1169**
- Readdie, R. M.** *vide* Reid.
- Reagan, A. B.** Birds of the Olympic peninsula, Washington. Topeka Trans. Kansas Acad. Sci. **23-24** 1911 (242-272). **1170**
- Reagan, A. B.** Notes on the flora and fauna of the Rosebud reservation, west of Gregory county. Vermilion Bull. Geol. Surv. South Dakota No. 4 [1909] (143-167). **1171**
- Reed, C. A.** Bird guide; water birds, game birds and birds of prey, east of the Rockies. (240) 232 figs. Worcester Mass. (C. K. Reed) 1910. 14 cm. **1172**
- Reeker, H.** Der Mönchsgeier noch nicht in Westfalen erlegt. [Gegen P. Wemer 1911.] Ornith. Monatschr. Magdeburg **37** 1912 (283). **1173**
- Reese, A. M.** The effect of narcotics on the development of the hen's egg. Science New York N.Y. **35** 1912 (633-634). **1174**
- Regalia, E.** Avifauna fossili italiane. Avicula Siena **11** 1907 (49-54 79-84). **1175**
- Regalia, E.** Su certe proporzioni degli arti in alcuni Uccelli. Avicula Siena **12** 1908 (84-90 105-108). **1176**
- Reichenow, [A.].** Neue Arten aus dem Uelle-Gebiet in Mittel-Afrika. J. Ornith. Leipzig **60** 1912 (320-321). **1177**
- Reichenow, [A.].** Über *Theristicus olivaceus* und Verwandte. Ornith. Monatsber. Berlin **11** 1903 (132-136) fig. **1177a**
- Reichenow, [A.].** Neues aus Afrika. Ornith. Monatsber. Berlin **20** 1912 (28-29). **1178**
- Reichenow, [A.].** Zwei neue Arten von Fernando-Po. Ornith. Monatsber. Berlin **20** 1912 (46-47). **1179**
- Reichenow, [A.].** Ein neuer afrikanischer Reiher. Ornith. Monatsber. Berlin **20** 1912 (61-62). **1180**
- [**Reichenow, A.**] *Lynx thorbeckei* Rchw. n. sp. Ornith. Monatsber, Berlin **20** 1912 (126-127). **1181**
- Reid, J. U. and Readdie, R. M.** A Mid-Lothian Burn. Edinburgh Trans. F. Nat. Soc. **6** 1912 (385-404). **1182**
- Remington, G. L.** A Kite's larder. Bombay J. Nat. Hist. Soc. **21** 1912 (1082) also **Dodsworth** *ibid* p. 1332. **1183**
- Rendle, M.** Über Nisthöhlen des Schwarzspechtes, *Picus martius* L. Gefied. Welt Magdeburg **41** 1912 (122-124 132-133 140-141). **1184**
- Rendle, M.** Über Nahrung und Nutzen des Schwarzspechtes, *Picus martius* (L.). Gefied. Welt Magdeburg **41** 1912 (244-245 251-253). **1185**
- Reiterer, E. et Lellèvre, A.** Origine épithéliale et évolution des follicules clos tégumentaires des oiseaux. J. Anat. physiol. Paris **48** 1912 (45-56). **1186**
- Rettig, A.** Der Mönchsgeier. Seine Brutperiode 1911 in der Dobrudscha. Mitt. Vogelwelt Nürnberg **11** 1911 (226-228). **1187**
- Retzius, G.** Spermien ostafrikanischer Tiere. Während der Lönnberg-schen Expedition eingesammelt. Biolog. Untersuchungen **16** Jena (G. Fischer) 1911 (82-88) 2 Taf. **1188**
- Retzius, G.** Zur Kenntnis der Spermien der Vögel. Biolog. Untersuchungen **16** Jena (G. Fischer) 1911 (89-92) 1 Taf. **1189**
- Retzius, G.** Zur Kenntnis der Hüllen und besonders des Follikelepithels an den Eiern der Wirbelthiere. IV Bei den Vögeln. Biolog. Untersuch. **17** Jena (Fischer) 1912 (39-44) 1 pl. **1190**
- Retzius, G.** Weitere Beiträge zur Kenntnis der Spermien der Gastropoden und Vögel. Biolog. Untersuchungen **17** Jena (G. Fischer) 1912 (95-99) 1 Taf. **1191**

- Rheinecke, O.** Personal observations and notes on breeding, migrant or visiting birds on the Niagara Frontier. Buffalo Bull. Soc. Nat. Sci. **10** 1912 (513-546). **1192**
- Rhoads, S. N.** Birds of the Paramo of central Ecuador. Auk Cambridge Mass. **29** 1912 (141-149). **1193**
- Rhoads, S. N.** Additions to the known ornithological publications of C. S. Rafinesque. Auk Cambridge Mass. **29** 1912 (191-198 401). **1194**
- Rhoads, S. N.** Constantine S. Rafinesque as an ornithologist. Cassinia Philadelphia Pa. **1911** 1912 (1-12) 1 portr. **1195**
- Richard, A.** L'hypolais polyglotte. *Hypolais polyglotta*. Basel Ornithol. Beob. **7** 1909-1910 (11-13). **1196**
- Richard, A.** Le gorge-bleue (*Cyanocula leucocyanea*) chez lui. Basel Ornithol. Beob. **7** 1909-1910 (152-154). **1197**
- Richard, A.** Le rapidité du vol chez les oiseaux. Basel Ornithol. Beob. **8** 1910-1911 (40 53-54). **1198**
- Richard, A.** A propos des lésions accidentelles observées sur des oiseaux en liberté. Basel Ornithol. Beob. **8** 1910-1911 (74-78) 3 figs. **1199**
- Richard, A.** Notes sur quelques oiseaux observés sur le lac de Neuchâtel au printemps 1910. Basel Ornithol. Beob. **8** 1910-1911 (111-113 127-129). **1200**
- Richmond, C. W.** Descriptions of five new birds from the west coast of Sumatra. Washington D.C. Proc. Biol. Soc. **25** 1912 (103-106). **1201**
- Rickett, C. B.** A list of the species of birds collected and observed in the Island of Shawsishan by J. D. La Touche. London Bull. Brit. Orn. Cl. **29** 1912 (114 124-160). **1202**
- Riddle, O.** On the formation, significance and chemistry of the white and yellow yolk of ova. J. Morph. Philadelphia Pa. **22** 1911 (455-490) 3 pls. 1 fig. **1203**
- Riddle, O.** The permeability of the ovarian egg membranes of the fowl. Science New York N.Y. **34** 1911 (887-889). **1204**
- Ridgway, R.** Descriptions of some new species and subspecies of birds from tropical America. Washington D.C. Proc. Biol. Soc. **25** 1912 (87-92). **1205**
- Ridgway, R.** Diagnoses of some new genera of American birds. Washington D.C. Proc. Biol. Soc. **25** 1912 (97-101). **1206**
- Ridolfi, C.** Collezione ornitologia di Meleto in Val d'Elsa. (vi+89). Firenze (tip. Ricci) 1908. **1207**
- Ridolfi, C.** Cattura importante del *Porphyrio smaragdnotus* (Temm.) a Lentini (Catania). Avicula Siena **12** 1908 (77-78). **1208**
- Rieg, E.** Die Mövenkolonie im Linthgebiet bei Utnach. Tierwelt Aarau **20** 1910 (646-647 661). **1209**
- Ries, A.** Die Züge der Staren (*Sturnus vulgaris* L.) in der Bamberger Landschaft im Beobachtungsjahre 1911. München Verh. ornith. Ges. **11** 1912 (147-156). **1210**
- Riley, J. H.** A new name for *Tanagra selateri* Berlepsch. Washington D.C. Proc. Biol. Soc. **25** 1912 (185). **1211**
- Rintoul, L. J. and Baxter, E. V.** On the occurrence of the Woodchat Shrike in Forth area. Scot. Nat. Edinburgh **1912** 1912 (10-11). **1212**
- Rintoul, L. J. and Baxter, E. V.** Lapland form of Bluethroat on the Isle of May. Scot. Nat. Edinburgh **1912** 1912 (236). **1213**
- Rintoul, L. J. vide Baxter.**
- Ritsema, C.** Data van aankomst en vertrek der Gierzwaluwen van 1902-1911. [Migration dates of *Apus apus*.] Ardea Leiden **1** 1912 (12). **1214**
- Roberts, A.** Economics of ornithology in South Africa. Pretoria Agri. Journ. Union S. A. **1** 1911 (352-369). **1215**
- Roberts, A.** Description of a new Flycatcher (*Tarsiger stellatus transvaalensis*). Pretoria J. S. Afric. Ornith. Union **8** 1912 (21). **1216**
- Roberts, A.** Notes on a collection of birds in the Transvaal Museum from Boror, Portuguese East Africa. Pt. ii. Pretoria J. S. Afric. Ornith. Union **8** 1912 (22-61). **1217**
- Roberts, A.** *Hypolais olivetorum* not *Sylvia nisoria* taken in the Transvaal. Pretoria J. S. Afric. Ornith. Union **8** 1912 (62-63). **1218**

- Roberts, T. S.** The Yellow-headed Blackbird. *Bird Lore* Harrisburg Pa. **14** 1912 (250-253) 1 pl. **1219**
- Robertson, J.** Waders observed at Balgray Dam, East Renfrew (Autumn 1911). *Glasgow Nat.* **4** 1911 (7-10). **1220**
- Robinson, H. W.** The first nesting of the common Eider in Ireland. *Brit. Birds London* **6** 1912 (106). **1221**
- Robinson, S. M.** Nidification of Davidson's babbler (*Turdinulus exul*). *Bombay J. Nat. Hist. Soc.* **21** 1912 (1088-1089). **1222**
- Rockwell, R. B.** Notes on the wading birds of the Barr lake region, Colorado. *Condor Hollywood Cal.* **14** 1912 (117-131) figs. 44-56. **1223**
- Rodgers, A.** Arctic Tern (*Sterna macrura*) in Oldham. *Lancs. Nat.* **5** 1912 (262) pl. **1224**
- le Roi, O.** Zur fauna des Vereinsgebietes. *Bonn SitzBer. Nat. Hist. Ver.* **1910** 2tes Heft 1911 sec. E (90-94) und **1911** 2tes Heft 1912 sec. E (173-177). **1225**
- le Roi.** Ornithologische Notizen aus dem Böhmerwald. *Ornith. Jahrb. Hallein* **23** 1912 (39-45). **1226**
- le Roi, O.** *Ammomanes phoenicura pallens* subsp. nov. *Ornith. Monatsber. Berlin* **20** 1912 (6-7). **1227**
- le Roi, O.** Ornithologische Miscellen. *Ornith. Monatsber. Berlin* **20** 1912 (7-8). **1228**
- le Roi, O.** Über *Somateria mollissima borealis* von Spitzbergen. *Ornith. Monatsber. Berlin* **20** 1912 (65-66). **1229**
- le Roi, O.** *Terekia cinerea* (Güld.) bei Mainz? *Ornith. Monatsber. Berlin* **20** 1912 (66). **1230**
- le Roi, O.** Zum Brüten der Lachmöwe im Rheinland. [Zur Ornith. des Mainzer Beckens, gegen W. Schuster.] *Zool. Beob. Frankfurt a. M.* **52** 1911 (357). **1231**
- Rollinat, C.** Chronique ornithologique d'Argenton-sur-Créuse pour 1911. *Paris Bul. soc. nat. acclim.* **59** 1912 (30-32). **1232**
- Rörig, G.** Die wissenschaftlichen Grundlagen des Vogelschutzes. *Verh. intern. OrnithKongr. Berlin* **5** 1911 (805-813). **1233**
- Rosenstadt, B.** Untersuchungen über die Histogenese des Eizahnes und des Schnabels beim Hühnchen. *Arch. mikr. Anat. Bonn* **79** Abt. 1 1912 (612-636) 1 Taf. **1234**
- Ross, J. A.** Description of eggs of *Myzantha melanotis*. *Emu Melbourne* **11** 1912 (210). **1235**
- [**Rossinski, D. M.**] Россинский, Д. М. Опытное изучение птицъ кольцеваниемъ въ Россіи. [L'étude expérimentelle des oiseaux en Russie par le bagueage.] *Moskva Ornith. et avicult.* **3** 3-4 1912 (46-94). **1236**
- Rössler, E.** Bericht über die Tätigkeit der „Hrvatska ornitološka centrala“ im Jahre 1909. *Glasnik naravosl. družt. Zagreb.* **23** 1911 (1-110). **1237**
- Rössler, E.** Im östlichsten Winkel Slawoniens. *Ornithologischer Bericht der „Kommission zur wissenschaftlichen Erforschung Sirmiens.“ Ornith. Jahrb. Hallein* **23** 1912 (112-133). **1238**
- Rössler, E. vide Babic.**
- Rothschild, Hon. W.** On some newly described Birds-of-Paradise, and some undescribed eggs of the same group. *Ibis London* **1912** 1912 (109-112) pl. ii. **1239**
- Rothschild, W.** On a new species of Cassowary (*Casuarus keysseri*) from German New Guinea with remarks on the other species of the genus. *London Bull. Brit. Ornith. Cl.* **29** 1912 (49-52). **1240**
- Rothschild, W.** Exhibition of and remarks on a large number of specimens of gamebirds to shew sexual alterations of plumage due to disease or injury. *London Bull. Brit. Ornith. Cl.* **29** 1912 (52-58) also **Hammond Smith, Ogilvie-Grant, Witherby and Pycraft t.c.** (58-62). **1241**
- Rothschild, W.** On a new subspecies of Albatross (*Diomedea culminata mathewsi*) from Campbell Island. *London Bull. Brit. Ornith. Cl.* **29** 1912 (69-70). **1242**
- Rothschild, W.** *Foudia omissa* sp. n. described. *London Bull. Brit. Orn. Cl.* **31** 1912 (26-27). **1243**
- Rothschild, W. and Hartert, E.** Ornithological explorations in Algeria. *Tring Nov. Zool.* **18** 1912 (456-550) pls. ix-xi and xv-xxvi. **1244**

- Rothschild, W. and Hartert, E.** List of a collection of birds made by Mr. Albert Meek on the Kumusi river, north-eastern British New Guinea. Nov. Zool. Tring **19** 1912 (187-206). **1245**
- Rothschild, W. and Hartert, E.** List of birds collected by Mr. A. S. Meek at Haidana, Collingwood Bay, in north-eastern British New Guinea. Nov. Zool. Tring **19** 1912 (207-209). **1246**
- Rouget, T. H.** Note sur les œufs de *Geocichla sibirica davisoni* Hume. Paris Rev. Fr. d'Orn. **2** 1912 (245). **1247**
- Rous, P.** An avian tumor in its relation to the tumor problem. Philadelphia Pa. Proc. Amer. Phil. Soc. **51** 1912 (201-205). **1248**
- Rowan, W.** Unpigmented eggs of the Ringed Plover [and common Tern]. British Birds London **6** 1912 (160-162) 2 figs. **1249**
- Rowe, A. J. and Stubbs, F. J.** The prehistoric origin of the common Fowl. Zoologist London **1912** 1912 (1-14). **1250**
- Rowswell, B. T.** Report of the ornithological section 1911. Guernsey Rep. and Trans. Soc. Nat. Sci. **1911** 1912 (270-277). **1251**
- Rowswell, B. T.** Are Guernsey birds British? Guernsey Rep. and Trans. Soc. Nat. Sci. **1911** 1912 (304-313). **1252**
- Rubow, C.** Hættemaagen (*Larus ridibundus*). Dens Liv i Billeder og Ord. Fotografier efter Naturen. [*Larus ridibundus*. Its life in photographs from nature.] (56) 36 figs. København (Gyldendal) 1911 24.5 x 16 cm. also in German, Berlin-Steglitz (Trewendt) 1912. **1253**
- Rüdiger, W.** *Lanius excubitor*, Brutvogel in der Letzlinger Heide. Zs. Oologie Berlin **22** 1912 (6-12). **1254**
- Rüdiger, W.** Etwas über frühere Brutorte des Kolkrahen. Zs. Oologie Berlin **22** 1912 (13-14). **1255**
- Rüdiger, W.** Mitteilungen aus Brandenburg (Neumark). Zs. Oologie Berlin **22** 1912 (42-43 57-59 121-124 142-144). **1256**
- Rüdiger, W.** Der Eier von *Larus audouini*. Zs. Oologie Berlin **22** 1912 (84-86) 1 Taf. **1257**
(N-9210 g)
- Rüdiger, W.** Über die Eier von *Colymbus griseigena* Bodd. und *C. nigricans* Scop. (Fundorte: Mark Brandenburg). Zs. Oologie Berlin **22** 1912 (86-87). **1258**
- Russell, F.** Notes on the birds of Sardis, Asia Minor. Zoologist London **1912** 1912 (97-104). **1259**
- Sage, J. H.** Holboell's Grebe in Connecticut. Auk Cambridge Mass. **29** 1912 (233). **1260**
- St. Quintin, W. H.** *vide* Horsbrugh.
- Sajovic, G.** Ornitologične beležke za Kranjsko leta 1911. [Ornithologische Notizen aus Krain 1911.] Carniola Laibach **3** 1912 (121-131). **1261**
- Sala, G.** Sulla fine struttura dei centri ottici degli Uccelli. (14) 2 tav. Pavia (tip. cooper.) 1907. **1262**
- Salvadori, T.** I Puffini dei mari italiani. Avicula Siena **12** 1908 (1-4). **1263**
- Salvadori, T.** Missione per la frontiera Italo-Etiopica sotto il comando del capitano Carlo Citerini. Risultati zoologici. Uccelli per I. Salvadori. Genova Ann. Mus. Civ. Stor. Nat. **45** 1912 (304-327). **1264**
- Salvadori, T.** Nuova specie del genere *Tanygnathus*. Genova Ann. Mus. Civ. Stor. Nat. **45** 1912 (328). **1265**
- Salvadori, T.** Secondo contributo all'ornitologia del Congo. Genova Ann. Museo Civ. Stor. Nat. **45** 1912 (444-456). **1266**
- Salvadori, T.** Note on the *Ruticilla nigra* of Giglioli. Ibis London **1912** 1912 (280-281). **1267**
- Salvadori, T.** Catture del *Turdus aureus* in Italia. Riv. ital. Orn. Bologna **1** 1912 (125-130). **1268**
- Salvadori, T.** Un altro esemplare di *Fregilopus varius* in Italia. Riv. ital. Orn. Bologna **1** 1912 (159). **1269**
- Salvadori, T.** Intorno alla *Ruticilla nigra* Giglioli. Riv. ital. Orn. Bologna **1** 1912 (159-161). **1270**
- Salvadori, T.** Catturo di un *Pigliamosche* pettirosso (*Erythrosterne parva*) in Liguria. Riv. ital. Orn. Bologna **1** 1912 (162). **1271**
- Salvadori, T.** Singolare cattura di una specie orientale del genere "*Ardetta*" nuova per l'Italia e per
e 11-2

- l'Europe. Riv. ital. Orn. Bologna **2** 1912 (86-88) 1 tav. **1272**
- Salvadori, T.** Nota intorno alla *Pucrasia ruficollis* David et Oust. Torino Boll. Musei zool. anat. **27** 1912 N. 647 (1-2). **1273**
- Salvadori, T.** Nota intorno alla *Tchitrea melanura* Reichnw. Torino Boll. Musei zool. anat. **27** 1912 N. 654 (1-2). **1274**
- Salvadori, T.** Note on *Conurus aeruginosus* and the allied species. Tring Nov. Zool. **18** 1912 (84-85). **1275**
- Salvadori, T. e Festa, E.** La Ghiandaia di Sardegna. Riv. ital. Orn. Bologna **2** 1912 (113-161). **1276**
- [**Sanickij, P. P.**] Саницкий, П. П. Орнитологическія наблюденія въ Калужской губерніи. [Ornithologische Beobachtungen im Gouvernement Kaluga.] Kaluga Trd. Obsč. izuč. prir. městn. Kraja **1** 1912 (75-90). **1277**
- Sarudny, N.** Einige neue Spezies und Subspezies paläarktischer Vogelarten. Ornith. Monatsber. Berlin **11** 1903 (129-131). **1278**
- Sarudny, N.** Über *Crateropus caudatus altirostris* Hart. Ornith. Monatsber. Berlin **20** 1912 (95-96). **1279**
- Sarudny, N.** *Turdus viscivorus loudoni* nom. nov. Ornith. Monatsber. Berlin **20** 1912 (96). **1280**
- Sarudny, N. A. vide Zarudnyj.**
- Sarudny, N. und Härms, M.** Bemerkungen über einige Vögel Persiens. J. Ornith. Leipzig **60** 1912 (592-619). **1281**
- Sarudny, N. und Härms, M.** Bemerkung über den Paradiesfliegenschnäpper aus Ceylon. Ornith. Monatsber. Berlin **20** 1912 (58-60). **1282**
- Saas, H. R. and others.** Local Fauna. Recent Bird Notes. Charleston Bull. Mus. **8** 1912 (34 39-41 50 51-53). **1283**
- Sassi, M.** Liste von Vogelbälgen aus Mesopotamien. Wien Ann. NatHist. Hofmus **26** 1912 (116-119) 1 Taf. **1284**
- Sassi, M.** Eine neue Art des Genus *Cercococcyx*. *Cercococcyx olivinus* nov. spec. Wien Ann. NatHist. Hofmus. **26** 1912 (341-342). **1285**
- Sassi, M.** Beitrag zur Ornith. Zentralafrikas. Wien Ann. NatHist. Hofmus. **26** 1912 (347-393) pl. v. **1286**
- Sassi, M.** Eine neue Ohreule aus Zentralafrika (*Asio abessinicus graneri* nov. subsp.) Wien Anz. Acad. Wiss. **1912** No. x 1912 (122). **1287**
- [**Satunin, K. A.**] Сатуниинъ, К. А. Животный міръ Муганской степи. Извъ: Муганская степь. I, 3. [Die Tierwelt der Mugan-Steppe. In: Die Mugan-Steppe I 3.] (iii + 85) 1 Taf. u. 6 Figs. Tiflis (Verwaltung des Uebersiedlerwesens im Kaukasus) 1912. 36 cm. **1288**
- [**Satunin, K. A.**] Сатуниинъ, К. А. Экскурсія въ южное Закавказье. [Ornithologische Excursion nach dem südlichen Transkaukasien.] Mess. ornith. Moskva **3** 1912 (1-15 99-110). **1289**
- [**Satunin, K. A.**] Сатуниинъ, К. А. Систематическій каталогъ птицъ Кавказскаго края. II. [Systematischer Katalog der Vögel des Kaukasus-Gebietes II.] Tiflis Zap. Kavk. Otd. russ. geogr. Obsč. **28** 2 1912 (85-195). **1290**
- Saunders, A. A.** Wilson's Snipe and its nest. Bird Lore Harrisburg Pa. **14** 1912 (170-171). **1291**
- Saunders, A. A.** Some birds of southwestern Montana. Condor Hollywood Cal. **14** 1912 (22-32 107-108) Map. **1292**
- Saunders, A. A.** The Western Marsh Wren wintering near Helena, Montana. Condor Hollywood Cal. **14** 1912 (108). **1293**
- Saunders, A. A.** A horseback trip across Montana. Condor Hollywood Cal. **14** 1912 (215-220). **1294**
- Saunders, A. A.** The probable breeding of the Bohemian Waxwing in Montana. Condor Hollywood Cal. **14** 1912 (224). **1295**
- Saunders, W. E.** The Yellow-breasted Chat and Carolina Wren in Ontario. Ottawa Nat. **25** 1912 (152-153). **1296**
- Saunders, W. E.** Harris' Sparrow in Ontario. Ottawa Nat. **26** 1912 (100-101). **1297**
- Schacht, H.** Ein beringtes Seglerpaar. Zool. Beob. Frankfurt a. M. **52** 1911 (353). **1298**
- Schad-Roodvalk, F.** Die Vogelarten aus der Gegend vom Kummergebirge bis zur Daubaer Schweiz. Prag Lotos **60** 1912 (15-24 38-44). **1299**

- Schaefer, O. v.** Zum zeitweiligen Verschwinden des Tannenhähers aus Sibirien. Wild u. Hund Berlin **18** 1912 (232). **1300**
- Schantz, O. M.** Prothonotary Warblers (*Protonotaria citrea*) nesting at Riverside, Illinois. Wilson Bull. Oberlin Ohio **24** 1912 (165-167) 2 pls. **1301**
- [**Scharleman, E. W.**] Шарлеманъ, Э. В. Къ вопросу и распространении степного жаворонка въ Киевской губернии. [Zur Frage über die Verbreitung der Kalandorlerche (*Melanocorypha calandra* L.) im Gouvernement Kiew.] Mess. ornith. Moskva **3** 1912 (306-307). **1302**
- Schaub, S.** Die Nstdunen der Vögel und ihre Bedeutung für die Phylogenie der Feder. Basel Verhand. Nat. Ges. **23** 1912 (131-182) 18 figs. **1303**
- Scheffelt, E.** Ornithologische Beobachtungen. Freiburg i. B. Mitt. Landesver. Natk. Nr. **267-268** 1912 (132-134). **1304**
- Schenk, J.** Bericht über die Vogelmarkierungen der Königl. Ung. Ornith. Zentrale im Jahre 1912. Aquila Budapest **19** 1912 (321-368) 1 Taf. **1305**
- Schiebel, G.** Ueber die Vögel der Insel Arbe (Norddalmatien). Ornith. Jahrb. Hallein **23** 1912 (142-148). **1306**
- Schifferli, A.** Notizen über den Bergfinken. Basel Ornith. Beob. **6** 1908 (183-184). **1307**
- Schifferli, A.** Beobachtungen von Drosseln aus der Gegend von Sempach. Basel Ornithol. Beob. **7** 1909-1910 (113-117 129-132). **1308**
- Schifferli, A.** Zum Vorkommen des Schwarzhalsigen Lappentauchers (*Podiceps nigricollis* Sauv.) in der Zentralschweiz. Basel Ornithol. Beob. **8** 1910-1911 (109-111). **1309**
- Schifferli, A.** Der Teichrohrsänger am Sempachersee. Basel Ornithol. Beob. **8** 1910-1911 (193-196). **1310**
- Schillings, C. G.** Die Vernichtung vieler Vogelarten durch moderne Damenmoden. Verh. intern. Ornith.-Kongr. Berlin **5** 1911 (826-838 102). **1311**
- Schiøler, E. L.** Om nogle for Grønlands Fuglefauna sjældne samt to nye Arter, *Chaulelasmus streperus* (L.) og *Passerella iliaca* (Merrem) typica. [On some species of birds rare in Greenland and on two species *Chaulelasmus streperus* (L.) and *Passerella iliaca* (Merrem) typica, new for Greenland.] Kjøbenhavn Ornith. Tids. **6** 1912 (65-80). **1312**
- Schlegel, R.** Beiträge zur Avifauna des Rachelgebietes (Bayerischer Wald). Ornith. Jahrb. Hallein **23** 1912 (92-112). **1313**
- Schlegel, R.** Ein 25er Gelege von *Ruticilla phoenicura*. Zs. Oologie Berlin **22** 1912 (89). **1314**
- Schmidt, E.** Leistungszucht in ihrer Einwirkung auf Konstitutionskraft. Verh. intern. Ornith.-Kongr. Berlin **5** 1911 (883-888). **1315**
- Schmidt, R.** *Lanius excubitor* als Brutvogel im Harz. Zs. Oologie Berlin **22** 1912 (54-56). **1316**
- Schmitz, E.** Ornithologisches aus Nordpalästina. Ornith. Monatsber. Berlin **20** 1912 (144-148). **1317**
- Schmitz, P. E.** Oologische Tagebuchnotizen aus Jerusalem. Zs. Oologie Berlin **22** 1912 (65-70 103-104). **1318**
- Schnee.** Einiges über die höhere Tierwelt der Marianen. Zs. Natw. Leipzig **82** 1912 (458-470). **1319**
- Schneider, G.** Über ein neues Vorkommen des Kuttener- oder Mönchsgeiers in der Schweiz. *Vultur monachus* (Linné). Colmar. Mitt. nathist. Ges. **11** 1912 (199-211) 1 Taf. **1320**
- Schneider, G.** Note sur le Waldrapp, *Corvus sylvaticus* Gesner, *Comatibis eremita* Linné. Espèce d'oiseau disparue de Suisse et toute l'Europe. Mülhausen Bull. Soc. ind. **82** 1912 (341-347) 1 Taf. **1321**
- Schouteden, H.** Le *Balaeniceps* Roi. Rev. Zool. Africaine Bruxelles **1** 1912 (347-352) 2 pls. **1322**
- Schuler, J.** L'élevage de l'autruche à Madagascar. Paris Rev. Fr. d'Orn. **2** 1912 (273-275). **1323**
- Schulz, G.** Etwas vom Wespenbussard (*Pernis apivorus*). Zs. Oologie Berlin **22** 1912 (24-26). **1324**
- Schulz, G.** Nest und Eier des Triel (*Oedicnemus crepitans*). Zs. Oologie Berlin **22** 1912 (113-115). **1325**
- Schulz, G.** Am Nest der Kronenschnepe. Zs. Oologie Berlin **22** 1912 (140-142). **1326**

- Schultz, W.** Bastardierung und Transplantation. I. a. Zur Theorie der Bastardunfruchtbarkeit. b. Subcutane Vogelhautverpflanzung zwischen Bastarden, c. zwischen Bastarden und ihren Stammarten. Arch. EntwMech. Leipzig **35** 1912 (484-499). **1327**
- Schulze, F. E.** Über die Luftsäcke der Vögel. Verh. intern. ZoolKongr. Jena **8** 1912 (446-482) 1 Taf. 6 figs. **1328**
- Schumann, A.** *Psophia crepitans* im königlichen Zoologischen Garten in Sofia. Zool. Beob. Frankfurt a. M. **52** 1911 (339-342). **1329**
- Schuster, L.** Über das Nistgeschäft des Gelbschulterpapageis (*Poicephalus meyeri matschiei*). Ornith. Monatsber. Berlin **20** 1912 (53-58). **1330**
- Schuster, L.** Über das Nistgeschäft des Zwergseglers (*Tachornis parvus myochrous*) in Deutsch-Ostafrika. Ornith. Monatsber. Berlin **20** 1912 (121-126). **1331**
- Schuster, W.** Der Aufruhr der Vogelwelt beim Erdbeben in Süddeutschland am 16. Nov. 1911, Nachts 10 Uhr 26 Min. Mitt. Vogelwelt Nürnberg **12** 1912 (25-26). **1332**
- Schuster, W.** Ornithologische Beobachtungen auf einer Jerusalemfahrt (Orientreise 1911). Zs. Oologie Berlin **22** 1912 (17-23 39-41).—Bemerkung dazu v. v. Tschusi zu Schmidhoben, ebenda, (88). **1333**
- Schwabe, F.** Zur Nützlichkeitsfrage des Vogelschutzes. Möllers D. Gärtnerztg Erfurt **27** 1912 (122-123). **1334**
- Schwartz, M.** Sind internationale Vereinbarungen zum Schutze solcher Vögel erwünscht, deren Bestand dadurch gefährdet ist, dass man sie ihrer Schmuckfedern wegen verfolgt? Verh. intern. OrnithKongr. Berlin **5** 1911 (839-846 104-105). **1335**
- Schweder, B.** Jagdwesen und Vogelschutz. Verh. intern. OrnithKongr. Berlin **5** 1911 (775-795 99). **1336**
- [**Sclater, P. L.**] Obituary—Eugene William Oates. Ibis London **1912** 1912 (341-342). **1337**
- [**Sclater, P. L.**] Obituary—Mr. Allan Octavian Hume, C.B. Ibis London **1912** 1912 (661-663). **1338**
- S[clater], P. L.** The Shoe-bill in the Regent's Park. Ibis London **1912** 1912 (686-688) 1 fig. **1339**
- Sclater, W. I.** A history of the birds of Colorado. With 17 plates and a map. (xxiv+576). London (Witherby) 1912 8vo. **1340**
- Sclater, W. I.** On the birds collected by Mr. Claude H. B. Grant at various localities in South Africa. Pt. iv with field notes by the Collector. Ibis London **1912** 1912 (1-63) pl. i. **1341**
- Sclater, W. L.** Note on a curious variety of *Cinnyris amethystina*. London Bull. Brit. Ornith. Cl. **29** 1912 (65-66). **1342**
- Sclater, W. L.** *vide* Shelley.
- Scott, W. E. D.** and **Sharpe, R. B.** Reports of the Princeton University expeditions to Patagonia, 1896-1899. Vol. ii. Ornithology part iii. Charadriidae—Anatidae (345-504) pl. i Princeton N.J. 1912 4to. **1343**
- Segerstråle, L.** Junger Austernfischer. Aquila Budapest **19** 1912 (452-453) col Taf. **1344**
- Seguin-Jard, E.** Captures ornithologiques faites à l'Aiguillon-sur-Mer (Vendée), pendant l'automne et l'hiver 1911-1912. Nantes Bul. soc. sci. (3) **2** 1912 (151-154). **1345**
- Seilern, J. Graf von** *vide* Hellmayr.
- Sellheim, H.** Vermag die Mutter das bebrütete Ei zu beeinflussen? Beitr. Geburtsh. Leipzig **17** 1912 (159-161) 1 Taf. **1346**
- Selous, E.** An observational diary on the domestic habits of the Red-Throated Diver (*Colymbus septentrionalis*). Zoologist London **1912** 1912 (81-96 171-180 210-219). **1347**
- Selous, E.** An observational diary on the domestic habits of the Carrion Crow, (*Corvus corone*). Zoologist London **1912** 1912 (321-337 393-396) [also **Lewis** *ibid* pp. 425-426]. **1348**
- Selous, F. C.** Early laying of the Cuckoo and removal of the eggs of foster-parents. Brit. Birds London **6** 1912 (90-91). **1349**
- Sergent, Ed. et Et.** Paludisme des oiseaux (*Plasmodium relictum*). L'infection peut se faire par simple frottis du thorax du moustique sur la peau. Paris C. R. soc. biol. **73** 1912 (36). **1350**

- Seth-Smith, D.** Exhibition of a spirit specimen of a nestling Australian Regent-Bird (*Sericulus melinus*). London Proc. Zool. Soc. **1912** 1912 (4) fig. **1351**
- Seth-Smith, D.** On the moulting of the King Penguin (*Aptenodytes pennanti*) in the Society's Gardens. London Proc. Zool. Soc. **1912** 1912 (60-62 671) pl. i. **1352**
- Seth-Smith, D.** On the display of the male Peacock Pheasant (*Polyplectron chinquis*) and figures of the young Cariamna (*Cariamna cristata*). London Proc. Zool. Soc. **1912** 1912 (557-558) pl. lxi. **1353**
- Seth-Smith, D.** On the nestling of *Farus hemprichi*. London Bull. Brit. Orn. Cl. **31** 1912 (25). **1354**
- Seth-Smith, D.** Bird notes from the Zoological Gardens. Avicult. Mag. London **3** 1912 (141-142 169-170 197-199 226-227 251-253 285-286 342-343). **4** 1912 (36-37). **1355**
- Seth-Smith, D.** The Ring-necked Teal. *Nettion torquatum*. Avicult. Mag. London **4** 1912 (23-24) pl. **1356**
- Seth-Smith, L. M.** Birds in Uganda forest. J. E. Afr. and Uganda N. H. Soc. **2** 1911 (4-8). **1357**
- Seton, E. T. and Preble, E. A.** List of birds noted on the Seton Expedition of 1907—being appendix G to "The Arctic Prairies" edit. by Ernest Thompson Seton. (Appendix 359-405) London (Constable) 1912 8vo. **1358**
- Sharpe, R. B.** *vide* Scott.
- Shelley, G. E.** The birds of Africa comprising all the species which occur in the Ethiopian region. Vol. v. pt. ii. completed and edited by W. L. Sclater, M.A., F.Z.S. (viii + 165-502) pl. 1-lvii. London 1912 (Sotheran) 1. 8vo. **1359**
- Sherman, A. R.** Diurnal activities of the Great Horned Owl (*Bubo virginianus virginianus*). Auk Cambridge Mass. **29** 1912 (240-241). **1360**
- Sherman, A. R.** Moments with the Leconte's Sparrows (*Passerherbulus lecontei*). Wilson Bull. Oberlin Ohio **24** 1912 (18-21). **1361**
- Sherman, A. R.** The Brown Thrasher (*Toxostoma rufum*) east and west. Wilson Bull. Oberlin Ohio **24** 1912 (187-191). **1362**
- Shimazono, J.** Das Kleinhirn der Vögel. Arch. mikr. Anat. Bonn. **80** Abt. 1 1912 (397-449) 3 Taf. **1363**
- Shipley, A. E.** (Chairman) Report of the Committee appointed to investigate the feeding habits of British Birds etc. etc. London Rep. Brit. Ass. **1911** 1912 (128-129). **1364**
- Shufeldt, R. W.** The photography of birds' eggs. Auk Cambridge Mass. **29** 1912 (274-276). **1365**
- Shufeldt, R. W.** The Band-tailed Pigeon (*Columba fasciata fasciata*) in North Dakota. Auk Cambridge Mass. **29** 1912 (539-540). **1366**
- Shufeldt, R. W.** Study of the eggs of the *Meleagridae*. Condor Hollywood Cal. **14** 1912 (209-213) fig. 82. **1367**
- Shufeldt, R. W.** Study of birds' eggs. Collection of Edward J. Court, Washington, D.C. Emu Melbourne **11** 1912 (198-202) pls. xviii-xx. **1368**
- Simon, E.** Trochilidae : dans "Mission du service géographique de l'Armée pour la mesure d'un Arc de Méridien Équatorial en Amérique du Sud 1899-1906" **9** Zoologie 1911 (B129-143). **1369**
- Simpson, S.** Observations on the body temperature of some diving and swimming birds. Edinburgh Proc. R. Soc. **32** 1912 (19-35). **1370**
- Sisoff, P.** *vide* Railliet.
- Sloanaker, J. L.** Two new Arizona records. Condor Hollywood Cal. **14** 1912 (154). **1371**
- Sloanaker, J. L.** A winter invasion of Jasper county, Iowa. Wilson Bull. Oberlin Ohio **24** 1912 (39-41). **1372**
- Smalley, F. W.** On the moults of the Long-tailed Duck (*Harelda glacialis*). London Bull. Brit. Ornith. Cl. **31** 1912 (7-8). **1373**
- Small, J. W.** The Green Woodpecker's method of extracting larvae from willows. Brit. Birds London **5** 1912 (329-332) fig. **1374**
- Smith, Amy.** The rarer birds of Somerset. (viii + 84) Taunton (Wessex Press) 1912 sm. 8vo. **1375**
- Smith, A. P.** Status of the *Picidae* in the Lower Rio Grande valley. Auk Cambridge Mass. **29** 1912 (241), **1376**

- Smith, A. P.** Recent records from the valley of the Lower Rio Grande. *Auk* Cambridge Mass. **29** 1912 (254-255). **1377**
- Smith, C. B.** The display of the Satyra Tragopan Pheasant, *Ceriornis satyra*. *Avicult. Mag.* London **3** 1912 (153-155) pl. **1378**
- Smith, G.** Studies in the experimental analysis of sex. Part 9. On spermatogenesis and the formation of giant spermatozoa in hybrid pigeons. *Q. J. Micros. Sci.* London **58** 1912 (159-170) pl. viii. **1379**
- Smith, S. H.** Snowden Sights, Wild fowler. (xvi + 117) York (Wad-dington) 1912 8vo. **1380**
- Smith, S. H.** Bird notes from the York district. *Naturalist* London **1912** (339). **1381**
- Smith, W. F.** Prothonotary Warbler in Connecticut. *Bird-Lore* Harrisburg Pa. **14** 1912 (109). **1382**
- Smith, W. W.** Notes on the Saddle-back of New Zealand (*Creadon carunculatus*). *Wellington Trans. Proc. N. Zeal. Inst.* **43** 1911 (165-168). **1383**
- Smyth, E. A. jun.** Birds observed in Montgomery county, Virginia. *Auk* Cambridge Mass. **29** 1912 (508-530) pl. xxiv. **1384**
- Snethlage, E.** Neue Vogelarten aus Amazonien. *Ornith. Monatsber.* Berlin **20** 1912 (153-155). **1385**
- Snouckaert van Schauburg, Baron R.** Vogelszugsdaten und Notizen aus Neerlangbroek. IV Bericht Herbstzug 1911. *Aquila* Budapest **19** 1912 (472-474). **1386**
- Snouckaert van Schauburg, Baron R.** Ornithologie van Nederland. Waarne-mingen van i Mei 1911 tot en met 30 April 1912 gedaan. *Deventer Club Ned. Vogelk. J. B. No. 2* 1912 (9-20) fig. **1387**
- S[nouckaert van] S[chauburg, Baron R.]** Blik op de Geschiedenis der Ornithologie van Palestina. *Deventer Club Ned. Vogelk. J. B. No. 2* 1912 (53-68). **1388**
- Snouckaert van Schauburg, Baron R.** Ornithologie van Nederland. Waarne-mingen van 1 Mei 1911 tot en met 30 April. [Ornithologie der Niederlande. Beobachtungen vom 1 Mai 1910—30 April 1911.] *Helder Tijdschr. Ned. Dierk. Ver.* **12** 1912 (183-198). **1389**
- Snouckaert van Schauburg, Baron R.** Ornithologische Notizen aus Holland. 1. Mai 1910—30 April 1911. *Ornith. Monatsber.* Berlin **20** 1912 (105-108). **1390**
- Snouckaert van Schauburg, Baron.** A propos de la chasse des grives au fusil de M. de la Fuye. *Paris Rev. Fr. d'Orn.* **2** 1912 (272-273). **1391**
- Söderberg, R.** *Cacatua leadbeateri aberrans*, eine neue Subspecies. *Ornith. Monatsber.* Berlin **20** 1912 (41-42). **1392**
- [Solomirskij, D.]** Соломирский, Д. Замѣтка по поводу весенняго оперенія Турухтановъ Пѣтушковъ. [Notice sur le plumage de noce du Combattant ordinaire (*Machetes pugnae*).] *Ekaterin-burg Bull. Soc. Oural. nat.* **31** 1911 (127-128 russ. & fr.). **1393**
- Solovjev, P. T.** Vers parasitaires des oiseaux du Turkestan. [Russ.] *St. Peterburg Ann. Mus. Zool.* **17** 1912 (86-115) 15 figs. **1394**
- Somerville, R.** On the occurrence of the Little Owl in Fife. *Scot. Nat. Edinburgh* **1912** 1912 (225-226). **1395**
- Speechly, H. M.** The Gray or Arkansas King Bird, *Tyrannus verticalis*. *Ottawa Nat.* **25** 1912 (188). **1396**
- Städler, H.** Vogelbeobachtungen aus Unterfranken. *München Verh. ornith. Ges.* **11** 1912 (11-18). **1397**
- Stafford, E. F.** Notes on Palmer's Thrasher (*Toxostoma curvirostra palmeri*). *Auk* Cambridge Mass. **29** 1912 (363-368). **1398**
- Standen, R.** The Osprey (*Pandion haliaetus*) in Cheshire. *Lancs. Nat.* **5** 1912 (59). **1399**
- Stanford, J. K.** Rare migrants in Yorkshire. *British Birds* London **6** 1912 (217). **1400**
- Stanwood, C. J.** Notes on the Canada Warbler. *J. Maine Ornith. Soc.* Portland **13** 1911 (46-49). **1401**
- Staples-Browne, R.** Diary of birds seen on the White Nile. *Avicult. Mag.* London **3** 1912 (157-163 182-185 218-222). **1402**
- Stellwaag, F.** Die embryonale Metamorphose der Mundrachenwand

- beim Kanarienvogel (*Fringilla canaria*).
Morph. Jahrb. Leipzig **44** 1912 (627-659) 2 Taf. **1403**
- Stemmler-Veller, C.** Über das Vorkommen der Kornreihe (*Circus cyaneus* Mont.) bei Schaffhausen. Basel Ornithol. Beob. **7** 1909-1910 (54-55). **1404**
- Stendall, J. H. S.** Rare birds in the Municipal Collection. Belfast Rep. Nat. F. C. **6** 1912 (522-523). **1405**
- Stephenson, T.** Bird notes from Whitby. Naturalist London **1912** 1912 (73). **1406**
- Stevens, C. M.** Capture of the Carolina Wren at Portland, Maine. Auk Cambridge Mass. **29** 1912 (106-107). **1407**
- Stewart, W.** The facial feathers of the rook. Brit. Birds London **5** 1912 (306-307). **1408**
- Stone, C.** Birds of Lake Boga, Victoria. Emu Melbourne **12** 1912 (112-122). **1409**
- Stone, W.** Franklin's Gull (*Larus franklini*) at Philadelphia. Auk Cambridge Mass. **29** 1912 (99-100). **1410**
- Stone, W.** Vroeg's catalogue. Auk Cambridge Mass. **29** 1912 (205-208). **1411**
- Stone, W.** Note on *Hapalopteron familiare*, (Kittl.). Auk Cambridge Mass. **29** 1912 (250). **1412**
- Stone, W.** Type of the genus *Saxicola*. Auk Cambridge Mass. **29** 1912 (396). **1413**
- Stone, W.** Report of the spring migration of 1911. Cassinia Philadelphia Pa. **1911** 1912 (42-60). **1414**
- Stone, W.** The phylogenetic value of color characters in birds. Philadelphia Pa. J. Acad. Nat. Sci. **15** 1912 (313-319) pl. 27. **1415**
- Stone, W.** A new *Synallaxis*. Philadelphia Proc. Acad. Nat. Sci. **64** 1912 (365). **1416**
- Stoney, C. V. and Ussher, R. J.** The Fulmar in Ireland. Irish Nat. Dublin **21** 1912 (180-182). **1417**
- Stoney, R. F.** Swinhoe's Snipe (*Gallinago megalis*) near Madras. Bombay J. Nat. Hist. soc. **21** 1912 (1083) also **Fraser** *ibid.* **1418**
- Stover, A. J.** Northern Pileated Woodpecker at Corvallis, Oregon. Bird Lore Harrisburg Pa. **14** 1912 (297). **1419**
- Stover, A. J.** A Robin's roost. Wilson Bull. Oberlin Ohio **24** 1912 (169-171) 1 pl. **1420**
- Stresemann, E.** Description of a new genus and new species of birds from the Dutch E. India Islands. London Bull. Brit. Ornith. Cl. **31** 1912 (4-6). **1421**
- Stresemann, E.** Note on three rare parrots and on the zoogeographical relations of Bali. London Bull. Brit. Ornith. Cl. **31** 1912 (15). **1422**
- Stresemann, E.** *Abrornis sakaiaorum* sp. n. described. London Bull. Brit. Ornith. Cl. **31** 1912 (27-28). **1423**
- Stresemann, E.** Ornithologische Miscellen aus dem Indo-Australischen Gebiet. Nov. Zool. Tring **19** 1912 (311-351). **1424**
- Strong, R. M.** The metallic colors of feathers from the sides of the neck of the domestic pigeon in "Mark Anniversary Volume." (263-277) pl. 20. New York (Holt) 1903 4to. **1425**
- Strong, R. M.** Some reminiscences of the late Professor C. O. Whitman. Auk Cambridge Mass. **29** 1912 (15-16) 1 portr. **1426**
- Strong, R. M.** Some observations on the life-history of the Red-breasted Merganser, *Mergus serrator*, Linn. Auk Cambridge Mass. **29** 1912 (479-488) pls. xxi-xxiii. **1427**
- Strong, R. M.** Results of hybridizing ring-doves, including sex-linked inheritance. Biol. Bull. Woods Hole Mass. **23** 1912 (293-320) figs. 1-3. **1428**
- Strong, R. M.** Another view of sex-limited inheritance. Science New York **36** 1912 (443-445). **1429**
- Stubbs, F. J.** Flight of the Common Snipe. Zoologist London **1912** 1912 (196-197). [also **Harvie-Brown** *ibid.* p. 229, **Huxley** *ibid.* p. 231]. **1430**
- Stubbs, F. J.** Notes on the habits and the coloration of the common Starling (*Sternus vulgaris*). Zoologist London **1912** 1912 (281-292), [also **Fortune** *ibid.* p. 349]. **1431**
- Stubbs, F. J.** *vide* Rowe.

- Stubbs, F. M.** A contribution towards a solution of the problem of migration. *Zoologist London* **1912** 1912 (441-449). **1432**
- Studer, T.** *vide* Fatio.
- Sturniolo, G.** Contributo allo studio degli Uccelli siciliani. *Avicola Siena* **10** 1906 (40-43); **11** 1907 (6-12; 97-101). **1433**
- Stuver, T.** Die afrikanischen Vögel der „Sammlung Dr. Volz“ im naturhistorischen Museum in Bern. *Basel Ornithol. Beob.* **6** 1908 (116-118). **1434**
- Suschkin, P. P.** Zur geographischen Verbreitung der Vögel im russischen Altai. *Ornith. Monatsber. Berlin* **20** 1912 (169-172). **1435**
- Sushkin, P. P.** Ontogenetical transformations of the bill in the Heron. (*Ardea cinerea*.) *London Proc. Zool. Soc.* **1912** 1912 (125-126) pl. xiii. **1436**
- [**Suškin, P. P.**] Сушкинъ, П. П. Новыя данныя къ распространению птицъ въ русскомъ Алтаѣ и по Абакану. [Neue Tatsachen der geographischen Verbreitung der Vögel im russischen Altai und am Abakan.] *Mess. ornith. Moskva* **3** 1912 (237-271). **1437**
- Swales, B. H.** Yellow Rail (*Coturnicops noveboracensis*). *Auk Cambridge Mass.* **29** 1912 (100-101 237-238). **1438**
- Swales, B. H.** Duck Hawk. (*Falco peregrinus anatum*.) *Auk Cambridge Mass.* **29** 1912 (102). **1439**
- Swales, R. H.** Some additions to a list of the winter birds of southeastern Michigan. Part 3. *Wilson Bull. Oberlin Ohio* **24** 1912 (126-129). **1440**
- Swarth, H. S.** Differences due to sex in the Black Swift. (*Nephoecetes niger borealis*.) *Auk Cambridge Mass.* **29** 1912 (241-242). **1441**
- Swarth, H. S.** Report on a collection of birds and mammals from Vancouver island. *Berkeley Univ. Cal. Pub. Zool.* **10** 1912 (1-124) pls. i-iv. **1442**
- Swarth, H. S.** A visit to Nootka sound. *Condor Hollywood Cal.* **14** 1912 (15-21) figs 8-11. **1443**
- Swarth, H. S.** The winter range of Yakutat Song Sparrow. *Condor Hollywood Cal.* **14** 1912 (73). **1444**
- Sword, J. and others.** A discussion of the question—"Do Woodcock carry their young." *Stirling Trans. Nat. Hist. Soc.* **1911-1912** 1912 (18-67). **1445**
- Sword, J.** Notes on bird life. *Stirling Trans. Nat. Hist. Soc.* **1911-12** 1912 (67-73). **1446**
- Swynnerton, C. F. M.** Remarks on the stomach-contents of birds. *Ibis London* **1912** 1912 (635-640). **1447**
- Symons, C. T. and Cave, W. A.** Note on arrival of migrant birds in Columbo. *Spolia zeylan. Columbo* **8** 1912 (66). **1448**
- Szemere, L. von.** Am Horste von *Aquila melanaëtus* Gm. und *Circaëtus gallicus* Gm. *Aquila Budapest* **19** 1912 (441-451). **1449**
- Szeots, B. v.** Weitere Erfahrungen während meiner Schwalbenmarkierungen. *Aquila Budapest* **19** 1912 (369-372). **1450**
- Szielasko.** Das Eischalenkorn der europäischen Geierarten. *Königsberg Schr. physik. Ges.* **52** 1911 (216-218). **1451**
- Tåning, Å. V.** Fortegnelse over nogle af det nordvestlige Himmersland Fugle. *Flore og Fauna, Kjöbenhavn* **1912** 1912 (82-86). **1452**
- Taverner, P. A.** Two interesting records for Canada. *Auk Cambridge Mass.* **29** 1912 (396-397). **1453**
- Taylor, W. P.** Field notes on amphibians, reptiles and birds of northern Humboldt county, Nevada, with a discussion of some of the faunal features of the region. *Berkeley, Univ. Cal. Pub. Zool.* **7** 1912 (319-436) pls. vii-xii. **1454**
- Taylor, W. P.** Notes on the Texas Nighthawk. *Condor Hollywood Cal.* **14** 1912 (222-223) fig. 85. **1455**
- Ternier, L.** La disparition du Pigeon passager d'Amérique. *Paris Bul. soc. nat. acclim.* **58** 1911 (193-195 229-231). **1456**
- Ternier, L.** Note sur deux cas d'albinisme chez les oiseaux. *Rev. franç. ornith. Paris* **2** 1911 (142). **1457**
- Ternier, L.** Notice sur la protection internationale des oiseaux. *Verh. intern. OrnithKongr. Berlin* **5** 1911 (993-999). **1458**
- Terrill, L. McL.** Bird Notes. *Ottawa Nat.* **26** 1912 (71-74). **1459**

- Teschemaker, W. E.** Nesting of the Crested Lark, *Galerita cristata*. *Avicult. Mag. London* **3** 1912 (273-280). **1460**
- Teschemaker, W. E.** Nesting of the Black Redstart, *Ruticilla titys*. *Avicult. Mag. London* **3** 1912 (293-297 330-335). 1 pl. **1461**
- Teschemaker, W. E.** Nesting of the Whinchat. *Pratincola rubetra*. *Avicult. Mag. London* **4** 1912 (24-32). **1462**
- Thaisz, L.** Über den wirtschaftlichen Nutzen des Rebhuhns, *Perdix perdix* (L.). Erster Bericht. Vegetabilische Nahrung des Rebhuhns. *Aquila Budapest* **19** 1912 (166-201). **1463**
- Thanner, R. von.** Von den Kanaren. *Ornith. Jahrb. Hallein* **23** 1912 (221-228). **1464**
- Thanzis, A.** Le pigeon voyageur; hypothèses relative à sa faculté d'orientation. *Paris Bul. soc. nat. acclim.* **59** 1912 (655-666). **1465**
- Thayer, A. H.** Concealing coloration. *Auk Cambridge Mass.* **29** 1912 (430-431). **1466**
- Thayer, A. H.** Concealing coloration, an answer to Theodore Roosevelt. *New York N.Y. Bull. Amer. Mus. Nat. Hist.* **31** 1912 (313-321). **1467**
- Thayer, J. E.** Great Auk eggs in the Thayer museum. *Auk Cambridge Mass.* **29** 1912 (208-209) pl. xii. **1468**
- Thayer, J. E. and Bangs, O.** Some Chinese vertebrates. *Aves. Cambridge Mass. Mem. Mus. Comp. Zool. Harvard Coll.* **40** 1912 (137-200) pls. iii-vi. **1469**
- Thayer, J. E. and Bangs, O.** A new race of Great Blue Heron from Espiritu Santo Island, Lower California. *Proc. New England Zool. Cl.* **4** 1912 (83-84). **1470**
- Thayer, M. R.** Some nesting habits of the Oregon Junco. *Bird Lore, Harrisburg Pa.* **14** 1912 (212-215) 2 figs. **1471**
- Thienemann, [J.]** Zusammenstellung der Ringstörche der Vogelwarte Rossitten, die in Afrika erbeutet wurden. *Bot. Jahrb. Leipzig* **46** 1912 Beiblatt (105-106). **1472**
- Thienemann, J.** x und xi Jahresbericht (1910 und 1911) der Vogelwarte Rossitten der Deutschen Ornithologischen Gesellschaft. *J. Ornith. Leipzig* **60** 1912 (133-243 429-470) 5 Taf. **1473**
- Thienemann, J.** Rossittener Lachmöwe (*Larus ridibundus*) in Westindien erbeutet. *Ornith. Monatsber. Berlin* **20** 1912 (130-131). **1474**
- Thienemann, J.** Vogelwarte Rossitten. Zug und Dauerche von *Apus apus*. Zug von *Delichon urbica*. *Ornith. Monatsber. Berlin* **20** 1912 (156). **1475**
- Thijsse, J. P.** De kruisbekken in Bloemendaal. [Die Kreuzschuäbel in Bloemendaal.] Amsterdam Versl. Med. Ned. Ornith. Ver. **8** 1912 (42). **1476**
- Thijsse, J. P.** Rottum in 1911. [Rottum in 1911 in ornithologischer Hinsicht.] Amsterdam Versl. Ned. Ornith. Ver. **8** 1912 (43-44). **1477**
- Thiroux, A.** Filaire d'une Mouette, *Larus cirrhocephalus*, observée au Sénégal. *Paris Bul. soc. path. exot.* **4** 1911 (525). **1478**
- Thiroux, A.** *Halteridium* d'une Mouette, *Larus cirrhocephalus*, observée au Sénégal. *Paris Bul. soc. path. exot.* **4** 1911 (524). **1479**
- Thomas, J. U.** The Ceylon Jungle Fowl in captivity. *Spolia Zeylan. Columbo* **7** 1911 (159-161). **1480**
- Thomas, Rose H.** Experimental Pheasant-breeding. *London Proc. Zool. Soc.* **1912** 1912 (539-546 912) pls. lxiv-lxvii. **1481**
- Thomson, A. L.** The Sandwich Tern (*Sterna cantiaca*) in "Dee": general status and first nesting record. *Scot. Nat. Edinburgh* **1912** 1912 (84-85). **1482**
- Thomson, A. L.** Aberdeen University bird-migration inquiry: first interim report (1909-12). *Scot. Nat. Edinburgh* **1912** 1912 (145-153 169-174 217-224 241-248). **1483**
- Thoreau, H. D.** Notes on New England birds; arranged and ed. by Francis H. Allen. (ix + 2 l + 452) pls. and map. Boston and New York (Houghton Mifflin) 1910. 19.5 cm. **1484**
- Thorpe, D. L.** *vide* Hope.
- Thürler, L.** Beobachtungen über das Vogelleben im Jauntale zur Winterszeit. *Basel Ornithol. Beob.* **7** 1909-1910 (97-100). **1485**
- Ticehurst, C. B.** Notes on a Storm Petrel in captivity. *Avicult. Mag. London* **3** 1912 (111-113). **1486**

- Ticehurst, C. B.** The Birds of Lower Egypt. *Zoologist London* **1912** 1912 (41-59). **1487**
- Ticehurst, C. B.** Migration and other ornithological notes from Lowestoft district June 30th 1910 to June 30th 1911. *Norwich Trans. Nat. Soc.* **9** 1912 (406-427). **1488**
- Ticehurst, C. B.** *vide* Bahr.
- Ticehurst, N. F.** Great Shearwater in Kent. *Brit. Birds London* **6** 1912 (21). **1489**
- Ticehurst, N. F.** Some notes on the breeding-habits of Nightingales. *British Birds London* **6** 1912 (170-176) 6 figs. **1490**
- Ticehurst, N. F.** *vide* Hartert.
- Tischler, F.** Der Tannenhäherzug in Ostpreussen. *Falco Halle* **8** 1912 (41-43). **1491**
- Tischler, F.** Bericht aus Ostpreussen (Bartenstein und Heilsberg). [Jan. Febr. März 1912.] *Falco Halle* **8** 1912 (1-2 23-24 58-59). **1492**
- Tischler, F.** Zum Tannenhäherzug [Ostpreussen]. *Ornith. Monatsber. Berlin* **20** 1912 (28). **1493**
- Tischler, F.** *Loxia leucoptera bifasciata* (Brehm) in Ostpreussen erlegt. *Ornith. Monatsber. Berlin* **20** 1912 (27). **1494**
- Tischler, F.** *Acanthis linaria holboelli* (Brehm) in Ostpreussen. *Ornith. Monatsber. Berlin* **20** 1912 (79). **1495**
- Tischler, F.** *Aquila maculata* (Gm.) in Ostpreussen erlegt. *Ornith. Monatsber. Berlin* **20** 1912 (187-188). **1496**
- Tobler, A. D.** Zur Invasion des Kreuzschnabels. *Basel Ornithol. Beob.* **7** 1909-1910 (42-44). **1497**
- Todd, W. E. C.** Descriptions of seventeen new neotropical birds. *Pittsburgh Pa. Ann. Carnegie Mus.* **8** 1912 (198-214). **1498**
- Townsend, C. W.** Notes on the summer birds of the St. John Valley, New Brunswick. *Auk Cambridge Mass.* **29** 1912 (16-23). **1499**
- Townsend, C. W.** The validity of the Red-legged subspecies of Black Duck. *Auk Cambridge Mass.* **29** 1912 (176-179). **1500**
- Townsend, C. W.** Bird genealogy. *Auk Cambridge Mass.* **29** 1912 (285-295). **1501**
- Tratz, E. P.** Ein ornithologischer Ausflug ins nordfriesische Watt. *Zool. Beob. Frankfurt a. M.* **53** 1912 (257-264). **1502**
- Trawiński, A.** Przyczynek do anatomii i histologii ptaków. [Beitrag zur Anatomie und Histologie der männlichen Begattungsorgane der Vögel.] *Lwów (Księga Pamiątkowa ku uczczeniu Prof. J. Nusbauma) (H. Altenberg)* 1911 (113-117). **1503**
- Troller, J.** Winterbeobachtungen aus dem Kanton Luzern 1909-10. *Basel Ornithol. Beob.* **8** 1910-1911 (49-52). **1504**
- Troller, J.** Schwarzückiger Fliegenfänger (*Muscicapa luctuosa* L.), Grauer, Fliegenschmäpper (*Muscicapa grisola* L.) und ihr Vorkommen in der Umgebung von Luzern. *Basel Ornith. Beob.* **8** 1910-1911 (125-127 141-148). **1505**
- Trotter, S.** The relation of genera to faunal areas. *Auk Cambridge Mass.* **29** 1912 (159-165). **1506**
- Trotter, S.** The names "Purple Finch" "Mavis" and "Highole". *Auk Cambridge Mass.* **29** 1912 (255-256). **1507**
- Trotter, S.** The frontier of the Carolinian Fauna in the lower Delaware Valley. *Cassinia Philadelphia Pa.* **1911** 1912 (13-18). **1508**
- Trotter, S.** The faunal divisions of eastern North America in relation to vegetation. *Philadelphia Pa. J. Acad. Nat. Sci.* **15** 1912 (207-218). **1509**
- Trouessart, E. L.** Catalogue des oiseaux d'Europe pour servir de complément et de supplément a l'ornithologie européenne de Degland et Gerbe (1867). (xviii + 545). Paris (Klincksieck) 1912 8vo. **1510**
- Trouessart, E. L.** Les formes migratrices et les formes sédentaires dans la faune ornithologique d'Europe. *Paris C. R. Acad. sci.* **155** 1912 (1628-1629). **1511**
- Trouessart, E.** La question de l'espèce en systématique. *Rev. gén. sci. Paris* **23** 1912 (853-858). **1512**
- Tschermak, A. von.** Über Veränderung der Form, Farbe und Zeichnung von Kanarieneiern durch Bastardierung. *Arch. Ges. Physiol. Bonn* **148** 1912 (367-395) 1 Taf. **1513**

- Tschusi zu Schmidhoffen, V. Ritter** von. Zur Geschichte der Ornithologie in Steiermark. Graz Mitt. Natw. Ver. Steierm. **48** 1912 (361-373). **1514**
- Tschusi zu Schmidhoffen, V. Ritter** von. Zoologische Literatur der Steiermark. Ornithologische Literatur 1911. Graz Mitt. Natw. Ver. Steierm. **48** 1912 (374-375). **1515**
- Tschusi zu Schmidhoffen, V. Ritter** von. Ueber paläarktische Formen. Ornith. Jahrb. Hallein. **23** 1912 (216-220). **1516**
- Tschusi zu Schmidhoffen, V. Ritter** von. Über den heurigen Taumenhäher-Zug. Ornith. Monatsber. Berlin **20** 1912 (43-44). **1517**
- Tschusi zu Schmidhoffen, V. Ritter** von. Massenaufreten der Wacholderdrossel (*Turdus pilaris* L.) in Oberösterreich. Ornith. Monatschr. Magdeburg **37** 1912 (154-155). **1518**
- Tschusi zu Schmidhoffen, V. Ritter** von. Ankunfts- und Abzugsdaten bei Hallein (1911). VIII. Ornith. Monatschr. Magdeburg **37** 1912 (241-244). **1519**
- Tschusi zu Schmidhoffen, V. Ritter** von. Ornithologische Literatur Österreich-Ungarns, Bosniens und der Herzegowina 1911. Wien Verh. Zool.-Bot. Ges. **62** 1912 (260-289). **1520**
- Tschusi zu Schmidhoffen, V. Ritter** von. Ornithologische Kollektaneen aus Österreich-Ungarn. (Aus Jagdzeitungen, populären u. Tagesblättern.) XX. (1911.) Zool. Beob. Frankfurt a. M. **53** 1912 (72-79 97-106 138-144 171-177). **1521**
- Tschusi zu Schmidhoffen, V. Ritter** von. Der Zug des Seidenschwanzes (*Bombycilla garrula* L.) im Winter 1910/11. Zool. Beob. Frankfurt a. M. **52** 1911 (321-329). **1522**
- Tschusi zu Schmidhoffen V. vide** Schuster.
- Tuck, J. G.** Nutcracker (*Nucifraga caryocatactes*) in Suffolk. Zoologist London **1912** 1912 (34). **1523**
- Tuck, J. G.** Food of the Tawny Owl (*Syrnium aluco*). Zoologist London **1912** 1912 (228). **1524**
- Tuck, J. G.** Spoonbills in Suffolk. Brit. Birds London **6** 1912 (67). **1525**
- [**Tugarinov, A. Ja.**] **Тугариновъ, А. Я.** Къ орнитофаунъ Енисейской губернии. [Neues über die Vögel des Jenisseischen Gouvernements.] Mess. ornith. Moskva **3** 1912 (124-128). **1526**
- Turner, E. L.** Notes on the Bearded Tit. British Bds. London **6** 1912 (138-145) pl. iv. **1527**
- Turner, E. L.** The return of the Bittern. Norwich Trans. Nat. Soc. **9** 1912 (433-436) pl. **1528**
- Uchida, S.** A hand-list of Formosan birds. Annot. Zool. Jap. Tokyo **8** 1912 (137-213). **1529**
- Uchida, S.** Shikoku san namiyegora no ichi hyohon. Tsuketari: Shikoku san chorui mokuroku. [On a specimen of *Picus namiyei* from Shikoku. Appendix: A list of the birds of Shikoku.] Dobuts. Z. Tokyo **24** 1912 (14-19). **1530**
- Uchida, S.** Ohshima san chorui mokuroku. [A list of the birds of the Kurile Islands.] Dobuts. Z. Tokyo **24** 1912 (270-280). **1531**
- Unzeitig, H.** Ueber die Einwirkung der Röntgenstrahlen auf die Bursa Fabricii und einige andere Organe junger Hühner. Anat. Anz. Jena **42** 1912 (22-24). **1532**
- [**Ušakov, V. E.**] **Ушаковъ, В. Е.** Интересныя находки въ Тарскомъ уездѣ, Тобольской губернии. [Interessante Funde im Tarsker Kreise des Tobolschen Gouvernements.] Mess. ornith. Moskva **3** 1912 (52-53). **1533**
- Uschakow, W. E. vide** Ušakov.
- Ussher, R. J.** Aves [in the Clare Island Survey]. Dublin Proc. R. Irish Acad. **31** pt. 20 1912 (1-54) 5 pls. **1534**
- Ussher, R. J.** Barnacle-Geese on the south coast of Ireland. Brit. Birds London **5** 1912 (246-247). **1535**
- Ussher, R. J. vide** Stoney.
- Uttendörfer, O.** Der Sanderling (*Calidris arenaria*) auf der Konsulstrasse. Ornith. Monatschr. Magdeburg **37** 1912 (468-469). **1536**
- Vallon, G.** Intorno ad una varietà di Passera raccolta sui monti del Friuli. Riv. ital. Orn. Bologna **1** 1912 (156-157). **1537**
- Vallon, G.** Catture di Uccelli rari avvenute nella provincia di Udine durante l'anno 1911. Riv. ital. Orn. Bologna **1** 1912 (163-164). **1538**

- Vallon, G.** Note intorno alle anomalie di colorazione riscontrate nelle ali e nella coda di alcune specie di Uccelli. Riv. ital. Orn. Bologna **2** 1912 (11-15). **1539**
- Vaucher, A.** Causerie sur *Otis tarda* Linné. Paris Rev. Fr. d'Orn. **2** 1912 (334-337). **1540**
- Venning, F. E. W.** Occurrence of Swinhoe's Snipe (*Gallinago megala*) at Migitkyina, Upper Burma. Bombay J. Nat. Hist. Soc. **21** 1911 (269). **1541**
- Venning, F. E. W.** Some birds and birds' nests from Haka, Chin hills. Bombay J. Nat. Hist. Soc. **21** 1912 (621-623). **1542**
- Vernet, H.** Une maladie des bécasses. Basel Ornithol. Beob. **8** 1910-1911 (132-134 148-150). **1543**
- Versluys, J.** Über Streptostylie und ähnliche Zustände bei Sauropsiden in Zusammenhang mit Bewegungen im Schädel. Verh. intern. zool. Kongr. Jena **8** 1912 (490-505). **1544**
- Versluys, J.** Das Streptostylie-Problem und die Bewegungen im Schädel bei Sauropsiden. Zool. Jahrb. Jena Suppl. **15** Bd 2 1912 (545-716) 1 Taf. **1545**
- Vetter-Stemmler, K.** Wintervögel auf dem Rhein bei Schaffhausen. Basel Ornithol. Beob. **7** 1909-1910 (157-158 177-178). **1546**
- Vietor, K. P. and Vietor, E. W.** Notes on Cliff Swallows. Bird Lore Harrisburg Pa. **14** 1912 (150-152) 1 fig. **1547**
- Villatte des Prugnes, R.** Variété blanche de la Buse ordinaire. Paris Rev. Fr. d'Orn. **2** 1912 (340). **1548**
- De Vis, C. W.** *Palaeolestes gorei* n.s. Ann. Queensland Mus. Brisbane **10** 1911 (15-17) pl. ii figs. 4-6. **1549**
- Visher, S.** Additions to a list of the birds of Harding county, north-western South Dakota. Auk Cambridge Mass. **29** 1912 (110-111). **1550**
- Visher, S. S.** Northern Eider in South Dakota; a new record for the interior of North America. Auk Cambridge Mass. **29** 1912 (535-536). **1551**
- Visher, S. S.** A preliminary list of the summer birds of Fall River county, south-western South Dakota. Wilson Bull. Oberlin Ohio **24** 1912 (1-6). **1552**
- Visher, S. S.** A list of the birds of the Pine Ridge reservation in "The biology of south-central South Dakota." Vermilion Bull. Geol. Surv. South Dakota No. **5** 1912 (61-136). **1553**
- Vitali, G.** Di un interessante derivato dell'ectoderma della prima fessura branchiale nel passero. Un organo nervoso di senso nell'orecchio medio degli uccelli. (2. Nota.) Anat. Anz. Jena **40** 1912 (631-639). **1554**
- Vitali, G.** Di un interessante derivato della prima fessura branchiale nel passero. Siena Atti Acc. fisiocritici (5) **3** 1911 (7-8). **1555**
- Vitali, G.** Sulla presenza di un organo nervoso di senso nell'orecchio medio degli Uccelli. Siena Atti Acc. fisiocritici (5) **3** 1911 (541). **1556**
- Vouga.** Avant et après le dessèchement des marais du lac de Neuchâtel. Basel Ornithol. Beob. **8** 1910-1911 (35-38). **1557**
- Wadén, D. J.** Meddelande från Lill-Hütis jaktvårdsområde för år 1910. [Mitteilung aus dem Jagdrevier Lill-Hütis für das Jahr 1910.] Helsingfors F. Jakttidn **6** 1911 (85-90). **1558**
- Waddell, P.** Rock Peplar Parrakeets. (*Polytelis melanura*) Avicult. Mag. London **3** 1912 (265-266). **1559**
- Wall, F.** Rambling notes on natural history in Chitral. Bombay J. Nat. Hist. Soc. **21** 1912 (614-620). **1560**
- Wallis, H. M.** On the nest and eggs of the House-Bunting (*Emberiza saharæ*) and the Algerian Blackbird (*Turdus merula mauritanica*). London Bull. Brit. Ornith. Cl. **29** 1912 (83-84). **1561**
- Wallis, H. M. and Pearson, C. E.** Description of the nestling of the Thick-billed Lark (*Rhamphocorys clot-bey*) and other Algerian birds. London Bull. Brit. Orn. Cl. **29** 1912 (104-107). **1562**
- Walter, A. H.** The Hairy and Downy Woodpeckers. Bird Lore Harrisburg Pa. **14** 1912 (127-130) 1 pl. **1563**
- Wangelin** vide Jacobi v. Wangelin.
- Ward, H. L.** Townsend's Solitaire in Wisconsin. Milwaukee Bull. Wis. Nat. Hist. Soc. **10** 1912 (47-48). **1564**
- Warren, E. R.** Some north-central Colorado bird notes. Condor Hollywood Cal. **14** 1912 (81-104) figs. 29-41 map. **1565**

- Wayne, A. T. The Golden Plover (*Charadrius dominicus dominicus*) on the coast of South Carolina. Auk Cambridge Mass. **29** 1912 (101-102). **1566**
- Wayne, A. T. The Seaside Sparrow (*Passerherbulus maritimus maritimus*) breeding on the coast of Georgia near Savannah. Auk Cambridge Mass. **29** 1912 (103-104). **1567**
- Webb, M. Occurrence of the Nukhta or Comb-duck (*Sarcidiornis melanonota*) in Sind. Bombay J. Nat. Hist. Soc. **21** 1912 (685-686). **1568**
- Weber, J. A. The Black-backed Gull (*Larus marinus*) on Long Island, N.Y. in August. Auk Cambridge Mass. **29** 1912 (100). **1569**
- Weber, J. A. A case of cannibalism among Blackbirds (*Quiscalus aeneus*). Auk Cambridge Mass. **29** 1912 (394-395). **1570**
- Weber, S. A. Nochmals der Fichtenkreuzschnabel als Insektenvertilger. Basel Ornithol. Beob. **7** 1909-1910 (25-26). **1571**
- Weckmann, J. F. Ornithologisch-photographische Naturstudien. Photogr. Rdsch. Halle **1912** (309-311) Taf. **1572**
- Weibüll, V. Hejren (*Ardea cinerea*) i Danmark nu og tidligere. (*Ardea cinerea* in Denmark in the past and present). Kjøbenhavn Ornith. Tids. **6** 1912 (80-89) 1 map. **1573**
- Weigold, H. III Jahresbericht der Vogelwarte der kgl. biologischen Anstalt auf Helgoland 1911. J. Ornith. Leipzig **1912** Sonderheft. 1912 (1-75) Taf. i-vii. **1574**
- Weigold, H. Ein Monat Ornithologie in den Wüsten und Kulturoasen Nordwestmesopotamiens und Innersyriens. J. Ornith. Leipzig **60** 1912 (249-297 365-410); **61** 1913 (1-40). **1575**
- Weigold, H. Wie können wir das biologische Problem des Vogelzugs exakt erforschen? Ein Beitrag zur Methodik biologischer Forschung. Ornith. Monatschr. Magdeburg **37** 1912 (112-123) 5 Taf. **1576**
- Weigold, H. Die Vogelwarte Helgoland einst und jetzt und die Methoden der Vogelzugsforschung. Verh. intern. Ornithkongr. Berlin **5** 1911 (563-574 90). **1577**
- Weissmantel, P. Beobachtungen an den Frohburg-Eschfelder Teichen während der Zugzeit. Ornith. Monatschr. Magdeburg **37** 1912 (405-412). **1578**
- Wels, H. Die Uraleule. (*Syrnium uralense* Pall.) Zs. Oologie Berlin **22** 1912 (77-84). **1579**
- Wels, [H.]. Ankunft der Zugvögel im Frühjahr 1912 in der Oberförsterei Astrawischken und einige andere Beobachtungen. Zs. Oologie Berlin **22** 1912 (89-90). **1580**
- Wendnagel, A. Der Heuschreckenrohrsänger in der Umgebung von Basel. Basel Ornithol. Beob. **6** 1908 (105-108). **1581**
- Werth, E. Die klimatischen Grenzen der Ornithophilie in Südamerika. Aus d. Natur Leipzig **7** 1912 (577-579). **1582**
- Wetmore, A. New records from Arkansas. Auk Cambridge Mass. **29** 1912 (112). **1583**
- Wettstein, O. von. Die Ornis des Gschnitztales bei Steinach am Brenner, Tirol. Ornith. Jahrb. Hallein **23** 1912 (176-194). **1584**
- Wheeler, D. E. Notes on the spring migration at timber line, north of Great Slave Lake. Auk Cambridge Mass. **29** 1912 (198-204) 1 map. **1585**
- Whish, F. H. L. Uncommon occurrences in west Somerset. Brit. Birds London **5** 1912 (338-340). **1586**
- Whistler, H. Some winter visitors to Rawal Pindi. Bombay J. Nat. Hist. Soc. **21** 1911 (261-262). **1587**
- Whistler, H. Occurrence of European Striated Swallow (*Hirundo rufula*), in Kangra. Bombay J. Nat. Hist. Soc. **21** 1912 (659). **1588**
- Whistler, H. Immature plumage of Lammergeier (*Gypaëtus barbatus*). Bombay J. Nat. Hist. Soc. **21** 1912 (663-665). **1589**
- Whistler, H. Nestling plumage of the Great Stone-plover (*Esacus recurvirostris*). Bombay J. Nat. Hist. Soc. **21** 1912 (1074). **1590**
- Whistler, H. The Himalayan Greenfinch. Bombay J. Nat. Hist. Soc. **21** 1912 (1074-1075). **1591**
- Whistler, H. The Long-tailed Grass-warbler (*Laticilla burnesi*, Blyth).

- Bombay J. Nat. Hist. Soc. **21** 1912 (1080-1081). **1592**
- White, H. L.** On the colour of the eggs of *Rallina tricolor*. Ibis London **1912** 1912 (552-554); see also **Mathews t.c.** (684-685). **1593**
- White, H. L.** Description of the eggs of the Lesser Satin Bower-bird (*Ptilonorhynchus minor*, Campbell) and of the eggs of *Ninox strenua*. Melbourne Bull. R. Austr. Orn. Un. No. **3** 1912 (2-3); also Emu **12** 1912 (20-21). **1594**
- White, H. L.** Descriptions of two nests and eggs. Emu Melbourne **11** 1912 (249-250). **1595**
- White, H. L.** Description of new eggs. Bull. R. Austr. Orn. Union Melbourne No. **2** 1911 p. 3. **1596**
- White, H. L.** Lilac nape-band on female Bowerbirds (*Chlamydodera*). Emu Melbourne **12** 1912 (22). **1597**
- White, H. L.** Description of eggs of Lesser Yellow-faced Honey-eater (*Ptilotis subchrysops*) and of nest and eggs of Western Emu-Wren (*Stipiturus westernensis*). Emu Melbourne **12** 1912 (45-46). **1598**
- White, S. A.** Bird life in the Riverina. Emu Melbourne **11** 1912 (207-209) **1599**
- White, S. A.** Rediscovery of *Pachycephala rufogularis* (Gould). Emu Melbourne **11** 1912 (212). **1600**
- White, S. A.** Field ornithology in South Australia. Emu Melbourne **12** 1912 (1-8 122-130). **1601**
- Whitehead, J. H.** Woodcock (*Scolopax rusticula*) in South Andamans. Bombay J. Nat. Hist. Soc. **21** 1912 (1085). **1602**
- Whitlock, F. L.** Further notes from the Stirling Ranges, W. A. Emu Melbourne **11** 1912 (239-243) pl. xxv-xxvi). **1603**
- Whitlock, F. L.** Notes on *Megalurus striatus* (Milligan). Emu Melbourne **11** 1912 (244-245). **1604**
- Wichtrich, P.** Der Leipziger Schlachtfeldgau als Winteraufenthalt der Krähen. Leipzig SitzBer. natf. Ges. **38** 1912 (22-25). **1605**
- Wichtrich, P.** Die beiden ersten Beobachtungen von *Arenaria interpres* in Sachsen. Ornith. Monatsber. Berlin **20** 1912 (38-41).—Bemerkungen dazu v. R. Heyder, ebenda (60-61); v. O. Heinroth, (81-82). **1606**
- Wichtrich, P.** Brauner Sichler, *Plegadis autumnalis*, bei Frohburg in Sachsen. Ornith. Monatsber. Berlin **20** 1912 (120-121). **1607**
- Van Withe, J. W.** On the development of the chondrocranium in birds. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (533-542). **1608**
- Wild, O. H.** Serin Finch (*Serinus serinus*) in Midlothian. Scot. Nat. Edinburgh **1912** 1912 (11). **1609**
- Wild, R. P.** and **Jourdain, F. C. R.** Cuckoo laying in nests of Marsh-Warbler and Rock-Pipit. British Birds London **6** 1912 (155-156). **1610**
- Willard, F. C.** A week afield in southern Arizona. Condor Hollywood Cal. **14** 1912 (53-63) figs. 13-19. **1611**
- Willard, F. C.** Breeding of the Scott Sparrow. Condor Hollywood Cal. **14** 1912 (195-196) fig. 79. **1612**
- Willard, F. C.** Nesting of the Rocky Mountain Nuthatch. Condor Hollywood Cal. **14** 1912 (213-215) figs. 83-84. **1613**
- Willet, G.** Some 1912 spring notes from southern California. Condor Hollywood Cal. **14** 1912 (194-195). **1614**
- Willett, G.** Birds of the Pacific slope of southern California. Cooper Ornith. Club Pacific Coast Avifauna No. 7 Hollywood Cal. 1912 (1-122). **1615**
- Williams, L. W.** The somites of the chick. Amer. J. Anat. Philadelphia **11** 1910 (55-100) 19 figs. **1616**
- Williams, R. W. jun.** A glimpse into the life history of the Turkey Vulture. Bird Lore Harrisburg Pa. **14** 1912 (13-14) fig. **1617**
- Williams, W. J.** Rare Birds in Ireland. Irish Nat. Dublin **21** 1912 (27). **1618**
- Williamson, F.** The Little Auk in south Lancashire. Lancs. Nat. **4** 1912 (385). **1619**
- Wilson, A.** The Birds of Nairn Edinburgh Trans. F. Nat. Soc. **6** 1912 (400-413). **1620**
- Wilson, F. E.** Additional notes on the Helmeted Honeyeater (*Ptilotis cassidix*). Emu Melbourne **11** 1912 (252-253) fig. **1621**

- Wilson, F. E.** Oologists in the Mallee. Emu Melbourne **12** 1912 (30-39) pls. iii-v. **1622**
- Wilson, R. W. S.** Greenland Wheatear (*Saxicola oenanthe leucorrhoa*) in Ayrshire. Glasgow Nat. **5** 1911 (43). **1623**
- Wilson, R. W. S. and H. W.** A visit to Castle Loch, Mochrum. Glasgow Nat. **4** 1911 (1-4) pl. **1624**
- Wilson, W.** Notes on the faeces of young birds. Naturalist London **1912** 1912 (50-51). **1625**
- Wisman, W. H.** White Pelicans in Ohio. Bird Lore Harrisburg Pa. **14** 1912 (297). **1626**
- Witherby, H. F.** Remarks on birds collected by Capt. Lynes in Spain. London Bull. Brit. Ornith. Cl. **29** 1912 (75-76). **1627**
- Witherby, H. F.** *Luscinola pryeri sinensis* subsp. n. described. London Bull. Brit. Ornith. Cl. **31** 1912 (11-12) also Lynes and Ogilvie-Grant t.c. (12-13). **1628**
- [**Witherby, H. F.**] Recovery of marked birds. Brit. Birds London **5** 1912 (222-223 312-317 340) **6** 1912 97-101 (211-216). **1629**
- W[itherby], H. F.** The 1912 "wreck" of the Little Auk. Brit. Birds London **5** 1912 (282-286 309-311 337-333). **1630**
- W[itherby], H. F.** The late Walter Ibbotson Beaumont. Brit. Birds London **6** 1912 (11-12). **1631**
- Witherby, H. F.** The "British Birds" marking Scheme. Progress for 1912 and some results. British Birds London **6** 1912 (177-183). **1632**
- Witherby, H. F.** Migration notes from Holy Island, Northumberland. Autumn, 1912. British Birds London **6** 1912 (202 210). **1633**
- Witherby, H. F.** *vide* Ford-Lindsay.
- Witherby, H. F.** *vide* Hartert.
- Witherby, H. F.** *vide* Lynes.
- Witt, D. O.** Occurrence of the Fantail Snipe (*Gallinago coelestis*) in Siam. Bombay J. Nat. Hist. Soc. **21** 1911 (269-270). **1634**
- Wolff, G.** Heinrich Schacht†. Nachruf. Ornith. Monatsschr. Magdeburg **37** 1912 (208-210). **1635**
(N-9210 g)
- Wolff, G.** Heinrich Schacht†. Nachruf. Zool. Beob. Frankfurt a. M. **53** 1912 (56-57). **1636**
- Wollaston, A. F. R.** Pygmies and Papuans: the stone age to-day in Dutch New Guinea. With Appendix. Notes on the birds collected by the B.O.U. expedition to Dutch New Guinea by W. R. Ogilvie-Grant (xxiv + 346 Appendix A 263-302) pls. and maps. London (Smith Elder) 1912 8vo. **1637**
- Wood, N. A.** A Michigan record for the Gannet. *Sula bassana* (Linn.). Wilson Bull. Oberlin Ohio **24** 1912 (43-44). **1638**
- Woodruff, F. M.** Two interesting captures in Lincoln Park, Chicago. Auk Cambridge Mass. **29** 1912 (109). **1639**
- Woosnam, R. B.** New localities for Hubbard's Francolin. J. E. Afr. and Uganda N.H. Soc. **2** 1912 (135). **1640**
- Wormald, H.** Red Grouse in confinement. Avicult. Mag. London **3** 1912 (92-96). **1641**
- Wright, A. H.** Early records of the Carolina Paroquet. Auk Cambridge Mass. **29** 1912 (343-363). **1642**
- Wright, H. W.** A Starling at Squantum, Mass. Auk Cambridge Mass. **29** 1912 (394). **1643**
- Wright, H. W.** A Crested Flycatcher in December at Cambridge, Mass. Auk Cambridge Mass. **29** 1912 (242-243). **1644**
- Wright, H. W.** A Palm Warbler (*Dendroica palmarum palmarum*) in winter at Boston, Mass. Auk Cambridge Mass. **29** 1912 (247-248). **1645**
- Wright, H. W.** Morning awakening and even-song. Auk Cambridge Mass. **29** 1912 (307-327). **1646**
- Wright, H. W.** The birds of the Jefferson region in the White mountains, New Hampshire. Manchester N.H. Proc. Inst. Arts Sci. **5** 1911 (1-126) **1647**
- Wright, M. O.** The Ruby-throated Hummingbird. Bird Lore Harrisburg Pa. **14** 1912 (186-189) 1 pl. **1648**
- Wurm, W. v. Oppol.**
- Wychgram, E.** Über das Ligamentum pectinatum im Vogelauge. Arch. vergl. Ophthalm. Leipzig **3** 1912 (22-29) 2 Taf. 4 Fig. **1649**

Wyman, I. E. White-throated Sparrow in Idaho. Auk Cambridge Mass. **29** 1912 (247). **1650**

Young, R. T. *Larus atricilla* and *Larus marinus* in North Dakota. Science New York **35** 1912 (308-309). **1651**

[**Zarudnyj, N. A.**] Зарудный, Н. А. За́мѣтки по Орнитологiи Туркестана. [Mitteilungen über die Ornithologie von Turkestan.] Mess. ornith. Moskva **3** 1912 (16-30 111-123 197-228). **1652**

[**Zarudnyj, N. A.**] Зарудный, Н. А. За́мѣтка о южно-каспiйскомъ королькѣ (*Regulus regulus hyrcanus* Zar.). [Einige Worte über das süd-kaspische Goldhähnchen (*Regulus regulus hyrcanus* Zar.).] Mess. ornith. Moskva **3** 1912 (64). **1653**

[**Zarudnyj, N. A.** und **Bilikevič, S. I.**] Зарудный, Н. А. и Билькевичъ, О. И. Большая бѣлая синица (*Parus bokharensis* Licht.) и ея расы. [*Parus bokharensis* und ihre Rassen.] Mess. ornith. Moskva **3** 1912 (132-150). **1654**

[**Zarudnyj, N. A.**] Зарудный, Н. А. За́мѣтка о персидской горихвосткѣ (*Phoenicurus semenovi* Zar.). [Mitteilung über *Phoenicurus semenovi* Zar.] Mess. ornith. Moskva **3** 1912 (244-247). **1655**

[**Zarudnyj, N. A.**] Зарудный, Н. А. Предварительная за́мѣтка о варакушкахъ (*Cyanecula*) Туркестана. [Vorläufige Notiz über die Blaukehlchen (*Cyanecula*) des Turkestan.] Mess. ornith. Moskva **3** 1912 (308-316). **1656**

Zarudnyj, N. A. *vide* Sarudny.

Zdobnitzky, E. Normaltage in bezug auf Ankunft und Abzug der Vögel in der Umgebung Brünns. Brunn Zs. Mähr. Ld. Mus. **12** 1912 (137-190). **1657**

Zedlitz, [O.] Graf v. [Reise in der Sinai-Halbinsel.] J. Ornith. Leipzig **60** 1912 (114-115). **1658**

Zedlitz, O. Graf. Von Suez zum Sankt Katharinen-Kloster. (Ein ornithologischer Streifzug.) J. Ornith. Leipzig **60** 1912 (325-364 529-569) 1 Karte. **1659**

Zedlitz, O. Graf. Beitrag zur Systematik afrikanischer Vogelformen. Ornith. Monatsber. Berlin **20** 1912 (74-79). **1660**

Zimmer, O. Die Vogelwelt Breslaus. Schles. Jahrb. Berlin **1913** 1912 (86-94). **1661**

Zimmermann, R. Frühjahrsbeobachtungen 1910. [Die „Lewitz“ bei Schwerin.] Ornith. Monatschr. Magdeburg **37** 1912 (68-81) 5 Taf. **1662**

[**Žitkov, B. M.**] Житковъ, Б. М. Птицы полуострова Ямала. [Les oiseaux de la presqu'île de Yamal.] St. Peterburg Ann. mus. zool. Ac. sc. **17** 1912 (311-369) pl. xi et 9 fig. **1663**

Zumstein, F. Beobachtungen über den Vogelzug in der Rheinpfalz während der Jahre 1907 1908 und 1909. Pfälz. Heimatk. Kaiserslautern **8** 1912 (91-94). **1664**

Zumstein, Friedr. Beobachtungen über den Zippammer (*Emberiza cia*). Dürkheim Mitt. Pollichia **27-28** 1913 (47-54). **1665**

II.—SUBJECT INDEX.

N.B.—For full Reference vide Titles.

COMPREHENSIVE AND GENERAL. **5803**

History.

Montaigne and Aldrovande's accounts of the aviaries of the Medicis; **Denise, 367.**

A history of Ornithologists and their works in Styria, Austria; **Tschusi zu Schmidhoffen, 1514.**

History of bird life in the neighbourhood of Zurich since 1557; **Bretscher, 178.**

Über das frühere Vorkommen des Schopfbis (*Geronticus eremita* L.) Gesner's „Waldrapp“ in Mittel-Europa; **Lauterborn, 815.**

History of the common Fowl (*Gallus gallus*) from the earliest times; **Stubbs & Rowe, 1250.**

Notes on the birds described by Diggles in the Proceedings of the Queensland Philosophical Society; **Mathews, 926.**

Biography—General.

CONSTANTINE S. RAFINESQUE and his ornithological work; **Rhoads, 1195.**

ROBERT SIBBALD and his prodromus of Scottish natural history published in 1694; **Mullens, 984.**

Biography—Obituary Notices.

WALTER IBBOTSON BEAUMONT; **Witherby, 1631.**

WILHELM BLASIUS; **Finsch, 442; Nehr Korn, 991.**

AUGUST FRANZ HELM; **Heyder, 667; Loos, 840.**

ALLAN OCTAVIAN HUME; **Sclater, 1338.**

JOHN GERRARD KEULEMANS; **Mathews, 921.**

EUGENE WILLIAM OATES; **Sclater, 1337; Ogilvie-Grant, 1025.**

KARL PARROT; **Besserer, 122.**

HENRY AUGUSTUS PURDIE; **Brewster, 180.**

HEINRICH SCHACHT; **Wolff, 1635, 1636.**

CHARLES OTIS WHITMAN; **Strong, 1426.**

General Treatises.

An index to the five volumes of Sharpe's Handlist of the genera and species of birds; **Ogilvie-Grant, 1024.**

Bibliography.

Record of bird literature for 1910 & 1911; **Hellmayr, 613.**

Bibliography of Austro-Hungarian Avian Literature for 1911; **Tschusi, 1520, 1521, 1515.**

An account of the series of bird-plates belonging to Jakob Theodor Klein (1685–1740) of Dantzic; **Gengler, 490.**

Additions to the known ornithological publications of C. S. Rafinesque; **Rhoads, 1194.**

On a unique copy of Schlegel's "De Vogels van Nederland"; **Oort, 1049.**

Dates of the issue of Lear's *Illustr. Psittacidae* and of S. Müller's *Verhandlungen über die Naturlijke Geschiedenis: Land en Volkenkunde*; **Mathews, 923.**

Institutions and Collections.

Catalogue of the "Marmotta" Collection of European birds in the Paris Museum; **Menegaux, 941.**

Katalog der Vogelsammlung der Naturhistorischen Museums der Stadt Wiesbaden; **Lampe, 806.**

(N-9210 g)

Die afrikanischen Vögel der „Sammlung Dr. Volz“ im naturhistorischen Museum in Bern; **Stuver, 1434.**

Collezione ornithologica Magni-Griffi nel Museo Zool. di Roma; **Carazzi, 230.**

On J. Court's collection of birds' eggs; **Shufeldt, 1368.**

A list of birds living in the Zoological garden of Mr. F. E. Faly-Fein of Ascania-Nova in Gov. Taurien, S. Russia; **Maly-shev, 906.**

Technique.

Methods in ornithological work; **Hartert, 599.**

Die Vogelwarte Helgoland einst und jetzt und die Methoden der Vogelzugsforschung; **Weigold, 1577.**

Methods of estimating the contents of bird stomachs; **McAtee, 860.**

Ornithologisch photographische Naturstudien; **Weckmann, 1572.**

The photography of birds' eggs; **Shufeldt, 1365.**

The determination of genotypes in zoölogy; **Allen, 12.**

Economics (see also under Food-habits, p. 72).

Birds and their relation to a grasshopper outbreak in California; **Bryant, 199.**

Les Oiseaux nuisibles de France et les modes de chasse ou de piégeage propres à leur destruction; **Arenberg, 38.**

Künstige Zuert wilder hühnerartiger Vögel (Russ.); **Lukašević, 854.**

Birds useful and birds injurious in South Africa; **Roberts, 1215.**

The insectivorous birds of New South Wales; **Anonymous, 28.**

Der Untergang des Albatros auf Laysan Island, Hawaiiische Inseln; **Henning, 637.**

Quiscalus crassirostris and *Crotophaga ani* destroying ticks in Jamaica; **Newstead, 999.**

Acanthis linaria and *Coccothraustes respertinus* destroying the Chinese cotton scale; **Arnold, 41.**

Food of some less familiar birds of the United States; **Beal & McAtee, 102.**

Economic relations of *Perdix perdix*; **Thaisz, 1463**; **Csiki, 336**; *Circaëtus gallicus*; **Paris, 1070**; *Picus martius*; **Rendle, 1185**; *Pyrrhula europaea*; **Collinge, 309.**

Ostrich breeding in Algeria; **Mene-gaux, 945**; in Madagascar; **Schuler, 1323.**

The possibility of breeding plumage birds for the plumage trade in captivity; **Bonhote, 153.**

Bird-Protection.

A handbook on the protection of birds, the various methods to be employed, and the legislative enactments of the various European countries; **Hennicke, 633 & 634.**

Die wissenschaftlichen Grundlagen des Vogelschutzes; **Rörig, 1233.**

Zur Nützlichkeitsfrage des Vogel-schutzes; **Schwabe, 1334.**

Jagdwesen und Vogelschutz; **Schweder, 1336.**

Vogelschutz und Ueberlandzentralen; **Hennicke, 635.**

Die Notwendigkeit und Form einer permanenten internationalen Verbindung zwischen den Vogelschutzvereinigungen der Kulturstaaten; **Heuss, 666.**

Sind internationale Vereinbarungen zum Schutze solcher Vögel erwünscht, deren Bestand dadurch gefährdet ist, dass man sie ihrer Schmuckfedern wegen verfolgt?; **Schwartz, 1335.**

Notice sur la protection internationale des oiseaux; **Ternier, 1458.**

Some reasons why international bird protection is necessary; **Dutcher, 413.**

The destruction of wild birds in general throughout the world; **Buck-land, 206.**

Die Raubvögel als Naturdenkmäler; **Braess, 167.**

Die Vernichtung vieler Vogelarten durch moderne Damenmoden; **Schillings, 1311.**

A method of saving birds from destruction at light-houses; **Hennicke, 636.**

Nesting boxes and the protection of birds' nests from the dormouse (*Myo-xus*); **Raspail, 1165.**

Bird protection in East Prussia; **Lühe, 851**; in Bavaria; **Haenel, 568.**

Ein Besuch der Vogelschutzstation in Seobach; **Dänhardt, 346.**

Erfahrungen über Tonernen im Bereiche des Reg.-Bez. Merseburg; **Jacobi v. Wangelin, 710.**

Practical bird-protection in Hungary; **Csörgey, 337, 338**; **Fernbach, 435**; **Maday, 870**; **Chernel, 272.**

St. Peter's Island in the Bielersee in Switzerland, a reservation for marsh and water birds; **Hess, 650.**

Bird protection and its necessity in Italy; **Martorelli, 911**; Bird protection and sport in Italy; **Ghigi, 509.**

Report on bird protection in Massa-chusetts, U.S.A.; **Forbush, 460.**

Schutz von Paradiesvögeln in Hollän-disch Neu-Guinea. (Holländisch); **ANON., 29.**

Proposals for the protection of the Hawaiian Islands bird reservation on Laysan Island; **Dill & Bryan, 377.**

Minor notices.—**Gottschalk, 529**; **Dietrich, 373, 374.**

Aviculture.

A handbook on aviaries and aviculture; **Page, 1064.**

Montaigne and Aldrovande's accounts of the aviaries of the Medicis; **Denise, 367.**

Bird notes from the Zoological Gardens of London; **Seth-Smith, 1355.**

Pheasants and their management in covert and aviary; **Barton, 95.**

On wintering indigenous and exotic birds in the open air; **Bacon, 63.**

Wintering cranes in New England; **Phillips, 1119.**

Manual of falconry; **Chiorino, 278.**

The goshawk in falconry; **Arenberg, 39.**

Avicultural notes on—*Lagopus scoticus*; **Wormald, 1641**; *Dendragapus canadensis*; **Bishop, 139**; *Phasianus*; **Béjot, 109**; *Gallus sonnerati*; **Ghigi, 515**; *Gallus lafayettei*; **Thomas, 1430**; *Polyplectron germaini*; **Ghigi, 512**; *Sphenocercus sphenurus*; **Dodsworth, 384**; *Procellaria pelagica*; **Ticehurst, 1486**; *Scolopax rusticola*; **Chalusek, 254**;

Psophia crepitans; **Schumann, 1329**: *Nettion torquatum*; **Seth-Smith, 1356**: *Serpentarius secretarius*; **Horsbrugh & St. Quintin, 684**: *Nyctala tengmalmi*; **Charlton, 268**: *Polytelis melanura*; **Waddell, 1559**: *Spathopterus alexandrae*; **Astley, 52**: *Dacelo gigantea*; **Cosgrave, 324**: *Crotophaga sulcirostris*; **Alfaro, 9**: *Chasmorhynchus nudicollis*; **Phillipps, 1120**: *Terpsiphone paradisea affinis*; **Baker, 72**: *Erithacus phoenicurus*; **Busse, 220**: *Ruticilla titys*; **Teschemaker, 1460, 1461**: *Pratincola rubetra*; **Teschemaker, 1462**; *Zosterops palpebrosa*; **Page, 1065**: *Prosthematodera novae-zealandiae*; **Ainley, 7**: *Galerita cristata*; **Teschemaker, 1460**: *Chryso-mitris cucullata*; **Amsler, 20**: *Cyanospiza ciris*; **Finn, 441**: *Erythrura prasina*; **Finn, 441**: *Diphyllodes hunsteini*; **Brook, 188**.

Acclimatisation.

Zur Einbürgerungsfrage; **Gebhardt, 489**.

Acclimatization of *Rhea americana* in Italy; **Puccl, 1148**: of *Cupidonia* and *Francolinus* in France; **d'Aubusson, 54** and **55**: of *Panurus biarmicus* at Hornsea, Yorkshire; **Booth, 154**: of *Fringilla canaria* on Midway Island, in the Pacific; **Bryan, 198**: of Paradise-birds in Little Tobago, West Indies; **Pichot, 1126**.

Nomenclature.

A discussion of the validity of the names in Vroeg's catalogue; **Stone, 1411**: and of the type of the genus *Saxicola*; **Stone, 1414**.

Nomenclature of British birds; **Hartert & others, 600**.

The nomenclature of Australian birds, many changes proposed; **Mathews, 917, 926, 928**.

The validity of Brissonian genera; **Mathews, 918**.

Antigone v. *Matheusia*, which is correct?; **Brasil & Iredale, 172**.

On the generic name of the barn-owl; **Mathews, 927**.

Some Irish Gaelic bird names used on Clare Island; **Colgan, 307**.

Die französischen Namen der Singvögel; **Büskens, 219**.

The names "Purple Finch," "Mavis," and "Highole"; **Trotter, 1507**.

Minor notices—**Cooke, 317**: **Harting, 601**: **Hesse, 660**: **Riley, 1211**: **Rhoads, 1194**: **Stone, 1413**.

STRUCTURE. 5807

Plumage and epithelial structures.

A discussion of the origin of feathers; **Gadow, 482**.

The regeneration of feathers and their relation to scales; **Bornstein, 157**.

The arrangement of the contour feathers in birds; **Fehring, 432**.

The downy plumage of nestlings and its relation to the phylogeny of feathers; **Schaub, 1303**.

On the metallic colouration of the feathers on the neck of the domestic pigeon; **Strong, 1425**.

The external characters of the kingfishers; **Miller, 962**.

The pterylography of *Sphenura broadbenti*; **Hall, 578**.

Plumage-change and development in *Phaëthon americanus*; **Gross, 551**.

Breeding and eclipse plumage of *Perdix perdix*; **Ogilvie-Grant, 1039**.

Immature plumage of *Anser indicus* and *Dendrocygna arborea*; **Blaauw, 142**.

On the origin and evolution of the closed follicles in the epithelial tissues of birds; **Relterer & Lelièvre, 1186**.

On the presence of "Herbst corpuscles" in the uropygial gland in birds; **Paris, 1071**.

Histology of the uropygial gland in *Rhynchotus*; **Paris, 1072**.

Nervous System and Sense Organs.

On the structure of the avian cerebellum; **Shimazono, 1363**.

On the development of the avian pineal gland; **Funkquist, 478**.

The nerve cells of the white matter of the spinal cord in birds; **Nemiloff, 994**.

Sviluppo e struttura dei nuclei d'origine dei nervi oculo-motore e trocleari in *Gallus dom.*; **Biondi, 136**.

On the development of the sympathetic nervous system in the chick; **Abel, 2**.

The development of the sympathetic nervous system in birds; **Kuntz, 794**.

Comparative morphology of the eye in various species of ducks; **Ischreyt, 701.**

On the "ligamentum pectinatum" of the bird's eye; **Wychgram, 1649.**

On the structure of the vascular membrane of the bird's eye; **Leplat, 822.**

Fibre elastice in cornea di *Gallus dom.*, disposizione particolare; De **Lieto Vollaro, 829.**

Apparato mitocondriale in cellule del cristallino di *Gallus* e *Columba*; **Maggiore, 872.**

Fine struttura dei centri ottici; **Sala, 1262.**

A curious sense organ derived from the ectoderm of the first branchial slit; **Vitali, 1554, 1556.**

Ruffinische Körperchen in der Zunge der Vögel; **Ducceschi, 405.**

Myology.

The ciliary and iris muscles; **Bond, 152.**

Osteology.

Etudes sur la régénération des os (Polish); **Kinol, 753.**

On the homologies of the zygomatic region of the bird's skull and its relations to the reptilian; **Bittner, 140.**

On "streptostyly" in the bird's skull; **Versluys, 1544, 1545.**

Histology and development of the egg-tooth and skull in the fowl; **Rosenstadt, 1234.**

Morfologia dello sterno; **Balducci, 75.**

The comparative histology of the femoral bone; **Foote, 459.**

The skeletal characters of the Kingfishers; **Miller, 962.**

On the development of the wing-skeleton in the Penguins; **Anthony & Gain, 32.**

Variation in the sternum of *Casuaris*; **Kothe, 785.**

On the development of the skull in *Corvus*; **Kohts, 774.**

Alimentary System.

On the morphology of the avian stomach; **Magnan, 873.**

Histological* structure of the large intestine; **Greschik, 537.**

La bourse de Fabricius et les organes lympho-épithéliaux; **Jolly, 720.**

Histology of the liver of the Dove; **Buch, 205.**

Circulatory System.

On the development of the atrio-ventricular valve of the bird's heart; **Favaro, 429.**

The structure of the heart muscle of the humming bird; **Jordan, 725.**

On the structure of the jugular lymph-sac in the chick; **Clark, 285.**

Struttura e sviluppo delle glandule linfatiche; **Pensa, 1106.**

Respiratory System.

Anatomy of the avian lung; **Juillet, 735, 736.**

On the air sacs of birds; **Schulze, 1328.**

An account of the syrinx in the *Scolopacidae*; **Pycraft, 1153, 1154.**

Reproductive and Excretory Systems.

The structure of the follicular epithelium of the avian ovum; **Retzius, 1190.**

On the presence of two ovaries in birds, especially some of the *Falconidae*; **Gunn, 557.**

The one-sided reduction of the ovaries in birds; **Gadow, 483.**

The ovary in hybrid ducks; **Chappellier, 263.**

The testis in hybrid Guinea × Common Fowls; **Guyer, 562.**

The interstitial cells and the supposed internal secretion of the chicken testis; **Boring, 156.**

Spermatogenesis and the formation of giant spermatozoa in hybrid pigeons; **Smith, 1379.**

The structure of the spermatozoa in *Struthio*, *Coloeus*, *Lanius*, *Perisoreus*, and *Corvus*; **Retzius, 1188, 1189, 1191**

Beitrag zur Anatomie und Histologie der männlichen Begattungsorgane der Vögel. (Polish); **Trawiński, 1503.**

Blood.

Dimensions of the red blood cells of birds; **Cleland & Johnston, 298.**

On the granular bodies in the leucocytes of certain birds; **Kollmann, 778.**

PHYSIOLOGY. 5811

Nervous System.

The physiology of the nerves of the bird's heart; **Paton, 1082.**

Funktion der Ruffinische Körperchen in der Zunge der Vögel; **Ducceschi, 405.**

Nutrition.

The liver and creatin metabolism; **Paton & Mackie, 1083.**

The effect of the removal of the pancreas in *Haliaetus albicilla*; **Glaja, 517.**

On the preponderating influence of the alimentary habits of birds on the structure of the digestive system especially in *Pandion haliaetus*; **Magnan, 878:** Influence of diet on growth in ducks; **Magnan, 886:** Influence of diet on the laying power of ducks; **Magnan, 887:** Experiments on the effect of special diet on the liver and kidneys in ducks; **Magnan, 888:** The effect of different diets on the duck's stomach; **Magnan, 889:** On the adaptation of the intestine to the influence of special diets among ducks; **Magnan, 890:** The effect of variation in food regime on the size of the liver; **Magnan, 891.**

Respiration.

On the body temperature of some diving and swimming bird; **Simpson, 1370.**

The strength of flight and its relation to the development of the lungs; **Magnan, 884.**

Bones and Muscles.

The ciliary and iris muscles; **Bond, 152.**

Das Streptostylie-Problem und die Bewegungen im Schädel bei Saurosiden; **Versluys,**

Reproduction.

Die klimatischen Grenzen der Ornithophilie in Südamerika; **Werth, 1582.**

Physical and Chemical Physiology.

On the metallic colouration of the feathers on the neck of the domestic pigeon; **Strong, 1425.**

How the hatching chick breaks the eggshell; **Kiebel, 744.**

On the weight of the plumage of birds; **Magnan, 874:** On the relative weight of the liver and kidneys in birds; **Magnan, 875, 876:** The relative weight of the wings in carinate birds; **Magnan, 877:** On the relative weights of the remiges and of the wings without feathers in birds; **Magnan, 879, 880:** On the relative weights of the rectrices of carinate birds; **Magnan, 881:** The relative weight of the coverts and body-feathers of birds; **Magnan, 882:** On the relative amount of blood in different groups of birds; **Magnan, 883:** The relative weight of the liver when drained of blood; **Magnan, 885.**

On the presence of manganese especially in the avian uterus; **Bertrand & Medigreceanu, 120.**

Evolution chimique des granulations acidophiles des oiseaux; **Kollmann, 779.**

EMBRYOLOGY. 5815

Early Stages.

On the early stages of the Pigeon's egg from oocyte to cleavage periods; **Bartelmez, 94.**

Parthenogenetic segmentation in the eggs of hybrid ducks; **Chappellier, 264.**

Gastrulation in birds, a criticism on Mr. Patterson's views; **Assheton, 50.**

The somites of the chick and their relation to re-segmentation; **Williams 1616.**

Limbs and Head.

On the development of the chondrocranium in birds; **Van Wijhe, 1608.**

On an interesting vesicle lined with epithelium derived from the first branchial slit in the embryo sparrow; **Vitali, 1555.**

The fifth and sixth aortic arches in birds; **Locy, 836.**

On the development of the bill in the Common Heron; **Sushkin, 1436.**

Die embryonale Metamorphose der Mundrachenwand beim Kanarienvogel; **Stellwaag, 1403.**

Über angebliche Zahnanlagen bei Vögeln; **Inde, 694.**

Nervous System and Sense Organs.

On the development of the sympathetic nervous system in the chick; **Abel, 2.**

Sviluppo dei nuclei di origine dei nervi oculomotori e trocleare in *Gallus*; **Biondi, 136.**

On the development of the vascular membrane of the bird's eye; **Leplat, 822.**

Alimentary System.

On the embryology of the caecum of the fowl; **Kersten, 752.**

Respiratory and Vascular Systems.

Embryology of the avian lung; **Juillet, 735.**

The earliest appearance of the blood-elements in the embryo of the chick; **Dantschakoff, 356.**

On the development of superficial lymphatics in chick embryos; **Clark, 284, Clark & Clark, 286.**

On the development of the jugular lymph sac in the chick; **Miller, 958.**

Excretory & Reproductive Systems.

Primi stadi di sviluppo del condotto di Müller; **Lunghetti, 855.**

On the early stages of oogenesis; **Berenberg-Gossler, 114, 115.**

Chemical Embryology.

Über Ovomuroid und Zucker in dem Weissen der Vogelier; **Mörner, 977.**

On the white and yellow yolk of the egg, its formation, chemistry etc.; **Riddle, 1203.**

The permeability of the fowl's ovarian egg-membrane; **Riddle, 1204.**

Experimental Embryology.

The early development of the chick in vitro; **McWhorter & Allen, 864.**

Effect of narcotics on the developing hen's egg; **Reese, 1174.**

Influence of osmotic pressure on the development of the hen's egg; **Bialaszewicz, 127.**

The effect of Rontgen rays on the developing Bursa Fabricii and other organs in the fowl; **Unzeitig, 1532.**

The growth of tissues from the embryo chick outside the body; **Burrows, 216.**

On the cultivation of tissues from chick embryos in various chemical solutions; **Lewis & Lewis, 825, 826, 827.**

Miscellaneous.

A method for displaying chick embryos; **Miller, 959.**

Wie zerbricht der ausschlüpfende Vogel die Eischale?; **Keibel, 744.**

ETHOLOGY.

5819

General and Miscellaneous.

The freezing of Cayuga lake in its effect on bird life; **Cahn, 233.**

Effect of an eclipse of the sun on birds; **Ottow, 1060.**

The effect of an earthquake on bird-life; **Schuster, 1332.**

Longevity in birds; **Petit, 1113.**

Einiges über das Baden der Vögel; **Heinroth, 611.**

On the methods of disposal of the faeces of young birds; **Wilson, 1625.**

Habits of a Golden Eagle in captivity for sixty-seven years; **Fitch, 452.**

Field-notes on Whip-poor-wills (*Antrostomus*) and Owls; **Bolles, 150.**

Food-habits.

The appetite of birds; **Aubouër, 53.**

Alimentazione degli Uccelli; **Passerini e Cecconi, 1079.**

On the food of nestling birds; **Collinge, 308, 310.**

Methods of estimating the contents of bird stomachs; **McAtee, 860.**

The distastefulness or otherwise of certain butterflies to birds; **Banta & others, 86; Bryant, 203; Pocock, 1137; Swynnerton, 1447.**

Birds attacking Libellulidae; **Codina, 303.**

The Grasshopper, *Schizodactylus monstrosus* as bait for birds; **Phillott, 1121.**

Feeding habits of British Birds; report of the Brit. Assoc. Committee; **Shiple, 1364.**

The food of birds in Scotland; **Florence, 457.**

The stomach contents of Rhodesian birds and their predilection for butterflies; **Swynnerton, 1447.**

The food of birds in India; **Mason & Maxwell-Lefroy, 915.**

Food of Australian birds as evidenced by the stomach contents; **Cleland, 297.**

Food of some less familiar birds of the United States; **Beal & McAtee, 102.**

Food of our more important Fly-catchers (Tyrannidae); **Beal, 101.**

Food of Herons and Ibises in Florida; **Baynard, 100.**

Quiscalus crassirostris and *Crotophaga ani* preying on ticks in Jamaica; **Newstead, 999.**

The food habits of: *Perdix perdix*; **Thaisz, 1463**; *Csiki, 336*: *Phasianus colchicus*; **Grimshaw, 542**: *Larus ridibundus*; **Charlton, 269**; *L. ridibundus* and *L. argentatus*; **Clarke, 294**: *Phaëthon americanus*; **Gross, 551**: *Astur palumbarius*, *Accipiter nisus*, *Buteo vulgaris*; **Chaignon, 253**: *Pernis apivorus*; **Dumast, 408**: *Falco tinnunculus*; **Chaignon, 253**, **Ghigi, 511**: *Syrnium aluco*; **Tuck, 1524**: *Athene noctua*; **Coward, 329**, **Meade-Waldo, 935**: *Megalaema marshallorum*; **Dodsworth, 389**: *Gecinus viridis*; **Smalls, 1374**: *Picus martius*. **Rendle, 1185**: *Oreoscoptes montanus*; **Kennedy, 750**: *Alauda arvensis*; **Hammond, 581**: *Coccothraustes vespertinus*; **Arnold, 41**: *Acanthis linaria*; **Arnold, 41**: *Loxia curvirostra*; **Butiköfer, 221**, **Weber, 1571**: *Pyrrhula europaea*; **Collinge, 309**: *Sturnella neglecta*; **Bryant, 202**: *Sturnus vulgaris* and *Corvus frugilegus*; **Hammond, 581.**

Migration (General).

Studies in bird migration; **Clarke, 289.**

A short review of our present knowledge of bird migration; **Coward, 327.**

A contribution to the theory of migration; **Stubbs, 1432.**

Exact methods in migration research; **Weigold, 1576.**

The causes of migration discussed; **Burrill, 215.**

On the relations of migratory and non-migratory forms of the same or allied species in the European fauna; **Trouessant, 1511.**

How to get exact observations on bird migration; **Hegyfoky, 609.**

Jahresbericht (1910 & 1911) der Vogelwarte Rossitten; **Thienemann, 1473.**

Migration lines of European migratory birds; **Bretscher, 179**, **Ekman, 419.**

Observations on the height in the air at which birds migrate; **Kaygorodoff, 742, 743**; **Lucanius, 849.**

Richtungszwang bei Zugvögeln als Mittel zum Wachtelfang benutzt; **Jurriaanse, 739.**

Migration (Regional observations).

GREAT BRITAIN and IRELAND: report on the immigrations of summer residents in the spring of 1911 and notes on the records received from light-houses and light-ships during the autumn of 1910; **O-Grant, 1034**: migration notes from the Lowestoft district in Suffolk; **Ticehurst, 1488**: autumn migration notes from Holy Island, Northumberland; **Witherby, 1633**: report on Scottish migration in 1911; **Baxter & Rintoul, 98**: dates of the return of summer birds in the Clyde area, spring of 1912; **Paterson, 1081**: autumn migration of Swallows at Rosslare harbour, Ireland; **Delap, 365.**

FRANCE: arrival and departure dates of Swallows in 1911; **Kirchner, 756**: the migrations of Swifts and Swallows in France; **Petit, 1112**: migration notes in Charente, spring 1912; **Delamain, 362, 364.**

GERMANY: Einiges über die Vogelzugerscheinung in den Emslanden, Prov. Hannover; **Detmers, 368**: Herbstzug und Erscheinen der ersten Wintergäste in Sauerlande, Prov. Westfalen, 1908; **Hennemann, 627**: migration observations near Lichtenstein, Kgr. Sachsen; **Helm, 621**: migration notes on the Froburg-Eschfelder Teiche, near Leipsic, Kgr. Sachsen; **Weismantel, 1578**: Über den Vogelzug 1911 bei Lübeck; **Hagen, 570**: migration notes

in Mecklenburg and Lubeck; **Clodius, 299**: migration on the Tuchler Heide near Danzig, Westpreussen; **Dobbrick, 381**: migration notes in East Prussia; **Luhe, 852, 853**: Ankunft der Zugvögel im Frühjahr 1912 in der Oberförsterei Astrawischken, Ostpreussen; **Wels, 1580**: Beobachtungen über den Vogelzug in der Rheinpfalz während 1907, 1908 und 1909; **Zumstein, 1664**: migration reports for Bavaria; **Gengler, 491, Gallenkamp, 485**: migration observations along the North sea and Baltic coasts; **Helm, 622**: iii. Jahresbericht der Vogelwarte der Kgl. Biologischen Anstalt auf Helgoland 1911; **Weigold, 1574**: die Vogelwarte Helgoland einst und jetzt und die Methoden der Vogelzugsforschung; **Weigold, 1577**: migration dates at Memmert one of the E. Frisian Islands; **Leege, 819**: zum Vogelzug auf der Insel Sylt, Nord-Friesische Inseln 1910; **Hagendefeldt, 573**.

AUSTRO-HUNGARY: Ankunfts- und Abzugsdaten aus Mariahof in Stiermark 1911; **Noggler, 1009**: Ankunfts- und Abzugsdaten bei Hallein, Oberösterreich (1911); **Tschusi zu Schmidhoffen, 1519**: migration dates at Liboch in Bohemia; **Loos, 838**: Normaltage in bezug auf Ankunft und Abzug der Vogel in der Umgebung Brünns, Mähren; **Zdobnitzky, 1657**: report on the spring migration of 1911 in Hungary; **Lambrecht, 802**: influence of the weather on the spring migration of 1911 in Hungary; **Hegyfoky, 610**: migration dates at Jaroslaw in Galicia; **Paschtschenko, 1078**: report on bird migration in Croatia and Slavonia in 1909; **Rössler, 1237**: spring migration dates at Budua in South Dalmatia; **Menesdorfer, 947**.

SWITZERLAND: Sommervögel, mittlere Daten ihrer Ankunft; **Fischer-Sigwart, 447, 449**: Causes de la diminution ou de la disparition des oiseaux; **Galli-Valerio, 486**: Beobachtungen im Rheintal 1909; **Hoffmann, 676**: Arrivées de quelques oiseaux á Moncheram; **Moreillon, 975**: Neuchâtel, changements dans les migrations après le desséchement des marais du lac; **Vonge, 1557**: Zug and Aufenthalt von Vögeln in Luzern; **Troller, 1504**.

HOLLAND: Migration dates in Holland in 1911; **Ekama, 417**: observations made during a stay of seven days on the

lightship "Maas" off the Hook of Holland; **Heurn, 663**: spring migration dates at Neerlangbroek; **Snouckaert, 1386**.

SCANDINAVIA: report on birds observed at Danish lighthouses in 1911; **Hørring, 682**: migration notes from Denmark in 1911; **Hagerup, 574**.

RUSSIA: migration notes in the Baltic provinces; **Grevé, 538**: spring migration in the neighbourhood of Pskov; **Nesterov & Nikandrov, 997**: Ankunft und Durchzug im Gouv. Smolensk (Russ.); **Grzibowski, 554**: Zugvögel in Finland (Schwedisch); **Brander, 171**.

ITALY: Migration notes from the Venice district; **Arrigoni degli Oddi, 45**.

EGYPT: migration notes in the Wadi Natron; **Nicoll, 1004**.

CHINA: migration dates on the Island of Shaweishan, Prov. Shantung; **Rickett, 1202**.

CANARY ISLANDS: some migration dates; **Thanner, 1464**.

SOUTH AFRICA: migration notes at the Blaauwberg in N. Transvaal; **Noome, 1013**: migration notes from the Buffalo river basin, Cape Colony; **Godfrey, 522**.

CEYLON: arrival dates at Colombo; **Symons & Cave, 1448**.

UNITED STATES: migration dates for North American Sparrows; **Cooke, 318**: report on the spring migration of 1911 in the Philadelphia neighbourhood; **Stone, 1414**: migration notes and dates at Chapel Hill N.C.; **Feld, 483**: migration phenomena on the islands in Lake Erie; **Jones, 722**: migration notes from St. Joseph county, Ind.; **Alphonsus, 16**.

CANADA: migration dates at St. Lambert, Quebec; **Terrill, 1459**: notes on the spring migration at timber line, north of Great Slave Lake; **Wheeler, 1585**.

Migration of Single Species.

Coturnix coturnix; **Menegaux, 940, 943, 946**.

Alca torda, Scottish visitation of 1911-12; **Clarke, 291**.

Larus ridibundus in Bavaria; **Beserer, 124**.

Stercorarius parasiticus and *S. pomarinus* wandering inland; Hesse, 657, 662.

Charadrius fulvus als Anzeiger des Westmonsuns in Java, (Holländisch); Olivier, 1042.

Machetes pugnax in Switzerland: Aebi, 4.

Gallinago gallinago and *G. stenura* near Calcutta; Pitman, 1129.

Scelopax rusticola in Mecklenburg-Strelitz; Gundlach, 555: in Prussia; Thienemann, 1473 p. 175.

Grus leucogeranus in Ost-Transkaukasien (Russ.); Karamzin, 740.

Ciconia ciconia in South Africa; Haagner, 566: wintering in S. Africa; Godfrey, 523; spring migration in Germany; Hennemann, 632.

Cygnus bewicki in Ost-Transkaukasien (Russ.); Karamzin, 740.

Bernicla leucopsis in England: Charlton, 271.

Nettion crecca again migrating and returning to Wenham, Mass.; Phillips, 1118.

Phaethon americanus in the Bermudas; Gross, 551.

Cypselus apus, in Central Europe; Hennemann, 631; in Germany, Thienemann, 1475; in Switzerland, Hennemann, 628; Muhlemann, 983; at Leyden in Holland; Ritzema, 1214.

Chaetura caudacuta in Australia; Dove, 399.

[*Cheledonaria*] *Hirundo urbica* in Germany; Thienemann, 1475.

Hirundo rustica in France: Daleau, 344; in central Europe; Hennemann, 632; in Denmark; Helms, 623; in Slavonia; Marek, 907.

Ptyonoprogne rupestris, in the Himalayas; Dodsworth, 386.

Muscicapa grisola at Tuskar rock, Ireland; Patten, 1092.

Troglodytes troglodytes at Tuskar rock, Ireland; Patten, 1088.

[*Ampelis*] *Bombycilla garrula* in central Europe; Tschusi zu Schmidhoffen, 1522.

Locustella naevia at Tuskar lighthouse, Ireland; Patten, 1089.

Anthus obscurus at Tuskar rock, Ireland; Patten, 1091.

Loxia curvirostra in France, Delamain, 364; in Switzerland; Tobler, 1497; in Livonia, Russia, Otto, 1057; Ottow, 1059.

Sturnus vulgaris near Bamberg in Bavaria; Ries, 1210.

Pastor roseus in France; Daguin, 342.

Corvus cornix and *C. frugilegus* in Norfolk; Gurney, 559.

Colaeus monedula, in West Prussia; Dobbrick, 382.

Nucifraga caryocatactes. in central Europe; Tschusi, 1517; in Germany, Kurella & Jordans, 796; in Westphalia, Hennemann, 629; in Saxony, Jacobi, 709; near Leipzig, Grimm, 540; near Greifswald in Pomerania, Koske, 784; in East Prussia, Tischler, 1491, 1493; in Württemberg; Bacmeister, 62; round Vienna, Eder, 414, and Mintus, 965; in Bohemia, Loos, 839; in Hungary; Kongl. Orn. Centr., 780; in Siberia Schaefer, 1300.

Bird-marking Experiments.

Das Ringexperiment im Dienste der Vogelzugforschung; Knauer, 766.

Wissenschaftliche Erfolge der Ringversuche zur Erforschung des Vogelzuges; Knauer, 765.

How to identify "ringed" birds; Masse, 916.

Report on the "British Birds" marking scheme for 1912; Witherby, 1632: recovery of marked birds; Witherby, 1629: report of the Aberdeen University bird-ringing scheme, 1909-12; Thomson, 1483.

General account of bird-marking experiments at the Bird-station Rositten in Prussia in 1910, especially with *Corvus cornix*, *Ciconia ciconia* and *Larus ridibundus*; Thienemann, 1473, p. 133: report on bird-marking experiments in Heligoland; Weigold, 1574: bird ringing results in Germany; Hagen, 572.

Report on bird-marking in Hungary for the year 1912; Schenk, 1305.

Bird marking in Switzerland; Burg, 213; Mathey-Duprez, 929, 930; Pittet, 1130.

Results and reports on the Leyden Museum bird-ringing experiments; Oort, 1044, 1048, 1052.

The Danish bird-marking station at Viborg; **Mortensen, 981.**

Ergebnisse des Markierens von Vögeln in Russland (Russ.); **Rossinskij, 1236.**

Accounts of the marking and recapture of *Larus ridibundus*, **Besserer, 124**, **Thienemann, 1475**; *Ciconia ciconia*; **Thienemann, 1472**; *Cypselus apus*, **Schacht, 1298**; *Hirundo rustica*; **Szeots, 1450**; *Sturnus vulgaris*; **Joy, 732, 733**; **Palmen, 1066.**

Flight and other Methods of Locomotion.

A handbook on the flight of birds; **Headley, 606.**

Le vol plané ascendant des grands Oiseaux voiliers et l'aéroplane sans moteur; **Ducos, 406.**

Zur Theorie des Segelfluges der Vögel; **Prochnow, 1145.**

Aerodynamische Betrachtungen über den segelnden Vogel; **Frölich, 472.**

The sailing flight of large birds; **Bohin, 148.**

Géométrie comparée des aéroplanes et des oiseaux volants; **Amans, 19.**

On the height in the air at which birds migrate; **Kaygorodoff, 742, 743**; **Lucanius, 849.**

Fliegen der Vögel gegen den Wind (Russ.); **Buturlin, 229.**

Rapidité du vol; **Richard, 1198.**

L'envergure et le queue chez les oiseaux; **Houssey et Magnan, 685.**

Das Aufliegen der Schwäne vom Erdboden; **Kühlhorn, 792.**

Position of the head in flight of *Leptoptilus crumenifera*; **Jackson, 706.**

On the flight of Gulls; **Brewster, 181**; **Hall, 576.**

The aerial evolutions of Wading birds; **Dewer, 369.**

Abnormal flight of the Common Snipe; **Stubbs and others, 1430.**

Parental Relations.

The infancy of birds, a popular work; **Pycroft, 1152.**

The influence of the brooding mother on the egg in pigeons; **Sellheim, 1346.**

Brauchen die jungen Vögel den Unterricht der Eltern?; **Gengler, 495.**

Sexual Relations.

Sind die männlichen Vögel in der Überzahl?; **Heinroth, 612.**

On the determination of the secondary sexual characters of fowls; **Pézar, 1114.**

Change of plumage and sexual maturity in the Blackbird; **Patten, 1084.**

Indifférence sexuelle chez les femelles des Fringillidés hybrides; **Chappelier, 262.**

Polyandrous habits of *Rostratula capensis*; **Pitman, 1128.**

The secondary sexual characters of *Podiceps cristatus* and their bearing on the whole conception of these characters; **Huxley, 693**: On the sexual relations of *Totanus calidris*; **Huxley, 692**: A "Disharmony" in the reproductive habits of *Anas boschas*; **Huxley, 691.**

Cypselus apus pairing in the air; **Koch, 770.**

The courtship and "display" of *Cerionis satyra*; **Smith, 1378**: *Polyplectron chinquis*; **Seth-Smith, 1353**: *Oedinenemus oedinenemus*; **Munn, 985**. *Mergus merganser*; **Brock, 184**: *Circus* and *Asio accipitrinus*; **Hesse, 656**: *Passer domesticus*; **Gengler, 496.**

Nidification (General).

On incubation habits; **Dunlop, 411.**

Wie zerbricht der ausschlüpfende Vogel die Eischale?; **Keibel, 744.**

Nidification (Regional observations).

BRITISH ISLANDS: Nesting habits of the breeding Terns; **Bickerton, 131.**

GERMANY: Brutergebniss der Vogelkolonie Memmert; **Leege, 820**: Bericht über die Brutergebnisse des Jahres 1911 auf Jordsand, Ellenbogen, Norderoog, Langenwerder und Poel; **Dietrich, 374.**

HOLLAND: Oologia neerlandica; **Pelt-Lechner, 1101, 1103.**

SPAIN: nesting notes in Andalusia; **Lynes, 857.**

RUSSIA: Nisten einiger Vögel des Gouv. Poltava (Russ.); **Gavrilenko, 488**: Nisten der Vögel aus pontischen Ufer des Kaukasus (Russ.); **Launits, 814.**

PALESTINE: Oologische Tagebuchnotizen aus Jerusalem; **Schmitz, 1318.**

ALGERIA: nests and eggs taken in 1908, 1909, 1911; **Rothschild & Hartert, 1244.**

RUSSIAN ASIA: Nest und Eier einiger Vögel des Gouv. Tomsk (Russ.); **Johansen, 715**: Eier, Nest und Nestbau der Vögel auf der Halbinsel Yamal (Russ.); **Žitkov, 1663**: Nest und Eier einiger Vögel in Turkestan (Russ.); **ZARUDNYJ, 1652**: Nisten der Vögel am Amu-darja Delta (Russ.); **Molčanov, 968**: Nisten der Vögel am Saissan-nor u. Marka-Kul (Russ.); **Poliakov, 1441.**

ETHIOPIAN REGION: New and rare bird's eggs from German East Africa, figured and described; **Grote, 552**: notes on eggs and nests from Boror, Portuguese E. Africa; **Roberts, 1217.**

INDIAN REGION: Nests and eggs in Kashmir; **Magrath, 898**: Nests and eggs of Arakan birds; **Hopwood, 681**: Some birds' nests from Haka, Chin Hills; **Venning, 1542.**

AUSTRALIAN REGION: Nests and eggs of the breeding birds of Australia and Tasmania; **North, 1014**: the nesting habits of Australian Petrels and Gulls; **Mathews, 917**: description of the hitherto unknown eggs of 137 species and sub-species; **Mathews, 924**: nests and eggs noticed in the Mallee country, Victoria; **Wilson, 1622**: notes on nests and eggs observed on the Moonie river of the New South Wales-Queensland border; **Jackson, 708**: nests and eggs of the bush birds of New Zealand; **M'Lean, 862.**

NEARCTIC REGION: Nests and eggs of the birds of Michigan, U.S.A.; **Barrows, 93.**

Nidification (Observations on Single Species).

GALLIFORMES: *Cathetus lathami*; **Loisel, 837**: *Perdix cinerea*; **Krohn, 790**: *Meleagris gallinax silvestris*; **Shufeldt, 1367.**

RALLIFORMES: *Rallina tricolor*; **White, 1593**: *Porphyrio caeruleus*; **Wallis & Pearson, 1562.**

PODICIPEDIFORMES: *Podiceps albipennis*; **Fry, 473**: [*Lophaethya*] *Colymbus griseigena* & *C. nigricans*; **Rüdiger, 1258.**

COLYMBIFORMES: *Colymbus septentrionalis*; **Selous, 1347.**

SPHENISCIFORMES: *Pygoscelis adeliae*; **Gain, 484.**

PROCELLANIFORMES: *Puffinus brevicaudus*; **Gabriel, 480**: *Fulmarus glacialis*; **Storoy & Ussher, 1417.**

ALCIFORMES: *Plautus impennis*; **Thayer, 1468.**

LARIFORMES: *Gygis alba*; **Bell, 110**: *Larus ichthyaetus*; **Bamberg, 79**: *L. novae-hollandiae*; **Hull, 690**: *L. argentatus*; **Dietrich, 375**: *L. audouini*; **Rüdiger, 1257.**

CHARADRIFORMES: *Haematopus ostralegus*; **Dietrich, 376**: *Himantopus leucocephalus*; **French, 470**: *Numenius arquatus*; **Schulz, 1326**: *N. phaeopus*, **Harvie-Brown, 603**: [*Limonites*] *Pisobia minutilla*, **Moore, 971**: *Gallinago delicata*, **Saunders, 1291**: *Irediparra gallinacea melvillensis*; **Mathews, 920**: *Oedinenus crepitans*; **Schulz, 1325**: *Houbara macqueeni*, **Aharoni, 6.**

GRUIFORMES: *Balearica regulorum gibbericeps*; **Jourdain, 728**: *Cariama cristata*; **Seth-Smith, 1353.**

ARDEIFORMES: *Oreoibis akleyorum*; **Chapman, 261**: *Ciconia alba*; **Gundlach, 556**: *Leucophoyx candidissima*; **Menegaux, 943**: [*Dupetor*] *Ardeiralla flavicollis melvillensis*; **Mathews, 920**: *Botaurus stellaris*; **Turner, 1528**: *B. stellaris capensis*; **Davies, 359.**

ANSERIFORMES: *Fuligula cristata*; **Brock, 185**: *Ulagula glaucion* & *C. islandica*; **Bunyard, 210**: *Mergus serrator*; **Strong, 1427.**

PELICANIFORMES: *Phaethon americanus*, **Gross, 551.**

ACCIPITRIFORMES: *Vultur monachus*, **Rettig, 1187**: *Gyps fulvus*; **Wallis & Pearson, 1562**: *Aquila melanaetus* and *Circus gallicus*; **Szemere, 1449**: *Pernis apivorus*, **Schulz, 1324**: [*Hierofalco*] *Falco gyrfalco*; **Montell, 969**: *Falco columbarius*, **Brown, 195**: *Cerchneis tinnunculus*, **Patten, 1085.**

STRIGIFORMES: *Ninox peninsularis*; **Macgillivray, 861**: *N. strenua*; **White, 1594**: *Syrnium aluco*; **Elliott, 422.**

PSITTACIFORMES: *Trichoglossus septentrionalis*; **White, 1596**: *Licmetis pastinator*; **Carter, 242**: *Poicephalus meyeri matschiei*; **Schuster, 1330**: *Eclectus roratus*, **Drummond, 402**: *Spathopterus alexandrae*, **Astley, 52.**

PODARGI: *Podargus rossi*; **Howe, 687.**

HALOYONES: *Dacelo gigantea*; Cosgrave, 324: *Halcyon barnardi*; White, 1596.

UPUPAE: *Upupa epops*, Pelt-Lechner, 1104: Puhlmann, 1149.

MEROPES: *Merops persicus*; Sassi, 1284.

CYPSELI: *Tachornis parvus myochrous*; Schuster, 1331.

TROCHILI: [*Trochilus*] *Calypte costae*; Dixon, 379.

CAPITONES: *Megalaema marshallorum*; Dodsworth, 389.

CUCULI: *Hierococcyx sparverioides*; Osmaston, 1055: *Cuculus canorus*, Jander, 711; Loyd, 848: Selous, 1349; Owen, 1061.

PIOI: *Dendrocopus major*; Bonar, 151: *Thriponax feddeni*; Cook, 314: *Picus martius*; Rendle, 1184.

HIRUNDINIDAE: [*Ptyonoprogne*] *Riparia rupestris*; Gengler, 499: *Hirundo rustica*; Passig, 1080: *Chelidon smithii*; Zarudny, 1652: *Petrochelidon lunifrons*; Vietor, 1547.

MUSCICAPIDAE: [*Alseonax*] *Muscicapa latirostris*; Jourdain, 727: [*Siphia*] *Muscicapa parva*; Grimm, 541: *Petroica chrysoptera*, Mathews, 920: *Gerygone magnirostris melvillensis*, Mathews, 920: *Pseudogerygone jacksoni*; White, 1595: *Poecilodryas pulverulenta*; Macgillivray, 861, *Rhipidura setosa melvillensis*; Mathews, 920: *Myiagra rubecula melvillensis*; Mathews, 920.

PYNONOTIDAE: *Pycnonotus leucotis*; Sarudny & Härms, 1281.

TIMELIIDAE: *Pomatorhinus nuchalis*; Cook, 312: *Calamanthus fuliginosus*, Dove, 400: *C. albiloris*; Chandler, 225: *Turdinulus exul*; Robinson, 1222: *Panurus biarmicus*; Turner, 1527.

MIMIDAE: *Toxostoma curvirostra palmeri*; Stafford, 1398.

TURDIDAE: [*Merula*] *Turdus merula mauritanica*, Wallis, 1561: [*Merula*] *Turdus elgonensis*; Jourdain, 727: [*Cichloselys*] *Geocichla sibirica davisoni*; Rouget, 1247: *Turdus pilaris*; Gottberg, 528: *T. torquatus*; Gengler, 502: [*Turdus*] *Planesticus migratorius*; Charles, 266: [*Hylocichla*] *Turdus musicus*; Meyere, 954: *Petrophila cyanus*; Dodsworth, 393: *Microcichla scouleri*; Dodsworth, 392: [*Phoenicurus*]

Ruticilla phoenicura; Schlegel, 1314; Jung, 737: *R. titys*; Teschemaker, 1460: [*Aedon*] *Luscinia megarhyncha*; Ticehurst, 1490: [*Erithacus*] *Luscinia sibilans*; Suškin, 1437: *Cossypha heuglini*; Grote, 553: *Sialia mexicana*; Myers, 990.

SYLVIIDAE: *Sylvia nisoria*; Poliakov, 1140: [*Sutoria*] *Orthotomus longicauda*; Germain, 504: *Megalurus striatus*; White, 1595: *Phylloscopus bonelli*; Gengler, 501: *Sericornis parvula rosinae*; Mathews, 920: *Stipiturus westernensis*; White, 1598: [*Amyntornis*] *Diaphorillas striatus howei*; Howe, 687.

LANIIDAE: *Cracticus mentalis*; White, 1596: *Pachycephala superciliosa belcheri*; Mathews, 920.

PARIDAE: *Parus major*; Bau, 97.

SITTIDAE: *Sitta europaea caesia*; Boxberger, 163: *S. carolinensis nelsoni*; Willard, 1614.

CERTHIIDAE: *Trichodroma muraria*; Gengler, 498.

ZOSTEROPIDAE: *Zosterops lateralis tasmanica*; Mathews, 920.

DIOAEIDAE: *Dicaeum hirundinaceum*; Chandler, 256.

NEOTARINIIDAE: [*Arachnechthra*] *Cinnyris brevirostris*; Sarudny & Härms, 1281: *Cinnyris falckensteini* and *C. mediocris*; Jourdain, 727.

MELIPHAGIDAE: *Gliciphila fasciata apsleyi*; Mathews, 920: *P. subchrysoptera*; White, 1598: *P. cockerelli*; Macgillivray, 861: *P. cassidix*; Wilson, 1621: *Xanthotis filigera*; White, 1596: *Myzantha melanotis*; Ross, 1235.

MNIOTILTIDAE: *Pronotaria citrea*; Schantz, 1301.

MOTACILLIDAE: *Anthus richardi richardi* and *A. r. striolatus*; Jourdain, 727: *A. spinoletta*; Gengler, 500.

ALAUDIDAE: *Rhamphocorys clot-bey* and *Ammomanes deserti algeriensis*; Wallis & Pearson, 1562: *Galerida cristata*; Teschemaker, 1460.

FRINGILLIDAE: *Coccothraustes humii*; Zarudny, 1652: *Hypacanthus spinoides*; Dodsworth, 390: *Passer yatii*; Sarudny & Härms, 1281: *Loxia curvirostra*; Clark, 283; *Carduelis carduelis*; Meyere, 953: *Pinivola californica*; Ray, 1169: *Emberiza saharae*; Wallis,

1561: *Plectrophenax nivalis*; Proger & Paterson, 1146: *Aimophila ruficeps scotti*; Willard, 1612: *Junco oreganus*; Thayer, 1471.

ICTERIDAE: *Molothrus bonariensis*, *M. rufo-axillaris*, *M. badius*; Grant, 532.

PARADISEIDAE: Eggs of various species described and figured; Ogilvie-Grant, 1026; Rothschild, 1239.

PTILONORHYNCHIDAE: *Ptilonorhynchus minor*; White, 1594: *Chlamydodera maculata*; Jackson, 708.

CORVIDAE: *Pica pica*; Meyere, 955; Jourdain, 727; *Garrulus glandarius*; Boxberger, 162.

Oology (see also under Nidification).

Catalogue of the Bird's Eggs in the Natural History Museum London vol. 5 (Zosteropidae-Streperidae); Ogilvie-Grant, 1023.

Oologia universalis palaeartica Lfg. 73-77; Krause, 787.

Erythrism in eggs; Jourdain, 727.

Notices of abnormally coloured and marked eggs; Bunyard, 207, 208.

Some abnormally coloured palaeartic eggs; Bamberg, 80.

The odd or abnormal egg generally found in a clutch; Colthrup, 311.

Blue eggs of Terns and Gulls discussed; Dunlop & others, 410.

Unpigmented eggs of the Ringed Plover and Common Tern; Rowan, 1249.

Great Auk eggs in the Thayer museum. (*Plautus impennis*); Thayer, 1468.

Das Eischalenkorn der europäischen Geierarten; Szielasko, 1451.

Abnormal Kestrel's egg laid in captivity; Patten, 1085.

Voice.

Bemerkungen zu A. Voigts Problemen der Vogelstimmenkunde; Braun, 175.

Über den Gesang; Braun, 173.

Über anomale Lautäusserungen der Vögel, insonderheit das Sprechenlernen der Papageien; Braun, 174.

Wann und weshalb rufen die nächtlichen Wanderer; Hagen, 570 p. 472.

Morning and evening bird-song in New Hampshire U.S.A.; Wright, 1646.

On the "drumming" of Snipes and Woodcocks; Bahr, 66.

On the call note or song of the following:—*Lophortyx californica*, Maillard, 902; *Haliaeetus leucorhynchus*, Magrath, 896; *Asio accipitrinus* and *Circus aeruginosus* Hesse, 656; *Muscicapa grisola*, Hoffmann, 675; *Terpsiphona paradisi*, Magrath, 894; *Dumetella carolinensis*, Bailey, 71; *Parus p. longirostris* and *P. a. rhenanus*, Meyere, 956; *Lanius senator*, *Acrocephalus palustris*, *Irithacus cyaneola*, *Pratincola rubetra*; Stadler, 1397.

Psychology.

Some remarks on bird psychology and instinct; Plačsek, 1132.

Some preliminary observations on the development of instincts and habits in young birds; Kuhlmann, 793.

The development of certain instincts and habits in chicks; Breed, 177.

Besitzen unsere Vögel eine instinktive Furcht vor dem Raubvogel? Braess, 168.

Preference of birds for red flowers; Graenicher, 530.

The persistence of instincts among wild ducks in captivity; Meilheurat, 936.

Organisation of the gull community; Herrick, 646.

Orientation in the passenger pigeon and the theories which explain it; Thauziès, 1465.

Colour and Moult.

The phylogenetic value of colour characters in birds; Stone, 1415.

The soundness of evidence drawn from experiments on birds in captivity in regard to protective colouration, discussed; Butler, 222.

The cause of iridescent colouration in birds; Mallock, 905.

The metallic colouration of feathers on the neck of the domestic pigeon; Strong, 1425.

Feather coloration in the Starling; Stubbs, 1431.

Further contributions to the "concealing coloration" question; **Allen, 10**; **Thayer, 1466, 1467.**

Moult and plumage changes in the following:--*Perdix perdix*, **Ogilvie-Grant, 1039**; *Aptenodytes pennanti*; **Seth-Smith, 1352**; *Anser indicus* and *Dendrocygna arborea*, **Blaauw, 142**; *Harelda glacialis*; **Smalley, 1373**; *Phaëthon americanus*; **Gross, 551**; *Corvus frugilegus*; **Stewart, 1408.**

Pathology and Parasites.

Causes of death in the Zoological Gardens in London in 1911; **Plimmer, 1135.**

Avian tumors in their relation to the general problem; **Rous, 1248.**

On the cause of polyneuritis in birds; **Funk, 477.**

Lésions accidentelles des oiseaux en liberté; **Richard, 1199.**

Sarcoma in *Gallus domesticus*; **Barile, 89.**

Maladie des hécaisses; **Vernet, 1543.**

Diseases of Pheasants; **Barton, 95.**

The parasitic worms of the birds of Turkestan; **Solovjev, 1394.**

The internal parasites recorded from Australian birds; **Johnston, 719.**

The parasitic worms of *Rhea*; **Railliet & Henry, 1156.**

New records of Mallophaga parasitic on birds; **Bagnell & Hall, 65.**

Mallophaga on *Alle alle* and other birds in the Forth area; **Evans, 423.**

Insect parasites of the genus *Laemobothrion*; **Neumann, 998.**

On *Mydaea anomala*, a dipterous parasite on various South American birds; **Nielsen, 1005.**

Bird cestods of the Egyptian Sudan and Uganda; **Fuhrmann, 476.**

Cestod parasites of Spheniscidae, Laridae and Procellariidae from the Antarctic; **Railliet & Henry, 1155.**

New species of Australian bird-cestods; **Johnston, 718.**

On a new cestod (*Otiditaenia*) from the Bustard (*Enpodotis kori*); **Beddard, 104.**

Nematods of the genus *Acuaria* parasitic in birds; **Railliet, Henry & Siroff, 1157.**

On a Nematod parasite (*Filaria*) and a haematozoon (*Halteridium*) observed in *Larus cirrhocephalus* in Senegal; **Thiroux, 1478 & 1479.**

Trichosomum meleagris gallopavo, a new nematode from the Turkey described; **Barile, 88.**

Monostoma fabar, a trematode parasite of the English sparrow in the United States; **Cole, 304.**

Blood-parasites in birds in the Zoological Gardens; **Plimmer, 1136.**

The haematozoa of birds, a study; **Marullaz, 913.**

Leucocytozoa in Portuguese birds; **França, 469.**

Leucocytozoa in the Vulture, Hawk and Snipe; **França, 468.**

Blood parasites (*Haemoproteus* and *Haemogregarina*) in birds; **Darling, 357.**

On a new haematozoan parasite in the pigeon; **Carini, 241.**

Haematozoa in *Melierax gabar*; **Léger & Husnot, 821.**

Trypanosomiasis in fowls; **Mesnil & Blanchard, 952.**

Trypanosomes in Guiana birds; **Brimont, 182.**

Tryphanosoma gallinarum and *T. gambiense* in the fowls and ducks of Uganda; **Duke, 407.**

The infection of birds with the *Halteridium* of Danilewsky; **Cardamitis, 240.**

Infection of birds with *Plasmodium* by external rubbing; **Sergent, 1350.**

Blackhead in Turkeys; a study in coccidiosis; **Cole & Hadley, 306.**

VARIATION AND AETIOLOGY.

5823

Variation.

Discussion on sexual alterations of plumage due to disease, injury or other causes; **Rothschild and others, 1241.**

Geographical variation in birds with special reference to humidity; **Beebe, 106.**

Die Veränderungen der Hausgeflügelrassen, ihre Ursachen und Wirkungen; **Lavalle, 816.**

Colour anomalies in birds; **Vallon, 1539.**

Variation in some Danish birds; **Arctander, 37.**

Mutation in *Hierophasis swinhooi*; **Ghigi, 513.**

Experiments in variation in *Coturnix coturnix*; **Cavazza, 245, 250.**

Variation in canaries' eggs through hybridization; **Tschermak, 1513.**

Hahnenfedriges Weibchen von *Cyanecula suecica suecica* (Russ.); **Averin, 58.**

Albino variations of the following species described:—*Rallus aquaticus*, **Ternier, 1457**; *Ereunetes pusillus*, **Murphy, 989**; *Gallinago gallinago*, **Koller, 775**; *Picus major*, **Dant, 355**; *Muscicapa grisola*, **Averin, 57**; *Turdus merula*, **Corbin, 321**; *Alauda arvensis*, **Ternier, 1457**; *Emberiza schoeniclus* **Harris, 589.**

A colour variation in *Cannabina linota*; **Martorelli, 912**; *Ruticilla tithys*, **Dant, 354.**

Teratology.

Muscular anomalies in the sparrow; **Menier, 949.**

Hyperdactyly in the Houdan fowl; **Barfurth, 87.**

Observations on a three-legged chicken; **Corona, 323.**

Pyrgita petronia, merkwürdige Schnabelbildung; **Dant, 347.**

Anomalie der Luftwege bei einer Ente (Russ.); **Gladkich, 519.**

Double eggs; **Hargitt, 582.**

Hybrids.

Bastardierung und Transplantation; **Schultz, 1327.**

Hybridization and the formation of new species; **Ghigi, 516.**

Results of several studies in hybridism; **Ghigi, 510.**

The testis in Guinea fowl × Common fowl hybrids; **Guyer, 562.**

(N-9210 g)

Esperimenti di ibridismo sui piccioni domestici per lo studio della reversione dei carotteri; **Ghigi, 508.**

Results of hybridizing ring-doves, including sex-linked inheritance; **Strong, 1428.**

The ovary in hybrid ducks; **Chappellier, 263, 264.**

Studies in hybrid ducks, and mendelian inheritance; **Goodale, 524.**

The effect of hybridization on the egg of the canary; **Tschermak, 1513.**

Hybridization of canaries; **Galloway, 487.**

Indifférence sexuelle chez les femelles des Fringillidés hybrides; **Chappellier, 262.**

Natural hybrids among the sparrows of Algeria; **Rothschild & Hartert, 1244, p. 479.**

On the question as to whether *Cyanistes pleskei* is a hybrid; **Pleske, 1134.**

Notices of hybrids between: *Tetrao tetrax* × *Lagopus lagopus*; **Palmgren, 1069, Grieg, 539**; *Tetrao tetrax* × *Phasianus colchicus*; **Jourdain, 730**; *Phasianus* × *Gallus*; **Poll, 1142**; *Graphophasianus soemmeringi* × *Calophasis ellioti*; **Ghigi, 514**; *Anser albifrons* × *A. cinereus*; **Cramm, 332**; *Anas boschas* × *Spatula clypeata*; **Arrigoni degli Oddi, 42**; *Somateria molissima* × *Anas boschas*; **Clarke, 293**; *Cacatua galerita* × *C. eos*; **Cosgrave, 235**; *Nucifraga caryocatactes caryocatactes* × *N. c. macrorhynchus*; **Hess, 652.**

Heredity and Evolution.

Leistungszucht in ihrer Einwirkung auf Konstitutionskraft; **Schmidt, 1315.**

Evolution and ancestral history; **Townsend, 1501.**

On the determination of secondary sexual characters in birds; **Cilleuls, 282.**

Stray notes on sexual selection; **Finn, 440.**

Notes on the history of barred breeds of poultry; **Pearl, 1099.**

On the results of inbreeding in Canaries; **Kluhs, 764.**

Experiments in Pheasant-breeding; transmission of the male's characters; **Thomas, 1481.**

Mendelian experiments on fowls; **Cunningham, 339.**

The Mendelian inheritance of fecundity in the domestic fowl; **Pearl, 1098.**

Experiments in sex-inheritance in poultry; **Morgan & Goodale, 976.**

Sex-limited inheritance and sexual dimorphism in poultry; **Goodale, 525.**

Sex-linked inheritance in the domestic pigeon; **Cole, 305.**

Another view of sex-limited inheritance; **Strong, 1429.**

Experiments in ovariectomy in ducks; **Goodale, 526.**

Certain phases of the theory of recognition marks; **McAtee, 859.**

Notes on recognition marks in certain birds; **Nichols, 1002.**

Geographical variation in birds with special reference to humidity; **Beebe, 106.**

La question de l'espèce en systématique; **Trouessart, 1512.**

Extinct Birds.

A list of the described fossil birds of France; **Paris, 1073.**

Avifauna fossili italiana; **Regalia, 1175.**

Pleistocene birds from the "Borsoder Bükk-Gebirges" in Hungary; **Lambrecht, 803**: the fossil birds, chiefly diluvial, of Hungary; **Lambrecht, 804.**

Palaeolestes gorei a new genus and species of pleistocene birds from pleistocene deposits of Australia; **De Vis, 1549.**

Further information on the now extinct Passenger Pigeon (*Ectopistes migratorius*); **Behr, 108**: **Cooke, 316**: **Hodge, 674**: **Pennock, 1105**: **Ternier, 1456.**

An additional specimen of the Labrador Duck discovered (*Camptorhynchus labradorius*); **Brooks, 192.**

Fregilupus varius, examples in Italian Museums; **Angelini, 27**: **Salvadori, 1269.**

GEOGRAPHY. 5827

General.

The relation of genera to faunal areas and habitat; **Trotter, 1506,**

Die Verbreitung der Gattung *Emberiza*, eine ornitho-geographische Studie; **Duncker, 409.**

The distribution of the genus *Coereba*; **Lowe, 844.**

PALAEARCTIC REGION.

General.

Die Vögel der paläarktischen Fauna, Heft vii; **Hartert, 590.**

EUROPE, a new supplement to Degland and Gerbe's catalogue of the birds of Europe; **Trouessart, 1510.**

EUROPE, list of the mid-european birds inhabiting the high alps which seem to be relics of the Glacial fauna; **Holdhaus, 677.**

ASIA; Verzeichnis der auf der Forschungsreise gesammelten Vögel; **Fuchs, 474.**

British Islands,

BRITISH ISLANDS: handlist of birds; **Hartert and others, 600**: Game-birds and Waterfowl described and illustrated; **Ogilvie-Grant, 1040**: nesting habits of the British breeding Terns; **Bickerton, 131.**

BRITISH ISLES: new British birds—*Larus fuscus britannicus* subsp. n.; **Lowe, 845**: *Terekia cinerea*; **Parkin, 1075, 1076**: *Falco peregrinus anatum*; **Haigh, 575**: *Muscicapa collaris*; **Nichols, 1000**: *Emberiza palustris tschusii*; **Hartert, 592**: *Emberiza leucocephala*; **Clarke, 290.**

KENT: **Parkin, 1075, 1076**: **Ticehurst, 1489.**

SUSSEX: bird notes from the Hastings district for 1911; **Bloomfield, 147**: occurrence of *Oenanthe hispanica* and other rare birds; **Nichols, 1001**: also **Fellden, 434**: **Ford-Lindsay, 462**: **Hartert, 592**: **Langdale, 806**: **Nichols, 1000**: **Parkin, 1077.**

SURREY: birds of Wimbledon Common; **Johnson, 717**, p. 171: also **Bunyard, 210.**

MIDDLESEX: **Devey, 370.**

ESSEX: bird report for the Felsted district 1910 and 1911; **Owen, 1062.**

HERTFORDSHIRE: report on birds observed in 1910; **Bickerton, 133**; birds

of the neighbourhood of St. Albans; **Bickerton, 132.**

OXFORDSHIRE: **Aplin, 35,**

HAMPSHIRE: bird notes from the Avon valley; **Corbin, 322:** first record of *Oceanodroma castro*; **Munn, 986.**

WILTSHIRE: report of Marlborough district 1911; **Disney, 378.**

DORSETSHIRE: **Ashford, 49.**

SOMERSETSHIRE: a list of the rarer birds; **Smith, 1375:** some uncommon occurrences; **Whish, 1586:** also **Coward, 328.**

DEVON: bird notes in the South Hams district; **Elliot, 420.**

CORNWALL: notes on Shearwaters and Petrels on Scilly; **Joy, 734.**

SHROPSHIRE: report on birds for 1910; **Forrest, 465:** field notes from Severn Valley for 1912; **Forrest, 464:** also **Forrest, 463.**

CHESHIRE: **Coward, 330:** **Standen, 1399.**

STAFFORDSHIRE: bird report for 1911, *Scops giu* and *Querquedula circia* first recorded from the county; **Masefield, 914:** bird notes chiefly taken near Stone in 1911; **Bladen, 144.**

DERBYSHIRE: **Jourdain, 731.**

WARWICKSHIRE: **Coward, 340.**

LEICESTERSHIRE: **Haigh, 575.**

NORTHAMPTONSHIRE: **Aplin, 33.**

BEDFORDSHIRE: **Elliott, 421.**

SUFFOLK, migration and other notes from the Lowestoft district; **Ticehurst, 1488:** also **Bunyard, 210:** **Tuck, 1523, 1525.**

NORFOLK: ornithological report for 1911; **Gurney, 558:** miscellaneous notes from Gt. Yarmouth; **Patterson, 1096:** *Botaurus stellaris* again breeding; **Turner, 1528:** also **Gurney, 559, 560, 561.**

LINCOLNSHIRE: report on birds for 1911; **Blathwayt, 146:** additions to the avifauna recorded; **Blathwayt, 145:** also **Haigh, 575.**

YORKSHIRE, birds of the Derwent valley and wild fowling reminiscences; **Smith, 1380:** rare birds recorded; **Stanford, 1400:** also **Fortune, 466:** **Smith, 1381:** **Stephenson, 1406.**

(N-9210 g)

LANCASHIRE: **Coward, 330:** **Rodgers, 1224:** **Williamson, 1619.**

CUMBERLAND and WESTMORELAND: ornithological report for 1911; **Hope & Thorpe, 679.**

NORTHUMBERLAND: a history of the birds of the County; **Bolam, 149:** annotated list of the birds of the north-eastern coast; **Charlton, 279:** notes chiefly on ducks; **Chapman, 257:** nesting of the Common Gull on the Farne Isles; **Booth, 155:** also **Charlton, 267, 268:** **Witherby, 1633.**

GLAMORGAN: migration and other bird-notes near Cardiff; **Proger & Paterson, 1146.**

MONTGOMERYSHIRE: **Forrest, 463.**

ANGLESEY and CARNARVONSHIRE: field notes; **Owen, 1063.**

SCOTLAND: report on Scottish ornithology for 1911; **Baxter & Rintoul, 98:** bird notes from the west Highlands; **Alston, 18:** past and present distribution of the Fulmar; **Harvie-Brown, 604, 605.**

DUMFRIESHIRE: addenda and corrigenda to the "Birds of Dumfriesshire"; **Gladstone, 521:** a catalogue of the birds; **Gladstone, 520.**

WIGTONSHIRE: bird notes from the Castle Loch, Mochrum; **Wilson, 1624:** also **Jackson, 705.**

AYRSHIRE: the birds of the neighbourhood of Beith; **Craig & Barr, 331:** also **Wilson, 1623.**

RENFREWSHIRE: waders observed in autumn, 1911; **Robertson, 1220.**

HADDINGTONSHIRE: **Evans, 424.**

MIDLOTHIAN: bird notes; **Reid & Readdie, 1182:** A Serin Finch (*Serinus serinus*) captured, first record for Scotland; **Wild, 1609:** first record of *Saxicola oenanthe leucorrhoea*; **Evans, 425.**

FIFE: bird-notes from the Isle of May 1911; **Baxter & Rintoul, 99:** *Lanius senator* on the Isle of May, a new Scottish bird; **Rintoul & Baxter, 1212:** *Luscinia suecica suecica* in the Isle of May; **Rintoul & Baxter, 1213:** occurrence of *Limicola platyrhyncha*, first record for Scotland; **Berry, 119:** also **Somerville, 1395.**

ABERDEEN; **Thomson, 1482.**

NAIRN: stray bird notes; **Wilson, 1620.**

Ross; **Jackson, 705.**

ORKNEY and SHETLAND: 3 rare birds recorded from Fair Is., all new to Scotland; **Clarke, 290.**

IRELAND, *Motacilla flava*, *Acrocephalus streperus*, *Alauda cantarella* and *Anthus trivialis* new to Ireland; **Patten, 1086, 1094**; *Beniela leucopsis* not uncommon on the south coast; **Ussher, 1535**; also **Williams, 1618.**

Co. DONEGAL: bird-notes at Bundoran; **Foster, 467**; also **Stoney & Ussher, 1417.**

Co. DOWN: notes on rare birds in the Belfast Municipal Museum; **Stendall, 1405**: the first record of the Common Eider breeding in Ireland; **Robinson, 1221.**

Co. LOUTH: increase and decrease of birds noted; **Pentland, 1107.**

Co. DUBLIN: **Barrington, 91.**

Co. WEXFORD: *Sylvia undata dartfordiensis* take at Tuskar rock, first Irish record; **Barrington, 92**; also **Patten, 1087, 1090, 1093, 1094, 1095.**

Co. MAYO: a survey of the birds of Clare Island; **Ussher, 1534**; also **Stoney & Ussher, 1417.**

Co. GALWAY: **Barrington, 91.**

ISLE OF MAN: ornithological record 1909-12; **Graves & Ralfe, 533.**

GUERNSEY: bird report for 1911; **Rowswell, 1251**: are Guernsey birds to be considered as British; **Rowswell, 1252.**

France.

FRANCE: Les oiseaux nuisibles et les modes de chasse ou de piégeage propres à leur destruction; **Arenberg, 38.**

ALLIER: catalogue of the avifauna of Montlucon and the neighbourhood; **Prugnes, 1147.**

ALPES-MARITIMES: bird-notes in the Esterel hills; **Ingram, 699.**

AVEYRON: list of birds observed; **Delmas, 366.**

CHARENTE: **Delamain, 363.**

CÔTE-D'OR: **Marion, 908**; **Paris, 1074.**

CÔTES DU NORD: Excursions ornithologiques sur les côtes de Bretagne; **Magaud d'Aubusson, 871.**

DORDOGNE: example of *Porphyrio caeruleus* obtained; **Février, 437.**

FINISTÈRE; **Bureau, 211.**

HAUTE-GARONNE: Notes relatives à quelques Oiseaux rares capturés dans le département; **Montlezun, 970.**

HAUTE-MARNE: *Otocoris alpestris* taken at St. Dizier; **Petit, 1111.**

INDRE: notes from Argenton for 1911; **Rollinat, 1232.**

MORIBAN: **Ingram, 698.**

NORD, PAS-DE-CALAIS, SOMME: list of his collection of birds; **Kempen, 746.**

PAS-DE-CALAIS: **Kempen, 748.**

SOMME: **Kempen, 747.**

SEINE et MARNE: annotated catalogue of breeding birds near Nemours; **Babin, 60.**

VENDÉE: rare birds captured at Aiguillon-sur-Mer; **Seguin-Jard, 1345**; **Anfrie, 21.**

Germany.

GERMANY: a handbook of keys to the adult and juvenal plumages, nests and eggs of the birds of middle Europe; **Dahl, 343**: Taschenbuch zum Vogelbestimmen; **Floericke, 456**: former occurrence of *Geronticus eremita*; **Lauterborn, 815**: also **le Roi, 1228.**

PROV. HANNOVER: Studien zur Avifauna der Emslande; **Detmers, 368**: die Ornithologie der Lüneburger Heide; **Koch, 769.**

PROV. WESTFALENS: report on birds for 1910 and 1911: **le Roi**: also **Reeker, 1173**; **Hennemann, 630.**

RHEIN PROV.: bird notes at Wiesdorf near Cologne; **Frey, 471**: report on the birds for 1910, 1911; **le Roi, 1225**: Beiträge zur Vogelfauna des Niederrheins; **Otto, 1058**: also **Bubner, 204**: **le Roi, 1228, 1230, 1231.**

THURINGISCHE STAÄTEN: **Gottberg, 528**; **Hildebrandt, 668.**

KGR. SACHSEN: Beobachtungen an den Frohburg-Eschfelder Teichen während der Zugzeit; **Weissmantel, 1578**: der Leipziger Schlachtfeldgau als

Winteraufenthalt der Krähen; **Wichtrich, 1605**; also **Grimm, 540**; **Wichtrich, 1606, 1607**.

PROV. SACHSEN: Systematische Verzeichnis aller bis Juli 1910 nachgewiesenen Vogelarten des Fallsteingebietes; **Lindner, 831**: Schlussstein zur Ornithologie des Fallsteingebietes; **Lindner, 833**: ecological observations; **Kleinschmidt, 761**; also **Rüdiger, 1254**; **Schmidt, 1316**.

MECKLENBURG: Frühjahrsbeobachtungen 1910; **Zimmermann, 1662**: Bericht über die Brutergebnisse des Jahres 1911 auf Inseln Langenwerder und Poel; **Dietrich, 374**; also **Gundlach, 555, 556**; **Hagen, 569**; **Clodius, 299**.

LUBECK: **Clodius, 299**; **Hagen, 571**.

FREISTADT HAMBURG: die Vogelwelt in der Umgebung; **Dietrich, 372**.

SCHLESWIG-HOLSTEIN: The breeding birds of Trischen Is. off the mouth of the Elb; **Itzerodt, 704**; also **Krohn, 789**.

PROV. BRANDENBURG: die Vögel; **Hocke, 673**: Beobachtungen und Aufzeichnungen während des Jahres 1911; **Hesse, 655**; also **Kitzler, 757**; **Rüdiger, 1255, 1256**.

PROV. POMMERN: Ornithologischer Bericht über einen sechstägigen Aufenthalt im April 1911 auf Hiddensee bei Rügen; **Lindner, 832**: Ornithologische Beobachtungen auf Hiddensee im Mai und Juni 1912; **Lindner, 830**: Die Vogelfreistätte des Ornithologischen Vereins "Joh. Friedr. Naumann" in Cöthen auf den Werder-Inseln; **Gottschalk, 529**; also **Koske, 784**.

PROV. WESTPREUSSEN: Ornithologie der Tuchler Heide; **Dobbrick, 381**.

PROV. OSTPREUSSEN: report for Jan.-Mch. 1912; **Tischler, 1492**; also **Christoleit, 280**; **Tischler, 1494, 1495, 1496**.

PROV. POSEN: ornithologische Beobachtungen und Mitteilungen; **Hammling, 580**; also **Hammling, 579**.

PROV. SCHLESSEN: die Vogelwelt; **Zimmer, 1661**; also **Kruber, 791**; **Uttendörfer, 1536**.

BADEN: **Scheffelt, 1304**; **Fischer-Sigwart, 446**.

BAYERN: Die Frühjahrsbesiedelung in Bayern 1909 und 1910; **Gallenkamp,**

485: Gelegenheitsbeobachtungen aus Bad Kissingen und Umgebung; **Beserer, 123**: Vogelbeobachtungen aus Unterfranken; **Stadler, 1397**: Beiträge zur Avifauna des Rachelgebietes; **Schlegel, 1313**: die Jackelsche Wehergegend einst und jetzt; **Gengler, 492**: Vogelleben im Moos bei München; **Merk-Buchberg, 950**: Ornithologische Notizen aus dem Böhmerwald; **le Roi, 1226**; also **Gengler, 491, 497**.

OST-FRIESISCHE INSELN: Brutergebnis der Vogelkolonie Memmert für 1911; **Leege, 820**: Ornithophänologisches vom Memmert; **Leege, 819**.

NORD-FRIESISCHE INSELN: Bericht über die Brutergebnisse des Jahres 1911 auf Jordsand, Ellenbogen und Norde-roog; **Dietrich, 374**: zum Vogelzug auf der Insel Sylt 1910; **Hagendefeldt, 578**; also **Dietrich, 373**; **Tratz, 1502**.

Austria-Hungary.

TIROL: Die Ornithologie des Gschnitztales bei Steinach am Brenner; **Wettstein, 1584**; also **Bau, 96**; **Thürler, 1485**.

SALZBURG: Ueber das Brüten der Wacholderdrossel (*Turdus pilaris*) in der Umgebung Salzburgs; **Plaz, 1133**.

STIERMARK: **Braun, 176**; **Noggler, 1009**; **Tschusi zu Schmidhoffen, 1514, 1515**.

KRAIN: Ornithologische Notizen 1911. [Slovenische]; **Sajovic, 1261**.

KROATIEN-SLAVONIEN und DALMATIEN: Kritische Verbesserungen und Zusätze zum Verzeichnis der Vögel der kroatischen Fauna; **Hirtz, 670**; also **Rössler, 1238**; **Hirtz, 671**; **Schiebel, 1306**.

DALMATIEN: n. subsp. *Riparia*; **Tschusi, 1516**: list of birds found on Pelagosa island in the Adriatic; **Babic & Rössler, 61**.

BOSNIEN: n. subsp. *Locustella*; **Tschusi, 1516**.

OBERÖSTERREICH: **Tschusi zu Schmidhoffen, 1518**.

NIEDERÖSTERREICH: **Mintus, 965**.

BÖHMEN: die Vogelarten aus der Gegend vom Kumbergebirge bis zur Daudaer Schweiz; **Schad - Roodvalk, 1299**: Ornithologische Notizen aus dem Böhmerwald; **le Roi, 1226**.

UNGARN: **Birthler, 137**; **Fuhrer, 475**.

Switzerland.

Catalogue of the birds of Switzerland, pt. 9 *Ruticillae*; **Fatio & Studer, 428**: The gulls and water birds frequenting the harbour of Geneva; **Ponay, 1143**: Faune ornithologique du Canton de Neuchâtel; **Mathey-Duprez, 931**: ornithologische Beobachtungen im Val de Ruz (Neuchâtel); **Knopfl, 795**: Quelques oiseaux observés sur le lac de Neuchâtel; **Richard, 1200**: die Brutvögel des Gebietes von Ranflüh im Emmental (Canton Berne); **Hess, 653**: die St. Petersinsel im Bielersee als Reservation für Sumpf- und Wasservögel (Canton Berne); **Hess, 650**: Ornithologische Beobachtungen unter der Geissmontfluh im Lindental, Canton Aargau; **Luginbutl, 850**: Changes in bird life in the neighbourhood of Zurich since Gesner's (1557) time; **Bretscher, 178**: *Ornis des Zürichsees*; **Graf, 531**: bird-life of a swamp between the Zurich and Walensee in Canton St. Gallen; **Noll-Tobler, 1012**: Lachmövenkolonie im Linthgebiet bei Uznach, Canton Glarus; **Noll-Tobler, 1010**: Vogelbeobachtungen vom Vierwaldstättersee zum Gotthard, Canton Uri; **Gengler, 493**: also **Aebi, 5**; **Burg, 212**; **Cuony, 340**; **Dant, 348, 350, 351, 352, 353**; **Diebohr, 371**; **Fischer-Sigwart, 445, 448, 450, 451**; **Gerber, 503**; **Ghidini, 507**; **Greppin, 535, 536**; **Hausemann, 602**; **Hess, 649, 651**; **Lerch, 823**; **Morand, 974**; **Muhlemann, 982**; **Noll-Tobler, 1011**; **Pittet, 1131**; **Richard, 1196, 1197**; **Rieg, 1209**; **Schifferli, 1307, 1308, 1309, 1310**; **Schneider, 1320**; **Stemmler-Velter, 1404**; **Troller, 1505**; **Vetter-Stemmler, 1546**; **Wendnagel, 1581**.

Holland.

Oologia neerlandica; **Pett-Lechner, 1101**: report on matters ornithological, May 1910, April, 1912; **Snouckaert van Schauburg, 1387, 1389, 1390**: Ornithologische Beobachtungen in den Niederlanden vom 1 September, 1910, bis zum 31 August, 1911 (Holländisch); **Oort, 1045**: report on birds received by the Leyden Museum, Sept. 1911 to Sept. 1912; **Oort, 1053**: *Pagophila eburnea* and *Bartramia longicauda* wrongly included in the Dutch avifauna; **Oort, 1047**: avifauna of the environs of Roermond; **Hens, 643**: avifauna of the south-western part of the Prov. Utrecht; **Eykman, 426**: on the birds of Texel;

Eecke, 416: notes from Rottum; **Thijssse, 1477**: also **Beaufort, 103**; **Hens, 644**; **Jurrianse, 738**; **Meyere, 957**; **Oort, 1046, 1050**; **Pelt-Lechner, 1102**; **Snouckaert, 1391**; **Thijssse, 1476**.

Belgium.

Dubois, 403.

Scandinavia.

DENMARK, report on birds observed at the lighthouses in 1911 (Danish); **Hørring, 682**: notes on birds from Stevns peninsula, Zealand; **Arctander, 137**: winter birds in a Copenhagen garden; **Petersen, 1110**: the shore-birds of the south of Funen (Danish); **Olsen, 1043**: list of birds breeding at Nakkebølle Fjord, Funen in spring of 1912; **Helms, 625**: bird-notes from the island Fanø, Jutland, June, 1911; **Klinge, 763**: bird notes from Aarhus bay in Jutland; **Knudsen, 767**: list of the birds of Himmerland; **Tanning, 1452**: also **Christensen, 279**; **Hagerup, 574**; **Helms, 624**; **Petersen, 1109**; **Rubow, 1253**; **Welbüll, 1573**.

NORWAY: Aus Südwestnorwegen. Ein ornithologisches Tagebuch; **Mayhoff, 933**: notes from Tromsø; **Haag, 564**: also **Lie-Petersen, 828**.

SWEDEN: an annotated list of birds of Swedish Lapland; **Ekman, 418**.

SPITZBERGEN: **le Roi, 1229**.

ICELAND: *Querquedula discors* a breeding bird; **Coburn, 302**.

Russia.

FINLAND: annotated list of birds of the birds of Turtola and Kolavi; **Munsterhjelm, 987**: annotated list of birds of Kōnkämä-dalen in Lappmark; **Munsterhjelm, 988**: aus dem Jagdrevier Lill-Hütis; **Wadén, 1558**: also **Brander, 170, 171**; **Levander, 824**.

Gouv. St. PETERSBURG: Avifauna (Russ.); **Bianchi, 130**: Lebensgewohnheiten der Seevögel (Russ.) **Rasner, 1164**.

ESTLAND: Ornithofauna (Russ.); **Koch, 768**

LIVLAND: ornithologische Beobachtungen auf der Insel Oesel; **Campenhausen, 237, 238**.

Gouv. KIELCE: Avifauna (Russ.); Katin, 741.

Gouv. MINSK: biologische und phänologische Beobachtungen (Russ.); Fedušin, 431.

Gouv. KIEV: Scharleman, 1302.

Gouv. BESSARABIEN: Avifauna (Russ.); Ostermann, 1056.

Gouv. TAURIEN: n. subsp. *Certhia*; Banikovskij, 84.

Gouv. POLTAVA: Lebensweise und Nisten einiger Vögel (Russ.); Gavrilenko, 488.

Gouv. CHARKOV: Biologie einiger Vögel (Russ.); Girčič, 518: subsp. n. *Emberiza* (Russ.); Averin, 59.

Gouv. KALUGA: Ornithofauna (Russ.); Sanickij, 1277.

Gouv. MOSCOV: biologisches über die Vögel; Pollakov, 1140.

Gouv. NOVGOROD: Kooli-Volkonskij, 782, 783: Bianchi, 129.

Gouv. PERM: Ornithofauna der Kama-Gebiet (Russ.); Bianchi, 128.

Gouv. SAMARA: Vögel des Districts Buguruslau (Russ.); Isolatov, 703.

CAUCASIEN: Vogelwelt der Mugau-Steppe (Russ.); Satunin, 1288: notes on some birds and description of n. sp. *Coracias*; Nesterov, 996: Ornithofauna des südlichen Transkaukasiens (Russ.); Satunin, 1289: Katalog der Vögel des Kaukasus (Russ.); Satunin, 1290: Pontische Küste des Kaukasus, Ornithofauna (Russ.); Lannitz, 813: Ornithofauna Transkaukasiens (Russ.); Lavrov, 817: n. sp. *Chrysomitris*; Loudon, 842: also Karamsin, 710.

Italy.

ITALY: n. subsp. *Dryobates*; Hartert, 560: also Chigi, 275.

PIEDMONT: *Ardetta eurhythmia* new to Europe, captured; Salvadori, 1272: also Salvadori, 1268.

LIGURIA: appunti per la sua Avifauna; Boschetti, 158: Avifauna della Lunigiana, aggiunto; Podenzana, 1138: also Salvadori, 1271.

LOMBARDIA: Uccelli del Piacentino; Ferragni, 436: also Martorelli, 909.

VENETO: Catture di Uccelli rari in provincia di Verona; Dal Nero, 995: Cattura di Uccelli rari in provincia

di Udine; Vallon, 1538: also Arrigoni degli Oddi, 44: Ninni, 1006, 1007.

EMILIA: Cattura notevoli; Cavazza, 248: also Cavazza, 247.

UMBRIA: first record for Italy of *Dandalus rubecula melophilus*; Picchi, 1122, 1123.

TOSCANO: Collezione ornitologica di Meleto in Val d'Elsa; Ridolfi, 1207: also Picchi, 1124.

PROV. ROMA: catalogue of birds from the neighbourhood of Rome; Chigi, 274: also Angelini, 24, 25, 26: Chigi, 276.

CALABRIA; Pisani, 1127.

SICILIA: Note per una Avifauna catanese; Fusco-Rao, 479: also Gregorio, 534: Ridolfi, 1208: Sturmiolo, 1433.

Spain, the Balkan Peninsula and Mediterranean Islands.

SPAIN: bird notes from the Serrania de Ronda and the Sierra Nevada in Andalusia; Lynes, 857 and Witherby, 1627.

ROUMANIA: a systematic account of the avifauna; Dombrowski, 396.

BALEARIC ISLANDS: n. sp. *Galerida*; Hartert, 598.

CORSICA: critical and field notes on the avifauna; Jourdain, 726: n. subsp. *Loxia*, *Coturnix*; Tschusi, 1516: n. sp. *Garrulus*; Laubmann, 811.

SARDINIA: Balducci, 78: Salvadori, 1267: Salvadori & Festa, 1276.

TUSCAN ARCHIPELAGO AND ELBA: on a large collection of birds; Arrigoni degli Oddi & Damiani, 47: Balducci, 76: Damiani, 345.

MEDITERRANEAN COUNTRIES: field notes on birds collected and observed in Egypt, Cyprus, Crete, Asia Minor, Greece, Sicily, Malta, Italy and Spain; Lynes, 856.

North Africa.

MAROCCO: Vaucher, 1540.

ALGERIA: list of birds collected and observed with descriptions of n. subsp. *Coloeus* and *Galerida* and systematic and field notes; Rothschild & Hartert, 1244.

list of birds collected by Flückiger with description of a new "form" of *Garrulus*; Kleinschmidt, 762; n. sp. *Ammomanes*; Hartert, 591: also Wallis, 1561: Wallis & Pearson, 1562.

TUNISIA: bird notes; Millet-Horsin, 963.

EGYPT: an account of the birds of the Wadi Natron; Nicoll, 1004: wild birds occurring in the Zoological gardens at Giza near Cairo; Nicoll, 1003: observations on birds at Giza and Lake Mariotis; Ticehurst, 1487.

Western Asia.

ASIA MINOR: a month after birds in the deserts and oases of Mesopotamia and Syria; Weigold, 1575: a list of birds obtained in Mesopotamia; Sassi, 1284: field notes from Sardis; Russell, 1259: n. subsp. *Dryobates*; Hartert, 590: n. subsp. *Ptilocorys*; Kollibay, 776.

PALESTINE: ornithologische Beobachtungen auf einer Jerusalemfahrt; Schuster, 1333: historical notes and a list of a collection; Snouckaert van Schauburg, 1388: bird notes from northern Palestine; Schmitz, 1317: report on his ornithological journey to Mount Sinai with n. sp. *Columba*; Zedlitz, 1658, 1659: also Aharoni, 6: Kollibay, 776, 777.

PERSIA: notes on some birds collected; Sarudny & Härms, 1281.

BALUCHISTAN: n. subsp. *Thalasseus*; Mathews, 917.

Russian Asia.

Gouv. TOBOLSK: interessante Funde im Tarsker Kreise; Usakov, 1533: Halbinsel Yamal, Avifauna (Russ.); Žitkov, 1663: n. sp. *Scops* (Russ.); Buturlin, 230.

Gouv. TOMSK: zur geographischen Verbreitung der Vögel im russischen Altai; Suschkin, 1435, 1437: n. sp. *Lagopus* und *Phylloscopus*; Hesse, 659, 661: zur Ornithofauna (Russ.); Johansen, 715.

Gouv. JENISSEISK: Ornithologie (Russ.); Tugarinov, 1526.

Gouv. IRKUTSK: n. subsp. *Caprimulgus*; Hartert, 590: also Buturlin, 223.

TURKESTAN: Delta des Amu-darja, Sommer—Ornithofauna (Russ.); Mol-

čanov, 968: Ornithofauna des Saissan-nor und Marka-Kul (Russ.); Poliakov, 1141: notes on a collection of birds from Semirretschensk: Gyldenstolpe, 563: n. subsp. *Cecropis*, *Scops*, *Parus*; Buturlin, 227, 230, 232: n. subsp. *Poecile*; Anonymous, 30: Chachlow, 252 & Hachlor, 567: also Buturlin, 227: Zarudny, 1652, 1656.

TRANSCASPISCHE PROV.: n. subsp. *Turdus*, *Iynx*; Loudon, 841, 842.

Eastern Palaeartic Asia.

JAPAN: a list of the birds of the Kurile Islands (Japanese); Uchida, 1531: a list of the birds of Shikoku (Japanese); Uchida, 1530: birds of Sulphur Isld., Bonin group (Japanese); Kuroda, 797: n. sp. *Puffinus*; Mathews, 917.

CHINA, NORTH OF THE YANGTZE KIANG: a list of birds collected and observed on the Island of Shaweishan, Prov. Shantung, by J. D. La Touche; Rickett, 1202: n. sp. *Acrocephalus* described from Chihli; La Touche, 810: n. sp. *Phasianus* described from Kansu; Ogilvie-Grant, 1036: n. subsp. *Luscinola* described from Hupeh; Witherby, 1628.

Atlantic Islands.

CANARY ISLANDS: an annotated list of the birds of Grand Canary; Bannerman, 85a: bird notes from Fuerteventura and Gran Canaria; Thanner, 1464: n. sp. *Accipiter*; Laubmann, 811.

CAPE VERD ISLANDS: n. sp. *Puffinus*; Mathews, 917.

ETHIOPIAN REGION.

General.

The birds of Africa, vol. v, pt. 2, containing the Dicruridae, Vangidae, Campophagidae, Laniidae and Prionopidae; Shelley, 1359.

West Africa.

WEST COAST: A list of birds, with field notes, collected on the west coast of Africa from Liberia to Cape Town and a detailed description of Ichabo Island off the coast of German S.W. Africa and its birds; Bannerman, 85.

GOLD COAST COLONY: n. sp. *Scops* described; O.-Grant, 1033.

KAMERUN : n. sp. *Apalis*, *Camaroptera*, *Iynx*; Reichenow, 1178, 1181.

FERNANDO PO : n. sp. *Mesopicos*, *Alseonax*; Reichenow, 1178, 1179.

FRENCH SOUDAN : n. sp. *Barbatula*; Reichenow, 1178.

BELGIAN CONGO : annotated list of birds collected by R. Grauer in the lake regions of central Africa with descriptions of new forms of *Asio*, *Cercococcyx*; Sassi, 1285, 1286, 1287 : a list of birds collected by Sig. M. Ribotti near Dangu in the Gherba zone; Salvadori, 1266 : n. spp. *Guttera*, *Francolinus*, *Vinago*, *Ploceus*, *Cinnyris*, *Alethe*; Reichenow, 1171.

South Africa.

SOUTH AFRICA : concluding part of an annotated list of birds collected at various localities by Claude Grant; Sclater, 1341 : the Game birds and Waterfowl figured and described; Horsburgh, 683 : n. sp. *Certhilanda*, *Bradypterus*, *Pycnonotus*, *Trachyphonus*; Ogilvie-Grant, 1028 : also Bannerman, 85 : Davies, 358.

NATAL, new records and rare birds noticed; Chubb, 281.

TRANSVAAL ; field notes from the Blaauwberg near Pietersburg; Noome, 1013 : list of wild birds in the Pretoria Zoological Gardens; Haagner, 565 : n. sp. *Tarsiger*; Roberts, 1216 : also Roberts, 1218.

BECHUANALAND, notes on the birds collected by Woosnam on a trip to Lake Ngami; Ogilvie-Grant, 1028.

PORTUGUESE EAST AFRICA : field notes on birds collected in Boror; Roberts, 1217.

CAPE SEAS : n. spp. *Majaqueus*, *Heteroprion*; Mathews, 917.

Central and East Africa.

NYASALAND : n. sp. *Erythrocerus* described; O.-Grant, 1033.

GERMAN EAST AFRICA : Beitrag zur Ornithologie des südöstlichen Deutsch-Ostafrika und n. sp. *Guttera*; Grote, 552 : n. gen. et sp. Ardeidae; Reichenow, 1180 : also Sassi, 1285, 1286, 1287.

BRITISH EAST AFRICA : n. gen. et sp. Ibisidae; Chapman, 261 : n. sp. *Campophaga*; Jackson, 707 : n. spp. *Pinarochroa*, *Cisticola*, *Bradypterus*; Madarász,

869 : n. spp. *Pylelia*, *Poliospiza*; Ogilvie-Grant, 1030, 1037 : n. sp. *Cryptospiza*; Percival, 1108 : also Jourdain, 728 : Woosnam, 1640.

UGANDA : field notes on forest birds; Seth-Smith, 1357 : spp. n. *Serinus*, *Cossypha*; Hartert, 593, 594.

North-East Africa.

SOMALILAND : birds collected by the Italian Somali-Ethiopian boundary commission under Capt. Citerini; Salvadori, 1264 : n. spp. *Serinus*, *Uraeginthus*, *Calamonastes*; Zedlitz, 1660 : n. subsp. *Laniarius*; Hilgert, 669.

ABYSSINIA : n. sp. *Poliospiza*, *Fringillaria*, *Columba*; Madarász, 865.

ERITREA : catalogue of a collection made by Capt. Chisini; Cavazza, 249.

EGYPTIAN SOUDAN : field notes made during the journey up the White Nile; Staples-Browne, 1402 : n. sp. *Scops*; Madarász, 867 : n. sp. *Ammomanes*; le Roi, 1227.

RED SEA : n. subsp. *Thalasseus*; Mathews, 917.

Madagascar and Mascarene Islands.

MADAGASCAR : n. sp. *Vanga*; Shelley, 1359 : n. sp. *Foudia*; Rothschild, 1243.

MAURITIUS : an annotated list of the birds, native and introduced, with field notes; Meinertzhagen, 937.

INDIAN REGION.

Indian Empire and Ceylon.

INDIA : the Game Birds described; Finn, 439 : account of the Game-birds, pts. vi-viii; Baker, 73 : the food of Indian birds; Mason & Maxwell Lefroy, 915.

KASHMIR : bird notes on a short trip; Magrath, 892 : additions to the Chitral list; Wall, 1560 : also Kinnear, 754 : Magrath, 898.

PUNJAB : Notes from Lahore; Jones, 721 : also Dodsworth, 385, 387, 388, 391, 393, 394; Magrath, 827 : Whistler, 1587, 1588, 1591, 1592.

BOMBAY PRES. : Burton, 217 : Cooper, 320 : Kinnear, 755 : Webb, 1568.

MADRAS PRES.: n. subsp. *Picumnus*; Hartert, 590: also Betham, 125: Stoney, 1418.

CENTRAL PROV.: Notes on a bird collecting trip in the Balaghat district; D'Abreu, 3.

UNITED PROVINCES: n. subsp. *Dryobates*; Hartert, 590.

BENGAL: n. subsp. *Ithaginis* from Sikkim; Beebe, 107.

ASSAM: n. subsp. *Cuculus*; Hartert, 590: also Baker, 174: Gore, 527.

BURMA: a list of birds from Arakan; Hopwood, 681: notes on some birds from the Chindwin valley; Hopwood, 680: notes on some of the bird-life at Thandoung; Cook, 313: some birds from Haka, Chin Hills; Venning, 1541: notes on some Maymyo birds; Harington, 583: also Harington, 584: Venning, 1541.

ANDAMAN ISLES: Whitehead, 1602.

CEYLON: annotated list of the birds of Colombo; Cave, 251: notes on a collecting trip; Henry, 642: n. sp. *Tchitrea*; Sarudny & Härms, 1282: n. sp. *Hydrochelidon*, *Thalasseus*; Mathews, 917.

Malay Peninsula and East India Islands.

DUTCH EAST INDIA ISLANDS: list of birds collected by the author; Dedem, 361.

MALAY PENINSULA: n. subsp. *Picumnus*; Hartert, 590: n. sp. *Abrornis*; Stresemann, 1423.

SUMATRA: 104 new species and subspecies described chiefly from the Barusan Islands; Oberholser, 1019: n. spp. *Muscadivores*, *Thriponax*, *Dicaeum*, *Alcedo*, *Copsychus*; Richmond, 1201: n. subsp. *Collocalia*; Oberholser, 1020.

JAVA: a general account of the bird life; Koningsberger, 781: sp.n. *Pisorhina*; Finsch, 444: also Heeckeren tot Wallén, 607, 608.

BALI, its zoogeographical relations; Stresemann, 1422: *Leucopsar rothschildi* gen et sp. n. described; Stresemann, 1421.

BORNEO: n. subsp. *Cuculus*; Hartert, 590.

CELEBES: n. sp. *Tanygnathus*; Salvadori, 1265.

Indo-China and China (south of the Yangtsze-kiang).

SIAM: n. sp. *Dendrocopus*; Hesse, 658: also Witt, 1634.

COCHINCHINA: review of the Sturnidae; Germain, 505.

CHINA, list of birds hitherto recorded from Yunnan with an account of a collection made by Mr. Owston's Japanese collector; Ingram, 696: n. sp. *Ithaginis* from Yunnan; Beebe, 107: account of a large collection of birds made by Zappey chiefly in Hupeh and Sechwan provinces, China, with descriptions of new forms of *Ithaginis Collocalia*, *Heteroxenicus*, *Tesia*, *Suthora*, *Pnoepyga*, *Oreocincla*, *Reguloides*, *Prinia*, *Sylviparus*, and *Bonaergeres* (*Corvidae*); Thayer & Bangs, 1469: n. sp. *Pucrasia* from Prov. Anhwei; Courtois, 326: n. spp. *Hydrochelidon*, *Gelochelidon*, *Sterna* from Chinese seas; Mathews, 917.

FORMOSA: handlist of the birds; Uchida, 1529: additional notes on birds recently collected by Mr. W. Goodfellow; Ogilvie-Grant, 1029: n. sp. *Ethiopsar* described; Hartert, 595: n. sp. *Abrornis*; Laubmann, 811: sp. n. *Pyrhula*, *Ianthia*, *Horeites*, *Brachypteryx*, *Parus* and *Dicaeum* described; Ogilvie-Grant, 1029, 1032.

PHILIPPINE ISLANDS: n. subsp. *Collocalia*; Oberholser, 1020: also Baer, 64.

AUSTRALIAN REGION.

New Guinea and dependent Islands.

TIMOR GROUP: n. spp. *Dicaeum*, *Neopsittacus* described; Hellmayr, 617.

MOLLUCCAN ISLANDS: notes chiefly taxonomic specially from the southern Moluccan islands with descriptions of new forms of *Anthus*, *Munia*, *Pratincola*, *Phylloscopus*, *Dendrobiastes*, *Centropus*, *Eos*, *Criniger*, *Stigmatops*, *Zosterops*, *Collocalia*; Stresemann, 1424: n. sp. *Phyllergates* and *Stoparola* described; Hartert, 594: n. spp. *Turdus*, *Oreosterops*, *Stigmatops* described from Ceram & Buru; Stresemann, 1421.

DUTCH NEW GUINEA, annotated handlist of the birds collected by the B.O.U. expedition by Ogilvie-Grant; cf. Wollaston, 1637.

BRITISH NEW GUINEA: list of a collection made on the Kumusi River with description of new subsp. of *Pitta*, *Machaerirhynchus*, *Coracina*, *Ptilotis*, *Pinarolestes*; **Rothschild & Hartert, 1245**: list of birds collected at Haidana, Collingwood Bay; **Rothschild & Hartert, 1246**.

GERMAN NEW GUINEA: n. sp. *Pitta*; **Finsch, 443**: n. spp. *Casuarinus*; **Rothschild, 1240**.

Australian Commonwealth.

AUSTRALIA: the petrels and gulls with coloured plates; **Mathews, 917**: a checklist of the birds; **Mathews, 919**: additions and corrections; **Mathews, 920**: nests and eggs of birds breeding in Australia and Tasmania; **North, 1014**: a notice of Mr. Court's Australian eggs; **Shufeldt, 1368**: a discussion on the Australian species of *Cornus*; **Ogilvie-Grant, 1031**: 726 new subspecies described; **Mathews, 919, 920**: n. gen. et sp. *Cuculidae* **Mathews, 922**.

AUSTRALIAN & NEW ZEALAND SEAS: n. spp. *Oceanites*, *Pelagodroma*, *Fregatta*, *Puffinus*, *Majaqueus*, *Pterodroma*, *Prion*, *Pseudoprion*, *Heteroprion*, *Pelecanoides*, *Diomedea*, *Thalassarche*, *Phoebetria*, *Hydrochelidon*, *Sterna*, *Anous*, *Gygis*, *Larus*, *Catharacta*; **Mathews, 917, 919**.

WEST AUSTRALIA: notes from the Stirling ranges; **Whitlock, 1603**: birds observed on Dorré and Bernier Islands; **Lippert, 834**: n. sp. *Cacatua*; **Söderberg, 1392**; **Carter, 242**; **Whitlock, 1604**.

SOUTH AUSTRALIA: field notes on the birds of the Eyre Peninsula, and of the Port Augusta district; **White, 1601**: bird notes from Kangaroo Island; **Mellor, 938**: also **Ashby, 48**; **White, 1600**.

NORTHERN TERRITORY: n. sp. *Neositta*, *Acyone*; **North, 1015**.

TASMANIA: notes from West Devonport; **Dove, 398**: also **Dove, 400**; **Fletcher, 455**; **Hall, 577**.

VICTORIA: list of birds from the Lake Boga district; **Stone, 1409**: field notes in the Mallee country; **Wilson, 1622**: also **French, 470**.

NEW SOUTH WALES: coloured figures of the insectivorous birds of N.S.W.; **ANON., 28**: on the birds of the small islands off the coast; **Hull, 690**: field notes on the Spotted Bower-Bird and other birds in the Moonie

river district north-west of Sydney; **Jackson, 708**: bird life in the Riverina district; **White, 1599**: bird notes round Cobbora; **Austin, 56**: n. sp. *Pseudogerygone*; **Campbell, 236**.

QUEENSLAND: field notes from the Herberton district; **Dodd, 383**: n. spp. *Ptilonorhynchus*, *Ptilotis*, described; **Campbell, 235**: also **Banfield, 81**; **Illidge, 695**.

New Zealand and dependencies.

NEW ZEALAND: notes on the bush-birds; **M'Lean, 862**: n. spp. *Bowdleria* and *Prothemadera* described; **Kemp, 745**: also **Mathews, 932**; **Smith, 1383**.

LORD HOWE, NORFOLK and KERMADECO ISLANDS: relationship of the avifaunas of these three groups; **Oliver, 1041**.

KERMADECO ISLANDS; **Bell, 110**.

CAMPBELL ISLAND: subsp. n. *Diomedea* described; **Rothschild, 1242**.

Pacific Islands.

On the distribution of the two species of *Numenius* in the Pacific; **Henninger, 638**.

FIJI ISLANDS: field observations and critical notes on the avifauna; **Bahr & Ticehurst, 67**.

SAMOA; **Henniger, 639**.

NEW CALEDONIA: n. subsp. *Sternula*, *Bruchigavia*; **Mathews, 917**.

ELLICE ISLANDS: n. subsp. *Procelsterna*; **Mathews, 917**.

MARIANNE or LADRONE ISLANDS: notes on the Vertebrate Fauna; **Schnee, 1319**.

HAWAIIAN ISLANDS: n. sp. *Carpodacus*; **Grinnell, 543**: n. sp. *Puffinus*; **Mathews, 917**.

LAYSAN ISLAND: report on an expedition; list of birds and proposals for protecting the bird reservation; **Dill & Bryan, 377**: also **Henning, 637**.

NEOTROPICAL REGION.

General.

A list of the birds of South America; **Brabourne & Chubb, 165**; n. spp. *Capito*, *Aulacorhynchus*, *Pteroglossus*, *Monasa*, *Momotus*, *Electron*, *Eumomota*, *Antrostomus*, *Nyctidromus*, *Nyctibius*; **Ridgway, 1205**.

South America.

ARGENTINE, CHILE and PATAGONIA: passing observations during a journey through; **Blaauw, 143.**

ARGENTINE: n. subsp. *Zonotrichia*; **Hellmayr, 616.**

PATAGONIA: account of Shore-birds and Ducks obtained by the Princeton University Expedition; **Scott & Sharpe, 1343**: notes on the birds of Tierra del Fuego; **Blaauw, 141.**

FALKLAND ISLANDS: 60 photographs of wild life, chiefly birds; **Cobb, 301**: n. sp. *Macronectes*, **Mathews, 917.**

CHILE: *Fringilla nivalis*, ein Bewohner der Hoch-Kordillere; **Fonck, 458**: n. sp. *Pelecanoides*, *Procelsterna*, **Mathews, 917.**

PARAGUAY: annotated list of birds collected by Señor Posner at Villa Rica; **Dabbene, 341.**

BOLIVIA: n. sp. *Chamaeza*; **Hellmayr u. v. Seilern, 618.**

PERU: n. sp. *Automolus* and *Thamnophilus* described and other rare birds noticed; **Hellmayr, 615**: n. sp. *Coereba*; **Lowe, 846.**

BRAZIL: annotated lists of collections made near Para and on the islands of Mexiana and Marajo by Mr. L. Müller; **Hellmayr, 614**: n. spp. *Conopophaga*, *Vireolanus*, *Knipolegus*, *Platyrrhynchus*, *Hypocnemis*; **Berlepsch, 118**: n. sp. *Myrmotherula*, *Picumnus*, *Momotus*; **Sneath, 1385**: n. sp. *Coereba*; **Lowe, 846.**

EQUADOR: list of birds collected by Dr. Rivet of the French expedition for measuring the arc of meridian in 1899-1906; **Menegaux, 939**: list of birds collected at Baños, with description of a new form of *Picolaptes*; **Menegaux, 944**: stray bird notes on the Paramo; **Rhoads, 1193**: n. sp. *Synallaxis*; **Stone, 1416.**

GALAPAGOS ISLANDS: n. sp. *Puffinus*, **Mathews, 917.**

DUTCH GUIANA: field notes on the birds of Surinam; **Heurn, 665.**

BRITISH GUIANA: taxonomic notes on some birds; **Brabourne and Chubb, 166.**

VENEZUELA: on a collection made by Mr. Klages in the "Cumbre de Valencia" with descriptions of new forms of *Tangara*, *Xanthoura*, *Myiodynastes*,

Pseudocolaptes, *Sittasomus*, *Premnoplex*, *Drymophila*, *Automolus*; **Hellmayr u. Seilern, 618, 620**: n. spp. *Arremonops*, *Saltator*, *Schistochlanys*, *Compsothlypis*, *Pheugopedius*, *Troglodytes*, *Craspedoprion*, *Myiobius*, *Myiochanes*, *Myiodynastes*, *Machetornis*, *Euchlornis*; **Todd, 1498.**

COLUMBIA: diagnoses of new species and subspecies of *Crypturus*, *Chamaepetes*, *Leptotila*, *Pionopsitta*, *Capito*, *Veniliornis*, *Rhamphocaenus*, *Drymophila*, *Formicarius*, *Grallaria*, *Upucerthia*, *Synallaxis*, *Picolaptes*, *Xenicopsis*, *Knipolegus*, *Muscisaxicola*, *Myiodynastes*, *Tyranniscus*, *Platypsaris*, *Attila*, *Rupicola*, *Phaeoprogne*, *Troglodytes*, *Thryophilus*, *Cinnicerthia*, *Planesticus*, *Vireosylva*, *Basileuterus*, *Spinus*, *Ammodramus*, *Myospiza*, *Atlapetes*, *Cyanocompsa*, *Diglossa*, *Sporathraupis*, *Chlorospigus*; **Chapman, 260**: n. sp. *Chrysoptilus*, **Madarasz, 868**: n. spp. *Sporophila*, *Penelope*; **Todd, 1498.**

Central America.

PANAMA: 26 new species and 3 new genera described; **Nelson, 992, 993**: n. subsp. *Piaya* described; **Todd, 1498.**

COSTA RICA, n. subsp. *Tangara* described; **Todd, 1498.**

West Indies.

WEST INDIES: n. subsp. *Butorides*, *Ardea*; **Oberholser, 1021, 1022**: n. subsp. *Melanosterna*, *Megalopterus*, **Mathews, 917.**

TRINIDAD, sp. n. *Chiromachaeris*; **Hartert, 593**: n. subsp. *Grallaria* and *Geotrygon*; **Hellmayr and Seilern, 619**: n. subsp. *Tangara* described; **Todd, 1498.**

CUBA: **Ramsden, 1158, 1159, 1160, 1161, 1162, 1163**: **Oberholser, 1018.**

SWAN, BLANQUILLA and HERMANOS ISLANDS: notes on avifauna and some problems of their distribution discussed; **Lowe, 843.**

NEARCTIC REGION
(including Mexico).**General.**

A new and revised edition of the Handbook of birds of Eastern North America; **Chapman, 258.**

Sixteenth supplement to the American ornithologist's union check-list of North American birds; **Allen, 13.**

The water birds game birds and birds of prey east of the Rockies; **Reed, 1172.**

A new division of North America into faunal regions; **Trotter, 1509**: n. subsp. *Butorides* and *Ardea*; **Oberhoser, 1021, 1022.**

Mexico.

MEXICO: descriptive catalogue of the birds; **Herrera, 645**: n. sp. *Ardea*; **Thayer and Bangs, 1470.**

Western United States.

CALIFORNIA: a systematic list of the birds of the State; **Grinnell, 548**: annotated list of the birds of the Pacific Slope of S. California; **Willett, 1615**: some 1912 spring notes from southern California; **Willett, 1614**: February bird notes from Palm Springs; **Grinnell, 545**: rare takes for San Mateo county; **Littlejohn, 835**: Notes from the San Joaquin valley; **Mailliard, 903**: Birds of a Mohave desert oasis; **Lamb, 801**: The shore birds of Santa Barbara; **Bowles and Howell, 161**: Recent Santa Barbara records; **Dawson, 360**: Notes from Todos Santos islands; **Howell, 689**: The present and future status of the California valley Quail; **Bryant, 200**: n. sp. *Puffinus*, **Mathews, 917.**

CALIFORNIA: minor notices:—**Bowles, 159, 160**; **Bryant, 201**; **Clay, 295, 296**; **Dixon, 380**; **Grinnell, 544, 547**; **Howell, 688**; **Law, 818**; **Mailliard, 900, 901, 904**; **Ray, 1169.**

ARIZONA: A week afield in the southern districts; **Willard, 1611**: Two new records. *Grus canadensis* and *Clangula clangula americana*; **Sloanaker, 1371**: also **Stafford, 1398**; **Willard, 1612, 1613.**

NEW MEXICO: list of birds observed in October at the head waters of the Gila river; **Bergtold, 117**: Birds of the cottonwood groves; **Balley, 69**: also **Bergtold, 116**; **Merrill, 951.**

COLORADO: a history of the birds of the State; **Sclater, 1340**: The present status of its check-list of birds; **Cooke, 319**: a survey of the life zones and lists of breeding birds arranged accordingly; **Cary, 243**: notes from the north-central districts; **Warren, 1565**:

notes on the wading birds of the Barr lake region; **Rockwell, 1223**: Three new bird records, *Calcarius lapponicus lapponicus*, *Hylocichla guttata sequoiensis* and *Planesticus migratorius migratorius*; **Hersey, 647, 648**: also **Betts, 126.**

NEVADA: faunal features of Humbolt county and a list of birds observed with field-notes; **Taylor, 1454**: a journey to the Star lake country and other notes from the Tahoe region; **Ray, 1168**: bird-notes in the Tahoean mountains; **Ray, 1166**: also **Ray, 1167.**

OREGON: **Anthony, 31**; **Jewett, 712**; **Stover, 1419.**

WASHINGTON: birds of the Olympic peninsula; **Reagan, 1170**: also **Edson, 415**; **Getty, 506.**

MONTANA: some birds of the southwest of the State; **Saunders, 1292**: field-notes during a hurried ride across the State; **Saunders, 1294**: also **Saunders, 1293, 1295.**

IDAHO: some birds of the Saw-tooth mountains; **Jewett, 714**: first record of *Zonotrichia albicollis*; **Wyman, 1650.**

WYOMING: **Palmer, 1068.**

Middle United States.

TEXAS: recent records from the valley of the lower Rio Grande; **Smith, 1377**; n. subsp. *Buteo* described; **Bishop, 138**: additions to birds of Kerrville; **Lacey, 799**: also **Smith, 1376.**

ARKANSAS: **Wetmore, 1583.**

MISSOURI: **Fleming, 454.**

KANSAS: a list of the birds of Sedgwick county; **Isely, 702.**

SOUTH DAKOTA: report on the fauna of the eastern part of the Rosebud reservation, now known as Gregory county; **Jones, 724**: notes on the fauna of the Rosebud reservation, west of Gregory county; **Reagan, 1171**: a list of the birds of the Pine Ridge reservation; **Visher, 1553**: a preliminary list of the summer birds of Fall River county; **Visher, 1552**: additions to a list of the birds of Harding county; **Visher, 1550**: also **Visher, 1551.**

NORTH DAKOTA; **Shufeldt, 1366**; **Young, 1651.**

MINNESOTA: **Lano, 808, 809.**

IOWA: a handbook for the identification of the common wild birds; **Bailey, 68**: also **Gabrielson, 481**: **Jones, 723**: **Sherman, 1361, 1362**: **Sloanaker, 1372**.

WISCONSIN: **Coale, 300**: **Hollister, 678**: **Mitchell, 966**: **Ward, 1564**.

ILLINOIS: **Aldrich, 8**: **Peabody, 1097**: **Schautz, 1301**: **Woodruff, 1639**.

INDIANA: tentative list of birds of St. Joseph county; **Alphonsus, 15**: notes on the birds of Notre Dame; **Alphonsus, 17**.

MICHIGAN: list of birds occurring in the State, with keys, descriptions and life histories; **Barrows, 93**: some additions to a list of the winter birds; **Swales, 1440**: *Sula bassana* recorded; **Wood, 1638**: also **Swales, 1438, 1439**.

OHIO: a study of the avifauna of the Lake Erie islands; **Jones, 722**: notes from the Tri-reservoir region; **Henninger, 641**: ecological notes on birds; **Dury, 412**: also **Henninger, 640**: **Morse, 980**: **Stover, 1420**: **Wisman, 1626**.

Eastern United States.

FLORIDA: a March bird list from the Caloosahatchee river and Lake Okechobee; **Phelps, 1115**: n. subsp. *Melospiza*; **Bangs, 83**.

GEORGIA: **Palmer, 1067**: **Wayne, 1567**.

SOUTH CAROLINA, additional bird notes; **Bragg, 169**: also **Mitchell, 967**: **Sass, 1283**: **Wayne, 1566**.

NORTH CAROLINA: notes on the birds observed on a trip through the mountains; **Bruner & Feild, 197**: notes on the birds of Chapel Hill; **Feild, 433**.

VIRGINIA: notes on birds breeding in the mountains; **Bailey, 70**: annotated list of birds observed in Montgomery county; **Smith, 1384**: also **Brown, 194**.

WEST VIRGINIA: **Brooks, 190**.

PENNSYLVANIA: the frontier of the Carolinian fauna in the lower valley of the Delaware; **Trotter, 1508**: an annotated list of the breeding birds of southern Center county; **Harlow, 586**: birds of the "Center Furnace Swamp"; **Harlow, 587**: also **Behr, 108**: **Mengel, 948**: **Miller, 960**: **Stone, 1410**.

NEW JERSEY: winter notes; **Kohler, 771**: also **Allen, 14**: **Harlow, 585**:

Kohler, 772, 773: **Kuser, 798**: **Moore, 972, 973**.

NEW YORK: some bird notes from New York city; **Hix, 672**: a list of birds observed at Prospect Park, Brooklyn; **M., 858**: annotated list of birds of the Niagara neighbourhood; **Rheinecke, 1192**: also **Boyle, 164**: **Clarke, 288**: **Crosby, 334, 335**: **Griscom, 549**: **Helmuth, 626**: **Johnson, 716**: **Miller, 981**: **Pennock, 1105**: **Weber, 1569**.

CONNECTICUT: **Brockway, 186**: **Dow, 401**: **Lacey, 800**: **Sage, 1260**: **Smith, 1382**.

MASSACHUSETTS: an annotated list of the birds of the eastern portion of the State; **Morse, 979**: report of the present condition of the Heath Hens on Martha's Vineyard Isld; **Field, 438**: notes on New England birds; **Thoreau, 1484**: *Myiarchus crinitus*. in December at Cambridge; **Wright, 1644**: also **Barrett, 90**: **Fay, 430**: **Morris, 978**: **Wright, 1643, 1645**.

NEW HAMPSHIRE: the birds of the Jefferson region in the White mountains; **Wright, 1647**: also **Vieter, 1547**.

MAINE: **Brock, 183**: **Clark, 283**: **Norton, 1017**: **Stanwood, 1401**: **Stevens, 1407**.

Canada and Newfoundland.

NEW BRUNSWICK: notes on the summer birds of the St. John valley; **Townsend, 1499**: also **Jewett, 713**.

NOVA SCOTIA: n. subsp. *Bonasa*; **Bangs, 82**.

NEWFOUNDLAND, observations during a short summer outing; **Arnold, 40**: notes on birds observed—summer of 1912; **Brown, 196**: n. subsp. *Loxia* described; **Bent, 113**: also **Brown, 195**.

QUEBEC: notes from the Magdalen islands; **Brooks, 191**: also **Moore, 971**: **Terrill, 1459**.

ONTARIO: a study of the avifauna of the Lake Erie islands; **Jones, 722**: *Scotiaptex nebulosa* obtained, first record for Canada; **Taverner, 1453**: also **Calvert, 234**: **Fleming, 453**: **Sanders, 1296, 1297**.

MANITOBA: occurrence of *Tyrannus verticalis*; **Speechly, 1396**.

ALBERTA: **Brooks & Cobb, 193**: **Cooke, 316**.

BRITISH COLUMBIA: some new records; **Brooks, 189**: a visit to Nootka sound; **Swarth, 1443**: field-notes on a collection of birds made in Vancouver Island; **Swarth, 1442**: *Arquatella m. couesi* in Vancouver Is., first record for Canada; **Taverner, 1453**.

MACKENZIE: list of birds noticed on the Seton expedition of 1907 to Athabasca and Great Slave Lakes; **Seton & Prebble, 1358**.

Alaska.

ALASKA: field notes on the birds of the Aleutian Islands and Bering Sea; **Bent, 112**: n. subsp. *Lagopus* described; **Bent, 111**: also **Swarth, 1444**.

Greenland.

GREENLAND: notes on rare birds and on *Chaulelasmus streperus* and *Passerella iliaca* new to that country; **Schiøler, 1312**: two new records *Turdus iliacus* and *Totanus totanus*; **Gronberger, 550**.

OCEANS.

ATLANTIC OCEAN: birds observed on a voyage from Holland to South America; **Heurn, 664**: n. spp. *Prion*, *Megalopterus*; **Mathews, 917**.

PACIFIC OCEAN: n. spp. *Majaqueus*, *Macronectes*, *Pseudoprion*, *Thalassarche*, *Gelochelidon*; **Mathews, 917**.

INDIAN OCEAN: n. spp. *Puffinus*, *Macronectes*, *Prion*, *Pseudoprion*, *Thalassarche*, *Thalassogeron*, *Gygis*; **Mathews, 917**: also **Oort, 1051**.

ANTARCTIC SEAS: n. sp. *Pagodroma*, *Macronectes*; **Mathews, 917**.

III.—SYSTEMATIC.

The arrangement of Sharpe's "Handlist of birds" is here used; where generic names differ, the name in the Handlist is prefixed in square brackets.

ORDER STRUTHIONIFORMES.

Struthio camelus, domestication and breeding in Algeria, **MENEGAUX, Rev. Sci. Paris 50** (2. semest.) 1912 p. 44: domestication in Madagascar, **SCHULER, Rev. Fr. d'Orn. 2** p. 273.

ORDER CASUARIIFORMES.

Dromiccius novachollandiae woodwardi, p. 175 N.W. Australia, *D. n. rothschildi* p. 175 S.W. Australia, subsp. n., *D. spenceri* nom. n. pro *D. minor* Spencer p. 176, **MATHEWS, Nov. Zool. 18**.

Peronista gen. n. for type *Dromaius peroni*, Rothschild, **MATHEWS, Austr. Av. Rec. 1** p. 107.

Casuarium casuarium johnsonii, on the coloration of the head and neck, **MATHEWS, Austral Av. Rec. 1** p. 66 pl. i.—*C. bennetti*, die Verschiebung des Sternums, **KOTHE, SitzBer. Ges. natf. Freunde 1911** p. 384.—*C. keysseri*. sp. n. German New Guinea, with remarks and complete list of other species of the genus, **ROTHSCHILD, Bull. B. O. C. 29** p. 49.

ORDER TINAMIFORMES.

Tinamus latifrons, figured from Ecuador, **MENEGAUX** (see No. 939 p. 3 pl. i).

Crypturus soui caucac subsp. n. Western Columbia, **CHAPMAN, Bull. Amer. Mus. N.H. 31** p. 141.

Rhynchotus rufescens, on the histology of the uropygial gland, **PARIS, C. R. ass. franç. avanc. sci. 40** p. 526.

Nothura maculosa, characteristic features of the young, **GRANT, Ibis 1912** p. 274 fig. 4.

ORDER GALLIFORMES.

British Game birds described and illustrated, **OGILVIE - GRANT, London 1912** 4to.

The Game birds of South Africa figured and described, **HORSBRUGH, London 1912** 4to.

The Game birds of India, **FINN, Calcutta 1911** 8vo.

Pheasants and how to rear them in the covert or aviary, the principal species figured and their diseases, **BARTON, London 1912** 8vo.

Megapodius duperreyi melvillensis subsp. n. Melville Is. N. Australia, **MATHEWS, Austral. Av. Rec. 1** p. 26.

Leipoa ocellata rosinae subsp. n. S. Australia, **MATHEWS, Nov. Zool. 18** p. 177.

Catheturus lathamii, account of a nest and its opening in Woburn Park, Engl., LOISEL, Bull. soc. acclim. **59** p. 745.—*Alectura lathamii robinsoni* subsp. n. Mid. Queensl., MATHEWS, Nov. Zool. **18** p. 177.

Penelope columbiana sp. n. Columbia, TODD Ann. Carnegie Mus. **8** p. 213.

Chamaepetes sanctae-marthae sp. n. Western Columbia, CHAPMAN, Bull. Amer. Mus. N.H. **31** p. 141.

Lagopus lagopus, in Halbinsel Yamal (Russ.), ŽITKOV. Ann. mus. zool. **17** p. 329 Textf. 7; field notes in the Alps, MORAND, Verh. Schweiz. Natf. Ges. **95** p. 233; figured in colour, GRINNELL, Bird-Lore **14** p. 376.—*L. lagopus brevirostris* subsp. n. Altai Mts., HESSE, Ornith. Monatsber. **20** p. 101.—*L. rupestris sanfordi* subsp. n. Aleutian Isles, BENT, Smiths. Misc. Collect. **56** No. 30 p. 1.

Lyrurus tetrrix, distribution in Holland, BEAUFORT, Ardea **1** p. 50.

Tetrao urogallus, Balzlauthheit, OPPEL, D. Jäger München **34** p. 401; WURM, pp. 461 590; OPPEL, pp. 514 631.

Tympanuchus cupido, report on its present condition on Martha's Vineyard Island, Massachusetts, FIELD, Report Mass. Comm. Game for 1907 Boston.

Bonasa umbellus togata, distribution and habits in Canada, MACNAMARA, Ottawa Nat. **26** 1912 p. 101.—*B. umbellus thayeri* subsp. n. Nova Scotia, BANGS, Auk **29** p. 378.

Tetrogallus himalayensis, photographed at Gilgit, APPLEFORD, Bombay J. Nat. Hist. Soc. **21** p. 1084.

Caccabis rufa, tip of first primary marked with a light-coloured speck in young birds, NOBLE, Brit. Birds **8** p. 248.

Francolinus lathamii schubotzi, subsp. n. Uelle river, Belgian Congo, REICHENOW, J. Ornith. **60** p. 320.—*F. granti*, recorded from S. Africa, SOLATER, Ibis **1912** p. 38.—*F. castaneicollis*, *F. bottegi* and *F. gofanus*, on the distinctness of these three species, O.-GRANT, Bull. B. O. C. **29** p. 116.—*F. castaneicollis*, a rare species in Italian Somaliland, SALVADORI, Ann. Mus. Civ. Genoa **45** p. 306.—*F. johnstoni*, egg figured, GROTE, J. Ornith. **60** p. 516 pl. 9 fig. 8.

Perdix perdix, on the breeding and eclipse plumages, OGILVIE-GRANT, Brit. Birds **5** p. 234 4 figs.; economics and food habits, THAISZ, Aquila **19** p. 166, CSIKI *ibid.* p. 202; do they shift their young, SWORD, Stirling Trans. Nat. Hist. Soc. **1911-12** p. 67.—*P. daurica occidentalis* = *P. daurica turcomana* (Russ.), BUTURLIN, Mess. ornith. **3** p. 63.

Coturnix coturnix, experiments in variation and geographical subspecies, CAVAZZA, Verh. intern. ZoolKongr. Jena **8** p. 783; due speciali forme, CAVAZZA, Riv. ital. Orn. **1** p. 131 1 tav.; experimental studies in the geographical variation, CAVAZZA, Archivio zool. ital. **5** p. 29 5 pls.; its migrations, MENEGAUX, Rev. Fr. d'Orn. **2** p. 251; also Bulletin de l'Institut général psychologique Paris **12** 92; also Rev. sci. Paris **50** (2. semest.) p. 394; the brown-throated variety (? hybrid *C. communis* × *C. capensis*) in Northamptonshire, APLIN, Zoologist **1912** p. 349.—*C. coturnix corsicana* subsp. n. Corsica, TSCHUSI, Orn. Jahrb. **23** p. 218.—*C. australis melvillensis*, Melville Is., N. Australia, *C. a. queenslandicus*, N. Queensl. subsp. n., MATHEWS, Austral. Av. Rec. **1** p. 26; *C. pectoralis praetermissa* p. 178 W. Australia, *C. australis rogersi* p. 179 N.W. Australia, *C. a. mungi* p. 179 N.W. Australia, MATHEWS, Nov. Zool. **18**.

Excalfactoria chinensis colletti p. 73 N. Terr. Australia, *E. c. cairnsi* p. 83 N. Queensl., subsp. n., MATHEWS, Austral. Av. Rec. **1**; *E. c. victoriae* Victoria subsp. n., MATHEWS, Nov. Zool. **18** p. 179.

Ithaginis kuseri sp. n. Yunan p. 190, *I. cruentus affinis* subsp. n. Sikkim, p. 191 BEERBE, Zoologica **1**.—*I. wilsoni* sp. n. Szechwan, China, THAYER & BANGS, Mem. Amer. Mus. Comp. Zool. Harvard Coll. **40** p. 139.

[Tragopan] *Ceriornis satyra*, its display, SMITH, Avicult. Mag. **3** p. 153 pl.

[Gennaesus] *Hierophasis swinhoii*, a mutation, GHIGI, Riv. ital. Orn. **1** p. 272.

Pucrasia ruficollis a distinct species, with synonymy, SALVADORI, Torino Boll. Musei. zool. anat. **27** No. 647.—*P. joretiana* sp. n. Prov. Anhwei, China, COURTOIS, Bull. B. O. C. **31** p. 7.

Phasianus colchicus crop-contents analyzed, GRIMSHAW, Scot. Nat. **1912**

p. 249.—*P. turkestanicus*, Hermaphrodit? (Russ.), ZARUDNYJ, Mess. ornith. **3** p. 120.—*P. strauchi chonensis* subsp. n. Kansu, China, OGILVIE-GRANT, Bull. B. O. C. **31** p. 16.—*P. holdereri* and *P. kiangsuensis*, distinguishing characters and habitats in central China, THAYER and BANGS, Mem. Amer. Mus. Comp. Zool. **40** p. 140.

Calophasis mikado, field-notes from Formosa, O.-GRANT, Ibis **1912** p. 654.

Gallus gallus, early history in Egypt and the far east, STUBBS & ROWE, Zoologist **1912** p. 1.—*G. lafayettei*, habits in captivity, THOMAS, Spolia Zeylan. **7** p. 159.—*G. sonnerati*, habits in captivity, GHIKI, Riv. ital. Orn. **1** p. 275.

Polyplectron chinquis, sexual display, SETH-SMITH P. Z. S. **1912** p. 557.—*P. germaini*, breeding notes, GHIKI, Riv. ital. Orn. **1** p. 270.

Pavo muticus, field-notes in Java, HEECKEREN TOT WALIËN, Ardea **1** p. 13.

Guttera pallasii nom. n. for *Meleagris cristata* (Pall. 1767 non Linn. 1758), STONE Auk **29** p. 208.—*G. cristata makondorum* subsp. n. S.E. German East Africa, GROTE, J. Ornith. **60** p. 514 pl. 9 fig 2 [egg].—*G. plumifera schubotzi* subsp. n. Uelle river, Belgian Congo, REICHENOW, J. Ornith. **60** p. 320.

Lophortyx californica, figured in colour, MAILLIARD, Bird Lore **14** p. 312; its present and future status in California, BRYANT, Condor **14** p. 131.

Odontophorus melanonotus, figured from Ecuador, MENEGAUX (see No. **939** p. 4 pl. ii).

ORDER TURNICIFORMES.

Turnix castanota melvillensis Melville Is. N. Australia, *T. c. alligator* Western N. Terr. Australia subsp. n., MATHEWS, Austral Av. Rec. **1** p. 271.—*T. maculosa psentes* p. 180 N.W. Australia, *T. varia stirlingi* p. 181 W. Australia, *T. v. subminuta* p. 181 N. Queensl., *T. castanota magnifica* p. 181 N.W. Australia, *T. pyrrothorax berneyi* p. 182 N.W. Australia, *T. velox vinotincta* p. 182 N.W. Australia, *T. v.*

(N-9210 g)

picturata p. 182 N.W. Australia, MATHEWS, Nov. Zool. **18**.

ORDER PTEROCLIDIFORMES.

The Sandgrouse of South Africa figured and described, HORSBRUGH, London 1912 4to.

ORDER COLUMBIFORMES.

Sphenocercus sphenurus figured and habits in confinement, DODSWORTH, Avicult. Mag. **3** pp. 129 169.

Vinago calva uellensis subsp. n. Uelle river, Belgian Congo, REICHENOW, J. Ornith. **60** p. 320.—*V. wakefieldi*, new to South Africa, SCLATER, Ibis **1912** p. 29.

Treron curvirostra hypothapsina p. 3, *T. c. smicra* p. 3, *T. c. pega* p. 4, *T. c. haliploa* p. 4, subsp. n., Barussan Islands, Sumatra, OBERHOLSER, Smith. Misc. Collect. **60** No. 7.

[*Osmotreron*] *Dendrophassa vernens mesochloa* p. 2, *D. v. polioptila* p. 3, *D. v. miza* p. 3, *D. fulvicollis melopogenys* p. 3, subsp. n., Barussan Islands, Sumatra, OBERHOLSER, Smith. Misc. Collect. **60** No. 7.

Ptilinopus regina melvillensis subsp. n. Melville Is. N. Australia, MATHEWS, Austral Av. Rec. **1** p. 27.

Megaloprepia magnifica heri subsp. n. Queensland, MATHEWS, Nov. Zool. **18** p. 184.

[*Carpophaga*] *Muscadivores consobrina babiensis* subsp. n. N.W. Sumatra, RICHMOND, Proc. Biol. Soc. **25** p. 103.—*M. acenus mistus* subsp. n. Barussan Isles Sumatra, OBERHOLSER, Smith. Misc. Coll. **60** No. 7 p. 2.

Myristicivora bicolor melvillensis subsp. n. Melville Is., N. Australia, MATHEWS, Austral Av. Rec. **1** p. 27.

[*Hemiphaga*] *Carpophaga novaezealandiae*, Maori methods of snaring, MATHEWS, Trans. Proc. N. Zeal. Inst. **43** p. 603.

Columba livia palacstinae subsp. n. Sinai, ZEDLITZ, J. Ornith. **60** p. 339.—*C. albinucha* figured with additional description from the Belgian Congo, SASSI, Wien Ann. Nat.Hist. Hofmus.

e 14

26 p. 351 pl. v.—*C. sodalicia* sp. n. Abyssinia, MADARASZ, Ornith. Monatsber. 20 p. 46.

Turturoena iriditorques, taxonomic notes, SASSI, Wien Ann. NatHist. Hofmus. 26 p. 352.

Macropoggia phasianella robinsoni subsp. n. N. Terr. Australia, MATHEWS, Nov. Zool. 18 p. 185.—*M. emiliana elassa*, *M. e. hypoperena* subsp. n. Barussan Isles Sumatra, OBERHOLSER, Smith. Misc. Coll. 60 No. 7 p. 2.

Ectopistes migratorius, recollections in Pennsylvania, BEHR, Cassinia 1911 p. 24; nesting in New York State formerly, PENNOCK, Auk 29 p. 238; a last word on, HODGE, Auk 29 p. 169; disappearance and extinction, TERNIER, Bull. soc. acclim. 58 pp. 193 229.

Turtur torquatus, in der Schweiz, DANT, Ornithol. Beob. 8 p. 38.

Geopelia humeralis apsleyi p. 27, *G. placida melvillensis* p. 28, Melville Is. N. Australia, *G. p. hedleyi* p. 84 N. Queensl. subsp. n., MATHEWS, Austral Av. Rec. 1; *G. humeralis inexpectata* p. 186 N. W. Australia, *G. placida clelandi* p. 186 W. Australia, *G. cuneata mungi* p. 187 N. W. Australia, subsp. n., MATHEWS, Nov. Zool. 18.

Chalcopelia afra and *C. chalcospilos* figured with remarks on the distribution, specific distinction and subspecific races, SOLATER, Ibis 1912 p. 34 pl. i.

Chalcophaps chrysochlora rogersi N. Queensl., *C. c. kempii* Cape York, subsp. n., MATHEWS, Nov. Zool. 18 p. 187.

Phaps chalcoptera riordani subsp. n. Melville Is. N. Australia, MATHEWS, Austral Av. Rec. 1 p. 28; *P. c. consobrina* p. 188 N. W. Australia, *P. c. murchisoni* p. 188 W. Australia, *P. elegans neglecta* p. 188 N. S. Wales, *P. e. affinis* p. 188 S. Australia, *P. histrionica alisteri* p. 189 N. W. Australia, subsp. n., MATHEWS, Nov. Zool. 18.

Petrophassa albipennis alisteri subsp. n., N. W. Australia, MATHEWS, Austral Av. Rec. 1 p. 28.

Geophaps smithi blaauwi N. W. Australia p. 28, *G. s. ceciliae* Melville Is. N. Australia p. 29, subsp. n., MATHEWS, Austral Av. Rec. 1.

Lophophaps ferruginea mungi N. W. Australia, *L. plumifera pallida* N. W. Australia, subsp. n., MATHEWS, Nov. Zool. 12 p. 190.

Ocyphaps lophotes whitlocki W. Australia, *O. l. stalkerii* N. Terr. Australia, subsp. n., MATHEWS, Nov. Zool. 18 p. 191.

Leptotila verreauxi occidentalis subsp. n. Western Columbia, CHAPMAN, Bull. Amer. Mus. N.H. 31 p. 142.

Geotrygon linearis trinitatis subsp. n. Trinidad, HELLMAYR & SEILERN, Bull. B. O. C. 31 1912 p. 13.—*G. goldmani* sp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 2.

ORDER RALLIFORMES.

Rallus aquaticus korejewi figured from Hupeh, China, THAYER & BANGS, Mem. Mus. Comp. Zool. 40 p. 144 pl. iii fig. 1.

[*Limnopardalis*] *Rallus rhytirynchus*, juvenal plumage described, GRANT, Ibis 1912 p. 275.

Eulabeornis castaneoventris melvilli subsp. n. Melville Is. N. Australia, MATHEWS, Austral Av. Rec. 1 p. 29; *E. philippensis mellori* p. 192 W. Australia, *E. castaneoventris rogersi* p. 193 N. W. Australia, MATHEWS, Nov. Zool. 18.

Tomirdus gen. n. for type *Eulabeornis tricolor robinsoni* Mathews, MATHEWS, Nov. Zool. 18 p. 193.

Rallina tricolor, the colour of the eggs, WHITE, Ibis 1912 p. 552; MATHEWS t.c. p. 684.

Porzana fluminea whitei S. Australia, *P. pusilla fitzroyi* N.W. Australia, *P. cinerea parryi* N.W. Australia, subsp. n., MATHEWS, Austral Av. Rec. 1 p. 73; *P. plumbea roberti* subsp. n. W. Australia, MATHEWS, Nov. Zool. 18 p. 446.

Porzanoidea gen. n. for type *Gallinula immaculata* Swains., MATHEWS, Austr. Av. Rec. 1 p. 117.

Limnobaenus marginalis, occurrence in Natal—only twice before known in S. Africa, CHUBB, J. S. Afr. Orn. Union 8 p. 2.

Amaurornis phoenicura cleptea subsp. n. Nias Is., OBERHOLSER, Smith. Misc. Coll. 64 No. 7 p. 2.

Tribonyx mortieri, field notes in Tasmania, FLETCHER, *Emu* 11 p. 250.—*T. ventralis whitei* p. 194 N. S. Wales, *T. v. territorii* p. 195 N. Terr. Australia, **subsp. n.**, MATHEWS, *Nov. Zool.* 18.

Monias benschi, figured, with taxonomic remarks, HARTERT, *Nov. Zool.* 19 p. 373 pl. i.

Gallinula tenebrosa magnirostris W. Australia, *G. t. subfrontata* N.S. Wales, **subsp. n.**, MATHEWS, *Nov. Zool.* 18 p. 195.

Porphyrio caeruleus, taken in Dordogne, France, FÉVRIER, *Rev. Fr. d'Orn.* 2 1912 p. 222; nesting in Algeria, WALLIS & PEARSON *Bull. B.O.C.* 29 p. 106.—*P. melanotus woodwardi subsp. n.* West Australia, MATHEWS, *Austral Av. Rec.* 1 p. 29.

Fulica atra, breeding habits and number of broods raised, APLIN, *Zoologist* 1912 p. 35.—*F. atra ingrami subsp. n.* N. Terr. Australia, MATHEWS, *Nov. Zool.* 18 p. 196.

Podica petersi diving habits denied, DAVIS, *J. S. Afr. Orn. Union* 8 p. 78.

ORDER PODICIPEDIFORMES.

Podiceps ruficollis Vroeg is the oldest and most correct name for *P. fluviatilis* Tunstall 1771, MATHEWS, *Austral Av. Rec.* 1 p. 29; *P. fluviatilis carterae* W. Australia, *P. f. parryi* N.W. Australia, *P. poliocephalus cloatesi* N.W. Australia, **subsp. n.**, MATHEWS, *Nov. Zool.* 18 p. 197.

[*Lophaethya*] *Podiceps cristatus*, secondary sexual characters and their general bearing to the whole conception, HUXLEY, *Science* 36 p. 601.—*Colymbus holboelli* habits as affected by the freezing of open water, CAHN, *Auk* 29 p. 439.

ORDER COLYMBIFORMES.

Colymbus septentrionalis, on the domestic habits, SELOUS, *Zoologist* 1812 pp. 81 171 210.—*Urinator arcticus suschkini subsp. n.* Turkestan (Russ.), ZARUDNYJ *Mess. ornith.* 3 p. 111.

ORDER SPHENISCIFORMES.

On the development of the wing skeleton in the Penguins, ANTHONY & GAIN, *C.R. Acad. sci. Paris* 155 p. 1264.

(N-9210 g)

Aptenodytes pennanti, moult as observed in the London Zoological Gardens, SETH - SMITH, *P.Z.S.* 1912 pp. 60 671 pl. i.

Pygoscelis adeliae, distribution, life history and habits, GAIN, *Rev. gén. sci. Paris* 23 p. 429 av. fig.

Eudyptula minor woodwardi subsp. n. W. Australia, MATHEWS, *Nov. Zool.* 18 p. 199.

ORDER PROCELLARIIFORMES.

The following Australian species figured:—*Oceanites oceanicus exasperatus* pl. lxxviii, *O. nereis nereis* pl. lxxix, *Pelagodroma marina dulciae* pl. lxx, *Fregetta tropica melanogaster* pl. lxxi, *Fregetta grallaria grallaria* pl. lxxii, *Puffinus assimilis tunneyi* pl. lxxiii, *P. reinholdi reinholdi* pl. lxxiv, *P. pacificus royanus* pl. lxxv, *P. carneipes carneipes* pl. lxxvi, *P. griseus griseus* pl. lxxvii, *P. tenuirostris brevicaudus* pl. lxxviii, *Procellaria aequinoctialis conspicillata* pl. lxxix, *P. parkinsoni* pl. lxxx, *P. cinerea* pl. lxxxii, *Priocella antarctica* pl. lxxxiii, *Pterodroma maeroptera gouldi* pl. lxxxiii, *P. melanopus* pl. lxxxiv, *P. lessonii leucocephala* pl. lxxxv, *P. mollis* pl. lxxxvi, *P. cookii cookii* pl. lxxxvii, *P. c. leucoptera* pl. lxxxviii, *Macroneetes giganteus albus* pl. lxxxix, *Daption capense* pl. xc, *Halobaena caerulea* xci, *Prion vittatus missus* pl. xcii, *Pseudoprion turtur turtur* pl. xciii, *Pelecanoides urinatrix urinatrix* pl. xciv, *Diomedea exulans rothschildi* pl. xcvi, *Thalassarche melanophris impavida* pl. xcvi, *Thalassogeron chrysostoma culminatus* pl. xcvi, *T. chlororhynchus bassi* pl. xcvi, *T. c. carteri* pl. xcix., *T. cautus cautus* pl. c, *Phoebetria palpebrata huttoni* pl. ci, MATHEWS, *Bds. Australia* 2 1912.

Puffini dei mari italiani, SALVADORI, *Avicula* 12 p. 1.

Procellaria pelagica, habits in captivity, TICEHURST, *Avicult. Mag.* 3 p. 111.

Oceanodroma leucorhoa, taken near Harrogate, FORTUNE, *Naturalist* 1912 p. 361.—*O. castro* first record for Hants, MUNN, *Brit. Birds* 5 p. 252.

Oceanites oceanus exasperatus subsp. n. New Zealand seas, MATHEWS, *Bd. Australia* 2 p. 11.

Pelagodroma marina dulciae p. 21 West Australia, *P. m. maoriana* p. 24 New Zealand seas, *P. m. howei* p. 26 East Australia, **subsp. n.**, MATHEWS, Bds. Australia 2.

Fregetta tubulata **sp. n.** Australian seas, MATHEWS, Bds. Australia 2 p. 42.

Fregettornis **gen. n.** for type *Fregetta grallaria* Vieillot, MATHEWS, Bds. Australia 2 p. 31.

Nesofregetta **gen. n.** for type *Fregetta moestissima* Salvin, MATHEWS, Bds. Australia 2 p. 31.

Puffinus couesi p. 67 Californian coasts; *P. assimilis kempi* p. 69 New Zealand seas; *P. a. tunneyi* pp. 69 71 West Australia; *P. lherminieri boydi* p. 70 Cape Verde Isl.; *P. l. becki* p. 70 Galapagos Isl.; *P. l. nugax* p. 72 Queensland; *P. reinholdi reinholdi* p. 74 New Zealand; *P. r. huttoni* p. 77 Snares Is., New Zealand; *P. pacificus hamiltoni* p. 82 Seychelles; *P. p. alleni* p. 83 S. Benedicto Is. California; *P. p. laysani* p. 83 Laysan Is., *P. p. royanus* p. 85 East Australia; *P. carneipes hullianus* p. 90 Norfolk Isl.; *P. c. hakodate* p. 90 Japan seas; *P. c. carbonarius* p. 90 New Zealand seas, **spp. et subspp. n.**, MATHEWS, Bds. Australia 2.—*P. obscurus godmani* Allen antedates *P. o. atlanticus* Rothschild & Hartert, for the Madeiran race of the Little Dusky Shearwater, WITHERBY, Brit. Birds 5 p. 253.—*P. brevicaudus*, breeding notes, GABRIEL, Vict. Nat. 28 p. 206.

Rheinholdia **gen. n.** for type *Puffinus reinholdi* Mathews, MATHEWS, Aust. Av. Rec. 1 p. 107.

[*Majaqueus*] *Procellaria aequinoctialis mixta* p. 111 Cape seas, *P. a. steadi* p. 112 New Zealand seas, *P. a. brabourni* p. 113 West coast of S. America **subsp. n.**, MATHEWS, Bds. Australia 2.

Aestrelata aterrima, second example obtained in the Indian ocean, VAN OORT, Leiden Notes Mus. Jentink 34 p. 70.—*Pterodroma macroptera albani* **subsp. n.** S.W. Australia, MATHEWS, Austral Av. Rec. 1 p. 30.

Pagodroma confusa **sp. n.** Cape Adare Antarctic, MATHEWS, Bds. Australia 2 p. 177.

[*Ossifraga*] *Macronectes giganteus solanderi* p. 187 Falkland Isles, *M. g.*

halli p. 187 Kerguelen, *M. g. wilsoni* p. 189 Ross sea, *M. g. forsteri* p. 189 Chile coasts, **subsp. n.**, MATHEWS, Bds. Australia 2.

Fulmarus glacialis past and present distribution in the British Islands, HARVIE-BROWN, Scot. Nat. 1912 pp. 97 121 map; early and adult plumage, CLARKE t.c p. 102, also HARVIE-BROWN, Zoologist 1912 pp. 381 401 2 pls.; breeding places in Ireland, STONEY and USSHER, Irish Nat. 21 p. 180; taken off the coast of la Vendée, France, ANFRIE, Rev. Fr. d'Orn. 2 p. 329.

Prion vittatus keyteli p. 210 Tristan d'Acunha, *P. v. gouldi* p. 211 Australian seas, *P. v. macgillivrayi* p. 211 St. Paul's I. Indian Ocean, *P. v. missus* p. 212 W. Australia, *P. v. salvini* p. 212 Crozet Isl., **subsp. n.**, MATHEWS, Bds. Australia 2.

Pseudoprion turtur eatoni p. 220 Kerguelen, *P. t. solanderi* p. 220 West coast of South America, *P. t. huttoni* p. 220 Chatham Is., *P. t. crassirostris* p. 221 Bounty Is., **subsp. n.**, MATHEWS, Bds. Australia 2.

Heteroprion **gen. n.** p. 222 for *H. belcheri* **sp. n.** p. 224 Australian seas, *H. desolatus mattingleyi* p. 226 East Australian seas, *H. d. peringueyi* p. 230 Cape seas, *H. d. macquariensis* p. 231 Macquarie Isl., *H. d. alter* p. 231 Auckland Isl., **subsp. n.**, MATHEWS, Bds. Australia, 2.

Pelecanoides urinatrix coppingeri p. 238 Straits of Magellan, *P. garnottii lessoni* p. 239 coast of Chili, *P. g. magellani* p. 239 Straits of Magellan, **subsp. n.**, MATHEWS, Bds. Australia 2.—*P. urinatrix belcheri* **subsp. n.** Australian seas, MATHEWS, Austral Av. Rec. 1 p. 84.

Diomedea exulans rothschildi **subsp. n.** Australian seas, MATHEWS, Bds. Austral. 2 p. 246.—*D. bassi* **sp. n.** Australian seas, MATHEWS, Nov. Zool. 18 p. 206.—*D. culminata mathewsi* **subsp. n.** Campbell Island, ROTHSCHILD, Bull. B.O.C. 29 p. 70.

Thalassarche melanophris imparida Tasmania p. 267, *T. m. belcheri* Kerguelen p. 271, *T. m. richmondi* West coast of S. America p. 272, **subsp. n.**, MATHEWS, Bds. Austral. 2.

Thalassogeron chrysostoma harterti subsp. n. Kerguelen Isl., MATHEWS, Bds. Austral. 2 p. 280.

Phoebetria pulpebrata huttoni Now Zealand seas p. 297, *P. fusca campbelli* Australian seas p. 305, subsp. n., MATHEWS, Bds. Austral. 2.

ORDER ALCIFORMES.

†*Plautus impennis*, the eggs in the Thayer Museum, THAYER, Auk 29 p. 208 pl. xii.

Alca torda, the visitation of 1911-12 in Scotland, CLARKE, Scot. Nat. 1912 p. 77.

[*Alle*] *Mergulus alle*, numbers destroyed and driven inland in Jan. 1912, WITHERBY, Brit. Birds 5 pp. 282 309 337; in south Lancashire, WILLIAMSON, Lancs. Nat. 4 p. 385.

Uria troile, the "Ringed" variation breeding in Dorset, ASHFORD, Zoologist 1912 p. 233.

Synthliboramphus antiquus taken in Ontario, FLEMING, Auk 29 p. 387.

ORDER LARIFORMES.

The following Australian species figured:—*Hydrochelidon leucoptera grisea* pl. cii, *H. leucoparcia rogersi* pl. ciii, *Gelochelidon nilotica macrotarsa* pl. civ, *Hydroprogne tschegrava strenua* pl. cv, *Thalasseus bergii poliocercus* pl. cvi, *T. bengalensis torresii* pl. cvii, *Sterna dougallii gracilis* pl. cviii, *S. striata melanorhyncha* pl. cix, *S. sumatrana kempii* pl. cx, *Sternula albifrons placens* pl. cxi, *Sternula nereis nereis* pl. cxii, *Onychoprion fuscatus serratus* pl. cxiii, *Melanosterna anaethetus novae-hollandiae* pl. cxiv, *Anous stolidus gilberti* pl. cxv, *Megalopterus tenuirostris melanops* pl. cxvi, *Megalopterus minutus minutus* pl. cxvii, *Procelsterna cerulea cinerea* pl. cxviii, *Gygis alba royana* pl. cxix, *Bruchigavia novae-hollandiae novae-hollandiae* pl. cxx, MATHEWS, Bds. Australia 2 1912.

Photographs of Danish Terns, CHRISTENSEN, København 1912.

Hydrochelidon leucoparcia leggei Ceylon, *H. l. delalandii* S. Africa, *H. l. swinhoei* Foochow, subsp. n., MATHEWS, Bds. Austral. 2 p. 320.—*H. rogersi* subsp. n. N.W. Australia, MATHEWS, Nov. Zool. 18 p. 207.

Chelidonius Rafinesque Febr. 1822 probably antedates *Hydrochelidon* Boie May 1822, RHOADS, Auk 29 p. 198.

Phaetusa magnirostris, first record in Cuba, RAMSDEN, Auk 29 p. 100.

Gelochelidon nilotica addenda China, *G. n. grönvoldi* S. Amer. subsp. n. and other subspecies considered, MATHEWS, Bds. Austral. 2 p. 331.

Sterna sandvicensis, *S. hirundo*, *S. minuta*, *S. dougallii*, *S. paradisaea*, nesting habits and haunts in England described and photographed, BICKERTON, Homelife of the Terns 1912 pp. 1-88 32 pls.—*S. cantiaca*, status and nesting in the Dee Valley, Aberdeen, THOMSON, Scot. Nat. 1912 p. 84.—*Thalasseus bergii bakeri* Mekran coast p. 346, *T. b. edwardsi* Ceylon p. 347, *T. bengalensis arabicus* Red Sea p. 355, subsp. n., MATHEWS, Bds. Austral. 2.—*S. bergii gwendolenae* p. 208 S.W. Australia, *S. striata incerta* p. 208 E. Australia, *S. s. christopheri* p. 209 W. Australia, *S. nereis horni* p. 209 W. Australia, *S. sinensis tormenti* p. 210 N.W. Australia, *S. sumatrana kempii* p. 210 Torres Straits, subsp. n., MATHEWS, Nov. Zool. 18 —*S. dougallii bangsi* subsp. n. Foochow, MATHEWS, Bds. Austral. 2 p. 364.—*Melanosterna anaethetus recognita* subsp. n. Bahama Isls., MATHEWS, Bds. Austral. 2 p. 403.—*S. fuliginosa*, taken in Cachar, India, BAKER, Bombay J. Nat. Hist. Soc. 21 p. 684.—*Sternula nereis exul* subsp. n. New Caledonia, MATHEWS, Bds. Austral. 2 p. 385.

Procelsterna cerulea nebouxi Ellice and Phoenix groups, Pacific, *P. c. imitatrix* St. Ambrose Isles off Chile, subsp. n. and revision of other subspecific forms, MATHEWS, Bds. Austral. 2 p. 431.

Anous stolidus gilberti subsp. n. South-west Australia, MATHEWS, Bds. Austral. 2 p. 405.—*Megalopterus minutus americanus* Carribean sea, *M. m. atlanticus* Ascension, subsp. n. and revision of other subspecific forms, MATHEWS, Bds. Austral. 2 p. 423.

Gygis alba, breeding habits on the Kermadec Islands, BELL, Emu 12 p. 26 2 pls.—*G. a. royana* Kermadec Isles p. 433, *G. a. monte* Seychelles p. 443, subsp. n., MATHEWS Bds. Austral. 2.

Rhodostethia rosea, breeding places in the Kolyma river in N.E. Siberia, BUTURLIN, Bul. soc. Zool. Genève 1 1912 p. 375.

Larus franklini first record for Pennsylvania, STONE, Auk 29 p. 99.—*L. atricilla*, observations in a colony, HARPER, Bird Lore 14 p. 204 4 figs.—*L. ridibundus*, its life in photographs from nature (Danish) RUBOW, København 1911; feeding on a swarm of shoreflies, CHARLTON, Brit. Birds 6 p. 21; Kolonie im Linthgebiet, Schweiz, RIEG, Tierwelt Aarau 20 pp. 646 661, NOLL-TOBIER, Ornith. Beob. 7 p. 33; *Chroicocephalus ridibundus lavrovi* subsp. n. Turkestan (Russ.), ZARUDNYJ, Mess. ornith. 3 p. 29.—*L. hemprichi*, nestling plumage, SETH-SMITH, Bull. B.O.C. 31 p. 25.—*L. novae-hollandiae ethelae* subsp. n. South Australia, MATHEWS, Austral Av. Rec. 1 p. 30; *L. n. gunni* subsp. n. Tasmania, MATHEWS, Nov. Zool. 18 p. 212.—*Bruchigavia novae-hollandiae forsteri* subsp. n. New Caledonia and other subspecies commented on, MATHEWS, Bds. Austral. 2 p. 457.—*L. fuscus*, its occurrence in Holland, VAN OORT, Ardea 1 1912 p. 61.—*L. fuscus britannicus* subsp. n. Caithness, LOWE, Brit. Birds 6 p. 2; further remarks, *ibid.* Bull. B.O.C. 29 p. 119.—*L. affinis* near Rome, ANGELINI Riv. ital. Orn. 1 p. 152, CHIGI *ibid.* p. 161; ANGELINI, Boll. Soc. Zool. ital. 1 p. 81.—*L. audouini* taken on Elba, BALDUCCI Riv. ital. Orn. 2 p. 34.

[*Megalestris*] *Catharacta antarctica lönnerbergi* subsp. n. New Zealand seas, MATHEWS, Nov. Zool. 18 p. 212.

Stercorarius pomarinus and *S. parasiticus*, Wanderungen ins Binnenland, HESSE, Ornith. Monatsber. 20 p. 37; also HAGEN *ib.* p. 98.—*S. pomarinus*, habits and occurrence in East Prussia, CHRISTOLEIT, Ornith. Monatsber. 20 p. 69.

ORDER CHARADRIIFORMES.

Notes on the wading birds of the Barr lake region, Colorado, ROCKWELL, Condor 14 p. 117 13 figs.

An account of the syrinx of the Scolopacidae, PYORAFI, Ibis 1912 p. 334 figs. 6-9.

Arenaria interpres, recorded from Saxony, WICHTRICH, Ornith. Monatsber. 20 p. 38; HEYDER, ebenda p. 60; HEINROTH, p. 81.

Haematopus ostralegus, nestling from Finnish islands figured, SEGERSTRÅLE, Aquila 19 p. 452.—*H. longirostris mattingleyi* p. 213 N. Queensl., *H. unicolor bernieri* p. 214 W. Australia, subsp. n., MATHEWS, Nov. Zool. 18.—*H. quoyi* nom. n. for *H. ater* Sharpe (nec Vieill.) of the Falkland Islands, BRABOURNE & CHUBB, Bds of S. America 1 p. 37.

Erythrogonys cinctus mixtus subsp. n. N. W. Australia, MATHEWS, Nov. Zool. 18 p. 215.

[*Lobivanellus*] *Lobibyx miles harterti* subsp. n. N. Queensl., MATHEWS, Nov. Zool. 18 p. 215.

Zonifer tricolor gwendolena subsp. n. S. W. Australia, MATHEWS, Nov. Zool. 18 p. 216.

[*Belonopterus*] *Vanellus chilensis*, *V. griseus*, *V. cayennensis*, specific distinctions and distribution, GRANT, Ibis 1912 p. 274.

Stephanibyx inornatus, egg figured, GROTE, J. Ornith. 60 p. 507 pl. ix fig. 5.

Charadrius fulvus, migration in Java, OLIVIER, Teysmannia Batavia 23 p. 706.

Eudromias morinellus, migrazioni e costumi in Italia, ANGELINI, Avicula 10 p. 2.

Podasocys montanus, range and home life, CRIDDLE, Ottawa Nat. 26 1912 p. 61.

[*Aegialitis*] *Charadrius cucullatus torbayi* subsp. n. S. W. Australia, MATHEWS, Austral Av. Rec. 1 p. 30; *C. bicinctus incertus* p. 217 S. W. Australia, *C. ruficapillus tormenti* p. 217 N.W. Australia, *C. melanops marugli* p. 218 N.W. Australia, *C. cucullatus tregellasi* p. 218 S.W. Australia, *C. australis whitlocki* p. 218 W. Australia, MATHEWS, Nov. Zool. 18.

Himantopus leucocephalus, nest and eggs, FRENCH, Vict. Nat. 28 p. 182.—*Hypsibates leucocephalus assimilis* subsp. n. N.W. Australia, MATHEWS, Nov. Zool. 18 p. 219.

Cladorhynchus leucocephalus rotnesti subsp. n. W. Australia, MATHEWS, Austral Av. Rec. 1 p. 31.

Recurvirostra novae-hollandiae stalkerii subsp. n. N. Terr. Australia, MATHEWS, Nov. Zool. 18 p. 220.

Numenius phaeopus, nesting and other habits in Shetland, HARVIE-BROWN, Zoologist 1912 p. 241.—*N. variegatus* and *N. tahitiensis*, their distribution in the Pacific, HENNINGER, Ornith. Monatsber 20 p. 62.

Macrorhamphus griseus, first record for Sussex, PARKIN, Brit. Birds 6 p. 95.

Totanus calidris, courtship and sexual relations, HUXLEY, P.Z.S. 1912 p. 647.

[*Helodromas*] *Totanus ochropus*, noted from Natal, hitherto doubtfully recorded from S. Africa, CHUBB, J. S. Afr. Orn. Union 8 p. 2.

Terekia cinerea, taken in Kent, a new British record, PARKIN, Brit. Birds 6 p. 74, also Bull. B.O.C. 29 p. 118.

[*Pavoncella*] *Machetes pugnax*, note on breeding plumage (Russ. & French), SOLOMIRSKIJ, Bull. Soc. Oural. nat. 31 p. 127.

Eurynorhynchus pygmaeus, breeding grounds (Russ.), BUTURLIN, Mess. ornith. 3 p. 54.

[*Limonites*] *Pisobia minutilla*, nesting habits in the Magdalen islands, MOORE, Auk 29 p. 210 pls. xiii-xiv.

[*Heteropygia*] *Tringa bairdi*, taken on St. Kilda, new to Scotland, CLARKE, Scot. Nat. 1912 p. 9.

Arquatella maritima cowesi in Vancouver Island, first record for Canada, TAVERNER, Auk 29 p. 396; *Tringa maritima*, Halbinsel Yamal Beschreibung (Russ.), ŽITKOV, Ann. mus. zool. 17 p. 341.

[*Pelidna*] *Tringa alpina*, the spelling of the vernacular name, Dunlin v. Dunling, HARTING, Ibis 1912 p. 211.

Limicola platyrhyncha, taken in Fife, new to Scotland, BERRY, Scot. Nat. 1912 p. 212.—*L. falcinellus sibirica*, the correct name for *L. platyrhyncha* Temm. new to Australia, MATHEWS, Austral Av. Rec. 1 p. 31.

Gallinago coelestis, abnormal flight habits, STUBBS, Zoologist 1912 p. 196 also HARVIE-BROWN and others *ibid.* p. 229.—*G. delicata*, nesting and other habits, SAUNDERS, Bird Lore 14 p. 170.—*G. australis oveni* subsp. n. N. W. Australia, MATHEWS, Nov. Zool. 18 p. 223.—*Scolopax solitaria*, Lebensweise, Balz (Russ.), DOROGSTAJSKIJ, Moskva Ornith. et avicult. 3 ½ p. 1.

Limnocyptes gallinula, its syrinx compared with that of the Common Snipe and Woodcock, PYCRAFT, Bull. B. O. C. 29 p. 77; on the "drumming" BAHR, *t.c.* p. 79.

Scolopax rusticola, the question of carrying its young discussed, SWORD and others, Stirling Trans. Nat. Hist. Soc. 1911-12 p. 18; distinction of sexes, KLEIN, Verh. pomm. Forstver. Stettin 1911 1912 p. 55; life-history and avicultural notes, CHALUSECK, Gefied. Welt Magdeburg 41 pp. 89 97 etc. etc.

Rostratula capensis, polyandrous habits in India, PITMAN, Bombay J. Nat. Hist. Soc. 21 p. 666.—*R. australis fitzroyi* subsp. n. N.W. Australia, MATHEWS, Austral Av. Rec. 1 p. 85.

Crymophilus fulicarius in Gouv. St. Petersburg (Russ.), BIANCHI, Ann. Mus. zool. 17 p. xlvi.

[*Hydralector*] *Irediparra gallinacea melvillensis* subsp. n. Melville Is. N. Australia, MATHEWS, Austral Av. Rec. 1 p. 73 *I. g. rothschildi* subsp. n. N.W. Australia, MATHEWS, Nov. Zool. 18 p. 224.

Oedienemus scolopax, spring display in Hants, MUNN, Brit. Birds 5 p. 226.

Esacus recurvirostris, nestling plumage, WHISTLER, Bombay J. Nat. Hist. Soc. 21 p. 1074.

[*Orthoramphus*] *Esacus magnirostris melvillensis* subsp. n. Melville Is. N. Australia, MATHEWS, Austral Av. Rec. 1 p. 85.—*Burhinus magnirostris rufescens* p. 225. N.W. Australia, *B. m. ramsayi* p. 225 Queensl. *B. m. broomei* p. 226 S.W. Australia, subspp. n., MATHEWS, Nov. Zool. 18.

The bustards of South Africa figured and described, HORSBRUGH, London 4to.

Otis tarda, various notes in Morocco, VAUCHER, Rev. Fr. d'Orn. 2 p. 334.

[*Heterotetrax*] *Otis humilis*, a rare species taken in Italian Somaliland, SALVADORI, Ann. Mus. Civ. Genoa 45 p. 309.

Sypheotis aurita, *S. bengalensis*, figured with synonymy description and habits in India, BAKER, Bombay J. Nat. Hist. Soc. 21 pp. 722, 1109 pls. vii & viii.

Houbara macqueenii synonymy, description and plate, BAKER, Bombay J. Nat. Hist. Soc. **21** p. 325 pls. vi & A ; description and habits in Palestine, AHARONI. Ornith. Jahrb. **23** p. 1.

Eupodotis edwardsi, synonymy description and plate, BAKER, Bombay J. Nat. Hist. Soc. **21** p. 304 pl. v.—*Choriotis australis derbyi* subsp. n. N.W. Australia, MATHEWS, Nov. Zool. **18** p. 226.

ORDER GRUIFORMES.

[*Sarcogeranus*] *Grus leucogeranus*, Ueberwintern im östl. Transkaukasien (Russ.), KARAMZIN, Mess. ornith. **3** p. 304.

[*Antigone*] *Matheusia rubicunda argentea* subsp. n. N.W. Australia, MATHEWS, Nov. Zool. **18** p. 227.—*Antigone* v. *Matheusia*, discussion of correct generic name. BRASIL & IREDALE, Austr. Av. Rec. **1** p. 122.

Balearica regulorum gibbericeps, egg from British E. Africa noticed, JOURDAIN, Bull. B. O. C. **31** p. 24.

Cariama cristata, nesting in captivity, SETH-SMITH, P. Z. S. **1912** p. 557 pl. lxxix ; *Chauna salvadorii* nom. n. pro. *C. cristata* Swains (nec Linn.) of the Argentine, BRABOURNE & CHUBB, Bds. of S. America **1** p. 53.

ORDER ARDEIFORMES.

Ibis molucca alligator subsp. n. N. Terr. Australia, MATHEWS, Nov. Zool. **18** p. 227.

Oreoibis gen. n., *akleyorum* sp. n. Mt. Kenia B. E. Afr. CHAPMAN, Bull. Amer. Mus. N.H. **31** 1912 p. 235 pls. xxxiii & xxiv.

Carpibis spinicollis fitzroi subsp. n. N.W. Australia, MATHEWS, Nov. Zool. **18** p. 228.

Comatibis eremita, former occurrence in Switzerland, SCHNEIDER, Mülhausen, Bull. Soc. ind. **82** p. 341 1 Taf. ; *Geroniticus eremita*, former occurrence in Central Europe, LAUTERBORN, Zool. Jahrb. Jena Suppl. **15** Bd 1 1912 p. 537.—*C. eremita*, rediscovered in Algeria, ROTHSCHILD & HARTERT, Nov. Zool. **18** p. 540.

Theristicus cupreipennis sp. n., Kamerun and the other species of the genus noticed, REICHENOW, Ornith. Monatsb. **11** 1903 p. 134.

Plegadis guarauna, winter and juvenal plumages described, GRANT, Ibis **1912** p. 276.

Platalea leucorodia, in Suffolk, TUOK, Brit. Birds **6** p. 67.—*P. regia stalkerii*, and *P. flavipes whitei*, N. Terr. Australia subsp. n. MATHEWS, Nov. Zool. **18** p. 229.

Ciconia ciconia, a list of examples ringed at Rossiten in Prussia and recaptured in Africa, THIENEMANN, Botanisches Jahrb. Leipzig **46** 1912 Beiblatt p. 105 ; movements in S. Africa, HAAGNER, Aquila **19** p. 16, wintering in S. Africa, GODFREY *ibid.* p. 19.—*C. nigra* im der Mark, KITZLER, Mark Berlin **9** p. 76.

Xenorhynchus asiaticus rogersi subsp. n. N. W. Australia, MATHEWS, Nov. Zool. **18** p. 229.

Leptoptilus crumeniferus, position of head in flight, JACKSON, J. E. Afr. and Uganda N. H. Soc. **2** p. 132.

Balaeniceps rex, structure, history, habits etc., SCHOUTEDEN, Rev. Zool. Afr. **1** p. 347 ; new example in the Zoological Gardens of London, SOLATER, Ibis **1912** p. 686 1 fig.

Ardea cinerea, the development of the bill in the embryo and young bird, SUSHKIN, P. Z. S. **1912** p. 125 pl. xiii ; occurrence in Denmark, past and present distribution, WEIBÜLL, Ornith. Tids. **6** p. 80.—*A. sumatrana matheusae* N. Queensl., *A. s. gilberti* N.W. Australia subsp. n., MATHEWS, Nov. Zool. **18** p. 230.—*A. herodias*, revision of subspecies p. 531, *A. h. adoxa* Curaçao p. 544, *A. h. hyperonca* California p. 550, *A. h. oligista* San Clemente Isl. California p. 553, subsp. n., OBERHOLSER, P. U. S. Nat. Mus. **43**.—*A. herodias sancti-lucae* subsp. n. Lower California, THAYER & BANGS, Proc. N. England Zool. Cl. **4** p. 83.

[*Herodias*] *Egretta alba neglecta* subsp. n. N.W. Australia, MATHEWS, Nov. Zool. **18** p. 230.—*H. egretta*, figured in colour, PEARSON, Bird Lore **14** p. 62.

Notophox novaehollandiae parryi N.W. Australia, *N. pacifica alexandrae* N. Terr. Australia, subsp. n., MATHEWS, Nov. Zool. **18** p. 231.

Leucophox candidissima breeding in captivity, MENEGAUX, Rev. Fr. d'Orn.

2 p. 279; *Egretta candidissima*, figured in colour, PEARSON, Bird Lore 14 p. 62.

Demigretta sacra buchani subsp. n. Buchanan Is. N. Australia, MATHEWS, Austral Av. Rec. 1 p. 85; *D. s. cooktowni* Queensl. *D. s. tormenti* N.W. Australia subsp. n., MATHEWS, Nov. Zool. 18 p. 232.

Nycticorax leuconotus, taken at Durban, CHUBB, J. S. Afr. Orn. Union 8 p. 3.—*N. caledonicus hilli* subsp. n. N.W. Australia, MATHEWS, Nov. Zool. 18 p. 233.

Butorides javanica littleri subsp. n. N. Queensl., MATHEWS, Nov. Zool. 18 p. 233.—*B. javanicus actophilus*, *B. j. castopterus* subsp. n. Barussan Isls., OBERHOLSER, Smith Misc. Coll. 60 no. 7 p. 1.—*B. virescens*, revision of subspecies p. 529, *B. v. eremonomus* Chihuahua, Mexico p. 546, *B. e. mesatus* Nicaragua p. 548, *B. v. hypernotius* Panama p. 549, *B. v. margaritophilus* Pearl Is. Panama p. 553, *B. v. cubanus* Cuba p. 557, *B. v. christophorensis* St. Christopher W. I. p. 561, *B. v. dominicanus* Dominica p. 562, *B. v. lucianus* St. Lucia W. I. p. 565, *B. v. barbadosis* Barbadoes p. 567, *B. v. grenadensis* Grenada p. 568, *B. v. tobagensis* Tobago p. 571, *B. v. curacensis* Curaçao p. 573, OBERHOLSER, Proc. U. S. Nat. Mus. 42.—*B. brunescens* of Cuba is a distinct species, OBERHOLSER, Proc. Biol. Soc. 25 p. 53.

Tigribaphe gen. nov. near *Tigrisoma* for *T. leucolaema* sp. n. Victoria Nyanza, REICHENOW, Ornith. Monatsber. 20 p. 61.

[*Ardetta*] *Ixobrychus minutus dubius* subsp. n. S.W. Australia, MATHEWS, Nov. Zool. 18 p. 234.

[*Nannoemus*] *Ardetta eurhythma* taken in Piedmont, Italy, new record for Europe, SALVADORI, Riv. ital. Orn. 2 p. 86 pl. i.

[*Dupetor*] *Ardeiralla flavicollis melvillensis* subsp. n. Melville Is. N. Australia, MATHEWS, Austral Av. Rec. 1 p. 74; *A. f. olivei* N. Queensl., *A. f. disneyi* N.W. Australia, subsp. n., MATHEWS Nov. Zool. 18 p. 234.

Botaurus stellaris, again breeding in Norfolk, TURNER, Trans. Nat. Soc. 9 p. 433 pl.—*B. stellaris capensis* nesting notes in Cape Colony, DAVIES, J. S., Afr. Ornith. Union 8 p. 68.—*B. poicilop-*

tilus westraliensis subsp. n. West Australia, MATHEWS Nov. Zool. 18 p. 235.

ORDER ANSERIFORMES.

British Waterfowl described and illustrated, OGILVIE-GRANT, London 1912 4to.

The Ducks of South Africa figured and described, HORSBURGH, London 1912 4to.

On the structure of the eye in ducks, ISCHREYT, Arch. vergl. Ophthalm. Leipzig 3 p. 39 2 Taf.

Cygnus cygnus field notes and photos of bird on nest, KERBERT, Ardea 1 p. 87, —*C. bewicki*, Ueberwintern in östl. Transkaukasien (Russ), KARAMZIM, Mess. ornith. 3 p. 305.

Chenopsis atrata roberti subsp. n. W. Australia, MATHEWS, Nov. Zool. 18 p. 446.

Anseranas semipalmata hamiltoni subsp. n. N.W. Australia, MATHEWS, Austral Av. Rec. 1 p. 85.

Cercoopsis novaehollandiae georgi subsp. n. W. Australia, MATHEWS, Nov. Zool. 18 p. 446.

Coscoroba candida, observations in Patagonia and sketches of young birds, BLAAUW, Notes Leyden Mus. 35 p. 50 pls. i & ii.

[*Chen*] *Anser hyperboreus* in der Schweiz, DANT., Ornithol. Beob. 8 p. 38.

Anser albifrons × *A. cinerens*, hybrids, CRAMM, Ornith. Monatschr. Magdeburg 37 p. 81.—*A. fabalis*, nuova per l'Italia, ARRIGONI DEGLI ODDI, Avicula 10 p. 105.—*A. segetum* sibirische Formen, Biologic Schnabel, Nest p. 320 344 Text f. 3-5, 9 pl. xi f. 2, *A. albifrons* Biologic, Nest p. 323, Text f. 6 Halbinsel Yamal (Russ.), ŽITKOV Ann. Mus. Zool. 17.—*A. brachyrhynchus*, in der Gouv. Novgorod, neu für die russische Fauna (Russ); BIANCHI Ann. Mus. Zool. 17 pl. xxxix.

[*Eulabia*] *Anser indicus*, the plumage of the young, BLAAUW, Ibis 1912 p. 657.

Branta canadensis canadensis, nesting at Lake Tahoe, Nevada, RAY, Condor 14 p. 67 figs. xxiii-xxvi; a plumage anomaly, KENNARD, Auk 29 p. 391.—*Bernicla brenta*, first record from Herts, BICKERTON, Trans. Herts Nat. Hist. Soc. 14 p. 271.

Dendrocygna fulva, recorded from Natal, CHUBB, J. S. Africa. Orn. Union 8 p. 1.—*D. javanica peroni*, N. W. Australia. *D. eytoni munna* Queensl. **subsp. n.** MATHEWS, Austral Av. Rec. p. 86.—*D. arborea*, the plumage of the young, BLAAUW, Ibis 1912 p. 657.

Tadorna radjah flindersi **subsp. n.** Queensl., MATHEWS, Austral Av. Rec. 1 p. 86, *T. tadornoides westralis* **subsp. n.** S. W. Australia *id. ibid.* p. 118.

Anas boschas, a "disharmony" in its habits, HUXLEY, Biol. Centralbl. Leipzig 32 p. 621; Gesichtssinn, BESSERER, D. Jäger München 34 p. 122.—*A. fulvigula*, *A. tristis*, *A. diazi*, *A. wyvilliana* and *A. laysansis*, sexual dimorphism and other interrelations of these species, PHILLIPS, Auk 29 p. 295 pl. xv.—*A. rubripes tristis*, on the validity of the subspecies, TOWNSEND, Auk 29 p. 176; *A. superciliosa rogersi* **subsp. n.** W. Australia MATHEWS, Austral Av. Rec. 1 p. 33.

[*Polionetta*] *Anas zonorhyncha*, first record for Burma, HARRINGTON, Bombay J. Nat. Hist. Soc. 21 p. 1086.

Chaulelasmus streperus, new record for Greenland, SCHIÖLER, Ornith. Tids. 6 p. 65.

Nettion castaneum rogersi, **subsp. n.** N. W. Australia, MATHEWS, Austral Av. Rec. 1 p. 86.—*N. torquatum* figured with avicultural notes, SETH-SMITH, Avicult. Mag. 4 p. 23 pl.

Dafila acuta shot in September in Kashmir, MAGRATH, Bombay J. Nat. Hist. Soc. 21 p. 658.

Querquedula discors, breeding in Iceland, COBURN, Zoologist 1912 p. 338.

Malacorhynchus membranacens assimilis **subsp. n.** N. W. Australia, MATHEWS, Austral Av. Rec. 1 p. 86.

Marmaronetta angustirostra occurs in Egypt, NICOLL Ibis 1912 p. 439.

Stictonetta naevosa lesueuri **subsp. n.** N. S. Wales MATHEWS, Austral Av. Rec. 1 p. 87.

[*Aythya*] *Nyroca nyroca dampieri* **subsp. n.** N. W. Australia, MATHEWS, Austral Av. Rec. 1 p. 87.—*Oxyura australis victoriae* **subsp. n.** Victoria, MATHEWS, Austral Av. Rec. 1 p. 87.

Fuligula cristata, plumage notes and habits in the nesting season, BROOK, Scot. Nat. 1912 p. 265.

Tachyeres cinereus, figured from Patagonia, SCOTT & SHARPE, Report Princeton Univ. Exped. Patagonia Ornith. 2 p. 489 pl. i.; the question of a second species of Steamer Duck discussed, BLAAUW, Notes Leyden Mus. 35 p. 47.

Clangula glaucion and *C. islandica*, on the differentiating characters of the immature plumage, OGILVIE-GRANT, Bull. B. O. C. 31 pp. 18 29.

Harelda glacialis, observations on the moults, SMALLEY, Bull. B. O. C. 31 p. 7.

Somateria mollissima, first breeding record for Ireland, ROBINSON, Brit. Birds 6 p. 106; breeding on an island off Brittany, France, INGRAM, Zool. 1912 p. 232.—*S. mollissima* × *Anas boschas*, a natural hybrid, CLARKE, Scot. Nat. 1912 p. 198 pl. v.—*Somateria mollissima borealis*, is the Eider-duck of Spitzbergen, LE ROI, Ornith. Monatsber. 20 p. 65; taken in S. Dakota, a record for the interior of North America, VISHNER, Auk 29 p. 535.

Biziura lobata westralis **subsp. n.** West Australia, MATHEWS, Austral Av. Rec. 1 p. 87.

Mergus merganser, its "display," BROOK, Scot. Nat. 1912 p. 116.—*M. serrator*, some observations on the life history, STRONG, Auk 29 p. 479 pls. xxi-xxiii.

ORDER PELECANIFORMES.

Phalacrocorax carbo, nesting in Wigtonshire, WILSON, Glasgow Nat. 4 p. 1.—*Carbo carbo westralis* p. 33 W. Australia, *C. melanoleucus melvillensis* p. 74 Melville Is., N. Australia, *C. gouldi tunneyi* p. 88 S. W. Australia, *C. varius perthi* p. 88 W. Australia, **subsp. n.**, MATHEWS, Austral Av. Rec. 1.

Plotus novae-hollandiae derbyi **subsp. n.** N. W. Australia, MATHEWS, Austral Av. Rec. 1 p. 74.

Sula bassana taken on Elba and its distribution in Italy, DAMIANI, Riv. ital. Orn. 2 p. 89 pl. ii; first record for Michigan, WOOD, Wilson Bull. 24 p. 43.

Phaëthon rubricauda westralis **subsp. n.** W. Australia, MATHEWS, Austral Av. Rec. 1 p. 88.—*P. americanus* life history, nidification and other habits, GROSS, Auk 29 p. 49 pl. iii-xi.

Pelecanus conspicillatus westralis subsp. n. West Australia, MATHEWS, Nov. Zool. 18 p. 244.

ORDER CATHARTIDIFORMES.

Carthartés aura, a glimpse into the life history, WILLIAMS, Bird Lore 14 p. 13 1 fig.

ORDER ACCIPITRIFORMES.

Plumage changes in the Falconinae, CHIGI, Riv. ital. Orn. 2 p. 20.

Serpentarius secretarius, habits in captivity and in a feral state, HORSBRUGH & ST. QUINTIN, Avicult Mag. 3 p. 105 1 pl.

Vultur monachus, occurrence in Switzerland, FISCHER-SIGWART, Verh. Schweiz. Natf. Ges. 95 p. 236; HESS Ornith. Jahrb. 23 p. 228; SCHNEIDER, Colmar Mitt. nathist. Ges. 11 p. 199 1 Taf.; seine Brutperiode 1911 in der Dobrudscha, RETTIG, Mitt. Vogelwelt Nürnberg 11 p. 226.

Gyps fulvus, in Switzerland in 1912, FISCHER-SIGWART, Verh. Schweiz. Natf. Ges. 95 p. 236; in Sicily, GREGORIO, Naturalista Sicil. 21 p. 27; nesting in Algeria, WALLIS & PEARSON, Bull. B. O. C. 29 p. 105; does this species occur in the N. W. Himalayas, DODSWORTH, Bombay J. Nat. Hist. Soc. 21 p. 1331.

Polyborus cheriway young photographed on nest, PHELPS, Wilson Bull. 24 p. 123 2 pls.

Circus pygargus, *C. cyaneus*, *C. aeruginosus*, on the courtship, flights and voices, HESSE, J. Ornith. 60 p. 481.—*C. hudsonius*, range and home life in Canada, CRIDDLE, Ottawa Nat. 25 p. 147; *C. maculosus*, six stages of plumage from downy to adult dress described, GRANT, Ibis 1912 p. 277.—*C. assimilis rogersi* p. 244 and *C. approximans inexpectatus* p. 245 N.W. Australia, subspp. n., MATHEWS, Nov. Zool. 18.—*C. approximans* in Samoa, HENNINGER, Ornith. Monatsber. 20 p. 185.

Astur palumbarius, its use in falconry, ARENBERG, Rev. Fr. d'Orn. 2 p. 319.—*Accipiter brevipes*, occurrence in Egypt first recorded, NICOLL Ibis 1912 p. 433.—*Astur fasciatus didimus* subsp. n. N. Terr. Australia, MATHEWS, Austral Av. Rec. 1 p. 33; *A. clarus cooktowni* p. 245 N.

Queensl., *A. novae-hollandiae alboides* p. 246 N.W. Australia, *A. fasciatus mackayi* p. 246 Queensl., *A. cirrocephalus broomei* p. 247 W. Australia, subspp. n., MATHEWS, Nov. Zool. 18.

Accipiter nisus lodygini, taxonomic notes, THAYER & BANGS, Mem. Amer. Mus. Comp. Zool. 40 p. 154.—*A. nisus teneriffae* subsp. n. Teneriffe, LAUBMANN, Verhandl. Ornith. Ges. 11 p. 164.—*A. ovampensis*, range extended to the eastern Transvaal, SOLATER, Ibis 1912 p. 15.—*A. nigroplumbens*, taken at Baños, Ecuador, MENEGAUX, Rev. Fr. d'Orn. 2 p. 287.

Buteo vulgaris, on a fixed white variety, VILLATTE des PRUGNES, Rev. Fr. d'Orn. 2 p. 340.—*B. lineatus texanus* subsp. n. Texas, BISHOP Auk 29 p. 232.

Harpyhalieëtus and *Urubitornis*, the distinctness of these two genera united by Sharpe, KOTHE, Ornith. Monatsber. 20 p. 1 fig.

Gypaëtus barbatus, nesting notes in southern Spain, LYNES, Ibis 1912 p. 487; its immature plumage, WHISTLER, Bombay J. Nat. Hist. Soc. 21 p. 663; the red colouring matter of the feathers, DODSWORTH, Ibis 1912 p. 208.—*G. barbatus atlantis*, a nestling figured from Algeria with remarks on taxonomy, ROTHSCHILD & HARTERT, Nov. Zool. 18 p. 531.

[*Uroaëtus*], *Aquila audax carteri* subsp. n. West Australia, MATHEWS, Nov. Zool. 18 p. 247.

Aquila chrysaetus breeding in the Vorablberg, BAU, Zs. Oologie 22 p. 2.—*A. melanaëtus*, nesting habits in Hungary, SZEMERE, Aquila 19 p. 441.—*A. adalberti*, over forty years in captivity, GURNEY, Norwich, Trans. Nat. Soc. 9 p. 458 pl.

Archibuteo lagopus, Halbinsel Yamal, Biologie, Nest (Russ.), ŽITKOV, Ann. mus. zool. 17 p. 317 pl. xi figs. 1 4.

[*Eutolmaëtus*] *Aquila morphnoides coongani* subsp. n. W. Australia, MATHEWS, Nov. Zool. 18 p. 248.

Circaëtus gallicus a destroyer of snakes, PARIS, Bul. Soc. acclim. 59 p. 493; nesting habits in Hungary, SZEMERE, Aquila 19 p. 449.—*C. cinereus* and *C. pectoralis*, on the specific distinctness of these two species, SOLATER, Ibis 1912 p.

9; also DAVIES, J. S. Afr. Orn. Union 8 p. 77.

Haliaeetus leucocephalus, supposed occurrence in Europe, KROHN, Ornith. Monatsber. 20 p. 176.—*H. leucogaster pallidus* subsp. n. N.W. Australia, MATHEWS, Nov. Zool. 18 p. 248.

Haliastur sphenurus territorii subsp. n. N. Terr. Australia, MATHEWS, Austral Av. Rec. 1 p. 88; *H. indus subleucosternus* subsp. n. N.W. Australia, MATHEWS, Nov. Zool. 18 p. 249.

Milvus milvus, the Kite in Wales in 1912, MEADE-WALDO, Bull. B.O.C. 31 p. 24.—*M. korschun napieri* p. 249 N. W. Australia, *M. isurus westraliensis* p. 250 W. Australia, MATHEWS, Nov. Zool. 18.—*M. govinda*, making a larder, REMINGTON, Bombay J. Nat. Hist. Soc. 21 p. 1082, DODSWORTH *ibid* p. 1332.

Gypocictinia melanosterna decepta subsp. n. N. W. Australia, MATHEWS, Nov. Zool. 18 p. 250.

Elanus axillaris parryi subsp. n. N. W. Australia, MATHEWS, Nov. Zool. 18 p. 251.

Pernis apivorus, food habits, DUMAST, Rev. Fr. d'Orn. 2 p. 228.

Baza suberistata queenslandica subsp. n. Queensld., MATHEWS, Nov. Zool. 18 p. 251.

Falco peregrinus, Halbinsel Yamal Nest (Russ.), ŽITKOV, Ann. mus. zool. 17 p. 317 pl. xi f. 3; nomenclature, variation and aberrations, KLEINSCHMIDT, Berajah 1912 pp. 1-6 6 pls.—*F. peregrinus anatum*, taken in England, new British bird, HAIGH, Brit. Birds 5 p. 219.—*F. peregrinus submelanogenys* S. W. Australia, *F. lunulatus apsleyi* Melville Is. N. Australia, subsp. n., MATHEWS, Austral Av. Rec. 1 p. 33; *F. l. muchisonianus* subsp. n. W. Australia, MATHEWS, Nov. Zool. 18 p. 252.—*F. feldeggii*, plumage changes, CHIOI, Roma Boll. Soc. zool. ital. 1 1912 p. 149.—*F. biarmicus*, falconry notes in South Africa, LANGFORD, J. S. Afric. Ornith. Union 8 p. 82 pl.—*Hypotriorchis subbuteo*, Dimensionen, Variabilität (Russ.), ZARUDNYJ, Mess. ornith. 3 p. 115.—*F. cuvieri*, taken at Durban, only twice previously recorded from S. Africa, CHUBB, J. S. Afr. Orn. Union 8 p. 3.—*F. eleonorae*, captured in the Apennines of Italy, CAVAZZA, Riv. ital. di Orn. 1 p. 157.

[*Hierofalco*] *Falco sacer*, in Italian Somaliland, not previously recorded, SALVADORI, Ann. Mus. Civ. Genoa 45 p. 311.

Ieracidea berigora melvillensis subsp. n. Melville Is. N. Australia, MATHEWS, Austral Av. Rec. 1 p. 34.

Cerchneis ceuchroides milligani subsp. n. N. W. Australia, MATHEWS, Nov. Zool. 18 p. 253.—*C. ceuchris*, colour of the claws not always white, NICOLL, Ibis 1912 p. 436; *C. naumanni*, moult by feather abrasion, DAVIES, J. S. Afr. Orn. Union 8 p. 75.—*C. naumanni turkestanicus* subsp. n. Turkestan (Russ.), ZARUDNYJ, Mess. ornith. 3 p. 114.

Pandion haliaetus, influence of its food habits on the structure of its digestive system, MAGNAN, Bull. Mus. Paris 1911 p. 581.—*P. haliaetus carolinensis*, home life photographed and described, ABBOTT, London 1911 8vo.—*P. h. carolinensis*, defending itself against a Bald Eagle, BARR, Auk 29 p. 393.

†*Palaeolestes gorei* gen. et sp. n. pleistocene of Darling downs, Queensland, DE VIS, Ann. Queensl. Mus. 10 1911 p. 15.

ORDER STRIGIFORMES.

Asio accipitrinus, on the courtship, flight and voice, HESSE, J. Ornith. 60 p. 481.—*A. capensis*, note on the nomenclature of this species, SOLATER, Ibis 1912 p. 2.—*A. abessinicus graueri* subsp. n. Belgian Congo west of Tanganyika, SASSI, Anz. Akad. Wien 1912 p. 122; also Wien Ann. Nat-Hist. Hofmus. 26 p. 360.

Scotopelia peli, obtained in Zululand, only twice previously known from S. Africa, CHUBB, J. S. Afr. Orn. Union 8 p. 3.

Bubo bubo, habits in Côte-d'Or, France, MARION, Rev. Fr. d'Orn. 2 p. 355; *B. ignarus*, the Mesopotamian subspecies discussed, SASSI, Wien Ann. Nat-Hist. Hofmus 26 p. 117.—*Bubo virginianus virginianus*, diurnal activities, SHERMAN, Auk 29 p. 240.

Nyctea nyctea, Halbinsel Yamal Nest (Russ.), ŽITKOV, Ann. mus. zool. 17 p. 314 Textf. 1.

Scops giu, new to Staffordshire, MASEFIELD, Stafford Rep. Trans. N.S. Field Cl. **46** p. 83.—*S. capensis*, the rufous phase, SOLATER, Ibis 1912 p. 4.—*S. sibirica ferghanensis* süd-östl. Ferghana, *S. s. irtyshensis* süd-östl. Govv. Tobolsk, **subsp. n.** (Russ.), BUTURLIN Naša ochota **6** 14 pp. 45-46.—*S. königseggi* **sp. n.** Egyptian Soudan, MADARASZ, Ornith. Monatsber. **20** p. 81.—*S. spurrelli* **sp. n.** Ashanti W. Afr., O.-GRANT, Bull. B. O. C. **29** p. 116.—*Pisorhina angelinae* **sp. n.**, Java, FINSON, Ornith. Monatsber. **20** p. 156.

Ninox boobook melvillensis **subsp. n.** Melville Is. N. Australia p. 34, *N. strenua victoriae* **subsp. n.** Victoria p. 75, MATHEWS, Austral Av. Rec. **1**; *N. b. halmaturina* p. 254 Kangaroo Isl. Australia, *N. b. mixta* p. 255 N. W. Australia, *N. connivens suboccidentalis* p. 255 N. Terr., **subsp. n.**, MATHEWS, Nov. Zool. **18**—*N. boobook royana* Norfolk Isl., *N. connivens addenda* S. W. Australia, **subsp. n.**, MATHEWS, Austral Av. Rec. **1** p. 120.—*N. strenua*, eggs described from Queensland, WHITE, Bull. R. Austr. Orn. Union No. **2** p. 3, also Emu **12** p. 20.

Syrnium aluco, nesting notes, ELLIOTT, Zoologist **1912** p. 293; field notes, POHL, Ornith. Monatsber. **20** p. 189.—*S. uralense*, habits and field notes, WELS, Zs. Oologie Berlin **22** p. 77.—*Scotiaptex nebulosa*, in Ontario, first record for Canada, TAVERNER, Auk **29** p. 397.

[*Nyctala*] *Aegolius t. tengmalmi*, captured in Northumberland, habits in captivity, CHARLTON, Brit. Birds. **6** p. 8.

Athene noctua, food habits, MEADE-WALDO and others, Brit. Birds **6** p. 64; taken in Fife, SOMERVILLE, Scot. Nat. **1912** p. 225; *Carina noctua*, food-habits and other notes, COWARD, Manchester Mem. **46** No. 8.

Speotyto cunicularia hypogaea, nest dug open and photographed, WARREN, Condor **14** p. 89.

[*Strix*] *Asio flammeus pallidus*, eine selbständige Form (Russ.), ZARUDNYJ, Mess. ornith. **3** p. 113.—*Tyto novae-hollandiae mackayi* Queensland p. 34 *T. n. whitei* S. Australia p. 34, *T. n. riordani* Victoria p. 35, *T. n. melvillensis*, Melville Is. N. Australia p. 35, *T. longimembris georgiae* N. Terr. Australia p. 75, **subsp. n.**, MATHEWS Austral. Av.

Rec. **1**; *T. alba alexandrae* p. 256, N. Terr. Australia, *T. novae-hollandiae perplexa* p. 257 W. Australia, *T. n. kimberli* p. 257 N. W. Australia, *T. tenebricosa multipunctata* p. 257 N. Queensl. *T. t. magna* p. 258 Victoria, **subsp. n.**, MATHEWS, Nov. Zool. **18**.

ORDER PSITTACIFORMES.

Eos bornea, review of subspecies p. 339, *E. b. rothschildi* **subsp. n.** Ceram p. 340, STRESEMANN, Nov. Zool. **19**.—*E. semilarvata*, its habitat proved to be Ceram, STRESEMANN, Bull. B. O. C. **31** p. 15.

Calliptilus solitarius, figured with field notes from Fiji, BAHR, Ibis **1912** p. 293 pl. v.

Trichoglossus haematodus mitchelli found on Bali, STRESEMANN, Bull. B. O. C. **31** p. 15.—*T. rubritorquis melvillensis* **subsp. n.** Melville Is. N. Australia, MATHEWS, Austral Av. Rec. **1** p. 35; *T. novae-hollandiae eyrei* p. 258 S. Australia, *T. versicolor mellori* p. 259 N. Terr., *T. v. whitei* p. 260 N. W. Australia, MATHEWS, Nov. Zool. **18**.

Glossopsitta porphyrocephala whitlocki **subsp. n.** W. Australia, MATHEWS, Nov. Zool. **18** p. 260.

Neopsittacus iris wetterensis **subsp. n.** Wetter Island, nr. Timor, HELLMAYR, Nov. Zool. **19** p. 211.

[*Microglossus*] *Solenoglossus aterrimus macgillivrayi* **subsp. n.** N. Queensl., MATHEWS, Nov. Zool. **18** p. 261.

Calyptorhynchus funereus whiteae S. Australia, *C. banksii fitzroyi*, N. W. Australia **subsp. n.** MATHEWS, Austral Av. Rec. **1** p. 35; *C. banksii northi* p. 262 N. Queensl., *C. viridis halmaturinus* p. 263 Kangaroo Isl. **subsp. n.** MATHEWS, Nov. Zool. **18**.

[*Cacatua*] *Cacatoes galerita rosinae* Kangaroo Is. S. Australia, *C. g. melvillensis*, Melville Is. N. Australia, *C. sanguinea apsleyi*, Melville Is. *C. s. ashbyi* New South Wales **subsp. n.**, MATHEWS, Austral Av. Rec. **1** p. 36; *C. galerita fitzroyi* p. 264 N. W. Australia, *C. g. queenslandica* p. 264 N. Queensland, *C. leadbeateri mungi* p. 264 N. W. Australia, *C. l. mollis* p. 265 W. Australia, *C. sanguinea distincta* p. 265 N. Terr., *C. s. subdistincta* p. 265

N. W. Australia, *C. roseicapilla kuhli* p. 266 N. Terr., *C. r. assimilis* p. 266 W. Australia, *C. r. derbyana* p. 266 N. W. Australia, **subsp. n.**, MATHEWS, Nov. Zool. 18.—*C. leadbeateri aberrans* **subsp. n.** West Australia, SÖDERBERG, Ornith. Monatsber. 20 p. 41; is identical with *C. leadbeateri mungi* Mathews, MATHEWS, Austral Av. Rec. 1 p. 36.

Licmetis pastinator, description, life history and habits in West Australia, CARTER, Ibis 1912 p. 627.

[*Calopsittacus*] *Leptolophus auricomis pallescens*, Mid. Australia, *L. a. intermedius* N. W. Australia, *L. a. obscurus*, N. Terr. **subsp. n.**, MATHEWS, Nov. Zool. 18 p. 267.

Conurus aeruginosus, taxonomic remarks on this and allied species, SALVADORI, Nov. Zool. 18 p. 84.—*C. fasciatus perioncus*, *C. f. calus* **subsp. n.** Barussan Islands, Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 4.

Conuropsis carolinensis, early records of this nearly extinct species, WRIGHT, Auk 29 p. 343.

Psilopsiagon **gen. n.** for type *Trichoglossus aurifrons*, RIDGWAY, Proc. Biol. Soc. 25 p. 100.

Grammopsittaca **gen. n.** for type *Psittacula lineola*, RIDGWAY, Proc. Biol. Soc. 25 p. 100.

Nannopsittaca **gen. n.** for type *Brotogerys panychlorus*, RIDGWAY, Proc. Biol. Soc. 25 p. 100.

Pionopsitta fuertesi **sp. n.**, western Columbia, CHAPMAN, Bull. Amer. Mus. N. H. 31 p. 143.

Hapalopsittaca **gen. n.** for type *Psittacus amazoninus*, RIDGWAY, Proc. Biol. Soc. 25 p. 100.

Diopsittaca **gen. n.** for type *Psittacus nobilis*, RIDGWAY, Proc. Biol. Soc. 25 p. 99.

Orthopsittaca **gen. n.** for *Psittacus manilatus*, RIDGWAY, Proc. Biol. Soc. 25 p. 99.

Thectocercus **gen. n.** for type *Psittacus acuticaudatus*, RIDGWAY, Proc. Biol. Soc. 25 p. 99.

Poicephalus gulielmi aubryanus synonymy and taxonomy discussed,

SASSI, Wien Ann. Nat. Hist. Hofmus. 26 p. 363.—*P. simplex* distinct from *P. rufiventris*, MADARÁSZ, Ornith. Monatsber. 20 p. 80.—*P. meyeri matschiei*, nesting habits in German East Africa, SCHUSTER, Ornith. Monatsber. 20 p. 53.

Prioniturus mada, note on this rare species in Buru, STRESEMANN, Bull. B. O. C. 31 p. 15.

Tanygnathus heterurus **sp. n.** Celebes?, SALVADORI, Ann. Mus. Civ. Genova 45 p. 328.

Polytelis melanura figured with avicultural notes, WADDELL, Avicult. Mag. 3 p. 265 pl.

[*Ptistes*] *Aprosmictus erythropterus parryensis* p. 268 N. W. Australia, *A. cyanopygius neglectus* p. 269 Victoria **subsp. n.**, MATHEWS, Nov. Zool. 18; *A. erythropterus yorki* **subsp. n.** N. Queensl., MATHEWS, Austr. Av. Rec. 1 p. 118.

Psittinus cyanurus pontius **subsp. n.** Barussan Islands, Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 5.

Loriculus galgulus lamprochlorus, *L. g. dolichopterus* **subsp. n.** Barussan Isles, Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 5.

Platycercus venustus melvillensis **subsp. n.** Melville Is. N. Australia, MATHEWS, Austral Av. Rec. 1 p. 36; *P. elegans victoriae* p. 270 Victoria, *P. e. subadelaidae* p. 270 S. Australia, *P. flaveolus innominatus* p. 270 S. Australia, *P. adscitus elseyi* p. 271 Queensl., *P. icterotis salvadori* p. 273 S. W. Australia, *P. i. whitlocki* p. 273 W. Australia, *P. barnardi whitei* p. 273 S. Australia, *P. b. augustus* p. 273 S. Australia, *P. zonarius dundasi* p. 274 W. Australia, *P. z. connectens* p. 274 W. Australia, **subsp. n.**, MATHEWS, Nov. Zool. 18.

Psephotus haematogaster alter p. 275 N. Victoria, *P. varius rosinae* p. 277 S. Australia, *P. v. exul* p. 277 Mid. Australia, *P. elegans carteri* p. 278 W. Australia, *P. chrysogaster mab* p. 278 S. Australia, *P. petrophilus zietzi* p. 278 S. Australia, **subsp. n.**, MATHEWS, Nov. Zool. 18.

[*Nanodes*] *Lathamus discolor tregellasi* **subsp. n.** Victoria, MATHEWS, Nov. Zool. 18 p. 279.

Melopsittacus undulatus intermedius, North Terr. and *M. u. pallidiceps* N.W.

Australia **subsp. n.**, MATHEWS, Nov. Zool. **18** p. 280.

Pezoporus terrestris leachi **subsp. n.** Tasmania, MATHEWS, Nov. Zool. **18** p. 280.

ORDER CORACIIFORMES.

Sub-Order Podargi.

Podargus strigoides melvillensis **subsp. n.** Melville Is. N. Australia, MATHEWS, Austral Av. Rec. **1** p. 37; *P. papuensis baileyi* p. 281 N. Queensl., *P. p. conigravi* p. 281 Waigean Is., *P. p. rogersi* p. 281 N. Queensl., *P. strigoides cornwalli* p. 282, *P. s. victoriae* p. 282 Victoria, *P. s. rossi* p. 282 S. Australia, *P. s. mungi* p. 283 N. W. Australia, *P. s. dendyi* p. 283 N. W. Australia **subsp. n.**, MATHEWS, Nov. Zool. **18**.

Aegotheles cristata murchisoniana **subsp. n.** Mid Australia, MATHEWS, Nov. Zool. **18** p. 284.

Sub-Order Coraciae.

Coracias garrula, taken near St. Omer, France, KEMPEN, Rev. Fr. d'Orn. **2** p. 425.—*C. garrula caucasica* **subsp. n.** Batoum (Russ.), NESTEROV, Mess. ornith. **3** p. 156.

Eurystomus orientalis bravi **subsp. n.**, N. W. Australia, MATHEWS, Nov. Zool. **18** p. 285.

Sub-Order Halcyones.

A revision of the classification of the Kingfishers, MILLER, Bull. Amer. Mus. N. H. **31** p. 239.

Alcedo ispida found near Simla, DODSWORTH, Bombay J. Nat. Hist. Soc. **21** p. 661; feeding its young with frogs, MAGRATH, Bombay J. Nat. Hist. Soc. **21** p. 661.—*A. meninting callima*, *A. m. subviridis* **subsp. n.** Barussan Isles, Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7 p. 7.—*A. meninting proxima* **subsp. n.** Pagi Is. Sumatra, RICHMOND, Proc. Biol. Soc. **25** p. 104.

Alcyone azurea alisteri **subsp. n.** N. W. Australia, MATHEWS, Austral Av. Rec. **1** p. 37; *A. azurea victoriae* p. 285 Victoria, *A. a. mixta* p. 285, N. Queensl., *A. pusilla halli* p. 286 N. Queensl. **subsp. n.**, MATHEWS, Nov. Zool. **18**.—*A. ramsayi* **sp. n.** North Territory, Australia, NORTH, Ibis **1912** p. 119.

Micralcyone **gen. n.** for type *Alcyone pusilla halli*, MATHEWS, Aust Av. Rec. **1** p. 107.

Ceyx enopopygius **sp. n.** E. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7 p. 7.

Dacelo leachii nana p. 37 Melville Is. N. Australia, *D. l. cliftoni* p. 37 Mid Westralia *D. l. kempi* p. 89 N. Queensland, **subsp. n.**, MATHEWS, Austral Av. Rec. **1**; *D. gigas tregellasi* Victoria, *D. leachii mungi* N.W. Australia, MATHEWS, Nov. Zool. **18** p. 287.

Halcyon macleayii publa and *H. sordidus melvillensis* Melville Is. N. Australia, **subsp. n.**, MATHEWS, Austral Av. Rec. **1** p. 38; *H. macleayii distinguendus* p. 288, *H. pyrrhopygius obscurus* p. 288 N.W. Australia, *H. sanctus ramsayi* p. 289 N. W. Australia, *H. s. confusus* p. 289 N. Queensl., *H. sordidus cooktowni* p. 289 N. Queensland, **subsp. n.**, MATHEWS, Nov. Zool. **18**.—*H. pyrrhopygius utingi* **subsp. n.** N. Queensl., MATHEWS, Austr Av. Rec. **1** p. 118.

Sauropatis Cab. & Heine and *Cyanalcyon* Bp., these generic names must be utilized for the Australian Kingfishers hitherto placed in *Halcyon*, MATHEWS, Austr. Av. Rec. **1** p. 107.

Sub-Order Bucerotes.

Cranorrhinus corrugatus megistus **subsp. n.** Batu Isles, Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7 p. 6.

[*Rhytidoceros*] *Buceros undulatus*, field notes in Java, HEECKEREN TOT WALIËN, Ardea **1** p. 84

Sub-Order Upupae.

Upupa epops, note on habits during incubation, FUHLMANN, Ornith. Monatsschr., Magdeburg, **37**, p. 430.

Sub-Order Meropes.

Merops apiaster, in der Schweiz, FISCHER-SIGWART, Ornithol. Beob. **8** p. 181.—*M. persicus*, breeding grounds near Bagdad noticed and photographed, SASSI, Wien Ann. Nat. Hist. Hofmus. **26** p. 119 pl. i.—*M. persicus chrysocercus* and *M. p. persicus* figured to show distinctive characters, ROTHSCHILD & HARTERT, Nov. Zool. **18** p. 525 pl. ix.—

M. ornatus shortridgei subsp. n. West Australia, MATHEWS, Nov. Zool. 18 p. 290.

Sub-Order Momoti.

[*Prionornis*] *Electron platyrhynchus suboles* subsp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 5.—*E. carinatus viridis* subsp. n. Costa Rica, RIDGWAY, Proc. Biol. Soc. 25 p. 89.

Eumomota superciliaris bipartitus subsp. n. Mexico, RIDGWAY, Proc. Biol. Soc. 25 p. 90.

Momotus momota cametensis subsp. n. Amazonas Brazil, SNETHLAGE, Ornith. Monatsb. 20, p. 155.—*M. lessonii exiguus* subsp. n. Mexico, RIDGWAY, Proc. Biol. Soc. 25 p. 89.—*M. conexus reconditus* subsp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 4.

Sub-Order Caprimulgi.

Nyctiblus griseus costaricensis Costa Rica p. 91 *N. g. panamensis* Panama p. 91 subsp. n., *N. maculosus* sp. n., Ecuador p. 92, RIDGWAY, Proc. Biol. Soc. 25.

Chordeiles virginianus henryi, photographed from life, WARREN, Condor 14 pp. 93, 95, 97.—*C. acutipennis texensis*, protective coloration, TAYLOR, Condor 14 p. 222 f. 85.

Eurostopus argus harterti subsp. n. N. Terr. Australia, MATHEWS, Nov. Zool. 18 p. 291.

Nyctidromus albicollis nelsoni S. W. Mexico p. 90 *N. a. sumichrasti* S. E. Mexico p. 91 subsp. n., RIDGWAY, Proc. Biol. Soc. 25.

Systellura gen. n. for type *Stenopsis ruficervix*, RIDGWAY, Proc. Biol. Soc. 25 p. 97.

[*Caprimulgus*] *Antrostomus nelsoni* sp. n. Mexico, RIDGWAY, Proc. Biol. Soc. 25 p. 90.—*Caprimulgus accrae* and *C. fulviventris*, figured with critical notes on the distinctness of these two species, BANNERMAN, Ibis 1912 p. 247, pl. iv.—*C. macrurus yorki* N. Queensl., *C. m. keatsi*, N. Terr. subsp. n., MATHEWS, Nov. Zool. 18 p. 291.—*C. europaeus sarudnyi* subsp. n. Lake Baikal, Siberia, HARTERT, Vög. pal. Fauna 2 p. 849.—*C. mirificus* sp. n. E. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 7.

Ptilonycterus gen. n. for type *Caprimulgus ocellatus*, RIDGWAY, Proc. Biol. Soc. 25 p. 98.

Antiurus gen. n. for type *Stenopsis maculicaudus*, RIDGWAY, Proc. Biol. Soc. 25 p. 98.

Setopagis gen. n. for type *Caprimulgus parvulus*, RIDGWAY, Proc. Biol. Soc. 25 p. 98.

Nyctipolus gen. n. for type *Caprimulgus nigrescens*, RIDGWAY, Proc. Biol. Soc. 25 p. 98.

Sub-Order Cypseli.

[*Macropteryx*] *Hemiprogne longipennis ocyptera* p. 7, *H. l. thoa* p. 8, subsp. n., Barussan Isles, Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7.

Collocalia fuciphaga, revision of subspecies p. 11, *C. f. amechana* Anambra Isl. p. 13, *C. f. aerophila* Nias Isl., Sumatra p. 16, *C. f. mearnsi* Luzon p. 17, *C. f. tachyptera* Guam Isl. p. 20, subsp. n., OBERHOLSER Proc. U. S. Nat. Mus. 42.—*C. linchi* review of subspecies p. 347, *C. l. oberholseri* subsp. n. Pagi Island near Sumatra, p. 348, *C. francica* review of southern forms p. 349, *C. f. assimilis* Fiji Islands, *C. f. reichenowi* Guadalcanar, Solomons subsp. n. p. 350, STRESEMANN, Nov. Zool. 19.—*C. inopina pellos* subsp. n. Szechwan, China, THAYER & BANGS, Mem. Mus. Comp. Zool. Harvard Coll. 40 p. 158.

Chaetura caudacuta, migration and connection with weather, DOVE, Proc. R. Soc. Tasmania 1911 p. 99.

[*Cypseloides*] *Nephoecetes niger borealis*, sexual differentiation, SWARTH, Auk 29 p. 241.

Tachornis parvus myochrous, nesting habits in German East Africa, SCHUSTER, Ornith. Monatsber. 20 p. 121 fig.

Cypselus melba, colonie à Fribourg, CUONY, Bul. Soc. Sci. Nat. Fribourg 19 p. 65; grosses Sterben 1909, DANT Ornithol. Beob. 7 p. 22; pairing in the air, KOCH, Ornith. Monatschr. Magdeburg 37 p. 382; BÜSING, Ornith. Monatschr. Magdeburg 37 p. 281.

Sub-Order Trochili.

On the humming birds collected by Dr. Rivet in Ecuador, SIMON (see No. 1369 in the list of authors).

On the structure of the heart-muscle of the humming-bird, JORDAN, Anat. Rec. Philadelphia 5 p. 517.

Phaethornis adolphei fraterculus subsp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 9.

Goethalsia gen. n. p. 6 for type *G. bella* sp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 7

Eriocnemis floccus sp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 8.

[*Trochilus*] *Archilochus colubris*, figured in colour. WRIGHT, Bird Lore 14 p. 186.—*Calypte costae*, nesting habits, DIXON, Condor 14 p. 75 figs. 27 & 28.

Selasphorus alleni, early nesting at Santa Barbara, BOWLES, Condor 14 p. 77.

ORDER COCYGES.

Sub-Order Cuculi.

A revision of the Australian Cuckoos, MATHEWS, Austral Av. Rec. 1 pp. 2-22.

Surniculus lugubris barussarum subsp. n. Barussan Isles Sumatra, OBERHOLSER Smiths. Inst. Misc. Collect. 60 No. 7 p. 5.

Cuculus canorus, interesting observation on breeding habits, LOYD, Brit. Birds 6 p. 62, SELOUS, t.c. p. 90, OWEN, t.c. p. 91; laying in nests of *Acrocephalus palustris* and *Anthus obscurus*, WILD & JOURDAIN, Brit. Birds 6 p. 155; egg taken in Berks as early as April 29th. JOURDAIN, Brit. Birds 6 p. 18; feeding its own young, JANDER, Wild und Hund, 18 p. 576; field notes in Norway, LIE-PETTERSEN, Bergen Naturen 36 pp. 129 192 1 fig.—*C. canorus bakeri* Assam p. 948, *C. c. insulindae* Borneo p. 952, subspp. n., HARTERT, Vög. pal. Fauna 2.—*C. rubricatus athertoni* N. Queensland p. 11, *C. c. albani* S. W. Australia p. 12, subspp. n., MATHEWS, Austral Av. Rec. 1.

Cercococcyx olivinus sp. n. Rutschuru nr. Lake Albert Edward, SASSI, Wien, Ann. NatHist. Hofmus 26 pp. 341 378.

Cacomantis merulinus and *C. sepulcris*, review of subspecies, STRESEMANN, Nov. Zool. 19 p. 332.—*C. merulinus subpallidus* subsp. n. Barussan Isles, Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 5.

(N-9210 g)

[*Metallococcyx*] *Chrysococcyx smaragdineus* and *C. s. intermedius*, critical remarks on a resuscitated subspecies from S. Africa and on Reichenow's generic term *Metallococcyx* applied to this species, BANNERMAN, Ibis 1912 p. 244.

[*Chalcococcyx*] *Chrysococcyx layardi* sp. n. New Caledonia p. 16, *C. plagosus tasmanicus* subsp. n. Tasmania p. 17, *C. p. carteri* subsp. n. S.W. Australia p. 17, *C. barnardi* sp. n. Queensland p. 20, MATHEWS, Austral Av. Rec. 1.—*C. minutillus perplexus* subsp. n. N.W. Australia, MATHEWS, Austral Av. Rec. 1 p. 38.

Neochalcites gen. n. p. 7 for type *Chrysococcyx basalis mellori* subsp. n. p. 14 South Australia, also *C. b. wyndhami* subsp. n. N.W. Australia p. 14, MATHEWS, Austral Av. Rec. 1.

Owenavis gen. n. for type *Chalcites osculans* Gould p. 3, *O. o. rogersi* subsp. n. N.W. Australia p. 13, MATHEWS, Austral Av. Rec. 1.

Micrococcyx gen. n. for type *Coccyzus pumilus*, RIDGWAY, Proc. Biol. Soc. 25 p. 99.

Eudynamis orientalis harterti subsp. n. Hainan, INGRAM, Nov. Zool. 19 p. 279.—*E. orientalis subcyanocephalus* subsp. n. N.W. Australia, MATHEWS, Austral Av. Rec. 1 p. 21.

Scythrops novaehollandiae neglectus subsp. n. N.W. Australia, MATHEWS, Nov. Zool. 18 p. 297.

Centropus bengalensis, review of subspecies p. 336, *C. b. sarasinorum* subsp. n. Molucca Islands p. 338, STRESEMANN, Nov. Zool. 19.

Piaya rutila panamensis subsp. n. Panama, TODD, Ann. Carnegie Mus. 8 p. 212.

ORDER SCANSORES.

Sub-Order Capitones.

Barbatula chrysocoma schubotzi subsp. n. French Soudan, REICHENOW, Ornith. Monatsber 20 p. 28.—*B. bilineata*, egg figured, GROTE, J. Ornith. 60 p. 523 pl. 9 fig. 1.

Megalaema marshallorum, habits, food and nesting near Simla, DODSWORTH, Bombay J. Nat. Hist. Soc. 21 p. 681.

Chotorea mystacophanes ampala subsp. n. Barussan Isles, Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7. p. 6.

Mezobucco duvaucelii gigantorhinus subsp. n. Batu Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 6.

Trachyphonus nobilis sp. n. Lake Ngami, OGILVIE-GRANT, Ibis 1912 p. 397.

Capito aurantiiventris sp. n. Brazil
C. auratus bolivianus subsp. n. Bolivia, RIDGWAY, Proc. Biol. Soc. Washington 25 p. 87.—*C. maculicoronatus rubrilateralis* subsp. n. western Columbia, CHAPMAN, Bull. Amer. Mus. N. H. 31 p. 144.

Sub-Order Rhamphastides.

Pteroglossus roraimae nom. n. for *P. araçari* auct. nec Linn., Guiana, BRABOURNE & CHUBB, Ann. Mag. N. H. 10 1912 p. 261.—*P. torquatus erythronus* subsp. n. Mexico, RIDGWAY, Proc. Biol. Soc. 25 p. 88.

Aulacorhynchus prasinus virescens subsp. n. Honduras, America, RIDGWAY, Washington Proc. Biol. Soc. 25 p. 88.—*A. caeruleigularis cognatus* subsp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 4.

Sub-Order Buccones.

Ecchaunornis gen. n. for type *Bucco radiatus*, RIDGWAY, Proc. Biol. Soc. 25 p. 97.

Monasa rikeri Brazil p. 88, *M. sclateri* Colombia p. 89 spp. n. RIDGWAY, Proc. Biol. Soc. 25.—*M. fidelis* and *M. similis* spp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. 56 No. 37 p. 1.

Sub-Order Pici.

A critical revision of the Woodpeckers based on the collections in the Zoological Museum at Berlin, HESSE, Mitt. Zool. Mus. 6 1912 p. 133.

Einige nomenklatorische Bemerkungen über Picipiden, HESSE, Ornith. Monatsber. Berlin 20 p. 160.

Gecinus viridis, method of extracting grubs from growing willows, SMALLS, Brit. Birds 5 p. 329 fig.

Chloronerpes chrysochlorus aurosus subsp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 3.

Chrysoptilus ujhelyii sp. n. Columbia, MADARASZ, Ornith. Monatsber. 20 p. 97.

[*Hypopicus*] *Dryobates hyperythrus marshalli* subsp. n. N.W. Himalayas, HARTERT, Vög. pal. Fauna 2 p. 926.

Dendrocopus is the correct generic name for *Picus major*, HESSE, Ornith. Monatsber. 20 p. 160.—*D. major*, trees used for nesting, BONAR, Scot. Nat. 1912 p. 81.—*Dryobates villosus* and *D. pubescens*, figured in colour, WALTER, Bird Lore 14 p. 127.—*Dryobates minor buturlini* subsp. n. Italy, HARTERT, Vög. pal. Fauna 2 p. 921.—*Dendrocopus analis longipennis* subsp. n. Bangkok, Siam, HESSE, Ornith. Monatsber 20 p. 82.—*Picus namiyei*, External characters from Shikoku, Japan (Japanese), UCHIDA, Dobuts. Z. Tokyo 24 1912 p. 14.

[*Dendrocoptes*] *Dryobates medius anatoliae* subsp. n. Asia Minor, HARTERT, Vög. pal. Fauna 2 p. 924.—*Dryobates medius transcaucasicus* nom. n. für *D. m. colchicus*, BUTURLIN, Ornith. Monatsber. 20 p. 64.

Mesopicos schultzei sp. n. Fernando Po, REICHENOW, Ornith. Monatsber. 20 p. 28.

Meiglyptes tukki calceuticus, *M. grammithorax microterus* subspp. n. Barussan Isles. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 6.

Micropternus phaiiceps celaenephis subsp. n. Nias Is. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 6.

Thriponax javensis büttikoferi subsp. n. Nias Is. Sumatra, RICHMOND, Proc. Biol. Soc. 25 p. 104.

Picus martius, nesting habits, food and economics RENDLE, Gefied. Welt 41 pp. 122, 132, 140, 244, 251.

Picumnus innominatus malayorum Malay peninsula, *P. i. avunculorum* Nilgari hills S. India, subspp. n., HARTERT, Vög. pal. Fauna 2 p. 937.—*P. varzeae* sp. n., Amazonas, Brazil, SNETILAGE, Ornith. Monatsb. 20 p. 154.

Iynx torquilla sarudnyi subsp. n., Transcaspiä, LOUDON, Ornith. Monatsber. 20 p. 44.—*I. thorbeckei* sp. n., Kamerun, REICHENOW, Ornith. Monatsb. 20 p. 126.

ORDER EURYLÆMIFORMES.

Eurylaimus ochromalus mecistus subsp. n. Banjak Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect 60 No. 7 p. 8.

ORDER MENURIFORMES.

Harriwhitea gen. n. for type *Menura alberti* Bp. MATHEWS, Aust Av. Rec. 1 p. 109.

ORDER PASSERIFORMES.

CONOPOPHAGIDÆ.

Conopophaga snethlageae sp. n. Para prov. Brazil, BERLEPSCH, Ornith Monatsber. 20 p. 17.

FORMICARIIDÆ.

Thamnophitus marcapatae sp. n. Peru, HELLMAYR, Verhandl. Ornith. Ges. Bayern 11 p. 162.

Thamnistes anabatinus coronatus subsp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect 60 No. 3 p. 9.

Dysithamnus mentalis suffusus subsp. n. Panama, NELSON, Smithsonian Inst., Misc. Collect 60 No. 3. p. 10.

Myrmotherula garbei, description of female, SNETHLAGE, Ornith. Monatsber. 20 p. 155: *M. sclateri*, sp. n. Amazonas, Brazil, SNETHLAGE, Ornith. Monatsber. 20 p. 153.

Herpsilochmus rufimarginatus exiguus subsp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect 60 No. 3 p. 11.

[*Formicivora*] *Drymophila caudata klagesi* subsp. n. Venezuela, HELLMAYR u. SEILERN, Arch. Naturg. 78 Abt. A Heft 5 p. 127.

Hypocnemis naevia ochracea subsp. n. Para Prov. Brazil, BERLEPSCH, Ornith. Monatsber. 20 p. 20.

Chamaeza brevicauda boliviana subsp. n. Bolivia, HELLMAYR u. v. SEILERN, Arch. Natg. Berlin 78 Abt. A. Heft. 5 p. 131.—*C. molissima*, a second example of this rare species now recorded from Ecuador, MENEGAUX, Rev. Fr. d'Orn. 2 p. 388.

Grallaria gigantea, figured from Ecuador, MENEGAUX, (see No. 939 p. 4 pl. iii).—*G. guatemalensis aripoensis* subsp. n. Trinidad, HELLMAYR and SEILERN, Bull. B. O. C. 31 1912 p. 13.

Grallaricula flavirostris brevis subsp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 12.

(N-9210 g)

DENDROCOLAPTIDÆ.

Synallaxis gularis pichinchae subsp. n., Ecuador, STONE, Proc. Acad. Philad. 64 p. 365.

Siptornis mülleri, additional description, HELLMAYR, Abh. Ak. Wiss. München 26 abt. 2 p. 112.

Pseudocolaptes boissonneautii striaticeps subsp. n. Venezuela, HELLMAYR u. SEILERN, Arch. Naturg. 78 Abt. A Heft 5 p. 97.

Antomolus klagesi p. 157 Venezuela, *A. watkinsi* p. 160 Peru, spp. n., HELLMAYR u. SEILERN, München, Verh. ornith. Ges. 11.

Philydor columbiana riveti figured from Ecuador, MENEGAUX, (see No. 939 p. 42 pl. iv).

Margarornis bellulus sp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 12.

Premnoplex brunnescens rostratus subsp. n. Venezuela, HELLMAYR u. SEILERN, Arch. Naturg. 78 Abt. A Heft 5 p. 107.

Sittasomus griseus virescens subsp. n. Venezuela, HELLMAYR u. SEILERN, Arch. Naturg. 78 Abt. A Heft 5 p. 106

Picolaptes warszewiczi aequatorialis subsp. n. Ecuador, MENEGAUX, Rev. Fr. d'Orn. 2 p. 389.

TYRANNIDÆ.

Food of the more important Flycatchers of the United States, BEAL, Washington, Biol. Surv. Bull. No. 44.

Knipolegus orenocensis xinguensis subsp. n. Para Prov., Brazil, BERLEPSCH, Ornith. Monatsber. 20 p. 19.

Machetornis rixosa flavigularis subsp. n. Venezuela, TODD, Ann. Carnegie Mus. 8 p. 209.

Platyrhynchus griseiceps amazonicus subsp. n. Para Prov. Brazil, BERLEPSCH, Ornith. Monatsber. 20 p. 20.

[*Rhynchoicyclus*] *Craspedoprion intermedius* sp. n. Venezuela, TODD, Ann. Carnegie Mus. 8 p. 207.

[*Megarhynchus*] *Myiodynastes chrysocephalus venezuelanus* subsp. n. Cumbre de Valencia, Venezuela, HELLMAYR u. SEILERN Arch. Naturg. 78 Abt. A Heft 5 p. 82.—*M. chrysocephalus cinerascens* subsp. n. Venezuela, TODD, Ann. Carnegie Mus. p. 209.

e 15—2

Myiobius modestus sp. n. Venezuela
TODD, Ann. Carnegie Mus. 8 p. 207.

Mitrephanes eminulus sp. n. Panama
NELSON, Smithsonian Inst. Misc. Collect.
60 No. 3 p. 13.

[*Horizopus*] *Myiochanes ardesiacus*
polioptilus subsp. n. Venezuela, TODD,
Ann. Carnegie Mus. 8 p. 208.

[*Blacicus*] *Myiochanes cinereus*, re-
vision of subspecies, HELLMAYR, Abh.
Ak. Wiss. München 26 Abt. 2 p. 131.

Praedo gen. n. p. 14 for type *P. audax*
sp. n. p. 15 Panama, NELSON, Smith-
sonian Inst. Misc. Collect. 60 No. 3.

PIPRIDAE.

[*Manacus*] *Chiromachaeris manacus*
trinitatis subsp. n. Trinidad, HARTERT,
Bull. B. O. C. 29 p. 63.

COTINGIDAE.

[*Pipreola*] *Euchlornis aureipectus*
festiva subsp. n. Venezuela, TODD, Ann.
Carnegie Mus. 8 p. 211.

PITTIDAE.

Pitta moluccensis lepta subsp. n. Batu
Is., Sumatra, OBERHOLSER, Smiths. Inst.
Misc. Collect. 60 No. 7 p. 8.—*P.*
habenichti sp. n. German New Guinea,
FINCH, Ornith. Monatsber. 20 p. 102,
also p. 127.—*P. strepitans*, field notes,
ILLIDGE, Queensl. Nat. 1 p. 221.—*P.*
versicolor intermedia p. 298 Mid.
Queensl., *P. macklotii yorki* p. 299 N.
Queensl., subsp. n., MATHEWS, Nov. Zool.
18.—*P. macklotii oblita* subsp. n. British
New Guinea, ROTHSCHILD & HARTERT,
Nov. Zool. 19 p. 197.

XENICIDAE.

Acanthidositta chloris, field notes from
N. Zealand, M'LEAN, Emu 11 p. 224 pls.
xxii xxiii.

HIRUNDINIDAE.

[*Clivicola*] *Riparia riparia fusco-*
collaris subsp. n. S. Dalmatia, TSCHUSI,
Orn. Jahrb. 23 p. 216.

Ptyonoprogne rupestris, migrations
and breeding times near Simla, DODS-
WORTH, Bombay J. Nat. Hist. Soc. 21
p. 660.

Hirundo rustica, autumn migration at
Rosslare in Ireland, DELAP, Irish Nat. 21
p. 65, WITHERLY *ibid* p. 143.—*Chelidon*

javanica carteri subsp. n. W. Australia,
MATHEWS, Nov. Zool. 18 p. 300.—*Cecro-*
pis rufula ferghanensis subsp. n. Fer-
ghana (Russ.), BUTURLIN, Mess. ornith.
Moskva 3 p. 242.

Cheramoeca leucosternum marugli
subsp. n. N. W. Australia, MATHEWS,
Nov. Zool. 18 p. 301; *C. l. stonoi* subsp.
n. New South Wales, MATHEWS, Austr.
Av. Rec. 1 p. 118.

Petrochelidon migricans rogersi N.
Terr. Australia p. 38, *P. ariel conigravi*
N. W. Australia p. 75, subsp. n.,
MATHEWS Austral Av. Rec. 1; *P.*
nigricans neglecta p. 301 N. W. Australia,
P. n. distinguenda p. 301 W. Australia,
subsp. n., MATHEWS, Nov. Zool. 18.—*P.*
lunifrons, first record for Cuba, RAMSDEN,
Auk 29 p. 396.—*Hirundo albifrons* Ra-
finesque 1822 an earlier name for *H.*
lunifrons Say 1823, RHOADS, Auk 29 p.
193.

MUSCICAPIDAE.

Microeca flavigaster melvillensis
subsp. n. Melville Is. N. Australia,
MATHEWS, Austral Av. Rec. 1 p. 39; *M.*
fascinans victoriae p. 302 Victoria, *M. f.*
subpallida p. 302 N. W. Australia, *M.*
flavigaster terraereginae p. 303 N.
Queensl., subsp. n., MATHEWS, Nov.
Zool. 18.

Kempia gen. n. for type *Microeca*
flavigaster Gould, MATHEWS, Aust. Av.
Rec. 1 p. 109.

Alseonax poensis sp. n. Fernando-Po,
REICHENOW, Ornith. Monatsber. 20 p. 46.

Muscicapa grisola, migrations at Tus-
kar rock, Ireland, PATTEN, Irish Nat. 21
p. 193; song in Germany, HOFFMANN,
Ornith. Monatschr. Magdeburg 37
p. 433; albino (Russ.), AVERIN Charikov
Bull. Soc. nat. 1 pt. 3 p. 26.

[*Hedymela*] *Muscicapa collaris*, taken
in Sussex, a new British record, NICHOLS,
Brit. Birds 5 p. 238 fig.

[*Siphia*] *Muscicapa parva* Nest und
Gelege, GRIMM, Zs. Oologie Berlin 22
p. 104; *Erythrosterina parva* in Italy,
BALDUCCI, Riv. ital. Orn. 2 p. 35 also
SALVADORI, *ibid* p. 162.

Niltava lychnis figured from Hupeli,
China, THAYER & BANGS, Mem. Mus.
Comp. Zool. 40 p. 163 pl. iii fig. 2.

Muscitrea grisola nesiotis subsp. n.
Simalur Is., Sumatra, OBERHOLSER,

Smiths. Inst. Misc. Collect. 60 No. 7 p. 11.

Petroica multicolor samueli Kangaroo Is. S. Australia, *P. chrysoptera addenda* N. S. Wales, **subsp. n.**, MATHEWS, Austral. Av. Rec. 1 p. 89; *P. multicolor frontalis* p. 303 Victoria, *P. phoenicea albicans* p. 304 Victoria, *P. rodinogaster inexpectata* p. 304 Victoria, *P. goodenovii quoyi* p. 305 N. S. Wales, *P. g. ruficapilla* p. 305 S. W. Australia, *P. g. alexandrae* p. 305 N. Terr., *P. cucullata vigorsi* p. 305 Victoria, *P. c. westralensis* p. 306 W. Australia, *P. c. subpicata* p. 306 N. Terr., **subsp. n.**, MATHEWS, Nov. Zool. 18.

Littlera **gen. n.** for type *Muscicapa chrysoptera* Q. & G., MATHEWS, Aust. Av. Rec. 1 p. 109.

Belchera **gen. n.** for type *Petroica rosea* Gould, MATHEWS, Aust. Av. Rec. 1 p. 109.

Whiteornis **gen. n.** for type *Muscicapa goodenovii* Vig. & Horsf., MATHEWS, Austr. Av. Rec. 1 p. 110.

[*Muscicapula*] *Dendrobiastes hyperythra alifurus* **subsp. n.** Buru, and other subspecies discussed, STRESEMANN, Nov. Zool. 19 p. 330.

Smicronis brevirostris stirlingi S. W. Australia, *S. b. melvillensis* Melville Is. N. Australia, **subsp. n.**, MATHEWS, Austral. Av. Rec. 1 p. 39; *S. b. pallescens* p. 306 Queensland, *S. b. viridescens* p. 307 S. Australia, *S. b. occidentalis* p. 307 W. Australia, *S. b. subflavescens* p. 307 N. Terr., *S. b. mungii* p. 307 N. W. Australia, *S. b. rogersi* p. 307 N. W. Australia, **subsp. n.**, MATHEWS, Nov. Zool. 18.

Gerygone magnirostris melvillensis p. 39 Melville Is. N. Australia, *G. chloronota darwini* p. 40 N. W. Australia, *G. c. apsleyi* p. 40 Melville Is., *G. laevigaster broomei* p. 89 N. W. Australia, **subsp. n.**, MATHEWS, Austral. Av. Rec. 1; *G. albogularis queenslandica* p. 308 Mid. Queensland, *G. culicivora wayensis* p. 308 Mid. Australia, *G. c. dendyi* p. 309 N. W. Australia, *G. c. exul* p. 309 Victoria, *G. magnirostris cairnsensis* p. 309 N. Queensl., *G. laevigaster mungii* p. 310 N. W. Australia, *G. l. monki* p. 310 N. Queensl., *G. tenebrosa christophori* p. 311 Mid. Australia, **subsp. n.**, MATHEWS, Nov. Zool. 18.—*G. mathewsae* **nom. n.** for *G. modesta* Pelz. nec Gould

Norfolk Isl., MATHEWS, Nov. Zool. 18 p. 449, *G. culicivora berneyi* **subsp. n.** Queensland, MATHEWS, Austr. Av. Rec. 1 p. 119.—*G. modiglianii muscicapa* **subsp. n.** Engano Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 11.

Ethelornis **gen. n.** for type *Gerygone magnirostris* Gould, MATHEWS, Austr. Av. Rec. 1 p. 110.

Wilsonavis **gen. n.** for type *Psilopus fuscus* Gould, MATHEWS, Austr. Av. Rec. 1 p. 110.

Royigerygone **gen. n.** for type *Gerygone mathewsae* Mathews, MATHEWS, Austr. Av. Rec. 1 p. 110.

Pseudogerygone jacksoni **n. sp.** New South Wales, CAMPBELL, Emu 11 p. 247; nest and eggs described, WHITE, *ibid.* p. 249.

[*Pogonocichla*] *Tarsiger stellatus transvaalensis* **subsp. n.** Transvaal, ROBERTS; J. S. Afr. Ornith. Union 8 p. 21.

Erythrocerus nyasae **sp. n.** Nyasaland, O.-GRANT, Bull. B. O. C. 29 p. 115.

Rhipidura flabellifera, field notes and photograph of nest, M'LEAN, Emu 11 p. 171 pl. xvi.—*R. setosa melvillensis* p. 41 Melville Is. N. Australia, *R. flabellifera buchani* p. 90 Buchanan Is. N. Australia, *R. setora tormenti* p. 90 N. W. Australia, *R. tricolor utingu* p. 90 N. Queensl., **subsp. n.**, MATHEWS, Austral. Av. Rec. 1; *R. flabellifera victoriae* p. 318 Victoria, *R. f. whitei* p. 318 S. Australia, *R. f. subphasiana* p. 319 N. W. Australia, *R. f. harterti* p. 319 Mid. Queensl., *R. f. frerei* p. 319 N. Queensl., *R. rufifrons inexpectata* p. 319 Victoria, *R. r. kempi* p. 320 N. Queensl., *R. r. parryi* p. 320 N. W. Australia, **subsp. n.**, MATHEWS, Nov. Zool. 18.

Howeavis **gen. n.** for type *Muscicapa rufifrons* Lath., MATHEWS, Austr. Av. Rec. 1 p. 111.

Terpsiphone paradisaea affinis, habits in "semi-captivity," BAKER, Avicult. Mag. 3 p. 302.—*Tchitrea paradisi ceylonensis* **subsp. n.** Ceylon, SARUDNY & HÄRMS, Ornith. Monatsber. 20 p. 60.—*T. melanura*, taxonomic note, SALVADORI, Torino Boll. Musei zool. anat. 27 1912 No. 654.

Rhinomyias umbratilis eclipsis subsp. n. Batu Is. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 12.

Culicicapa ceylonensis pernocara, *C. c. amphiala*, *C. c. pellowi*, Barussan Is. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 12.

Myiagra rubecula melvillensis p. 41 and *M. latirostris cooperi* p. 42 Melville Is. N. Australia, *M. rubecula broomei* p. 90 N. W. Australia, *M. latirostris tormenti* p. 91 N. W. Australia, subsp. n., MATHEWS, Austral Av. Rec. 1; *M. rubecula yorki* p. 321 N. Queensl., *M. r. ringwoodi* p. 321 Victoria, *M. nitida robinsoni* p. 322 N. Queensl., *M. latirostris kempi* p. 322 N. Queensl., subsp. n., MATHEWS, Nov. Zool. 18.

Machaerirhynchus flaviventer novus subsp. n. Bt. N. Guinea, ROTHSCHILD & HARTERT, Nov. Zool. 19 p. 200.—*M. flaviventer secundus* subsp. n. N. Queensl., MATHEWS, Nov. Zool. 18 p. 322.

Abrornis sakaorum sp. n. Perak, STRESEMANN, Bull. B. O. C. 31 p. 27.—*A. albigularis formosana* subsp. n. Formosa, LAUBMANN, Ornith. Monatsber. 20 p. 174; this is founded on *Cryptolopha fulvifacies* (Swinh.) juv., OGILVIE-GRANT, Bull. B. O. C. 31 p. 14.

Seisura inquieta nea p. 323 Queensl., *S. i. westralensis* p. 323 S. W. Australia, subsp. n., MATHEWS, Nov. Zool. 18.

Piezorhynchus alecto taken at Cape York, first record for Australia, CAMPBELL, Bull. R. Austr. Orn. Un. No. 3 p. 2; also Emu 12 p. 19.

Monarcha alecto melvillensis subsp. n. Melville Is. N. Australia, MATHEWS, Austral Av. Rec. 1 p. 42.

Carterornis gen. n. for *Monarcha leucotis* Gould, MATHEWS, Austr. Av. Rec. 1 p. 111.

Stoparola panayensis obiensis subsp. n. Obi Major, Moluccan Isles, HARTERT, Bull. B.O.C. 31 p. 2.

CAMPOPHAGIDAE.

Artamides sumatrensis halistephis subsp. n. Pagi Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 14.

Pteropodocys maxima pallida, N. Terr. Australia, *P. m. neglecta* S. W.

Australia, subsp. n., MATHEWS, Nov. Zool. 18 p. 325.

[*Graucalus*] *Coracina azurea* from West Africa figured, SHELLEY, B. Afr. 5 p. 225 pl. 52.—*C. novaehollandiae didimus* p. 42, *C. hypoleuca apsleyi* p. 42, *C. tenuirostris melvillensis* p. 43 Melville Island, N. Australia, *C. hypoleuca parryi* p. 43, N. W. Australia subsp. n., MATHEWS, Austral Av. Rec. 1; *C. novaehollandiae westralensis* p. 326 West Australia, *C. n. subpallida* p. 326 N. W. Australia, *C. n. connectens* p. 326 N. Queensl., *C. hypoleuca stalkerii*, p. 327, N. Queensl., *C. tenuirostris obscura* p. 328, N. Queensl. subsp. n., MATHEWS, Nov. Zool. 18.—*C. papuensis meekiana* subsp. n. Bt. N. Guinea, ROTHSCHILD and HARTERT, Nov. Zool. 19 p. 201.

Campephaga quiscalina and *C. xanthornoides* from Africa figured, SHELLEY, B. Afr. 5 1912 pp. 202, 213, pls. li., lii.—*C. martini* sp. n. Nandi Bt. E. Africa JACKSON, Bull. B. O. C. 31 p. 18.

Pericrocotus igneus trophis, *P. andamanensis minythomelas*, subsp. n. Simalur Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 14.

Lalage tricolor indistincta p. 328 N. W. Australia, *L. leucomela yorki* p. 329 N. Queensl., *L. l. gouldi* p. 329 N. Terr. subsp. n., MATHEWS, Nov. Zool. 18.—*L. pacifica*, field and critical notes from Fiji, BAHR, Ibis 1912 p. 301.—*L. nigra empheris* subsp. n. Nias Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 15.

PYCNONOTIDAE.

Aegithina tiphia horizopectera p. 9 *Ae. viridissima nesiotica* p. 10, subsp. n. Barussan Is., Sumatra, OBERHOLSER Smiths. Inst. Misc. Collect. 60 No. 7.

Microtarsus melanocephalus chrysopterus, *M. m. hyperemnus* Barussan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 10.

Criniger affinis harterti subsp. n. Peling Is., Moluccas, STRESEMANN, Nov. Zool. 19 p. 342.

Haplopteron familiare, a note on this rare species from Bonin Island, STONE, Auk 29 p. 250.

Pycnonotus tricolor ngantii subsp. n. Lake Ngami, OGILVIE-GRANT, Ibis 1912 p. 391.—*P. layardi pallidus* subsp. n. Boror, Portuguese E. Africa, ROBERTS, J. S. Afr. Orn. Union 8 p. 49.—*P. erythrophthalmos cyanochrus* p. 10, *P. e. isus* p. 10, *P. e. pammicrus* p. 11, *P. olivaceus chloeodis* p. 11, *P. plumosus porphyreus* p. 11, Barussan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7.

[*Otocompsa*] *Pycnonotus leucotis*, nesting habits in Persia, SARUDNY & HÄRMS, J. Ornith. 60 p. 616.

TIMELIIDAE.

Clitonyx albicapilla, field notes from N. Zealand, M'LEAN, Emu 11 p. 173.

Orthonyx temminckii chandleri subsp. n. N. S. Wales, MATHEWS, Nov. Zool. 18 p. 329.

Macrorhonyx gen. n. for type *Orthonyx spaldingi* Ramsay, MATHEWS, Austr. Av. Rec. 1 p. 111.

Cinclosoma punctatum neglectum p. 330 Victoria, *C. p. dovei* p. 330 Tasmania, *C. castanotum dundasi* p. 330 W. Australia, *C. castaneothorax nea* p. 331 W. Australia, subspp. n., MATHEWS, Nov. Zool. 18.

Samuela gen. n. for type *Cinclosoma cinnamomeum* Gould, MATHEWS, Austr. Av. Rec. 1 p. 112.

Pycnoptilus floccosus sandlandi, subsp. n. Victoria, MATHEWS, Nov. Zool. 18 p. 331.

Drymodes brunneopygia victoriae subsp. n., MATHEWS, Nov. Zool. 18 p. 332.

Hylacola pyrrhopygia brevicauda p. 332 Victoria, *H. p. halmaturina* p. 333 Kangaroo Is., *H. p. whitlocki* p. 333 West Australia, subspp. n., MATHEWS, Nov. Zool. 18.

Psophodes olivaceus magnirostris subsp. n. Queensland, MATHEWS, Austral Av. Rec. 1 p. 92; *P. o. scrymgeouri* p. 333 Victoria, *P. o. sublateralis* p. 334 N. S. Wales, subspp. n., MATHEWS, Nov. Zool. 18.

[*Argya*] *Crateropus caudatus altirostris*, and its allies, taxonomic notes, SARUDNY, Ornith. Monatsber. 20 p. 95.

Pomatorhinus temporalis bamba subsp. n. Melville Isl. N. Australia, MATHEWS, Austral Av. Rec. 1 p. 43;

P. t. tregellasi p. 334 Victoria, *P. t. cornwalli* p. 335 N. Queensl., *P. t. nigrescens* p. 335 N. W. Australia, *P. t. intermedius* p. 335 N. Terr., *P. superciliosus gilgandra* p. 336 N. S. Wales, *P. s. gwendolenae* p. 336 N. W. Australia subspp. n., MATHEWS, Nov. Zool. 18.

Morganornis gen. n. for type *Pomatorhinus superciliosus* Vig. & Hors., MATHEWS, Austr. Av. Rec. 1 p. 112.

Calamanthus fuliginosus, nesting and other field observations in Tasmania, DOVE, Ibis 1912 p. 269.—*C. fuliginosus carteri* p. 337 West Australia, *C. campestris ethelae* p. 337 South Australia, *C. c. dorrie* p. 337 Dorrie Isl. W. Australia, *C. c. wayensis* p. 338, West Australia subspp. n., MATHEWS, Nov. Zool. 18.—*C. albiloris* field-notes, CHANDLER, Emu 11 p. 237 pl. xxiv.

Cincloramphus cruralis clelandi p. 338 S. W. Australia, *C. c. rogersi* p. 338 N. W. Australia, *C. matthewsi alisteri* p. 339 W. Australia, *C. m. horsfieldi* p. 339 N. Terr., subspp. n., *C. m. vigorsi* p. 339 nom. n. for *Anthus rufescens* Vig. & Hors., MATHEWS, Nov. Zool. 18.

Bowdleria punctata vealeae subsp. n., North Island, New Zealand, KEMP Austr. Av. Rec. 1 p. 124.

Anuroopsis malaccensis nesitis, *A. m. exsanguis*, subspp. n. Barussan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 8.

Alcippe cinerea hypocneca subsp. n., Batu Is. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 8.

Stachyris maculata hypopyrrha subsp. n. Batu Is. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 9.

Cyanoderma erythropterum pellum subsp. n. Batu Is. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 9.

Mixornis pileata zaptera, *M. p. zarhabdota*, Barussan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 9.

Myiophonus temminckii turcestanicus, Verbreitung, Lebensweise, Nest, Dimensionen (Russ.), ZARUDNYJ, Mess. ornith. Moskva 3 p. 197.

Brachypteryx goodfellowi sp. n. Mt. Arizan, Formosa, O.-GRANT, Bull. B. O. C. 29 p. 108.

Heteroxenicus cruralis formaster subsp. n. Szechwan, China, THAYER & BANGS, Mem. Amer. Mus. Comp. Zool. Harvard Coll. 40 p. 169.

Tesia grallator sp. n. Szechwan, China, THAYER & BANGS, Mem. Amer. Mus. Comp. Zool. Harvard Coll. 40 p. 169 pl. v figs. 1 & 2.

Panurus biamicus introduced and established at Hornsea Mere, Yorks, BOOTH, Naturalist London 1912 p. 168; breeding habits with photographs, TURNER, Brit. Bds. 6 p. 138 pl. iv.

Suthora unicolor canaster subsp. n., *S. zappeyi* sp. n., pl. iv f. 2, Szechwan, China, THAYER & BANGS, Mem. Amer. Mus. Comp. Zool. Harvard Coll. 40 p. 171.

TROGLODYTIDAE.

Thryothorus coraya berlepschi Bartica grove Bt. Guiana, *T. oyapocensis ituribisciensis*, subspp. n., BRABOURNE & CHUBB, Ann. Mag. N. H. 10 p. 362.—*Pheugopedius macrurus annectens* subsp. n. Venezuela, TODD, Ann. Carnegie Mus. 8 p. 205.

Troglodytes festinus sp. n. Panama, NELSON, Smiths. Inst. Misc. Collect. 60 No. 3 p. 22.—*T. solitarius* sp. n. Venezuela, TODD, Ann. Carnegie Mus. 8 p. 206.

[*Anorthura*] *Troglodytes troglodytes* migration observations at Tuskar rock in Ireland, PATTEN, Irish Nat. 21 p. 125.

Pnoepyga mutica sp. n. Szechwan, China, THAYER & BANGS, Mem. Amer. Mus. Comp. Zool. Harvard Coll. 40 p. 172 pl. iv. fig. 1.

CINCLIDAE.

Cinclus aquaticus, photographed at its nest, BROOK, Brit. Birds 5 p. 294 pl. v.—*C. cinclus saturatus*, in Gouv. Jenisseisk, Beschreibung, TUGARINOV, Mess. ornith. 3 p. 125.—*C. melanogaster* on its status—not a species but a variation, MARTORELLI, Boll. Soc. Ticinese Sci. Nat. 7 p. 36.—*C. tenuirostris* und dessen formen, Verbreitung, Lebensweise, Nest, Dimensionen (Russ.), ZARUDNYJ, Mess. ornith. Moskva 3 p. 214.

MIMIDAE.

Oreoscoptes montanus, fruit-eating habits in Washington State, KENNEDY, Auk 29 p. 224.

Toxostoma rufum, habits varying in the east and west, SHERMAN, Wilson Bull. 24 p. 187; home life, GABRIELSON *ibid* p. 65.—*T. curvirostre palmeri*, nesting and other habits, STAFFORD, Auk 29 p. 363.

TURDIDAE.

The Rutilillae of Switzerland, FATIO & STUDER, Catalogue of the birds of Switzerland livr. 9.

Myadestes coloratus sp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 23.

[*Merula*] *Turdus merula*, change of plumage and sexual maturity correlated, PATTEN, Rep. Brit. Ass. 1911 p. 404.—*T. merula mauritanica*, nest and eggs noticed, WALLIS, Bull. B. O. C. 29 1912 p. 84.—*M. relicta* sp. n. Turkestan, SARUDNY, Ornith. Monatsber. 11 1903 p. 129.

[*Oreocichla*] *Turdus aureus*, capture in Italia, SALVADORI, Riv. ital. Ornith. 1 p. 125.—*Oreocinclada dauma socia* subsp. n. Szechwan, China, THAYER & BANGS, Mem. Amer. Mus. Comp. Zool. Harvard Coll. 40 p. 174.—*Turdus lunulatus dendyi* subsp. n. Victoria, MATHEWS, Nov. Zool. 18 p. 340.

Turdus viscivorus sarudnyi subsp. n. Transcaspia, LOUDON, Ornith. Monatsber. 20 p. 5, *T. v. loudoni* nom. n. für *T. v. sarudnyi* Loudon SARUDNY, *ibid.* p. 96.—*T. pilaris*, breeding near Salzburg, Austria, PLAZ, Ornith. Jahrb. 23 p. 68; sudden irruption in Upper Austria, TSOHUDI, Ornith. Monatschr. 37 p. 154.—*T. pilaris sarudnyi* subsp. n. Transcaspia, LOUDON, Ornith. Monatsber. 20 p. 5.—*Turdus deningeri* sp. n. Ceram, STRESEMANN, Bull. B. O. C. 31 p. 4.

[*Hylocichla*] *Turdus philomelos philomelos*, in Haddington, EVANS, Scot. Nat. 1912 p. 43; in Ross and Wigtonshire, JACKSON, *t.c.* p. 163.—*T. philomelos clarkei*, the breeding subspecies in Holland, SNOUCKAERT, Rev. Fr. d'Orn. 2 p. 272.

[*Tharrhaleus*] *Accentor modularis*, a resident in Holstein and Switzerland, BIEDERMANN-IMHOOF, Ornith. Monatsber. 20 p. 82.

Epthianura albifrons tasmanica p. 340 Tasmania, *E. a. westralensis* p. 341 W. Australia, *E. tricolor assimilis*

p. 341 W. Australia, *E. t. distincta* p. 341 N. Terr., *E. aurifrons flavescens* p. 341 W. Australia, *E. a. obsoleta* p. 341 N. Terr., *E. crocea tunneyi* p. 342 N. Terr., **subsp. n.**, MATHEWS, Nov. Zool. 18.

[*Phoenicurus*] *Ruticilla phoenicura*, a clutch of 25 eggs, SCHLEGEI, Zs. Oologie Berlin 22 p. 89.—*R. titys*, habits and nesting in captivity, TESCHEMAKER, Avicult. Mag. 3 pp. 293 330.—*P. semenovi*, Beschreibung (Russ.), ZARUDNYJ, Mess. ornith. Moskva 3 p. 244.—*R. nigra* Giglioli from Sardinia is an artificially blackened *R. titys*, SALVADORI, Ibis 1912 p. 280, also Riv. ital. Orn. 1 p. 159.

Cyanecula, on the various races inhabiting Turkestan, ZARUDNYJ, Mess. Ornith. 3 p. 308.—*C. suecica suecica*, hahnenfedriges Weibchen (Russ.), AVERIN, Char'kov Bull. Soc. nat. 1 3 p. 27.—*Luscinia suecica suecica*, on the Isle of May, RINTOUL & BAXTER, Scot. Nat. 1912 p. 236.—*C. caerulecula* and *C. wolfei* on the European subspecies, DUBOIS, Rev. Fr. d'Orn. 2 1912 p. 411.

[*Aëdon*] *Luscinia megarhyncha*, photographs and notes on breeding habits, TICEHURST, Bt. Bds. 6 p. 170.—*L. luscinia*, taken on Fair Isle, second record for Great Britain, CLARKE, Scot. Nat. 1912 p. 9, also Brit. Birds 5 p. 240.

[*Erithacus*] *Dandalus rubecula melophilus*, first record for Italy, PICCHI, Brit. Birds 6 p. 121; also Riv. ital. Orn. 1 p. 147 2 fig.—*Luscinia sibilans*, Nest, Eier (Russ.), SUŠKIN, Mess. ornith. 3 p. 239.

Calliope calliope, taken on the Aleutian Islands, new to America, BENT, Smiths. Misc. Collect. 56 No. 32 p. 22.

Ianthia goodfellowi **sp. n.** Formosa, OGILVIE-GRANT, Ibis 1912 p. 649 pl. xiv.

Copsychus saularis pagiensis **subsp. n.** Pagi Is. Sumatra, RICHMOND, Proc. Biol. Soc. 25 p. 105.—*C. saularis zacnecus* **subsp. n.** Sinalur Is. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 12.

Kittacincla melanura hypoliza, *K. m. opisthochra*, *K. malabarica opisthopela*, *K. m. opisthisa*, Barussan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 13.

Cossypha heuglini, colour of the egg, GROTE, Ornith. Monatsber. 20 p. 79.—*C. somereni* **sp. n.** Uganda, HARTERT, Bull. B. O. C. 31 p. 3.

Irania gutturalis, in südl. Transkaukasien (Russ.), SATUNIN, Mess. ornith. 3 p. 8 106.

Alethe uellensis and *A. polioparea* **spp. n.** Uelle river, Belgian Congo, REICHENOW, J. Ornith. 60 p. 321.

Pratincola auct. should be *Saxicola* Bechst the type of which is *Motacilla rubicola* Linn., STONE, Auk 29 p. 396.—*P. rubetra* nesting in captivity, TESCHEMAKER, Avicult. Mag. 4. p. 24.—*P. caprata*, subspecies reviewed p. 319, *P. c. albonotata* **subsp. n.** Celebes p. 321, STRESEMANN, Nov. Zool. 19.

Pinarochroa rudolphi **sp. n.**, Elgon, Bt. E. Afr., MADARASZ, Ornith. Monatsber. 20 p. 175.

Saxicola oenanthe leucorrhoea, first record for Midlothian, EVANS, Scot. Nat. 1912 p. 115; *Oenanthe leucorrhoea*, a female in male plumage, BEDFORD, Scot. Nat. 1912 p. 210.—*S. oenanthe argentea*, occurs in Egypt, NICOLL, Ibis 1912 p. 408.—*S. stapazina* and *S. hispanica*, their specific identity or otherwise, and their subspecific forms discussed, INGRAM, Rev. Fr. d'Orn. 2 p. 392.

Catharus fuscater mirabilis **sp. n.** Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 24.

SYLVIIDAE.

Locustella fluviatilis obscura **subsp. n.** Bosnia, TSCHUSI, Orn. Jahrb. 23 p. 216.—*L. luscinioides*, field notes from Egypt, NICOLL, Ibis 1912 p. 415.—*L. naevia*, migration observations at Tuskar, Ireland, PATTEN, Irish Nat. 21 p. 137.

Acrocephalus palustris, *A. arundinaceus*, *A. aquaticus*, figured with detailed account of distribution and life history, HOWARD, British Warblers Part 7.—*A. australis inexpectatus* **subsp. n.** N.S. Wales, MATHEWS, Austral Av. Rec. 1 p. 92; *A. australis mellori* p. 342 S. Australia, *A. a. carterae* p. 343 N. W. Australia, MATHEWS, Nov. Zool. 18.—*A. dumetorum*, occurrence in Yorkshire, first record for England, STANFORD, Brit. Birds 6 p. 217.—*A.*

tangorum sp. n. Chihli prov. China, LA TOUCHE, Bull. B. O. C. 31 p. 10.

Luscinola pryeri sinensis subsp. n. Hankow, China, WITHERBY, Bull. B. O. C. 31 p. 11.—*Dumeticola intermedia* in Gouv. Jonisseisk, Beschreibung (Russ.), TUGARINOV, Mess. ornith. 3 p. 127.

[*Sutoria*] *Orthotomus longicauda*, nesting habits in Cochin China, GERMAIN, Rev. Fr. d'Ornith. 2 p. 211.

Orthotomus cineraceus baeus, *O. c. ochrommatus*, subsp. n. Barussan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 13.

Cisticola ruficapilla bororensis subsp. n. Boror, Portuguese E. Africa, ROBERTS, J. S. Afr. Orn. Union. 8 p. 54.—*C. kalahari*, further descriptive notes, OGILVIE-GRANT, Ibis 1912 p. 384.—*C. kmunkei* sp. n. Elgon, Bt. E. Afr., MADARASZ, Ornith. Monatsber. 20 p. 175.—*C. exilis melvillensis* Melville Is. N. Australia p. 43, *C. e. parryi* N. W. Australia p. 77, *C. e. tormenti* Derby N. W. Austr. p. 77, subsp. n., MATHEWS, Austral Av. Rec. 1; *C. exilis mixta* N. Queensl., *C. e. alexandrae* N. Terr. subsp. n., MATHEWS, Nov. Zool. 18 p. 343.

Laticilla burnesi, habits and distribution, WHISTLER, Bombay J. Nat. Hist. Soc. 21 p. 1080.

Megalurus gramineus halmaturinus p. 43 Kangaroo Is. S. Australia, *M. alisteri melvillensis* p. 92 Melville Is. N. Australia, subsp. n., MATHEWS, Austral Av. Rec. 1; *M. gramineus goulburni* p. 344 N. S. Wales, *M. g. wilsoni* p. 344 Victoria, *M. g. dubius* p. 344 S. Australia, *M. g. thomasi* p. 344 S. W. Australia, *M. alisteri alisteri* p. 345 N. W. Australia, *M. a. dulciei* p. 345 Queensl., *M. a. oweni* p. 345 N. S. Wales, subsp. n., MATHEWS, Nov. Zool. 18.—*M. striatus*, field notes, WHITLOCK, Emu 11 p. 244; nest and eggs described, WHITE, *ibid* p. 249.

Dulciornis gen. n. for type *Megalurus alisteri* Mathews, MATHEWS, Austr. Av. Rec. 1 p. 112.

Bradypterus bedfordi sp. n. Lake Ngami, OGILVIE-GRANT, Ibis 1912 p. 382.—*B. elgonensis* sp. n. Elgon, Bt. E. Afr., MADARASZ, Ornith. Monatsber. 20 p. 175.

Calamonastes simplex, revision of the subspecies, *C. s. erlangeri*, *C. s. hilgerti*,

subsp. n. N. and S. Somaliland, ZEDLITZ, Ornith. Monatsber. 20 p. 78.

[*Iduna*] *Hypolais olivetorum* not *Sylvia nisoria* taken in the Transvaal, a correction, ROBERTS, J. S. Afr. Orn. Union 8 p. 62.

Sylvia atricapilla, wintering in Somerset, COWARD, Brit. Birds 5 p. 243.—*S. cantillans albistriata*, a distinct subspecies described by Brehm from Egypt, NICOLL, Ibis 1912 p. 412.

Melizophilus undatus, occurrence at Tuskar light co. Wexford, PATTEN, Nature 90 p. 306.—*Sylvia undata dartfordiensis*, taken at Tuskar rock, first Irish record, BARRINGTON, Irish Nat. 21 p. 232, also British Birds 6 p. 220.—*S. undata aremoricus*, on this and the other races of Furze-Warblers, INGRAM, Zoologist 1912 p. 298.—*M. undatus bradfordiensis*, on a nest taken in Finistère, France, BUREAU, Nantes Bul. soc. sci. 2 p. xv.

Phylloscopus trochilus eversmanni from the Bass rock, Firth of Forth, EVANS, Scot. Nat. 1912 p. 44.—*P. trivirgatus parvirostris* subsp. n. Pahang, Malay Peninsula, STRESEMANN, Nov. Zool. 19 p. 322.

[*Oreopneuste*] *Phylloscopus indicus albigula* subsp. n. Altai, HESSE, Ornith. Monatsber. 20 p. 163.

Reguloides maculipennis debilis subsp. n. Szechwan, China, THAYER & BANGS, Mem. Amer. Mus. Comp. Zool. Harvard Coll. 40 p. 180.

Chthonicola sagittata inexpectata subsp. n. Victoria, MATHEWS, Nov. Zool. 18 p. 346, *C. s. queenslandica* subsp. n., MATHEWS, Austr. Av. Rec. 1 p. 119.

Acanthiza inornata submastersi p. 43 S. W. Australia, *A. pusilla arno* p. 44 Eyre's Peninsula, S. Australia, *A. lineata whitei* p. 44 Kangaroo Is., S. Australia, *A. chrysorrhoea addenda* p. 44 Port Augusta, S. Australia, *A. pusilla consobrina* Centr. Australia p. 78, *A. uropygialis condora* Central Austr. p. 78, *A. iredalei hedleyi* S. Australia p. 78, *A. lineata goulburni* N. S. Wales p. 93, subsp. n., MATHEWS, Austral Av. Rec. 1; *A. pusilla venus* p. 348 S. Australia, *A. tanami* p. 349 N. Terr., *A. lineata chandleri* p. 349 Victoria, *A. l. clelandi* p. 349 S. Australia, *A. uropygialis ruthergheni* p. 350 Victoria, *A. u. mellori* p. 350 S. Australia, *A. u.*

angusta p. 350 S. Australia, *A. u. nea* p. 350 W. Australia, *A. u. murchisoni* p. 350 W. Australia, *A. chrysorrhea sandlandi* p. 351 Victoria, *A. c. leachi* p. 351 Tasmania, *A. c. perksi* p. 351 S. Australia, *A. c. multi* p. 351 W. Australia, *A. reguloides connectens* p. 352 Victoria, **subsp. n.**, MATHEWS, Nov. Zool. 18.

Milligania **gen. n.** for type *Acanthiza robustirostris* Milligan, MATHEWS, Austr. Av. Rec. 1 p. 112.

Sericornis brunnea pallescens p. 353 W. Australia, *S. lathamii cairnsi* p. 354 N. Queensl., *S. l. intermedia* p. 354 S. Queensl., *S. parvula harterti* p. 354 Victoria, *S. p. rosinae* p. 354 S. Australia, *S. p. herbertoni* p. 355 Queensland, *S. magnirostris viridior* p. 355 N. Queensl., *S. m. howei* p. 355 Victoria, *S. maculata warreni* p. 356 W. Australia, *S. m. mellori* p. 356 S. Australia, *S. m. ashbyi* p. 356 Kangaroo Isl., **subsp. n.**, MATHEWS, Nov. Zool. 18.

Neosericornis **gen. n.** for type *Muscicapula lathamii* Stephens, MATHEWS, Nov. Zool. 18 p. 353.

Tasmanornis **gen. n.** for type *Sericornis humilis* Gould, MATHEWS, Nov. Zool. 18 p. 353.

Apalis rufogularis kamerunensis **subsp. n.** Kamerun, REICHENOW, Ornith. Monatsber. 20 p. 28.

Camaroptera superciliaris kamerunensis **subsp. n.** Kamerun, REICHENOW, Ornith. Monatsb. 20 p. 29.

Phyllergates coronatus and *P. cucullatus*, key of the subspecies, STRESEMANN, Nov. Zool. 19 p. 341.—*P. cucullatus batjanensis* **subsp. n.** Batjan, Moluccan Isles, HARTERT, Bull. B. O. C. 31 p. 2.

Horeites acanthizoides concolor **subsp. n.** Mt. Arizan, Formosa, O.-GRANT, Bull. B. O. C. 29 p. 107.

Urosphena squamiceps, habits in Burma, COOK, Bombay J. Nat. Hist. Soc. 21 p. 1085.

Prinia gracilis gracilis and *P. g. deltae*, on their respective ranges in Egypt, NICOLL, Ibis 1912 p. 416.—*P. inornata exter* **subsp. n.** Szechwan, China, THAYER & BANGS, Mem. Amer. Mus. Comp. Zool. Harvard Coll. 40 p. 182 pl. v figs. 4 5.

Burnesia dysancrita **sp. n.** Sumatra, B. d. halistona **subsp. n.** Nias Is. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. 60 No. 7 p. 14.

Malurus melanocephalus melvillensis p. 45 Melville Is. N. Australia, *M. cyaneus samueli* p. 93 Flinder's Is., *M. c. fletcheriae* Tasmania p. 93, **subsp. n.** MATHEWS, Austral Av. Rec. 1 *M. cyaneus henriettae* p. 357 Victoria, *M. c. leggei* p. 358 S. Australia, *M. c. ashbyi* p. 358 Kangaroo Isl., *M. melanotus victoriae* p. 358 Victoria, *M. m. germaini* p. 359 South Australia, *M. cyanotus exul* p. 359 W. Australia, *M. leuconotus perplexus* p. 359 W. Australia, *M. lamberti mastersi* p. 360 North Terr., *M. l. occidentalis* p. 360 W. Australia, *M. l. mungi* p. 360 N.W. Australia, *M. amabilis barroni* p. 361 N. Queensl., *M. a. rogersi* p. 361 N. W. Australia, *M. melanocephalus pyrrhonotus* p. 362 N. Queensl., **subsp. n.**, MATHEWS, Zool. Nov. 18; *M. splendens riordani* **subsp. n.** Mid-Australia, MATHEWS, Austr. Av. Rec. 1 p. 119.

Hallornis **gen. n.** for type *Malurus cyanotus* Gould, MATHEWS, Austr. Av. Rec. 1 p. 113.

Leggeornis **gen. n.** for type *Malurus lamberti* Vig. & Hors., MATHEWS, Austr. Av. Rec. 1 p. 113.

Rosina **gen. n.** for type *Malurus coronatus* Gould, MATHEWS, Austr. Av. Rec. 1 p. 113.

Ryania **gen. n.** for type *Muscicapula melanocephalus* Lath., MATHEWS, Austr. Av. Rec. 1 p. 113.

Stipiturus westernensis and *S. malachurus*, differences noticed and tails figured, CAMPBELL, Emu 11 p. 246.—*S. malachurus tregellasi* **subsp. n.** Victoria, *S. m. westernensis* Campbell antedates *S. m. rothschildi* Mathews, MATHEWS, Austral Av. Rec. 1 p. 45; *S. malachurus littleri* Tasmania, *S. m. rothschildi*, S. W. Australia, **subsp. n.**, MATHEWS, Nov. Zool. 18 p. 363.

Sphenura broadbenti pterylography, HALL, Proc. R. Soc. Tasmania 1911 p. 33 pl. iv.—*S. broadbenti whytei* **subsp. n.** S. Australia, MATHEWS, Austral Av. Rec. 1 p. 79.

Maccoyornis **gen. n.** for type *Sphenura broadbenti* McCoy, MATHEWS, Austr. Av. Rec. 1 p. 113.

[*Amyntornis*] *Diaphorillas textilis morgani* p. 364 S. W. Australia, *D. t. inexpectatus* p. 365 N. S. Wales, **subsp. n.**, MATHEWS, Nov. Zool. 18.

Magnamytis **gen. n.** for type *Amyntornis woodwardi* Hartert, MATHEWS, Nov. Zool. 18 p. 366.

Dynamytis **gen. n.** for type *Amytis goyderi* Gould, MATHEWS, Nov. Zool. 18 p. 366.

VIREONIDAE.

Vireo huttoni obscurus, in Washington State, GETTY, Condor 14 p. 74.

Vireolanius leucotis simplex **subsp. n.**, Para Prov. Brazil, BERLEPSCH, Ornith. Monatsber. 20 p. 18.—*V. eximius mutabilis* **subsp. n.** Panama, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3 p. 20.

AMPELIDAE.

[*Ampelis*] *Bombycilla garrula*, its movements in the winter of 1910-11, TSCHUSI ZU SCHMIDHOFFEN, Zool. Beob. 52 1911 p. 321.

ARTAMIDAE.

Artamus leucorhynchus melvillensis p. 45 Melville Is. N. Australia, *A. personatus munna* p. 94 N. S. Wales, **subsp. n.**, MATHEWS, Austral. Av. Rec. 1 p. 45; *A. leucorhynchus harterti* p. 367 N. W. Australia, *A. minor derbyi* p. 368 N. W. Australia, **subsp. n.**, MATHEWS, Nov. Zool. 18.

Campbellornis **gen. n.** for type *Ocypterus personatus* Gould, MATHEWS, Austr. Av. Rec. 1 p. 113.

Austrartamus **gen. n.** for type *Artamus melanops* Gould, MATHEWS, Austr. Av. Rec. 1 p. 114.

Pseudartamus **gen. n.** for type *Loxia cyanoptera* Lath., MATHEWS, Austr. Av. Rec. 1 p. 114.

Micrartamus **gen. n.** for type *Artamus minor* Vieill., MATHEWS, Austr. Av. Rec. 1 p. 114.

VANGIDAE.

Vanga griseipectus **sp. n.** S. Madagascar figured, SHELLEY, B. Afr. 5 1912 p. 194 pl. 1.

PRIONOPIDAE.

Grallina cyanoleuca neglecta **subsp. n.** N. W. Australia, MATHEWS, Nov. Zool. 18 p. 372.

Eurocephalus anguitimens from South Africa figured, SHELLEY, Bds. Afr. 5 p. 445 pl. lvi fig. 2.

Colluricincla harmonica zamba p. 46 Kangaroo Is. S. Australia, *C. brunnea parryi* p. 46 N. W. Australia, *C. parvula alligator* p. 46 N. Terr. Australia, *C. brunnea rosbucki* p. 94 N. W. Australia, *C. rufiventris murchisoni* p. 94 E. Murchison, W. Australia, *C. parvula conigravi* p. 94 N. W. Australia, **subsp. n.**, MATHEWS, Austral. Av. Rec. 1; *C. harmonica victoriae* p. 369 Victoria, *C. h. oblita* p. 369 S. Queensl., *C. h. pallescens* p. 369 N. Queensl., *C. rufiventris whitei* p. 370 S. Australia **subsp. n.**, MATHEWS, Nov. Zool. 18.

Bowyeria **gen. n.** for type *Collyriocinclla boweri* Ramsay, MATHEWS, Austr. Av. Rec. 1 p. 114.

Pinarolestes megarhynchus superfluous **subsp. n.** Bt. N. Guinea, ROTH-SCHILD & HARTERT, Nov. Zool. 19 p. 205.

Prinops polioloepha from East Africa figured, SHELLEY, Bds. Afr. 5 p. 481 pl. lvii fig. 1.

Sigmodus mentalis, from Congoland figured, SHELLEY, Bds. Afr. 5 p. 467 pl. lvii fig. 2.

LANIIDAE.

Cracticus nigrogularis tormenti p. 46 N. W. Australia, *C. torquatus colletti* p. 46 N. Terr. Australia, *C. quoyi jardini* p. 94 N. Queensl., *C. mentalis kempi* p. 95 Queensl., **subsp. n.**, MATHEWS, Austral. Av. Rec. 1 p. 46; *C. tibicen terraereginae* p. 372 N. Queensl., *C. t. intermissus* p. 372 Victoria, *C. hypoleucus intermedius* p. 373 N. S. Wales, *C. nigrogularis inkermani* p. 374 Queensl., *C. n. mellori* p. 374 S. Australia, *C. n. kalgoorli* p. 374 W. Australia, *P. torquatus olindus* p. 374 Victoria, *C. t. ethelae* p. 375 S. Australia, **subsp. n.**, MATHEWS, Nov. Zool. 18; *C. torquatus colei* **subsp. n.** Victoria, MATHEWS, Austr. Av. Rec. 1 p. 119.

Melloria **gen. n.** for type *Cracticus quoyi tunneyi* Hartert, MATHEWS, Austr. Av. Rec. 1 p. 114.

Lanius excubitor homeyeri, note on an example taken near Arezzo, Italy, PICCHI, Riv. Ital. Ornith. Bologna 1 p. 237.

[*Phoneus*] *Lanius senator* (*L. pomarinus* auct.), taken on the Isle of May Fife, new to Scotland, RINTOUL & BAXTER, Scot. Nat. 1912 p. 10.—*L. pomeranus badius*, occurrence in Italy, CHIGI, Riv. ital. Orn. 1 p. 140.

Fiscus marwitzii and *F. newtoni* from Africa figured, SHELLEY, B. Afr. 5 1912 pp. 247 257 pl. liii.

[*Pelicius*] *Telophorus* Swainson 1831 must be used for *Pelicius zeylonus*, SHELLEY, Bds. Afr. 5 p. 402.

Rhodophoneus hilgerti and *R. cathe-magmenus* from East Africa figured, SHELLEY, Bds. Afr. 5 pp. 394 395 pl. liv.

Laniarius mufumbiri, figured with additional information, OGILVIE-GRANT, Ibis 1912 p. 332 pl. v.—*L. funebris degener*, south Somaliland, *L. f. atrocoeruleus* Abyssinia and north Somaliland, subsp. n., HILGERT, Nov. Zool. 18 p. 606.

Nicator chloris and *N. gularis*, from Africa figured, SHELLEY, Bds. Afr. 5 pp. 436 439 pl. lv.

[*Pomatorhynchus*] *Tschagra* Lesson 1831 must be used for the genus sometimes named *Pomatorhynchus* Boie sometimes *Telephonus* Swains. SHELLEY, B. Afr. 5 p. 361.

Nilans affinis from central Africa figured, SHELLEY, Bds. Afr. 5 p. 462 pl. lvi fig. 1.

Falcunculus frontatus iredalei subsp. n. Victoria, MATHEWS, Austral Av. Rec. 1 p. 47; *F. frontatus herbertoni* subsp. n. N. Queensl., MATHEWS, Nov. Zool. 18 p. 376; *F. f. lumholtzi* subsp. n. Queensl., MATHEWS, Austr. Av. Rec. 1 p. 119.

Oreoica cristata clelandi p. 376 S. Australia, *O. c. pallescens* p. 377 N. Terr., *O. c. mungii* p. 377 N. W. Australia, *O. c. westralensis* p. 377 S. W. Australia, subsp. n., MATHEWS, Nov. Zool. 18.

Pachycephala rufogularis, rediscovery of this species near Adelaide, S. Australia, WHITE, Emu 11 p. 212.—*P. superciliosa belcheri* p. 40 N. W. Australia, *P. leucura gredt* p. 40 Melville Is. N. Australia, *P. rufiventris colletti* p. 41 N. W. Australia, *P. grisola riordani* p. 41 Melville Is., *P. gutturalis consobrina* Buchanan Is. N. Australia p. 76, *P. g. violetae* N. Terr. Australia p. 76, *P. lanioides buchanani* Buchanan

Is. N. Australia p. 77, MATHEWS, Austral Av. Rec. 1; *P. leucura alligator* p. 312 N. Terr., *P. l. connectens* p. 312 N. Terr., *P. gutturalis ashbyi* p. 313 S. Queensl., *P. g. youngi* p. 313 Victoria, *P. olivacea tregellasi* p. 315 Victoria, *P. australis viridior* p. 316 Victoria, *P. australis rosinae* p. 317 S. Australia, subsp. n., *P. enidae* nom. n. for *Eopsaltria inornata* Ramsay p. 317, MATHEWS, Nov. Zool. 18.

Tregellasia gen. n. for type *Eopsaltria capito* Gould, MATHEWS, Austr. Av. Rec. 1 p. 110.

Gilbertornis gen. n. for type *Pachycephala rufogularis* Gould, MATHEWS, Austr. Av. Rec. 1 p. 110.

Mattingleya gen. n. for type *Pachycephala peninsulae* Hartert, MATHEWS, Austr. Av. Rec. 1 p. 111.

Alisterornis gen. n. for type *Pachycephala l. buchanani* Mathews, MATHEWS, Austr. Av. Rec. 1 p. 111.

Quoyornis gen. n. for type *Muscicapa georgiana* Q. & G., MATHEWS, Austr. Av. Rec. 1 p. 111.

PARIDAE.

[*Poecile*] *Parus palustris longirostris* und *P. atricapillus rhenanus*, the distinction of their notes, MEYERE, Ardea 1 p. 46.—*Parus palustris communis*, *P. atricapillus montanus*, *P. rhenanus*, *P. salicarius* in der Schweiz, BURG Ornithol. Beob. 6 p. 17.—*Parus salicarius*, nomenclature, variations and subspecies with coloured plate, KLEIN-SOHNIDT, Berajah 1912 pp. 1-6 2 pls.—*Poecile baicalensis suschkini* subsp. n. Tarbagatai, Turkestan (Russ. + lat. Diagn.), CHACHLOV, Mess. ornith. 3 p. 60, HACHLOB, Ornith. Monatsber. 20 p. 8, ANON. Ochotn. gazeta 40 p. 28.—*Penthestes atricapillus*, figured in colour, FORBUSH, Bird Lore 14 p. 372.

[*Periparus*] *Parus ater vieirae*; remark on specimens from S. Spain, WITHERBY, Bull. B. O. C. 29 p. 75.—*Periparus ater derjugini* subsp. n. Caucasus, SARUDNY, Ornith. Monatsb. 11 1903 p. 120.—*Parus ater ptilosus* subsp. n. Mt. Arizan, Formosa, O.-GRANT, Bull. B. O. C. 29 p. 108, figured with field notes, O.-GRANT Ibis 1912 p. 646 pl. xiii fig. 2.

Parus major, a curious nest, BAU, Zs. Oologie Berlin 22 p. 76.—*P. cinereus*

ferghanensis subsp. n. Ferghana Turkestan, BUTURLIN, Ornith. Monatsber. 20 p. 84; additional remarks (Russ.), BUTURLIN, Mess. ornith. 3 p. 163.—*P. bokharensis* und dessen Rassen, Verbreitung, Beschreibung, *P. b. iliensis* und *P. b. dzungaricus* subspp. n. Central Asia (Russ.), ZARUDNYJ & BILĀKEVIČ, Mess. ornith. 3 p. 132.

Cyanistes pleskei on the question as to whether this is a distinct species or a hybrid, PLESKE, J. Ornith. 60 p. 96.—*C. georgicus* und *C. colchicus* Unterscheidungsmerkmale (Russ.), NESTEROV, Mess. ornith. 3 p. 151.

[*Aegithalus*] *Acredula caudata*, the dark eye-stripe of the female, BIEDERMANN-IMHOOF, Ornith. Monatsber. 20 p. 115.

Anthoscopus smithi, critical and systematic note, OGILVIE-GRANT, Ibis 1912 p. 379.

Aphelocephala leucopsis missa p. 377 N. S. Wales, *A. nigricincta tanami* p. 378 N. Terr., subspp. n., MATHEWS, Nov. Zool. 18.

Sphenostoma cristatum pallidum p. 378 S. Australia, *S. c. occidentale* p. 378 W. Australia, *S. c. tanami* p. 379 N. Terr., subspp. n., MATHEWS, Nov. Zool. 18.

REGULIDAE.

Regulus regulus buturlini = *R. regulus hyrcanus* (Russ.), ZARUDNYJ, Mess. ornith. 3 p. 64.

Sylviparus modestus occultus subsp. n. Szechwan, China, THAYER & BANGS, Mem. Amer. Mus. Comp. Zool. Harvard Coll. 40 p. 185.

SITTIDAE.

Sitta europaeu minor remark on specimens from Spain and Portugal, WITHERBY, Bull. B. O. C. 29 p. 75.—*S. carolinensis* and *S. canadensis*, figured in colour, ALLEN, Bird Lore 14 p. 316.

Neositta mortoni sp. n. Northern Territory, Australia, NORTH, Ibis 1912 p. 118.—*N. pileata whitlocki* p. 47 S.W. Australia, *N. p. melvillensis* p. 47 Melville Is. N. Australia, *N. p. broomei* p. 95 N. W. Australia, subspp. n., MATHEWS, Austral Av. Rec. 1; *N. chrysoptera lathamii* p. 379 Victoria, *N. pileata milligani* p. 380 W. Australia,

N. p. broomi p. 380 S. W. Australia, *N. p. rogersi* p. 380 N. W. Australia, *N. p. subleucoptera* p. 380 N. Terr., *N. striata rothschildi* p. 381 Queensl., subspp. n., MATHEWS, Nov. Zool. 18.

Neosittella gen. n. for type *Sitella striata* Gould, MATHEWS, Austr. Av. Rec. 1 p. 114.

CERTHIIDAE.

Certhia familiaris buturlini subsp. n. Krim (Russ.), BANIKOVSKIJ, Mess. ornith. 3 p. 160.

Climacteris melanura alexandrae p. 381 N. Territory, *C. rufa orientalis* p. 382 S. Australia, *C. picumnus australis* p. 382 S. Australia, *C. p. victoriae* p. 382 Victoria, *C. leucophaea grisescens* p. 383 S. Australia, *C. erythroops neositta* p. 383 S. W. Australia, subspp. n., MATHEWS, Nov. Zool. 18.

Whitlocka gen. n. for type *Climacteris melanura* Gould, MATHEWS, Austr. Av. Rec. 1 p. 115.

Neoclisma gen. n. for type *Climacteris picumnus* Temm., MATHEWS, Austr. Av. Rec. 1 p. 115.

ZOSTEROPIDAE.

[*Zosterops*] *Oreosterops pinalae* sp. n. Ceram, STRESEMANN, Bull. B. O. C. 31 p. 5.—*Z. palpebrosa*, breeding habits in captivity, PAGE, Avicult. Mag. 3 p. 114; review of subspecies p. 346, *Z. p. harterti* Alor and *Z. p. foghaensis* Buru subspp. n. p. 347, STRESEMANN, Nov. Zool. 19.—*Z. coeruleescens* field notes from N. Zealand, M'LEAN, Emu 11 p. 223.—*Z. lutea hecla* subsp. n. N. W. Australia, MATHEWS, Austral Av. Rec. 1 p. 48; *Z. lutea tribulationis* p. 384 N. W. Australia, *Z. lateralis tasmanica* p. 385 Tasmania, *Z. l. cornwalli* p. 385 Queensl. subspp. n., MATHEWS, Nov. Zool. 18.

Nesozosterops gen. n. for type *Z. strenua* Gould, MATHEWS, Nov. Zool. 18 p. 451.

DICAIEIDAE.

Dicaeum sumatranum batuense subsp. n. Batu Is. Sumatra, RICHMOND, Proc. Biol. Soc. 25 p. 104.—*D. hirsutinaceum*, nesting and other habits, CHANDLER, Emu 12 p. 130.—*D. hirsutinaceum yorki*, Queensl., *D. h. tormenti*, N. W. Australia, subspp. n., MATHEWS,

Nov. Zool. **18** p. 387.—*Dicaeum trigonostigma antioproctum*, *D. t. lyprum*, *D. t. melanthe* **subsp. n.** Barussan Isl. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7 p. 21.—*D. formosum* **sp. n.** Mt. Arizan, Formosa, O.-GRANT, Bull. B. O. C. **29** p. 109, figured Ibis **1912** p. 653 pl. xiii fig. 1.—*D. hanieli* **sp. n.** Timor, HELLMAYR, Nov. Zool. **19** p. 210.

Pardalotus melanocephalus melvillensis p. 48 Melville Is. N. Australia, *P. m. barroni* p. 96 N. Queensl., *P. m. tormenti* p. 96 N. W. Australia, **subsp. n.**, MATHEWS, Austral Av. Rec. **1**; *P. striatus kingi* p. 387 King Isl., *P. striatus substriatus* p. 388, Victoria, *P. s. subaffinis* p. 388 S. Australia, *P. s. murchisoni* p. 338 Middle Australia, *P. s. westralensis* p. 388 S. W. Australia, *P. s. rogersi* p. 388 N. W. Australia, *P. punctatus interjectus* p. 389 Victoria, *P. p. leachi* p. 389 Tasmania, *P. p. whitlocki* p. 389 S. W. Australia, *P. rubricatus parryi* p. 390 N. W. Australia, *P. melanocephalus inexpectatus* p. 390 N. W. Australia, **subsp. n.**, MATHEWS, Nov. Zool. **18**.

Pardalotinus **gen. n.** for type *Pipra striata* Gmel., MATHEWS, Austr. Av. Rec. **1** p. 115.

Neopardalotus **gen. n.** for type *Pardalotus quadragintus* (Gould), MATHEWS, Austr. Av. Rec. **1** p. 115.

[*Prionochilus*] *Anaimos maculatus opistatus* **subsp. n.** Nias Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7 p. 22.

NECTARINIIDAE.

Chalcostetha calcostetha pagicola **subsp. n.** Simalur Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7 p. 17.

Aethopyga siparaja tinoptila p. 17, *Ae. s. melanetra* p. 18, *Ae. s. photina* p. 18, **subsp. n.** Barussan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7.

[*Arachnechlura*] *Cinnyris brevirostris*, description with notes on eggs and nests from Seistan, SARUDNY & HARMS, J. Ornith. **60** p. 610.

Cinnyris falkensteini and *C. medio-cris*, eggs from B. E. Afr. described, JOURDAIN, Bull. B. O. C. **29** p. 100.—*C. chloropygius uellensis* **subsp. n.**,

Uelle river Belgian Congo, REICHENOW, J. Ornith. **60** p. 321.—*C. ornata polyclysta* p. 18, *C. brasiliiana oenopa* p. 18 *C. b. mecynorhyncha* p. 19, *C. b. hypolampis* p. 19, **subsp. n.** Barussan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7.

[*Chalcomitra*] *Cinnyris amethystina* remarks on a curious variation or mutation, SOLATER, Bull. B. O. C. **29** p. 65.

[*Cyrtostomus*] *Cinnyris frenata macgillivrayi* **subsp. n.** N. Queensl., MATHEWS, Austral Av. Rec. **1** p. 97; *C. frenata olivei* **subsp. n.** N. Queensl., MATHEWS, Nov. Zool. **18** p. 391.

Arachnothera longirostra melanchima p. 19, *A. l. exochra* p. 19, *A. l. hypochra* p. 19, *A. l. zarhina* p. 19, *A. chrysogenys copha* p. 20, *A. c. isopega* p. 20, *A. c. pleoxantha* p. 20, **subsp. n.** Barussan Is. Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7.

Anthreptes malacensis nesaeus p. 20, *A. m. pelloptilus* p. 20, *A. m. pollostus* p. 21, Barrusan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7.

Chalcoparia singalensis panopsia **subsp. n.** Banjak Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7 p. 21.

MELIPHAGIDAE.

Melithreptes lunatus gradus p. 48 Melville Is. N. Australia, *M. l. yorki* p. 98 Cape York, **subsp. n.**, MATHEWS, Austral Av. Rec. **1**; *M. l. adelaidensis* p. 391 S. Australia, *M. l. subalbogularis* p. 392 N. W. Australia, *M. gularis loftyi* p. 392 S. Australia, *M. g. coongani* p. 392 N. W. Australia, *M. g. ingrani* p. 393 Mid Queensl., *M. atricapillus submagnirostris* p. 393 Victoria, *M. a. augustus* p. 393 S. Australia, *M. a. pallidiceps* p. 394 S. Australia, *M. a. insularis* p. 394 King Isl., *M. a. subleucogenys* p. 394 W. Australia, **subsp. n.**, MATHEWS, Nov. Zool. **18**.

Plectorhyncha lanceolata neglecta **subsp. n.** S. Australia, MATHEWS, Nov. Zool. **18** p. 395.

Myzomela erythrocephala melvillensis, and *M. obscura apsleyi* p. 48 Melville Is. N. Australia, *M. nigra ashbyi* p. 98 S. Australia **subsp. n.**, MATHEWS, Austral Av. Rec. **1**; *M. sanguinolenta stephensi*

p. 395 N. Queensl., *M. erythrocephala kemp* p. 396 N. Queensl., *M. e. derbyi* p. 396 N. W. Australia, *M. nigra westraliensis* p. 396 W. Australia, *M. pectoralis incerta* p. 396 N. Queensl., *M. obscura munna* p. 397 N. Queensl., **subsp. n.**, MATHEWS, Nov. Zool. 18.

Acanthorhynchus tenuirostris cairnsensis p. 397 N. Queensl., *A. t. victoriae* p. 398 Victoria, *A. t. loftyi* p. 398 S. Australia, *A. superciliosus wilsoni* p. 398 S. W. Australia, **subsp. n.**, MATHEWS, Nov. Zool. 18.

Gliciphila melanops braba Kangaroo Is. S. Australia, *G. fasciata broomei*, N. W. Australia, *G. f. apsleyi* Melville Is. N. Australia, **subsp. n.**, MATHEWS, Austral Av. Rec. 1 p. 49; *G. melanops chandleri* p. 399 Victoria, *G. m. crassirostris* p. 399 Tasmania, *G. m. westernensis* p. 399 W. Australia, *G. albifrons incerta* p. 399 Victoria, *G. fasciata inkermani* p. 400 Queensl., *G. modesta ramsayi* p. 400 N. Queensl., **subsp. n.**, MATHEWS, Nov. Zool. 18.

Ramsayornis **gen. n.** for type *Gliciphila subfasciata* Ramsay, MATHEWS, Austr. Av. Rec. 1 p. 115.

[*Conopophila*] *Certhionyx albogularis yorki* Queensland, *C. rufogularis keatsi* N. Terr. Australia, **subsp. n.**, MATHEWS, Austral Av. Rec. 1 p. 49; *C. rufogularis queenslandicus* **subsp. n.** Queensl., MATHEWS, Nov. Zool. 18 p. 401.

Meliphaga phrygia tregellasi **subsp. n.** Victoria, MATHEWS, Nov. Zool. 18 p. 402.

Stigmatops indistincta melvillensis p. 50 Melville Is. N. Australia, *S. i. ovida* p. 98 N. Queensl. **subsp. n.**, MATHEWS, Austral Av. Rec. 1 p. 50; *S. indistincta rufescens* p. 402 N. Terr., *S. i. media* p. 403 N. W. Australia, *N. i. perplexa* p. 403 N. W. Australia, MATHEWS, Nov. Zool. 18.—*S. indistincta* and *S. argentauris* subspecies and synonymy reviewed p. 342, *S. i. nupta* **subsp. n.** Aru Isles p. 344, *S. a. patasiwa* **subsp. n.** Ceram p. 345, STRESEMANN, Nov. Zool. 19.—*S. monticola* Ceram p. 5, *S. deningeri* Buru p. 6 **spp. n.**, STRESEMANN, Bull. B. O. C. 31.

Ptilotis sonora cooperi, *P. flavescens melvillensis*, *P. unicolor brenda*, Melville Is. N. Australia p. 50, *P. leucotis munna* Kangaroo Is. S. Australia, p. 50, *P. l. torringtoni* p. 80, New South Wales,

P. l. melanodera Victoria p. 80, *P. chrysops samueli* p. 99 S. Australia, *P. cratitia samueli* p. 99 S. Australia, *P. chrysotis graingeri* p. 99 Mt. Grainger, S. Australia, **subsp. n.**, MATHEWS, Austral Av. Rec. 1; *P. analoga mixta* p. 403 N. Queensl., *P. gracilis imitatrix* p. 403 N. Queensl., *P. fusca davsoni* p. 404 Queensl., *P. f. dingi* p. 404 S. Australia, *P. lewinii nea* p. 404 Victoria, *P. l. mab* p. 404 Queensl., *P. l. ivi* p. 405 Queensl., *P. sonora walgetti* p. 405 N. S. Wales, *P. s. broomei* p. 405 W. Australia, *P. s. murchisoni* p. 405 Mid Australia, *P. s. rogersi* p. 406 N. W. Australia, *P. s. decipiens* p. 406 N. W. Australia, *P. chrysops barroni* p. 406 N. Queensl., *P. c. beaconsfieldi* p. 407 Victoria, *P. fasciogularis brunnescens* p. 407 N. Queensl., *P. leucotis depauperata* p. 407 S. Australia, *P. melanops meltoni* p. 408 Victoria, *P. cratitia halmaturlina* p. 409 Kangaroo Isl., *P. c. howei* p. 409 Victoria, *P. c. stirlingi* p. 409 W. Australia, *P. heartlandi mungi* p. 409 N. W. Australia, *P. k. alexandrensis* p. 409 N. Terr., *P. ornata munna* p. 410 W. Australia, *P. o. tailemi* p. 410 S. Australia, *P. chrysotis ethelae*, p. 410 S. Australia, *P. c. andersoni* p. 411 N. W. Australia, *P. flavescens wyndhami* p. 411 N. W. Australia, *P. f. subgermana* p. 411 N. Queensl., *P. flava addenda*, p. 412 Queensl., *P. penicillata mellori* p. 412 Victoria, *P. p. whitei* p. 412 S. Australia, *P. p. rosinae*, p. 412, S. Australia, *P. p. ladasi* p. 413 Mid Australia, *P. p. calconi*, p. 413 N. W. Australia, *P. unicolor yarru* p. 413 Queensl., *P. u. durbiski* p. 413 N. W. Australia, **subsp. n.**, MATHEWS, Nov. Zool. 18.—*P. analoga vicina* **subsp. n.** Sudest Ist. nr. N. Guinea, ROTHSCHILD & HARTERT, Nov. Zool. 19 p. 203.—*P. carpentariensis* Gulf of Carpentaria Queensland, *P. subchrysops* Cooktown, **spp. n.**, CAMPBELL, Bull. R. Austr. Orn. Un. No. 3 p. 1. also Emu 12 p. 19.

Caloptilotis type *Ptilotis macleayana* Ramsay, *Paraptilotis* type *P. fusca* *Lophoptilotis* type *P. leadbeateri*, *Ptilotula* type *P. flavescens* **genn. n.** MATHEWS, Nov. Zool. 18 p. 414.

Microptilotis **gen. n.** for type *Ptilotis gracilis* Gould, MATHEWS, Austr. Av. Rec. 1 p. 116.

Trichodere **gen. n.** for type *Ptilotis cockerelli* Gould, NORRU, Ibis 1912 p. 120.

Meliornis pyrroptera indistincta p. 414 South Australia, *M. novaehollandiae assimilis* p. 415 Victoria, *M. n. subassimilis* p. 415 S. Australia, *M. nigra herbertoni* p. 415 N. Queensl. *M. n. inexpectata* p. 416 **subsp. n.**, MATHEWS, Nov. Zool. 18.

Anthornis melanura, field notes in New Zealand, M'LEAN, Emu, 11 p. 178.

Prosthemadera novae-zealandiae, field notes in N. Zealand, M'LEAN, Emu 11 p. 182.—*P. novae-zealandiae phoebe* North Isl. New Zealand, *P. n. kivini* Auckland Isles, **subsp. n.**, KEMP, Austr. Av. Rec. 1 p. 124.

Manorhina melanophrys yarra **subsp. n.** Victoria, MATHEWS, Nov. Zool. 18 p. 416.

Myzantha flavigula wilsoni p. 51 S. Australia, *M. f. melvillensis* p. 51, Melville Is. N. Australia, *M. f. casuarina* p. 100 N. W. Australia **subsp. n.**, MATHEWS, Austral Av. Rec. 1 p. 51; *M. melanocephala whitei* p. 417 S. Australia, *M. m. leachi*, p. 417 Tasmania, *M. m. crassirostris* p. 417 Queensl., *M. flavigula berneyi*, p. 417 Queensl., *M. f. clelandi* p. 418 S. W. Australia, *M. f. wayensis* p. 418 Mid. Australia, *M. f. alligator* p. 418 **subsp. n.**, MATHEWS, Nov. Zool. 18.

Coleia **gen. n.** for type *Merops [Acanthochaera] carunculatus* Lath. MATHEWS, Aust. Av. Rec. 1 p. 116.

Dyotornis **gen. n.** for type *Corvus paradoxus* Daudin, MATHEWS, Austr. Av. Rec. 1 p. 116.

Anellobia chrysoptera halmaturina **subsp. n.** Kangaroo Is. S. Australia, MATHEWS, Austral Av. Rec. 1 p. 101.—*A. chrysoptera intermedia* p. 419 S. Australia, *A. c. tasmanica* p. 420 Tasmania, **subsp. n.**, MATHEWS, Nov. Zool. 18.

Acanthagenys rufogularis cygnus p. 420 Victoria, *A. r. territorii* p. 420 N. Terr., *A. r. wei* p. 421 Mid Australia, *A. r. queenslandicus* p. 421 N. Queensl., **subsp. n.**, MATHEWS, Nov. Zool. 18.

Entomyzon cyanotis apsleyi p. 51 Melville Is. N. Australia, *E. c. hedleyi* p. 101 N. Queensl., **subsp. n.**, MATHEWS, Austral Av. Rec. 1; *E. cyanotis connectens* p. 421 Queensl., *E. c. subalbipennis* p. 422 N. W. Australia **subsp. n.** MATHEWS, Nov. Zool. 18.

(N-9210 g)

Philemon argenticeps melvillensis, *P. orientalis breda* p. 51 Melville Is. N. Australia *P. argenticeps kemp* p. 101 N. Queensland, *P. a. broomei* p. 101 N. W. Australia, *P. buceroides yorkei* p. 102 N. Queensl., *P. b. gordon* p. 102 Melville Is. N. Australia, **subsp. n.** MATHEWS, Austral Av. Rec. 1; *P. argenticeps alexis* p. 422 N. Terr., *P. corniculatus ellioti* p. 423 N. Queensl., *P. orientalis didimus* p. 423 S. Australia, *P. o. johnstoni*, p. 423 N. Queensl., **subsp. n.**, MATHEWS, Nov. Zool. 18.

Neophilemon **gen. n.** for type *Philemon buceroides* Swains, MATHEWS, Austr. Av. Rec. 1 p. 117.

Microphilemon **gen. n.** for type *Buphaga orientalis* Lath., MATHEWS, Austr. Av. Rec. 1 p. 117.

MNIOTILTIDAE.

Protonotaria citrea, first record for Connecticut, SMITH, Bird Lore 14 p. 109.

Vermivora ruficapilla (Wilson) is the correct name for the Nashville Warbler, COOKE, Auk 29 p. 545.

[*Parula*] *Compsothlypis pitiayumi elegans* **subsp. n.** Venezuela, TODD, Ann. Carnegie Mus. 8 p. 204.

Basileuterus melanogenys ignotus E. Panama p. 21, *B. m. eximius* W. Panama p. 22, **subsp. n.**, NELSON, Smithsonian Inst. Misc. Collect. 60 No. 3.

DREPANIDIDAE.

Telespiza cantans, its anatomy and systematic position, CLARK, Auk 29 p. 166.

MOTACILLIDAE.

Motacilla alba, at Tuskar rock, Ireland, PATTEN, Irish Nat. 21 p. 120.—*M. alba orientalis* **subsp. n.** Turkestan, SARUDNY, Ornith. Monatsber. 11 1903 p. 130.—*M. boarula boarula*, nesting in East Sussex, FEILDEN, Brit. Birds 6 p. 17; breeding in Holland, HENS, Deventer Club Ned. Vogelk. 2 p. 49.—*Budytes citreola citreola*, *B. c. werae* in Turkestan, Dimensionen (Russ.), ZARUDNYJ, Mess. ornith. 3 p. 23.—*M. flava dombrowskyi*, first record for Egypt, NICOLL, Ibis 1912 p. 417.

Anthus trivialis, taken on Tuskar rock, first record for Ireland, PATTEN, Irish Nat. 21 p. 209 pl. iv, also MOFFAT

ibid p. 246.—*A. richardi*, second record from Ireland, WILLIAMS, Irish Nat. **21** p. 27; a review of the Indo-Malayan forms p. 315, *A. r. albidus* subsp. n. p. 316 Flores, STRESEMANN, Nov. Zool. **19**.—*A. richardi richardi* and *A. r. striolatus*, eggs described, JOURDAIN, Bull. B. O. C. **29** 1912 p. 98.—*A. pratensis enigmaticus* charakteristik p. 25, *A. japonicus härmsi* Discussionen p. 26, *A. gustari* p. 28 Turkestan (Russ.) ZARUDNYJ, Mess. ornith. **3**.—*A. obscurus*, migration observations on Tuskar rock, Ireland, PATTEN, Irish Nat. **21** p. 164.—*A. australis adelaidensis* p. 424 S. Australia, *A. a. bibali* p. 424 S. W. Australia, *A. a. subaustralis* p. 425 Mid. Australia, *A. a. subrufus* p. 425 N. W. Australia, *A. a. tribulationis* p. 425 N. W. Australia, subsp. n., MATHEWS, Nov. Zool. **18**; *A. a. queenslandica*, subsp. n. Queensland, MATHEWS, Austr. Av. Rec. **1** p. 120.

ALAUDIDAE.

Certhilanda kalahariae sp. n. Kalahari desert, OGILVIE-GRANT, Ibis **1912** p. 375.

Rhamphocorys clot-bey, nesting habits and description of young birds, WILLIS & PEARSON Bull. B. O. C. **29** p. 104.

Otocoris alpestris, taken at St. Dizier, Haute-Marne, France, PETIT, Bul. soc. zool. France, **36** 1912 p. 211; not rare in Belgium, DUBOIS, *op. cit.* **37** p. 119.

Melanocorypha calandra in Gouv. Kiev, Phänologie, Gesang (Russ.), SOHARLEMAN, Mess. ornith. **3** p. 306.

Alauda arvensis, bei Burgdorf in Schweiz, AEBI, Ornithol. Beob. **8** p. 41.

Mirafra javanica melvillensis subsp. n. Melville Is. N. Australia, MATHEWS, Austral Av. Rec. **1** p. 102; *M. javanica queenslandica* p. 425 Queensl., *M. j. subrufescens* p. 426 N. W. Australia, *M. j. nigrescens* p. 426 N. Terr. subsp. n., MATHEWS, Nov. Zool. **18**.

Galerita cristata nesting and other habits in captivity, TESCHEMAKER, Avicult. Mag. **3** p. 273; *Ptilocorys cristata*, on the subspecies found in Sinai and Palestine, KOLLIBAY, Ornith. Monatsber. **20** p. 113.—*G. cristata caroli*, additional information on this rare subspecies, NICOLL, Ibis **1912** p. 425.—*P. cristata ioniae* p. 26, *P. c. subdaurica* p. 26 Asia Minor, *P. c. weigoldi* p. 27 Mesopotamia,

subsp. n., KOLLIBAY, Ornith. Monatsber. **20**.—*G. theklae hilgerti* subsp. n. southern Algeria and the other species and subspecies discussed and figured, ROTH-SCHILD & HARTERT, Nov. Zool. **18** p. 492 pl. x.—*G. theklae polatzeki* subsp. n. Balearic Islands, HARTERT, Ornith. Monatsber. **20** p. 30.

Ammomanes phoenicura pullens subsp. n. Egyptian Soudan, LE ROI, Ornith. Monatsber. **20** p. 6.—*A. deserti* subspecies reviewed p. 542, *A. d. katharinae* subsp. n. Mt. Sinai p. 543, ZEDLITZ, J. Ornith. **60**.—*A. deserti mya* subsp. n. Algerian Sahara, HARTERT, Ann. Mag. N.H. **10** 1912 p. 230.—*A. deserti algeriensis*, nesting habits in Algeria, WALLIS & PEASON, Bull. B.O.C. **29** p. 105.

[*Eremopteryx*] *Pyrrhulanda melananchen*, addition to the Avifauna of Egypt, NICOLL, Ibis **1912** p. 424.

FRINGILLIDAE.

Migration dates, plumage notes and coloured figures of North American Sparrows, COOKE & CHAPMAN, Bird Lore **14** pp. 45 98 158 218 287 345.

[*Ligurinus*] *Chloris chloris*, distribution and revision of the subspecies, LAUBMANN, Ornith. Jahrb. **23** p. 83.

Sporophila leucoptera mexicanae nom. n. für *S. l. aequatorialis* Sneathlage 1907, HELLMAYR, Abh. Ak. München **26** Abt. 2 p. 119.—*L. haplochroma* sp. n. Columbia, TODD, Ann. Carnegie Mus. **8** p. 200.

[*Pitylus*] *Caryothraustes canadensis simulans* subsp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. **60** No. 3 p. 16.

Saltator orenocensis rufescens subsp. n. Venezuela, TODD, Ann. Carnegie Mus. **8** p. 201.

Fringilla teydea, notes from Teneriffe, ASTLEY, Avicult. Mag. **3** p. 195.—*F. teydea polatzeki*, figured from Grand Canary with systematic and field notes, BANNERMAN, Ibis **1912** p. 613 pl. xii.—*F. canariensis*, remarks with a key to the Chaffinches of the north Atlantic islands, BANNERMAN, Ibis **1912** p. 617.

[*Spinus*] *Chrysomitris spinus buturlini* subsp. n. Prov. Baku, S.E. Russia, LONDON, Ornith. Monatsber. **20** p. 45.

Hypacanthis spinoides, habits, distribution and nesting, WHISTLER, Bombay J. Nat. Hist. Soc. **21** p. 1074, DODSWORTH, *ibid* p. 1075, MARGRATH, *ibid* p. 1309.

[*Linaria*] *Acanthis flavirostris stoliczkae* in Ferghana, new to the Russian Empire (Russ.), BUTURLIN, Mess. ornith. Moskva **3** p. 248.—*A. linaria holböllii*, not uncommon in Germany, LE ROY, Ornith. Monatsber. **20** p. 7.—*Cannabina linota*, a strange variation, MARTORELLI, Riv. ital. di Ornitologia **1** p. 121.

[*Montifringilla*] *Leucosticte tephrocotis* making Cliff Swallows' nests their night abode, MILLS, Bird Lore **14** p. 170.

Petronia superciliaris bororensis subsp. n. Boror, Portuguese East Africa, ROBERTS, J. S. Afr. Orn. Union **8** p. 46.

Passer domesticus, western Asian subspecies reviewed, ZEDLITZ, J. Ornith. **60** p. 566.—*P. domesticus tingitanus* and *P. hispaniolensis*, the sparrows of N. W. Africa discussed and the crowns of various individuals figured, ROTHSCHILD & HARTERT, Nov. Zool. **18** p. 479 pl. xi.—*P. italiae vallonii*, remarks on the example from the mountain of Friuli, VALLON, Riv. ital. Orn. **1** p. 156.—*P. enigmaticus* sp. n. Beludschistan, SARUDNY, Ornith. Monatsber. **11** 1903 p. 130.—*P. yatii*, description with notes on eggs and nests from Seistan, SARUDNY & HÄRMS, J. Ornith. **60** p. 592 fig.

[*Polioptila*] *Serinus angolensis somereni* subsp. n. Uganda, HARTERT, Bull. B. O. C. **29** p. 63.—*S. angolensis hilgerti* subsp. n. S. Somaliland and revision of the other subspecies, ZEDLITZ, Ornith. Monatsber. **20** p. 76.—*P. elgonensis* sp. n. Mt. Elgon, Bt. E. Africa, O.-GRANT, Bull. B. O. C. **31** p. 17.—*P. dimidiata* sp. n. Abyssinia, MADARASZ, Ornith. Monatsber. **20** p. 45.

Serinus serinus, taken in Midlothian, new to Scotland, WILD, Scot. Nat. **1912** p. 11.—*Fringilla canaria*, introduction on Midway Island, N. Pacific, BRYAN, Auk **29** p. 339.

[*Carpodacus*] *Pyrrhula erythrina*, supposed occurrence in Oxfordshire, APLIN, Zoologist **1912** p. 460.—*C. erythrinus*, neuerdings im Warthetal bei Posen, HAMMLING, Ornith. Monatsber. **20** p. 172.—*C. mutans* sp. n. Hawaii, GRINNELL, Auk **29** p. 24; its status discussed, PHILLIPS, Auk **29** p. 336, GRINNELL t. c. p. 543.

Loxia curvirostra, breeding in Suffolk for three successive years, BUNYARD, Brit.

Birds London **6** p. 88; breeding in Charente, France, DELAMAIN, Rev. Fr. d'Orn. **2** pp. 298–322: biological notes, THIJSSSE, Versl. Med. Ned. Ornith. Ver. **8** p. 42.—*L. curvirostra corsicana* subsp. n. Corsica, TSCHUSI, Orn. Jahrb. **23** p. 217.—*L. curvirostra percna* subsp. n. Newfoundland, BENT, Smiths. Miscell. Coll. **60** No. 15 p. 1.—*L. leucoptera bifasciata*, in Ostpreussen erlegt, TISCHLER, Ornith. Monatsber. **20** p. 27.—*L. bifasciata*, invasion in Livonia in autumn 1911, OTTOW, Ornith. Monatsber. **20** pp. 11–62; zahlreiches Auftreten in Livland (Russ.), OTTO, Mess. ornith. Moskva **3** p. 249.

Pyrrhula europaea, food habits, COLLINGE, J. econ. biol. **7** p. 50.—*P. arizanica* sp. n. Formosa, OGILVIE-GRANT, Ibis **1912** p. 644.

Pinicola californica, discovery of its nest and eggs in California, RAY, Condor **14** p. 157.

Emberiza, die Verbreitung der Gattung, DUNCKER, J. Ornith. **60** p. 69.—*E. palustris tschusii*, occurrence in Sussex, first British record, rearrangement of allied species and subspecies, HARTERT, British Birds **6** p. 153.—*Hypocentor rustica*, taken on the Aleutian Islands, new to America, BENT, Smiths. Misc. Collect. **56** No. 32 p. 19.—*E. citrinella*, the subspecies and their distribution, GENGLER, Ornith. Jahrb. **23** p. 88.—*E. citrinella somovi* subsp. n. Gouv. Charkov (Russ.), AVERIN, Charkov Trav. Soc. nat. **45** p. 153.—*E. cirulus*, a curious variation taken near Rome, FALCONIERI DI CARPEGNA, Boll. soc. zool. ital. **1** p. 188.—*E. buchani obscura* subsp. n. Turkestan, SARUDNY, Ornith. Monatsber. **11** 1903 p. 130.—*M. leucocephala*, taken at Fair Isle, Orkney, new to Great Britain, CLARKE, Scot. Nat. **1912** p. 8; also British Birds **5** p. 239.—*E. cia*, field-notes, ZUMSTEIN, Bürkheim Mitt. Pollichia **27–28** 1913 p. 47.

Miliaria calandra buturlini, Turkestan Dimensionen (Russ.), ZARUDNYJ, Mess. ornith. Moskva **3** p. 209.

[*Fringillaria*] *Emberiza saharae*, nest and eggs noticed, WALLIS, Bull. B. O. C. **29** 1912 p. 83.—*F. koudesi* sp. n. Abyssinia, MADARASZ, Ornith. Monatsber. **20** p. 46.

Plectrophenax nivalis, nesting on Flatholm in the Bristol Channel, PROGER & PATERSON, Cardiff Trans. Nat. Soc. **44** p. 101.—*Fringilla nivalis*, in Schlesien,

KRUBER, Ornith. Monatsber. **20** p. 127; ein Bewohner der Hoch-Kordillere des südlichen Chile, FONCK, Verh. intern. ZoolKongr. Jena **8** p. 925.

Calcarius lapponicus, osservato per la prima volta nel Romano, ANGELINI, Boll. Soc. zool. ital. **1** p. 87.

Chondestes grammacus grammacus, first record for Cuba, RAMSDEN, Auk **29** p. 395.

[*Ammodromus*] *Passerherbulus maritimus maritimus* and *P. m. macgillivraii*, their breeding ranges in Georgia, WAYNE, Auk **29** p. 103.—*P. lecontei*, field notes, SHERMAN, Wilson Bull. **24** p. 18.

Junco oreganus, nesting habits, THAYER, Bird Lore **14** p. 212 2 figs.

Zonotrichia albicollis, first record for Idaho, WYMAN, Auk **29** p. 247.

[*Brachyospiza*] *Zonotrichia strigiceps*, taxonomic remarks p. 187, *Z. s. dabbenei* subsp. n. Tucuman N. W. Argentina p. 190, HELLMAYR, München Verhandl. Ornith. Ges. **11**.

Melospiza melodia caurina, winter range in Alaska, SWARTH, Condor **14** p. 73.—*M. melodia beata* subsp. n., BANGS, Proc. N. Engld. Zool. Cl. **4** p. 87.

Passerella iliaca, new record for Greenland, SCHIÖLER, Ornith. Tids. **6** p. 65.—*P. stephensi* in Marin county, California, MAILLIARD, Condor **14** p. 63 figs. 20-22.

Pipilo crissalis carolae a valid subspecies, GRINNELL, Condor **14** p. 199.

Arremonops tocuyensis sp. n. Venezuela, TODD, Ann. Carnegie Mus. **8** p. 198.

COEREBIDAE.

Coereba, the distribution of the genus and an annotated list of the species, *C. chloropyga majuscula* and *C. luteola major* figured pl. viii, *C. chloropyga cayennensis* Cayenne p. 506, *C. luteola montana* W. Venezuela p. 509, subsp. n., LOWE, Ibis **1912** p. 489.—*C. chloropyga alleni* subsp. n. Matto Grosso, Brazil, LOWE, Bull. B. O. C. **29** p. 86.—*C. pacifica* sp. n. coast of Peru, LOWE, Bull. B. O. C. **29** p. 85.

Oreomanes fraseri, taxonomic notes, from Peru, HELLMAYR, Verhandl. Ornith. Ges. Bayern. **11** p. 159.

TANAGRIDAE.

[*Calospiza*] *Tanagra guttata eusticta* Costa Rica p. 202, *T. g. trinitatis* Trinidad subsp. n. p. 203, TODD, Ann. Carnegie Mus. **8**—*T. guttata bogotensis* subsp. n. Bogota, Columbia, HELLMAYR & SEILERN, Arch. Natg. **78a** p. 57.—*T. xanthogastra* subspecies reviewed p. 17, *T. x. quitensis* subsp. n. Peru and Ecuador p. 16, *T. fucosus* sp. n. p. 17 Panama, NELSON, Smithsonian Inst. Misc. Collect. **60** No. 3.—*T. cayana huberi* additional description, HELLMAYR, Abh. Ak. Wiss. München **26** Abt. 2 p. 125.

Tanagra selateri Berlepsch must in future be known as *Thraupis episcopus nesophilus* nom. n., RILEY, Proc. Biol. Soc. **25** p. 185.

[*Nemosia*] *Hemithranpis guira*, subspecies revised, HELLMAYR, Abh. Ak. Wiss. München **26** Abt. 2 p. 101.

[*Hemithraupis*] *Chrysothlypis chrysomelas ocularis* subsp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. **60** No. 3 p. 19.—*H. ornatus* sp. n. Columbia Panama, NELSON, Smithsonian Inst. Misc. Collect. **60** No. 3 p. 19.

Hylopingus gen. n. for type *H. inornatus* sp. n. Panama, NELSON, Smithsonian Inst. Misc. Collect. **60** No. 3 p. 18.

Schistochlamys atra aterrima subsp. n. Venezuela, TODD, Ann. Carnegie Mus. **8** p. 203.

PLOCEIDAE.

Vidua serena, its parasitic cuckoo-like habits, ROBERTS, J. S. Afr. Ornith. Union **8** p. 45.

Pyromelana aurea, first description of the female from Angola, BANNERMAN, Ibis **1912** p. 232.

Cryptospiza borealis sp. n. Mt. Urguess B. E. Afr., PERCIVAL, Bull. B. O. C. **29** p. 76.

Zonaeginthus bellus samueli subsp. n. Kangaroo Is. S. Australia, MATHEWS, Austral Av. Rec. **1** p. 102; *Z. guttatus philordi* p. 427 Victoria, *Z. castanotis monki* p. 427 Queensl., *Z. c. wayensis* p. 428 Mid Australia, *Z. c. wungi* p. 428 Mid Australia, *Z. c. alexandrae* p. 428 N. Terr., subsp. n., MATHEWS, Nov. Zool. **18**.

Emblema picta territorii N. Terr.,
E. p. coongani W. Australia, **subsp. n.**,
MATHEWS, Nov. Zool. **18** p. 428.

Pytelia chubbi **sp. n.** Bt. E. Africa,
OGILVIE-GRANT, Bull. B. O. C. **20** p. 64.

Munia castaneothorax apsleyi **subsp. n.** Melville Is. N. Australia, MATHEWS, Austral Av. Rec. **1** p. 52; *M. bichenovii pallescens* p. 429 N. S. Wales, *M. b. bandi* p. 429 N. Terr., *M. castaneothorax gangi* p. 430 N. W. Australia, *M. pectoralis incerta* p. 430 N. Terr., **subsp. n.**, MATHEWS, Nov. Zool. **18**.—*M. punctulata blasii* **subsp. n.** TIMOR and other subspecies reviewed, STRESEMANN, Nov. Zool. **19** p. 317.

Ægitha temporalis tregallasi Victoria, *Æ. t. loftyi* S. Australia, *Æ. ruficauda connectens* Queensl., *Æ. r. subclarescens* N. W. Australia, *Æ. r. thorpei* W. Australia, **subsp. n.**, MATHEWS, Nov. Zool. **18** p. 431.

Alisteranus **gen. n.** for type *Amadina cincta* Gould, *A. cinctus vinotinctus* **subsp. n.** Queensl., MATHEWS, Nov. Zool. **18** p. 433.

Neochmia personata harterti, N. W. Australia, *N. phaeton iredalei* N. Queensl. **subsp. n.**, MATHEWS, Nov. Zool. **18** p. 434; *N. phaeton fitzroyi* **subsp. n.** N. W. Australia, MATHEWS, Austr. Av. Rec. **1** p. 120.

Estrilda erythronota, revision of the subspecies, ZEDLITZ, Ornith. Monatsber. **20** p. 76.

Uræginthus cyanocephalus, revision of the subspecies, *U. c. mülleri* **subsp. n.**, S. Somaliland, ZEDLITZ, Ornith. Monatsber. **20** p. 77.

[*Heterhyphantes*] *Ploceus melanolaema* occurs in Fernando Po, REICHENOW, Ornith. Monatsber. **20** p. 46.—*Ploceus anochlorus* **sp. n.** Uelle river, Belgian Congo, REICHENOW, J. Ornith. **60** p. 321.

Foudia omissa **sp. n.** Madagascar, ROTHSCHILD, Bull. B. O. C. **31** p. 26.

Ploceus baya, migrational movements in India, PUNDE, Bombay J. Nat. Hist. Soc. **21** p. 675.—*P. manyar*, subspecies reviewed, STRESEMANN, Nov. Zool. **19** p. 318.

ICTERIDAE.

Molothrus bouariensis, *M. rufoaxillaris*, and *M. badius*, on the eggs

and foster parents, GRANT, Ibis **1912** p. 278 fig. 5.

Xanthocephalus xanthocephalus, figured in colour, ROBERTS, Bird Lore **14** p. 250.

Quiscalus aeneus, a cannibal, WEBER, Auk **29** p. 394.

STURNIDAE.

A review of the Starlings and Mynahs of Cochin China, GERMAIN, Rev. Fr. d'Orn. **2** pp. 302 337.

Sturnus vulgaris, notes on habits and coloration, STUBBS, Zoologist **1912** p. 281; FORTUNE, *ibid* p. 349; marked in Berkshire, taken in Finland, JOY, Brit. Birds **6** p. 13; a resident bird and destroyer of eggs in Germany, PUHLMANN, Ornith. Monatschr. Magdeburg **37** p. 184; migrations round Bamberg, Bavaria, RIES, München Verh. ornith. Ges. **11** p. 147; in Essex co. New Jersey U.S.A., KOHLER, Wilson Bull. **24** p. 44.

Gracupica tertia from Bali figured, HARTERT, Nov. Zool. **19** p. 374 pl. ii.

Æthiopsar cristatellus formosanus **subsp. n.** Formosa, HARTERT, Bull. B. O. C. **31** p. 14.

Leucopsar **gen. n.** for type *L. rothschildi* **sp. n.** Bali, STRESEMANN, Bull. B. O. C. **31** p. 4; figured, HARTERT, Nov. Zool. **19** p. 374 pl. ii.

EULABETIDAE.

[*Eulabes*] *Gracula*, a review of the species and subspecies, STRESEMANN, Nov. Zool. **19** p. 312.—*G. javanensis miotera* p. 16, *G. j. ophellochlora* p. 17, Barussan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7.

Aplonis fuscus hullianus **subsp. n.** Lord Howe Isl., MATHEWS, Nov. Zool. **18** p. 451.

[*Lamprocorax*] *Calornis metallica*, field notes, BANFIELD, Emu **12** p. 22; *Lamprocorax metallicus*, the subspecies discussed, STRESEMANN, Nov. Zool. **19** p. 311.—*Lamprocorax metallicus sapphira* **subsp. n.** N. Queensland, MATHEWS, Nov. Zool. **18** p. 437.—*L. chalybeus pachistorhinus*, *L. c. rhadinorhamphus*, **subsp. n.** Barussan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7 p. 17.

Creadion carunculatus field notes and approaching extinction, SMITH, Trans. and Proc. N. Zeal. Inst. **43** p. 165.

†*Fregilupus varius*, an unknown example in the Leghorn Museum, SALVADORI, Riv. ital. Orn. **1** p. 159, and other examples in Italian Museums, ANGELINI, *ibid* p. 202.

ORIOLIDAE.

Oriolus maculatus richmondi subsp. n. Pagi Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7 p. 16.—*Oriolus traillii*, sexual plumage distinctions, PRIMROSE, Bombay. J. Nat. Hist. Soc. **21** p. 676.

[*Mineta*] *Oriolus flavocinctus parryi* subsp. n. N. W. Australia, MATHEWS, Austral Av. Rec. **1** p. 52; *O. sagittatus subaffinis* N. Queensl., *O. s. blaauwi* N. W. Australia, *O. flavocinctus kingi* Queensl. *O. f. madaraszi* N. Queensl. subsp. n., MATHEWS, Nov. Zool. **18** p. 435.

Sphecothebes flaviventris audoni, Queensl., *S. f. ashbyi* N. Terr. subsp. n., MATHEWS, Nov. Zool. **18** p. 436.

DIORURIDAE.

[*Dicruropsis*] *Dicrurus bracteatus baileyi* subsp. n. N. Territory Australia, MATHEWS, Nov. Zool. **18** p. 437.

[*Buchanga*] *Dicrurus assimilis atactus*, critical notes on this West African form, BANNERMAN, Ibis **1912** p. 230.—*D. leucogenis diporus*, *D. cineraceus celaenus*, subsp. n. Barussan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7 p. 15.

Dissemurus paradiseus olizurus p. 15, *D. p. adelphus* p. 15, *D. p. pachistus* p. 16, *D. p. elassopterus* p. 16, subsp. n. Barussan Is., Sumatra, OBERHOLSER, Smiths. Inst. Misc. Collect. **60** No. 7.

PARADISEIDAE.

[*Craspedophora*] *Ptilorhis intercedens* and *P. alberti*, eggs described and figured, OGILVIE-GRANT, Ibis **1912** p. 117 pl. iii figs. 4 5 7 8.

Falcinellus astrapioides, unique specimen figured, HARTERT, Nov. Zool. **18** p. 604 pl. vii.—*F. striatus atratus*, additional description, ROTHSCHILD, Ibis **1912** p. 110.

Astrapia rothschildi, figured from Rawlinson Mts. N. Guinea, HARTERT,

Nov. Zool. **18** p. 604 pl. viii; eggs from German N. Guinea described, ROTHSCHILD, Ibis **1912** p. 111.

[*Astrarchia*] *Astrapia stephaniae*, egg figured and nesting habits in captivity described, OGILVIE-GRANT, Ibis **1912** p. 114 pl. iii fig. 3.

Paradisaea apoda and *P. raggiana*, nesting habits and eggs, OGILVIE-GRANT, Ibis **1912** p. 113 pl. iii figs. 1 2.—*P. granti*, its habitat is in German New Guinea, NORTH, Vict. Nat. Melbourne **27** p. 187.

[*Trichoparadisaea*] *Paradisaea gulielmi*, eggs from German New Guinea described, ROTHSCHILD, Ibis **1912** p. 111.

Diphylloides humsteini, figured with avicultural notes, BROOK, Avicult. Mag. **3** p. 181 pl.

Paradigalla brevicauda, figured with additional description from Dutch New Guinea, ROTHSCHILD, Ibis **1912** p. 109 pl. ii.

PTILONORHYNCHIDAE.

Lophorina minor, egg from British New Guinea figured, OGILVIE-GRANT, Ibis **1912** p. 116 pl. iii fig. 6.

Ptilonorhynchus violaceus dulciae subsp. n. S. Queensland, MATHEWS, Nov. Zool. **18** p. 438.—*P. minor* sp. n. Herberton range, Queensland, CAMPBELL, Bull. R. Austr. Orn. Un. No. 3 p. 1; eggs described, WHITE, *t.c.* p. 2; also Emu **12** p. 19.

Sericulus chrysocephalus rothschildi subsp. n. Queensland, MATHEWS, Nov. Zool. **18** p. 441.—*S. melinus*, a nestling figured and noticed, SETH-SMITH, P. Z. S. **1912** p. 4 fig.

Chlamydodera maculata, field notes on bower, nest and eggs and other habits, JACKSON, Emu **12** p. 65 pls. vi-xx; a lilac napeband sometimes present in the female of this and other species of the genus, WHITE, Emu **12** p. 22.—*C. nuchalis melvillensis* subsp. n. Melville Is. N. Australia, MATHEWS, Austral Av. Rec. **1** p. 52; *C. maculata clelandi* p. 439 S. Australia, *C. m. subguttata* p. 440 Mid Australia, *C. nuchalis oweni* p. 440 N. W. Australia, subsp. n., MATHEWS, Nov. Zool. **18**.

Rogersornis gen. n. for type *Ptilonorhynchus nuchalis* Jard & Selby, MATHEWS, Austr. Av. Rec. **1** p. 117.

Ailuroedus crassirostris blaauri
subsp. n. N. S. Wales, MATHEWS, Nov.
Zool. 18 p. 439.

CORVIDAE.

[*Trypanocorax*] *Corvus frugilegus*,
moult of the facial feathers, STEWART,
Brit. Birds London 5 p. 306; spring
emigration in Norfolk, GURNEY, Zoo-
logist 1912 p. 389; Bau und Entwick-
lung des Kiefer-Gaumen-Apparates
(Russ. + deutsch. Rés.) KOHLS, Moskva
Bull. soc. nat. 1911 (1912) p. 253
pls. iv-vi.

Corvus sardus of Kleinschmidt cannot
be separated from *C. corax*, BALDUCCI,
Riv. Ital. Orn. 1 p. 225.—*C. coronoides*
Vig. & Horsf., *C. ceciliae* Mathews, and
C. bennetti North, recognised as the
Australian species of the genus,
OGILVIE-GRANT, Bull. B. O. C. 29 p. 70.—
C. ceciliae marngli subsp. n. Kimberley
W. Australia, MATHEWS, Austral Av.
Rec. 1 p. 52; *C. coronoides ceciliae* p. 442
N. W. Australia, *C. c. perplexus* p. 442
S. W. Australia, *C. bennetti bonhoti*
p. 442 W. Australia, *C. b. queenslandicus*
p. 443 Queensl., *C. marianae mellori*
p. 443 S. Australia, *C. m. halmaturinus*
p. 433 Kangaroo Isl., *P. m. tasmanicus*
p. 443 Tasmania, subsp. n., MATHEWS,
Nov. Zool. 18.—*C. cornix*, spring emi-
gration in Norfolk, GURNEY, Zoologist 1912
p. 389.—*C. corone*, a diary of its domestic
habits, SELOUS, Zoologist 1912 pp. 321
393; also LEWIS *ibid.* p. 425.

Coloews monedula cirtensis subsp. n.
Constantine, Algeria, ROTHSCHILD &
HARTERT Nov. Zool. 18 p. 471.

Nucifraga caryocatactes, movements
in Westphalia in the autumn 1911,
HENNEMAN, Ornith. Jahrb. 23 p. 65;
irruption in Württemberg, BACMEISTER,
Ornith. Jahrb. 23 p. 141; in Bohemia,
LOOS, Ornith. Jahrb. 23 p. 133; near
Vienna, EDER, Ornith. Jahrb. 23 p. 149.—
N. caryocatactes caryocatactes and *N. c.*
macrorhynchus, beaks and tongues
figured, GURNEY, Zoologist 1912 p. 125;

on hybrids between these two subspecies,
HESS, Zs. Oologie Berlin 22 p. 53; in
Depart. Côte-d'Or, France, PARIS, Rev.
Fr. d'Orn. 2 p. 349 fig.—*N. c. macro-*
rhynga, invasion dates in 1911 in Hun-
gary, KÖNGL, U. O. C. Aquila 19 p. 462.—
N. c. laphorhynchus, appearance near
Padua, ARRIGONI DEGLI ODDI, Riv. ital.
Orn. 1 p. 169.

Cyanopoliis cooki, distribution in
Spain, PICCHI, Riv. ital. Orn. 1 p. 16;
its supposed occurrence in France,
ANFRIE & DELEUIL, Rev. Fr. d'Orn. 2
p. 224, also HUGUES p. 248 LEVANDER *t.c.*
p. 311.

Garrulus glandarius ichnusae, on the
validity of this subspecies, SALVADORI &
FESTA, Riv. ital. Orn. 2 p. 113.—*G.*
glandarius corsicanus subsp. n. Corsica,
LAUBMANN, Verhandl. ornith. Ges. Bayern
11 p. 164.—*G. lambessae* sp. n. Algeria,
KLEINSCHMIDT, Falco Halle 8 1912 p. 51.

Xanthoura yncas andicola subsp. n.
Merida, Venezuela, and revision of other
subspecies, HELLMAYR & SEILERN, Arch.
Naturg. 78a p. 72.

Struthidea cinerea swainsoni subsp. n.
Queensland, MATHEWS, Nov. Zool. 18
p. 445.

Glaucopis wilsoni, field notes from
N. Zealand, McLEAN, Emu 11 p. 229.

Corcorax melanoramphos subniger
Victoria, *C. m. whiteae* S. Australia,
subsp. n., MATHEWS, Nov. Zool. 18
p. 446.

Boanerges gen. n. p. 199 for type *B.*
internigrans sp. n. p. 200 pl. vi,
Szechwan, China, THAYER & BANGS, Mem.
Amer. Mus. Comp. Zool. Harvard Coll.
40.

STREPERIDAE.

Strepera graculina robinsoni p. 443
N. Queensl., *S. m. halmaturina* p. 444
Kangaroo Isl., *S. m. howei* p. 444 Victoria,
S. versicolor vicilloti p. 444 Victoria,
subsp. n., MATHEWS, Nov. Zool. 18.

XVIII. MAMMALIA

ARRANGED BY

R. LYDEKKER, F.R.S.

CONTENTS

	PAGE
I. TITLES	4
II. SUBJECT INDEX:—	
Comprehensive and General = 6003:—	
Treatises, Text-books	29
Institutions, Collections	29
Economics	29
Miscellaneous	29
Structure = 6007:—	
General and Comparative	29
Histology	29
Tegument	29
Nervous system and sense-organs	30
Myology	30
Osteology and Dentition	30
Alimentary system	32
Circulatory and respiratory system	33
Blood, Lymph, etc.	33
Placenta	33
Excretory organs. Special glands	33
Organs of reproduction	33
Physiology = 6011:—	
General and miscellaneous	34

	PAGE
Development = 6015 :—	
Ovum, oogenesis	34
Spermatozoon, spermatogenesis..	34
Embryology	34
Post-embryonal	35
Ethology = 6019 :—	
General	35
Habits	35
Variation and Aetiology = 6023 :—	
Variation	35
Evolution	35
Hybrids	35
Heredity	35
Geography = 6027 :—	
Europe = <i>d</i> and <i>da</i> to <i>dk</i>	36
Scandinavia, etc. <i>da</i>	36
Russia Europea <i>db</i>	36
German empire <i>dc</i>	36
British Islands <i>de</i>	36
France <i>df</i>	36
Spain <i>dg</i>	36
Italy <i>dh</i>	36
Switzerland <i>di</i>	36
Austria Hungary <i>dk</i>	36
Mediterranean Islands <i>dm</i>	36
Asia = <i>e</i>	36
Asiatic Russia <i>ea</i>	36
China and Tibet <i>eb</i>	36
Japan and Korea <i>ec</i>	36
Cochin China, etc. <i>ed</i>	37
British India <i>ef</i>	37
Malaya, etc. <i>eg</i>	37
Persia and Syria <i>eh</i> and <i>ei</i>	37
Africa and Madagascar = <i>f</i>	37
North America = <i>g</i>	37
Central and South America, Antilles = <i>h</i>	38
Australasia and Southern Ocean = <i>i</i>	38
III. SYSTEMATIC = 6031 :—	
Primates	38
A. Anthropeoidea	39
Hominidae	39
Simiidae	39
Cercopithecidae	39
Cebidae and Hapalidae	39
B. Lemuroidea	39

	PAGE
Chiroptera	40
Pteropodidae	40
Natalidae and Vespertilionidae	40
Noctilionidae, Emballonuridae, and Phyllostomatidae	40
Insectivora	41
Macroscelididae	41
Talpidae	41
Soricidae	41
Erinaceidae	42
Carnivora	42
A. Carnassidentia	42
Felidae	42
Viverridae and Hyænidæ	42
Canidae	42
Ursidae and Procyonidae	43
Mustelidae	43
B. Pinnipedia	43
Rodentia	43
Sciuridae	43
Castoridae, Dipodidae, and Gliridae	44
Muridae	44
Hystriidae, Geomyidae, and Heteromyidae	47
Octodontidae and Caviidae	47
Leporidae and Ochotonidae	47
Ungulata	48
A. Artiodactyla	48
Bovidae	48
Antilocapridæ and Giraffidae	49
Cervidae	50
Tragulidae and Camelidae	50
Hippopotamidae, Suidæ, and Dicotylidae	50
B. Perissodactyla	50
Equidae	50
Rhinocerotidae	51
Tapiridae, Titanotheriidae, and Lophiodontidae	52
C. Hyracoidea	52
D. Entelonychia and Toxodontia	52
E. Proboscidea	52
Cetacea and Sirenia	52
Edentata	53
Marsupialia	53
Monotremata and Multituberculata	54

I.—TITLES.

- †Abel, O. Wissenschaftliche Ergebnisse der Wiener Universitätsreise nach Griechenland. I. Fossilfunde in Pikermi. Wien Verh. ZoolBot. Ges 62 1912 2 Heft. (61-63). 1
- †Abel, O. Ueber eine im Erdwaechs von Starunia in Galizien gefundene Nashornleiche. Wien Verh. ZoolBot. Ges. 62 1912 3. u. 4 Heft. (79-82). 2
- †Abel, O. Cetaceenstudien. III. Mitteilung. Rekonstruktion des Schädels von *Prosqualodon australe* Lyd. aus dem Miozän Patagoniens. Wien SitzBer. Akad. Wiss. 121 Abt. I. 1912 (57-74) 3 Taf. 3
- †Abel, O. Verfehlte Anpassungen bei fossilen Wirbeltieren. Zool. Jahrb. Jena 1912 Suppl. 15 Bd 1 (597-609). 4
- Ackerknecht, Eberh. Ein eigenartiges Organ im Mundhöhlenboden der Säugetiere. Anat. Anz. Jena 41 1912 (434-449). 5
- Ackert, James E. On a tactile organ in the cheek of the Mole, *Scalops aquaticus*. Anat. Anz. Jena 41 1912 (341-347). 6
- Addario, G. Sulla presenza dei corpusecoli di Prowazek ed Halberstädter nella congiuntiva normale dell'Uomo e della Seimmia. Ann. oftalm. Pavia 39 fasc. 3-4 1910 (221-230). 7
- Addison, William H. F. The development of the Purkinje cells and of the cortical layers in the cerebellum of the Albino Rat. J. Comp. Neur. Philadelphia 21 1911 (459-487) pls. 8
- Adloff, P. Noch einmal die Bolk'sche Hypothese und die Differenzierung des Primatengebisses. Zs. Morph. Stuttgart 15 1912 (381-400) 3 Taf. 9
- Ahrens. Zur Frage der prä-laktischen Zahnanlage. Anat. Anz. Jena 42 1912 (506-514). 10
- Ahrens. Ueber prä-lakteale Zahnanlagen. München SitzBer. Ges. Morph. 27 1912 (46-58). 11
- Aimé, Paul. Note sur les museles cardiaques du Chien. Paris C. R. soc. biol. 73 1912 (158-160). 12
- Allen, G. M. Some Chinese Vertebrates—Mammalia. Cambridge Mass. Mem. Mus. Comp. Zool. Harvard Coll. 40 1912 (201-247). 13
- Allen, G. M. Zaglossus. Cambridge Mass. Mem. Mus. Comp. Zool. Harvard Coll. 40 1912 (253-307) 2 pls. 14
- Allen, G. M. New African Rodents. Cambridge Mass. Bull. Mus. Comp. Zool. Harvard Coll. 54 1912 (439-447). 15
- Allen, G. M. New Mammals from Yunan and Tonkin. Washington D.C. Proc. Biol. Soc. 25 1912 (177-180). 16
- Allen, J. A. The probable recent extinction of the Musk-ox in Alaska. Science New York ser. 2 36 1912 (720-722). 17
- Allen, J. A. Historical and nomenclatorial notes on North American Sheep. New York N.Y. Bull. Amer. Mus. Nat. Hist. 31 1912 (1-29). 18
- Allen, J. A. Mammals from Western Colombia. New York N.Y. Bull. Amer. Mus. Nat. Hist. 31 1912 (71-95). 19
- Allen, J. A. A new Pika from Colorado. New York N.Y. Bull. Amer. Mus. Nat. Hist. 31 1912 (103-104). 20
- Ancel, P. *vide* Bouin, P.
- Andersen, Knud. Catalogue of the Chiroptera in the collection of the British Museum. 2nd ed. 1. Megachiroptera. London 1912 (ci + 854). 21
- Andersen, K. A new *Nyctimene* from New Guinea. Ann. Mag. Nat. Hist. London ser. 8 9 1912 (95-96). 22

- Andersen, K. Brief diagnosis of eight new *Petalia*, with a list of known forms of the genus. *Anu. Mag. Nat. Hist. London ser. 8* 10 1912 (546-550). 23
- Andersen, K. A new *Cynopterus* from Borneo. *Ann. Mag. Nat. Hist. London ser. 8* 10 1912 (641). 24
- Anderson, Richard John. The mandible in Mammalia. (Abstr.) *Proc. vii Internat. Zool. Cong. Cambridge Mass.* 1912 (250-253.) 25
- Anderson, R. J. Notes on the temporal bone in Mammalia (chiefly in Primates). *Verh. internat. viii ZoolKongr. Jena* 8 (907-914) 1912. 26
- †Andreuxi, A. Avanzi di *Elephas meridionalis*, rinvenuti a Sangimignano (Siena) ed a Lari (Pisa). *Riv. ital. Pal.* 18 pts. 2 and 3 1912 (88-90). 27
- †Andrews, C. W. Molar tooth of an Elephant from the Nile at Khartum. *Geol. Mag. London decade 5* 9 1912 (110-113). 28
- Andrews, Roy C. *Berardius bairdii* in Japan. *Science New York ser. 2* 36 1912 (902-903). 29
- Angelotti, G. Contributo allo studio dei solchi cerebrali nei Viverridi. *Archiv. ital. Anat. Embriol. Firenze* 10 1912 (461-481). 30
- Anile, Antonino. Topografia delle glandule di Brunner nella Scimmia. *Napoli Atti R. Acc. med. chirurg.* 1906 (1-6) tav. 31
- [ANON.] Fifth Annual Report of the American Bison Society. *New York N.Y.* 1912 (1-31). 32
- Anthony, R. Contribution à l'étude morphologique générale des caractères d'adaptation à la vie arboricole chez les Vertébrés. *Ann. Sci. nat. zool. Paris sér. 2* 15 1912 (101-342). 33
- Anthony, R. Modifications craniennes consécutives à la synostose prématurée d'une portion de la suture coronale gauche chez un Mandrill. *Paris Bull. Soc. Anthropol.* 1911 (191-197). 34
- Anthony, R. et Santa-Maria, A. S. de. Essai d'un nouveau plan descriptif du cerveau de l'Homme et des Singes basé sur l'évolution morphologique du pallium dans la série des Mammifères. *Rev. sci. Paris* 50 1912 (238-241). 35
- Antonius, Otto. Was ist der „Tarpán“. *Naturwiss. Wochensch. Berlin* 27 1912 (513-517). 36
- †Antonius, O. Die Rassengliederung der quartären Wildpferde Europas. *Wien Verh. ZoolBot. Ges.* 62 1912 2 Heft. (64-78). 37
- Argaud, R. Sur la structure de la bandelette ensiforme. *Paris C. R. soc. biol.* 72 1912 (152-154). 38
- Argaud, R. Sur la vascularisation des valvules auriculo-ventriculaires chez le Cheval. *Paris C. R. soc. biol.* 73 1912 (812-814). 39
- Argaud, R. et Weber, A. Les fibres d'Herxheimer dans la muqueuse linguale du Dauphin (*Delphinus delphis*). *Paris C. R. soc. biol.* 72 1912 (918-920). 40
- Argaud, R. et Weber. Des rapports de l'épithélium avec le chorion dans la muqueuse linguale du Dauphin. *Paris C. R. soc. biol.* 72 1912 (964-965). 41
- Ärnäck-Christie-Linde, Augusta. On the development of the teeth of the *Soricidae*; an ontogenetical inquiry. *Ann. Mag. Nat. Hist. London ser. 8* 9 1912 (609-625) pls. xviii & xix. 42
- Ärnäck-Christie-Linde, A. Der Bau der Soriciden und ihre Beziehungen zu anderen Säugetieren. Pt. 2. *Morph. Jahrb. Leipzig* 44 1912 (261-296). 43
- Arnold, George. The rôle of the chondriosomes in the cells of the Guinea-pig's pancreas. *Arch. Zellforschg Leipzig* 8 1912 (152-271) Taf. 44
- Athias, M. L'appareil mitochondrial de cellules interstitielles de l'ovaire du Murin. *Paris C. R. soc. biol.* 72 1912 (448-449). 45
- Auerbach, A. Kameruner Säugetiere. *Karlsruhe Verh. Naturwis. Ver.* 25 1912 (1-28) 5 Taf. 46
- Auerbach, M. Bemerkungen über einige Säugetiere aus der Sammlung des Grosh. Naturalien-Kabinetts zu Karlsruhe. *Zool. Anz. Leipzig* 39 1912 (306-312). 47
- [Avtokratov, D. M.] Автократовъ, Д. М. Къ вопросу о полидактилии и редукациі пальцевъ у домашнихъ

- ЖИВОТНЫХЪ. [Ein Beitrag zur Frage nach der Polydactylie und der Reduction der Zehen bei den Haussäugetieren.] Mess. med. vet. soc. St. Peterburg 23 1911 (274-282). 48
- Bailey, F. M. Note on Takin (*Budorcas taxicolor*). Bombay J. Nat. Hist. Soc. 21 1912 (1069-1071) 2 pls. 49
- Bailey, Vernon. A new subspecies of Mountain Sheep from western Texas and south-eastern New Mexico. Washington D.C. Proc. Biol. Soc. 25 1911 (109-110). 50
- Baker, A. B. Further notes on the breeding of the American Black Bear in captivity. Washington D.C. Smithsonian Misc. Collect. 59 No. 10 1912 (1-4). 51
- Baker, A. B. Notes on Animals now, or recently, living in the National Zoological Park. Washington D.C. Smithsonian Misc. Collect. 59 No. 9 1912 (1-3). 52
- Baldwin, W. M. Muscle-fibres and muscle-cells of the adult White Mouse heart. Anat. Anz. Jena 42 1912 (177-181). 53
- Balen-Blanken, G. C. van. Bijdrage tot de kennis der anatomie van pancreas en lymphvaatstelsel der Primaten. [Beitrag zur Kenntnis der Anatomie von Pancreas und Lymphgefässsystem der Primaten.] Amsterdam 1912 (1-58). 54
- Balli, Ruggero *vide* Sperino, Giuseppe.
- Ballowitz, E. Die Spermien des afrikanischen Erdferkels (*Orycteropus afer* Pall.). Anat. Anz. Jena 42 1912 (182-186). 55
- †Bassini, F. e Misuri, A. Sopra un Delfinorineo del Calcareo Mioceenico di Lecce (*Ziphiodelphis abeli* Dal Piaz). Roma Atti Mem. Lineei ser. 5 9 1912 (25-38) tav. 56
- †Bate, Miss Dorothea M. A. On a new species of Mouse and other Rodent remains from Crete. Geol. Mag. London decade 5 9 1912 (4-6). 57
- Baum, Hermann. Das Lymphgefässsystem des Rindes. Berlin 1912 (xii+170) 32 Taf. 58
- Beaux, Oscar de. Lebende liberianische Zwergflussperde in Carl Hagenbeeks Tierpark in Stellingen. Zool. Anz. Leipzig 40 1912 (227-233). 59
- Beneden, E. van. Recherche sur l'embryologie des Mammifères. II. Arch. Biol. Paris 27 1912 (191-401) pls. viiia-xxi. 60
- [Birula, A.] Бируля, А. Материалы по систематикѣ и географическому распространению млекопитающихъ. III. *Carnivora*, собранныя Н. А. Заруднымъ въ Персию въ 1896, 1898, 1900, 1901 и 1903, 1904 гг. [Contributions à la classification et à la distribution géographique des Mammifères. III. *Carnivora*, recueillis dans la Perse par N. A. Zaroudny en 1896, 1898, 1900-1901 et 1903-1904.] St. Peterburg Ann. mus. zool. 17 1912 (219-280) pls. viii-x. 61
- Bizot. Le rapport brachio-anti-brachial chez les Chéiroptères. Paris C. R. Acad. sci. 154 1912 (131-133). 62
- Blackman, M. W. The anal glands of *Mephitis mephitis*. Anat. Rec. Philadelphia 5 1911 (491-515). 63
- Bluntschli, Hans. Beziehungen zwischen Form und Funktion der Primatenwirbelsäule. Morph. Jahrb. Leipzig 44 1912 (489-517) Taf. 64
- Bluntschli, H. Zur Phylogenie des Gebisses der Primaten (mit Ausblicken auf jenes der Säugetiere überhaupt. Zürich Vierteljahrsh. Natf. Ges. 56 1912 (351-392). 65
- Boas, J. E. V. Ohrknorpel und äusseres Ohr der Säugetiere, eine Vergleichend-Anatomische Untersuchung. Kopenhagen 1912 25 Taf. 66
- Bolk, L. Über die Obliteration der Nähte am Affenschädel, zugleich ein Beitrag zur Kenntnis der Nähtanomalien. (9. Beitr. zur Affen-anatomic.) Zs. Morph. Stuttgart 15 1912 (1-206). 67
- Bonhote, J. L. On a further collection of Mammals from Egypt and Sinai. London Proc. Zool. Soc. 1912 (224-231). 68
- Borella, Alete e Finzi, Guido. Su tre casi di polidattilia [in *Equus caballus* e *Sus scrofa dom*]. Clinica veter. Milano 31 1908 (673-677). 69
- Bossalino, D. Sul decorso delle fibre nervose nei nervi ottici e nel chiasma (Mammiferi e Uomo). Ann. oftalm. Pavia 38 1909 (835-860) tav. 70

- Botezat, E.** Die Apparate des Gefühlssinnes der nackten und behaarten Säugetierhaut, mit Berücksichtigung des Menschen. *Anat. Anz. Jena* 42 1912 (193-250 273-318) Tab. 71
- Bouin, P. et Ancel, P.** Sur l'évolution de la glande mammaire pendant la gestation. Déterminisme de la phase glandulaire gravidique. *Paris C. R. Soc. biol.* 72 1912 (129-131). 72
- Brauer, A.** Zwei neue Baumschlieferarten aus Westafrika. *Berlin Sitzber. Ges. natf. Freunde* 1912 (411-412). 73
- [**Brauner, A.**] Браунеръ, А. О хорькахъ Бессарабин. [Die Iltisse Bessarabiens.] *Kišinev Trd. Obšč. jest.* 2 (90-92). 74
- [**Brauner, A.**] Браунеръ, А. Летучія мыши Крыма. [Die Fledermäuse der Krim.] *Bull. Soc. nat. Crimée Simferopol* 1912 (84-93). 75
- Bresslau, Ernst.** Die Entwicklung des Mammarapparates der Monotremen, Marsupialier und einiger Placentalier. Ein Beitrag zur Phylogenie der Säugetiere. 2. Der Mammarapparat des erwachsenen *Echidna*-Weibchens. 3. Entwicklung des Mammarapparates der Marsupialier, Insectivoren, Nagetiere, Carnivoren und Wiederkäuer. (R. Semon, *Zool. Forschungsreisen in Australien*, Bd 4, Lfg 5.) *Jena Denkschr. med. Ges.* 7 1912 (631-874) 11 Taf. 76
- Bresslau, E.** Die ventralen Tasthaare der Eichhörchen, ihre Funktion und ihre Verbreitung. *Zool. Jahrb. Jena* 1912 Suppl. 15 Bd 3 (479-492). 77
- Bresslau, E.** Ueber Hyperthelie. *Münchener med. Wochenschr.* 59 1912 (2793-2795). 78
- Bresslau, E.** Über bisher unbekannte Spürhaare an der Bauchseite der Eichhörchen. *Mitt. philomath. Ges. Strassburg* Bd 4 H. 4 1912 (543-547). 79
- Breuil, l'Abbé, H. vide** Rio, H. Alcade del, Breuil, l'Abbé Henri, et Sierra, Père Lorenzo.
- Brinkmann, August.** Die Hautdrüsen der Säugetiere (Bau und Secretionsverhältnisse). *Anat. Hefte Wiesbaden* Abt. 2 20 1912 (1173-1231). 80
- Brockman, R. E. Drake.** Two new Mongooses from Somaliland. *Ann. Mag. Nat. Hist. London ser. 8* 10 1912 (612 613). 81
- Broek, A. J. P. van den.** Over geslachtsverschillen in het bekken bij Primaten. [Ueber Geschlechtsunterschiede im Primatenbecken.] *Festbundel H. Treub Leiden* 1912 (483-495). 82
- Broek, A. J. P. van den.** Over het verband tusschen symphyse en acetabulum bij zoogdieren en de beteekenis van het os acetabuli. [On the relation between the symphysis and the acetabulum in the Mammalian pelvis and the signification of the cotyloid bone.] *Amsterdam Versl. Wis. Nat. Afd. K. Akad. Wet.* 20 1912 (886-891); *Proc. Sci. K. Akad. Wet.* 14 1912 (781-786). 83
- †**Broom, R.** On the structure of the internal ear and the relations of the basiscranial nerves in *Dicynodon*, and on the homology of the Mammalian auditory ossicles. *London Proc. Zool. Soc.* 1912 (419-425) pl. lvi. 84
- Broum, R.** The morphology of the coracoid. *Anat. Anz. Jena* 41 1912 (625-631). 85
- †**Brown, Barnum.** *Brachyostracon*, a new genus of Glyptodonts from Mexico. *New York N.Y. Bull. Amer. Mus. Nat. Hist.* 31 1912 (167-177). 86
- Camerano, Lorenzo.** Ricerche intorno allo Stambecco delle Alpi. Parte II. *Torino Mem. Acc. sc. ser. 2* 57 1907 (1-70) 2 tav. 87
- Camerano, L.** Osservazioni intorno alle ossa wormiane della fontanella fronto-naso-maxillo-lacrimale e intorno all'osso lacrimale del Camoscio. *Torino Atti Acc. sc. ser. 4* 14 1912 (897-903) tav. 88
- Camerano, L.** Osservazione intorno all' *Capra ibex graicus* Matschie. *Torino Bull. Mus. Zool. e Anat.* 27 No. 656 1912 (1-4). 89
- †**Campana, D. I.** I Tapiri del terziario italiano. *Pal. Ital.* 16 1910 (147-204) taf. xix-xxi. 90
- †**Capellini, Giovanni.** Tapiri fossili Bolognesi. *Bologna Mem. Ac. sc. ser. 6* 8 1911 (107-111). 91

- †**Capellini**, G. Zifioidi fossili nel Museo Geologico di Bologna. Bologna Mem. Acc. sc. ser. 6 8 1911 (113-115). 92
- Cardoso**, Anibal. Antiguedad del Caballo en La Plata. [Antiquity of the Horse in La Plata.] Buenos Aires Ann. Mus. Nac. Hist. Nat. 22 1912 (371-439 459-462). 93
- Carson**, Robert D. Retarded development in a Red Kangaroo. London Proc. Zool. Soc. 1912 (234-235). 94
- [**Čausov**, L. I.] Чаусовъ, Л. И. Тарбаганья чума и отношение ея къ чумъ людей. [Die Tarbagan-Pest und ihre Beziehungen zu der Pest der Menschen.] Mess. med. vet. Soc. St. Peterburg 23 1911 (703-766). 95
- Cavazza**, Filippo. Del *Mus meridionalis*, O. G. Costa e del suo valore sistematico. Napoli Ann. Mus. zool. ser. 2 3 No. 21 1911 (1-7). 96
- Cavazza**, F. Ricerche intorno alle specie italiane del genere *Crocidura*. Torino Boll. Musci zool. anat. ser. 2 1912 No. 653 (1-16). 97
- Cavazza**, F. Ancora delle specie italiane del genere *Crocidura*. Torino Boll. Musci zool. anat. ser. 2 1912 No. 659 (1-10). 98
- †**Chapman**, Fredk. On the occurrence of *Scaldicetus* in Victoria. Melbourne Rec. Geol. Surv. Victoria 3 1912 (236-238) pl. xl. 99
- Charpy**, A. et Mouchet, A. Articulations péronéo-tibiales, significations anatomique et phys. de la membrane interosseuse de la jambe. Bibliogr. anat. Nancy 22 1912 (16-29). 100
- †[**Chomenko**, I.] Хоменко, И. *Camelus bessarabiensis* и другія ископаемыя формы Бессарабіи. [*Camelus bessarabiensis* und andere fossile Formen Süd-Bessarabiens.] Kišinev Trd. obšč. jest. 3 1912 (92-128) Taf. 101
- †[**Chomenko**, I.] Хоменко, И. *Mastodon arvernensis* Croiz. et Job. nova var. *progressor* изъ верхыя плиоценовыхъ песковъ Ю. Бессарабіи. [Le *Mastodon arvernensis* Croiz. et Job. nova var. *progressor* des sables du Pliocène supérieur dans le Sud de la Bessarabie.] Ann. géol. minér. Novo-Alexandria 14 1912 (159-166) pl. 102
- [**Chomenko**, I.] Хоменко, И. Меотическая фауна с. Таракліи Бендерскаго уѣзда. II. *Castor fiber* Lin. [La faune méotique du village Taraklia du district de Bendery. II. *Castor fiber* Lin.] Kišinev Trd. obšč. jest. 2 1909-1910 u. 1910-1911 (1912) (135-148) Taf. iii iv. 103
- Clark**, G. A. *vide* Jordan, D. S.
- †**Cook**, Harold James. Notice of a new genus of Rhinoceros from the Lower Miocene. Science New York ser. 2 35 1912 (219-220). 104
- Copeland**, Manton. Notes on the Mammals of Mt. Greylock, Massachusetts. Washington D.C. Proc. Biol. Soc. 25 1912 (157-162). 105
- Cory**, Charles B. The Mammals of Illinois and Wisconsin. Field Mus. Nat. Hist. Chicago Zool. Pub. 11 1912 (1-505). 106
- Creutzfeldt**, Hans Gerhard. Über das Fehlen der Epiphysis cerebri bei einigen Säugern. Anat. Anz. Jena 42 1912 (517-521). 107
- Cuénot**, L. L. Hérité chez les Souris. Brünn Verh. Naturf. Ver. 49 1911 (214-222). 108
- Cunninghame**, R. J. The Water-Elephant. London Journ. E. Africa and Uganda Nat. Hist. Soc. 2 1912 (97-99). 109
- Cutore**, Gaetano. Alcune notizie sul corpo pineale del *Macacus sinicus* L. e del *Cercopithecus griseus viridis* L. Folia Neurobiologica Haarlem 6 1912 (267-276). 110
- †**Dawson**, Charles and Woodward, Arthur Smith. On the discovery of a Palaeolithic Human skull and mandible in a flint-bearing gravel overlying the Wealden (Hastings Beds) at Piltdown, Fletching (Sussex). London Abstr. Proc. Geol. Soc. No. 932 1912 (20-27). 111
- †**Dehaut**, E. G. Matériaux pour servir à l'histoire zoologique et paléontologique des Iles de Corse et de Sardaigne. 3 Animaux fossiles du Cap Figari. Paris 1911. 112
- Deinse**, A. b. van. The sutura parietalis of the Mammals. Anat. Anz. Jena 41 1912 (347-351). 113
- †**Deninger**, K. Über einen Unterkiefer von *Rhinoceros minutus* aus der Molasse bei Stockach. Heidelberg Mitt. geol. Landesanst. 6 1912 (515-519) 2 Taf. 114

- †Depéret, Charles. Sur un nouveau genre d'Ongulés Éocènes, le *Lophiaspis*, de la famille des Lophiodontidés. Proc. vii Internat. Zool. Cong. Cambridge Mass. 1912 (769-770). 115
- [Děvickij, Vl.] Дѣвенцкіи, Вл. Къ гистологін надпочечныхъ железъ. [Zur Histologie der Nebenniere.] Charikov Med. žurn. 13 1912 (33-44). 116
- Dexler, H. Das Rückenmark von *Halicore dugong* Erxl. Verh. internat. ZoolKongr. Jena 8 (527-534) 1912. 117
- Dexler, H. Das Hirn von *Halicore dugong* Erxl. Morph. Jahrb. Leipzig 45 1912 (97-190) 2 Taf. 118
- Dollman, Guy. A new Snub-nosed Monkey. London Proc. Zool. Soc. 1912 (503-504). 119
- Dollman, G. A new Gerbil from British East Africa. Ann. Mag. Nat. Hist. London ser. 8 9 1912 (219-220). 120
- Dollman, G. Seven new African Dormice. Ann. Mag. Nat. Hist. London ser. 8 9 1912 (312-320). 121
- Dollman, G. A new Elephant-Shrew from the Island of Zanzibar. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (130-131). 122
- Donaldson, Henry and Hatai, Shin-kishi. A comparison of the Norway Rat with the Albino Rat in respect to body-length, brain-weight, spinal-cord weight and the percentage of water in both the brain and the spinal cord. J. Comp. Neur. Philadelphia 21 1911 (417-458). 123
- Droogleever Fortuyn, Ae. B. Die Ontogenie der Kerne des Zwischenhirns beim Kaninchen. Arch. Anat. Physiol. Leipzig Anat. Abt. 1912 (303-352). See also Fortuyn, Ae. B. Droogleever. 124
- †Dubois, Eug. Over de Plaats von *Pithecanthropus* in het zoologisch systeem. [On the place of *Pithecanthropus* in the zoological system.] Haarlem Arch. Mus. Teyler ser. 3 1 1912 (142-149). 125
- Dujardin-Beaumetz, Ed. et Mosny, E. Evolution de la peste chez la Marmotte pendant l'hibernation. Paris C. R. Acad. sci. 155 1912 (329-332). 126
- Elliot, D. G. New species of Monkeys of the genera *Seniocebus*, *Alouatta*, and *Aotus*. New York N.Y. Bull. Amer. Mus. Nat. Hist. 31 1912 (31-33). 127
- Elze, C. Über den sogenannten Nervus laryngeus inferior des Lamas (*Auchenia lama*). Anat. Anz. Jena 42 1912 (410-414). 128
- Erbach-Fürstenau, Raimund Graf zu. Beobachtungen über das Tierleben in Ost- und Zentralafrika. Berlin Sitzber. Ges. natf. Freunde 1912 (271-299). 129
- Faber, Arno. Die anatomischen und physikalischen Verhältnisse des Ductus Botalli. Arch. Anat. Physiol. Leipzig Anat. Abt. 1912 (157-170). 130
- Falcoz, L. Contribution à la faune des terriers de Mammifères. Paris C. R. Acad. sci. 154 1912 (1380-1383). 131
- Favaro, Giuseppe. Intorno alla presenza di cellule muscolari lisce nella pleura polmonare di qualche Mammifero. Padova Atti Mem. Acc. ser. 2 24 1908 (103-105). 132
- Favaro, G. Sviluppo delle valvole atrioventricolare nei Mammiferi e negli Uccelli. Monit. zool. ital. Firenze 23 1912 (222-226). 133
- †Felix, Johannes. Das Mammuth von Borna. Leipzig Veröff. Mus. Völkerk. H. 4 1912 (iv + 54) 9 Taf. 134
- Fernando, H. T. Whales washed ashore on the coast of Ceylon from 1889 to 1910. Spolia Zeylanica Columbo 8 1912 (52-54). 135
- Ferry, Georges vide Givkovitch, Yarko.
- Festa, Enrico. Descrizione di una nuova specie del genere *Crocidura* di Sardegna. Torino Boll. Mus. zool. ed Anat. 27 No. 648 1912 (1-2). 136
- [Filatov, D.] Филатовъ, Д. О Кавказскомъ зубрѣ. [Sur le Bison du Caucase.] St. Peterburg, Mém. Ac. Sc. 30 No. 8 1912 (1-38) 4 pl. 137
- Finzi, Guido vide Borella, Atele.
- Flynn, T. Thomson. Notes on Marsupialian anatomy. I. On the condition of the median vaginal septum in the *Trichosuridae*. Proc. R. Soc. Tasmania 1911 (120-123) pl. xxi. 138
- Flynn, T. T. Notes on Marsupialian anatomy. II. On the female genital organs of a virgin *Sarcophilus satanicus*. Proc. R. Soc. Tasmania 1911 (144-156) pls. xxiii-xxvii. 139

- Foà, Pio.** Sullo cellule interstiziali del testicolo. Torino Mem. Acc. sc. ser. 2 62 1912 (463-478) tav. 140
- Fortuyn, Ae. B.** Droogleever. Über den systematischen Wert der japanischen Tanzmaus (*Mus wagneri* var. *rotans* nov. var.). Zool. Anz. Leipzig 39 1912 (177-190). See also Droogleever Fortuyn, Ae. B. 141
- Franz, Victor.** Studien zur vergleichenden Anatomie der Augen der Säugetiere. Arch. vergl. Ophthalm. Leipzig 2 1911 (180-217 269-322). 142
- Frassetto, Fabio.** Sullo sviluppo delle ossa del cranio nell' Uomo ed in altri Primati. Bologna 1912 (1-120) tav. 143
- Freund, Ludwig.** Walstudien. Wien SitzBer. Ak. Wiss. Mat. Nat. Kl. 121 1912 (1103-1182) 2 Taf. 143a
- Freund, L.** Über die Testikondie und das Ligamentum latum der männlichen Säuger. Verh. viii internat. ZoolKongr. Jena (541-548) 1912. 144
- Freund, L.** Der eigenartige Bau der Sirenenniere. Verh. viii internat. ZoolKongr. Jena (548-557) 1912. 145
- Freund, L.** Zur Morphologie des harten Gaumens der Säugetiere. Verh. viii internat. ZoolKongr. Jena (557-568) 1912. 146
- Frets, G. P.** Over het Jacobson's orgaan der Primaten. [On Jacobson's organ in Primates.] Amsterdam Versl. Wis. Nat. Afd. K. Akad. Wet. 21 1912 (184-188); Proc. Sci. K. Akad. Wet. 15 (134-138). 147
- Frets, G. P.** Over den uitwendigen neus van de Primaten. [Nose of Primates.] Amsterdam Versl. Wis. Nat. Afd. K. Akad. Wet. 21 1912 (179-184); Proc. Sci. K. Akad. Wet 15 (129-134). 148
- Frets, G. P.** Beiträge zur vergleichenden Anatomie und Ontogenie der Nase der Primaten. I: Beobachtungen und Bemerkungen zur Entwicklung der Nase bei einigen catarrhinen Affen, Säugern und dem Menschen. Morph. Jahrb. Leipzig 44 1912 (409-463). 149
- †**Friedenthal, A.** Ein subfossiler Edelhirsch-Fund. N. balt. Waidm.-blt. Riga 8 1912 (230). 150
- Friedenthal, Hans.** Zur Technik der Untersuchung des Haarkleides und der Haare der Säugetiere. Zs. Morph. Stuttgart 14 1912 (441-452). 151
- Fritze, Adolf.** *Gorilla gorilla schwarzi* Matschie. [Museumsexemplar.] Hannover Jahrb. Prov. Mus. 1911-12 (113) Taf. 152
- Fuchs, Hugo.** Beiträge zur Entwicklungsgeschichte und vergleichenden Anatomie des Brustschulterapparates der Wirbeltiere. Mitt. 1: Über die Entwicklung der Clavicula bei *Talpa europaea* und *Erinaceus europaeus* (nebst einigen vergleichend-anatomischen Bemerkungen). Zs. Morph. Stuttgart Sonderheft 2 1912 (141-226) 4 Taf. 153
- Fuchs, H.** Bemerkungen über das Gebiss des *Erinaceus europaeus*, gegründet auf das Fehlen eines unteren Incisivus. Zs. Morph. Stuttgart 14 1912 (507-526). 154
- Funkquist, Herman.** Zur Morphogenie und Histogenese des Penealorgans bei den Vögeln und Säugetieren. Anat. Anz. Jena 42 1912 (111-123). 155
- Fuss, A.** Über die Geschlechtszellen des Menschen und der Säugetiere. Arch. mikr. Anat. Bonn 81 Abt. 2 1912 (1-23) 2 Taf. 156
- Gadow, Hans.** The one-sided reduction of the ovaries and oviducts in the Amniota, with remarks on Mammalian evolution. London Proc. Zool. Soc. 1912 (808-821). 157
- Gaillard, Claude.** Les tâtonnements des Égyptiens de l'Ancien Empire à la recherche des Animaux à domestiquer. Rev. Ethnogr. et Sociol. Paris 1912 Nos. 11 12 (20 pp.) pl. 158
- Gallardo, Angel.** El Delfin *Lagenorhynchus fitzroyi* (Waterhouse) Flower, capturado en Mar del Plata (26 de Diciembre de 1912). [The Dolphin, *Lagenorhynchus fitzroyi*, captured at Mar del Plata, December 26, 1912.] Buenos Aires An. Mus. Nac. Hist. Nat. 23 1912 (391-397). 159
- Gaupp, E.** Die Verwandtschaftsbeziehungen der Säuger, vom Standpunkte der Schädelmorphologie aus erörtert. Verh. viii intern. ZoolKongr. Jena 1910 (215-240) 1912. 160
- Gay, R. A.** Ricerche sulle differenze osteologiche di alcuni *Mus*. Alessandria 1906 (1-16). 161

- Gemelli, Agostino.** Sulle connessioni degli elementi del sistema nervoso centrale. Riv. fis. mat. sc. nat. Pavia **15** 1907 (409-417). **162**
- Gemelli, A.** Contributo alla conoscenza della distribuzione dei nervi e delle terminazioni nervose nella membrana del timpano [dei Mammiferi]. Riv. fis. mat. sc. nat. Pavia **18** 1908 (382-387). **163**
- Giannelli, Lingi.** Contributo allo studio dello sviluppo del pancreas nei Mammiferi. Ferrara Atti Acc. med. nat. **81** fasc. 1-2 1907 (83-138). **164**
- Giannelli, L.** Ricerche istologiche sull' ovidutto dei Mammiferi. Ferrara Atti Acc. med. nat. **80** fasc. 3-4 1906 (109-112). **165**
- Giannelli, L.** Contributo alla migliore conoscenza dello sviluppo delle ghiandole genitali nei Mammiferi (*Lepus cuniculus*). II. Nota. Sviluppo del testicolo. Ferrara Atti Acc. med. nat. **80** fasc. 2 1906 (31-52). **166**
- Giannelli, L.** Sopra il particolare aspetto delle cellule epiteliali dei plessi coroidei in embrioni di Mammiferi. Ferrara Atti Acc. med. nat. **85** 1910-1911 (12-16). **167**
- Giannelli, L.** Nuovo contributo allo studio dello sviluppo del pancreas nei Mammiferi. Ferrara Atti Acc. med. nat. **85** 1910-1911 (9-11). **168**
- †**Gidley, J. W.** Perissodactyla. [Symposium on ten years' progress in vertebrate palæontology.] Bull. Geol. Soc. Amer. Washington D.C. **23** 1912 (179-181). **169**
- Gidley, J. W.** The Lagomorphs an independent order. Science New York N.Y. ser. 2 **36** 1912 (285-286). **170**
- Givkovitch, Jarko et Ferry, Georges.** Sur les rapports de l'ovulation et de la menstruation. Paris C. R. soc. biol. **72** 1912 (624-626). **171**
- †**Glauert, Ludwig.** The Mammoth Cave (continued). Perth (W. Australia) Rec. W. Australian Mus. **1** 1912 (39-46). **172**
- †**Glauert, L.** Fossil Marsupial remains from Balladonia in the Eucla division. Perth Rec. W. Australian Mus. **1** 1912 (47-65). **173**
- Goeldi, Emil A.** Ueber ein interessantes, neues Hirsch-Geweih. Bern Mitt. natfor. Ges. **1912** (14-20). **174**
- Goldman, E. A.** A new Weasel from Costa Rica. Washington D.C. Proc. Biol. Soc. **25** 1912 (9-10). **175**
- Goldman, E. A.** The generic names *Cercomys* and *Proechimys*. Washington D.C. Proc. Biol. Soc. **25** 1912 (94). **176**
- Goldman, E. A.** The type locality of *Proechimys steerei* Goldman. Washington, D.C. Proc. Biol. Soc. **25** 1912 (186). **177**
- Goldman, E. A.** A new Peccary from Costa Rica. Washington D.C. Proc. Biol. Soc. **25** 1912 (189-189). **178**
- Goldman, E. A.** Descriptions of twelve new species and subspecies of Mammals from Panama. Washington D.C. Smithson. Misc. Collect. **56** No. 36 1912 (1-11). **179**
- Goldman, E. A.** New Mammals from Eastern Panama. Washington D.C. Smithson. Misc. Collect. **60** No. 2 1912 (1-18). **180**
- Goldschmidt-Rothschild, R. von.** Mrs. Gray's Wasserbock. Frankfurt a. M. Ber. Senckenb. Ges. **43** 1912 (1-3) Taf. **181**
- Gorjanovic-Kramberger.** Der Unterkiefer der Hylobaten im Vergleich zu dem des rezenten und fossilen Menschen. Verh. intern. zahnärztl. Kongr. Berlin **5** (1909) 1 1912 (140-149). **182**
- Grandidier, G.** Une nouvelle Chauve-Souris de Madagascar. Bul. Muséum Paris **1912** (8 9). **183**
- †**Grandidier, G.** Une nouvelle espèce subfossile d'*Hypogeomys*, l'*H. boulei* G. G. Bul. Muséum Paris **1912** (10 11) pl. ii. **184**
- Gregory, William K.** Notes on the principles of quadrupedal locomotion and on the mechanism of the limbs in Hoofed Animals. New York N.Y. Ann. N.Y. Acad. Sci. **22** 1912 (267-294) pl. xxxiv. **185**
- †**Gregory, W. K.** Note on the Upper Eocene Titanotheroid *Telmatherium* (?) *incisivum* Douglass from the Uinta basin. Science New York N.Y. ser. 2 **35** 1912 (546). **186**
- †**Gregory, W. K.** Marsupials, Insectivores and Primates. [Symposium on ten years' progress in vertebrate palæontology.] Bull. Geol. Soc. Amer. Washington D.C. **23** 1912 (187-196). **187**

- Grevé, K. Materialien zur Frage über die Formen des braunen Bären, *Ursus arctos* L. Riga Korr.-blt. Naturf. Ver. **55** 1912 (51-61). **188**
- Griffini, A. Le Zebre; studio zoologico popolare. Milano 1912—dated 1913 (xxviii + 298) 41 pls. **189**
- Grinev, D. P. Structure et fonction des îlots de Langerhans. Arch. sc. biol. St. Peterburg **17** 1 1912 éd. franç. (13-30). **190**
- Grinnell, J. A new Cony from the vicinity of Mount Whitney. Berkeley Cal. Univ. Cal. Pub. Zool. **10** 1912 (125-129). **191**
- Grinnell, J. The Bighorn of the Sierra Nevada. Berkeley Cal. Univ. Cal. Pub. Zool. **10** 1912 (143-153). **192**
- Grinnell, J. The two Pocket-Gophers of the region contiguous to the Lower Colorado River in California and Arizona. Berkeley Cal. Univ. Cal. Pub. Zool. **10** 1912 (171-178) pl. v. **193**
- Grinnell, J. The Warner Mountain Cony. Washington D.C. Proc. Biol. Soc. **25** 1912 (129 130). **194**
- Grinnell, J. A new member of the *Perognathus parvus* group of Pocket-Mice. Washington D.C. Proc. Biol. Soc. **25** 1912 (127 128). **195**
- Grinnell, J. and Swarth, H. S. The Mole of Southern California. Berkeley Cal. Univ. Cal. Pub. Zool. **10** 1912 (131-136). **196**
- Grosz, Siegfried *vide* Tandler, Julius.
- Guthzeit, Otto. Ueber die Bedeutung des Tuberculum impar. Leipzig 1912 (1-17). **197**
- Gylek, Franz. Untersuchungen über das Planum nasale der Hauscarnivoren und den Befeuchtungsmodus an demselben. Anat. Anz. Jena **40** 1912 (449-463). **198**
- Hagedoorn, Arend L. The genetic factors in the development of the House-Mouse which influence the coat-colour, with notes on such genetic factors in the development of the other Rodents. Zs. indukt. Abstammungslehre Berlin **6** 1912 (97-136) Taf. **199**
- Hamilton, Major J. Stevenson. The local races of Burchell's Zebra. London Proc. Zool. Soc. **1912** (757-763). **200**
- Hammerschlag, Viktor. Zuchtversuche mit japanischen Tanzmäusen und europäischen Laufmäusen. Arch. Entw-Mech. Leipzig **33** 1912 (339-344). **201**
- Hansemann, D. von. Kurze Bemerkungen über die Leydig'schen Zwischenzellen des Hodens. Arch. Entw-Mech. Leipzig **34** 1912 (475-476). **202**
- †Harlé, Édouard. Sur la découverte d'un Porc-épic quaternaire aux environs de Montrojeau (Haute-Garonne). Paris Bul. soc. géol. sér. 4 **10** 1910 (730-739) 1912. **203**
- Hatai, Shinkishi *vide* Donaldson, Henry H.
- Hauffe, Georg. Das normale Vorkommen von Brustdrüsen auf dem Rücken von Tieren. Kosmos Stuttgart **9** 1912 (434-436). **204**
- Heath, Harold. Special investigation of the Alaska Fur-Seal rookeries, 1910. Washington D.C. Dept. Comm. Lab. Bur. Fish. Rep. **1910** 1911 (1-22). **205**
- Heller, E. New Rodents from British East Africa. Washington D.C. Smithsonian. Misc. Collect. **59** No. 16 1912 (1-20). **206**
- Heller, E. New genera and races of African Ungulates. Washington D.C. Smithsonian. Misc. Collect. **60** No. 8 1912 (1-16). **207**
- Heller, E. New races of Insectivores, Bats, and Lemurs from British East Africa. Washington D.C. Smithsonian. Misc. Collect. **60** No. 12 1912 (1-13). **208**
- Hepburn, David. Observations on the anatomy of the Weddell Seal (*Leptonychotes weddelli*). Parts 2 and 3. Edinburgh Trans. R. Soc. **48** 1912 (191-194 321-332). **209**
- Hermansson, K. *vide* Ribbing, L.
- Herwerden, M. A. van. Over den samenhang van de eilandjes van Langerhans en het overige klierweefsel van het pankreas. [Ueber den Zusammenhang der Langerhans'schen Inseln mit dem übrigen Drüsengewebe des Pankreas.] Utrecht Onderz. physiol. Lab. scr. 5 **13** 1912 (134-137). **210**
- Hilivirta, Eino. Beiträge zur Anatomie und Histologie der Harnblase der Haussäugetiere. Dresden 1911 (1-59) 11 Taf. **211**
- Hine, J. S. Ohio Moles and Shrews. Ohio Nat. Columbus **12** 1912 (494-496). **212**

- Hilzheimer, Max.** Bestimmungstabellen für die in Württemberg vorkommenden Fledermäuse und Spitzmäuse. Stuttgart Jahreshefte Ver. Naturk. Württemberg **27** 1911 (549-556). **213**
- Hilzheimer, M.** Die in Deutschland aufbewahrten Reste des Quaggas. Vortrag . . . Frankfurt a. M. Abh. Senckenb. Ges. **31** 1912 (83-105) 6 Taf. **214**
- Hilzheimer, M.** Neues zur Geschichte des Kameles. Aus d. Natur Leipzig **8** 1912 (206-210). **215**
- †**Hilzheimer, M.** Das Mammut. (Die allmählich wachsende Kenntnis von seinem Aussehen.) Mit e. Rekonstruktionsversuch . . . Natur Leipzig **1912** (398-403 413-417). **216**
- Hilzheimer, M.** Über *Mus sylvaticus* L., *Mus wagneri* Eversm. und *Mus minutus* Pall. in den Muscen zu Helsingfors und Stuttgart. Helsingfors Acta Soc. Fauna et Flora Fenn. **34** No. 10 1911 (1-19). **217**
- Hilzheimer, M.** Ein Hundeskelett und andere Haustierfunde aus dem 3. oder 4. Jahrh. n. Chr. aus Paulinenaue (Mark). Stuttgart Zeits. f. Morph. u. Anthrop. **15** 1912 (229-246). **218**
- Hilzheimer, M.** Über ein Pferd der Völkerwanderungszeit. Zool. Anz. Leipzig **40** 1912 (105-117). **219**
- †**Hinton, Martin A. C.** Note on Lemming remains from the Arctic bed at Angel Road [Ponder's End]. London Q. J. Geol. Soc. **68** 1912 (249). **220**
- Hoening, Hans.** Die Hirnfurchung bei *Canis dingo* in vergleichender Besprechung zu den Hauptvertretern der übrigen Caniden. Bern Mitt. Natf. Ges. **1911** (1-10) 1912. **221**
- Hoening, H.** Vergleichend-anatomische Untersuchungen über den Hirnfurchungstypus der Caniden mit besonderer Berücksichtigung des *Canis dingo*. Berlin 1912 (1-54) 3 Taf. **222**
- Holl, Moritz.** Zur Morphologie des *M. digastricus mandibulae* der Affen. Wien SitzBer. Akad. Wiss. **122** 1912 Abt. iii. (71-114). **223**
- Holl, M.** Makroskopische Darstellung des atroventrikularen Verbindungsbündels am menschlichen und tierischen Herzen. Wien Denkschr. Ak. Wiss **87** 1912 (269-295) 3 Taf. **224**
- Hollister, N.** Mammals of the Alpine Club expedition to the Mount Robson district. Canadian Alpine J. Banff Alberta 1912 (1-44). **225**
- Hollister, N.** Description of a new Water-Mongoose from East Africa. Washington D.C. Proc. Biol. Soc. **25** 1912 (1-2). **226**
- Hollister, N.** Two new American Pikas. Washington D.C. Proc. Biol. Soc. **25** 1912 (57-58). **227**
- Hollister, N.** The Mona Monkey on the island of St. Kitts. Washington D.C. Proc. Biol. Soc. **25** 1912 (93). **228**
- Hollister, N.** The earliest name of the Cape Ratel. Washington D.C. Proc. Biol. Soc. **25** 1912 (96). **229**
- Hollister, N.** Five new Mammals from Asia. Washington D.C. Proc. Biol. Soc. **25** 1912 (181-184). **230**
- Hollister, N.** The names of the Rocky Mountain Goats. Washington D.C. Proc. Biol. Soc. **25** 1912 (185-186). **231**
- Hollister, N.** On a specimen of *Ovis californiana* Douglas in the National Museum. Washington D.C. Proc. Biol. Soc. **25** 1912 (187). **232**
- Hollister, N.** New Mammals from Canada, Alaska and Kamchatka. Washington D.C. Smithsonian. Misc. Collect. **56** No. 35 1912 (1-8) 3 pls. **233**
- Hollister, N.** Description of a new subspecies of Monkey from British East Africa. Washington D.C. Smithsonian. Misc. Collect. **59** No. 3 1912 (1-2). **234**
- Hollister, N.** New Mammals from the Highlands of Siberia. Washington D.C. Smithsonian. Misc. Collect. **60** No. 14 1912 (1-6). **235**
- Hollister, N.** A list of the Mammals of the Philippine Islands, exclusive of the Cetacea. Manila Philippine J. Sci. **7** 1912 (1-64). **236**
- Hoof, Lucien van.** La spermatogenèse dans les Mammifères. I. L'évolution de l'élément chromatique dans la spermatogenèse du Rat (291-345). II. Le synapsis dans les spermatoocytes des Mammifères (351-380). Cellule Louvain **27** 1912 pls. **237**
- Hubrecht, A. A. W.** Frühe Entwicklungsstadien des Igels und ihre Bedeutung für die Vorgeschichte (Phylogenese) des Amnions. Zool. Jahrb.

- Jena 1912 Suppl. 15 Bd 2 (739-774)
4 Taf. 238
- Huene, Friedrich von. Die Herkunft
des Os interparietale der Mammalia.
Anat. Anz. Jena 42 1912 (522-524). 239
- Hürlimann, Rud. Die arteriellen
Kopfgefäße der Katze. Intern.
Monatschr. Anat. Leipzig 29 1912
(371-442) Taf. 240
- Inouye, Michio. Die Entwicklung des
sekundären Gaumens einiger Säugetiere
mit besonderer Berücksichtigung der
Bildungsvorgänge am Gesichte und des
Umlagerungsprozesses der Gaumen-
platten. Anat. Hefte Wiesbaden Abt. 1
46 1912 (1-184). 241
- †Issel, Arturo. Un Omero di *Felsino-
therium*. Roma Mem. Ae. Lincei
ser. 5 9 1912 (119-125) 2 tav. 242
- Jackson, C. M. On the recognition
of sex through external characters in
the young Rat. Biol. Bull. Woods
Hole Mass. 23 1912 (171-173). 243
- Jolly, J. et Levin, S. Evolution des
corpuscules de Hassall dans le thymus
de l'animal jeuneur. Paris C. R. soc.
biol. 72 1912 (642-644). 244
- Jordan, D. S. and Clark, G. A.
Die Robben und ihre Beschützung.
Verh. viii intern. Zool. Kongr. Jena
(534-541) 1912. 245
- Jordan, H. E. The microscopic
anatomy of the epiphysis of the Opos-
sum. Anat. Rec. Philadelphia 5 1911
(325-338). 246
- Jordan, H. E. A note on the anatomy
of the pulmonary arteries of Mam-
mals. Anat. Rec. Philadelphia 5
1911 (457-460). 247
- Jordan, H. E. Notes on the sper-
matogenesis of the Bat. Anat. Anz.
Jena 40 1912 (513-522). 248
- †Kafka, Josef. Kopytníci země
české žijící i vyhynulí. I. Chobot-
natei. II. Lichoprstí. [Lebende und
ausgestorbene Ungulata Böhmens.
Ungulata Teil I. 1. Proboscidea. 2.
Perissodaetyla.] Archiv. pro. přír.
prozk. Čech. Prag. Teil 14 No. 5
1909 (1-70). 249
- Kasakoff, W. Zur Frage von dem
Bau des Mitteldarmes bei *Erinaceus
europaeus*. Anat. Anz. Jena 41 1912
(33-45) Taf. 250
- [Kaščenko, N. F.] Кащенко, Н. О.
Крысы и заместители ихъ въ Запад-
ной Сибири и Туркестанѣ. [Les Rats
et les espèces vicaires dans la Sibirie
occidentale et dans le Turkestan.]
St. Peterburg Ann. Mus. zool. Ac. Sc.
17 1912 (370-389). 251
- [Kaščenko, N. F.] Кащенко, Н. О.
Новыя изслѣдованія по маммологіи
Забайкалья. [Nouvelles études sur les
Mammifères de la Transbaïcalie.] St.
Peterburg Ann. Mus. zool. Ac. Sc.
17 1912 (390-420). 252
- Kazzander, Julius. Zur Anatomie
des Penis beim Maulwurfe. Zool. Anz.
Leipzig 39 1912 (446-457). 253
- Keller, C. Die Herkunft der euro-
päischen Haustierwelt. Verhandl.
viii intern. zool. Kongr. Jena (356-
365) 1912. 254
- Keller, C. Neue Beiträge zur Kennt-
nis der alteretischen Haustiere. Zürich
Vierteljahrsehr. Natf. Ges. 57 1912
1 u. 2 (282-290). 255
- †Kellogg, Miss Louise, The Pleisto-
cene Rodents of California. Berkeley
Cal. Univ. Cal. Pub. Bull. Dep. Geol. 7
1912 (151-168). 256
- Kermauner, Fritz. Über Pla-
zentarkotyledonen und den Blut-
kreislauf im intervillösen Raum. Arch.
Anat. Physiol. Leipzig Anat. Abt.
1912 (189-192) Taf. 257
- Kershaw, J. A. Notes on the breed-
ing habits of the Platypus. Victorian
Natural. Melbourne 29 1912 (102-106)
pls. vi vii. 258
- Khomenko, I. *vide* Chomenko, I.
- †Kiernik, E. Materialien zur Palä-
zoologie der diluvialen Säugetiere
Polens: T. iii. Reste einer Saiga-
Antilope aus der Maszycka-Höhle bei
Ojców. Cracovie Bull. Ac. Sci. 1912
(981-1000) pl. xlvii. 259
- †Klornik, E. Ein neuer Titano-
theriumfund in Europa. Cracovie Bull.
Ac. Sci. 1912 1913 (1211-1224) Taf.
260
- Killermann-Regensburg, Seb. A.
Dürer's Bilder vom Walross, Wisent
und Elentier. Naturwiss. Wochensehr.
Jena ser. 2 11 1912 (785-789). 261
- King, Miss Helen Dean. The sex-
ratio in hybrid Rats. Biol. Bull.
Wood's Holl Mass. 21 1911 (104-112).
262

- Kingsley, J. S.** A neglected point in the quadrate-problem. Proc. 7th Int. Zool. Cong. Cambridge Mass. 1912 (185-186). 263
- [**Kirilov, S. Ja.**] Кирпловъ, С. Я. Къ учению о спермиогенезѣ лошади. [Zur Kenntniss der Spermiogenese des Pferdes.] Kazanĭ Zap. veterin. Inst. 29 1912 (203-232) 2 Taf. 264
- Kirillow, S. J.** Die Spermiogenese beim Pferde. I. Arch. mikr. Anat. Bonn 79 Abt. 2 1912 (125-147) Taf. 265
- Klaatsch, H.** Die Bedeutung des Säugemechanismus für die Stammesgeschichte des Menschen. KorrbL. D. Ges. Anthr. Braunschweig 43 1912 (114-126). 266
- Klatt, Berthold.** Über die Veränderung der Schädelkapazität in der Domestikation. Berlin SitzBer. Ges. natf. Freunde 1912 (153-179). 267
- [**Klimov, A.**] Климовъ, А. Къ учению о наружномъ ухѣ собаки. [Beiträge zur Kenntniss von dem äusseren Ohr des Hundes.] Kazanĭ Zap. veterin. Inst. 29 1912 (327-400) 2 Taf. 268
- Kohlbrugge, J. H. F. et Retterer, Ed.** Du pied et du long péronier latéral d'un Orangoutang adulte. Paris C. R. soc. biol. 72 1912 (256-257). 269
- Kollmann, Max.** *Procavia* nouveau du Sahara Algérien. Bul. Muséum Paris 1912 (281-283). 270
- Kollmann, M.** Sur quelques points de l'anatomie des organes génitaux mâles des Lémuriens. Paris C. R. Acad. sci. 155 1912 (861-863). 271
- Kolmer, Walther.** Zur Frage nach der Anatomie des Makrochiropterenauges. Anat. Anz. Jena 40 1912 (626-629). 272
- [**Kooli-Volkonskij, I.**] Кооль-Волконскій, И. Кое-что о северномъ оленѣ Новгородской губ. [Einiges über das Reentier des Gouv. Novgorod.] Semja ochotn. Moskva 5 1912 (25-26). 273
- Kowarzik, Rudolf.** Einige Bemerkungen zu Prof. Dr. W. Sallačs Vortrag. „Die Geweihbildungen der jetzt lebenden Hirscharten der Alten und Neuen Welt“. ZentrBl. Forstwes. Wien 38 1912 (69-77). 274
- †**Kowarzik, R.** Der Mosehusochs im Diluvium Europas und Asiens. Wien Denks. Mat.-Nat. Kl. k. Akad. Wiss. 87 1912 (1-62) 2 Taf. 275
- Kraemer, H.** Die mongolischen und die sogenannten assyrischen Wildpferde. Berlin Mitt. D. LandwGes. 27 1912 (33-37). 276
- Kränzle, Eduard.** Untersuchungen über die Haut des Schweines. Arch. mikr. Anat. Bonn 79 Abt. 1 1912 (525-559) 2 Taf. 277
- Kressmann, Fraulein Margarothe.** Schuppenreste bei Sireniden. Jenaische Zs. Natw. 48 1912 (399-432) Taf. xvii. 278
- Kuiper, K.** Sur les ferments de la salive de divers Animaux. Haarlem Arch. Néerl. Sci. Soc. Holl. ser. 3 B. 1 1912 (235-241). 279
- Kull, Harry.** Über die Panethschen Zellen verschiedener Säugetiere. Anat. Anz. Jena 41 1912 (609-611). 280
- Kunze, Arnold.** Über die Brustflosse der Wale. Zool. Jahrb. Jena Abt. f. Anat. 32 1912 (577-651) 3 Taf. 281
- Lahille, F.** Nota preliminar sobre una nueva especie de Marsopa del rio de la Plata (*Phocaena dioptrica*). [Preliminary note on a new species of Porpoise from the Rio de la Plata.] Buenos Aires An. Mus. Nac. Hist. Nat. 23 1912 (269-278) lám. vi-viii. 282
- Lapicque, Louis.** Sur le poids encéphaliques des Mammifères Amphibies. Bul. Muséum Paris 1912 (1-6). 283
- Laville.** Comparaison du crâne de la Marmotte d'Eragny avec un crâne d'une Marmotte du Thibet. Paris Bul. mém. soc. anthr. sér. 6 1 1910 (517-518). 284
- Leche, Wilhelm.** Über Beziehungen zwischen Gehirn und Schädel bei den Affen. Zool. Jahrb. Jena 1912 Suppl. 15 Band 2 (1-116) 4 Taf. 285
- Legendre, R.** Notes sur le système nerveux central d'un Dauphin (*Delphinus delphis*). Bul. Muséum Paris 1912 (6-8). 286
- L'hermitte, J.** Sur la présence dans le Var d'une forme de Hérisson nouvelle pour la France. Marseille Bul. soc. linn. 2 1910 (97-101). 287
- Lelièvre, Aug. vide Retterer, Ed.**

- Lepri, Giuseppe.** Nota su alcuni *Felis* acquistati dal Mus. zool. R. Univ. Roma. Roma Boll. Soc. zool. ital. ser. 3 1 1912 (114-119). 288
- †**Leriche, Maurice.** Sur le plus ancien reste connu de l'ordre des Pinnipèdes. Lille Ann. Soc. géol. Nord 39 1910 (369-370). 289
- Lešer, Otakar.** O vývinu tvaru oka u některých obratlovců. [Ueber die Entwicklung der Bulbusform des Auges bei einigen Vertebraten.] Prag Rozpr. České Ak. Frant. Jos. 20 1911 (1-30). 290
- Levin, S.** *vide* Jolly, J.
- Lickteig, A. und E.** Beitrag zur Kenntnis der Anlage und Entwicklung der Zahnbeingrundsubstanz. Arch. mikr. Anat. Bonn 80 1912 (117-156) Taf. 291
- Little, C. C.** The influence of heredity and of environment in determining the coat-colors in Mice. Science New York N.Y. ser. 2 34 1911 (563). 292
- Locy, William A.** The fifth and sixth aortic arches in Birds and Mammals. Proc. vii Intern. Zool. Cong. Cambridge Mass. 1912 (242-249). 293
- Loeb, L.** The cyclic changes in the ovary of the Guinea-pig. J. Morph. Philadelphia Pa. 22 1911 (37-70). 294
- Lönnerberg, Einar.** Somewhat Mammals from British East Africa. Ann. Mag. Nat. Hist. London ser. 8 9 1912 (63-69). 295
- Lönnerberg, E.** Mammals collected by the Swedish Zoological Expedition to British East Africa, 1911. Stockholm Vet.-Ak. Handl. 48 art. 5 1912 (1-188) 15 pls. 296
- Lönnerberg, E.** Anatomical notes on Mammals obtained in British East Africa by the Swedish Zoological Expedition, 1911. I. Stockholm Vet.-Ak. Handl. 49 art. 7 1912 (1-32) 2 pls. 297
- Loewenthal, N.** Ueber die Stellung der sogenannten Gl. retrolingualis nach entwicklungsgeschichtlichen Befunden. Anat. Anz. Jena 42 1912 (385-410). 298
- Loewenthal, N.** Drüsenstudien. 4. Beitrag zur Kenntnis der Entwicklung der Augenhöhlendrüsen. Arch. mikr. Anat. Bonn 79 Abt. 1 1912 (464-503) 2 Taf. 299
- Long, J. A.** *vide* Mark, E. L.
- Long, J. A. and Mark, E. L.** Maturation of the egg of the Mouse. Washington Carnegie Inst. Pub. No. 142 1911 (iv+72) pls. 1-6. 300
- Lotichius.** Das Quagga. Frankfurt A. M. Ber. Senckenb. Ges. 43 1912 (104-107) Taf. ii. 301
- Luciani, L.** Ancora sulla sfera visiva del mantello cerebrale del Cane. Roma Rend. Acc. Lincei ser. 5 21 1912 (487-493). 302
- Lübcke, Hans Hermann Julius Theodor.** Untersuchungen der Extremitätenmuskulatur von *Tragulus javanicus* im Vergleich zu Hirsch, Reh und Schaf. Glückstadt 1912 (1-32) 15 Taf. 303
- Luna, Emerico.** Ricerche istologiche, istogenetiche e morfogenetiche sul nucleo del nervo ipoglosso (nucleo principale di Stilling) e su di alcune formazioni nucleari del midollo allungato. [In *Sus scrofa*.] Roma, Ric. Lab. anat. norm. 16 2 1911 (34-74) 2 tav. 304
- Lydekker, R.** The Horse and its Relatives. London 1912 (xii+286). 305
- Lydekker, R.** The Sheep and its Cousins. London 1912 (xv+315). 306
- Lydekker, R.** The Ox and its Kindred. London 1912 (xi+271). 307
- Lydekker, R.** On the milk-dentition of the Ratel. London Proc. Zool. Soc. 1912 (221-224). 308
- Lydekker, R.** The North Rhodesian Giraffe. London Proc. Zool. Soc. 1912 (771-773) pl. lxxxvi. 309
- Lydekker, R.** The Bornean Bantian. London Proc. Zool. Soc. 1912 (902-906). 310
- Magnan, A.** Le régime alimentaire et la longueur de l'intestin chez les Mammifères. Paris C. R. Acad. sci. 154 1912 (129-131). 311
- Magnan.** La structure de l'intestin chez les Mammifères. Paris C. R. Acad. sci. 154 1912 (301-302). 312

- Magnan, A. Recherches sur l'alimentation naturelle et le tube digestif des Mammifères. Ann. Sci. nat. Zool. Paris sér. 2 16 1912 (207-247). 313
- Magnan, A. Le cœcum des Mammifères. Paris C. R. Acad. sci. 154 1912 (452-453). 314
- Magnan, A. Le poids de l'estomac chez les Mammifères. Paris C. R. Acad. sci. 154 1912 (657-659). 315
- Magnan, A. Contribution à l'étude de l'alimentation naturelle des Mammifères. Bul. Muséum Paris 1912 (127-131) 316
- †Mahony, J. On the bones of the Tasmanian Devil and other Animals associated with Human remains near Warrnambool. Victorian Natural Melbourne 29 1912 (43-46). 317
- Manners-Smith, J. The limb-arteries of Primates. J. Anat. Physiol. London 46 1912 (95-172) 12 pls. 318
- Marchand, R. Les pores des alvéoles pulmonaires. Bibliogr. anat. Naney 22 1912 (57-71). 319
- Marelli, Carlos A. Sobre dos fetos de *Phocidae*. [On two fœtuses of Seals.] Buenos Aires Bol. Soc. Physis. 1 1912 (47-51). 320
- Mark, E. L. and Long, J. A. Die Reifung der Eier der Maus. Verh. viii intern. Zool.-Kongr. Jena (401-408) 1912. 321
- Mark, E. L. *vide* Long, J. A.
- Matschie, P. Einige Schimpansen aus dem Kongo-Staate. Rev. Zool. Africaine Bruxelles 2 1912 (115-124). 322
- Matschie, P. Beschreibungen einiger neuer Meerkatzen des Musée du Congo Belge. Rev. Zool. Africaine Bruxelles 1 1912 (433-442). 323
- Matschie, P. Über einige Rassen des Steppenluchses. Berlin SitzBer. Ges. natf. Freunde 25 1912 (55-67). 324
- Matschie, P. Eine anscheinend noch nicht beschriebene Rasse des Hyänenhundes. Berlin SitzBer. Ges. natf. Freunde 25 1912 (250-255 & 311). 325
- Matschie, P. Über *Felis jacobita*, *colocola* und zwei ihnen ähnliche Katzen. Berlin SitzBer. Ges. natf. Freunde 1912 (255-259). 326
(N-9210 f)
- Matschie, P. *Gazella (Nanger) soemmerringii sibyllae* subsp. nov. Berlin SitzBer. Ges. natf. Freunde 1912 (260-270). 327
- Matschie, P. Zur Kenntnis der südchinesischen Kurzschwanz-Makaken. Berlin SitzBer. Ges. natf. Freunde 1912 (305-310). 328
- Matschie, P. Einige bisher wenig beachtete Rassen des Nörzes. Berlin SitzBer. Ges. natf. Freunde 1912 (345-354). 329
- Matschie, P. Die von Herrn Major P. H. G. Powell-Cotton gesammelten Rassen der Gattung *Tragelaphus*. Berlin SitzBer. Ges. natf. Freunde 1912 (544-567). 330
- Matschie, P. Zwei neue Rassen des roten Baumkänguruhs aus Deutsch-Neuguinea. Berlin SitzBer. Ges. natf. Freunde 1912 (568-572). 331
- Matschie, P. Die achtzehnte deutsche Gweihausstellung zu Berlin 1912. Neudamm Deutsche Jäger-Zeitung 58 1912 (569 *et seq.*); 59 (97 *et seq.*). 332
- Matthes, Ernst. Einige Bemerkungen über das Gehörorgan von Walen und Sirenen. Anat. Anz. Jena 41 1912 (594-599). 333
- Matthes, Ernst. Zur Entwicklung des Kopfskelettes der Sirenen. I. Die Regio ethmoidalis des Primordialkraniums von *Manatus latirostris*. Jenaische Zs. Natw. 48 1912 (489-514). 334
- †Matthew, W. D. African Mammals. [Symposium on ten years' progress in vertebrate palæontology.] Bull. Geol. Soc. Amer. Washington D.C. 23 1912 (156-162). 335
- †Matthew, W. D. Carnivora and Rodentia. [Symposium on ten years' progress in vertebrate palæontology.] Bull. Geol. Soc. Amer. Washington D.C. 23 1912 (181-187). 336
- †Maurette, Laurent. Étude paléontologique du *Rhinoceros leptorhinus* du Pliocène inférieur de Millas (Pyénées-Orientales) et des faunes du Pliocène inférieur en général. Lyon Ann. soc. linn. 57 1911 (1-26) pl. 337
- Maximow, Alexander. Ueber die erste Entstehung der Blutzellen im Säugetierembryo. Proc. vii Intern. Zool. Cong. Cambridge Mass. 1912 (390-395). 338

- Mayer, André, Rathery, Fr. et Schaeffer, Georges. Sur les mitochondries de la cellule hépatique. Paris C. R. soc. biol. 72 1912 (217-220). 339
- Mayer, Otto. Mikrometrische Untersuchungen über die Zelldichtigkeit der Grosshirnrinde bei den Affen. J. Psychol. Leipzig 19 1912 (233-251) 2 Taf. 340
- Mayr, Th. Die Drüsenknospen: Thymus und Tholus am Metapharynx der Säuger. Morph. Jahrb. Leipzig 45 1912 (1-56) 3 Taf. 341
- Meek, A. The Seals at the Farne Islands. Newcastle Rep. Dove Lab. 1912 (83-85). 342
- Meller, Paul. Ueber den europäischen gemeinen Hausbüffel (*Bubalus indicus vulgaris*). Ein Beitrag zu Siebenbürgens Tierzucht. Halle 1912 (1-128) 2 Taf. 343
- Ménier, G. L'accessoire du grand dorsal chez l'Ouistiti (*Hapale jaculus* L.). Paris C. R. soc. biol. 72 1912 (494-496). 344
- Merk, M. Beiträge zur Biologie der Zwergspitzmaus, *Sorex pygmaeus* Pall. Zool. Beob. Frankfurt a. M. 52 1911 (90-94). 345
- †Merriam, J. C. Recent discoveries of Carnivora in the Pleistocene of Rancho La Brea. Berkeley Cal. Univ. Cal. Pub. Bull. Dep. Geol. 7 1912 (39-46). 346
- †Merriam, J. C. The fauna of Rancho La Brea, part ii, *Canidae*. Berkeley Cal. Mem. Univ. Cal. 1 1912. 347
- †Merz, Hermann. Über Murmeltierüberreste in der Umgebung Burgdorfs. Diana Genève 28 1910 (163-166). 348
- Michailow, Sergius. Innervation des Herzens im Lichte der neuesten Forschungen. Zs. wiss. Zool. Leipzig 99 1912 (539-687) 5 Taf. 349
- Mileo, Nicola. L'osso trasverso nel carpo dei Chiroteri. Archivio zool. Napoli 5 1912 (201-232) 2 tav. 350
- Miller, Gerrit S. Catalogue of the Mammals of Western Europe (Europe exclusive of Russia) in collection of the British Museum. London Brit. Mus. 1912 (xv + 1019). 351
- Miller, G. S. A new Jumping-Mouse from New Mexico. Washington D.C. Proc. Biol. Soc. 24 1911 (253-254). 352
- Miller, G. S. Two new Murine Rodents from Turkestan. Washington D.C. Proc. Biol. Soc. 25 1912 (59-60). 353
- Miller, G. S. The names of two North American Wolves. Washington D.C. Proc. Biol. Soc. 25 1912 (95). 354
- Miller, G. S. The cranial and dental characters of *Chilophylla*. Washington D.C. Proc. Biol. Soc. 25 1912 (117). 355
- Miller, G. S. A new Chamois from the Apennines. Washington D.C. Proc. Biol. Soc. 25 1912 (131-134). 356
- Miller, G. S. The names of the large Wolves of Northern and Western North America. Washington D.C. Smithsonian. Misc. Collect. 59 No. 15 1912 (1-5). 357
- Miller, G. S. Directions for preparing specimens of Mammals. Washington D.C. Smithsonian. Inst. U. S. Nat. Mus. Bull. No. 39 1912 (1-22). 358
- Miller, G. S. List of North American Land Mammals in the United States National Museum, 1911. Washington D.C. Smithsonian. Inst. U. S. Nation. Mus. Bull. No. 79 1912 (xiv + 455). 359
- Miller, G. S. A small collection of Bats from Panama. Washington D.C. Smithsonian. Institut. U. S. Nation. Mus. Proc. No. 42 1912 (21-26). 360
- Miller, G. S. Variation in the skull and horns of the Isabella Gazelle. Washington D.C. Smithsonian. Inst. U. S. Nation. Mus. Proc. 42 1912 (171 172), pl. xv. 361
- Mingaud, G. Sur un embryon de Castor. Nîmes Bul. soc. sci. nat. 38 1912 (106-108). 362
- Minot, Charles S. Note on the blastodermic vesicle of the Opossum. Anat. Rec. Philadelphia 5 1911 (295-300). 363
- Misura, A. *vide* Bassani, F.
- Mitchell, P. Chalmers. The Childhood of Animals. London 1912 (xiv + 269). 364
- Mobilio, Camillo. Dell'innervazione della tenda cerebellare in alcuni Mammiferi. Rami collaterali del patetico e rami meningei del trigemino, Mo-

- derno zootatro Bologna 1910 (estr. 1-34). 365
- Mobilio, C. Ricerche anatomico-comparate sull'innervazione del muscolo piccolo obliquo dell'occhio ed appunti sulle radici del ganglio oftalmico nei Mammiferi. Monit. zool. ital. Firenze 23 1912 (80-106). 366
- Mobilio, C. Sullo sviluppo della glandola lacrimale nel Buco. Anat. Anz. Jona 42 1912 (81-110). 367
- Mobilio, C. Innervazione del muscolo accessorio del grande obliquo dell'occhio nell'Asino. Monit. zool. ital. Firenze 23 1912 (102-106). 368
- Mollé, J. van. De spermatogenese. [La spermatogenèse.] Amsterdam Werk. Gen. Nat. Genees. Heek. ser. 2 7 1912 (79-83). 369
- Mongiardino, Torasio. Manuale di Anatomia descrittiva comparata degli Animali domestici. Torino 1907 (1-1055). 370
- Montlezun, A. de. Matériaux pour servir à l'étude des os péniens des Mammifères de France. Toulouse Bul. soc. hist. nat. 43 1910 (96-101). 371
- Morawski, Juljus. Gehirnuntersuchungen bei Katzen- und Hundefamilien (mit Berücksichtigung des Geschlechts und der Entwicklung). Jahrb. Psychiatric Leipzig 33 1912 (306-477). 372
- Morgan, T. H. Moulting and change of colour of coat in Mice. Science New York N.Y. ser. 2 34 1911 (918-919). 373
- Morita, S. Über die Ursachen der Richtung und Gestalt der thoracalen Dornfortsätze der Säugetierwirbelsäule. Anat. Anz. Jona 42 1912 (1-10). 374
- Morse, F. W. The Ancestry of Domesticated Cattle. Washington D.C. U. S. Dep. Agric. Bureau Animal Industry Rep. 27 (1910) 1912 (187-239). 375
- Mosse, A. H. Immunity of animals to snake-bite. Bombay J. Nat. Hist. Soc. 21 1911 (295-298). 376
- Mouchet, A. *vide* Charpy, A.
- Mulon, P. Note sur la capsule surrénale du Mouton. Bibliogr. anat. Nancy 22 1912 (30-36). 377
(N-9210 f)
- Mulon, P. Les corps biréfringents des glandes génitales. Paris C. R. soc. biol. 72 1912 (204-207). 378
- Mulon, P. Appareil réticulaire et mitochondries dans la surrénale du Hérisson. Paris C. R. soc. biol. 73 1912 (268-269). 379
- [Murin, N. I.] Мурипъ, Н. И. Анатомія и гистологія м'якого неба, глотки, пищевода и кардія плотояднихъ (собака и конка). [Anatomio und Histologio des weichen Gaumens, des Schlundkopfes, der Speiseröhre und des Magenmundes der Fleischfresser (Hund und Katze).] Kazan' Zap. veterin. Inst. 29 1912 (468-524). 380
- Nehring. Altersbestimmung des Rehwildes nach den Zähnen und der Ausbildung seines Kopfschmuckes. Sanct Hubertus Cöthen 30 1912 (275-282). 381
- Nelson, E. W. Two genera of Bats new to Middle America. Washington D.C. Proc. Biol. Soc. 25 1912 (93). 382
- Nelson, E. W. A new subspecies of Pronghorn Antelope from Lower California. Washington D.C. Proc. Biol. Soc. 25 1912 (107-108). 383
- Nelson, E. W. A correction of two recent names for Mammals. Washington D.C. Proc. Biol. Soc. 25 1912 (116). 384
- Némai, Josef. Vergleichend-anatomische Studien am Kehlkopfe der Säugetiere. Arch. Laryng. Berlin 26 1912 (451-508) 2 Taf. 385
- Neuville, H. A propos d'un crâne de Gorille rapporté de la Likouala-Mossaka par le Dr. A. Durriex. Anthropologie Paris 23 1912 (563-586). 386
- Neuville, H. *vide* Retterer, Ed.
- Newberry, P. E. The Cult-animal of Set. Klio Leipzig 12 1912 (397-411). 387
- Newman, H. H. The ovum of the Nine-banded Armadillo: Growth of the ovocytes, maturation, and fertilization. Biol. Bull. Woods Hole Mass. 23 1912 (100-140) pls. i-vi. 388
- Nierstrasz, H. F. Die Embryonalentwicklung von Thymus und ultimobranchialem Körper bei *Tarsius*

- und *Nycticebus*. Zool. Jahrb. Jena 1912 Suppl. 15 Bd 2 (229-256) 2 Taf. 389
- Noack, Th. Chinesische Haustiere. Zool. Anz. Leipzig 41 1912 (118-140). 390
- Nonnenbruch, Wilhelm. Ein Beitrag zur Kenntnis der Verbindung zwischen Epidermis und Cutis. München 1912 (1-20). 391
- O'Donoghue, Chas. H. The corpus luteum in the non-pregnant *Dasyurus* and polyovular follicles in *Dasyurus*. Anat. Anz. Jena 41 1912 (353-368) 2 Taf. 392
- [Ognev, S. I.] Огневъ, О. И. О коллекции млекопитающихъ изъ Уссурийскаго края. [Sur une collection de Mammifères provenant de la province de l'Ussuri.] St. Peterburg Ann. Mus. zool. Ac. Sc. 16 1912 (475-511) Pl. vi vii. 394
- Osborn, Henry Fairfield. Cranio-metry in the *Equidae*. New York N.Y. Mem. Amer. Mus. Nat. Hist. ser. 2 1 1912 (57-100). 395
- Osgood, Wilfrid H. Mammals from Western Venezuela and Eastern Colombia. Chicago Field Mus. Nat. Hist. Zool. Pub. 10 1912 (33-66) pl. v. 396
- Oströil, Antonín vide Voelker, Otomar.
- Ouwens, P. A. Bijdrage tot de kennis der zoogdieren van Celebes. [Beitrag zur Kenntnis der Säugetiere von Celebes.] Toysmannia Batavia 22 1911 (447-454). 397
- Pardi, Francesco. Contributo allo studio dello sviluppo del grasso nel mesenterio dei Mammiferi. Pisa 1909 (1-11). 398
- Pas, Luis van der. Otros indicios de evolucion actual en el Caballo Criollo. [Additional evidence of actual evolution in the Native Horse.] Buenos Aires An. Mus. Nac. Hist. Nat. 23 1912 (397-410). lám. ix. 399
- Patten, C. J. Cranium of an adolescent Chimpanzee showing bilateral and symmetrical complete bipartite division of the parietals, with multipartite division of the upper segments, with remarks on the significance of parietal division. Zs. Morph. Stuttgart 14 1912 (527-608) 3 Taf. 400
- Patterson, J. Thomas. A preliminary report on the demonstration of polyembryonic development in the Armadillo (*Tatu novemcinctum*). Anat. Anz. Jena 41 1912 (369-381). 401
- Peter, Karl. Die Entwicklung der Nasenmuscheln bei Mensch und Säugetieren. Tl 1: Entwicklung der Sieb-beinmuscheln bei Säugetieren. Arch. mikr. Anat. Bonn 79 Abt. 1 1912 (427-463) 2 Taf. 402
- Peter, K. Die Entwicklung der Nasenmuscheln bei Mensch und Säugetieren. Tl 2: Entwicklung der Nasen-muscheln beim Menschen. Arch. mikr. Anat. Bonn 80 Abt. 1 1912 (478-559) 2 Taf. 403
- †Peterson, O. A. A group of Stenomylins in the Carnegie Museum. Pittsburg Ann. Carnegie Mus. 8 1912 (366-369) pls. xxi xxii. 404
- †Peterson, O. A. Artiodactyla. [Symposium on ten years' progress in vertebrate palæontology.] Bull. Geol. Soc. Amer. Washington D.C. 23 1912 (162-178). 405
- †Peterson, O. A. Recently proposed species of the genus *Diceratherium*. Science New York N.Y. ser. 2 36 1912 (801). 406
- Phisalix, Marie. Immunité naturelle du Hérisson vis-à-vis du venin de l'*Heloderma suspectum* Cope. Paris C. R. Acad. sci. 154 1912 (1434-1437). 407
- Phillips, J. C. A new Puma from Lower California. Washington D.C. Proc. Biol. Soc. 25 1912 (85-86) pl. v. 408
- [Pilat, M.] Пилать, М. „Внутри-клеточный ретикулярный аппаратъ“ въ эпителиальныхъ клеткахъ надпочечника ёжа (*Erinaceus europaeus*). [„Apparate reticolare interno“ in den Nebennierenzellen des Igels (*Erinaceus europaeus*).] St. Peterburg Trav. Soc. nat. C. r. séances 43 1 1912 (15-28 u. 40-41). 409
- Pilat, M. Der intracelluläre Netzapparat in den Epithelzellen der Nebenniere vom Igel (*Erinaceus europaeus*). Arch. mikr. Anat. Bonn 80 1912 (157-166) Taf. 410
- Poche, Franz. Über den Inhalt und die Erscheinungszeiten der einzelnen Teile, Hefte etc. und die verschiedenen Ausgaben des Schreber's.

- schen Säugetierwerkes. Arch. Natg. Berlin 77 Bd 1 SupplH. 4 1912 (124-183). 411
- Pocock, R. I. On the moulting of an Arctic Fox (*Vulpes lagopus* in the Society's Garden. London Proc. Zool. Soc. 1912 (55-60). 412
- Pocock, R. I. On a rare Stag (*Cervus wallichii*) from Nepal recently presented to the Zoological Society by His Majesty King George. London Proc. Zool. Soc. 1912 (558-575). 413
- Pocock, R. I. On antler-growth in the *Cervidæ*, with special references to *Elaphurus* and *Odocoileus* (*Dorc-elaphus*). London Proc. Zool. Soc. 1912 (773-783). 414
- Pocock, R. I. The death of two Rhinoceroses. Field London 1912 (143). 415
- Pocock, R. I. Obliterative coloration and Big Game. Field London 1912 (1637). 416
- †Pohlig, H. Sur une vieille mandibule de *Tetracaulodon ohioiticus* Blum. avec défense *in situ*. Bruxelles Bull. Soc. géol. paleont. hydr. 26 p.v. 1912 (187-193). 417
- Pohlig, H. Bovidés fossiles de l'Italie. Bruxelles Bull. Soc. géol. paléont. hydr. 26 p.v. 1912 (311-317). 418
- Policard, A. Sur quelques points de la cytologie des plexus choroïdes. Paris C. R. soc. biol. 72 1912 (430-432). 419
- †Pontier, G. Observations sur la dentition du *Mastodon andium*. Lille Ann. Soc. géol. Nord. 39 1910 (303-307). 420
- Préda, G. La myéliarchitecture de l'écorce du cerveau chez les Lémuriens. Paris C. R. soc. biol. 72 1912 (71-73). 421
- [Prozorov, N. V.] Прозоровъ, Н. В. Материалы къ микроскопическому изслѣдованію кровеносной системы хилуса, синуса и корковаго слоя почекъ нашихъ домашнихъ млекопитающихъ животныхъ и отчасти чловѣка. [Beiträge zum makroskopischen Studium des blutführenden Systems des Chilus, des Sinus und der Rindenschicht der Niere unsrer Haussäugetiere und z. T. des Menschen.] Kazan' Zap. veterin. Inst. 28 1912 (509-558); 1912 (233-293). 422
- Raspail, Xavier. Le mélanisme chez les Rongeurs. Bul. Muséum Paris 1912 (283-287). 423
- Rathery, Fr. *vide* Mayer, André.
- Ray, G. D. W. and Walker, E. W. Ainley. The size of the aorta in Warm-blooded Animals, and its relationship to the body-weight and to the surface-area expressed in a formula. London Proc. R. Soc. ser. B 86 1912 (39-56). 424
- Ray, G. D. W. and Walker, E. W. Ainley. The size of the trachæa in Warm-blooded Animals, and its relationship to the weight, the surface-area, the blood-volume, and the size of the aorta. London Proc. R. Soc. ser. B 86 1912 (56-65). 425
- Read, J. Marion. Observations on the suckling period in the Guinea-pig. Berkeley Cal. Univ. Cal. Pub. Zool. 9 1912 (341-351). 426
- Reichenau, W. von. Einiges über Schädel und Gebiss der Biber (*Castorinae*). Wiesbaden Jahrb. Nassau Ver. 65 1912 (208-226) Taf. iii iv. 427
- Retterer, Ed. et Lelièvre, Aug. Du tendon réfléchi du long péronier latéral du Chimpanzé. Paris C. R. soc. biol. 72 1912 (154-156). 428
- Retterer, Ed. et Lelièvre, Aug. Du pied et du tendon du long péronier latéral d'un jeune Orang-outang. Paris C. R. soc. biol. 72 1912 (237-240). 429
- Retterer, Ed. et Lelièvre, Aug. Développement et structure des os du cœur de quelques Ruminants. Paris C. R. soc. biol. 72 1912 (371-373). 430
- Retterer, Ed. et Neuville, H. Squelette cardiaque d'un vieil Ours. Paris C. R. soc. biol. 72 1912 (492-495). 431
- Retterer, Ed. et Vallois, H. De la double rotule de quelques Primates. Paris C. R. soc. biol. 72 1912 (379-382). 432 73
- Retterer, Ed. et Vallois, H. De la double rotule chez quelques Rongeurs. Paris C. R. soc. biol. 72 1912 (410-413). 433 73
- Retterer, Ed. et Vallois, H. De la rotule et du genou des Chéiroptères. Paris C. R. soc. biol. 72 1912 (450-453). 434 73
- Retterer, Ed. *vide* Kohlbrugge, J. F. H.

- Retzius, Gustaf.** Über das Verhalten der sich entwickelnden Spermien der Mammalier zu der Biondifärbung. [In: Retzius, Biolog. Untersuchungen, N.F. XVI.] Jena 1911 (65-68) 2 Taf. 435
- Retzius, G.** Die Spermien des Schimpansen. [In: Retzius, Biolog. Untersuchungen, N.F. XVI.] Jena 1911 (79-81) Taf. 436
- Retzius, G.** Spermien ostafrikanischer Tiere. Während der Lönningerschen Expedition eingesammelt. [In: Retzius, Biolog. Untersuchungen N.F. XVI.] Jena 1911 (82-88) 2 Taf. 437
- Retzius, G.** Zur Kenntnis des Geschmacksorgans beim Kaninchen. [In: Retzius, Biolog. Untersuchungen, N.F. XVII.] Jena 1912 (72-80) Taf. 438
- Retzius, G.** Blick auf die jetzige Kenntnis der Spermienformen der Primaten. [In: Retzius, Biolog. Untersuchungen, N.F. XVII.] Jena 1912 (100-108) 2 Taf. 439
- Reusch, Paul.** Untersuchungen über die Eichelgrube des Pferdes, ihren Inhalt und ihre klinischen Veränderungen. Borna-Leipzig 1912 (1-41). 440
- †**Reynolds, Sidney H.** A monograph of the British Pleistocene Mammalia vol. ii pt. 4 the *Mustelidae*. London Palaeontographical Society (1911) 1912. 441
- Ribbing, I. und Hermansson, K.** Kleinere Muskelstudien. 3. Die distale Extremitätenmuskulatur eines Schimpansen. Lund Univ. Årsskr. N.F. 8 Afd. 2 No. 3 [= Fysiogr. Sällsk. Handl. N.F. 23 No. 8] 1912 (9). 442
- Ribeiro, Alipio de Miranda.** Zwei neue Affen unserer Fauna, Brasil. Rundschau Rio de Janeiro 1912 (21-23). 443
- Richter, Hans.** Beitrag zur Anatomie der Iris des Pferdes mit besonderer Berücksichtigung der durch die Gestalt der Pupille gegebenen regionären Verschiedenheiten und der Veränderungen beim Pupillenspiel. Arch. vergl. Ophthalm. Leipzig 2 1911 (327-364) Taf. 444
- †**Riggs, Elmer S.** New or little-known Titanotheres from the Lower Uinta formations. Chicago Field Mus. Geol. Publ. 4 1912 (17-41) pls. iv-xii. 445
- Rio, H. Alcade del, Breuil, l'Abbé Henri et Sierra, Père Lorenzo.** Les Cavernes de la Région Cantabrique (Espagne). Monaco 1912 (1-265) pls. 446
- Risting, Sigurd.** Knølhvalen. [Megaptera boöps.] Bergen Norsk Fisket. 31 1912 (437-449). 447
- Robinson, Herbert C.** On new Mammals from the islands of the Johore Archipelago. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (589-595). 448
- Rörig, Georg.** Beiträge zur Biologie der Mäuse. Berlin Mitt. biol. Anst. 12 1912 (22-25). 449
- Rörig, G.** Über einen Hasen-Kaninchenbastard aus freier Wildbahn. D. Jägerztg Neudamm 58 1912 (601-607 etc.) Taf. 450
- Rossi, Ottorino.** Sulla fine struttura del bulbo olfattorio [dei Mammiferi]. Riv. patol. ment. nerv. Firenze 12 1907 (62-72). 451
- †**Roth, Santiago.** Un nuevo género de la familia *Megatheriidae*. [A new genus of the family *Megatheriidae*.] Rev. Mus. La Plata Buenos Aires 18 1912 (7-21). 451a
- Rubaschkin, W.** Zur Lehre von der Keimbahn bei Säugetieren. Über die Entwicklung der Keimdrüsen. Anat. Hefte Wiesbaden Abt. 1 46 1912 (343-408) 7 Taf. 452
- Ruge, Georg.** Grenzlinien der Ploura-Säcke beim Orang. Morph. Jahrb. Leipzig 44 1912 (371-402). 453
- Sallač, W.** Die Kronenhirsche und die Mendel'schen Gesetze. VerSchr. ForstJagdNatkd Prag 1911-12 (537-576 617-646); 1912-13 (3-18 65-88). 454
- Salvesen, Theodore E.** The Whaling industry of to-day. London J. R. Soc. Arts 60 1912 (515-522). 455
- Santa-Maria, A. S. de. vide Anthony, R.**
- [**Satunin, K. A.**] Сатунинъ, К. А. Животный миръ. Муганская степь. I, 3. [Die Tierwelt der Muga-Steppe. I, 3.] Tiflis [Verwaltung des Uebersiedlerwesens im Kaukasus] 1912 (i-iii + 1-85) Taf. 456
- Schaefer, P.** Über helle und trübe Muskelfasern beim Pferd. Frankfurt

- a. M. Abh. Senckenb. Ges. 31 1912 (173-188) Taf. 457
- Schaeffer, Georges *vide* Mayer, André.
- Scharff, Robert Francis. Distribution and Origin of Life in America. London 1911 1912 (xvi + 497). 458
- Schauder, Wilhelm. Untersuchungen über die Eihäute und Embryotropie des Pferdes. Arch. Anat. Physiol. Leipzig Anat. Abt. 1912 (259-302) 2 Taf. 459
- Schildwächter, Johannes Wilhelm. Histologische Untersuchungen über den Ciliarmuskel von Pferd, Schwein und Schaf. Freiburg 1911 (1-42) 6 Taf. 460
- Schlesinger, Günther. Studien über die Stammesgeschichte der Proboscider. Wien Jahrb. Geol. Reichs. 62 1912 (87-182) pls. vi-vii. 461
- †Schlesinger, G. Ueber den Fund einer ostindischen Ahnenform der Elefanten in Niederösterreich. Wien Verh. ZoolBot. Ges. 62 1912 2 Heft. (55). 462
- Schmid, Georg. Die angeblichen Gorillas in Hannos Bericht. Zool. Ann. Würzburg 5 1912 (67-71). 463
- †Schmidtgen, O. Die Scapula von *Halitherium schinzi*. Centralbl. f. Min. Berlin 1911 (221-223). 464
- Schmidtgen, O. Neue Beiträge zur Kenntnis der hinteren Extremität von *Halitherium schinzi* Kaup. Zool. Jahrb. Jena 1912 Suppl. 15 2 (457-498) Taf. xxix. 465
- Schouteden, H. Note sur la Girafe du Congo. Rev. Zool. Africaine Bruxelles 2 1912 (134-137). 466
- Schouteden, H. Note sur un Potamochère. Rev. Zool. Africaine Bruxelles 2 1912 (138-141). 467
- Schulze, Franz Eilhard. Die Erhebungen auf der Lippen- und Wangenschleimhaut der Säugetiere. I. Ruminantia. Berlin SitzBer. Ak. Wiss. 1912 (510-521) 3 Taf. 468
- Schumacher, Siegmund v. Bau, Entwicklung und systematische Stellung der Blutlymphdrüsen. Arch. mikr. Anat. Bonn. 81 Abt. 1 1912 (92-150) 2 Taf. 469
- Schwalbe, G. Mitteilungen über die Haare, besonders über ihre Richtung. Mitt. philomath. Ges. Strassburg 4 H. 4 1912 (517-531). 470
- Schwarz, Ernst. On a new Palm-Civet from Timor. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (131-132). 471
- Schwarz, E. Notes on Malay Tigers, with description of a new form from Bali. Ann. Mag. Nat. Hist. London ser. 8 10 1912 (324-326). 472
- Schwarz, E. Beiträge zur Kenntnis der Zebras. Arch. Natg. Berlin 78 Abt. A H. 7 1912 (34-57) 6 Taf. 473
- †Scott, William B. Mammalia of the Santa Cruz beds. Part 2. Toxodontia. Rep. Princeton University Expeditions to Patagonia, 1896-99. Princeton N.J. 6 (Palaeontology) Part 2 1912 (111-238) pls. xii-xxvii. 474
- †Scott, W. B. Mammalia of the Santa Cruz beds. Order Toxodontia. Rep. Princeton University Expeditions to Patagonia, 1896-99. Princeton N.J. 6 (Palaeontology) 1912 (287-300). 475
- †Scott, W. B. Mammalia of the Santa Cruz beds. Part 3. Entelonychia. Rep. Princeton University Expeditions to Patagonia, 1896-99. Princeton N.J. 6 (Paleontology) Part 3 1912 (239-286) pls. xxviii-xxx. 476
- Sedlacek, Stephan. Über Plazentartbildung bei Antilopen. Anat. Hefte Wiesbaden Abt. 1 46 1912 (573-598) Taf. 477
- †Seife, Ivar. Die fossilen Pferde Südamerikas. Uppsala K. Svenska Vet.-Ak. Handl. 48 No. 6 1912 (1-183) 3 Taf. 478
- [Sepp, E. K.] Сеппъ, Е. К. О строении и связях передняго двухолмия кролика. Дисс. [Ueber den Bau des vorderen Zweihügels und dessen Bahnen bei dem Kaninchen. Diss.] Moskva 1911 (1-25) 13 Taf. 479
- Shortridge, G. C. Notes on the time of appearance and flight of Eastern Bats. Bombay. J. Nat. Hist. Soc. 21 1912 (1321). 480
- Sicher, Harry. Die Entwicklungsgeschichte der Kopfarterien von *Talpa europaea*. Morph. Jahrb. Leipzig 44 1912 (465-487) 3 Taf. 481
- Sierra, Père Lorenzo *vide* Rio, H. Alcade del, Breuil, l'Abbé Henri et Sierra, Père Lorenzo. 482

- †Simonelli, V. Avanzi di *Tursiops* di Pliocene Senese. Bologna Mem. Acc. sc. ser. 6 8 1911 (249-260) taf. 483
- Skoda, K. Die sogenannten Tubercula pharyngea der Haussäugetiere und die Ansatzverhältnisse der Kopfbeugemuskeln an der Schädelbasis. Anat. Anz. Jena 42 1912 (33-47). 484
- Smith, G. Elliot. The origin of Mammals. Rep. Brit. Assoc. London 1911 1912 (424-425). 485
- Smith, T. Manners *vide* Manners-Smith, T.
- Söderlund, Hans. Beiträge zur Kenntnis der Histologie der serösen Häute von *Felis domestica*. Dresden 1912 (1-75) Taf. 486
- †Soergel, W. *Rangifer cf. tarandus* Gray aus den Schottern von Süßenborn bei Weimar. Centralbl. f. Min. Berlin 1911 (625-627). 487
- †Soergel, W. Das Aussterben diluvialer Säugetiere und die Jagd des diluvialen Menschen. (Festschr. zur 43. allg. Vers. d. D. Anthropol. Ges. H. 2.) Jena 1912 (iv + 81) 3 Taf. 488
- Sokolowsky, Alexander. Aus der Biologie der Elefantenröbber. Prometheus Berlin 23 1912 (409-413). 489
- Sowerby, A. de C. Mammals of Northern China in R. S. Clark and A. de C. Sowerby's "Through Shên-Kan; an Account of the Clark Expedition in North China 1908-9." London 1912 (1-239). 490
- Spencer, Baldwin. Description of a new species of *Sminthopsis*. Melbourne Proc. R. Soc. Vict. ser. 2 21 1909 (449-451). 491
- Sperino, Giuseppe e Balli, Ruggero. L'encefalo del *Dasyprocta aguti* (L.) in rapporto a quello di altri Roditori. Modena Mem. Acc. ser. 3 10 1912 (3-62) 3 tav. 492
- Sprinz, O. Über die Glandula caudalis bei *Cavia cobaya*. Derm. Wochenschr. Leipzig 55 1912 (1371-1380). 493
- Staurengi, Cesare. Esistenza costante del fonticulus orbitalis nel feto dell' *Equus caballus* ed ossicino fontanelle corrispondente in un *E. caballus* adulto, omologo coll'os prefrontale dei Rettili. Gazz. med. lomb. Milano 66 1907 (357-358). 494
- Staurengi, C. Comunicaz. prev. di craniologia comp. Fessura bregmatica lateralis in varie specie dei Mammiferi. Gazz. med. lomb. Milano 66 1907 (46-47). 495
- Staurengi, C. Comunicazioni prev. di craniologia comparata. Processi petrosi dorsopostsfenoidi e sutura interpetrosa in una specie di Antilopinae (*Madoqua saltiana*). Duplicità frequente dello squamoso nella *Ourebia montana*. Gazz. med. lomb. Milano 65 1906 (301-302). 496
- Staurengi, C. Note prev. di craniologia comparata. I. Duplicità dei nuclei ossificatori del nasale nell' *Ovis aries* e nel *Sus scrofa dom.* II. Foramen dorsi sellae nell' *Hapale penicillata*. Gazz. med. lomb. Milano 65 N. 7 1906 (61-62). 497
- Stefanelli, Augusto. Sulle espansioni nervose de peli tattili. Archivio zool. Napoli 6 1912 (325-348) 3 tav. 498
- †Stefanini, G. Mammiferi Terrestri del Miocene Veneto. Padova Mem. Ist. Geol. 1 1912 (267-318) Tav. 499
- Stegmann, P. Studien über das aufrechthörnige Rind (*Bos orthoceros*). Jahrb. wiss. Tierzucht Hannover 7 1912 (37-65). 500
- †Stehlin, H. Die Säugetiere des Schweizerischen Eocaens: vii *Adapis*. Zürich Abh. Schweiz. pal. Ges. 38 1912 (1165-1208). 501
- Steinberg, Hélène. Description de l'organe de Jacobson chez un fœtus de Chat. Anat. Anz. Jena 42 1912 (466-472). 502
- Steinmann, G. Über die Ursache der Asymmetrie der Wale. Anat. Anz. Jena 41 1912 (45-54). 503
- Stricht, O. Van der. Sur le mécanisme de la fixation de l'œuf de la Chauve-Souris (*V. noctua*) dans l'utérus. Paris C. R. ass. anatomistes 13 1911 (1-9). 503a
- [Suvorov, E. K.] Суворовъ, Е. К. Командорскіе Острова и пушной промыселъ на нихъ. [Die Komandor-Inseln und ihre Pelztierjagd.] St. Petersburg (Depart. d. Landwirtschaft.) 1912 (1-34). 504
- Swarth, Harry S. Report on a collection of Birds and Mammals from Vancouver Island. Berkeley Cal. Univ.

- Calif. Zool. Pub. 10 1912 (1-124)
pls. i-iv. 505
- Swarth, H. S. *vide* Grinnell, J.
- Taft, A. E. On the brain of *Hyrax capensis* and the first traces of the visual cortex. *Folia Neurobiologica Haarlem* 6 1912 (182-195) pl. 506
- Tandler, Julius. Einfluss der Geschlechtsdrüsen auf die Geweihbildung bei Rentieren. *Wien Anz. Ak. Wiss.* 1910 (252-257). 507
- Tandler, Julius u. Grosz, Siegfried. Über den Saisondimorphismus des Maulwurfhodens. *Arch. EntwMech. Leipzig* 35 1912 (132-134). 508
- Tandler, Julius *vide* Zuckerkandl, Emil.
- Taylor, Walter P. A new *Pero-gnathus* from the San Joaquin Valley, California. *Berkeley Cal. Univ. Cal. Pub. Zool.* 10 1912 (155-166). 509
- Taylor, W. P. The Beaver of West Central California. *Berkeley Cal. Univ. Cal. Pub. Zool.* 10 1912 (167-169). 510
- Terni, Tullio. Contributo alla conoscenza del nucleo mesencefalico del nervo trigemino [embrioni di *Mus rattus*]. *Monit. zool. ital. Firenze* 23 1912 (32-43). 511
- Tesdorpf, Oscar L. Einbürgerung des Muffelwildes (Mouflons) auf dem Europäischen Festlande. *Neudamm* 1910 (1-69). 512
- Thayer, Abbott H. Concealing coloration, an answer to Theodore Roosevelt. *New York N.Y. Bull. Amer. Mus. Nat. Hist.* 31 1912 (313-321). 513
- Thomas, Oldfield. On small Mammals from the Lower Amazon. *Ann. Mag. Nat. Hist. London ser. 8 9 1912* (84-90). 514
- Thomas, O. Notes on *Phascogale* and *Chaetocercus*. *Ann. Mag. Nat. Hist. London ser. 8 9 1912* (91-92). 515
- Thomas, O. Revised determination of two Far-Eastern species of *Myospalax*. *Ann. Mag. Nat. Hist. London ser. 8 9 1912* (93-95). 516
- Thomas, O. A new genus of Opossums and a new Tuco-tuco. *Ann. Mag. Nat. Hist. London ser. 8 9 1912* (239-241). 517
- Thomas, O. Mammals of the Panyam Plateau, Northern Nigeria. II. *Ann. Mag. Nat. Hist. London ser. 8 9 1912* (269-274). 518
- Thomas, O. Two new Asiatic Voles. *Ann. Mag. Nat. Hist. London ser. 8 9 1912* (348-350). 519
- Thomas, O. On Mammals from Central Asia collected by Mr. Douglas Carruthers. *Ann. Mag. Nat. Hist. London ser. 8 9 1912* (391-448). 520
- Thomas, O. On Insectivores and Rodents collected by Mr. F. Kingdon Ward in N.W. Yunnan. *Ann. Mag. Nat. Hist. London ser. 8 9 1912* (513-519). 521
- Thomas, O. List of a third collection of Mammals from Panyam, N. Nigeria, presented by the Rev. G. T. Fox. *Ann. Mag. Nat. Hist. London ser. 8 9 1912* (683-686). 522
- Thomas, O. New species of *Crocidura* and *Petaurista* from Yunnan. *Ann. Mag. Nat. Hist. London ser. 8 9 1912* (686-688). 523
- Thomas, O. Mammals from the Ja River, Cameroons. *Ann. Mag. Nat. Hist. London ser. 8 10* (41-43). 524
- Thomas, O. Small Mammals from South America. *Ann. Mag. Nat. Hist. London ser. 8 10* (44-48). 525
- Thomas, O. A new Vespertilionine Bat from Angola. *Ann. Mag. Nat. Hist. London ser. 8 10 1912* (204-206). 526
- Thomas, O. Two new species of *Nasua*. *Ann. Mag. Nat. Hist. London ser. 8 10 1912* (228-230). 527
- Thomas, O. Two new West African Mammals. *Ann. Mag. Nat. Hist. London ser. 8 10 1912* (280-282). 528
- Thomas, O. On a collection of small Mammals from the Tsin-ling Mountains, Central China, presented by Mr. G. Fenwick Owen to the National Museum. *Ann. Mag. Nat. Hist. London ser. 8 10 1912* (395-403). 529
- Thomas, O. New Bats and Rodents. *Ann. Mag. Nat. Hist. London ser. 8 10 1912* (403-411). 530
- Thomas, O. Two new races of Mongoose. *Ann. Mag. Nat. Hist. London ser. 8 10 1912* (588-589). 531
- Thomas, O. New *Centronycteris* and *Ctenomys* from S. America. *Ann.*

- Mag. Nat. Hist. London ser. 8 10 1912 (638-640). 532
- Thomas, O. The Duke of Bedford's zoological exploration of Eastern Asia—xv. On Mammals from the provinces of Sze-chwan and Yunnan, Western China. London Proc. Zool. Soc. 1912 (127-141). 533
- Thomas, O. The races of the European Wild Swine. London Proc. Zool. Soc. 1912 (390-393). 534
- Thomas, O. Two new genera and a new species of Viverrine Carnivora. London Proc. Zool. Soc. 1912 (498-503). 535
- Thomas, O. The generic names *Cercomys* and *Proechimys*. Washington D.C. Proc. Biol. Soc. 25 1912 (115 116). 536
- Thomas, O. The technical name of the Tasmanian Devil. Washington D.C. Proc. Biol. Soc. 25 1912 (116). 537
- Thomas, O. Descriptions of two Giant Rats from New Guinea presented to the British Museum by the Hon. Walter Rothschild. Nov. Zool. Tring 19 1912 (91 92). 538
- Thyng, Fred W. The anatomy of a 7.8 mm. Pig-embryo. Anat. Rec. Philadelphia 5 1911 (17-45). 539
- Todd, T. Wingate and C. G. The sterno- and brachiocephalic muscles and their nerve-supply, with special reference to the Ungulata. Anat. Anz. Jena 42 1912 (71-79). 540
- Todd, Wingate. The hinder end of the brachial plexus in Man and Mammals. Anat. Anz. Jena 42 1912 (129-144). 541
- Toldt, Karl. Beiträge zur Kenntnis der Behaarung der Säugetiere. Zool. Jahrb. Jena Abt. f. Syst. 33 1912 (9-86) 2 Taf. 542
- Toldt, K. Epidermisstreifen, Haarreihen- und Wildzeichnung in der Entwicklung der Hauskatze. Wien Verh. Zool.-bot. Ges. 1912 (16-27). 543
- Toldt, K. Über die eigenartige Beschaffenheit des Oberhäutchens der rinnenförmigen Borstenstacheln von *Platacanthomys lasiurus* Blyth. Wien Verh. Zool.-Bot. Ges. 1912 (29-31). 544
- Toldt, K. Über längsgefurchte Säugertierhaare. Wien Verh. Zool.-Bot. Ges. 1912 (31-34). 545
- Torraca, L. Sulle arteriolae rectae del rene dei Mammiferi. Monit. zool. ital. Firenze 23 1912 (276-283). 546
- Townsend, Charles Haskins. The Northern Elephant-Seal, *Macrorhinus angustirostris*, Gill. Zoologica New York N.Y. 1 1912 (159-173). 547
- Townsend, C. H. Mammals collected in Lower California, with descriptions of new species. New York N.Y. Bull. Amer. Mus. Nat. Hist. 31 1912 (117-130) pls. viii ix. 548
- Tretjakoff, D. Das Auge vom Renntier. Intern. Monatschr. Anat. Leipzig 29 1912 (150-201) Taf. 549
- Trouessart, E. L. Primates nouveaux de la collection du Muséum. Nouv. Arch. Muséum Paris sér. 5 4 1912 (267-284) pls. i-v. 550
- †True, Frederiek W. The genera of fossil Whalebone Whales [allied to *Balaenoptera*. Washington D.C. Smithsonian. Misc. Collect. 59 No. 6 1912 (1-8). 551
- †True, F. W. A fossil Toothed Cetacean from California [representing a new genus and species. Washington D.C. Smithsonian. Misc. Collect. 60 No. 11 1912 (1-7) 2 pls. 552
- †True, F. W. Description of a new fossil Porpoise of the genus *Delphinodon* from the Miocene formation of Maryland. Philadelphia J. Ac. Nat. Sci. ser. 2 15 1912. 553
- †True, F. W. Marine Mammals. [Symposium on ten years' progress in vertebrate palæontology.] Bull. Geol. Soc. Amer. Washington D.C. 23 1912 (197-200). 554
- †True, F. W. On the correlation of North American and European genera of fossil Cetaceans. (Abst.) Proc. vii Intern. Zool. Cong. Cambridge Mass. 1912 (779-781), 555
- Tschachmachtschjan, Haikandueht. Über die Pectoral- und Abdominalmuskulatur und über die Sealenus-Gruppe bei Primaten. Eine vergleichend morphologische Untersuchung. Morph. Jahrb. Leipzig 44 1912 (297-370). 556

- Tsukaguchi, Risaburo.** Zur Entwicklungsgeschichte der Ziege (*Capra hircus*). Beiträge zur Entwicklung der Wiederkäuer. Anat. Hefte Wiesbaden Abt. 1 46 1912 (413-492) 7 Taf. 557
- Tur, Jan.** Sur l'origine et la zone pellucide des œufs des Mammifères. Paris C. R. soc. biol. 72 1912 (336-337). 558
- Turner, Sir William.** The Marine Mammals in the Anatomical Museum of the University of Edinburgh. London 1912 (xv+207). 559
- Ueckermann, Adolf.** Untersuchungen über die Gesichtsmuskulatur der Xenarthra. Zs. wiss. Zool. Leipzig 102 1912 (377-424) 2 Taf. 560
- Ulkan, G.** Die Entwicklung der Fundusdrüsen im Magen des Schweines. Anat. Anz. Jena 41 1912 (78-80). 561
- Vallois, H. vide Rotterer, Ed.**
- Vanzetti, Ferruccio.** Sulla presenza di tessuto cartilagineo nel cuore di Coniglio. Archivio sc. med. Torino 35 1911 (171-187) tav. 562
- Vasticar, E.** Sur la structure des piliers internes de l'organe de Corti. Paris C. R. Acad. sci. 154 1912 (135-138). 563
- Vasticar, E.** Sur la structure de la cellule de Deiters. Paris C. R. Acad. sci. 154 1912 (1538-1540). 564
- Veith, A.** Beiträge zum Studium der Maxillarbezahnung der Hippiden. Arch. Natg. Berlin 78 Abt. A. H. 5 1912 (1-33) 2 Taf. 565
- Vermeulen, H. A.** Over het niet constant zijn van den bouw van het dierlijk lichaam. Atavisme en evolutie. [Ueber die Inkonzanz des Baues des tierischen Körpers, Atavismus und Evolution.] Tijdschr. Vecarts. Utrecht 39 1912 (303-308). 566
- [Vlasov, N. M.] Власовъ, Н. М.** Synchrondrosis позвоночника лошади. [Die Synchrondrose der Wirbelsäule des Pferdes.] Kazanĭ Zap. veterin. Inst. 29 1912 (401-467). 567
- Voelker, Otomar et Ostrčil, Antonín.** Vývin uteru sysla za březnosti. Histogenesa jeho placenty a zárodečných blan. I. Změny uteru před placentačí. [Uterusveränderungen bei *Spermophilus* in der Gravidität. Histogenese der Placenta und Eihäute. I. Uterus-
- veränderungen vor der Placentation.] Prag Rozpr. Česká Ak. Frant. Jos. 19 1910 No. 7 (1-31) 2 Taf. 568
- Voelker, Otomar et Ostrčil, Antonín.** Vývin uteru sysla v březnosti. II. Začátky placentace. [Graviditätsveränderungen des Uterus bei *Spermophilus*. II. Anfänge der Placentation.] Prag Rozpr. Česká Ak. Frant. Jos. 19 1910 No. II. (1-3) 3 Taf. 569
- Voelker, Otomar et Ostrčil, Antonín.** Vývin uteru sysla v březnosti. III. Plně vyvinutá placenta a konečné doby březnosti. [Graviditätsveränderungen des Uterus bei *Spermophilus*. III. Vollentwickelte Placenta und Endstadien der Gravidität.] Prag Rozpr. Česká Ak. Frant. Jos. 19 1910 No. 31 (1-29) 3 Taf. 570
- Vogel, Johann.** Ein Fall von Polydaktylie bei einem Fohlen. Wien Tierärztl. ZentrBl. 35 1912 (214). 571
- Voit, Max.** Das Primordialeranium des Kaninchens unter Berücksichtigung der Deckknochen. Anat. Hefte Wiesbaden Abt. 1 38 1909 (425-616) mit 16 Taf. 572
- [Vradij, V. P.] Врадій, В. П.** Замѣтка о ново-земельской пеструшкѣ или леммингѣ (*Mus lemmus*). [Notiz über den Lemming von Novaja Zemlja.] Priroda i ochota Moskva 40 1912 2 (191-194). 573
- Vram, Ugo.** Su di un *Cercopithecus diana* Erxl. Roma Boll. Soc. zool. ital. ser. 3 1 1912 (312-322). 574
- Vries, J. de.** Ueber die Zytoarchitektur der Grosshirnrinde der Maus und über die Beziehungen der einzelnen Zellschichten zum Corpus callosum auf Grund von experimentellen Läsionen. Folia Neurobiologica Haarlem 6 1912 (289-322). 575
- [Vrublevskij, K.] Врублевскій, К.** Теоретическая дифференцировка некоторых жвачных на древесноядных (Fruticivora) и травоядных (Herbivora) и практическое ея значение. [Theoretische Differenzierung einiger Wiederkäuer in Holzfresser (Fruticivora) und Grasfresser (Herbivora) und ihre Bedeutung für die Praxis.] Arch. veterin. nauk St. Peterburg 42 1912 (746-778). 576
- Waite, Edgar A.** Notes on three notable New Zealand Whales. Rec.

- Canterbury Mus. Christchurch N.Z. 1
1912 (323-328) pls, lix-lxiii. 577
- Walker, E. W. Ainley *vide* Ray,
G. D. W.
- Walther, Ad. R. Studien über
Vererbung bei Pferden. Zs. induct.
Abstammungslehre Berlin 6 1912
(238-244). 578
- Walther, Ad. R. Beiträge zur
Kenntnis der Vererbung der Pferde-
farben. Hannover 1912 (v+73)
6 Taf. 579
- Weber, Ew. Das Przewalski-Wild-
pferd. Zs. Tiermed. Jena 16 1912 (179-
192). 580
- Weber, D. *vide* Argaud, R.
- Weber, Max. Seltene Cetaceen an
der Niederländischen Küste. Leiden
Tijdschr. Ned. dierk. Ver. ser. 2 12
1912 (215-221). 581
- Wegner, Martin. Mund- u. Rachen-
verhältnisse bei neugeborenen Carni-
voren im Vergleich zum erwachsenen
mit besonderer Berücksichtigung der
physiologischen Vorgänge, die sich bei
der Atmung und Nahrungsaufnahme
abspielen. Arch. Natg. Berlin 78
Abt. A H. 1 1912 (1-26) 2 Taf. 582
- Welker, Friedrich. Anthropologische
Untersuchungen über das Atlanto-
occipitalgelenk bei Menschen und Affen.
München (Natur u. Kultur) 1912 (iii+
94). 583
- Wichmann, S. E. Über die Ent-
stehung der Urogenitalverbindung und
die Bedeutung der Müllerschen Genital-
gänge bei den Säugetieren. Anat.
Hefte Wiesbaden Abt. 1 45 1912
(629-702) 5 Taf. 584
- Wiley, Arthur. Foetal membranes
of the American Beaver (*Castor*
canadensis). Zool. Jahrb. Jena 1912
Suppl. 15 Bd. 2 (191-218). 585
- Williams, Geoffrey. An unknown
animal on the Uasingishu. London
Journ. E. Africa & Uganda Nat. Hist.
Soc. 2 1912 (123-125). 586
- Williams, Leonard W. The inter-
tubercular or bicipital foramen of the
humerus of the Guinea-pig. Science
New York N.Y. ser. 2 36 1912 (192).
587
- Wilson, W. Biology of Cattle. Verh.
viii intern. ZoolKongr. Jena 1910 (939-
948) 1912. 588
- Winans, Walter. Deer Breeding for
Fine Heads, with Descriptions of many
Varieties and Cross-breeds. London
1912 (xii+105). 589
- Wittmaack, Karl. Über das Bogen-
gangssystem der Tanzmäuse. Verh.
D. otol. Ges. Jena 21 1912 (235-
238). 590
- Woltereck, R. *vide* Behning, A.
- †Woodward, A. Smith. On some
Mammalian teeth from the Wealden
of Hastings. London Q. J. Geol.
Soc. 67 1911 (278-281). 591
- Woodward, A. Smith *vide* Dawson,
Charles.
- Wroughton, R. C. Some new Indian
Rodents. Bombay J. Nat. Hist. Soc.
21 1912 (338-342) pl. 592
- Wroughton, R. C. Bombay Natural
History Society's Mammal Survey of
India. Bombay J. Nat. Hist. Soc. 21
1912 (392-410 825-851 1170-1195)
pl. 593
- Wroughton, R. C. Some new Indian
Mammals. Bombay J. Nat. Hist.
Soc. 21 1912 (707-773). 594
- †Wurm, A. Beiträge zur Kennt-
nis der diluvialen Säugetierfauna
von Mauer a. d. Elsenz (bei Heidel-
berg). I. *Felis leo fossilis*. Jahres-
ber. oberrhein. geol. Ver. Stutt-
gart ser. 2 1912 (77-102) 3 Taf. 595
- †Wurm, A. Über *Rhinoceros*
etruscus Falco. von Mauer a. d. Elsenz
(bei Heidelberg). Heidelberg Verh.
nathist. Ver. 12 1912 (1-62) 4 Taf.
596
- Zimmermann, A. Ueber das Epi-
sternum der Schafe. Anat. Anz. Jena
40 1912 (646-651). 597
- Zuckermandl, Emil und Tandler,
Julius. Ueber die Extremitäten-
arterien des afrikanischen Elefanten.
Wien SitzBer. Ak. Wiss. Abt. 3 120
1911 (315-329) Taf. 598
- †Zuffardi, Pietro. L'*Elephas anti-*
quus Falco. nella filogenesi delle forme
Elefantine fossili. Roma Atti Acc.
Lincei ser. 2 21 1912 (298-304). 599
- [Žurin, S.] Журичь, О. Обь од-
номъ изъ типовъ норъ „крапчатого
суслика.“ [Ueber einen Typus der
Höhlen des „getüpfelten“ Ziesels.]
Choziajstvo Kiev 7 1912 (245-247).
600

II.—SUBJECT INDEX.
6003 to 6027

N.B.—For full References go to Titles.
COMPREHENSIVE AND GENERAL.

6003

Treatises, Text-Books, etc.

Catalogue European Mamm.;
Miller, 351.

Catalogue Bats; Andersen, 21.

Herkunft europäischen Haustier-
welt; Keller, 254.

Animals of Ancients; Keller, 255.

Inhalt und Erscheinungszeiten des
Schreber'schen Säugetierwerkes; Poche,
411.

Institutions, Collections.

List. U.S. Nat. Mus; Miller, 359.

Cetacea Edinburgh Univ. Mus.;
Turner, 559.

Preparing skins, etc.; Miller, 358.

Condition of American Bison herds;
Anon., 32.

Rare Mammals in Washington Zool.
Park; Baker, 52.

Domestication.

Domesticated Horses, Oxen and
Sheep; Lydekker, 305-307.

Chinesische Haustiere; Noack, 390.

Domestication by ancient Egyptians;
Gaillard, 158.

Economics.

Nahrung der Wiederkäuer bei Zucht-
versuchen, Schaden in Wäldern;
Vrublevskij, 563.

Seebären und deren Fang; Suvorov,
504.

Sealing; Jordon and Clark, 245.

Whaling; Salvesen, 455.

Fang von *Megaptera*; Risting, 447.

Miscellaneous.

Extermination Aurochs; Lydekker,
307.

Aussterben diluvialer Säugetiere;
Soergel, 488.

Albert Dürer's pictures of Walrus,
Bison and Elk; Killermann-Regens-
burg, 261.

Die angeblichen Gorillas in Hannos
Bericht; Schmid, 463.

Egyptian "Set" = *Phacochærus*;
Newberry, 387.

Cavern-paintings, etc., Spain;
Rio, Breuil, et Sierra, 446.

Asymmetrie der Wale; Steinmann,
503.

Origin of Mammals; Smith, 485.

Infaney of Animals; Mitchell, 364.

Schädelkapazität in Domestikation;
Klatt, 267.

Inkonstanz im Bau des tierischen
Körpers; Vermeulen, 563.

Verfälschte Anpassungen bei fossilen
Wirbeltieren; Abel, 4.

Age of Roe by teeth, etc.; Nehring,
381.

Mobility of Rhinoceros horns;
Pocock, 415.

Immunity to Snake-bite; Mosse,
376.

Immunité du Hérisson vis-à-vis du
vonin de *Heloderma*; Phisalix, 407.

Arctomys bobac und Pest; Čausov,
93.

Evolution de la peste chez la Mar-
motte; Dujardin-Beaumetz et Mosny,
126.

STRUCTURE. 6007

General and Comparative.

Anatomia Animalium domesticorum; Mon-
giardino, 370.

Anatomy African Mammals; Lönn-
berg, 297: *Leptonychotes*; Hepburn,
209: Pig-embryo; Thyng, 539:
Zaglossus; Allen, 14: Whales (especi-
ally soft parts and homology of
valves); Freund, 143.

Histology.

Chondriosomes in cells of Guinea-pig's
pancreas; Arnold, 44.

Tegument.

Verbindung zwischen Epidermis und
Cutis; Nonnenbruch, 391.

Apparate des Gefühlssinnes der
nackten und behaarten Säugetierhaut;
Botezat, 71.

Histologie der serösen-Häute (*Felis*);
Söderlund, 486.

- Haare, besonders ihre Richtung; Schwalbe, 470.
- Peli tattili loro espansioni nervose; Stefanelli, 498.
- Haar; Friedenthal, 151.
- Behaarung; Toldt, 542.
- Epidermisstreifen u. Haarreihen Hauskatze; Toldt, 543.
- Borstenstacheln *Plalacanthomys*; Toldt, 544.
- Längsgefurchte Haare; Toldt, 545.
- Ventralen Tasthaare der Eichhörnchen; Bresslau, 77.
- Spürhaare an der Bauchseite *Sciurus*; Bresslau, 79.
- Haut des Schweines; Kränzle, 277.
- Schuppenreste *Sirenia*; Kressmann, 278.
- Hautdrüsen; Brinkmann, 80.
- Muqueuse linguale Dauphin; Argaud et Weber, 40, 41.
- Mammarapparates der Monotremen, Marsupialier und einiger Placentalier; Bresslau, 76.
- Brustdrüsen; Bresslau, 78.
- Geweihbildungen; Kowarzik, 274.
- Growth of antlers and homology of branches; Pocock, 414.
- Nervous System and Sense-Organs.**
- Elementi del sistema nervoso centrale; Gemelli, 162.
- Système nerveux Dauphin; Legendre, 286.
- Poids encéphalique Mammifères Amphibies; Lapique, 283.
- Cerveau et l'évolution morphologique du pallium; Anthony et Santa-Maria, 36.
- Gehirn *Felis* u. *Canis*; Morawski, 372.
- Fehlen der Epiphysis cerebri; Creutzfeldt, 107.
- Beziehungen zwischen Gehirn und Schädel Affen; Leche, 285.
- Myéliarchitecture de l'écorce du cerveau Lémuriciens; Préda, 421.
- Solchi cerebrali Viverridi; Angelotti, 30.
- Brain: *Hyrax*; Taft, 506.
- Grosshirnrinde Maus; Vries, 575.
- Histologie Grosshirnrinde; Mayer, 340.
- Innervazione della tenda cerebellare; Mobilio, 365.
- Ontogenie der Kerne Zwischenhirns Kaninchen; Droogleever Fortuyn, 124.
- Hirn *Halicore*; Dexler, 118.
- Corpo pineale *Macacus*; Cutore, 110.
- Bandelette ensiforme; Argaud, 38.
- Hirnfurchung *Canis*; Hoenig, 221.
- Encefalo *Dasyprocta* e alti Roditori; Sperino e Balli, 492.
- Epiphysis *Didelphys*; Jordan, 246.
- Bau des vorderen Zweihügels und dessen Bahnen; Sepp, 479.
- Rückenmark *Halicore*; Dexler, 117.
- Brachial plexus; Todd, 541.
- Nervo ipoglosso; Luna, 304.
- Nervus laryngeus inferior *Auchenia*; Elze, 128.
- Innervazione muscolo accessorio grande obliquo *Equus*; Mobilio, 368.
- Innervation des Herzens; Michailow, 349.
- Espansioni nervose dei peli tattili; Stefanelli, 498.
- Bogengangssystem Tanzmäuse; Wittmaack, 590.
- Corpuscoli di Prowazek ed Halberstädter *Primates*; Addario, 7.
- Ohr Hunde; Klimov, 268.
- Ohrknorpel u. Ohr; Boas, 66.
- Cellule de Deiters; Vasticar, 563.
- Piliers internes organe de Corti; Vasticar, 560.
- Gehörorgan von Walen und Sironen; Matthes, 333.
- Decorso delle fibre nervose nei nervi ottici e nel chiasma; Bossalino, 70.
- Nervi membrana del timpano; Gemelli, 163.
- Anatomie der Augen; Franz, 142.
- Entwicklung der Augenhöhlendrüsen; Lcewenthal, 299.
- Nerves of optic muscles; Mobilio, 365.

Innervazione muscolo piccolo obliquo ganglio oftalmico; **Mobilio**, 367.

Auge Renntier; **Tretjakoff**, 549.

Anatomic des Makrochiropteren-anges; **Kolmer**, 272.

Iris Pferdes; **Richter**, 444.

Geschmaeksorgens Kaninehen; **Retzius**, 438.

Nase Primates; **Frets**, 154, 155: **Peter**, 402.

Planum nasale der Hauscarnivoren; **Gylek**, 198.

Bulbo olfattorio; **Rossi**, 451.

Jacobson's organ Primates; **Frets**, 147: **Cat**; **Steinberg**, 502.

Tactile organ in cheek *Scalops*; **Ackert**, 6.

Myology.

Optic muscles innervation; **Mobilio**, 366.

Ciliarmuskel Pferd, Schwein, Schaf; **Schildwächter**, 460.

Gesichtsmuskulatur Xenarthra; **Ueckermann**, 560.

Pectoral- und Abdominalmuskulatur bei Primaten; **Tschachmachtschjan**, 553.

Distale Extremitätenmuskulatur *Troglodytes*; **Ribbing & Hermansson**, 442.

Extremitätenmuskulatur *Tragulus*; **Lübecke**, 304.

Sterno- und brachiocephalic muscles and their nerve-supply; **Todd & Todd**, 540.

Accessoire du grand dorsal *Hapale*; **Ménier**, 344.

Musculus digastricus Primates; **Holl**, 223.

Muscle-fibres and muscle-cells in heart *Mus*; **Baldwin**, 53.

Muscles cardiaques Chien; **Aimé**, 12.

Helle und trübe Muskelfasern Pferd; **Schaefer**, 457.

Tendon réléchi du long péronier latéral Chimpanzé; **Retterer et Lelièvre**, 428.

Osteology.

Osteology and dentition *Adapis*; **Stehlin**, 501: *Mustelidae*; **Reynolds**, 441: *Titanotheriidae*; **Riggs**, 445: *Delphinodon*; **True**, 552: *Ziphiodelphis*; **Bassani & Misuri**, 55.

Squelette cardiaque *Ursus*; **Retterer et Neuville**, 431.

Differenze osteologiche di alcuni *Mus*; **Gay**, 161.

Verwandtschaftsbeziehungen vom Standpunkte der Schädelmorphologie aus erörtert; **Gaupp**, 160.

Sutura parietalis; **Deinse**, 113.

Cranial abnormalities *Papio*; **Anthony**, 34: *Anthropopithecus*; **Patten**, 400.

Obliteration der Nähte am Affenschädel; **Bolk**, 67.

Cranial variation Gazelle; **Miller**, 361.

Absence sagittal crest Gorilla; **Neuville**, 386.

Cranial peculiarities; **Staurenghi**, 497.

Entwicklung des Kopfskelettes Sirenia; **Matthes**, 334.

Primordialeranium Kaninehens; **Voit**, 572.

Os interparietale; **Huene**, 239.

Ossa wormiane o osso lacrimale; **Camerano**, 88.

Sviluppo delle ossa del cranio Primates; **Frassetto**, 143.

Craniology *Ovibos*; **Kowarzik**, 275.

Craniometry *Equidae*; **Osborn**, 395.

Craniology and preorbital depression, Zebra; **Schwarz**, 473.

Schädel u. Gebiss Biber; **Reichenau**, 427.

Craniology and dentition *Chilophylla*; **Miller**, 355.

Schädel *Prosqualodon*; **Abel**, 3.

Morphologie des harten Gaumens; **Freund**, 146.

Fonticulus orbitalis ed ossicino corrispondente (omologo coll'os praefrontale dei Rettili) *Equus*; **Staurenghi**, 494.

Fissura bregmatica lateralis; **Staurenghi**, 495.

- Tubercula pharyngea Haussäugetiere; Skoda, 484.
- Temporal bone; Anderson, 26.
- Mandible; Anderson, 25.
- Unterkiefer *Hylobates* und *Homo*; Gorjanovic-Kramberger, 182.
- Atlanto-occipitalgelenk Primates; Welker, 583.
- Primatenwirbelsäule; Bluntschli, 63.
- Richtung und Gestalt der thoracalen Dornfortsätze der Wirbelsäule; Morita, 374.
- Brustschulterapparates; Fuchs, 153.
- Episternum Schafe; Zimmermann, 597.
- Mechanism of limbs Ungulata; Gregory, 185.
- Eutherian and Marsupial coracoid= posterior ventral element in Monotreme and Anomodont shoulder-girdle; Broom, 85.
- Pied et long péronier latéral *Simia*; Kohlbrugge et Retterer, 269; et Retterer et Lelièvre, 270.
- Symphysis and acetabulum pelvis; Broek, 83.
- Geschlechtsunterschiede im Primatenbecken; Broek, 82.
- Scapula and hind-limb *Halitherium*; Schmidtgen, 465.
- Intertubercular foramen humerus Guinea-pig; Williams, 587.
- Rapport brachio-antibrachial Chiroptera; Bizot, 61.
- Osso trasverso nel carpo Chiropteri; Mileo, 350.
- Double rotule Primates, Chiroptera and Rodentia; Retterer & Vallois, 432 433 435.
- Articulations peronéo - tibiales; Charpy et Mouchet, 100.
- Brustflosse Wale; Kunze, 281.
- Homology auditory ossicles—incus= Reptilian quadrate; Broom, 85.
- Quadrate-problem; Kingsley, 263.
- Dentition (see also Osteology).
- ☛ Zahnbeingrundsubstanz; Lickteig, 291.
- Maxillarbezahnung *Equidae*; Veith, 565.
- Enumeration molar cusps *Equus*; Pas, 399.
- Gebiss *Cervidae* u. *Bovidae* im Zusammenhang mit Nahrung; Vrublevskij, 563.
- Prälakteale Zahnanlagen; Ahrens, 10, 11.
- Milk-dentition Ratel; Lydekker, 308.
- Gebiss Primates; Bluntschli, 65.
- Differenzierung des Primatengebisses; Adloff, 9.
- Gebiss *Erinaceus*; Fuchs, 154.
- Dentition *Soricidae*; Arnäck-Christie-Linde, 42, 43.
- Alimentary System.
- Glandule di Brunner Scimmie; Anile, 31.
- Panethschen Zellen; Kull, 280.
- Lippen- und Wangenschleimhaut Ruminantia; Schulze, 468.
- Eigenartiges Organ im Mundhöhlenboden; Ackerknecht, 5.
- Salivary ferments; Kuiper, 279.
- Mund- u. Rachenverhältnisse bei neugeborenen Carnivoren; Wegner, 582.
- Stellung der sogenannten Gl. retro-lingualis; Loewenthal, 298.
- Poids de l'estomac; Magnan, 315.
- Magen und Darm *Cervidae* u. *Bovidae* im Zusammenhang mit deren Nahrung; Vrublevskij, 576.
- Anatomie von Speiseröhre, Magen u. Mund des Hundes und der Katze; Murin, 380.
- Entwicklung Fundusdrüsen im Magen *Sus*; Ulkan, 561.
- Tube digestif; Magnan, 313.
- Intestin; Magnan, 312.
- Cæcum; Magnan, 314.
- Mitochondries de la cellule hépatique; Mayer, Rathery et Schæffer, 339.
- Mitteldarm *Erinaceus*; Kasakoff, 250.
- Pancreas und Lymphgefäß-system Primates; Balen-Blanken, 54.

Zusammenhang der Langerhauschen Inseln mit dem übrigen Drüsengewebe des Pankreas; **Herwerden, 210.**

Circulatory and Respiratory Systems.

Kehlkopfe; **Némai, 385.**

Ductus Botalli; **Faber, 130.**

Sviluppo valvole atrioventricolare; **Favaro, 133.**

Vascularisation des valvules auriculo-ventriculaires Cheval; **Argaud, 39.**

Atroventrikularon Verbindungs-bündels am Herzen; **Holl, 224.**

Aortic arches; **Locy, 293.**

Relative sizes of aorta and trachea in different species; **Ray & Walker, 424, 425.**

Pulmonary arteries; **Jordan, 247.**

Entwicklungsgeschichte der Kopfarterien *Talpa*; **Sicher, 481.**

Os du cœur Ruminants; **Retterer et Lelièvre, 430.**

Plexus choroides; **Policard, 419.**

Blutführendes System des Chilus, des Sinus und der Rindenschicht der Niere Haussäugetiere; **Prozorov, 422.**

Cellule muscolari nella pleura polmonare; **Favaro, 132.**

Poros des alvéoles pulmonaires; **Marchand, 319.**

Pleura-Säcke Orang; **Ruge, 453.**

Arteriellen Kopfgefäße Katze; **Hürlimann, 240.**

Limb-arteries *Primates*; **Manners-Smith, 318: Elephas; Zuckermandl und Tandler, 598.**

Arteriolæ del rene; **Torraca, 546.**

Tessuto cartilagineo in cuore di Coniglio; **Vanzetti, 562.**

Blood, Lymph, etc.

Lymphgefässsystem Rindes; **Baum, 58.**

Placenta.

Plazentabildung bei Antilopen; **Sedlacek, 477.**

Foetal Membranes Beaver; **Willey, 585.**

(N-9210 f)

Plazentarkotyledonen und Blutkreislauf im intervillösen Raum; **Kermauner, 257.**

Excretory Organs. Special Glands.

Corpuscules de Hassall dans le thymus; **Jolly et Levin, 244.**

Langerhaus'schen Inseln; **Grinev, 190.**

Vorkommen von Brustdrüsen auf dem Rücken; **Hauffe, 204.**

Anal glands *Mephitis*; **Blackman, 62.**

Glandula caudalis *Cavia*; **Sprinz, 493.**

Foot-gland *Rhinoceros* and ergot *Equus*; **Pocock, 415.**

Harnblase Haussäugetiere; **Hiltivirta, 211.**

Entstehung der Urogenitalverbindung und die Bedeutung der Müllerschen Genitalgänge; **Wichmann, 584.**

Capsule surrénale *Ovis*; **Mulon, 377.**

Surrénale Hérisson appareil réticulaire et mitochondries; **Mulon, 379.**

Apparato reticolare interno in Nebennierenzellen des Igels; **Pilat, 409, 410.**

Histologischer Bau der Nebenniere; **Dëvickij, 116.**

Sirenenniere; **Freund, 145.**

Eichelgrube Pferde; **Reusch, 440.**

Organs of Reproduction.

Corps biréfringents des glandes génitales; **Mulon, 378.**

Organes génitaux mâles Lémuriens; **Kollmann, 271.**

Pencalorgan; **Funkquist, 155.**

Os penis *Ursus*; **Grevé, 188.**

Penis *Talpa*; **Kazzander, 253.**

Os penis; **Montlezun, 371.**

Cellule interstiziali testicolo; **Foà, 140.**

Genitalia Porpoise; **Freund, 143a.**

Testikondie und Ligamentum latum **Freund, 144.**

Vaginal septum *Trichosuridae*; Flynn, 138.

Female genitalia *Sarcophilus*; Flynn, 139.

Ovidutto, istologia; Giannelli, 165.

Loydigschen Zwischenzellen des Hodens; Hansemann, 202.

Saisondimorphismus des Maulwurfhodens; Tandler und Grosz, 508.

PHYSIOLOGY. 6011

General and Miscellaneous.

Sfera visiva del mantello cerebrale *Canis*; Luciani, 303.

Salivary ferments; Kuiper, 279.

Locomotion in Hoofed Animals; Gregory, 185.

Alimentation; Magnan, 313.

Langerhaus'schen Inseln; Grinev, 190.

Suckling period in Guinea-pig; Read, 426.

Glande mammaire pendant gestation; Bouin et Ancel, 73.

Funktionen des vordern Zweihügels und seiner Bahnen; Sepp, 479.

Evolution des corpuscules de Hassall dans le thymus; Jolly et Levin, 244.

DEVELOPMENT. 6015

Ovum; Oogenesis; Spermatozoon; Spermatogenesis.

Ovulation et menstruation; Givkovitch et Ferry, 171.

Appareil mitochondrial des cellules interstitielles de l'ovaire du Murin; Athias, 45.

Ovary Guinea-pig cyclic changes; Loeb, 294.

Origine et zone pellucide des œufs; Tur, 558.

Fixation de l'œuf *Vespertilio*; Stricht, 503a.

Ovum Armadillo; Newman, 388.

Maturation of egg, Mouse; Long & Mark, 300; Mark & Long, 321.

Spermien und Biondifärbung; Retzius, 435.

Spermien Ostafrikanischer Tiere; Retzius, 437; Primates; Retzius, 439;

Schimpanse; Retzius, 436; *Orycteropus*; Ballowitz, 54.

Spermatogenesis; Hoof, 237; Mollé, 369; Bat; Jordan, 248; Pferde; Kirilov, 264, 265.

Embryology.

General; Beneden, 60.

Graviditätsveränderungen des Uterus *Spermophilus*; Voelker & Oströil, 568-570.

Eihäute und Embryotrophe Pferdes; Schauder, 459.

Embryon *Castor*; Mingaud, 362.

Polyembrionic development *Tatu*; Patterson, 401.

Retarded development Kangaroo; Carson, 94.

Entwicklungsgeschichte *Capra*; Tsukaguchi, 557.

Entwicklung der Blutlymphdrüsen; Schumacher, 469.

Geschlechtszellen; Fuss, 156.

Blastodermic vesicle Opossum; Minot, 363.

Cellule epiteliali dei plessi coroidi in embrioni; Giannelli, 167.

Tuberculum impar; Guthzeit, 197.

Entwicklung des sekundären Gaumens; Inouye, 241.

Sviluppo del grasso nel mesenterio; Pardi, 398.

Entwicklung der Nasenmuscheln; Peter, 402.

Entwicklung Bulbusform des Auges; Lešer, 290.

Entwicklung der Keimdrüsen; Rubaschkin, 453.

Entwicklungsgeschichte der Kopfarterien *Talpa*; Sicher, 481.

Entwicklung Fundus - Drüsen Magen *Sus*; Ulkan, 561.

Entwicklungsstadium des Igels und die Vorgeschichte des Amnions; Hubrecht, 238.

Nucleo mesencefalico nervo trigemino embrioni *Mus*; Terni, 511.

Thymus und Tholus; Mayr, 341.

Entstehung der Urogenitalverbindung und die Bedeutung der Müllerschen Genitalgänge; Wichmann, 584.

Development dentition *Soricidae*; **Ärnäck-Christie-Linde, 42, 43**: Purkinje cells and cortical layers Albino Rat; **Addison, 8.**

Erste Entstehung der Blutzellen; **Maximow, 338.**

Ontogenie der Nase Primates; **Frets, 149**: **Peter, 402.**

Embryonalentwicklung Thymus *Tarsius* und *Nycticebus*; **Nierstrasz, 389.**

Entwicklung Clavicula *Talpa* und *Erinaceus*; **Fuchs, 153.**

Sviluppo pancreas; **Giannelli, 164, 168.**

Sviluppo del testicolo *Lepus*; **Gian-nelli, 166.**

Sviluppo Glandola lacrimale *Bos*; **Mobilio, 367.**

Post-Embryonal.

Entwicklung des Mammarapparates der Monotremen, Marsupialier und einiger Placentaler; **Bresslau, 76.**

Mund- u. Rachenverhältnisse bei neugeborenen Carnivoren; **Wegner, 582.**

Evolution de la glande mammaire pendant gestation; **Bouin & AnceI, 73.**

ETHOLOGY. 6019

General.

Alimentation; **Magnan, 316.**

Futterpflanzen einiger Wiederkäuer; **Vrublevskii, 563.**

Adaptation à vie arboricole; **Anthony, 33.**

Faune des terriers de Mammifères; **Falcoz, 131.**

Coloration infant and adult; **Mitchell, 364.**

Concealing coloration; **Thayer, 513**: in Big Game, especially Zebras; **Pocock, 416.**

Melanism Rodents; **Raspail, 423.**

Einfluss der Geschlechtsdrüsen auf Geweihbildung bei Rentieren; **Tandler, 507.**

Kronenhirsche und Mendel'schen Gesetze; **Sallač, 454.**

(N-9210 f)

Habits; Life-histories.

Flight-time Indian Bats; **Short-ridge, 480.**

Habits Sea Elephant; **Townsend, 547**: *Budorcas*; **Bailey, 49.**

Breeding habits Platypus; **Kershaw, 258.**

VARIATION AND ÆTHIOLOGY.

6023

Variation.

Veränderung Schädelcapazität in Domestikation; **Klatt, 267.**

Moulting and colour change Mice; **Morgan, 373.**

Comparison of Norway with Albino Rat; **Donaldson & Hatai, 123.**

Sex in young Rats; **Jackson, 243.**

Abnormal cranium *Papio*; **Anthony, 34.**

Extremitäten mit abnormer Zehen-zahl von Rindern; **Avtokratov, 48.**

Polidattilia *Equus* e *Sus*; **Borella & Finzi, 69.**

Polydaktylie *Equus*; **Vogel, 571.**

Skull Gazelle; **Miller, 361.**

Hybrids.

Hasen-Kaninchenbastard; **Rörig, 450.**

Hybridising Deer; **Winans, 589.**

Hybrid Rats sex-ratio; **King, 262.**

Evolution.

General; **Gadow, 157.**

Bedeutung des Säugemechanismus für Stammesgeschichte des Menschen; Atavism und Evolution; **Vermeulen, 566, Klaatsch, 266.**

Stammesgeschichte Proboscidea; **Schlesinger, 461, Zuffardi, 599.**

Heredity.

The influence of heredity coat-colors Mice; **Little, 292.**

Zuchtversuche mit Tanzmäusen und Laufmäusen; **Hammerschlag, 201.**

Genetic factors in development of House-Mouse; **Hagedoorn, 199.**

Hérédité Souris; **Cuénot, 108.**

e 19—2

Vererbung bei Pferden; **Walther**,
578, 579.

GEOGRAPHY. 6027

Europe. *d*

Europe, descriptive catalogue;
Miller, 350: new Mico; **Hilzheimer**,
217: new Minks; **Matschie**, 329.

Russia in Europe. *db*

Russia, new *Equus* (Tarpan of
Gmelin); **Antonius**, 36.

Mugan-Steppe, Säugetier; **Satunin**,
456.

Bessarabia, new Mastodon; **Cho-**
menko, 101.

German Empire. *de*

Germany, new Red Deer; **Matschie**,
332.

Württemberg, key to Bats and
Shrews; **Hilzheimer**, 213.

Bohemia, new Titanotheres; **Kiernik**,
259.

British Islands. *de*

Sussex Man-like skull; **Dawson** &
Woodward, 111,

Hastings Wealden teeth (sp. n);
Woodward, 591,

France. *df*

Rennes new Oligocene Seal; **Léris**,
289.

Spain. *dg*

Cavern-exploration; **Rio**, **Breuil**, &
Sierra, 446.

New races *Sus*; **Thomas**, 534.

Italy. *dh*

New Pliocene Tapir; **Campana**, 90.

New Pliocene *Tursiops*; **Simonelli**,
483.

Italy and Sicily new Pleistocene *Bos*;
Pohlig, 418.

Venice Miocene list; **Stefanini**, 499.

Apennines new Chamois; **Miller**,
356.

Switzerland. *di*

New *Adapis*; **Stehlin**, 501.

Greece. *dj*

Pikermi fauna; **Abel**, 1.

Hungary. *dk*

Transylvania new *Sus*; **Thomas**,
534.

Mediterranean Islands. *dl*

Sardinia new Pleistocene spp.;
Dehaut, 112: new Shrew; **Festa**, 136.

Crete new Pleistocene *Mus*; **Bate**,
57.

Asia (collectively). *e*

New Rodents; **Hollister**, 230.

Central Asia lists and new spp.;
Thomas, 520.

Asiatic Russia. *ea*

Transbaikalien list and new forms;
Kašōenko, 252.

Ussuri list and new Bat; **Ognev**,
394.

Turkestan, new Rodents; **Miller**,
353.

Turkestan and Afghanistan new
Voies; **Thomas**, 519.

Siberia n. spp.; **Hollister**, 235.

Kamchatka new Reindeer; **Hollister**,
238.

British India. *ef*

India Mammal survey with syno-
nomy of species; **Wroughton**, 593:
new Bats and Rodents; **Wroughton**,
592, 594: new Buffalo; **Matschie**, 332.

China and Tibet. *eb*

Chinesische Haustiere; **Noack**, 390.

China new spp.; **Allen**, 13: new
Macaques; **Matschie**, 328.

N. China list; **Sowerby**, 489.

Tibet and Sze-chuan redetermination
of *Cervidae*; **Pocock**, 413.

Sze-chuan and Yun-nan list (with
full description of spp. named, 1911);
Thomas, 533.

Kan-su new Stag; **Pocock**, 413.

Shen-si and Kan-su list and new spp.; **Thomas, 529.**

Shen-si and Manchuria new *Myospalax*; **Thomas, 516.**

Cochin China, etc. *ed*

Yun-nan and Sze-chuan list and n. spp.; **Thomas, 521.**

Yun-nan new Rodents; **Allen, 16:** new *Crocidura* and *Petaurista*; **Thomas, 523.**

Tonkin new *Rhinopithecus*; **Dollman, 119:** new Carnivora; **Thomas, 535.**

Malay Peninsula and Islands. *eg*

Johore Archipelago new sp. and subspp.; **Robinson, 448.**

Borneo new *Cynopterus*; **Andersen, 24:** new genus Carnivora; **Thomas, 535:** new Bantian; **Lydekker, 310.**

Sarawak new *Petalia*; **Andersen, 23.**

Bali new Tiger; **Schwarz, 472.**

Timor new Palm-civet; **Schwarz, 471.**

Celebes new Anoa; **Ouwens, 397.**

Philippines list; **Hollister, 236.**

Persia and Syria. *ch*

Persia new Carnivora; **Birula, 60.**

Africa and Madagascar. *f*

African Mammals palæontology; **Matthew, 335.**

Africa and Syria new Caracals; **Matschie, 324.**

Africa new Chimpanzees; **Matschie, 322:** new Bats; **Andersen, 23:** new Mongooses; **Thomas, 531:** new Rodents; **Allen, 15:** new Dormice; **Dollman, 121:** new Ungulate genera and species; **Heller, 207:** new Ungulates; **Matschie, 332:** new Gazelles; **Matschie, 327:** new Bushbucks; **Matschie, 330.**

Egypt list and n. spp.; **Bonhote, 68.**

Algerian Sahara new Hyrax; **Kollmann, 270.**

Somaliland new Mongooses; **Brockman, 81.**

B. E. Africa and Somaliland list and new subspp.; **Lönnerberg, 296.**

B. E. Africa new Lemuroidea Insectivora Chiroptera; **Heller, 208:** new Monkey; **Hollister, 234:** new *Lyaon*; **Matschie, 325:** new Rodents; **Heller, 206:** new Gerbil; **Dollman, 120.**

Guasingishu new (?) animal; **Williams, 586.**

East Africa new Mongoose; **Hollister, 226.**

East and Central Africa list and notes; **Erbach-Fürstenau, 129.**

Zanzibar new Elephant-Shrew; **Dollman, 122.**

S. Africa new *Equidae*; **Hilzheimer, 214.**

Angola new Bat; **Thomas, 526.**

W. Africa new *Procavia*; **Brauer, 73.**

W. Africa new Mongoose and Bat; **Thomas, 528.**

Cameruns list; **Auerbach, 46:** n. spp.; **Thomas, 524.**

Congo new Guenons; **Matschie, 323.**

Nigeria list and new *Dasymys*; **Thomas, 518, 522.**

Madagascar new Bat and *Hypogeomys*; **Grandidier, 183, 184.**

North America. *g*

Distribution and origin of fauna; **Scharff, 458:** list; **Miller, 359:** new Pikas; **Hollister, 227.**

Canada and Alaska new Marmot and Reindeer; **Hollister, 233.**

Mt. Robson Canada list; **Hollister, 225.**

Vancouver list; **Swarth, 505.**

Utah new Uinta Titanotheres; **Riggs, 445.**

Maryland new Miocene Porpoise; **True, 553.**

Colorado new Pika; **Allen, 20.**

Illinois and Wisconsin list; **Cory, 106.**

Mt. Groylock Mass. list; **Copeland, 105.**

California new Mole; **Grinnell & Swarth, 196:** new Puma; **Phillips, 408:** Rancho La Brea new Pleistocene *Canis* and other Carnivora; **Merriam,**

346 & 347; new *Pica*; Grinnell, 191; new Pleistocene Rodents; Kellogg, 256; new *Ochotona*; Grinnell, 194; new Pocket-Mouse; Grinnell, 195; new *Perognathus* and *Castor*; Taylor, 509, 510; new Tertiary Cetacean; True, 552.

Low. California list and n. spp.; Townsend, 548; new Pronghorn; Nelson, 383.

California and Arizona new *Thomomys*; Grinnell, 193.

Texas new Bighorn; Bailey, 50.

Sierra Nevada new Bighorn; Grinnell, 192.

New Mexico new Jumping-Mouse; Miller, 352.

Mexico new genus of Glyptodont; Brown, 86.

Central and South America, Antilles, etc. h

Costa Rica new Weasel and Peccary; Goldman, 175, 178.

Panama new spp.; Goldman, 180; new Bats; Miller, 360; new *Centronycteris*; Thomas, 532.

S. America distribution and origin of fauna; Scharff, 458; n. spp.; Thomas, 525, 530; new Monkeys; Elliot, 127; new Cats; Matschie, 326; extinct Horses; Seve, 478.

Santa Fé new *Odocoileus*; Goeldi, 174.

Venezuela and Colombia n. spp.; Osgood, 396.

Colombia list and n. spp.; Allen, 19.

Peru new Opossum; Thomas, 517.

Amazonia list and n. spp.; Thomas, 514.

Brazil new Monkeys; Ribeiro, 443.

Argentina survival Tertiary Horses; Cardoso, 93; new *Tueo-tueos*; Thomas, 517, 532.

Argentina new Tertiary Ground-Sloth; Roth, 451a; Argentina new Porpoise; Lahille, 282.

Patagonia *Toxodontia* and *Entelonychia*; Scott, 474-476.

Australasia and Southern Ocean. i

W. Australia new *Sminthopsis*; Spencer, 491; Pleistocene list; Glauert, 173.

Victoria prehistoric bones; Mahony, 317; new *Scaldicetus*; Chapman, 99.

New Guinea new Bat; Andersen, 22; new Rats; Thomas, 515; new Tree-Kangaroos; Matschie, 331; New Guinea new *Phascologale*; Thomas, 515.

III.—SYSTEMATIC. 6031

I.—PRIMATES.

Primates and Insectivora palæontology, GREGORY Bull. Geol. Soc. Amer. 23 p. 187; Grosshirnrinde, MAYER J. Psychol. 19 p. 233; Beziehungen Zwischen Gehirn und Schädel, LECHE Zool. Jahrb. 1912 Suppl. 15 Band 2; Corpo pineale, CUTORE Folia Neurobiologica 6 p. 267; Cerveau et l'évolution morphologique du pallium, ANTHONY et SANTA-MARIA Rev. sci. Paris 50 p. 238; Double rotule, RETTERER et VALLOIS Paris C. R. soc. biol. 72 p. 379; Nose, FRETTS Amsterdam Versl. Akad. 21 p. 179 Proc. 15 p. 129; Morph. Jahrb. 44 p. 409, PETER t.c. p. 478; Limb-arteries, MANNERS-SMITH J. Anat. Physiol. London 46 p. 95; Pancreas and lymphatics, BALEN-BLANKEN No. 53; Musculus digastricus, HALL Wien Sitzber. Akad. Wiss. 122 Abt. iii p. 711; Wirbelsäule, BLUNTSCHLI Morph. Jahrb. 44 p. 489; Gebiss Phylogenie, BLUNTSCHLI Vierteljahrsh. Natf. Ges. 56 p. 351; Differenzierung des gebisses, ADLOFF Zs. Morph. 15 p. 381; Atlanto-occipital gelenk, WELKER No. 580; Obliteration der Nähte am Affenschädel, BOLK Zs. Morph. 15 p. 1; Spermienformen, RETZIUS 430; Geschlechtsunterschiede im Zeeken, BROEK Feestbundel H. Treub p. 483; Jacobson's organ, FRETTS Amsterdam Versl. Akad. 21 p. 184 Proc. 15 p. 134; Unterkiefer *Hyllobates* und *Homo* GORJANOVIC-KRAMBERGER Verh. internat. zahnärztl. Kongr. Berlin 5 (1909) p. 140; Die angeblichen Gorillas in Hannos Bericht, SCHMID Zool. Ann. 5 p. 67.

A.—Anthropoidea.

HOMINIDAE.

†Man-like skull from gravel at Piltown Sussex, DAWSON & WOODWARD Abstr. Proc. Geol. Soc. No. 932 p. 20.

†*Pithecanthropus erectus* systematic position, DUBOIS Arch. Mus. Teyler ser. 3 1 p. 142.

SIMIIDAE.

Anthropopithecus troglodytes tendon réfléchi du long péronier latéral RETTERER & LELIÈVRE Paris C. R. soc. biol. 72 p. 154. [See also *Troglodytes*.]

Gorilla male skull from Congo lacking sagittal crest, NEUVILLE Anthropologie 23 p. 563; *Gorilla gorilla schwarzi* Museums-exemplar, FRITZE Hannover Jahrb. Prov. Mus. 1911-12 p. 113.

Satyris orang Pleura, RUGE Morph. Jahrb. 44 p. 371.

Simia satyris pied et tendon du long péronier latéral, RETTERER & LELIÈVRE Paris C. R. soc. biol. 72 p. 237; KOHLBRUGGE & RETTERER t.c. p. 256.

Simia (Anthropopithecus) nahani Banalia p. 118, *ituricus* Ituri p. 121, *cottoni* Sassa R. p. 124, subsp. n., MATSCHIE Rev. Zool. Africaine 2.

Troglodytes niger, Distale extremitäten muskulatur, RIBBING & HERMANSSON Lund Univ. Årsskr. N.F. 8 Afd. 2 No. 3; Abnormal cranium, PATTEN Zs. Morph. 14 p. 527; Spermien. RETZIUS No. 436.

CERCOPITHECIDAE.

Cercopithecus diana figd., VRAM Boll. Soc. zool. ital. 1912 p. 312; (*Erythrocebus*) *patas albosignatus* p. 433, *poliomystax* p. 434, (*Chlorocebus*) *cynosurus weynsi* p. 435, *C. itinbirensis* p. 437, *C. molloni*, *aethiops lukonzolure* p. 438, (*Otopithecus*) *denti liebrechtsi* p. 439, *elegans* p. 440, Congo spp. et subsp. n., MATSCHIE (u. DUBOIS) Rev. Zool. Africaine 1.

Colobus oustaleti, *nigrimanus* figured, TROUSSERT Nouv. Arch. Muséum Paris sér. 5 4 pls. iv v; *abyssinicus kikuyensis*, subsp. n., B.E.A., LÖNNBERG Ann. Mag. Nat. Hist. ser. 8 9 p. 63.

Lasiopyga mona in St. Kitts, HOLLISTER Washington Proc. Biol. Soc. 25 p. 93; *pygerythra callida*, subsp. n. B. E. Africa, HOLLISTER Smithsonian Misc. Collect. 59 No. 3 p. 1.

Macacus (Magus) arctoides melli p. 308, *a. esau* p. 309, subsp. n. S. China, MATSCHIE Sitzber. Ges. natf. Freunde 1912.

Papio maimon cranial abnormalities, ANTHONY Bull. Soc. Anthropol. 1911 p. 191.

Rhinopithecus avunculus sp. n. Tonkin, DOLLMAN Proc. Zool. Soc. 1912 p. 503 (Abs. p. 18).

Semnopithecus schistaceus, francoisi poliocephalus, figured, TROUSSERT Nouv. Arch. Muséum Paris sér. 5 4 pls. i-iii.

CEBIDAE AND HAPALIDAE.

Alouatta ululata sp. n. Maranhao Brazil, ELLIOT Bull. Amer. Mus. Nat. Hist. 31 p. 32.

Aotus griseimembra sp. n. Colombia, ELLIOT Bull. Amer. Mus. Nat. Hist. 31 p. 33.

Callimico (=Callimidas p. 23) g. n. for *C. snethlageri* sp. n. Para, RIBEIRO Brasil. Rundschau 1912 p. 22.

Hapale jacchus accessoire du grand dorsal, MÉNIER Paris C. R. soc. biol. 72 p. 494.

Leontocebus martinsi 9 p. 85, *midas egens* 10 p. 44, THOMAS Ann. Mag. Nat. Hist. London ser. 8 sp. et subsp. n. Low. Amazonia.

Mico melanoleucus sp. n. Amazonia (?), RIBEIRO Brasil. Rundschau 1912 p. 22.

Mycetes skull and brain vide LECHE No. 285.

Seniocebus meticulousus sp. n. Colombia, ELLIOT Bull. Amer. Mus. Nat. Hist. 31 p. 31.

B.—Lemuroidea.

Organes génitaux, KOLLMANN Paris C. R. Acad. sci. 155 p. 861; Myéliarchitecture de l'écorce du cerveau, PRÉDA Paris C. R. soc. biol. 72 p. 71; Embryonalentwicklung; Thymus *Tarsius* und

Nycticebus, NIERSTRASZ Zool. Jahrb. 1912 suppl. 15 Bd 2 p. 229.

Galago moholi cocos, HELLER Smithson. Misc. Collect. 60 No. 12 p. 1; (*Otolemur*) *kikuyensis*, LÖNNBERG Ann. Mag. Nat. Hist. ser. 8 9 p. 64 sp. et subsp. n. B. E. Africa.

†*Adapis* osteology and dentition p. 1165, *A. (Leptadapis) ruetimeyeri* sp. n. Eocene Egerkingen p. 1261, STEHLIN Abh. Schweiz. pal. Ges. 38.

INCERTAE SEDIS.

†*Ophthalmomegas* g. n. for *O. lamar-moræ* sp. n. Tertiary Cap Frigari, DEHAUT No. 112 p. 55 1911.

II.—CHIROPTERA.

Of Württemberg, HILZHEIMER Jahreshäfte Ver. Naturk. Württemberg 27 p. 549; of Crimea, BRAUNER Bull. Soc. Nat. Crimée 1 p. 89; fixation de l'œuf, STRICHT C. R. ass. anatomistes 13 p. 1; rotule et genou, RETTERER & VALLOIS C. R. soc. biol. 72 p. 450; appareil mitochondrial des cellules interstitielles de l'ovaire, ATHIAS C. R. soc. biol. 72 p. 448; Anatomie des Makrochiropterenauges, KOLMER Anat. Anz. 40 p. 626; rapport brachio-antibrachial, BIZOT Paris C. R. Acad. sci. 154 p. 131; flight-time Indian bats, SHORTRIDGE Bombay J. Nat. Hist. 21 p. 1321.

PTEROPODIDAE.

Discriptive list, ANDERSEN Cat. Chiroptera Brit. Mus. 1.

Chironax g. n. for *Cynopterus melanocephalus*, ANDERSEN Cat. Chiroptera Brit. Mus. 1 p. 658.

Cynopterus horsfieldi lyoni nom. n. for *C. h. minor*, ANDERSEN op. cit. p. 827; *persimilis* sp. n. Sarawak, ANDERSEN Ann. Mag. Nat. Hist. ser. 8 10 p. 641.

Dyacopterus g. n. for *Cynopterus spadiceus*, ANDERSEN Cat. Chiroptera 1 p. 651.

Lissonycteris subg. n. for *Rousettus angolensis*, ANDERSEN Cat. Chiroptera 1 p. 23.

Nyctimene certans sp. n. Mount Goliath, Dutch New Guinea, ANDERSEN Ann. Mag. Nat. Hist. ser. 8 9 p. 95.

Penthetor g. n. for *Cynopterus lucasi*, ANDERSEN Cat. Chiroptera p. 665.

Phygetis subg. n. for *Myonycteris brachycephala*, ANDERSEN op. cit. p. 570.

Stenonycteris subg. n. for *Rousettus lanosus*, ANDERSEN op. cit. p. 23.

NYCTERIDAE AND VESPERTILIONIDAE.

Cistugo g. n. for *C. seabrae* sp. n. Mossamedes, THOMAS Ann. Mag. Nat. Hist. ser. 8 10 p. 205.

Kerivoula cuprosa Cameruns p. 41, *phalena* Gold Coast p. 281, THOMAS Ann. Mag. Nat. Hist. ser. 8 10 spp. n.

Miniopterus natalensis arenarius, subsp. n. B. E. Africa, HELLER Smithson. Misc. Collect. 60 No. 12 p. 2.

Myotis orinomus in California, GRINNELL & SWARTH Univ. Calif. Zool. Pub. 10 p. 137; *petax* Chuisaya Steppe, HOLLISTER Smithson. Misc. Collect. 60 No. 14 p. 6; *ikonnikovi* Ussuri district, OGNEW Ann. mus. zool. St. Peterb. 16 p. 477 spp. n.

Nyctimene certans sp. n. New Guinea, ANDERSEN Ann. Mag. Nat. Hist. ser. 8 9 p. 95.

Petalia tragata Sarawak p. 546, *nana* French Congo, *major* Cameruns, *aurita* B. E. A. p. 547, *thebaica adana* Aden, *damarensis brockmani* Somaliland, *d. media* Abyssinia, *gambiensis* Gambia, p. 548 spp. et subsp. n., ANDERSEN Ann. Mag. Nat. Hist. ser. 8 10.

Pipistrellus aero Mt. Garguoz, *helios* Merelle Water B. E. A. spp. n., HELLER Smithson. Misc. Collect. 60 No. 12 p. 3; *mimus glaucillus* Multan WROUGHTON Bombay J. Nat. Hist. Soc. 21 p. 709 sp. et subsp. n.

NOCTILIONIDAE, EMBALLONURIDAE, AND PHYLLOSTOMATIDAE.

Centronycteris centralis sp. n. Panama, THOMAS Ann. Mag. Nat. Hist. ser. 8 10 p. 638.

Chæronycteris inca sp. n. Peru, THOMAS Ann. Mag. Nat. Hist. 8 10 p. 403.

Chilophylla craniology and dentition, MILLER Washington Proc. Biol. Soc. 25 p. 117.

Chiroderma isthmicum sp. n. Panama, MILLER U. S. Nat. Mus. Proc. 42 p. 25

Dirias minor in Central America, NELSON Washington Proc. Biol. Soc. 25 p. 93.

Lonchophylla robusta sp. n. Panama, MILLER U. S. Nat. Mus. Proc. 42 p. 23.

Macrophyllum macrophyllum in Panama, NELSON Washington Proc. Biol. Soc. 25 p. 93.

Scleronycteris g. n. p. 404 for *S. ega* sp. n. Ega p. 405, THOMAS Ann. Mag. Nat. Hist. ser. 8 10.

Rhinopoma kinneari sp. n. Kach, WROUGHTON Bombay J. Nat. Hist. Soc. 21 p. 767.

Tricnops aurita sp. n. Madagascar, GRANDIDIER Bul. Muséum Paris 1912 p. 8.

Vampyressa minuta sp. n. Panama, MILLER U. S. Nat. Mus. Proc. 42 p. 25.

III.—INSECTIVORA.

Appareil réticulaire et mitochondries dans la surrénale, MULON C. R. soc. biol. 73 p. 268; Entwicklung der Clavicula *Talpa* und *Erinaceus*, FUCHS Zs. Morph. Sonderheft 2 p. 141.

MACROSCOLIDIDAE.

Elephantulus pulcher rendilis Guaso Nyiro, LÖNNBERG Vet.-Ak. Handl. 48 art. 5 p. 49; *rufescens mariakana*, HELLER Smithsonian Misc. Collect. 60 No. 12 p. 10 subspp. n. B. E. Africa.

Macroscelides proboscideus live specimen, POCOCK Proc. Zool. Soc. 1912 p. 142.

Petrodromus sultani sangi subsp. n. B. E. A., HELLER Smithsonian Misc. Collect. 60 No. 12 p. 12.

Rhynchocyon adersi sp. n. Zanzibar, DOLLMAN Ann. Mag. Nat. Hist. ser. 8 10 p. 130.

TALPIDAE.

Ohio Moles and Shrews, HINE Ohio Nat. 12 p. 494.

Scalops aquaticus tactile organ in cheek, ACKERT Anat. Anz. 41 p. 341.

Scapanulus g. n. p. 396 for *S. oweni* sp. n. Kan-su p. 397; THOMAS Ann. Mag. Nat. Hist. ser. 8 10.

Scapanus latimanus occultus subsp. n. S. California, GRINNELL & SWARTH Univ. Cal. Pub. Zool. 10 p. 131.

Scaptonyx fuscicaudatus affinis subsp. n. Yun-nan, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 514.

Talpa europaea Kopfartern, SICHER Morph. Jahrb. 44 p. 465; Penis, KAZZANDER Zool. Anz. 39 p. 446; Saisondimorphismus des Maulwurfhodens, TANDLER und GROSZ Arch. EntwMech. 35 p. 132.

SORICIDAE.

Development of dentition and presence of prelacteal series, ÄRNBÄCK-CHRISTIE-LINDE Ann. Mag. Nat. Hist. ser. 8 9 p. 609 Morph. Jahrb. 44 p. 261.

Blarina (Cryptotis) squamipes sp. n. Colombia, ALLEN Bull. Amer. Mus. Nat. Hist. 31 p. 93. [See also *Cryptotis*].

Blarinella griselda sp. n. Kan-su, THOMAS Ann. Mag. Nat. Hist. ser. 8 10 p. 400.

Chodsigoa lamula sp. n. Kan-su, THOMAS Ann. Mag. Nat. Hist. ser. 8 10 p. 399.

Crocidura russula mimuloides No. 653 p. 9, *mimula italica* p. 12 Italy, *sicula sarda* No. 659 p. 7 Sardinia, CAVAZZA Torino Bol. Musei zool. anat. 27; *dracula* Yun-nan, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 686; *ichnusæ* Sardinia, FESTA Torino Boll. Musei zool. anat. 27 No. 648 p. 1; *Suahelae Mazerus turba lakiundæ* Lakiundo R. p. 6, *rainei* Mt. Garguez p. 7, *lutreola* Mt. Bololo p. 8, *hildegardæ altæ* Mt. Garguez p. 9, *h. procera* Mt. Lololokui B. E. A. spp. et subspp. n., HELLER Smithsonian Misc. Collect. 60 No. 12, spp. et subsp. n.; *klossii* nom. n. for *C. major* Kloss nec Wagler *aoris* sp. n. Johore Archip., ROBINSON Ann. Mag. Nat. Hist. ser. 8 10 p. 589.

Cryptotis merus sp. n. E. Panama, GOLDMAN Smithsonian Misc. Collect. 60 No. 2 p. 17. [See also *Blarina*.]

Pachyura lixa æquatoria Mt. Sagalla p. 4, *infinitesima* Laikipia B. E. A. p. 5, subsp. et sp. n., HELLER Smithsonian Misc. Collect. 60 No. 12.

Sorex pygmeus Biologie, MERK Zool. Beob. 52 p. 90 1911; *sinalis* Shen-si *consulus* Kan-su spp. n., THOMAS Ann. Mag. Nat. Hist. ser. 8 10 p. 398.

Sylvisorex sorelloides sp. n. LÖNNBERG Ann. Mag. Nat. Hist. ser. 8 9 p. 67.

ERINACEIDAE.

Hérisson nouvelle pour la France, L'HERMITTE Marseille Bul. soc. linn. 2 1910 p. 97.

Erinaceus europeus Albinismus, FRITZE Hannover Jahrb. ProvMus. 1911-12 p. 113; apparatus reticolare interno der Nebennierenzellen, PILAT St. Peterburg Trav. Soc. nat. C.r. 43 1 p. 15; intracelluläre Netzapparat Nebenniere, PILAT Arch. mikr. Anat. 80 p. 157; Entwicklungsstadien und die Vorgeschichte des Amnions, HUBRECHT Zool. Jahrb. 1912 15 Bd 2 p. 739; Gebiss, FUCHS Zs. Morph. 14 p. 507; Mitteldarme KASAKOFF Anat. Anz. 41 p. 33.

IV.—CARNIVORA.

Pleistocene Rancho La Brea, MERRIAM Univ. Cal. Pub. Bull. Dep. Geol. 7 p. 39; Persian, BIRULA Ann. mus. St. Peterb. 17 p. 219; unknown sp. (?) Guasingishu, WILLIAMS Journ. E. Africa and Uganda Nat. Hist. Soc. 2 p. 123; palæontology, MATTHEW Bull. Geol. Soc. Amer. 23 p. 181.

A.—Carnassidentia.

FELIDAE.

Notes on various, LEPRI Bull. Soc. Zool. Ital. ser. 3 1 p. 114.

Felis domestica serosen Haute, SÖDERLUND No. 486; arteriellen Kopfgefasse, HURLIMANN Intern. Monatschr. Anat. 29 p. 371; Epidermisstreifen u. Haarreihen, TOLDT Wien Zool.-Bot. Ges. 1912 p. 16; Epidermisstreifen, Haarreihen, TOLDT Ver. Zool.-Bot. Ges. 62 p. 16; Anatomie von Rachen, Speiseröhre, Magenmund, MURIN Kazanī Zap. veterin. Inst. 29 p. 468; *leo fossilis* bei Heidelberg, WURM Jahresber. oberrhein. geol. Ver. N.F. 2 p. 77; *tigris balica* subsp. n. Bali, SCHWARZ Ann. Mag. Nat. Hist. ser. 8 10 p. 323; *jacobita* and *colocola* distinctions p. 255, *colocola neumayeri* Matto Grosso *pajeros garleppi* Peru subsp. n. p. 259, MATSCHIE Sitzber. Ges. natf. Freunde 1912; *improcera* Lower California, PHILLIPS Washington Proc. Biol. Soc. 25 p. 85; *pardinooides emerita* N. Venezuela, THOMAS Ann. Mag. Nat. Hist. ser. 8 10 p. 44; (*Caracal*) *berberorum spatzi* Tunis p. 61, *v. medjerdae*, Medjerda

Valley p. 62, *nubicus corylinus* Atlas p. 63, *caracal schmitzi* Dead Sea p. 64, *c. aharonii* Up. Euphrates p. 66, sp. et subsp. n., MATSCHIE Sitzber. Ges. natf. Freunde 1912; *nubica* stands for Sudan and *bengalensis* for Indian Caracal.

VIVERRIDAE AND HYENIDAE.

Solchi cerebrali, ANGELOTTI Archiv. ital. Anat. Embriol. 10 p. 461.

Chrotogale g. n. p. 499 (Abs. p. 17) for *O. owstoni* sp. n. p. 500 (Abs. p. 17) Tonkin, THOMAS Proc. Zool. Soc. 1912.

Diplogale g. n. for *Hemigale hosei*, THOMAS Proc. Zool. Soc. 1912 p. 499 (Abs. p. 18).

Helogale hirtula ahselli B. E. Africa, LÖNNBERG ser. 8 9 p. 64; *hirtula annulata*, *h. powelli* Somaliland, BROCKMAN 10 p. 612 Ann. Mag. Nat. Hist. subsp. n.

Hyaena schillingsi rendilis subsp. n. B. E. A., LÖNNBERG Ann. Mag. Nat. Hist. ser. 8 9 p. 64.

Mungos phœnicurus N. Nigeria p. 280, *paludinosus mordax* G. E. Africa, *naso nigerianus* Nigeria, p. 588, Ann. Mag. Nat. Hist. ser. 8 10 THOMAS; *paludinosus rubescens* E. Africa, HOLLISTER Washington Proc. Biol. Soc. 25 p. 1; *sanguineus rendilis* B. E. Africa, LÖNNBERG Vet.-Ak. Handl. 44 part 5 p. 66 spp. et subsp. n.

Paradoxurus hermaphroditus hanieli subsp. n. Timor, SCHWARZ Ann. Mag. Nat. Hist. ser. 8 10 p. 131.

CANIDAE.

Hirnfurchung, HOENIG Mitt. Natf. Ges. Bern 1911 p. 1 & No. 222.

Canis familiaris skeleton from Mark, HILZHEIMER Zeits. f. Morphol. u. Anthrop. 15 p. 220; Anatomie von Rachen, Speiseröhre, Magenmund, MURIN Kazanī Zap. veterin. Inst. 29 p. 468; sfera visiva del mantello cerebrale, LUCIANI Rend. Acc. Lincei ser. 5 21 p. 487; Bau des Ohres, KLIMOV Kazanī Zap. veterin. Inst. 29 p. 327; *jamesi* sp. n. Tiburon Island Low. California, TOWNSEND Bull. Amer. Mus. Nat. Hist. 31 p. 130; (†) *milleri* sp. n. p. 247, (†) *orcutti* Merriam 1910 = *ochropus* (†) *orcutti* p. 255 Pleistocene Rancho La Brea

Cal., MERRIAM Mem. Univ. Cal. 1; *lycaon* for Wolf of E. Canada and N.E. U.S. *floridanus* sp. n. Florida, Washington Proc. Biol. Soc. 25 p. 95, *tundrarum* sp. n. Barren Ground p. 1 list p. 4, Smithsonian Misc. Collect. 59 No. 15, MILLER; *famelicus zarudnyi* subsp. n. Baluchistan, BIRULA Ann. Mus. zool. St. Peterb. 17 p. 270.

Icticyon panamensis sp. n. E. Panama, GOLDMAN Smithsonian Misc. Collect. 60 No. 2 p. 14.

Lycan pictus prageri subsp. n. Guasin Gishu B. E. Africa, MATSCHIE Sitzber. Ges. Natfor. Fr. 1912 p. 311. See also p. 250.

Vulpes lagopus coat-change, POCOCK Proc. Zool. Soc. 1912 p. 55; *corsac nigra* var. n. Transbaikalien KAŠ-ČENKO Ann. Mus. St. Peterb. 17 p. 393.

URSIDAE AND PROCYONIDAE.

Bassaricyon gabbi orinomus subsp. n. E. Panama, GOLDMAN Smithsonian Misc. Collect. 60 No. 2 p. 16.

Nasua candace Colombia p. 228, *manium* Ecuador p. 228, spp. n., THOMAS Ann. Mag. Nat. Hist. ser. 8 10.

Ursus (†) *spelaeus* and *arctos* Rutenknochen, GREVÉ Korr.-blt. Naturf. Ver. 55; *americanus* breeding, BAKER Smithsonian Misc. Collect. 59 No. 10 p. 51.

MUSTELIDAE.

British Pleistocene, REYNOLDS, No. 441.

Grison furax melinus subsp. n. Chile p. 47, Chilian and Argentine forms p. 45, THOMAS Ann. Mag. Nat. Hist. ser. 8 10.

Lutra vulgaris Jugendleben, ECKSTEIN Aus d. Natur 8 p. 21; *lutra seistanica* subsp. n. Scistan, BIRULA Ann. Mus. zool. St. Peterb. 17 p. 274.

Mellivora milk-dentition, LYDEKKER Proc. Zool. Soc. 1912 p. 221; *capensis* (Schreb.) antedates *ratel* (Sparman), HOLLISTER Washington Proc. Biol. Soc. 25 p. 96; *leuconota* note, AUERBACH Zool. Anz. 39 p. 314.

Mephitis mephitica anal glands, BLACKMAN Anat. Rec. Philad. 5 p. 491, 1911.

Mustela lymani Altai, HOLLISTER Smithsonian Misc. Collect. 60 No. 14 p. 5; *costaricensis* Costa Rica, GOLDMAN Washington Proc. Biol. Soc. 25 p. 9; (*Lutreola*) *lutreola wyborgensis* S.E. Finland p. 347, *l. cylipea* E. Prussia p. 348, *l. budina* Ortelsburg p. 348, *l. varina* Schwerin, *l. albica* Lübeck, p. 351, *l. biedermanni* N.W. France p. 353, *l. aremorica* Aremorikern, *l. glogeri* Stoberau, p. 354, MATSCHIE Sitzber. Ges. natf. Freunde 1912 spp. et subspp. n.

Putorius putorius evermanni Verbreitung in Südrussland, BRAUNER Kišinev Trd. Obšč. jest. 2 p. 90.

B.—Pinnipedia.

Sealing, JORDAN & CLARK Verh. viii Internat. Zool. Kongr. p. 534.

Callorhinus ursinus Lebensgewohnheiten, Wanderungen, Fortpflanzung, Fang, SUVOROV No. 504; condition of herds, HEATH Washington Dept. Comm. Lab. Bur. Fish. Rep. No. 748.

Leptonychotes weddelli anatomy, HEBURN Edinburgh Trans. R. Soc. 48 pp. 191, 321; foetus, MARELLI Bol. Soc. Physis 1 p. 47.

Macrorhinus leoninus Biologie, SOLOKOWSKY Prometheus 23 p. 409; *angustirostris* on Guadalupe I., TOWNSEND Zoologica 1 p. 159.

†*Paleotaria* g. n. for *P. henriettae* sp. n. Tongrien near Rennes, LERICHE Ann. Soc. Géol. Nord. 39 p. 369 1910.

Phoca vitulina on Farne Is., MEEK Rep. Dove. Lab. 1912 p. 83.

Trichechus rosmarus A. Dürer's picture, KILLERMANN-REGENSBURG Naturwiss. Wochenschr. ser. 2 11 p. 785.

V.—RODENTIA.

Californian Pleistocene, KELLOGG Univ. Cal. Pub. Bull. Dep. Geol. 7 p. 151; Palæontology, MATTHEW Bull. Geol. Soc. Amer. 23 p. 181; Melanism. RASPAIL, Bul. Muséum Paris 1912 p. 283; double rotule, RETTERER & VALLOIS C. R. soc. biol. 72 p. 410.

SCIURIDAE.

Arctomys crâne, LAVILLE Paris Bul. mém. soc. anthrop. sér. 6 p. 517; *bobac* und Pest, ČAUSOV Mess. med.

vct. soc. 23 p. 703; DUJARDIN-BEAU-METZ & MOSNY Paris C. R. Acad. sci. 155 p. 329; *marmotta* fossil in Switzerland, MERZ Diana 28 p. 163. [See also *Marmota*.]

Citellus carruthersi sp. n. Zungaria, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 393; *beecheyi* (†) *captus* Pleistocene California, KELLOGG Univ. Cal. Pub. Bull. Dept. Geol. 7 p. 161 sp. et subsp. n.

Dremomys senex Hupeh, ALLEN Bull. Mus. Comp. Zool. Harvard 40 p. 229; *pernyi flavior* Yun-nan, ALLEN Washington Proc. Biol. Soc. 25 p. 178 sp. et subsp. n.

Eutamias asiaticus altaicus subsp. n. Altai, HOLLISTER Washington Proc. Biol. Soc. 25 p. 183.

Marmota sibilis sp. n. Alberta, HOLLISTER Smithsonian Misc. Collect. 56 No. 35 p. 1.

Microsciurus alfari venustus 56 No. 36 p. 4; *isthmicus vivatus* 60 No. 2 p. 4, GOLDMAN Smithsonian Misc. Collect. subsp. n. Panama.

Petaurista marica sp. n. Yun-nan THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 687.

Protoxerus stangeri bea subsp. n. B. E. Africa, HELLER Smithsonian Misc. Collect. 59 No. 16 p. 2.

Sciurotamias davidanus thayeri subsp. n. Sze-chuan, ALLEN Mem. Mus. Comp. Zool. Harvard Coll. 40 p. 231.

Sciurus vulgaris ventralen Tasthaare, BRESSLAU Zool. Jahrb. 1912 Suppl. 15 Bd 3 p. 479; Spürhaare an der Bauchseite, BRESSLAU Mitt. philomath. Ges. Strassburg H 4 p. 543; Brustdrüsen, BRESSLAU Münchener med. Wochenschr. 59 p. 2793; *castaneoventris haemobaphes* Yun-nan, ALLEN Washington Proc. Biol. Soc. 25 1912 p. 177; *vittatus famulus* Johore Archip., ROBINSON Ann. Mag. Nat. Hist. ser. 8 10 p. 592; *variegatoides helveolus* Panama, GOLDMAN Smithsonian Misc. Collect. 56 No. 36 p. 3; *milleri* Colombia, ALLEN Bull. Amer. Mus. Nat. Hist. 31 p. 91; *griseogena tamae* Colombia, OSGOOD Field Mus. Zool. Pub. 10 p. 48; *griseus* (†) *fossilis* Pleistocene California, KELLOGG Univ. Cal. Pub. Bull. Dept. Geol. 7 p. 156 spp. et subsp. n.

Sicista napaea sp. n. Altai, HOLLISTER Smithsonian Misc. Collect. 60 No. 14 p. 2.

Spermophilus guttatus Bauten, ŽURIN Chožajstvo 7 p. 245.

CASTORIDAE, DIPODIDAE AND GLIRIDAE.

Allactaga elater dzungariae Zungaria, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 406; *griseescens* Chuisaya Steppe, HOLLISTER Smithsonian Misc. Collect. 60 No. 14 p. 2 sp. et subsp. n.

Castor skull and dentition, REICHENAU Jahrb. Nassau Ver. 65 p. 208; *fiber* Bessarabian Tertiary, CHOMENKO Kišinev Trd. Obšč. jest. 2 pt. 2 p. 1; Schädel und Gebiss, REICHENAU Jahrb. Ver. Natk. 65 p. 208; embryon, MINGAUD Nîmes Bul. soc. sci. nat. 38 p. 106; *subauratus* sp. n. California, TAYLOR Univ. Cal. Pub. Zool. 10 p. 167; *canadensis* foetal membranes, WILLEY Zool. Jahrb. 1912 Suppl. 15 Bd 2 p. 191.

Graphiurus microtis griseus B. E. Africa p. 440, *schwabi* Cameruns p. 441, ALLEN Bull. Mus. Comp. Zool. Harvard 54; *crassicaudatus dorotheae* S. Nigeria p. 312, *surdus* French Congo p. 314, *spurrelli* Gold Coast p. 315, *haedulus* Cameruns p. 316, *ansorgei* S. Angola p. 317, *brockmani internus* B. E. Africa p. 318, *butleri* Sudan p. 319, DOLLMAN Ann. Mag. Nat. Hist. ser. 8 9; *murinus johnstoni* p. 2, *m. isolatus* p. 3 B. E. Africa, HELLER Smithsonian Misc. Collect. 59 No. 16 spp. et subsp. n.

Platacanthomys lasiurus Borsten-Stacheln, TOLDT Wien Verh. zool.-bot. Ges. 1912 p. 29.

MURIDAE.

Acomys johannis Nigeria, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 272; *russatus aegyptiacus*, BONHOTE Proc. Zool. Soc. 1912 p. 230 sp. et subsp. n.

Apeomys fuscatus sp. n. Colombia sp. n., ALLEN Bull. Amer. Mus. Nat. Hist. 31 p. 89.

Apodemus microtis sp. n. Russian Turkestan, MILLER Washington Proc. Biol. Soc. 25 p. 60. [See also *Mus*.]

Alticola phasma sp. n. Chinese Turkestan, MILLER Washington Proc. Biol. Soc. 25 p. 59

Arvicola Fortpflanzung, RÖRIG, Mitt. biol. Anst. 12 p. 82.

Chilomys fumeus sp. n. Colombia, OSGOOD Field Mus. Zool. Pub. 10 p. 53.

Colomys bicolor sp. n. Cameruns, THOMAS Ann. Mag. Nat. Hist. ser. 8 10 p. 43.

Craseomys aquilus sp. n. Hupch, ALLEN Mem. Mus. Comp. Zool. Harvard 40 p. 216.

Cremnomys g. n. p. 340 for *C. cutchicus* sp. n. Kach p. 342, WROUGHTON Bombay J. Nat. Hist. Soc. 21.

Cricetomys gambianus raineyi p. 15, *g. enguvi*, *g. osgoodi*, p. 16, subspp. n., Brit. East Africa, HELLER Smithsonian Misc. Collect. 59 No. 16.

Dasymys foxi sp. n. N. Nigeria, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 685.

Dendromus mesomelas percivali p. 5, *whytei capitis* p. 6, subspp. n. B. E. Africa, HELLER Smithsonian Misc. Collect. 59 No. 16.

Dicrostonyx (†) *henseli* Pleistocene Ponder's End, HINTON Q. J. Geol. Soc. 68 p. 249.

Dyromys milleri sp. n. Zungaria, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 394.

Ellobius albicatus Chinese Turkestan p. 401, *coenosus* Tien Shan p. 402, *fusciceps ursulus* Zungaria p. 403, *kastchenkoi* Tomsk p. 404, *talpinus transcaspiae* Transcaspia p. 405, spp. et subspp. n., THOMAS Ann. Mag. Nat. Hist. ser. 8.

Epimys zappeyi Sze-chuan, ALLEN Bull. Mus. Comp. Zool. Harvard 40 p. 225; *alleni kaimosae* p. 7, *coucha neumani* p. 8, *c. durumae, taitae* p. 9, B. E. Africa, HELLER Smithsonian Misc. Collect. 59 No. 16; *surifer permangilis* p. 593, *s. aoris* p. 534, subspp. n. Johore Archip., ROBINSON Ann. Mag. Nat. Hist. ser. 8 10. [See also *Mus.*]

Euneomys mordax sp. n. Mendoza, THOMAS Ann. Mag. Nat. Hist. ser. 8 10 p. 410.

Hoplomys goethalsi sp. n. Panama, GOLDMAN Smithsonian Misc. Collect. 56 No. 36 p. 10.

Lagurus lagurus altorum subsp. n. Zungaria, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 401.

Leggada dunni Punjab p. 339 *cinderella* Kach p. 770, WROUGHTON Bombay J. Nat. Hist. Soc. 21 spp. n.

Lemniscus pulchellus spermophilus subsp. n. B. E. Africa, HELLER Smithsonian Misc. Collect. 59 No. 16 p. 11.

Lophiomys thomasi sp. n. Mt. Gargues B. E. A., HELLER Smithsonian Misc. Collect. 59 No. 16 p. 4.

Lophuromys aquilus margarettae subsp. n. Mt. Gargues B. E. A., HELLER Smithsonian Misc. Collect. 59 No. 16 p. 7.

Mallomys hercules sp. n. New Guinea, THOMAS Nov. Zool. 19 p. 92.

Meriones crassus pallidus Sudan, BONHOTE Proc. Zool. Soc. 1912 p. 226; *erythrorurus aquilo* Zungaria, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 395 sp. et subsp. n.

Microtus raddei Beschreibung p. 415, *michnoi ungarensis* p. 418, *brandti aga* p. 418, Transbaikalia, KAŠČENKO Ann. Mus. zool. 17; *ilæus* E. Russian Turkestan p. 348, *afghanus* Afghanistan p. 349, *arcturus* Zungaria p. 398, *wardi* Yun-nan p. 516, *chinensis tarquinius* Sze-chuan, *custos* Yun-nan, p. 57, THOMAS Ann. Mag. Nat. Hist. ser. 8 9; (*Eothenomys*) *aurora* Hupeh p. 211, (*E.*) *mucronatus* Sze-chuan p. 214, ALLEN Mem. Mus. Comp. Zool. Harvard 40 spp. et subspp. n.

Microxus affinis sp. n. Columbia, ALLEN Bull. Amer. Mus. Nat. Hist. 31 p. 89.

Mus, spp. var. osteology, GAY No. 161; Reifung Eier, MARK & LONG Verh. viii internat. Zool. Congr. Jena 1910 p. 401; *musculus* Grosshirnrinde, VRIES Folia Neurobiologica 6 1912 p. 289; coat and colour change, MORGAN Science ser. 2. 34 p. 918; hérédité, CUÉNOT Brunn. Verh. Naturfor. Ver. 49 p. 214; *meridionalis* validity, CAVAZZA Napoli Ann. Mus. Zool. ser. 2 3 No. 21; *phillipsi* Nimur dist. C. P., WROUGHTON Bombay J. Nat. Hist. Soc. 21 p. 772; (†) *catreus* Pleistocene Croto, BATE Geol. Mag. decade 5 9 p. 4; *sylvaticus flavobrunneus* N. Germany p. 7, *s. fennicus* Finland p. 9, *wagneri sareptanicus* Sarepta p. 14, *minutus fenniae* Finland p. 15, *m. sareptae* Sarepta p. 18, HILZHEIMER Acta Soc. Fauna et Flora

Fenn. 34 1911 spp. et subsp. n.; *norvegicus* Verbreitung im asiatischen Russland, KAŠČENKO Ann. Mus. zool. 17 p. 370; normal and albino forms, DONALDSON & HATAI J. Comp. Neur. Philad. 21 p. 417 1911; *n. primarius* subsp. n. (? = *M. caraco*) p. 401, *musculus tomensis* p. 407, *batorovi* p. 409, Transbaikalien Beschreibung, KAŠČENKO Ann. Mus. St. Peterb. 17; *rattus* waltzing phase, BONHOTE Proc. Zool. Soc. 1912 p. 6. [See also *Apodemus* and *Epimys*.]

Myodes lemmus auf Novaja-Zemlja, VRADIJ Priroda i ochota 40 2 p. 191.

Myopus morulus sp. n. Altai, HOLLISTER Smithsonian. Misc. Collect. 60 No. 14 p. 1.

Myospalax fontanus Shen-si p. 93, *epsilanus* Manchuria, spp. n., THOMAS Ann. Mag. Nat. Hist. ser. 8 9

Neacomys pictus Panama, GOLDMAN Smithsonian. Misc. Collect. 30 No. 2 p. 6; *pusillus* Colombia, ALLEN Bull. Amer. Nat. Hist. 31 p. 81 spp. n.

Neotoma albigula seri, insularis subsp. et sp. n. Islands of Low. California, TOWNSEND Bull. Amer. Mus. Nat. Hist. 31 p. 125.

Ondatra replaces *Fiber*, MILLER U. S. Nation. Mus. Bull. No. 79 p. 230.

Oryzomys griseolus Venezuela, OSGOOD Field Mus. Zool. Pub. 10 p. 49; *idoneus* p. 5, *frontalis* p. 6, *bombycinus* p. 6, *gurunensis* p. 7, Panama, GOLDMAN Smithsonian. Misc. Collect. 56 No. 36; *palmirae, pectoralis*, p. 83, *munchiquensis* p. 85, *fulvirostris* p. 86, *obscurior affinis* p. 88, Colombia, ALLEN Bull. Amer. Mus. Nat. Hist. 31 spp. et subsp. n.

Otomys orestes dollmani subsp. n. Mt. Gargues B. E. A., HELLER Smithsonian. Misc. Collect. 59 No. 16 p. 5.

Pelomys fallax iridescens p. 12, *f. concolor* p. 13, subsp. n. B. E. Africa, HELLER Smithsonian. Misc. Collect. 59 No. 16.

Peromyscus pirrensis E. Panama, GOLDMAN Smithsonian. Misc. Collect. 60 No. 2 p. 5; *guardia, stephani, eremicus carmen*, Islands of Low. California, TOWNSEND Bull. Amer. Mus. Nat. Hist. 31 p. 126, spp. et subsp. n.

Phodopus crepidatus sp. n. Chuisaya Steppe, HOLLISTER Smithsonian. Misc. Collect. 60 No. 14 p. 3.

Phyllotis magister, darwini posticalis, p. 406, *d. limatus* p. 407 Peru, *d. tucumanicus* Tucuman, *d. vaccarum* Argentine Cordilera, p. 408, *andium* Equador p. 409, spp. et subsp. n., THOMAS Ann. Mag. Nat. Hist. ser. 8 10.

Reithrodon cuniculoides flammaram subsp. n. Tierra del Fuego, THOMAS Ann. Mag. Nat. Hist. ser. 8 10 p. 441.

Reithrodontomys milleri sp. n. Colombia, ALLEN Bull. Amer. Mus. Nat. Hist. 31 p. 77.

Rheomys raptor sp. n. Panama, GOLDMAN Smithsonian. Misc. Collect. 60 No. 2 p. 8.

Rhipidomys mollissimus p. 78, *similis, coculensis*, p. 79, spp. n., Colombia, ALLEN Bull. Amer. Mus. Nat. Hist. 31.

Saccostomus isiolae sp. n. B. E. Africa, HELLER Smithsonian. Misc. Collect. 59 No. 16 p. 14.

Steatomys caurinus sp. n. Nigeria, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 271.

Tatera phillipsi umbrosa subsp. n. B. E. Africa, DOLLMAN Ann. Mag. Nat. Hist. ser. 8 9 p. 219.

Taterillus melanops sp. n. B. E. Africa, ALLEN Bull. Mus. Comp. Zool. Harvard 54 p. 446.

Thamnomys ochraceus, ALLEN Bull. Mus. Comp. Zool. Harvard 54 p. 442; *dolichurus littoralis*, HELLER Smithsonian. Misc. Collect. 59 No. 16 p. 10 sp. et subsp. n. B. E. Africa.

Thomasomys cinereiventer p. 80, *popayanus* p. 81 Colombia, ALLEN Bull. Amer. Mus. Nat. Hist. 31; *hylophilus* Venezuela, OSGOOD Field Mus. Zool. Pub. 10 p. 50 spp. n.

Uranomys foxi sp. n. Nigeria, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 273.

Uromys rothschildi sp. n. New Guinea, THOMAS Novit. Zool. 19 p. 91.

Zapus luteus New Mexico, MILLER Washington Proc. Biol. Soc. 24 p. 253; (*Eozapus*) *setchuanus vicinus* Kan-su, THOMAS Ann. Mag. Nat. Hist. ser. 8 10 p. 402 sp. et subsp. n.

Zygodontomys cherriei ventricosus subsp. n. Panama, GOLDMAN Smithsonian. Misc. Collect. 56 No. 36 p. 8.

HYSTRICIDAE, GEOMYIDAE, and
HETEROMYIDAE.

Atherurus macrourus pemangilis
subsp. n. Johore Archip., ROBINSON
Ann. Mag. Nat. Hist. ser. 8 10 p. 590.

Hystrix quarternaire aux Montrejeau
(Haute-Garonne), HARLÉ Bul. soc.
géol. sér. 4 10 p. 730; *cuneiceps* Kach,
WROUGHTON Bombay J. Nat. Hist.
Soc. 21 p. 771; *galeatus somalensis*
subsp. n. Somaliland, LÖNNBERG Vet.-
Ak. Handl. 48 art. 5 p. 107 sp. et
subsp. n.

Heterocephalus stygius, ALLEN Bull.
Mus. Comp. Zool. Harvard 54 p. 444;
glaber progrediens, LÖNNBERG Vet.-
Ak. Handl. 48 art. 5 p. 103 sp. et
subsp. n. B. E. Africa.

Heteromys lomitensis Colombia, ALLEN
Bull. Amer. Mus. Nat. Hist. 31 p. 77;
panamensis, *zonalis*, 56 No. 30 p. 9,
crassirostris 60 No. 2 p. 10, GOLDMAN
Smithson. Misc. Collect. Panama;
anomalus brachialis Venezuela, OSGOOD
Field Mus. Zool. Pub. 10 p. 54 spp. et
subsp. n.

Hypogeomys (†) *boulei* sp. n. Pleisto-
cene Madagascar, GRANDIDIER Bull.
Muséum, Paris 1912 p. 10.

Macrogeomys dariensis sp. n. Panama,
GOLDMAN Smithson. Misc. Collect. 60
No. 2 p. 8

Perognathus penicillatus seri for *p.*
goldmani, *spinatus occultus* for *s. nelsoni*
nom. n., NELSON Washington Proc.
Biol. Soc. 25 p. 116; *xanthonotus*
California, GRINNELL Washington Proc.
Biol. Soc. 25 p. 128; *longimembris*
neglectus San Joaquin Cal., TAYLOR
Univ. Cal. Pub. Zool. 10 p. 155;
baileyi insularis, *penicillatus goldmani*,
spinatus nelsoni Islands of Low. Cali-
fornia, TOWNSEND Bull. Amer. Mus.
Nat. Hist. 31 p. 122 sp. et subspp. n.

*Thomomys albatu*s California p. 172
chrysonotus Arizona p. 174 spp. n.,
GRINNELL Univ. Cal. Pub. Zool. 10.

OCTODONTIDAE and CAVIIDAE.

Cavia cobaya suckling period, READ
Univ. Cal. Pub. Zool. 9 p. 341; inter-
tubercular foramen humerus, WILLIAMS
Science Ser. 2 36 p. 192; Glandula
caudalis, SPRINZ Derm. Wochenschr.
55 p. 1371.

Cercomys replaces *Proechimys*,
GOLDMAN Washington Proc. Biol.
Soc. 25 p. 94; replaces *Thricomys*,
THOMAS t.c. p. 115.

Ctenomys talarum recessus 9 p. 241;
saltarius 10 p. 639, THOMAS Ann. Mag.
Nat. Hist. ser. 8 sp. et subsp. n. Argen-
tina.

Dactylomys dactylinus canescens
subsp. n. Low. Amazonia, THOMAS
Ann. Mag. Nat. Hist. ser. 8 9 p. 87.

Dasyprocta aguti encephalo, SPERINO
Modena Mem. Acc. ser. 3 10 p. 3.

Hydrochoerus isthmius sp. n. Panama,
GOLDMAN Smithson. Misc. Collect. 60
No. 2 p. 11.

Isotrix darlingi sp. n. Panama,
GOLDMAN Smithson. Misc. Collect. 60
No. 2 p. 12.

Proechimys stands for Spiny Rats,
THOMAS Washington Proc. Biol. Soc.
25 p. 115; *steerei* type locality Hyuta-
nahan, Brazil, GOLDMAN Washington
Proc. Biol. Soc. 25 p. 186; *ochraceus* sp.
n. Venezuela, OSGOOD Field Mus. Zool.
Pub. 10 p. 56.

Thryonomys gregorianus pusillus
subsp. n. B. E. Africa, HELLER Smith-
son. Misc. Collect. 59 No. 16 p. 17.

Zelotomys hildegardeae vinaceus subsp.
n. B. E. Africa, HELLER Smithson.
Misc. Collect. 59 No. 16 p. 10.

LEPORIDAE and OCHOTONIDAE.

Lagomorpha an order, GIDLEY
Science ser. 2 36 p. 285.

Lepus sviluppo del testicolo, GIAN-
NELLI Ferrara Atti Acc. med. Nat. 80
fasc. 2 p. 1; *simcoxi* Khandesh,
WROUGHTON Bombay J. Nat. Hist.
Soc. 21 p. 338; *raynei* p. 18, *kakumegae*
p. 19, B. E. Africa, HELLER Smithson.
Misc. Collect. 59 No. 16; *aurigineus*
Kiang-si p. 181, *quercerus* Altai, *swinhoei*
sowerbyi Shan-si, p. 182, *brachyurus*
angustidens Hondo I. Japan p. 183,
HOLLISTER Washington Proc. Biol.
Soc. 25; *alleni tiburonensis* Tiburon
I. California, TOWNSEND Bull. Amer.
Mus. Nat. Hist. 31 p. 120 spp. et
subspp. n.; *europæus* × *cuniculus*
Bastard, RÖRIG D. Jägerztg 58 p. 601;
cuniculus Primordialeranium, VOIT
Anat. Hefte Wiesbaden Abt. 1 38
p. 425 1909; Bau u. Funktion des
vorderen Zweihügels, SEPP No. 479.

Ochotona cansa morosa Shen-si 10 p. 403, THOMAS Ann. Mag. Nat. Hist. ser. 8; (*Ogotoma*) *hamica* Lien Shan 9 p. 407; *nitida* sp. n. Altai, HOLLISTER Smithson. Misc. Collect. 60 No. 14 p. 4; *levis* Montana p. 57, *uinta* Utah p. 58, HOLLISTER Washington Proc. Biol. Soc. 25; *albatus* Mt. Whitney California, GRINNELL Univ. Cal. Pub. Zool. 10 p. 125; *figginsi* Colorado, ALLEN Bull. Amer. Mus. Nat. Hist. 31 p. 103; *taylori* Warner Mts. California, GRINNELL Washington Proc. Biol. Soc. 25 p. 129 spp. et subsp. n.

Sylvilagus gabbi messorius Panama, GOLDMAN Smithson. Misc. Collect. 60 No. 2 p. 13; *nigronuchalis continentis* Venezuela, OSGOOD Field Mus. Zool. Pub. 10 p. 57; (*Tapeti*) *fulvescens* Colombia, ALLEN Bull. Amer. Mus. Nat. Hist. 31 p. 75 sp. et subsp.

VI.—UNGULATA.

Locomotion and mechanism of limbs, GREGORY Ann. N.Y. Acad. Sci. 22 p. 267.

A.—Artiodactyla.

Palaeontology, PETERSON Bull. Geol. Soc. Amer. 23 p. 162; Zahn- und Magenbau, Nahrung, Schaden, VRUBLEVSKIJ Arch. veterin. nauk 42 p. 746; antelopes and ibex partly domesticated by ancient Egyptians, GAILLARD Rev. Ethnogr. et Sociol. 1912 Nos. 11 12; Plazentarbildung bei Antilopen, SEDLACZEK Anat. Hefte Wiesbaden Abt. 1 46 p. 573; développement et structure des os du cœur Ruminants, RETTERER & LELIÈVRE Paris C. R. soc. biol. 72 p. 371; Lieppen- und Wangenschleimhaut Ruminantia, SCHULZE Berlin Sitzber. Ak. Wiss. 1912 p. 510.

BOVIDAE.

Biology Cattle, WILSON Verh. 8 internat. ZoolKongr. Jena 1910 p. 930.

Æpyceros melampus rendilis subsp. n. B. E. Africa LÖNNBERG Vet. Ak. Handl. 48 art. 5 p. 164.

Ammelaphus g. n. for *Strepsiceros imberbis*, HELLER Smithson. Misc. Collect. 60 No. 8 p. 15.

Anoa quarlesi (?) sp. n. Celebes, OUWENS, Teysmannia Batavia 22 1911 p. 447.

Antilope (*Nemorhædus*?) † *melonii* sp. n. Pleistocene Cap Figari Sardinia, DEHAUT No. 112 p. 57.

Beatragus g. n. for *Damaliscus hunteri*, HELLER Smithson. Misc. Collect. 60 No. 8 p. 8.

Bison bonasus A. Dürer's picture, KILLERMANN-REGENSBURG Naturwiss. Wochenschr. ser. 2 11 p. 785; *b. caucasicus* Lebensweise Wanderungen, FILATOV St. Peterburg Mém. Ac. Sc. 30 No. 8; *bison* condition of American herds, ANON (No. 32).

Bos general account domesticated and wild, LYDEKKER No. 307; *taurus* colour-inheritance Shorthorns, LAUGHLIN Amer. Nat. 45 p. 5; *taurus* and *indicus* ancestry, history and breeds, MORSE U. S. Dep. Agric. Bureau Animal Industry Rep. 27 p. 187; lymphgefäßssystem, BAUM No. 58; *orthoceros*, STEGMANN Jahrb. wiss. Tierzucht 7 p. 37; † (*primigenius*) *italiae* Rome p. 311, (*p.*) *siciliae* Sicily p. 317, subsp. n., Pleistocene, POHLIG Bull. Soc. belge Geol. 26 P.V.; *sondaicus lowi* subsp. n. Borneo, LYDEKKER Proc. Zool. Soc. 1912 p. 906.

Bubalis cokei kongoni Guaso Nyiro p. 5, *nakurae* Nakura p. 6, *lelwel roosevelti* p. 7 sp. et subsp. n., HELLER Smithson. Misc. Collect. 60 No. 8.

Bubalus indicus vulgaris in Siebenbürgens, MELLER No. 343; *bubalus septentrionalis* N. India, MATSCHIE Deutsche Jäger-Zeitung 59 p. 103, *caffer bubuensis* [? *туруensis*] Turu G. E. Africa p. 103, *c. tanae* Tana Valley, *c. athiensis* Athi Plains p. 210, MATSCHIE Deutsche Jäger-Zeitung 59 subsp. n.

Budorcas taxicolor (notes and figg.), BAILEY Bombay J. Nat. Hist. Soc. 21 p. 1069.

Capra hircus Entwicklungsgeschichte; Beiträge zur Entwicklung der Wiederkäuer, TSUKAGUCHI Anat. Hefte Wiesbaden Abt. 1 46 p. 413; *Capra ibex* monograph, CAMERANO Torino Mem. Acc. sc. ser. 2 fasc. 5; *ibex graicus* subsp. n. Graian Alps, MATSCHIE Deutsche Jäger-Zeitung 59 p. 102 invalid, CAMERANO Torino Boll. Mus. Zool. e Anat. 27 No. 656.

Cephalophus harveyi keniae subsp. n. Nairobi district, LÖNNBERG Ann. Mag. Nat. Hist. ser. 8 9 p. 65.

Cobus maria fig., GOLDSCHMIDT-ROTHSCHILD Ber. Senckenb. Ges. 43 p. 1 pl. i.

Damaliscus lunatus reclinis subsp. n. Mt. Caprivi G. E. Africa, MATSCHIE Deutsche Jäger-Zeitung 59 p. 120.

Gazella hayi = *G. fuscifrons*, LYDEKKER Proc. Zool. Soc. 1912 p. 911.

Gazella rufifrons hasleri fig., POCK Proc. Zool. Soc. 1912 p. 5.

Gazella isabella skull and horn variation, MILLER U. S. Nat. Mus. Proc. 42 p. 171; (*Nanger*) *soemmeringii siblyllae* Sennar p. 261, *s. erlangeri* Abyssinia p. 263, *s. casanovae* N. Abyssinia p. 265, subspp. n., MATSCHIE Sitzber. Ges. natf. Freunde 1912.

Hippotragus (Ozanna) niger kaufmanni subsp. n. Mt. Caprivi G. E. Africa, MATSCHIE Deutsche Jäger-Zeitung 59 p. 119.

Oreas oreas kaufmanni subsp. n. Mt. Caprivi G. E. A., MATSCHIE Deutsche Jäger-Zeitung 59 p. 119.

Kobus ellipsiprymnus canescens subsp. n. B. E. Africa, LÖNNBERG Vet.-Ak. Handl. 48 art. 5 p. 160. [See also *Cobus*.]

Nyala g. n. for *Tragelaphus angasi*, HELLER Smithson. Misc. Collect. 60 p. 16.

Oreamnos americanus (Blainville) supersedes *O. montanus* (Ord) pre-occupied p. 185, *O. a columbiae* nom. n. for *O. m. columbianus* Allen pre-occupied p. 186, HOLLISTER Washington Proc. Biol. Soc. 25.

Oreodorcas g. n. for *Redunca fulvorufula*, HELLER Smithson. Misc. Collect. 60 No. 8 p. 13.

Ourebia montana æquatoria subsp. n. Lado, HELLER Smithson. Misc. Collect. 60 No. 8 p. 12.

Ovibos European and Asiatic fossil skulls, KOWARZIK Wien Denks. Mat. Nat. Kl. K. Akad. Wiss. 87 p. 1; *moschatus* extinction in Alaska, ALLEN Science ser. 2 38 p. 720.

Ovis breeds and species, LYDEKKER, No. 306; *aries* capsule surrénale, MULON Bibliogr. anat. Nancy 22 p. 30;

(N-9210 f)

Episternum, ZIMMERMANN Anat. Anz. 40 p. 646; *musimon* continental flocks, TESDORPF No. 512; *cervina* and *dalli* races, ALLEN Bull. Amer. Mus. Nat. Hist. 31 p. 1; *c. sierrae* subsp. n. Sierra Nevada, GRINNELL Univ. Cal. Pub. Zool. 10 p. 144; *montana* dates from Schreber 1804, HOLLISTER Washington Proc. Biol. Soc. 25 p. 187; *californiana* characters, HOLLISTER l.c.; *canadensis texicanus* subsp. n. Texas, BAILEY Washington Proc. Biol. Soc. 25 p. 109.

Rhynchotragus cavendishi minor subsp. n. Nairobi district, LÖNNBERG Ann. Mag. Nat. Hist. ser. 8 9 p. 65.

Rupicapra fæsula sp. n. Apennines, MILLER Washington Proc. Biol. Soc. 25 p. 131.

Saiga tatarica Cavern Masczyce Poland, KIERNIK Cracovie Bull. Ac. Sci. 1912 p. 981.

Sigmoceros g. n. for *Bubalis lichtensteini*, HELLER Smithson. Misc. Collect. 60 No. 8 p. 4

Sylvicapra grimmii roosevelti Lado p. 9, *g. altivallis* Aberdare Mts. p. 10, subspp. n., HELLER Smithson. Misc. Collect. 60 No. 8.

Tragelaphus powelli Entotto Shoa p. 347, *haywoodi brunneus* Kenia p. 549, *eldomae* Eldoma Ravine p. 550, *cottoni* Bahr-el-Gebel W. of Lado p. 552, *c. meridionalis* between Dufile and Wadelai p. 555, *c. dodingae* Doding Mts. E. N. E. of Dufile p. 556, *dianae* Kalakaba N. of Albert Nyanza p. 557, *d. simplex* between Ituri and Irumu p. 560, *d. sassae* Kasindi p. 561, *scriptus makalae* Makala, *decula fulvo-ochraceus* Dungoler near S. affluent of L. Tana, p. 563, *locorinae* Locorina Mt. S. Toposa p. 564, *l. laticeps* N. of Elgon p. 565, spp. et subspp. n., MATSCHIE Sitzber. Ges. natf. Freunde 1912.

ANTILOCAPRIDAE AND GIRAFFIDAE.

Antilocapra americana peninsularis subsp. n. Low. California, GOLDMAN Washington Proc. Biol. Soc. 25 p. 107.

Giraffa camelopardalis congicus true locality Dungu N.E. of the Wello, SCHOUTEDEN Rev. Zool. Africaine 2 p. 134; *c. thornicrofti* described and figured, LYDEKKER Proc. Zool. Soc. 1912 p. 771.

CERVIDAE.

Growth of antlers and homology of branches, POCOCK Proc. Zool. Soc. 1912 p. 773; Geweihbildungen, KOWARZIK Zentr. Bl. Forstwess. Wien 38 p. 69; Kronenhirsche und Mendel'schen Gesetze, SALLAČ ForstJagdNatkd 1911-12 p. 537 1912-13 p. 3; distribution S. American, GOELDI Bern Mitt. Natfor. Ges. 1912 p. 1; Deer hybrids, WINANS No. 589.

Alces machlis A. Dürer's picture, KILLERMANN-REGENSBURG Naturwiss. Wochenschr. ser. 2 11 p. 785.

Capreolus capreolus Altersbestimmung nach den Zähnen, NEHRING Sanct Hubertus Cöthen 30 p. 275.

Cervulus sp. note, AUERBACH Zool. Anz. 39 p. 306.

Cervus elaphus fossil in Livland, FRIEDENTHAL N. balt. Waiden.-blt. 8 p. 230; *e. neglectus* Posen p. 688, *e. visurgensis* Rheinland, *e. debilis* Low. Rheinland, p. 734, *e. saxonicus* Saxony p. 737, subsp. n., MATSOIIE Deutsche Jäger-Zeitung 58; *wallichi* distinct from *affinis* p. 559, *cashmirianus macneilli* accorded specific rank p. 570, *kansuensis* sp. n. Kan-su p. 573, POCOCK Proc. Zool. Soc. 1912.

Elaphurus homology antler-tines, POCOCK Proc. Zool. Soc. 1912 p. 773.

Mazama americana citus subsp. n. Venezuela, OSGOOD Field Mus. Zool. Pub. 10 p. 43.

Odocoileus homology antler-tines, POCOCK Proc. Zool. Soc. 1912 p. 773; *peruvianus* note, AUERBACH Zool. Anz. 39 p. 310; *dickii* sp. n. Santa Fé, GOELDI Bern Mitt. Natfor. Ges. 1912 p. 14.

Rangifer tarandus Auge, TRETJAKOFF Intern. Monatschr. Anat. 29 p. 150; Einfluss der Geschlechtsdrüsen auf Geweihbildung, TANDLER Wien Anz. Ak. Wiss. 1910 p. 252; Verbreitung im Novgorod, KOOLĭ-VOLKONSKIJ Semja ochotn. 5 p. 25; Weimar Pleistocene, SOERGEL Centralbl. f. Min. 1911 p. 625; *fortidens* Alberta p. 3, *excelsifrons* Pt. Barrow Alaska p. 5, *phylarchus* Kamchatka p. 6, spp. n., HOLLISTER Smithsonian Misc. Collect. 56 No. 35.

TRAGULIDAE AND CAMELIDAE.

Camelus Neues zur Geschichte, HILZHEIMER Aus d. Natur 8 p. 206; (†) Tertiary Bessarabia, CHOMENKO Kišinev Trd. Obšč. jest. 3 p. 1; paper entitled *Camelus bessarabiensis*, but it is stated this is not a specific name.

†*Stenomylus*, skeletons, PETERSON Ann. Carnegie Mus. 8 p. 366.

Tragulus Extremitätenmuskulatur, LÜBCKE No. 303.

HIPPOPOTAMIDAE, SUIDAE, AND
DICOOTYLIDAE.

Choeropsis liberiensis external characters, BEAUX Zool. Anz. 40 p. 227.

Pecari and *Tayassu*, both used, MILLER U. S. Nation. Mus. Bull. No. 79 p. 383. [See also *Tayassu*.]

Phacochoerus africanus = "Set" of Ancient Egypt, NEWBERRY Klio 12 p. 397.

Potamochoerus intermedius akin to *choeropotamus*, SCHOUTEDEN Rev. Zool. African 2 p. 138; *choeropotamus keniae* subsp. n. Nairobi district, LÖNNBERG Ann. Mag. Nat. Hist. ser. 8 10 p. 66.

Sus scrofa embryonal anatomy, THYNG Anat. Rec. Philad. 5 p. 17 1911; Haut, KRÄNZLE Arch. mikr. Anat. 79 Abt. 1 p. 525; Entwicklung der Fundusdrüsen im Magen, ULKAN Anat. Anz. 41 p. 78; *s. castilianus* N. Spain p. 392, *s. baticus* S. Spain, *attila* Transylvania, p. 393, subsp. et sp. n., THOMAS Proc. Zool. Soc. 1912 & Abs. P.Z.S. 1912 pp. 13 & 14.

Tayassu albirostris spiradens subsp. n. Costa Rica, GOLDMAN Washington Proc. Biol. Soc. 25 p. 189. [See also *Pecari*.]

B.—Perissodactyla.

Palaeontology, GIDLEY Bull. Geol. Soc. Amer. 23 p. 179; ausgestorbene Perissodactyla Böhmens, KAFKA Archiv pro přír. výzkum Čech. Prag. Teil 14 No. 5.

EQUIDAE.

General account, tame and wild, LYDEKKER No. 305; Rassengliederung der quartären Wildpferde Europas, ANTONIUS Verh. Zool. Bot. 62 2 Heft.

p. 64; Mongolischen und assyrischen, KRAEMER Berlin Mitt. D. LandwGes. 27 p. 33; Argentine Horses direct descendants of Pleistocene *Equus recitidens*, CARDOSO Buenos Aires An. Mus. Nac. Hist. Nat. 22 p. 371; South American fossil, SEFVE Vet.-Ak. Handl. 48 No. 6; eraniology Quagga-Zebra group, SCHWARZ Arch. Naturges. 78 Heft 7 p. 34; eraniometry, OSBORN Mem. Amer. Mus. Nat. Hist. ser. 2 1 p. 57; cranial and dental characters Horse Mule and Ass, OSBORN Amer. Nat. 46 p. 266; obliterative coloration Zebras, POCOCK Field 120 p. 1637; Maxillarbezahnung, VEITH Arch. Natg. Berlin 78 Abt. A. H. 5 1912 p. 1; fonticulus orbitalis and prefrontal, STAURENGHI Gazz. med. lomb. Milano 66 p. 357 1907; Vererbung der Farben, WALTHER 579.

Dolichohippus g. n. for *Equus grevyi*, HELLER Smithsonian. Misc. Collect. 60 No. 8 p. 1.

Equus caballus Polydaktylie, VOGEL Tierärztl. Zentrbl. 35 p. 214; vascularisation des valvules auriculo-ventriculaires, ARGAUD C. R. soc. biol. 73 p. 812; Eichelgrube, REUSCH, No. 440; helle und trübe Muskelfasern, SCHÆFER Abh. Senckenb. Ges. 31 p. 173; Spermio-genese, KIRILOV Kazanī Zap. veterin. Inst. 29 p. 203; Iris, RICHTER Arch. vergl. Ophthalm. 2 p. 327 1911; Synchronrosen Wirbelsäule, VLASOV Kazanī Zap. veterin. Inst. 29 p. 401; evolution in Argentina, PAS Buenos Aires An. Mus. Nac. Hist. Nat. 23 p. 397; Prehistoric skull from Neukölln near Berlin, HILZHEIMER Zool. Anz. 40 p. 105; *przewalskii*, WEBER Zs. Tiermed. Jena 16 p. 179; *gmelini* sp. n. Govt. Woromesh Russia (Gmelin's Tarpan), ANTONIUS Naturwiss. Wochenschr. 27 p. 516; *annectans* Rothsch. = *crawshayi* de Winton, SCHWARZ Arch. Naturges. 78 Heft. 7 p. 56; *quagga* at Frankfurt a. M., LOTICHIUS Ber. Senckenb. Ges. 43 p. 104; German specimens, HILZHEIMER Abh. Senckenb. Ges. 31 p. 85; includes *burchelli* group, *g. greyi*, *danielli* and *lorenzi* invalid, SCHWARZ Arch. Naturges. 78 Heft. 7 p. 34; *burchelli* variation in Transvaal and inconstancy of races, HAMILTON Proc. Zool. Soc. 1912 p. 757; *b. paucistriatus* subsp. n. S. Africa, HILZHEIMER Abh. Senckenb. Ges. 31 p. 86; *zebra*

etc. popular account and figg., GRIFFINI No. 189; (*Hippotigris*) *kaufmanni* subsp. n. Mt. Caprivi G. E. A., MATSCHIE Deutsche Jäger-Zeitung 59 p. 209.

Megacephalon subg. n. for *Equus grevyi*, HILZHEIMER Abh. Senckenb. Ges. 31 p. 85; preoccupied 1846.

†*Parahipparion burmeisteri* sp. n. Tertiary Argentina, SEFVE Vet.-Ak. Handl. 48 No. 6 p. 109.

RHINOCEROTIDAE.

†*Acerotherium albigense* sp. n. Oligocene Canton Salvagnac, ROMAN Arch. Mus. Lyon 11 art. 1 p. 28.

†*Diceratherium* deciduous teeth, PETERSON Science ser. 2 36 p. 801.

†*Dolichorhinus fluminialis* sp. n. Low. Uinta Utah, RIGGS Field Mus. Geol. Publ. 4 p. 33.

†*Eggysodon* g. n. for *Ronzotherium osborni* Schlosser, *pomeli* sp. n. Oligocene Gannat p. 21, ROMAN Lyon Arch. Mus. Hist. Nat. 11 art. 1.

†*Epiaphelops* g. n. for *E. virgasectus* sp. n. Miocene Western U.S., COOK Science ser. 2 35 p. 219.

†*Mesatirhinus superior* sp. n. Eocene Utah, RIGGS Field Mus. Nat. Hist. Pub. Geol. ser. 4.

†*Metarhinus riparius, cristatus, spp.* n. Low. Uinta Utah, RIGGS Field Mus. Geol. Publ. 4 p. 28.

†*Rhadinorhinus* g. n. for *R. abbotti* sp. n. Lower Uinta Utah, RIGGS Field Mus. Geol. Publ. 4 p. 36.

Rhinoceros mobility of horn and correspondence in position of foot-gland with ergot of Horse, POCOCK Field 119 p. 143; abnormal horn from Lado, WARD t.c. p. 144; (†) *antiquitatis* aus Erdwachs in Galizien, ABEL Verh. Zool. Bot. Ges. 62 3 u. 4 Heft. p. 77; (†) *leptorhinus* in Pyrénées-Orientales, MAURETTE Lyon Ann. Soc. linn. 57 p. 1; (†) *etruscus* von Mauer, WURM Heidelberg Verh. nathist. Ver 12 p. 1; (†) *minutus* aus der Molasse bei Stockach, DENINGER Mitt. geol. Landesanst. 6 p. 5151.

TAPIRIDAE,

†LOPHIODONTIDAE, AND

†TITANOTHERIIDAE.

†*Lophiaspis* g. n. for *L. maurettei* sp. n. Eocene France, DEPÉRET Proc. vii Internat. Zool. Congr. Cambridge Mass. p. 769.

Tapirus (†) *capellini* sp. n. Pliocene Italy, CAMPANA Pal. Ital. 16 p. 200 1910; notes on this species and *T.* (†) *arvernensis*, CAPELLINI Bologna Mem. Acc. Sc. ser. 6 8 p. 107.

†*Sthenodectes* g. n. for *Telmatherium* (?) *incisivum*, GREGORY Science ser. 2 35 p. 546.

†*Titanotherium bohemicum* sp. n. Tertiary Bohemia, KIERNIK Cracovie Bull. Ac. Sci. 1912 p. 1219 1913.

C.—Hyracoidea.

Hyrax capensis brain, TAFT Folia Neurobiologica Haarlem 6 p. 182.

Procavia brucei borana Bora district, LÖNNBERG Ann. Mag. Nat. Hist. ser. 8 9 p. 66; *bounhioli* Algerian Sahara, KOLLMANN Bul. Muséum Paris 1912 p. 281; (*Dendrohyrax*) *tessmanni* Spanish Guinea p. 411, (*D.*) *adametzi* Cameruns p. 412, BRAUER Sitzber. Ges. natf. Freunde 1912, spp. et subsp. n.

D—†Entelonychia and Toxodontia.

SCOTT, Nos. 474-476.

Nesodon cornutus sp. n. Miocene Patagonia, SCOTT No. 476 p. 196.

E.—Proboscidea.

Phylogeny, SCHLESINGER Jahrb. Geol. Reichs. 62 p. 87; "Water-Elephant," CUNINGHAME Journ. E. Africa and Uganda Nat. Hist. Soc. 2 p. 97; ausgestorbene Proboscidea Böhmens, KAFKA Archiv pro přír. výzk. Čech. Prag. Teil 14 No. 5.

Elephas africanus Extremitätenarterien, ZUCKERKANDL & TANDLER Wien Sitzber. Ak. Wiss. Abt. 3 120 p. 315; (†) *primigenius* legends and reconstruction, HILZHEIMER Natur Leipzig 1912 p. 398; skeleton from Borna, FELIX Leipzig Veröffent. Städt. Mus. f. Völkerkunde Heft. 4; p. *fraasi* subsp. n., DIETRICH Stuttgart Jahreshefte Ver. Natk. 68 p. 42; (†) *antiquus* relationships, ZUFFARDI Atti Acc. Lincei ser. 2 21 p. 298; (†) *meridionalis* in Italy, ANDREUXI

Riv. ital. Pal. 18 pts. 2 and 3 p. 88; sp. (c.f. *meridionalis*) from Nile at Khartum, ANDREWS Geol. Mag. dec. 5 9 p. 110; (†) *planifrons* aus Niederösterreich, SCHLESINGER Verh. Zool. Bot. Ges. 62 2 Heft. p. 55.

†*Mastodon arvernensis* var. n. *progressor*, CHOMENKO Ann. géol. et min. Russ. 14 p. 161; *americanus* with permanent lower tusk, POHLIG Bull. Soc. belg. Geol. 26 P.V. p. 187; *andium* abnormal molar, PONTIER Ann. Soc. géol. Nord 39 p. 303 1910.

VII.—CETACEA AND SIRENIA.

Work on fossil Cetacea and Sirenia, TRUE Bull. Geol. Soc. Amer. 23 p. 197; Correlation American and European fossil Cetaceans, TRUE Proc. vii Internat. Zool. Cong. p. 779; Origin of asymmetry in Cetacea, horizontal tail-fin due to torsion, STEINMANN Anat. Anz. 41 p. 45; Schuppenreste bei Sireniden, KRESSMANN Jenaische Zs. Natw. 48 p. 399; Gehörorgan Cetacea and Sirenia, MATTHES Anat. Anz. 41 p. 594; Sirenniere, FREUND Verh. viii internat. ZoolKongr. Jena 1910 p. 548; Brustflosse der Wale, KUNZE Zool. Jahrb. Abt. f. Anat. 32 p. 577; Cetacea in Edinburgh Univ. Mus., TURNER No. 556; Seltene Cetaceen an Niederländischen Küste, WEBER Tijdschr. Ned. dierk. Ver. ser 2 12 p. 215; Whales stranded in Ceylon, FERNANDO Spolia Zeylanica 8 p. 52; New Zealand Whales, WAITE Rec. Canterbury Mus. 1 p. 323; Whaling, SALVEGEN J. R. Soc. Arts 60 p. 515.

Berardius bairdi in Japan, ANDREWS Science ser. 2 36 p. 902.

†*Delphinodon dividum* sp. n. Miocene Maryland, TRUE Philadelphia J. Ac. Sci. Nat. ser. 2 15 p. 188.

Delphinus delphis nervous system, LEGENDRE Bul. Muséum Paris 1912 p. 6; muqueuse linguale, ARGAUD & WEBER Paris C. R. soc. biol. 72 pp. 918 964.

†*Felsinotherium subappeninum* humerus, ISSEL Mem. Ac. Lincei ser. 5 9 p. 119.

Halicore dugong Hirn, DEXLER Morph. Jahrb. 45 p. 97; *Halicore dugong* Rückenmark, DEXLER Verh. viii internat. ZoolKongr. Jena 1910 p. 527.

†*Halitherium schinzi* scapula, SCHMIDTGEN Centralbl. f. Min. 1911 p. 221; hind-limb, SCHMIDTGEN Zool. Jahrb. 1912 Suppl. 15 ii p. 457.

†*Hesperocetus* g. n. (*Iniidae*) for *H. californicus* sp. n. Tertiary California, TRUE Smithson. Misc. Collect. 60 No. 11 p. 1.

Lagenorhynchus fitzroyi at Mar del Plata, GALLARDO Buenos Aires An. Mus. Nac. 23 p. 391.

Manatus Regio othmoidalis der Primordialkraniums, MATTHES Jenaische Zs. Natw. 48 p. 489.

Megaptera boöps Wanderungen und Fang, RISTING Bergen Norsk Fisket. 31 p. 437.

Phocæna dioptrica sp. n. Rio de la Plata, LAHILLE Buenos Aires An. Mus. Nac. 23 p. 269.

†*Plesiocetus* and allied extinct genera, TRUE Smithson. Misc. Collect. 59 No. 6.

†*Prosqualodon australe* Schädel, ABEL Wien Sitzber. Akad. Wiss. 121 Abt. i p. 57.

†*Scaldicetus macgeei* sp. n. Tertiary Victoria, CHAPMAN Rec. Geol. Surv. Victoria 3 p. 237.

Tursiops (†) *osennae* sp. n. Pliocene Italy, SIMONELLI Bologna Mem. Acc. Sc. ser. 8 6 p. 259 1911.

Ziphiidae Italian fossil, CAPELLINI Bologna Mem. Acc. sc. ser. 6 8 p. 113.

†*Ziphiodelphis abeli* skull, BASSANI & MISURI Mem. Ac. Lincei ser. 5 9 p. 25.

VIII.—EDENTATA.

Gesichtsmuskulatur Zenarthra, UECKERMANN Zs. wiss. Zool. 102 p. 377.

†*Brachyostracon* g. n. for *B. cylindricus* sp. n. Pleistocene Mexico p. 169, genus also including *B. mexicanus* (Cuatapáro and Ramircz 1874) p. 168, Glyptodonts divided into *Glyptodontidae*, *Sclerocalyptidae* and *Doedicuridae* p. 175, BROWN Bull. Amer. Mus. Nat. Hist. 31.

Myrmecophaga tridactyla artatus subsp. n. Venezuela, OSGOOD Field Mus. Zool. Pub. 10 p. 40.

Orycteropus Spermien, BALLOWITZ Anat. Anz. 42 p. 182.

†*Plesiomegatherium* g. n. for *P. hansmeyeri* sp. n. Tertiary Argentina, ROTH Rev. Mus. La Plata 18 p. 7.

Tatu novemcinctum polyembrionic development, PATTERSON Anat. Anz. 41 p. 369; ovum, NEWMAN Biol. Bull. Woods Hole 23 p. 100.

IX.—MARSUPIALIA.

Development mammary structures, BRESSLAU No. 79; genitalia, FLYNN Proc. R. Soc. Tasmania 1911 pp. 120 & 144; Palæontology, GREGORY, Bull. Geol. Soc. Amer. 23 p. 187; Notes W. Australian Pleistocene, GLAUERT Rec. W. Australian Mus. 1 pp. 39 47.

Chaetocercus cristicauda entitled to stand as a genus, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 92.

Dendrolagus bürgersi p. 571, *matschiei flavidior* p. 572, sp. et subsp. n. German New Guinea, MATSCHIE Sitzber. Ges. natf. Freunde 1912.

Didelphys marsupialis blastodermic vesicle, MINOT Anat. Rec. Philad. 5 p. 259 1911; epiphysis, JORDAN t.c. p. 325.

†*Diprotodon australis* note, GLAUERT Rec. West. Austral. Mus. 1 p. 46.

Glironia g. n. p. 239 for *G. venusta* sp. n. Peru p. 240, THOMAS Ann. Mag. Nat. Hist. ser. 8 9; second example, THOMAS op. cit. 10 p. 47.

Macropus rufus retarded development, CARSON Proc. Zool. Soc. 1912 p. 234.

Marmosa isthmica 56 No. 36 p. 1, *invicta* 60 No. 2. p. 3, GOLDMAN Smithson. Misc. Collect. Panama; *mitis pallidiventris* Colombia, OSGOOD Field Mus. Zool. Pub. 10 p. 39, spp. et subsp. n.

Metachirus nudicaudatus dentaneus sp. n. Panama, GOLDMAN Smithson. Misc. Collect. 56 No. 36 p. 2

†*Nototherium* var. nov., GLAUERT Rec. West. Austral. Mus. 1 p. 39.

Peramys emiliae Low. Amazonia, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 89; *melanops* Panama, GOLDMAN SMITHSON. Misc. Collect. 60 No. 1 p. 2, spp. n.

Phascogale melanura modesta subsp. n. D. New Guinea, THOMAS Ann. Mag. Nat. Hist. ser. 8 9 p. 92.

Sarcophilus harrisi earliest name of Tasmanian Devil, THOMAS Washington Proc. Biol. Soc. 25 p. 116; *ursinus* remains of this and other mammals in Victoria, MAHONY Victorian Nat. 29 p. 43.

Sminthopsis longicaudatus sp. n. West. Australia, SPENCER Proc. R. Soc. Vict. ser. 2 21 p. 449 1909.

X.—MONOTREMATA AND
MULTITUBERCULATA.

Development mammary apparatus, BRESSLAU 76.

†*Dipriodon valdensis* sp. n. Wealden Hastings, WOODWARD Q. J. Geol. Soc. 67 p. 279 1911.

Ornithorhynchus paradoxus breeding habits and young, KERSHAW Victoria Natural. 29 p. 102.

†*Plagiaulax dawsoni* teeth from Hastings Wealden, WOODWARD Q. J. Geol. Soc. 47 p. 278 1911.

Zaglossus bruijnii anatomy, ALLEN Mem. Mus. Comp. Zool. Harvard 40 p. 253.

LIST OF ABBREVIATIONS WITH TITLES OF THE JOURNAL.

The numbers at end of full Title are those used in the General List of Journals relating to all sciences which is published by the International Catalogue of Scientific Literature as a separate volume.

[Technical, Medical, and other Publications not included in this List, will be referred to by their full titles when they contain articles within the scope of the Catalogue.]

NOTE.—All Bulletins and Reports of the Agricultural Experiment Stations of the United States will be referred to thus :—

Agric. Exp. Sta.
Name of State.
Name of Place.
Bull. or Rep.

- Aarau, Mitt. Natf. Ges.*—Mitteilungen der aargauischen naturforschenden Gesellschaft. Aarau. 8vo. 1 Swi.
- Aarsb. Norges Fiskerier, Bergen.*—Aarsberetning vedkommend Norges Fiskerier, Bergen. 2 Nor.
- Aarsb. off. Foranst. Landb., Kristiania.*—Aarsberetning angaaende de offentlige Foranstaltninger til Landbrugets Fremme. 1 Nor.
- Abeille, Paris.*—Abeille (l'). Sec. Bedel, Paris. [irrégul.] 2 Fr.
- Abh. geol. Specialkarte Els.-Lothr., Strassburg.*—Abhandlungen zur geologischen Specialkarte von Elsass-Lothringen. Strassburg. [2-3 H. jährl.] 1 Ger.
- Acireale, Rend. Mem. Acc. Zelanti.*—Rendiconti e Memorie della R. Accademia degli Zelanti, Acireale. 1 It.
- Actes Mus. hist. nat., Rouen.*—Actes du Muséum d'histoire naturelle. Rouen: (Seine-Inférieure). [irrégul.] 5 Fr.
- Adelaide, Trans. R. Soc. S. Aust.*—Transactions of the Royal Society of S. Australia, Adelaide. — N.S.W.
- Agric. colon., Firenze.*—Agricoltura (L') Coloniale. Organo dell' Istituto Agrario Coloniale Italiano e dell' Ufficio Agrario sperimentale dell' Eritrea. Firenze. — It.
- Agric. Gaz., Sydney, N.S.W.*—Agricultural Gazette, Sydney, N.S.W. 1 N.S.W.
- Agric. litt. Mer. Noire, Novorossijsk.*—1 Черноморское сельское хозяйство: органъ Сухумскаго общества сельскаго хозяйства. Новоросіискъ [Agriculture du littoral Rus. de la Mer Noir; bulletin mensuel de la Société agricole de Soukhoum-Kate, Novorossijsk]. — Rus.
- Akad, Ért., Budapest.*—Akademiai Értésítő, Budapest. [Akademischer Anzeiger, Budapest.] — Hun.
- Akvarium, Moskva.*—Акваріумъи комнатныя растенія. Сборникъ издаваемый Московскимъ Обществомъ Любителей акваріума и комнатныхъ растеній. Москва [L'aquarium et les plantes d'appartement. Recueil édité par la Société des Amateurs d'aquariums et des plantes d'appartement. Moscou]. — Rus.

- Alabama, Bul. Geol. Surv. University P.O.*—Bulletin of the Geological Survey of Alabama, University P.O. 1 U.S.
- Albany Univ., N.Y., Bul. St. Mus.*—Bulletin of the New York State Museum. University of the State of New York, Albany, N.Y. 4 U.S.
- Albany, N.Y., St. Educ. Dep. Mus. Bul.*—New York State Education Department, New York State Museum Bulletin, Albany, N.Y. 4 U.S.
- Albany, N.Y., St. Educ. Dept. Mus. Mem.*—New York State Education Department. New York State Museum Memoirs, Albany, N.Y. 5 U.S.
- Albany, N.Y., St. Educ. Dept. Mus. Rep.*—New York State Education Department. New York State Museum Annual Report, Albany, N.Y. 6 U.S.
- Albany, N.Y., Trans. Alb. Inst.*—Transactions of the Albany Institute, Albany, N.Y. 7 U.S.
- Alger, Bul. Soc. hist. nat.*—Alger, Bulletin de la Société d'histoire naturelle de l'Afrique du Nord. — Fr.
- Allatorv. L., Budapest.*—Állatorvosi Lapok, Budapest. [Tierärztliche Blätter, Budapest.] — Hun.
- Allatt. Közlem., Budapest.*—Állattani Közlemények, Budapest. [Zoologische Mittheilungen, Budapest.] 32 Hun.
- Allg. Fischereiztg, München.*—Allgemeine Fischerei-Zeitung, red. v. B. Hofer, F. Fischer u. H. Reuss. München. [$\frac{1}{2}$ monatl.] 24 Ger.
- Allg. Forstztg, Frankfurt a. M.*—Allgemeine Forst- und Jagd-Zeitung, hrsg. v. Lorey. Frankfurt a. M. [monatl.] Nebst Supplement: Jahresbericht über Veröffentlichungen und wichtigere Ereignisse im Gebiete des Forstwesens etc. 25 Ger.
- Alnwick, Proc. Berwicks. Nat. Cl.*—History and Proceedings of the Berwickshire Naturalists' Club, Alnwick, etc., etc., etc. 2 U.K.
- Altenburg, Mitt. Osterland.*—Mittheilungen aus dem Osterlande, hrsg. v. d. naturforschenden Gesellschaft des Osterlandes zu Altenburg. Altenburg. [2 jäh.] 38 Ger.
- Amani, Mit. Biol. landw. Inst.*—Mitteilungen aus dem biologischlandwirtschaftlichen Institut Amani. [wöch.] — Ger.
- Amer. Geol., Minneapolis, Minn.*—American Geologist, Minneapolis, Minnesota. 13 U.S.
- Amer. J. Anat., Philadelphia, Pa.*—The American Journal of Anatomy, published by the Wistar Institut of Anatomy and Biology, Philadelphia, Pa. [Includes Proc. Ass. Amer. Anat.] 14 U.S.
- Amer. J. Physiol., Boston, Mass.*—American Journal of Physiology, Boston, Mass. 17 U.S.
- Amer. J. Sci., New Haven, Conn.*—American Journal of Science, New Haven, Conn. 19 U.S.
- Amer. Midl. Nat., Notre Dame, Indiana.*—The American Midland Naturalist, devoted to Natural History, primarily that of the Prairie States. Published by the University of Notre Dame, Notre Dame, Indiana. [Bi-Monthly.] — U.S.
- Amer. Mus. J., New York, N.Y.*—The American Museum Journal. American Museum of Natural History. New York, N.Y. 554 U.S.
- Amer. Nat., New York, N.Y., or Lancaster, Pa.* [formerly Boston, Mass.]—The American Naturalist, New York, N.Y., or Lancaster, Pa. 21 U.S.
- Amer. Ornith., Worcester, Mass.*—American Ornithology. For the Home and School. Worcester, Mass. 570 U.S.
- Amiens, Bul. soc. apicult. Somme.*—Bulletin de la société d'apiculture de Somme. — Fr.

- Amiens, Bul. soc. indust.*—Bulletin de la société industrielle d'Amiens (Somme). [bimestr.] 27 Fr.
- Amiens, Bul. soc. linn.*—Bulletin de la société linnéenne du nord de la France. Amiens (Somme). [mensuel.] 28 Fr.
- Amiens, Mém. soc. linn.*—Mémoires de la Société linnéenne. Amiens. 926 Fr.
- Amsterdam, Ardea.*—Ardea. Tijdschrift der Nederlandsche Ornithologische Vereeniging. — Hol.
- Amsterdam, Bijdr. Dierk.*—Bijdragen tot de dierkunde uitgegeven door het Koninklijk Zoölogisch genootschap Natura Artis Magistra te Amsterdam, Leiden. — Hol.
- Amsterdam, Jaarb. Ned. Ornith. Ver.*—Jaarboekje der Nederlandische Ornithologische Vereeniging, Wageningen. — Hol.
- Amsterdam, Proc. Sci. K. Akad. Wet.*—Proceedings of the Sections of Sciences, Koninklijke Akademie van Wetenschappen, Amsterdam. 8vo. 3 Hol.
- Amsterdam, Tijdschr. K. Ned. Aardr. Gen.*—Tijdschrift van het Koninklijk Nederlandsch Aardrijkskundig Genootschap, Amsterdam. 8vo. 4 Hol.
- Amsterdam, Verh. K. Akad. Wet., 2e Sect.*—Verhandelingen der Koninklijke Akademie van Wetenschappen, 2e Sectie (Natuurhistorische, Geologische en Medische Wetenschappen), Amsterdam. 8vo. 6 Hol.
- Amsterdam, Versl. Wis. Nat. Afd. K. Akad. Wet.*—Verslag der Vergaderingen van de Wis- en Natuurkundige Afdeeling der Koninklijke Akademie van Wetenschappen, Amsterdam. 8vo. 7 Hol.
- Amsterdam, Werk. Gen. Nat. Genees. Heelk.*—Werken van het Genootschap ter bevordering der Natuur-, Genees- en Heelkunde, Amsterdam. 8vo. 68 Hol.
- Anat. Rec. Philadelphia.*—The Anatomical Record Philadelphia. (Published by the Wistar Institute of Anatomy and Biology. — U.S.
- An. cient. Parag., Asuncion.*—Anales científicos Paraguayas, Asuncion. — Paraguay.
- An. Mus. Chile, Santiago.*—Anales del Museo nacional de Chile. Publicados por orden del Gobierno de Chile. Primera Seccion. Zoología. Santiago. — Chile.
- An. Mus. La Plata, Buenos Aires.*—Anales del Museo de La Plata, Buenos Aires. — Argent.
- An. Mus., Mexico.*—Anales del Museo nacional de México. — Mex.
- An. Mus., Montevideo.*—Anales del Museo nacional de Montevideo, Montevideo. — Uruguay.
- An. Mus. Nac., Buenos Aires.*—Anales del Museo nacional de Buenos Aires. Buenos Aires. — Argent.
- An. Mus., San Salvador.*—Anales del Museo nacional, organo oficial del Instituto del mismo nombre, San Salvador. — Salvador.
- Anat. Anz., Jena.*—Anatomischer Anzeiger. Centralblatt für die gesammte wissenschaftliche Anatomie, hrsg. v. v. Bardeleben. Jena. [zwangl.] Nebst Ergänzungsheften. 40 Ger.
- Anat. Hefte, Wiesbaden.*—Anatomische Hefte, hrsg. v. Merkel u. Bonnet. Wiesbaden. 1. Abth.: Arbeiten aus anatomischen Instituten. [5 H. jährl.] 2 Abth.: Ergebnisse der Anatomie und Entwicklungsgeschichte. [jährl.] 41 Ger.
- Angers, Bul. soc. étud. sci.*—Bulletin de la société d'études scientifiques d'Angers (Maine-et-Loire). [annuel.] 33 Fr.
- Ann. Agric., Roma.*—Annali di Agricoltura, Roma. 5 It.
- Ann. ass. nat., Levallois-Perret.*—Anuales de l'association des naturalistes. Levallois-Perret. — Fr.
- Ann. biol. lacustre, Bruxelles.*—Annales de Biologie Lacustre, Bruxelles. — Bel.

- Ann. Bot., Oxford.*—Annals of Botany, Oxford. 4 U.K.
- Ann. Ent. Soc. Amer., Columbus, Ohio.*—Annals of the Entomological Society of America. Columbus, Ohio. — U.S.
- Ann. Fac. Sci., Marseille.*—Annales de la Faculté des Sciences de Marseille (Bouches du Rhône). 50 Fr.
- Ann. géog., Paris.*—Annales de géographie, dir. Vidal de la Blache, Gallois et de Margerie. Paris. [bimestr.] 52 Fr.
- Ann. géol. Balkan., Belgrade.*—Annales géologiques de la péninsule Balkanique, Belgrade. — Servia.
- Ann. géol. minér., Novo-Aleksandrija.*—Ежегодникъ по геологій и минералогіѣ Россіи. Нова Александрія [Annuaire géologique et minéralogique de la Russie, Novo-Alexandria]. — Rus.
- Ann. Inst. océan., Monaco.*—Annales de l'Institut océanographique de Monaco. Monaco. — Monaco.
- Ann. Hist.-Nat. Mus. Nat. Hung., Budapest.*—Annales Historico-Naturales Musei Nationalis Hungarici, Budapest. 34 Hun.
- Ann. hyg. colon., Paris.*—Annales d'hygiène et de médecine coloniales. Paris. [trimestr.] 56 Fr.
- Ann. Igiene, Roma.*—Annali d'Igiene sperimentale, Roma. 11 It.
- Ann. Inst. Pasteur, Paris.*—Annales de l'Institut Pasteur, dir. Duclaux. Paris. [mensuel.] 60 Fr.
- Ann. Labor. étud. soie, Lyon.*—Annales du Laboratoire d'études de la soie. Lyon. — Fr.
- Ann. Mag. Nat. Hist., London.*—Annals and Magazine of Natural History, London. 7 U.K.
- Ann. Mus. Congo, Bruxelles.*—État indépendant du Congo. Annales du Musée du Congo, publiées par ordre du Secrétaire d'état. Série II. Zoologie. Bruxelles. 4to. — Bel.
- Ann. Mus., Marseille.*—Annales du Musée de Marseille. Marseille. — Fr.
- Ann. Natal. Govt. Mus., London.*—Annals of the Natal Government Museum, London. — S. Afr.
- Ann. Natphilos., Leipzig.*—Annalen der Naturphilosophie. Leipzig. 1285 Ger.
- Ann. nevrol., Napoli.*—Annali di nevrologia, Napoli. 9 It.
- Ann. oftalm., Pavia.*—Annali di Oftalmologia, Pavia. 10 It.
- Ann. paléont., Paris.*—Annales de Paléontologie publiées sous la direction de Marcellin Boule. Paris. — Fr.
- Ann. Queensland Mus., Brisbane.*—Annals of the Queensland Museum, Brisbane. — Queensland.
- Ann. Rep. Geol. Surv. Ind., Calcutta.*—Annual Report of the Geological Survey of India, Calcutta. 2 Ind.
- Ann. sci. nat. (Zool.), Paris.*—Annales des sciences naturelles, paraît en deux parties : 1. Zoologie et Paléontologie, comprenant l'anatomie, la physiologie, la classification et l'histoire naturelle des animaux, dir. E. Perrier. Paris. [12 numéros par an.] 77 Fr.
- Ann. Scot. Nat. Hist., Edinburgh.*—Annals of Scottish Natural History, Edinburgh and London. 8 U.K.
- Ann. Transvaal Mus., Pretoria.*—Annals of the Transvaal Museum, Pretoria. Printed at the Government Printing and Stationery Office. 24½ × 15½ cm. — S. Afr.

- Ann. Trop. Med., London.*—Annals of tropical medicine and parasitology. Issued by the Liverpool School of Tropical Medicine. London and Liverpool. 8vo. — U.K.
- Ann. Univ. Grenoble, Paris.*—Annales de l'Université de Grenoble, publiées par les Facultés de droit, des sciences et des lettres, et par l'école de médecine. Paris. [trois numéros par an.] 81 Fr.
- Ann. Univ., Jassy.*—Annales scientifiques de l'Université de Jassy. Jassy. — Fr.
- Ann. Univ., Lyon.*—Annales de l'Université. Lyon (Rhône). [irrégul.] 82 Fr.
- Annaberg, Ber. Ver. Natk.*—Bericht des Annaberg-Buchholzner Vereins für Naturkunde. Annaberg. [5 jährl.] 47 Ger.
- Année biol., Paris.*—Année biologique, dir. Yves Delage. Paris. [annuel.] (bibliogr.) 84 Fr.
- Année psychol., Paris.*—Année psychologique, pub. par A. Binet. Paris. [annuel.] 87 Fr.
- Annot. Zool. Jap., Tōkyō.*—Annotationes Zoologicae Japonenses. *European languages.* Tōkyō, Japan. 1 Jap.
- Antanan. Ann.*—Antananarivo Annual and Madagascar Magazine, Antananarivo. — Madag.
- Appalachia, Boston, Mass.*—Appalachia, Boston, Mass. 25 U.S.
- Apunt. Hist. Nat., Buenos Aires.*—Apuntes de Historia natural. Buenos Aires. 8vo. — Argent.
- Aquila, Budapest.*—Aquila, Budapest. 3 Hun.
- Arb. D. Ges. Züchtgsk., Hannover.*—Arbeiten der Deutschen Gesellschaft für Züchtungskunde, hrsg. v. d. Arbeitstätte für die Sammlung und Verwertung züchterischer Erfahrungen. Hannover. [zwangl.] — Ger.
- Arb. hirnanat. Inst. Zürich, Wiesbaden.*—Arbeiten aus dem hirnanatomischen Institut in Zürich, hrsg. v. C. v. Monakow. Wiesbaden. [zwangl.] — Ger.
- Arb. Kasp. Exp., St. Peterburg.*—Труды Каспійскої Экспедиції 1904 года. С.-Петербург [Arbeiten der Kaspischen Expedition im Jahre 1904. St Peterburg]. — Rus.
- Arb. Neurol. Inst. Wien, Leipzig.*—Arbeiten aus dem Neurologischen Institute (Institut für Anatomie und Physiologie des Centralnervensystems) an der Wiener Universität, hrsg. v. H. Obersteiner. Leipzig u. Wien. [zwangl.] — Ger.
- Arcachon, Trav. soc. sci. station zool.*—Société scientifique et Station zoologique d'Arcachon (Gironde). Travaux des Laboratoires. Paris. [annuel.] 106 Fr.
- Arch. anat. microsc., Paris.*—Archives d'anatomie microscopique, dir. Ranvier et Hennequy. Paris. [trimestr.] 107 Fr.
- Arch. Anat. Physiol., Leipzig.*—Archiv für Anatomie und Physiologie, Leipzig. 1. Anatomische Abtheilung u. d. T.: Archiv für Anatomie und Entwicklungsgeschichte. 2. Physiologische Abtheilung u. d. T.: Archiv für Physiologie. [jede Abth. 2 monatl.] 52 Ger.
- Arch. Anthr., Braunschweig.*—Archiv für Anthropologie, hrsg. v. Ranke. Braunschweig. [$\frac{1}{4}$ jährl.] 53 Ger.
- Arch. Anthr. Schlesw.-Holst., Kiel.*—Archiv für Anthropologie und Geologie Schleswig-Holsteins und der benachbarten Gebiete, hrsg. v. Mestorf u. Haas. Kiel. [1 H. jährl.] 54 Ger.
- Arch. Augenheilk., Wiesbaden.*—Archiv für Augenheilkunde, hrsg. v. Knapp u. Schweigger. Wiesbaden. [8 H. jährl.] 56 Ger.
- Arch. Balneother., Halle*—Archiv der Balneotherapie und Hydrotherapie, hrsg. v. Müller. Halle. [zwangl.] 57 Ger.

- Arch. biol., Paris-Bruxelles.*—Archives de Biologie, réd. E. Van Beneden et Ch. Van Bambeke. Paris-Bruxelles. [trimestr.] 109 Fr.
- Arch. Biont., Berlin.*—Archiv für Biontologie, hrsg. v. d. Gesellschaft naturforschender Freunde in Berlin. Berlin. [zwangl.] — Ger.
- Arch. Dermat. Syph., Wien.*—Archiv für Dermatologie und Syphilis, red. v. F. J. Pick. Wien und Leipzig. [monatl.] 24 Ger.
- Arch. EntwMech., Leipzig.*—Archiv für Entwicklungsmechanik der Organismen, hrsg. v. Roux. Leipzig. [$\frac{1}{2}$ jährl.] 60 Ger.
- Arch. exper. Path., Leipzig.*—Archiv für experimentelle Pathologie und Pharmakologie, red. v. Naunyn u. Schmiedeberg. Leipzig. [9-12 H. jährl.] 61 Ger.
- Arch. Gesch. Natw., Leipzig.*—Archiv für die Geschichte der Naturwissenschaften und der Technik, hrsg. v. K. V. Buchka, H. Stadler, C. Schaefer, K. Ludhoff. Leipzig. [zwangl.] — Ger.
- Arch. ges. Physiol., Bonn.*—Pflüger's Archiv für die gesammte Physiologie des Menschen und der Thiere, hrsg. v. M. Verworn. Bonn. [48 H. jährl.] 63 Ger.
- Arch. ges. Psychol., Leipzig.*—Archiv für die gesamte Psychologie, hrsg. v. E. Neumann. Leipzig. — Ger.
- Arch. Gynäk., Berlin.*—Archiv für Gynäkologie, red. v. Gusserow u. Leopold. Berlin. [6-7 H. jährl.] 66 Ger.
- Arch. Hydrobiol., Stuttgart.*—Archiv für Hydrobiologie und Planktonkunde (N. F. der Forschungsberichte a. d. biolog. Station zu Plön), hrsg. v. O. Zacharias. Stuttgart. [$\frac{1}{4}$ jährl.] — Ger.
- Arch. Hyg., München.*—Archiv für Hygiene, hrsg. v. Buchner etc. München. [8 H. jährl.] 69 Ger.
- Arch. Inst. Pasteur, Tunis.*—Archives de l'Institut Pasteur de Tunis. Tunis. — Fr.
- Arch. ital. biol., Torino.*—Archives italiennes de biologie, Torino. 16 It.
- Arch. Java Suiker., Soerabaia.*—Archief voor de Java-Suikerindustrie, Soerabaia. 8vo. 9 Hol.
- Arch. klin. Chir., Berlin.*—Archiv für klinische Chirurgie, hrsg. v. v. Bergmann, Gussenbauer u. Körte. Berlin. [8 H. jährl.] 71 Ger.
- Arch. Landesk. Sachsen, Halle.*—Archiv für Landes- und Volkskunde der Provinz Sachsen, hrsg. v. Kirchhoff. Halle. [jähr.] 73 Ger.
- Arch. Laryng., Berlin.*—Archiv für Laryngologie und Rhinologie, hrsg. v. Fränkel. Berlin. [3-4 H. jährl.] 74 Ger.
- Arch. Math. Naturv., Kristiania.*—Archiv for Mathematik og Naturvidenskab, Kristiania. 3 Nor.
- Arch. mikr. Anat., Bonn.*—Archiv für mikroskopische Anatomie und Entwicklungsgeschichte, hrsg. v. Hertwig u. Waldeyer. Bonn. [4-8 H. jährl.] 77 Ger.
- Arch. miss. sci. litt., Paris.*—Archives des missions scientifiques et littéraires. Paris. [irrégul.] 125 Fr.
- Arch. Mus., Rio de Janeiro.*—Archivos do Museu Nacional do Rio de Janeiro. — Braz.
- Arch. Mus. hist. nat., Lyon.*—Archives du Muséum d'histoire naturelle. Lyon (Rhône). 126 Fr.
- Arch. Natg., Berlin.*—Archiv für Naturgeschichte, hrsg. v. E. Strand. Berlin. [12 H. jährl.] 78 Ger.
- Arch. Natw. LdDurchf. Böhmen, Prag.*—Archiv der Naturwissenschaftlichen Landesdurchforschung von Böhmen. Prag. [zwangl.] 26 Aus.

- Arch. Ohrenheilk., Leipzig.*—Archiv für Ohrenheilkunde, hrsg. v. Tröltsch etc. Leipzig. [7 H. jährl.] 79 Ger.
- Arch. parasit., Paris.*—Archives de parasitologie, réd. R. Blanchard. Paris. [trimestr.] 129 Fr.
- Arch. path. Anat., Berlin.*—Virchow's Archiv für pathologische Anatomie und Physiologie und für klinische Medicin, hrsg. v. J. Orth. Berlin. [monatl.] 80 Ger.
- Arch. Pharm., Berlin.*—Archiv der Pharmacie, hrsg. vom deutschen Apotheker-Verein. Berlin. [monatl.] 81 Ger.
- Arch. Philos., Berlin.*—Archiv für Philosophie. 1. Abth.: Archiv für Geschichte der Philosophie. 2. Abth.: Archiv für systematische Philosophie. Berlin. [8 H. jährl.] 82 Ger.
- Arch. physik. Ther., Berlin.*—Archiv für physikalisch-diätetische Therapie in der ärztlichen Praxis, hrsg. v. Ziegelroth. Berlin. [monatl.] 83 Ger.
- Arch. Protistenkunde, Jena.*—Archiv für Protistenkunde, hrsg. v. M. Hartmann u. S. von Prowazek. Jena. 1284 Ger.
- Arch. Psychiatrie, Berlin.*—Archiv für Psychiatrie und Nervenkrankheiten, red. v. Jolly. Berlin. [3-4 H. jährl.] 85 Ger.
- Arch. R. Inst. Bact., Lisboa.*—Archivos do real Instituto bacteriologico Camara Pestana, Lisbon. — Por.
- Arch. Rassenbiol., Leipzig.*—Archiv für Rassen- und Gesellschaftsbiologie einschliesslich Rassen- und Gesellschaftshygiene, hrsg. v. A. Ploetz. Leipzig. [2 monatl.] — Ger.
- Arch. sc. biol., St. Peterburg.*—Архивъ биологическихъ наукъ. С.-Петербургъ [Archives des sciences biologiques. St.-Pétersbourg]. 4 Rus.
- Arch. Schiffshyg., Leipzig.*—Archiv für Schiffs- und Tropenhygiene, hrsg. v. Mense. Leipzig. [$\frac{1}{2}$ monatl.] 86 Ger.
- Arch. Sci. Phys., Genève.*—Archives des sciences physiques et naturelles. Genève, Lausanne et Paris. 8vo. 10 Swi.
- Arch. Tierheilk., Berlin.*—Archiv für wissenschaftliche und praktische Tierheilkunde, hrsg. v. Dammann etc. Berlin. [2 monatl.] 87 Ger.
- Arch. vergl. Ophthalm., Leipzig.*—Archiv für vergleichende Ophthalmologie hrsg. von G. Freytag. Leipzig. [$\frac{1}{4}$ jährl.] — Ger.
- Arch. veterin. nauk, St. Peterburg.*—Архивъ ветеринарныхъ наукъ. С.-Петербургъ [Archives des sciences vétérinaires. St.-Pétersbourg]. 5 Rus.
- Arch. Zellforschg, Leipzig.*—Archiv für Zellforschung, hrsg. v. R. Goldschmidt. Leipzig. [zwangl.] — Ger.
- Arch. zool., Paris.*—Archives de zoologie expérimentale et générale, fond. H. de Lacaze-Duthiers (avec "Notes et Revue"). Paris. [trimestr.] 136 Fr.
- Arch. polon. biol. méd., Lwów.*—Archives polonaises des Sciences biologiques et médicales, red. H. Kadyi, Lwów. 8vo. [irrégul.] 61Pol.
- Arch. farm., Roma.*—Archivio di farmacologia sperimentale e scienze affini. Roma. 271 It.
- Arch. fisiol., Firenze.*—Archivio di fisiologia, Firenze. 272 It.
- Arch. ital. anat. embriol., Firenze.*—Archivio italiano d'anatomia e d'embriologia. Firenze. 273 It.
- Arch. ostetricia, Napoli.*—Archivio d'ostetricia e ginecologia, Napoli. 20 It.
- Arch. ottalmol., Palermo.*—Archivio d'ottalmologia, Palermo. 21 It.
- Arch. sc. med., Torino.*—Archivio per le scienze mediche, Torino. 22 It.
- Arch. zool., Napoli.*—Archivio zoologico, Napoli. 275 It.

- Ark. Kemi, Stockholm.*—Arkiv. för kemi, mineralogi och geologi utgifvet af K. Svenska Vetenskapsakademien i Stockholm. — Swe.
- Archaeol. Aeliana, Newcastle-on-Tyne.*—Archaeologia Aeliana, Newcastle-on-Tyne. — U.K.
- Archangel'sk, Izv. Obšč. izuč. russ. sčvera.*—Извѣстія Общества изученія русскаго сѣвера. Архангельскъ [Bulletin de la Société pour l'exploration du Nord russe. Archangel'sk]. — Russ.
- Archiv. Zs., München.*—Archivalische Zeitschrift, hrsg. durch das Bayerische Allgemeine Reichsarchiv in München. München. [zwangl.] — Ger.
- Ark. Zool., Stockholm.*—Arkiv för zoologie utgifvet af K. Svenska Vetenskapsakademien i Stockholm. 8vo. — Swe.
- Aschaffenburg, Mitt. natw. Ver.*—Mittheilungen des naturwissenschaftlichen Vereins zu Aschaffenburg. Jena. [zwangl.] 91 Ger.
- Astrachan', Arb. Ichth. Lab.*—Труды Ихтиологической Лабораторіи Управления Каспійско-Волжскихъ рыбныхъ и тѣльныхъ промысловъ. Астрахань [Arbeiten des Ichthyologischen Laboratoriums der Kaspi-Volgaschen Fischerei-Verwaltung in Astrachan]. — Rus.
- Astrachan', Izv. Obšč. vrač.*—Извѣстія Общества Астраханскихъ врачей. Астрахань [Bulletin de la Société médicale d'Astrachan]. — Rus.
- Augsburg, Ber. natw. Ver.*—Bericht des naturwissenschaftlichen Vereins für Schwaben und Neuburg, früher naturhistorischen Vereins in Augsburg. Augsburg. [mehrjähr.] 96 Ger.
- Auk, Cambridge, Mass.*—The Auk (American Ornithologists' Union), Cambridge, Mass. 29 U.S.
- Austin, Bull. Univ. Tex.*—Bulletin of the University of Texas. Austin, Texas. — U.S.
- Austin, Cont. Zool. Lab. Univ. Tex.*—Contributions from the Zoological Laboratory of the University of Texas, Austin. 30 U.S.
- Aus d. Heimat, Stuttgart.*—Aus der Heimat. Organ des deutschen Lehrer-Vereins für Naturkunde. Stuttgart. [2 monatl.] Nebst Beilage: Schriften des deutschen Lehrervereins für Naturkunde. [jährl.] 100 Ger.
- Aus d. Natur, Leipzig.*—Aus der Natur. Zeitschrift für alle Naturfreunde, hrsg. v. W. Schoenichen. Leipzig. [$\frac{1}{2}$ monatl.] — Ger.
- Aus d. Posener Lande, Lissa i P.*—Aus dem Posener Lande. Blätter für Heimatkunde, hrsg. v. P. Beer. Lissa i P. [$\frac{1}{2}$ monatl.] — Ger.
- Aus d. Schwarzw., Stuttgart.*—Aus dem Schwarzwald. Blätter des württembergischen Schwarzwald-Vereins. Stuttgart. [monatl. 2 H.] 102 Ger.
- Austin, Trans. Texas Acad. Sci.*—Transactions of the Texas Academy of Science, Austin. 32 U.S.
- Austr. Nat., Sydney, N.S.W.*—The Australian Naturalist, Sydney. — N.S.W.
- Autun, Bul. soc. hist. nat.*—Bulletin de la société d'histoire naturelle. Autun (Saône-et-Loire). 149 Fr.
- Auxerre, Bul. soc. sci. hist. nat.*—Bulletin de la société des sciences historiques et naturelles de l'Yonne. Auxerre (Yonne). 152 Fr.
- Avicula, Siena.*—Avicula, giornale ornitologico italiano, Siena. 27 It.
- Aviculteur, Paris.*—Aviculteur (1'), dir. de Perpigna., Paris. [mensuel.] 156 Fr.
- Avicult. Mag., Brighton.*—The Avicultural Magazine, being the Journal of the Avicultural Society for the study of foreign and British birds, Brighton. 18 U.K.
- Avignon, Mém. Acad.*—Mémoires de l'Académie de Vaucluse. Avignon (Vaucluse). [trimestr.] 157 Fr.

- Bad. Landw. Wochenbl., Karlsruhe.*—Badisches landwirtschaftliches Wochenblatt. Amtliches Organ der badischen Landwirtschaftskammer. Karlsruhe. — Ger.
- Bagnères de Bigorre, Bul. soc. Ramond.*—Bulletin de la société Ramond. Bagnères de Bigorre (Hautes-Pyrénées). Toulouse. [trimestr.] 150 Fr.
- Balt. Wochenschr., Jurjew.*—Baltische Wochenschrift. Jurjew. 12 Rus.
- Baltimore, Md., Johns Hopkins Univ. Cir.*—Johns Hopkins University Circulars, Baltimore, Md. 36 U.S.
- Baltimore, Md., Mem. Biol. Lab. Johns Hopkins Univ.*—Memoirs from the Biological Laboratory of the Johns Hopkins University, Baltimore, Md. 37 U.S.
- Baltimore, Md., Proc. Ass. Amer. Anat.*—Proceedings of the Association of American Anatomists. [Included in Amer. J. Anat., Baltimore, Md.] 556 U.S.
- Baltimore, Md., Stud. Biol. Lab. Johns Hopkins Univ.*—Studies from the Biological Laboratory, Johns Hopkins University, Baltimore, Md. 38 U.S.
- Baltimore, Trans. Md. Acad. Sci.*—Transactions of the Maryland Academy of Science, Baltimore. 39 U.S.
- Bamberg, Ber. natf. Ges.*—Bericht der naturforschenden Gesellschaft in Bamberg. [3 jähr.] 111 Ger.
- Barcelona, Bol. R. Ac. Cs.*—Boletín de la Real Academia de Ciencias y Artes de Barcelona. Barcelona. — Spain.
- Barcelona, Bul. Montauyeux.*—Bulletin du Club Montauyeux. Barcelona. — Sp.
- Barcelona, Mem. R. Ac. Cs.*—Memorias de la Real Academia de Ciencias y Artes de Barcelona. — Spain.
- Barrow, Rep. Nat. F. Cl.*—Report and Proceedings of the Barrow Naturalists' Field Club, Barrow-in-Furness. 8vo. 21 U.K.
- Basel, Abh. Schweiz. Pal. Ges.*—Abhandlungen der schweizerischen paläontologischen Gesellschaft. Mémoires de la Société paléontologique suisse. Basel und Genf. 4to. 2 Swi.
- Basel, Verh. Natf. Ges.*—Verhandlungen der naturforschenden Gesellschaft in Basel. Basel. 8vo. 11 Swi.
- Bastia, Bul. soc. sci. hist. nat.*—Bulletin de la société des sciences historiques et naturelles de la Corse. Bastia (Corse). [mensuel.] 161 Fr.
- Batavia, Geneesk. Tijdschr. Ned. Ind.*—Geneeskundig Tijdschrift voor Nederlandsch-Indië uitgegeven door de Vereeniging ter bevordering der Geneeskundige Wetenschappen in Nederlandsch-Indië, Batavia. 8vo. 10 Hol.
- Batavia Meded. Vissch. Stat.*—Mededelingen van het Visscherij station te Batavia. — Hol.
- Batavia, Nat. Tijdschr.*—Natuurkundig Tijdschrift voor Nederlandsch-Indië uitgegeven door de Koninklijke natuurkundige Vereeniging, Batavia. 8vo. 11 Hol.
- Bath, Proc. Nat. Hist. F. Cl.*—Proceedings of the Bath Natural History and Antiquarian Field Club, Bath. 22 U.K.
- Bautzen, SitzBer. Isis.*—Sitzungsberichte und Abhandlungen der naturwissenschaftlichen Gesellschaft Isis zu Bautzen. Bautzen. [zwangl.] 116 Ger.
- Bayr. Forstzty, Nürnberg.*—Bayerische Forst- und Jagd-Zeitung. Nürnberg. [36 H. jährl.] 118 Ger.
- Beauvais, Mém. soc. acad.*—Mémoires de la société académique d'archéologie, sciences et arts du département de l'Oise. Beauvais (Oise). [annuel.] 165 Fr.
- Behavior Monogr. Cambridge, Mass.*—Behavior Monographs. Cambridge, Mass. — U.S.
- Beitr. Anat. Ohr., Berlin.*—Beiträge zur Anatomie, Physiologie, Pathologie u. Therapie des Ohres, der Nase u. des Halses, hrsg. v. A. Passow u. K. L. Schaffer. Berlin. [zwangl.] — Ger.

- Beitr. chem. Physiol., Braunschweig.*—Beiträge zur chemischen Physiologie und Pathologie. Zeitschrift für die gesammte Biochemie, hrsg. von F. Hofmeister. Braunschweig. [zwangl.] 1258 Ger.
- Beitr. Geburtsh., Leipzig.*—Beiträge zur Geburtshülfe und Gynäkologie, red. v. Hegar. Leipzig. [3 H. jährl.] 127 Ger.
- Beitr. geol. Karte Schweiz, Bern.*—Beiträge zur geologischen Karte der Schweiz. Bern. 4to. — Swi.
- Beitr. Geophysik, Leipzig.*—Beiträge zur Geophysik, hrsg. v. Gerland. Leipzig. [1-2 H. jährl.] 120 Ger.
- Beitr. klin. Chir., Tübingen.*—Beiträge zur klinischen Chirurgie, red. v. Bruns. Tübingen. [7-8 H. jährl.] 132 Ger.
- Beitr. Natk. Preussen, Königsberg.*—Beiträge zur Naturkunde Preussens, hrsg. v. d. physikalisch-ökonomischen Gesellschaft zu Königsberg. Königsberg. [zwangl.] 135 Ger.
- Beitr. path. Anat., Jena.*—Beiträge zur pathologischen Anatomie und zur allgemeinen Pathologie, red. v. Ziegler. Jena. [6 H. jährl.] 137 Ger.
- Belfast, Proc. Nat. F. Cl.*—Report and Proceedings of the Belfast Naturalists' Field Club, Belfast. 24 U.K.
- Belfast, Rep. Nat. Hist. Phil. Soc.*—Report and Proceedings of the Belfast Natural History and Philosophical Society, Belfast. 26 U.K.
- Bellinzona, Boll. Soc. Ticinese Sci. Nat.*—Bollettino della Società Ticinese di Scienze Naturali. Bellinzona. — Swi.
- Beograd, Spom. Srpska Ak.*—Srpska Kraljevska Akademija. Spomenik. Beograd. — Servia.
- Ber. Fischereiver. Ostpr., Königsberg.*—Berichte des Fischerei-Vereins für die Provinz Ostpreussen. Königsberg. [zwangl.] 142 Ger.
- Ber. Hauptvers. D. Forstver., Berlin.*—Bericht über die Hauptversammlung des Deutschen Forstvereins (Versammlung deutscher Forstmänner). Berlin. [jährl.] 1259 Ger.
- Ber. Kongr. exp. Psych. Leipzig.*—Bericht über den Kongress für experimentelle Psychologie. Im Auftrage des Vorstandes hrsg. Leipzig. — Ger.
- Ber. Leist. Ent., Berlin.*—Bericht über die wissenschaftlichen Leistungen auf dem Gebiete der Entomologie. Berlin. [zwangl.] — Ger.
- Ber. ophthalm. Ges., Wiesbaden.*—Bericht über die Versammlung der ophthalmologischen Gesellschaft. Wiesbaden. [jährl.] 143 Ger.
- Berajah, Leipzig.*—Berajah, Zoographia infinita, hrsg. v. O. Kleinschmidt. Leipzig. [zwangl.] — Ger.
- Bergens Mus. Aarb.*—Bergens Museums Aarbog, Bergen. 8 Nor.
- Bergens, Mus. Skr. N. R.*—Bergens Museums Skrifter. Ny Raekke. Bergen. — Nor.
- Bergen, Norsk Fisket.*—Norsk Fiskeritidende, Bergen. 7 Nor.
- Bergen, Naturen.*—Naturen, Bergen. 6 Nor.
- Berkeley, Univ. Cal. Pub. Bull. Dept. Geol.*—University of California Publications. Bulletin of the Department of Geology, Berkeley. 40 U.S.
- Berkeley, Univ. Cal. Chron.*—The University Chronicle. University of California, Berkeley, Cal. 568 U.S.
- Berkeley, Univ. Cal. Pub. Physiol.*—University of California Publications. Physiology. Berkeley, Cal. 558 U.S.
- Berkeley, Univ. Cal. Pub. Tech. Bul. Coll. Agric. Exp. Sta. Ent.*—University of California Publications, Technical Bulletins. College of Agriculture, Agricultural Experiment Station. Entomology. Sacramento. — U.S.

- Berkeley, Univ. Cal. Pub. Zool.*—University of California Publications. Zoology. Berkeley, Cal. 545 U.S.
- Berlin, Abh. Ak. Wiss.*—Abhandlungen der kgl. Akademie der Wissenschaften zu Berlin. Berlin. [jähr.] 152 Ger.
- Berlin, Abh. D. Seefischereiver.*—Abhandlungen des deutschen Seefischereivereins. Berlin. [zwangl.] 153 Ger.
- Berlin, Abh. geol. Landesanst.*—Abhandlungen der kgl. preussischen geologischen Landesanstalt. Berlin. [2–8 H. jährl.] 154 Ger.
- Berlin, Arb. biol. Anst.*—Arbeiten aus der biologischen Anstalt für Land- und Forstwirtschaft (vormals Biologische Abteilung für Land- und Forstwirtschaft am Kaiserl. Gesundheitsamte). Berlin. [zwangl.] — Ger.
- Berlin, Arb. D. Landw. Ges.*—Arbeiten der deutschen Landwirtschafts-Gesellschaft. Berlin. [jähr. in zwangl. H.] 159 Ger.
- Berlin, Arb. Gesundheitsamt.*—Arbeiten aus dem kaiserlichen Gesundheitsamte. Berlin. 160 Ger.
- Berlin, Ber. D. bot. Ges.*—Berichte der deutschen botanischen Gesellschaft. Berlin. [monatl.] 164 Ger.
- Berlin, Ber. D. chem. Ges.*—Berichte der deutschen chemischen Gesellschaft. Berlin. [20 H. jährl.] 165 Ger.
- Berlin, Jahrb. geol. Landesanst.*—Jahrbuch der kgl. preussischen geologischen Landesanstalt und Bergakademie. Berlin. [jähr.] 171 Ger.
- Berlin, Mitt. biol. Anst.*—Mitteilungen aus der kaiserlichen biologischen Anstalt für Land- und Forstwirtschaft. Berlin. [zwangl.] — Ger.
- Berlin, Mitt. D. Landw. Ges.*—Mitteilungen der deutschen Landwirtschafts-Gesellschaft. Berlin. [$\frac{1}{2}$ monatl.] 173 Ger.
- Berlin, Mitt. D. Seefischereiver.*—Mittheilungen des deutschen Seefischereivereins, red. v. Herwig. Berlin. [monatl.] 174 Ger.
- Berlin, Mitt. Prüfungsanst. Wasserversorg.*—Mitteilungen aus der Kgl. Prüfungsanstalt für Wasserversorgung und Abwässerbeseitigung zu Berlin, hrsg. v. A. Schmidtman und Carl Günther. Berlin. [zwangl.] 1318 Ger.
- Berlin, Mitt. zool. Mus.*—Mittheilungen aus dem zoologischen Museum in Berlin. Berlin. [2 H. jährl.] 179 Ger.
- Berlin, Monatsber. D. geol. ges.*—Monatsberichte der deutschen geolog. Gesellschaft Berlin. [179 m.] — Ger.
- Berlin, SitzBer. Ak. Wiss.*—Sitzungsberichte der kgl. preussischen Akademie der Wissenschaften. Berlin. [wöch.] 182 Ger.
- Berlin, SitzBer. Ges. natf. Freunde.*—Sitzungsberichte der Gesellschaft naturforschender Freunde zu Berlin. [jähr. in zwangl. H.] 183 Ger.
- Berlin, Verh. Ges. Anthr.*—Verhandlungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte, red. v. Virchow. Berlin. 1261 Ger.
- Berlin, Veröff. Inst. Meeresk.*—Veröffentlichungen des Instituts für Meereskunde und des geographischen Instituts an der Universität Berlin, hrsg. v. A. Penck. Berlin. 1307 Ger.
- Berlin, Zs. D. geol. Ges.*—Zeitschrift der deutschen geologischen Gesellschaft. Berlin. [$\frac{1}{4}$ jährl.] 199 Ger.
- Berlin, Zs. Ver. D. Zuckerind.*—Zeitschrift des Vereins der deutschen Zuckerindustrie, red. v. Alexander Herzfeld. Berlin. 1294 Ger.
- Berliner ent. Zs.*—Berliner entomologische Zeitschrift, hrsg. v. d. entomologischen Verein zu Berlin. Berlin. [$\frac{1}{4}$ jährl.] 208 Ger.
- Berliner Klinik.*—Berliner Klinik. Sammlung klinischer Vorträge. Berlin. [16 H. jährl.] 210 Ger.

- Berliner klin. Wochenschr.*—Berliner klinische Wochenschrift, red. v. Ewald u. Posner. Berlin. 209 Ger.
- Berliner thierärztl. Wochenschr.*—Berliner thierärztliche Wochenschrift, hrsg. v. Dieckerhoff etc. Berlin. Nebst Beilage: Mittheilungen für Veterinärbeamte. 214 Ger.
- Bern, Mitt. Natf. Ges.*—Mitteilungen der naturforschenden Gesellschaft in Bern. Bern. 8vo. 15 Swi.
- Bern, Mitt. Schweiz. Entom. Ges.*—Mitteilungen der schweizerischen entomologischen Gesellschaft. Bulletin de la société entomologique Suisse. 8vo. Bern. —Swi.
- Besançon, Mém. soc. émül.*—Mémoires de la société d'émulation du Doubs. Besançon (Doubs). [annuel.] 167 Fr.
- Besançon, Mém. soc. hist. nat.*—Mémoires de la société d'histoire naturelle du Doubs. Besançon (Doubs). [annuel.] 168 Fr.
- Bessarab. selisk. choz., Kišinev.*—Бессарабское сельское хозяйство. Кишиневъ [L'économie rurale de Bessarabie. Kishinev]. — Rus.
- Béziers, Bul. soc. étud. sci. nat.*—Bulletin de la société d'étude des sciences naturelles de Béziers (Hérault). [irrégul.] 171 Fr.
- Bibliogr. anat., Nancy.*—Bibliographie anatomique, dir. A. Nicolas. Paris-Nancy. [mensuel.] 172 Fr.
- Bibliogr. zool., Leipzig.*—Bibliographia zoologica. Leipzig. [Bibliographie, jährl.] 220 Ger.
- Bibl. géolog. russ., St. Peterburg.*—Русская геологическая библиотечка. С.-Петербургъ [Bibliothèque géologique russe. St.-Petersbourg]. 13 Rus.
- Bibl. med., Stuttgart.*—Bibliotheca medica, hrsg. v. Born etc. Stuttgart. [jährl. in zwangl. H.] 218 Ger.
- Bibl. věst. vinoděl., Odessa.*—Библиотечка Вѣстника Бинодѣлія. Одесса [Bibliothèque du Věstnik Vinodèlia, Odessa]. — Rus.
- Bidr. F. Vet. Soc., Helsingfors.*—Bidrag till kännedom om Finlands Natur och Folk, utgifna af Finska Vetenskaps-Societeten. Helsingfors. 8vo. 3 Fin.
- Bienenwirthsch. Centralbl., Hannover.*—Bienenwirthschaftliches Centralblatt, red. v. Lehzen. Hannover. [$\frac{1}{2}$ monatl.] 223 Ger.
- Biochem. Zs., Berlin.*—Biochemische Zeitschrift, red. v. C. Neuberg. Berlin. [zwangl.] — Ger.
- Biol. Bull., Wood's Holl, Mass.*—Biological Bulletin, Marine Biological Laboratory, Wood's Holl, Mass. 535 U.S.
- Biol. Centr.-Amer., London.*—Biologia Centrali-Americana, London. 4to. 27 U.K.
- Biol. Centralbl., Leipzig.*—Biologisches Centralblatt, hrsg. v. Rosenthal. Leipzig. [früher Berlin.] [$\frac{1}{2}$ monatl.] 226 Ger.
- Biol. Zs., Moskva.*—Биологическій Журналъ. Москва [Biologische Zeitschrift. Moskau]. — Rus.
- Biologica, Torino.*—Biologica, Raccolta di Scritti di Biologia, Torino. — It.
- Biometrika, Cambridge.*—Biometrika, Cambridge. 437 U.K.
- Bird Lore, Harrisburg, Pa.*—Bird Lore, Harrisburg, Pa. 48 U.S.
- Birmingham, Proc. Nat. Hist. Phil. Soc.*—Proceedings of the Birmingham Natural History and Philosophical Society, Birmingham. 28 U.K.
- Bishop Auckland, Trans. Weardale Nat. F. Cl.*—Transactions of the Weardale Naturalists' Field Club, Bishop Auckland. 438 U.K.

- Bl. Aquarienkunde, Stuttgart.*—Blätter für Aquarien- und Terrarienkunde, hrsg. v. W. Wolterstorff. Organ des Internationalen Bundes der Aquarien- und Terrarienfrende. Stuttgart [früher Magdeburg]. [wöch.] 227 Ger.
- Bl. Zuckerrübenbau, Berlin.*—Blätter für Zuckerrübenbau, hrsg. v. Hager. [$\frac{1}{2}$ monatl.] 235 Ger.
- Blackheath, Trans. West Kent Nat. Hist. Soc.*—Transactions of the West Kent Natural History, Microscopical and Photographic Society, Blackheath. 30 U.K.
- Blutstudien, Magdeburg.*—Blutstudien, hrsg. v. F. Freytag. Magdeburg. [unbest.] — Ger.
- Board Agric. Leaf., London.*—Board of Agriculture Leaflets, London. 4to. — U.K.
- Boll. Ass. Med. Trieste., Triest.*—Bollettino della Associazione Medica Triestina (Selbstverlag). — Aus.
- Boll. malat. orecchio, Firenze.*—Bollettino delle malattie dell' orecchio, della gola e del naso, Firenze. 31 It.
- Boll. Naturalista, Siena.*—Bollettino del Naturalista, Siena. 33 It.
- Bol. sc. med., Bologna.*—Bollettino delle scienze mediche, Bologna. 37 It.
- Bol. com. parasit. agric., Mexico.*—Boletín de la Comisión de parasitología agrícola de México. — Mex.
- Bol. Mus. Goeldi, Pará.*—Boletín do Museu Goeldi de Historia natural e ethnographia (Museu paraense), Pará. — Braz.
- Bol. Mus., Mexico.*—Boletín del Museo nacional de México. — Mex.
- Bologna, Ann. Uff. prov. Agric.*—Annali dell' Ufficio provinciale per l'Agricoltura, Bologna. 40 It.
- Bologna, Mem. Acc. sc.*—Memorie dell'Accademia delle scienze dell'Istituto, Bologna. 42 It.
- Bologna, Rend. Acc. sc.*—Rendiconti dell'Accademia delle scienze dell'Istituto, Bologna. 43 It.
- Bombay, J. Asiat. Soc.*—Journal of the Bombay Branch of the Royal Asiatic Society, Bombay. — Ind.
- Bombay, J. Nat. Hist. Soc.*—Journal of the Bombay Natural History Society, Bombay. 5 Ind.
- Bonn, Jahresber. Fischereiver.*—Jahresbericht des Rheinischen Fischerei-Vereins. Bonn-Poppelsdorf. [jähr.] 237 Ger.
- Bonn, Sitz. Ber. Ges. Natk.*—Sitzungsberichte der niederrheinischen Gesellschaft für Natur- und Heilkunde zu Bonn. Bonn. 1295 Ger.
- Bonn, Sitz. Ber. nathist. Ver.*—Sitzungsberichte des naturhistorischen Vereins der preussischen Rheinlande und Westfalens. Bonn. [2jähr.] — Ger.
- Bonn, Verh. nathist. Ver.*—Verhandlungen des naturhistorischen Vereins der preussischen Rheinlande, Westfalens u. d. Reg.-Bez. Osnabrück. Nebst Sitzungsberichten der niederrheinischen Gesellschaft für Natur- und Heilkunde zu Bonn. Bonn. [jähr. in je 2 Hälften.] 238 Ger.
- Bordeaux, Actes soc. linn.*—Actes de la société linnéenne de Bordeaux (Gironde). [trimestre.] 184 Fr.
- Bordeaux, Mém. soc. sci. phys. nat.*—Mémoires de la société des sciences physiques et naturelles de Bordeaux. [trimestr.] 189 Fr.
- Bordeaux, Proc.-verb. soc. linn.*—Procès-verbaux de la Société Linnéenne de Bordeaux. — Fr.
- Bordeaux, Proc.-verb. soc. sci. phys. nat.*—Procès-verbaux de la société des sciences physiques et naturelles de Bordeaux. — Fr.

- Boston, Mass., Mem. Amer. Acad. Arts Sci.*—Memoirs of the American Academy of Arts and Sciences, Boston, Mass. 53 U.S.
- Boston, Mass., Mem. Soc. Nat. Hist.*—Memoirs of the Boston Society of Natural History, Boston, Mass. 54 U.S.
- Boston, Mass., Occ. Paprs. Soc. Nat. Hist.*—Occasional Papers of the Boston Society of Natural History, Boston, Mass. 56 U.S.
- Boston, Mass., Proc. Amer. Acad. Arts Sci.*—Proceedings of the American Academy of Arts and Sciences, Boston, Mass. 60 U.S.
- Boston, Mass., Proc. Soc. Nat. Hist.*—Proceedings of the Boston Society of Natural History, Boston, Mass. 61 U.S.
- Bot. Centralbl., Beihefte, Dresden.*—Botanisches Centralblatt. Referirendes Organ, hrsg. v. Uhlworm u. Kohl. [wöch.] Beihefte. Abt. 1: Anatomie, Histologie etc. Abt. 2: Systematik, Pflanzengeographie etc. Dresden. [zwangl.] 241 Ger.
- Bot. Gaz., Chicago, Ill.*—Botanical Gazette. Chicago, Ill. 64 U.S.
- Bot. Jahrb., Leipzig.*—Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie, hrsg. v. Engler. Leipzig. [10 H. jährl.] 242 Ger.
- Boulder, Univ. Colo. Stud.*—The University of Colorado Studies. Boulder, Colo. 572 U.S.
- Boulogne-sur-mer, Bul. Soc. acad.*—Bulletin de la société académique, dir. H. Réveillez. Boulogne-sur-mer (Pas-de-Calais). [trimestr.] 191 Fr.
- Bourges, Bul. soc. hist. litt. sci.*—Bulletin de la Société historique, littéraire, artistique et scientifique du département du Cher. Bourges (Cher). [irrégul.] 197 Fr.
- Bregenz, JahrBer. Mus. Ver.*—Jahresbericht des Vorarlberger Museum-Vereines. Bregenz. [jähr.] 48 Aus.
- Bremen, Abh natw. Ver.*—Abhandlungen, hrsg. v. naturwissenschaftlichen Verein zu Bremen. Bremen. [1-2 H. jährl.] 253 Ger.
- Bremen, Jahrb. Samml.*—Jahrbuch der bremischen Sammlungen, red. v. G. Pauli. Bremen. [$\frac{1}{2}$ jährl.] — Ger.
- Brescia, Comment. Ateneo.*—Commentarii dell' Ateneo, Brescia. 45 It.
- Breslau, Jahresber. Ges. vaterl. Cultur.*—Jahresbericht der schlesischen Gesellschaft für vaterländische Cultur. Breslau. 258 Ger.
- Breslau, Jahresh. Ver. Insektenk.*—Jahresheft des Vereins für schlesische Insektenkunde zu Breslau. — Ger.
- Brighton, Rep. Nat. Hist. Soc.*—Report of the Brighton and Hove Natural History and Philosophical Society, Brighton. 37 U.K.
- Brisbane, Ann. Queensland Mus.*—The Queensland Naturalist. The Organ of the Field Naturalist's Club and its branches. Brisbane, H. Pole & Co. — Qnsl.
- Brisbane, Mem. Queensland Mus.*—Memoirs of the Queensland Museum. Brisbane. — Qnsl.
- Brisbane, Proc. R. Soc. Queensland.*—Proceedings of the Royal Society of Queensland, Brisbane. — Qnsl.
- Brisbane, Trans. Nat. Hist. Soc. Queensland.*—Proceedings of the Natural History Society of Queensland, Brisbane. — Qnsl.
- Bristol, Proc. or Rep. Nat. Soc.*—Proceedings or Report of the Bristol Naturalists' Society, Bristol. 40 U.K.
- Brit. Birds, London.*—British Birds, an illustrated magazine devoted to the birds on the British List. [Monthly.] Witherby & Co. London. — U.K.
- Brit. J. Derm., London.*—British Journal of Dermatology, London. — 43 U.K.
- Brit. J. Psych., Cambridge.*—British Journal of Psychology, Cambridge. — U.K.

- Brit. Med. J., London.*—British Medical Journal, London. 44 U.K.
- Bromberg, Mitt. Inst. Landw.*—Mitteilungen des Kaiser Wilhelms-Instituts für Landwirtschaft in Bromberg. Berlin. [4-6 H. jährl.] — Ger.
- Bromberg, Votr. Pflanzenschutz.*—Vorträge über Pflanzenschutz der Abteilung für Pflanzenkrankheiten des Kaiser Wilhelms-Instituts für Landwirtschaft in Bromberg. Berlin. [zwaugl.] — Ger.
- Brooklyn N.Y., Bul. Ent. Soc.*—Bulletin of the Entomological Society. Brooklyn, N.Y. — U.S.
- Brooklyn, N.Y., Inst. Arts Sci. Cold Spring Harbor Monog.*—Cold Spring Harbor Monographs. Brooklyn Institute of Arts and Sciences. Brooklyn, N.Y. 573 U.S.
- Brooklyn, N.Y., Mus. Inst. Arts Sci. Bul.*—The Museum of the Brooklyn Institute of Arts and Science. Science Bulletin, Brooklyn, N.Y. — U.S.
- Broteria, Lisboa.*—Broteria. Revista de ciencias naturaes do Collegio de S. Fiel. Lisboa. — Por
- Brünn, Verh. Natf. Ver.*—Verhandlungen des Naturforschenden Vereines in Brünn. Brünn. [jährl.] 61 Aus.
- Brünn, Čas. Mor. Mus. Zemsk.*—Časopis Moravského Musea Zemského. Red. Frant. Rypáček, Frant. Šujan. Vydává Moravská Musejní Společnost. Brno [Zeitschrift des Mährischen Landesmuseums, hrsg. von der Mährischen Museums-Gesellschaft-Brünn]. [$\frac{1}{2}$ jährl.] 53 Aus.
- Brünn, Zs. Mähr. Ld-Mus.*—Zeitschrift des Mährischen Landesmuseums, hrsg. von der Mährischen Museums-Gesellschaft, red. v. A. Rzehak, C. Schirmeisen u. J. Matzura. Brünn. [$\frac{1}{2}$ jährl.] 63 Aus.
- Bruxelles, Ann. Soc. belge microsc.*—Annales de la Société belge de microscopie. Bruxelles. 21 Bel.
- Bruxelles, Ann. Soc. ent. Belgique.*—Annales de la Société entomologique de Belgique. Bruxelles. [mensuel.] 23 Bel.
- Bruxelles, Ann. Soc. roy. malac.*—Annales des séances de la Société royale zoologique et malacologique de Belgique. Bruxelles. [mensuel.] [Includes Bul. and Mém.] 48 Bel.
- Bruxelles, Ann. Soc. scient.*—Annales de la Société scientifique de Bruxelles (Louvain). [trimestr.] 26 Bel.
- Bruxelles, Bul. Acad. roy.*—Bulletin de la classe des sciences de l'Académie royale des sciences, des lettres et des beaux arts de Belgique. Bruxelles. [mensuel.] 27 Bel.
- Bruxelles, Bul. Soc. géol. paléont. hydr.*—Bulletin de la Société belge de géologie, de paléontologie et d'hydrologie. Bruxelles. [Includes Pr. verb. Mém.] 42 Bel.
- Bruxelles, Bul. Soc. roy. linn.*—Bulletin de la Société royale linnéenne de Bruxelles. Bruxelles. [mensuel.] 47 Bel.
- Bruxelles, Mém. Acad. Roy.*—Mémoires de l'Académie royale des sciences, des lettres et des beaux-arts de Belgique. Bruxelles. — Bel.
- Bruxelles, Mém. Soc. ent. Belgique.*—Mémoires de la Société entomologique de Belgique. Bruxelles. 52 Bel.
- Bryn Mawr, Pa., Bryn Mawr Coll. Monogr.*—Bryn Mawr College Monographs. Bryn Mawr, Pa. 546 U.S.
- Bryologist, Brooklyn, N.Y.*—The Bryologist, Brooklyn, N.Y. 65 U.S.
- Bucharest, An. Inst. Geol. Romaniei.*—An. Institutul Geologic al României. Bucarest. [Annales de l'Institut géologique de Roumanie. Bucharest.] — Rou.

- Bucharest, Bul. Soc. Sci.*—Buletinul Societatii de Stiinte din Bucuresci-România. (Bulletin de la Société de Sciences Bucarest-Roumanie) Bucuresci, [Bucharest.] — Rou.
- Bucuresci, An. Ac. Române.*—Analele Academiei Române, Bucuresci. — Rou.
- Bucuresci, Publ. Adamachi Ac. Română.*—Academia Română. Publicatiunile fondului Vasilie Adamachi, Bucuresci. — Rou.
- Budap. Orr. Ujs., Budapest.*—Budapesti Orvosi Ujság, Budapest. [Budapester Medizinische Zeitung, Budapest.] — Hun.
- Buenos Aires, Act. Ac. Córdoba.*—Actas de la Academia nacional de Ciencias en Córdoba, Buenos Aires. — Argent.
- Buenos Aires, An. Soc. Cient. Argent.*—Anales de la Sociedad científica argentina, Buenos Aires. — Argent.
- Buenos Aires, Bol. Ac. Córdoba.*—Boletín de la Academia nacional de Ciencias en Córdoba, Buenos Aires. — Argent.
- Buffalo, Bul. Soc. Nat. Sci.*—Bulletin of the Buffalo Society of Natural Sciences, Buffalo, N.Y. 66 U.S.
- Buitenzorg, Ann. Jard. bot.*—Annales du Jardin botanique de Buitenzorg, publiées par M. Treub, Batavia, Leido. 8vo. 16 Hol.
- Buitenzorg, Bul. Dép. Agric. Indes Néerl.*—Bulletin du Département de l'Agriculture des Indes Néerlandaises, Buitenzorg. 8vo. — Hol.
- Buitenzorg, Meded. Dep. Landb.*—Mededeelingen uitgaande van het Departement van Landbouw te Buitenzorg. — Hol.
- Buitenzorg, meded Proefst. Thee.*—Medeelingen van het proefstation voor thee. Buitenzorg, Departement van Landbouw. — Hol.
- Bulawayo, Proc. Rhod. Sci. Ass.*—Proceedings of the Rhodesia Scientific Association, Bulawayo. — S. Afr.
- Bul. carte géol. France, Paris.*—Bulletin des services de la carte géologique de France et des topographies souterraines. Paris. [irrégul.] 206 Fr.
- Bul. écon. Madagascar, Tananarive.*—Colonie de Madagascar et dépendances. Bulletin économique publié tous les deux mois par les soins du gouvernement général. Tananarive. 867 Fr.
- Bul. Inst. Ocean. Monaco.*—Bulletin de l'Institut océanographique de Monaco. — Mon.
- Bul. Inst. Pasteur, Paris.*—Bulletin de l'Institut Pasteur, Paris. — Fr.
- Bul. Inst. psych. internat., Paris.*—Bulletin de l'Institut psychologique international. Paris. 224 Fr.
- Bul. biol., Jurjev.*—Справочный листокъ біолога. Юрьевъ [Bulletin biologique. Jurjev]. — Rus.
- Bul. Com. Géol. Finl., Helsingfors.*—Bulletin de la Commission Géologique de Finlande. Helsingfors. 8vo. 5 Fin.
- Bul. Ent. Research, London.*—Bulletin of entomological research. London. — U.K.
- Bul. Mich. Acad. Sci. Agricultural College.*—Bulletin of the Michigan Academy of Science, Agricultural College, Mich. — U.S.
- Bul. N. Zeal. Dept. Agric., Wellington.*—Bulletin of the New Zealand Department of Agriculture. Wellington. — N.Z.
- Bul. Murith., Aigle.*—Bulletin de la Murithienne, Société valaisanne des sciences naturelles. Aigle, Bex, etc. 8vo. 19 Swi.
- Bul. Muséum, Paris.*—Bulletin du Muséum d'Histoire Naturelle. Paris. [8 numéros par an] 237 Fr.

- Bul. sci. France Belgique, Paris.*—Bulletin scientifique de la France et de la Belgique, dir. Giard. Paris. [annuel.] 245 Fr.
- Bul. Soc. Romande Apicult., Neuchâtel.*—Bulletin de la Société Romande d'Apiculture. Lausanne (Impr. Charles Bretagne, L. Vincent). — Swi.
- Bul. Soc. Zool., Genève.*—Bulletin de la Société Zoologique de Genève. 8vo. Genève. — Swi.
- Bul. stat. biol. Arcachon, Bordeaux.*—Bulletin de la station biologique d'Arcachon. Bordeaux. — Fr.
- Bul. Suisse Pêche, Neuchâtel.*—Bulletin Suisse de Pêche et Pisciculture. Organe français de la Société Suisse de Pêche et Pisciculture paraissant chaque mois à Neuchâtel, réd. Savoie-Petit-pierre et Prof. D. O. Fuhmann. Neuchâtel. — Swi.
- Burton-on-Trent, Trans. Nat. Hist. Soc.*—Burton-on-Trent Natural History and Archæological Society, Burton-on-Trent. 46 U.K.
- Braunschweig, Jahresber. Ver. Natw.*—Jahresbericht des Vereins für Naturwissenschaft zu Braunschweig. Braunschweig. [2 jähr.] 250 Ger.
- C. R. ass. anat., Paris.*—Comptes-rendus de l'association des anatomistes. Paris. [annuel.] 871 Fr.
- C. R. Soc. helvét. Sci. Nat., Genève.*—Comptes rendus des travaux de la Société helvétique des sciences naturelles. Genève. — Swi.
- Caen, Bul. soc. linn.*—Bulletin de la société linnéenne de Normandie. Caen (Calvados). [trimestr.] 249 Fr.
- Caen, Mém. soc. linn.*—Mémoires de la société linnéenne de Normandie. Caen (Calvados). [irrégul.] 252 Fr.
- Cagliari, Boll. sc. med. nat.*—Bollettino della Società fra i cultori delle scienze mediche e naturali, Cagliari. 277 It.
- Cairo, Bul. Inst. Egypt.*—Bulletin de l'Institut Egyptien. Le Caire. — Egypt.
- Cairo J. Sci.*—Cairo Scientific Journal, Cairo. — Egypt.
- Cairo, Mém. Inst. Egypt.*—Mémoires de l'Institut Egyptien. Le Caire. — Egypt.
- Cairo, Rec. Eg. Govt. Sch. Med.*—Records of the Egyptian Government School of Medicine. Ministry of Public Instruction, Cairo. — Egypt.
- Cairo, Yrbk. Khed. Agric. Soc.*—Yearbook of the Khedivial Agricultural Society, Cairo. — Egypt.
- Cairo, Zool. Gdns. Sp. Rep.*—Public Works Department Zoological Gardens, Giza, near Cairo. Special Report. — Egypt.
- Calcutta, J. As. Soc. Beng.*—Journal and Proceedings of the Asiatic Society of Bengal, Calcutta. 9 Ind.
- Calcutta, J. Trop. Vet. Sci.*—The Journal of Tropical Veterinary Science, Calcutta. — Ind.
- Calcutta, Mem. Dept. Agric. Ind. Ent. Ser.*—Memoirs of the Department of Agriculture in India. Entomological Series. Calcutta. — Ind.
- Calcutta, Proc. As. Soc. Beng.*—Proceedings of the Asiatic Society of Bengal Calcutta. 11 Ind.
- Calcutta, Proc. J. Agric. Hort. Soc. Ind.*—Proceedings and Journal of the Agricultural and Horticultural Society of India, Calcutta. 12 Ind.
- Cambridge, Mass., Bul. Mus. Comp. Zool. Harvard Coll.*—Bulletin of the Museum of Comparative Zoology at Harvard College, Cambridge, Mass. 71 U.S.
- Cambridge, Mass., Cont. Mus. Comp. Zool. Harvard Coll.*—Zoological Laboratory Contributions, Museum of Comparative Zoology, Harvard College, Cambridge, Mass. 77 U.S.

- Cambridge, Mass., Mem. Mus. Comp. Zool. Harvard Coll.*—Memoirs of the Museum of Comparative Zoology of Harvard College, Cambridge, Mass. 78 U.S.
- Cambridge, Mass., Mem. Nuttall Ornith. Cl.*—Memoirs of the Nuttall Ornithological Club. Cambridge, Mass. 79 U.S.
- Cambridge, Mass., Proc. New Engl. Zool. Cl.*—Proceedings of the New England Zoological Club, Cambridge, Mass. 83 U.S.
- Cambridge, Mass., Rep. Mus. Comp. Zool. Harvard Coll.*—Annual Report of the Museum of Comparative Zoology, Harvard College, Cambridge, Mass. 84 U.S.
- Cambridge, Proc. Phil. Soc.*—Proceedings of the Cambridge Philosophical Society, Cambridge. 48 U.K.
- Cameron, La., Gulf Biol. Sta. Bull.*—Gulf Biologic Station. Cameron, La. Bulletin. — U.S.
- Canad. Entomol., London, Can.*—Canadian Entomologist, London [formerly Toronto], Can. 6 Can.
- Canterbury, Rep. E. Kent Nat. Hist. Soc.*—Annual Report and Transactions of the East Kent Scientific and Natural History Society, Canterbury. 52 U.K.
- Cape Town, Agric. J.*—The Agricultural Journal of the Cape of Good Hope. Published for the Department of Agriculture. Cape Town. [monthly.] — S. Afr.
- Cape Town Ann Nat. Mus.*—Annals of the Natal Government Museum, London. — S. Africa.
- Cape Town, Ann. S. Afric. Mus.*—Annals of the South African Museum, Cape Town. 5 S. Afr.
- Cape Town, Marin. Invest.*—Marine Investigations in South Africa, Cape Town. 6 S. Afr.
- Cape Town, Rep. Geol. Comm.*—Annual Report of the Geological Commission, Cape Town. 2 S. Afr.
- Cape Town, Rep. S. Afric. Ass.*—Report of the South African Association for the Advancement of Science. Cape Town. — S. Afr.
- Cape Town, Trans. S. Afric. Phil. Soc.*—Transactions of the South African Philosophical Society, Cape Town, [Includes Proceedings.] 7 S. Afr.
- Cape Town, Trans. R. Soc. S. Africa.*—Transactions of the Royal Society, South Africa, Cape Town. — S. Afr.
- Caracas, Rev. Univ. Venezuela.*—Revista científica de la Universidad central de Venezuela, Caracas. — S. Amer.
- Carcassonne, Bul. soc. étud. sci.*—Bulletin de la société d'études scientifiques de l'Aude. Carcassonne (Aude). [annuel.] 254 Fr.
- Cardiff, Trans. Nat. Soc.*—Transactions of the Cardiff Naturalists' Society, Cardiff. 55 U.K.
- Carinthia II, Klagenfurt.*—Carinthia II, Mitteilungen des Naturhistorischen Landesmuseums für Kärnten, red. v. Karl Frauscher. Klagenfurt. [2 monatl.] 67 Aus.
- Carlisle, Trans. Cumb. Ass.*—Transactions of the Cumberland Association, etc., Carlisle. 8vo. 56 U.K.
- Cas. Lékař. Česk., Prag.*—Časopis Lékařů Českých. Praha. [Zeitschrift der Tschechischen Ärzte.] Prag. [wöch.] 72 Aus.
- Cassel, Abh. Ver. Natk.*—Abhandlungen und Bericht des Vereins für Naturkunde zu Cassel. Cassel. [2 jähr.] 267 Ger.
- Cassinia, Philadelphia, Pa.*—Cassinia: Proceedings of the Delaware Valley Ornithological Club of Philadelphia, Philadelphia, Pa. — U.S.

- Catania, Atti Acc. Gioenia.*—Atti dell' Accademia Gioenia di scienze naturali, Catania. 48 It.
- Catania, Bul. Acc. Gioenia.*—Bullettino delle sedute dell' Accademia Gioenia di scienze naturali, Catania. 49 It.
- Caus. sci., Paris.*—Causeries scientifiques de la société zoologique de France. Paris. [irrégul.] 257 Fr.
- Centralbl. Augenheilk., Leipzig.*—Centralblatt für praktische Augenheilkunde, hrsg. v. Hirschberg. Leipzig. [monatl.] 273 Ger.
- Centralbl. Bakt., Jena.*—Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten, hrsg. v. O[skar] Uhlworm. Jena. 1. Abth. : Medicinischhygienische Bakteriologie. [1 Bd zwangl. ersch. Originale, 2 Bde Referate zu je 26 Nrn jährl.] 2. Abth. : Allgemeine, landw.-technol. etc. Bakteriologie. [2 Bde zu je 26 Nrn jährl.] Jena (G. Fischer). 274 Ger.
- Centralbl. Gynäk., Leipzig.*—Centralblatt für Gynäkologie, hrsg. v. Fritsch. Leipzig. [wöch.] 279 Ger.
- Centralbl. Min., Stuttgart.*—Centralblatt für Mineralogie, Geologie und Paläontologie; hrsg. v. Bauer etc. Stuttgart. [$\frac{1}{2}$ monatl.] 285 Ger.
- Centralbl. Path., Jena.*—Centralblatt für allgemeine Pathologie und pathologische Anatomie, hrsg. v. Ziegler. Jena. [$\frac{1}{2}$ monatl.] 288 Ger.
- Cellule, Louvain.*—La Cellule. Recueil de cytologie et d'histologie générale. Lierre et Louvain. — Bel.
- Cernigov, Zemsk. sborn.*—Земскій сборникъ Черниговъ [Recueil du zemstvo de Tschernigov]. — Rus.
- Ceylon, Ann. R. Bot. Gard.*—Annals of the Royal Botanic Gardens, Peradenuja, Ceylon. 28 Ind.
- Chalon-sur-Saône, Bul. soc. sci. nat.*—Bulletin de la société des sciences naturelles de Saône-et-Loire. Chalon-sur-Saône (Saône-et-Loire). [mensuel.] 260 Fr.
- Chambéry, Bul. soc. hist. nat.*—Bulletin de la société d'histoire naturelle. Chambéry (Savoie). [irrégul.] 262 Fr.
- Chambéry, Mém. Acad. sci. bel.-let.*—Mémoires de l'Académie des sciences, belles-lettres et arts de la Savoie. Chambéry (Savoie). [annuel.] 263 Fr.
- Chapel Hill, N.C., J. Elisha Mitchell Sci. Soc.*—Journal of the Elisha Mitchell Scientific Society, Chapel Hill, N.C. 88 U.S.
- Char'kov, Ann. Univ.*—Лѣтописи Императорскаго Харьковскаго Университета. Харьковъ [Annales de l'Université Impériale de Kharkov]. 25 Rus.
- Char'kov, Bul. Soc. nat.*—Бюллетени Харьковскаго Общества любителей природы. Харьковъ [Bulletins de la Société des amis de la nature de Kharkov]. — Rus.
- Char'kov, C. R. Inst. vét.*—Сборникъ трудовъ Харьковскаго ветеринарнаго Института. Харьковъ [Comptes rendus des travaux de l'Institut vétérinaire à Kharkov. Kharkov]. — Rus.
- Char'kov, Med. Žurn.*—Харьковскій медицинскій журналъ. Харьковъ [Journal de médecine de Kharkov. Kharkov]. — Rus.
- Char'kov, Trav. Soc. nat.*—Труды Общества испытателей природы при Императорскомъ Харьковскомъ Университетѣ. Харьковъ [Travaux de la société des naturalistes à l'Université Impériale de Kharkov. Kharkov]. — Rus.
- Char'kov, Trd. Obšč. ispyt. prir.*—Труды Общества испытателей природы при Императорскомъ Харьковскомъ Университетѣ. Харьковъ [Travaux de la Société des naturalistes de l'Université Impériale de Kharkov]. 22 Rus.
- Charité-Ann., Berlin.*—Charité-Annalen, red. v. Schaper. Berlin. [jähr.] 295 Ger.
- Cheltenham Coll. Nat. Hist. Mag.*—Cheltenham College Natural History Magazine, Cheltenham. 57 U.K.

- Cheltenham, Proc. Nat. Hist. Soc.*—Proceedings of the Natural History Society, Cheltenham. — U.K.
- Chemnitz, Ber. natw. Ges.*—Bericht der naturwissenschaftlichen Gesellschaft zu Chemnitz. Chemnitz. [mehrjähr.] 303 Ger.
- Cherbourg, Mém. soc. sci. nat.*—Mémoires de la société nationale des sciences naturelles et mathématiques de Cherbourg (Manche). [trimestr.] 272 Fr.
- Chester, Ann. Rep. Soc. Nat. Sci.*—Annual Report and Proceedings of the Chester Society of Natural Science, Literature and Art, Chester. 8vo. 61 U.K.
- Chicago, Ill., Bull. Acad. Sci.*—Bulletin of the Chicago Academy of Sciences, Chicago, Ill. 96 U.S.
- Chicago, Ill., Cont. Hull Bot. Lab. Univ. Chic.*—Contributions from Hull Botanical Laboratory. (University of Chicago), Chicago, Ill. 99 U.S.
- Chicago, Ill., Field Columb. Mus. Pub. Geol. Ser.*—Field Columbian Museum Publications. Geological Series. Chicago, Ill. 108 U.S.
- Chicago, Ill., Field Columb. Mus. Pub. Zool. Ser.*—Field Columbian Museum Publications. Zoological Series. Chicago, Ill. 111 U.S.
- Chicago, Ill., Field Mus. Nat. Hist. Pub. Ornith. Ser.*—Field Museum of Natural History Publications. Ornithological Series. Chicago, Ill. 109 U.S.
- Chożajstvo, Kiev.*—Хозяйство. Кіевъ [Agriculture. Kiev]. — Rus.
- Choz. na Donu, Novočerkassk.*—Хозяйство на Дону. Новочеркасскъ [Agriculture sur le Don. Novočerkassk]. — Rus.
- Chron. Agric., Lausanne.*—Chronique Agricole du canton de Vaud. Lausanne. 8vo. 23 Swi.
- Chur, Jahresber. Natf. Ges. Graub.*—Jahresbericht der naturforschenden Gesellschaft Graubündens. Chur. 8vo. 24 Swi.
- Chutor, St. Peterburg.*—Хуторъ. С. Петербургъ [La ferme. St. Pétersbourg]. — Rus.
- Chutorianin, Poltava.*—Хуторянинъ; органъ Полтавскаго общества сельскаго хозяйства. Полтава [Le fermier; organe de la Société agronomique de Poltava. Poltava]. 30 Rus.
- Cincinnati, Ohio, J. Soc. Nat. Hist.*—Journal of the Cincinnati Society of Natural History, Cincinnati, Ohio. 115 U.S.
- Claremont, Cal., Pomona Coll. Rep. Laguna Mar. Lab.*—Pomona College. Report of the Laguna Marine Laboratory. Claremont Cal. — U.S.
- Clermont-Ferrand, Ann. stat. limnol. de Besse.*—Annales de la station limnologique de Besse. Clermont-Ferrand. — Fr.
- Clifton Coll., Rep. Sci. Soc.*—Report of the Clifton College Scientific Society. — U.K.
- Clin. vet., Milano.*—La clinica veterinaria, Milano. 51 It.
- Colmar, Mitt. nathist. Ges.*—Mittheilungen der naturhistorischen Gesellschaft in Colmar. Bulletin de la Société d'histoire naturelle de Colmar. Colmar. [2 jähr.] 311 Ger.
- Colorado Springs, Colo. Coll. Pub. Sci. Ser.*—Colorado College Publications. Science Series. Colorado Springs. 123 U.S.
- Colombo, J. Ceyl. R. As. Soc.*—Journal of the Ceylon Branch of the Royal Asiatic Society, Colombo. 13 Ind.
- Columbus, Proc. Ohio Acad. Sci.*—Proceedings of the Ohio Academy of Sciences. Columbus, Ohio. — U.S.
- Columbus, Rep. Ohio Acad. Sci.*—Annual Report of the Ohio State Academy of Science. Columbus, Ohio. 549 U.S.

- Comun. Mus., Buenos Aires.*—Comunicaciones del Museo nacional de Buenos Aires, Buenos Aires. — Argent.
- Condor, Hollywood, Cal.*—Condor. (Cooper Ornithological Club), Hollywood, Cal. 129 U.S.
- Connecticut Geol. Nat. Hist. Surv. Bul., Hartford.*—Connecticut State Geological and Natural History Survey. Bulletin. Hartford. — U.S.
- Cont. N. Amer. Ornith., Longwood and Concord, Mass.*—Contributions to North American Ornithology, by Reginald Heber Howe Jr., Longwood and Concord, Mass. 577 U.S.
- Cont. Nat. Hist. Lep. N. Amer., Decatur, Ill.*—Contributions to the Natural History of the Lepidoptera of N. America. Decatur, Ill. — U.S.
- Copenhagen, Bul. explor. mer.*—Conseil permanent international pour l'exploration de la mer. Bulletin des résultats acquis pendant les courses périodiques publié par le Bureau du Conseil avec l'assistance de M. Knudsen, Copenhague. — Den.
- Copenhagen, Pub. explor. mer.*—Conseil permanent international pour l'exploration de la mer. Publications de circonstance. Copenhague. — Den.
- Copenhagen, Rapp. et proc.-verb. explor. mer.*—Conseil permanent international pour l'exploration de la mer. Ser. Rapports et procès-verbaux. Copenhague. — Den.
- CorrBl. Schweizerärzte, Basel.*—Correspondenzblatt für Schweizerärzte. Basel. 8vo. 26 Swi.
- CorrBl. Zahnärzte, Berlin.*—Correspondenzblatt für Zahnärzte. Berlin. [$\frac{1}{4}$ jährl.] 314 Ger.
- Cosmos, Paris.*—Cosmos, revue hebdomadaire des sciences et de leurs applications, fondée par M. l'abbé Moigno. Paris. 300 Fr.
- Croydon, Proc. Microsc. Nat. Hist. Cl.*—Proceedings of the Croydon Microscopical and Natural History Club, Croydon. 66 U.K.
- Croydon, Proc. Trans. Nat. Hist. Sci. Soc.*—Proceedings and Transactions of the Croydon Natural History and Scientific Society. 484 U.K.
- D. Arch. klin. Med., Leipzig.*—Deutsches Archiv für klinische Medizin, red. v. Ziemssen u. Moritz. Leipzig. [12-18 H. jährl.] 318 Ger.
- D. Cam. Alman., Berlin.*—Deutscher Camera Almanach. Ein Jahrbuch für Amateur-photographen, hrsg. v. Fritz Loescher. Berlin. [jährl.] — Ger.
- D. ent. Zs., Berlin.*—Deutsche entomologische Zeitschrift, hrsg. v. d. deutschen entomologischen Gesellschaft. Berlin, Nicolai. [3 H. jährl.] 331 Ger.
- D. ent. Zs. Iris, Berlin.*—Deutsche entomologische Zeitschrift, hrsg. vom entomologischen Verein Iris in Dresden. Berlin, Friedländer u. Sohn. [2 H. jährl.] 332 Ger.
- D. Fleischbeschauerztg, Berlin.*—Deutsche Fleischbeschauer-Zeitung, hrsg. von Beisswanger, Edelmann, Glage. Berlin. [monatl.] — Ger.
- D. Forstztg, Neudamm.*—Deutsche Forst-Zeitung, red. v. v. Sothen. Neudamm. [wöch.] 336 Ger.
- D. ill. Bienenztg, Leipzig.*—Deutsche illustrierte Bienenzeitung, hrsg. v. O. Krancher. Leipzig. [monatl.] 343 Ger.
- D. Jäger, München.*—Der deutsche Jäger. Illustrierte süddeutsche Jägerzeitung, red. v. Grashey. München. [36 H. jährl.] 341 Ger.
- D. Jägerztg, Neudamm.*—Deutsche Jäger-Zeitung, red. v. v. Sothen. Neudamm. [$\frac{1}{2}$ wöch.] 342 Ger.
- D. Kolonien, Berlin.*—Die deutschen Kolonien. Monatsschrift für die sittliche und soziale Hebung der Eingeborenen in den Schutzgebieten, hrsg. v. G. Müller. Berlin. — Ger.

- D. KolZtg, Berlin.*—Deutsche Kolonialzeitung. Organ der Deutschen Kolonialgesellschaft. Berlin. [wöch.] 345 Ger.
- D. landw. Presse, Berlin.*—Deutsche landwirtschaftliche Presse, red. v. Müller. Berlin. [$\frac{1}{2}$ wöch.] 348 Ger.
- D. landw. Tierzucht, Leipzig.*—Deutsche landwirtschaftliche Tierzucht, hrsg. v. C. Nörner. Leipzig. [wöch.] 1323 Ger.
- D. med. Wochenschr., Leipzig.*—Deutsche medicinische Wochenschrift, red. v. Eulenburg u. Schwalbe. Leipzig. 352 Ger.
- D. MedZtg, Berlin.*—Deutsche Medicinal-Zeitung, hrsg. v. Grosser. Berlin. [$\frac{1}{2}$ wöch.] 353 Ger.
- D. Monatschr. Zahnheilk, Leipzig.*—Deutsche Monatsschrift für Zahnheilkunde, red. v. Parreidt. Leipzig. 365 Ger.
- D. Obstbauztg, Stuttgart.*—Deutsche Obstbauzeitung, 52 Jg. der Pomologischen Monatshefte, hrsg. v. Lucas. Stuttgart. [$\frac{1}{2}$ monatl.] — Ger.
- D. Rdsch. Geogr. Stat., Wien.*—Deutsche Rundschau für Geographie und Statistik hrsg. v. Friedrich Umlauf. Wien. [monatl.] 88 Aus.
- D. thierärztl. Wochenschr., Hannover.*—Deutsche thierärztliche Wochenschrift, red. v. Malkmus. Hannover. 373 Ger.
- D. Vierteljschr. Gesundheitspfl., Braunschweig.*—Deutsche Vierteljahrsschrift für öffentliche Gesundheitspflege, hrsg. v. Adickes etc. Braunschweig. Nebst Supplement: Jahresbericht über die Fortschritte und Leistungen auf dem Gebiete der Hygiene. 383 Ger.
- D. Zs. Chir., Leipzig.*—Deutsche Zeitschrift für Chirurgie, red v. Rose u. Helferich. Leipzig. [$\frac{1}{2}$ monatl.] 389 Ger.
- D. Zs. Nervenheilk., Leipzig.*—Deutsche Zeitschrift für Nervenheilkunde, hrsg. v. Erb etc. Leipzig. [18 H. jährl.] 391 Ger.
- Danzig, Ber. bot.-zool. Ver.*—Bericht des Westpreussischen botanischzoologischen Vereins. Mit Unterstützung des westpr. Provinzial-Landtages hrsg. Danzig. [zwangl.] — Ger.
- Danzig, Ber. Natgesch. Samml.*—Amtlicher Bericht über die Verwaltung der naturgeschichtlichen vorgeschichtlichen und volkskundlichen Sammlungen des westpreussischen Provinzial-Museums. Danzig. [jährl.] — Ger.
- Danzig, Jahrb. Lehrerver.*—Jahrbuch des westpreussischen Lehrervereins für Naturkunde. Danzig. [zwangl.] — Ger.
- Danzig, Mitt. Fischereiver.*—Mittheilungen des westpreussischen Fischereivereins, red. v. Seligo. Danzig. [jährl.] 393 Ger.
- Danzig, Schr. natf. Ges.*—Schriften der naturforschenden Gesellschaft in Danzig. Danzig. [zwangl.] 394 Ger.
- Darmstadt, Abh. geol. Landesanst.*—Abhandlungen der grossherzoglich hessischen geologischen Landesanstalt zu Darmstadt. Darmstadt. [1-2 H. jährl.] 395 Ger.
- Darmstadt, Notizbl. Ver. Erdk.*—Notizblatt des Vereins für Erdkunde und der grossherzoglichen geologischen Landesanstalt zu Darmstadt, nebst Mittheilungen aus der grossherzoglich hessischen Centralstelle für die Landesstatistik. Darmstadt. [jährl.] 396 Ger.
- Davenport, Iowa, Proc. Acad. Nat. Sci.*—Proceedings of the Davenport Academy of Natural Sciences, Davenport, Iowa. 131 U.S.
- Dax, Bul. soc. Borda.*—Bulletin de la société de Borda. Dax (Landes). [trimestr.] 304 Fr.
- Délmagy. Termt. Füzetek, Temesvár.*—Délmagyarországi Természettudományi Füzetek. Temesvár. [Naturwissenschaftliche Hefte aus Süd-Ungarn.] 4 Hun.

- Demerara, J. R. Agric. Soc.*—Journal of the Royal Agriculture and Commercial Society of British Guiana, Demerara. — Brit. Guiana.
- Denver, Proc. Colo. Sci. Soc.*—Proceedings of the Colorado Scientific Society, Denver. 134 U.S.
- Derby, J. Archæol. Nat. Hist. Soc.*—Journal of the Derbyshire Archæological and Natural History Society, London and Derby. 68 U.K.
- Derbyshire Nat. Q., Derby.*—Derbyshire Naturalists' Quarterly, Derby. 464 U.K.
- Derevniã, St. Peterburg.*—Деревня. С. Петербургъ [Le village. Journal mensuel d'agriculture. St. Pétersbourg]. — Rus.
- Derm. Zs., Berlin.*—Dermatologische Zeitschrift, hrsg. v. Lassar. Berlin. [2 monatl.] 399 Ger.
- Des Moines, Proc. Iowa Acad. Sci.*—Proceedings of the Iowa Academy of Sciences, Des Moines. 137 U.S.
- Diana, Genève.*—Diana. Organe de la Société suisse des chasseurs. Berne et Genève. 4to. 27 Swi.
- Dijon, Mém. Acad. sci. arts.*—Mémoires de l'Académie des sciences, arts et belles-lettres. Dijon (Côte d'Or). [annuel.] 310 Fr.
- Dōbuts. Z., Tōkyō.*—Dōbutsugaku Zasshi. [Zoological Magazine.] Tōkyō, Japan.. 7 Jap.
- Dorchester, Proc. Dorset Nat. Hist. F. Cl.*—Proceedings of the Dorset Natural History and Antiquarian Field Club, Dorchester. 70 U.K.
- Douglas, J. Isle Man Soc.*—Yn Lioar Manninagh, Douglas. 8vo. 71 U.K.
- Draguignan, Bul. soc. agricult.*—Bulletin de la société d'agriculture, de commerce, et d'industrie du Var. Draguignan. 874 Fr.
- Draguignan, Bul. soc. étud. sci. archéol.*—Bulletin de la société d'études scientifiques et archéologiques de Draguignan (Var.) 314 Fr.
- Dr. Disp., Kjöbenhavn.*—Doktordisputatser. 5 Den.
- Dresden, Abh. zool. Mus.*—Abhandlungen und Berichte des kgl. zoologischen und anthropologisch-ethnographischen Museums zu Dresden. Leipzig. [2 jährl.] 405 Ger.
- Dresden, Ber. tierärztl. Hochsch.*—Bericht über die Königliche Tierärztliche Hochschule zu Dresden. Erstattet von Rektor und Senat. Dresden. [jähr.] — Ger.
- Dresden, Jahresber. Ver. Erdk.*—Jahresbericht des Vereins für Erdkunde in Dresden. Dresden. [2 jährl.] 410 Ger.
- Dresden, Mitt. Heimatschutz.*—Sächsischer Heimatschutz. Mitteilungen des Landesvereins zur Pflege heimatlicher Natur, Kunst und Bauweise. Dresden. [zwangl.] — Ger.
- Dresden, Mitt. min. Mus.*—Mittheilungen aus dem kgl. mineralogisch-geologischen und prähistorischen Museum in Dresden. Leipzig. [zwangl.] 411 Ger.
- Dresden, Mitt. Ver. Erdk.*—Mitteilungen des Vereins für Erdkunde zu Dresden. [2 H. jährl.] — Ger.
- Dresden, SitzBer. Flora.*—Sitzungsberichte und Abhandlungen der Königl. Sächs. Gesellschaft für Botanik und Gartenbau e. G. "Flora" zu Dresden, hrsg. v. F. Liedien. Dresden. [jähr.] 414 Ger.
- Dresden, SitzBer. Isis.*—Sitzungsberichte und Abhandlungen der naturwissenschaftlichen Gesellschaft Isis in Dresden. Dresden. [jähr.] 415 Ger.
- Dublin, Econ. Proc. R. Soc.*—Economic Proceedings of the Royal Dublin Society, Dublin. — U.K.

- Dublin, Proc. R. Irish Acad.*—Proceedings of the Royal Irish Academy, Dublin. 74 U.K.
- Dublin, Sci. Proc. R. Soc.*—Scientific Proceedings of the Royal Dublin Society, Dublin. 77 U.K.
- Dublin, Sci. Trans. R. Soc.*—Scientific Transactions of the Royal Dublin Society, Dublin. 78 U.K.
- Dublin, Stud. Mar. Lab. R. Soc.*—Studies from the Marine Laboratory of the Royal Dublin Society (Reprints from Trans. R. Dublin Soc.), Dublin. 79 U.K.
- Dublin, Trans. R. Irish Acad.*—Transactions of the Royal Irish Academy, Dublin. 81 U.K.
- Dürkheim, Mitt. Pollichia.*—Mittheilungen der Pollichia, eines naturwissenschaftlichen Vereines der Rheinpfalz. Dürkheim. [zwangl.] 418 Ger.
- Düsseldorf, Mitt. natw. Ver.*—Mittheilungen des naturwissenschaftlichen Vereins zu Düsseldorf. Düsseldorf. [zwangl.] 419 Ger.
- Dumfries, Trans. Nat. Hist. Soc.*—Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society, Dumfries. 83 U.K.
- Durban, Trans. Proc. Nat. sci. soc.*—Transactions and Proceedings of the National Society of Science at Durban. — S. Afric.
- Durham, Proc. Univ. Phil. Soc.*—Proceedings of the University of Durham Philosophical Society, Durham. 341 U.K.
- Ealing, Rep. Sci. Microsc. Soc.*—Report and Transactions of the Ealing Scientific and Microscopical Society, Ealing. 8vo. 86 U.K.
- Eastbourne, Trans. Nat. Hist. Soc.*—Transactions of the Eastbourne Natural History Society, Eastbourne. 8vo. 88 U.K.
- Eberswalde, Mitt. Ver. Heimatk.*—Mitteilungen des Vereins für Heimatkunde zu Eberswalde. Im Auftrage des Vorstandes hrsg. v. R. Schmidt. Eberswalde. [monatl.] — Ger.
- Echange, Moulins.*—Echange (1'). Revue linnéenne, organe des naturalistes de la région lyonnaise, contenant les demandes d'échange, d'achat . . . de livres, collections ou objets d'histoire naturelle, réd. par. M. Pic. Moulins. [mensuel.] 316 Fr.
- Eclogæ Geol. Helvet., Lausanne.*—Eclogæ geologicæ Helvetiæ. Recueil périodique de la Société géologique suisse. Mitteilungen der schweizerischen geologischen Gesellschaft. Lausanno. 8vo. 30 Swi.
- Edinburgh, Proc. R. Physic. Soc.*—Proceedings of the Royal Physical Society of Edinburgh. 95 U.K.
- Edinburgh, Proc. R. Soc.*—Proceedings of the Royal Society of Edinburgh. 96 U.K.
- Edinburgh, Proc. Scot. Microsc. Soc.*—Proceedings of the Scottish Microscopical Society, Edinburgh. 8vo. 98 U.K.
- Edinburgh, Trans. F. Nat. Soc.*—Transactions of the Edinburgh Field Naturalists', etc., Society, Edinburgh. 8vo. 106 U.K.
- Edinburgh, Trans. Geol. Soc.*—Transactions of the Edinburgh Geological Society, Edinburgh. 103 U.K.
- Edinburgh, Trans. Highl. Soc. Scot.*—Transactions of the Highland and Agricultural Society of Scotland, Edinburgh. 104 U.K.
- Edinburgh, Trans. R. Scot. Arbor. Soc.*—Transactions of the Royal Scottish Arboricultural Society, Edinburgh. 108 U.K.
- Edinburgh, Trans. R. Soc.*—Transactions of the Royal Society of Edinburgh. 109 U.K.
- Edinburgh, Trans. Scot. Nat. Hist. Soc.*—Transactions of the Scottish Natural History Society, Edinburgh. 110 U.K.

- Ekaterinburg, Bull. Soc. Oural. nat.*—Записки Уральского Общества любителей естествознания. Екатеринбургъ [Bulletin de la Société Ouralienne des amateurs des sciences naturelles à Catherinebourg]. 36 Rus.
- Ekaterinoslav, Izv. gorn. Učilišć.*—Извѣстія Екатеринославскаго высшаго горнаго училища [Bulletin de l'école supérieure des mines d'Ekaterinoslav. Ekaterinoslav]. — Rus.
- Elberfeld, Jahresber. natw. Ver.*—Jahresberichte des naturwissenschaftlichen Vereins in Elberfeld und Barmen. Elberfeld. [zwangl.] 425 Ger.
- Elbeuf, Bul. soc. étud. sci. nat.*—Bulletin de la société d'études des sciences naturelles d'Elbeuf (Seine-Inférieure). [trimestr.] 324 Fr.
- Emden, Jahresber. natf. Ges.*—Jahresbericht der naturforschenden Gesellschaft in Emden. Emden. [2 jähr.] 436 Ger.
- Emu, Melbourne.*—The Emu, Melbourne. 6 Vic.
- Ent. Bl., Berlin.*—Entomologische Blätter. Internationale Monatschrift für die Biologie der Käfer Europas, mit besonderer Berücksichtigung der forst- u. landwirtschaftlichen Schädlinge, red. v. H. Eckstein etc. Berlin. — Ger.
- Ent. Jahrb., Leipzig.*—Entomologisches Jahrbuch, hrsg. v. Krancher. Leipzig. [jähr.] 439 Ger.
- Ent. Mag., London.*—The Entomologists' Monthly Magazine, London. 8vo. 119 U.K.
- Ent. Mitt. Berlin.*—Entomologische Mitteilungen, hrsg. v. Verein zur Förderung des deutsch. entomol. Museums. Berlin [monatl.]. — Ger.
- Ent. News, Philadelphia, Pa.*—Entomological News and Proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia. American Entomological Society, Philadelphia, Pa. 366 U.S.
- Ent. Rdsch., Stuttgart.*—Entomologische Rundschau mit Anzeigenbeilage: Insektenbörse und Beilage: Entomologisches Vereinsblatt, hrsg. v. C. Schaufuss. Stuttgart. [½ monatl.] — Ger.
- Ent. Rec., London.*—The Entomologists' Record and Journal of Variations, London. 8vo. 121 U.K.
- Ent. Tidskr., Stockholm.*—Entomologisk Tidskrift utgifven af Entomologiska Föreningen i Stockholm. Stockholm. 8vo. 7 Swe.
- Ent. Zs., Frankfurt a. M.*—Entomologische Zeitschrift. Centralorgan des internationalen entomologischen Vereins. Frankfurt a. M. [48 Nrn. jähr.] 442 Ger.
- Entomologist, London.*—The Entomologist, London. 8vo. 120 U.K.
- Epsom Coll. Rep. Nat. Hist. Soc., London.*—Report of the Epsom College Natural History Society, London. 8vo. 122 U.K.
- Erd. Kis., Selmeczbánya.*—Erdészeti Kisérletek, Selmeczbánya. [Forstwissenschaftliche Versuche, Selmeczbánya.] 5 Hun.
- Erd. Vándorgy Emlékk., Kolozsvár.*—Erdélyi Muzéum Egyesület Vándorgyűléseinek Emlékkönyve, Kolozsvár. [Memoiren der Wandersitzung des siebenbürgischen Museum-Vereines, Kolozsvár.] — Hung.
- Erfurt, Jahrb. Ak. Wiss.*—Jahrbücher der kgl. Akademie gemeinnütziger Wissenschaften zu Erfurt. Erfurt. 444 Ger.
- Ergebn. Ges. Zahnheilk., Wiesbaden.*—Ergebnisse der gesamten Zahnheilkunde, hrsg. v. G. Vischer u. B. Mayrhofer. Wiesbaden. [¼ jähr.] — Ger.
- Ergebn. inn. Med., Berlin.*—Ergebnisse der inneren Medizin und Kinderheilkunde, hrsg. v. F. Krause etc. Berlin. [zwangl.] — Ger.
- Ergebn. Physiol., Wiesbaden.*—Ergebnisse der Physiologie, hrsg. v. L. Asher u. K. Spiro. Wiesbaden. [2 Bde. jähr.] — Ger.

- Ergebn. wiss. med., Leipzig.*—Ergebnisse der wissenschaftlichen Medizin, hrsg. von C. Sewin. Leipzig. [monatl.] — Ger.
- Ergebn. Zool., Jena.*—Ergebnisse und Fortschritte der Zoologie, hrsg. v. J. W. Spengel. Jena. [zwangl.] — Ger.
- Erivanĭ, Pam. kniž. Erivansk. gub.*—Памятная книжка Эриванской губернии. Эривань [Almanach du gouvernement d'Erivan. Erivan]. — Rus.
- Erlangen, SitzBer. physik. Soc.*—Sitzungsberichte der physikalisch-medicinischen Societät zu Erlangen. Erlangen. [jährl.] 453 Ger.
- Essex Nat., Salem, Mass.*—Essex Naturalist. (Journal of the Essex Field Club), Salem, Mass. 150 U.S.
- Explor. géolog. chem. de fer Sibérie, St. Peterburg.*—Геологическія изслѣдованія и развѣдки по линіи Сибирской желѣзной дороги. С.-Петербургъ [Explorations géologiques et minières le long du chemin de fer de Sibérie. St.-Pétersbourg]. 45 Rus.
- F. Forstfören. Ströskr., Helsingfors.*—Finska Forstföreningens Ströskrifter. Helsingfors. 8vo. 11 Fin.
- F. Jakttidn., Helsingfors.*—Finsk Jakttidning. Helsingfors. 8vo. — Fin.
- F. Läkares. Handl., Helsingfors.*—Finska Läkaresällskapets Handlingar. Helsingfors. 8vo. 12 Fin.
- F. Tidskr., Helsingfors.*—Finsk Tidskrift för Vitterhet, Vetenskap, Konst och Politik. Helsingfors. 8vo. 15 Fin.
- Falco, Leipzig.*—Falco, unregelmässig im Anschluss an das Werk „Berajah, Zoographica infinita“ erscheinende Zeitschrift, hrsg. v. O. Kleinschmidt. Leipzig. [zwangl.] — Ger.
- Falmouth, Rep. R. Cornwall Polyt. Soc.*—Annual Report of the Royal Cornwall Polytechnic Society, Falmouth. 124 U.K.
- Fauna exotica, Frankfurt a. M.*—Fauna exotica. Mitteilungen aus dem Gebiete der exotischen Insektenwelt. Beiblatt der entomologischen Zeitschrift. Frankfurt a. M. — Ger.
- Fauna, Luxembourg.*—Fauna. Verein Luxemburger Naturfreunde. Mitteilungen aus den Vereinsitzungen. (Fauna. Société des Naturalistes Luxembourgeois. C. R. des Séances). Luxembourg. — Lux.
- Fauna Neapel, Berlin.*—Fauna und Flora des Golfes v. Neapel, hrsg. v. d. zoologischen Station. Berlin. [zwangl.] 459 Ger.
- Fauna och Flora, Uppsala.*—Populär Tidskrift för Biologie, utgifven af Einar Lönnberg. Uppsala and Stockholm. [Fauna and Flora. A popular journal of Biology.] — Swe.
- Felsted, Rep. Sch. Sci. Soc.*—Report of the Felsted Schools Scientific Society, Felsted. 125 U.K.
- Ferrara Atti Acc. med. nat.*—Atti dell'Accademia di scienze mediche e naturali, Ferrara. 60 It.
- Feuille jeunes natural., Paris.*—Feuille des jeunes naturalistes, dir. Dollfus, Paris. [mensuel.] 337 Fr.
- Field, London*—The Field, London. 128 U.K.
- Firenze, Arch. Soc. it. antrop. etnol.*—Archivio della Società italiana di antropologia e di etnologia, Firenze. 61 It.
- Firenze, Atti Acc. Georgof.*—Atti dell'Accademia dei Georgofili, Firenze. 62 It.
- Firenze, Atti soc. tosc.*—Igiene Atti della Società Toscana d'Igiene, Firenze. — It.
- Firenze, Boll. Soc. Entom.*—Bollettino della Società Entomologica, Firenze. 65 It.
- Firenze, Public. Ist. st. sup.*—Pubblicazioni del Istituto di studi superiori. Firenze. 67 It.

- Fischerbote, Hamburg.*—Der Fischerbote. Zeitschrift für die Interessen der Hochsee-, Küsten- und Flussfischerei sowie der Fischverwertung, hrsg. v. H. Lübbert. Hamburg. [monatl.] — Ger.
- Fischereiztg, Neudamm.*—Fischerei-Zeitung. Wochenschrift hrsg. v. Dröschner. Neudamm. 461 Ger.
- Fisheries Scotland Sci. Invest., London.*—Annual Report of the Fisheries of Scotland. — U.K.
- Fisk. Tidskr. Finl., Helsingfors.*—Fiskeritidskrift för Finland. Helsingfors. 8vo. 16 Fin.
- Flora, Jena.*—Flora oder allgemeine botanische Zeitung, hrsg. v. Goebel. Marburg. [6-8 H. jährl.] 463 Ger.
- Flugschr. D. Ges. Züchtgskunde, Hannover.*—Flugschrift der deutschen Gesellschaft für Züchtungskunde. Berlin. [zwangl.] — Ger.
- Földt. Évk., Budapest.*—Földtani Évkönyvei, Budapest. [Jahrbuch für Geologie, Budapest.] 20 Hun.
- Földt. Int. Évi Jelent., Budapest.*—A Magyar Királyi Földtani Intézet Évi Jelentése, Budapest. [Jahresbericht der Königlichen ungarischen geologischen Anstalt. Budapest.] 22 Hun.
- Földt. Közl., Budapest.*—Földtani Közlöny, Budapest. [Geologische Mittheilungen, Budapest.] 7 Hun.
- Folia haematol., Leipzig.*—Folia haematologica. Internationales Zentralorgan für Blut- und Serumforschung, hrsg. v. A. Pappenheim. Leipzig [früher Berlin]. [monatl.] — Ger.
- Folia neurobiol., Leipzig.*—Folia neurobiologica. Internationales Zentralorgan für die gesamte Biologie des Nervensystems, hrsg. v. E. Hekma. Leipzig. [zwangl.] — Ger.
- Folia Neurobiol., Haarlem.*—Folia Neurobiologica. Internationales Zentralorgan für die gesamte Biologie des Nervensystems. Haarlem. 8vo. — Hol.
- Folia Serol., Leipzig.*—Folia Serologica. II (serologischer) Teil des internationalen Zentralorgans für Blut- und Serumforschung, hrsg. v. A. Pappenheim. Leipzig. [zwangl.] — Ger.
- Folia urol., Leipzig.*—Folia urologica. Internationales Archiv für die Krankheiten der Harnorgane, hrsg. v. J. Israël etc. Leipzig. [monatl.] — Ger.
- Folkestone, Proc. Nat. Hist. Soc.*—Proceedings of the Folkestone Natural History Society, Folkestone. 8vo. 129 U.K.
- Forsch. D. Landesk., Stuttgart.*—Forschungen zur deutschen Landes- und Volkskunde, hrsg. v. Kirchhoff. Stuttgart. [$\frac{1}{2}$ jährl.] 464 Ger.
- Forst JagdZtg, Saaz.*—Forst- und Jagdzeitung. Fachschrift des Vereines Deutscher Forstleute in Böhmen, red. v. Karl Mayer. Saaz. [monatl.] 100 Aus.
- Fortschr. Natw. Forschg, Berlin.*—Fortschritte der Naturwissenschaftlichen Forschung, hrsg. v. E. Abderhalden. Berlin. [zwangl.] — Ger.
- Fortschr. Röntgenstr., Hamburg.*—Fortschritte auf dem Gebiete der Röntgenstrahlen, hrsg. v. Deycke u. Albers-Schönberg. Hamburg. [2 monatl.] 471 Ger.
- Forstwiss. Centralbl., Berlin.*—Forstwissenschaftliches Centralblatt, hrsg. v. Fürst Berlin. [monatl.] 466 Ger.
- Fortschr. Med., Leipzig.*—Fortschritte der Medicin, hrsg. v. Eberth u. Goldscheider Leipzig. [wöch.] 469 Ger.
- Frankfurt a. M., Abh. Senckenb. Ges.*—Abhandlungen hrsg. v. d. Senckenbor- gischen naturforschenden Gesellschaft. Frankfurt a. M. [3 H. jährl.] 473 Ger.

- Frankfurt a. M., Ber. Senckenb. Ges.*—Bericht der Senckenbergischen naturforschenden Gesellschaft in Frankfurt a. M. [jähr.] 476 Ger.
- Frankfurt a. M., NachrBl. D. malakozool. Ges.*—Nachrichtenblatt der deutschen malakozoologischen Gesellschaft. Frankfurt a. M. [monatl.] 480 Ger.
- Frauenfeld, Mitt. Thurg. Natf. Ges.*—Mitteilungen der thurgavischen naturforschenden Gesellschaft. Frauenfeld. 8vo. 32 Swi.
- Freiburg i. B., Ber. natf. Ges.*—Berichte der naturforschenden Gesellschaft zu Freiburg i. B. Freiburg i. B. [jähr. in zwangl. H.] 485 Ger.
- Freie Hefte natw. Mitt., Leipzig.*—Freie Hefte für naturwissenschaftliche Mitteilungen in zwangloser Folge hrsg. v. Haas. Leipzig. — Ger.
- Fribourg, Bul. Soc. Sci. Nat.*—Bulletin de la Société fribourgeoise des sciences naturelles. Fribourg. 8vo. 35 Swi.
- Fribourg, Mém. Soc. Sci. Nat.*—Mémoires de la Société fribourgeoise des sciences naturelles. Fribourg. 8vo. — Swi.
- Fühlings landw. Ztg, Stuttgart.*—Fühlings landwirthschaftliche Zeitung, hrsg. v. Fischer. Stuttgart. [$\frac{1}{2}$ monatl.] 489 Ger.
- Gaea, Stuttgart.*—Gaea. Natur und Leben, hrsg. v. H. Haas. Stuttgart. [monatl.] 492 Ger.
- Gartenflora, Berlin.*—Gartenflora, hrsg. v. Wittmack. Berlin. [$\frac{1}{2}$ monatl.] 495 Ger.
- Gaz. lek., Warszawa.*—Gazeta lekarska, red. W. Gajkiewicz, Warszawa. 8vo. [weekly.] 7 Pol.
- Gazz. chim. ital., Palermo.*—Gazzetta chimica italiana, Palermo. 68 It.
- Gazz. med. lomb., Milano.*—Gazzetta medica lombardo, Milano. 71 It.
- Gazz. osp. clin., Milano.*—Gazzetta degli ospedali e delle cliniche, Milano. 72 It.
- Geelong Nat.*—The Geelong Naturalist, the Quarterly Journal of the Geelong Field Naturalists' Club. Geelong. [Victoria.] — Vic.
- Gefied. Welt, Magdeburg.*—Die gefiederte Welt. Magdeburg. [wöch.] 502 Ger.
- GeflZüchter, Leipzig.*—Geflügel-Züchter. Allgemeine Fachzeitung. Leipzig-Connewitz. [wöch.] 504 Ger.
- Geisenheim, Ber. Lehranst. Obstbau.*—Bericht der kgl. Lehranstalt für Obst- und Weinbau zu Geisenheim a. Rh. Wiesbaden. [jähr.] 505 Ger.
- Geneesk. Blad. Klin., Haarlem.*—Geneeskundige Bladen uit Kliniek en Laboratorium voor de praktijk, Haarlem, 8o. 19 Hol.
- Genève, Bul. Boissier.*—Bulletin de l'herbier Boissier. Genève et Bâle. 8vo. 38 Swi.
- Genève, Bul. Inst. Nat.*—Bulletin de l'Institut national genevois. Genève. 8vo. 39 Swi.
- Genève, Bul. Soc. Lépidopt.*—Bulletin de la Société lépidoptérologique de Genève. — Swi.
- Genève C. R. Soc. Phys. Hist. Nat.*—Compte rendu des séances de la société de physique et d'histoire naturelle de Genève. Genève. 8vo. — Swi.
- Genève, Mém. Inst. Nat.*—Mémoires de l'Institut national genevois. Genève. 4to. 44 Swi.
- Genève, Mém. Soc. Phys.*—Mémoires de la Société de physique et d'histoire naturelle de Genève. Genève. 4to. 45 Swi.
- Genova, Ann. Museo Civ. st. nat.*—Annali del Museo Civico di storia naturale, Genova. 74 It.
- Genova, Atti Soc. ligustica sc. nat. geogr.*—Atti della Società ligustica di scienze naturali e geografiche, Genova. 76 It.

- Genova, Boll. Musei zool. anat. comp.*—Bollettino dei Musei di zoologia e di anatomia comparata della R. Università, Genova. 78 It.
- Genova Boll. R. Acc. med.*—Bollettino della R. Accademia medica, Genova. 77 It.
- Geogn. Jahreshfte, München.*—Geognostische Jahreshfte, hrsg. v. d. geognostischen Abtheilung des kgl. bayerischen Oberbergamts in München. München. [jähr.] 507 Ger.
- Géographie, Paris.*—Géographie (1a), bulletin de la société de géographie, par Hulot et Ch. Rabot. Paris. [mensuel.] 362 Fr.
- Geogr. Anz., Gotha.*—Geographischer Anzeiger, hrsg. v. Perthes. Gotha. [monatl.] 509 Ger.
- Geogr. Fören. Tidskr., Helsingfors.*—Geografiska Föreningens Tidskrift. Helsingfors. 8vo. 17 Fin.
- Geogr. JahrBer. Öst., Wien.*—Geographischer Jahresbericht über Österreich, red. v. Robert Sieger. Wien. [jähr. referierend.] 108 Aus.
- Geogr. Jahrb., Gotha.*—Geographisches Jahrbuch, hrsg. v. Wagner. Gotha. 510 Ger.
- Geogr. Zs., Leipzig.*—Geographische Zeitschrift, hrsg. v. Hettner. Leipzig. [monatl.] 512 Ger.
- Geol. Mag., London.*—Geological Magazine, London. 134 U.K.
- Geol. Rdsch., Leipzig.*—Geologische Rundschau. Zeitschrift für allgemeine Geologie, hrsg. v. d. Geologischen Vereinigung. [zwangl.] — Ger.
- Geol. u. palæont. Abh., Jena.*—Geologische und palæontologische Abhandlungen, hrsg. v. E. Koken. Jena (G. Fischer). [zwangl.] 1267 Ger.
- Gera, Jahresber. Ges. Natw.*—Jahresbericht der Gesellschaft von Freunden der Naturwissenschaft in Gera. Gera. [mehrjähr.] 515 Ger.
- Ghlas Srpske Ak., Beograd.*—Ghlas Srpske Kraljevske akademije. Prvi razred. Beograd. — Servia.
- Giessen, Ber. Ges. Natk.*—Bericht der oberhessischen Gesellschaft für Natur- und Heilkunde. Giessen. [mehrjähr.] 522 Ger.
- Giorn. internaz. sc. med., Napoli.*—Giornale internazionale delle scienze mediche. Napoli. 82 It.
- Giorn. malattie veneree, Milano.*—Giornale delle malattie veneree, Milano — It.
- Glasgow Nat.*—The Glasgow Naturalist. The Journal of the Natural History Society of Glasgow (including the Transactions) and Proceedings of the Society (3rd Ser.). Glasgow, published by the Society at its rooms, 205, Bell Street. — U.K.
- Glasgow, Proc. Phil. Soc.*—Proceedings of the Glasgow Philosophical Society, Glasgow. 137 U.K.
- Glasgow, Rep. Fish. Board.*—Annual Report of the Fishery Board for Scotland, Glasgow. 8vo. 9 U.K.
- Glasgow, Trans. Geol. Soc.*—Transactions of the Geological Society of Glasgow, Glasgow. 138 U.K.
- Glasgow, Trans. Nat. Hist. Soc.*—Transactions of the Natural History Society of Glasgow, Glasgow. 142 U.K.
- Glasnik naravosl. društ., Zagreb.*—Glasnik hrvatskoga naravoslovnoga društva. [Societas historico-naturalis Croatica.] Zagreb. — Croat.
- Gloucester, Proc. Cotteswold Nat. F. Cl.*—Proceedings of the Cotteswold Naturalists' Field Club, Gloucester. 144 U.K.
- Görlitz, Abh. natf. Ges.*—Abhandlungen der naturforschenden Gesellschaft zu Görlitz. [zwangl.] 528 Ger.

- Göteborg, Vet. Handl.*—Göteborgs Kungl. Vetenskaps- och Vitterhetssamhälles Handlingar. Göteborg. 8vo. 9 Swe.
- Göttingen, Abh. Ges. Wiss.*—Abhandlungen der kgl. Gesellschaft der Wissenschaften zu Göttingen. Berlin. [jährl. in zwangl. H.] 529 Ger.
- Göttingen, Nachr. Ges. Wiss.*—Nachrichten von der kgl. Gesellschaft der Wissenschaften zu Göttingen. Göttingen. [jährl. in zwangl. H.] 531 Ger.
- Göttingische gel. Anz.*—Göttingische gelehrte Anzeigen. Berlin. [monatl.] 532 Ger.
- Graefes Arch. Ophthalm., Leipzig.*—Graefes Archiv für Ophthalmologie, red. v. Leber u. Wagenmann. Leipzig. [5-6 H. jährl.] 533 Ger.
- Grahamstown, Rec. Albany Mus.*—Records of the Albany Museum, Grahamstown. 12 S. Africa.
- Granville, Ohio, Bul. Sci. Lab. Denison Univ.*—Bulletin of the Scientific Laboratories of Denison University, Granville, Ohio. 160 U.S.
- Gray, Bul. soc. grayl. émul.*—Bulletin de la société grayloise d'émulation. Gray (Haute-Saône). [irrégul.] 363 Fr.
- Graz, Mitt. Natw. Ver. Steiern.*—Mitteilungen des Naturwissenschaftlichen Vereines für Steiermark, red. v. K. Fritsch. Graz. [jährl.] 119 Aus.
- Greifswald, Jahresber. geogr. Ges.*—Jahresbericht der geographischen Gesellschaft zu Greifswald. Greifswald. [mehrjähr.] 534 Ger.
- Greifswald, Mitt. natw. Ver.*—Mittheilungen aus dem naturwissenschaftlichen Verein für Neu-Vorpommern und Rügen in Greifswald. Berlin. [jährl.] 535 Ger.
- Greiz, Abb. Ver. Naturkunde.*—Abhandlungen und Berichte des Vereins der Naturfreunde zu Greiz. [zwangl.] — Ger.
- Grenoble, Bul. soc. stat. sci. nat. arts ind.*—Bulletin de la société de statistique, des sciences naturelles et des arts industriels de l'Isère. Grenoble (Isère). [trimestr.] 367 Fr.
- Groningen, Mitt. Min. Geol. Inst.*—Mitteilungen aus dem Mineralogisch-Geologischen Institut der Reichs-Universität zu Gronigen. Leipzig (Borntraeger). Gronigen (Erven P. Nordhoff). 8vo. — Hol.
- Guernsey, Rep. and Trans. Soc. Nat. Sci.*—Report and Transactions of the Guernsey Society of Natural Science, Guernsey. 146 U.K.
- Güstrow, Arch. Ver. Natg.*—Archiv des Vereins der Freunde der Naturgeschichte in Mecklenburg. Güstrow. [jährl.] 537 Ger.
- Haarlem, Arch. Mus. Teyler.*—Archives du Musée Teyler, Haarlem. 8vo. 21 Hol.
- Haarlem, Arch. Néerl. Sci. Soc. Holl.*—Archives Néerlandaises des Sciences exactes et naturelles publiées par la Société Hollandaise des Sciences. Haarlem. 8vo. 22 Hol.
- Haarlem, Bul. Kolon. Mus.*—Bulletin van het Koloniaal Museum te Haarlem, Amsterdam. 8vo. 23 Hol.
- Haarlem, Nat. Verh. Holl. Maatsch. Wet.*—Natuurkundige Verhandelingen van de Hollandsche Maatschappij der Wetenschappen te Haarlem. Haarlem. 4to. 24 Hol.
- Habana, An. Ac. Cs.*—Anales de la real Academia de ciencias, medicas, fisicas y naturales de la Habana. — Havana.
- Halifax Nat.*—The Halifax Naturalist and Record of the Scientific Society, Halifax. 147 U.K.
- Halifax, N.S., Proc. and Trans. Nova Scotian Inst. Sci.*—Proceedings and Transactions of the Nova Scotian Institute of Science, Halifax, N.S. 13 Can.

- Halle, Abh. natf. Ges.*—Abhandlungen der naturforschenden Gesellschaft zu Halle. Halle. [zwangl.] 542 Ger.
- Halle, Leopoldina.*—Leopoldina. Amtl. Organ der kais. Leopoldinisch-Carolinischen deutschen Akademie der Naturforscher, Halle. Leipzig. [15 Nrn. jährl.] 546 Ger.
- Halle Mitt. natf. Ges.*—Mitteilungen der naturforschenden Gesellschaft zu Halle a. S. Halle. [zwangl.] — Ger.
- Halle, Nova Acta Leop.*—Nova Acta academiae caesar. Leopoldino-Carolinae naturae curiosorum. Abhandlungen der kaiserl. Leopoldinisch-Carolinischen deutschen Akademie der Naturforscher, Halle. Leipzig. [jährl. in zwangl. H.] 548 Ger.
- Hamburg, Abh. natw. Ver.*—Abhandlungen aus dem Gebiete der Naturwissenschaften, hrsg. vom naturwissenschaftlichen Verein in Hamburg. [zwangl.] 550 Ger.
- Hamburg, Jahrb. wiss. Anst.*—Jahrbuch der Hamburgischen wissenschaftlichen Anstalten. Hamburg. [jährl.] Nebst Beiheften. 553 Ger.
- Hamburg, Verh. natw. Ver.*—Verhandlungen des naturwissenschaftlichen Vereins in Hamburg-Altona. Hamburg. [jährl.] 559 Ger.
- Hamburg, Verh. Ver. natw. Unterh.*—Verhandlungen des Vereins für naturwissenschaftliche Unterhaltung zu Hamburg. Hamburg. [3 jähr.] 560 Ger.
- Handl. Ned. Nat. Geneesk. Congres.*—Handelingen van het Nederlandsch Natuur- en Geneeskundig Congress. 8vo. 26 Hol.
- Hannover, Jahresber. nathist. Ges.*—Jahresbericht der naturhistorischen Gesellschaft zu Hannover. Hannover. [mehrjähr.] 563 Ger.
- Hannover, Jahrb. Prov. Mus.*—Jahrbuch des Provinzial-Museums zu Hannover. Hannover. — Ger.
- Harvard Psych. Stud., Boston, Mass.*—Harvard Psychological Studies. Ed. by Hugo Münsterberg. Boston and New York. — U.S.
- Harz, Magdeburg.*—Der Harz. Vereinsblatt des Harzklubs. Magdeburg. [monatl.] 571 Ger.
- Hastings and East Sussex Nat.*—Hastings and East Sussex Naturalist, being the Journal of the Hastings and St. Leonards Natural History Society. Hastings. — U.K.
- Hastings, Mus. Publ.*—Publications of the Hastings Museum. — U.K.
- Hastings Nat.*—v. Hastings and E. Sussex Nat.
- Havre (Le), Bul. soc. géol.*—Bulletin de la société géologique de Normandie. Le Havre (Seine-Inférieure). [trimestr.] 371 Fr.
- Hedwigia, Dresden.*—Hedwigia. Organ für Kryptogamenkunde, red. v. Hieronymus. Dresden. [2 monatl.] 573 Ger.
- Heidelberg, Abh. Ak. Wiss.*—Abhandlung der Heidelberger Akademie der Wissenschaften. Heidelberg. [zwangl.] — Ger.
- Heidelberg, Mitt. geol. Landesanst.*—Mittheilungen der grossherzoglich badischen geologischen Landesanstalt, hrsg. im Auftr. des Ministeriums des Innern. Heidelberg. [jährl.] 547 Ger.
- Heidelberg, SitzBer. Ak. Wiss.*—Sitzungsberichte der Heidelberger Akademie der Wissenschaften. Heidelberg. [zwangl.] — Ger.
- Heidelberg, Verh. nathist. Ver.*—Verhandlungen des naturhistorisch-medicinischen Vereins zu Heidelberg. Heidelberg. [1-2 H. jährl.] 575 Ger.
- Heimat, Kiel.*—Die Heimat. Monatsschrift des Vereins zur Pflege der Natur- und Landeskunde in Schleswig-Holstein, red. v. Lund. Kiel. 577 Ger.

- Helder, Jaarb. onderz. Zee.*—Jaarboek van het Rijksinstituut voor het onderzoek der zee, Helder. — Hol.
- Helder, Tijdschr. Ned. Dierk. Ver.*—Tijdschrift der Nederlandsche Dierkundige Vereeniging, Leiden. 8vo. 27 Hol.
- Helder, Verh. Onderz. Zee.*—Verhandelingen uit het Rijksinstituut voor het onderzoek der see, Helder. — Hol.
- Helios, Berlin.*—Helios. Abhandlungen und Mittheilungen aus dem Gesamtgebiete der Naturwissenschaften. Organ des naturwissenschaftlichen Vereins des Reg.-Bez. Frankfurt a. O. Berlin. [jähr.] 579 Ger.
- Helsingfors, Acta Soc. Fauna et Fl. Fenn.*—Acta Societatis pro Fauna et Flora Fennica. Helsingfors. 8vo. 1 Fin.
- Helsingfors, Acta Soc. Sc. Fenn.*—Acta Societatis Scientiarum Fennicae. Helsingfors. 4to. 2 Fin.
- Helsingfors, C. R. Cong. Nat. Med.*—Comptes rendus du Congrès des Naturalistes et Médecins du Nord tenu à Helsingfors. — Fin.
- Helsingfors, Medd. Soc. Fauna et Fl. Fenn.*—Meddelanden af Societas pro Fauna et Flora Fennica. Helsingfors. 8vo. 22 Fin.
- Helsingfors, Öfvers. F. Vet. Soc.*—Öfversigt af Finska Vetenskaps-Societetens Förhandlingar. Helsingfors. 8vo. 26 Fin.
- Hermanstadt, Verh. Mitt. siebenb. Ver. Naturw.*—Verhandlungen und Mittheilungen des siebenbürgischen Vereins für Naturwissenschaften in Hermanstadt. 18 Hun.
- Hertford, Trans. Nat. Hist. Soc.*—Vide Watford, Trans. Herts. Nat. Hist. Soc. — U.K.
- Hess. Chronik. Darmstadt.*—Hessische Chronik. Monatsschrift für Familien und Ortsgeschichte in Hessen und Hessen-Nassau. Hrsg. v. H. Brawenius, Oktavio etc. Darmstadt. — Ger.
- Hildburghausen, Schr. Ver. meining. Gesch.*—Schriften des Vereins für sachsenmeiningische Geschichte und Landeskunde. Hildburghausen. [zwangl.] 581 Ger.
- Hildesheim, Mitt. Roemer-Mus.*—Mittheilungen aus dem Roemer-Museum zu Hildesheim. [zwangl.] 583 Ger.
- Himmel u. Erde, Leipzig.*—Himmel und Erde. Illustrierte naturwissenschaftliche Monatsschrift, red. v. Schwahn. Leipzig. 585 Ger.
- Hobart, Proc. R. Soc. Tasmania.*—Papers and Proceedings of the Royal Society of Tasmania, Hobart. — Tasm.
- Hochland, München.*—Hochland. Monatschrift für alle Gebiete des Wissens, der Literatur und Kunst, hrsg. v. K. Muth. München u. Kempten. — Ger.
- Hod. drob., Lwów.*—Hodowca drobiu, red. J. Szpilman, Lwów. 4to. [monthly.] 10 Pol.
- Hof, Ber. Ver. Natk.*—Bericht des nordoberfränkischen Vereins für Natur-, Geschichts- und Landeskunde. Hof. [mehrjähr.] 586 Ger.
- Holmesdale, Proc. Nat. Hist. Cl., London.*—Proceedings of the Holmesdale Natural History Club, London. 4to. 149 U.K.
- Honolulu, Exp. Sta. Hawaiian Sug. Pl. Ass. Div. Ent. Bul.*—Division of Entomology. Bulletin. Report of the work of the Experiment Station of the Hawaiian Sugar Planters' Association. Honolulu. — U.S.
- Honolulu, H.I., Occ. Paprs., Bernice Pauahi Bishop Mus.*—Occasional Papers of the Bernice Pauahi Bishop Museum of Polynesian Ethnology and Natural History. Honolulu, H.I. — U.S.
- Honolulu, Proc. Hawaii Ent. Soc.*—Proceedings of the Hawaiian Entomological Society. Honolulu. — U.S.

- Hoppe-Seylers Zs. physiol. Chem., Strassburg.*—Hoppe-Seylers Zeitschrift für physiologische Chemie, hrsg. v. Kossel. Strassburg. [monatl.] 587 Ger.
- Horsham, Rep. Christ's Hosp. Nat. Hist. Soc.*—Report of the Christ's Hospital Natural History Society, Horsham. — U.K.
- Hufschmied, Hannover.*—Der Hufschmied. Zeitschrift für das gesamte Hufbeschlagswesen, red. v. M. Lungwitz. Hannover. [monatl.] — Ger.
- Hull Mus. Publ.*—Hull Museum Publications. — U.K.
- Hull, Trans. Geol. Soc.*—Transactions of the Hull Geological Society, Hull. 153 U.K.
- Hull, Trans. Sci. F. Nat. Cl.*—Transactions of the Hull Scientific and Field Naturalists' Club, Hull. 155 U.K.
- Hund, Wien.*—Der Hund. Unabhängige kynologische Zeitschrift für Österreich-Ungarn, hrsg. v. Franz Xaver Pleban. Wien. [$\frac{1}{2}$ monatl.] 130 Aus.
- Hygiea, Stockholm.*—Hygiea. Medicinsk och farmaceutisk månadsskrift utgifven af Svenska Läkare-sällskapet. Stockholm. 8vo. 10 Sve.
- Hyg. Rdsch., Berlin.*—Hygienische Rundschau, hrsg. v. Fraenkel etc. Berlin. [$\frac{1}{2}$ monatl.] 591 Ger.
- Ibis, London.*—The Ibis (a Quarterly Journal of Ornithology), London. 8vo. 156 U.K.
- Ind. For., Allahabad*—(not fixed).—Indian Forester, Allahabad. 16 Ind.
- Ind. For. Mem., Calcutta.*—Indian Forest Memoirs. Calcutta. [The publication will be divided into several series c.f. Climate series, Botanic series, etc. — Ind.]
- Ind. Med. Gaz., Calcutta.*—Indian Medical Gazette, Calcutta. 18 Ind.
- Ind. For. Rec., Calcutta.*—The Indian Forest Records, Calcutta. — Ind.
- Indiana, Rep. Dept. Geol. Nat. Res., Indianapolis*—Report of the Indiana Department of Geology and Natural Resources, Indianapolis. 166 U.S.
- Indianapolis, Ind., Proc. Acad. Sci.*—Proceedings of the Indiana Academy of Science, Indianapolis. 169 U.S.
- Innsbruck, Ber. Natw. Med. Ver.*—Berichte des Naturwissenschaftlich-Medizinischen Vereines in Innsbruck. Innsbruck. [jähr.] 138 Aus.
- Innsbruck, Zs. Ferd.*—Zeitschrift des Ferdinandeums für Tirol und Vorarlberg. Innsbruck. [jähr.] 140 Aus.
- Intern. ent. Zs., Guben.*—Internationale entomologische Zeitschrift, hrsg. unter Mitarbeit bedeutender Entomologen. Guben. [wöch.] — Ger.
- Intern. Mitt. Bodenkunde Berlin.*—Internationale Mitteilungen für Bodenkunde, red. v. G. Murgoci etc. Berlin. [2 mon.] — Ger.
- Intern. Monatschr. Anat., Leipzig.*—Internationale Monatsschrift für Anatomie und Physiologie, hrsg. v. Anderson etc. Leipzig. 668 Ger.
- Intern. Rev. Hydrobiol., Leipzig.*—Internationale Revue der gesamten Hydrobiologie und Hydrographie, hrsg. v. B. Helland-Hansen etc. Leipzig. [6 H. jährl.] — Ger.
- Intern. Wochenschr. Wiss., München.*—Internationale Wochenschrift für Wissenschaft, Kunst und Technik, hrsg. v. P. Hinneberg. München. — Ger.
- Intern. Zentralbl. Ohrenheilk., Leipzig.*—Internationales Zentralblatt für Ohrenheilkunde, hrsg. v. O. Brieger u. G. Gardenigo. Leipzig. [monatl.] — Ger.
- Int. Q., Burlington, Vt.*—The International Quarterly. Burlington, Vt. — U.S.
- Inverness, Trans. N. Ass.*—Transactions of the Northern Association of Literary, etc., Societies, Inverness. 8vo. 159 U.K.

- Inverness, Trans. Sci. Soc. F. Cl.*—Transactions of the Inverness Scientific Society, etc., Inverness. 8vo. 160 U.K.
- Iowa City, Iowa, Bul. Univ. Lab. Nat. Hist.*—Bulletin from the Laboratories of Natural History of the State University of Iowa City. 170 U.S.
- Iowa Geol. Surv., Des Moines.*—Iowa Geological Survey, Des Moines. 171 U.S.
- Iowa Geol. Surv. Monogr., Des Moines.*—Iowa Geological Survey, Monographs, Des Moines. 172 U.S.
- Ipswich, Suffolk Proc. Inst. Archaeol.* Proceedings of Suffolk Institute of Archaeology and Natural History, Ipswich. 412 U.K.
- Irish Nat., Dublin.*—Irish Naturalist (a monthly Journal of General Irish Natural History), Dublin. 161 U.K.
- Irkutsk, Izv. Vost.-Sib. Otd. Russ. Geogr. Obšč.*—Извѣстія Восточно-Сибирскаго отдѣла Императорскаго русскаго Географическаго Общества. Иркутскъ [Bulletin de la Section pour la Sibirie orientale de la Société Impériale russe de Géographie. Irkoutsk]. 58 Rus.
- Ithaca, N.Y., Cornell Univ. Bul. Sci.*—Cornell University Bulletin. Science. Cornell University, Ithaca, N.Y. 175 U.S.
- Izv. Kavk. Šelkov. St., Tiflis.*—Извѣстія Кавказской шелководственной станціи. Тифлицъ [Bulletin de la station séricale du Caucase. Tiflis]. — Rus.
- Izv. Obšč. izsl. prir. Orlov. gub., Kiev.*—Извѣстія Общества для изслѣдованія природы Орловской губерніи. Кіевъ [Bulletin de la Société pour l'exploration de la nature du Gouvernement Orél. Kiev]. — Rus.
- Izv. Obšč. ljub. izučen. Kuban. obl. Ekaterinodar.*—Извѣстія общества любителей изученія Кубанской области. Екатеринодаръ [Bulletin de la Société pour l'exploration de la province de Kouban. Ekaterinodar]. 62 Rus.
- J. Agric. Sci., Cambridge.*—Journal of Agricultural Science, Cambridge. — U.K.
- J. agricult. tropic., Paris.*—Journal d'agriculture tropicale, dir. Vilbouchevitch. Paris. [mensuel.] 879 Fr.
- J. Amer. Chem. Soc., Easton, Pa.*—Journal of the American Chemical Society, Easton, Pa., 182 U.S.
- J. Anat. Physiol., London.*—The Journal of Anatomy and Physiology (normal and pathological), London. 8vo. 162 U.K.
- J. anat. physiol., Paris.*—Journal de l'anatomie et de la physiologie normales et pathologiques de l'homme et des animaux, dir. Mathias Duval. Paris. [bimestr.] 388 Fr.
- J. Anim. Behav. Boston.*—Journal of Animal Behavior, Boston Mass. — U.S.
- J. Biol. Chem., New York, N.Y.*—The Journal of Biological Chemistry, New York City. — U.S.
- J. Board Agric., London.*—Journal of the Board of Agriculture, London. 164 U.K.
- J. Comp. Neur. Psych., Granville, Philadelphia.*—The Journal of Comparative Neurology and Psychology, Denison University, Granville, Philadelphia. 185 U.S.
- J. Comp. Path. Ther., Edinburgh.*—Journal of Comparative Pathology and Therapeutics, Edinburgh and London. 167 U.K.
- J. Conch., Leeds.*—The Journal of Conchology, Leeds. 8vo. 168 U.K.
- J. conchyliol., Paris.*—Journal de Conchyliologie, publié sous la direction de M. H. Fischer. Paris. [trimestr.] 393 Fr.
- J. Cooper Lab., Berkhamsted.*—The Journal of the Cooper Research Laboratory. Berkhamsted. — U.K.
- J. East Africa Soc., London.*—Journal of East Africa Society, London. — U.K.
- J. econ. biol., London.*—The Journal of Economic Biology, London. — U.K.

- J. Econ. Ent., Concord, N.H.*—Journal of Economic Entomology; official organ of the Association of Economic Entomologists. Concord, N.H. — U.S.
- J. Essex Lab., Chelmsford.*—The Journal of the Essex Technical Laboratories, Chelmsford. 8vo. 170 U.K.
- J. Exp. Med., New York.*—Journal of Experimental Medicine, New York. — U.S.
- J. Exp. Zool., Philadelphia, Pa.*—The Journal of Experimental Zoology, Philadelphia, Pa. — U.S.
- J. Fed. Malay Mus., Kuala Lumpur.*—Journal of the Federated Malay States Museums, Kuala Lumpur. — Straits Settlements.
- J. Forest. Suisse, Berne.*—Journal forestier suisse. Berne. 8vo. 52 Swi.
- J. Genetics, Cambridge.*—Journal of Genetics, Cambridge. — U.K.
- J. Geol., Chicago, Ill.*—Journal of Geology. (University of Chicago, Chicago, Ill.) 101 U.S.
- J. Hygiene, London.*—The proposed Journal of Hygiene. (Dr. J. S. Haldane.) London. 171 U.K.
- J. inf. diseases, Chicago, Ill.*—The Journal of infectious diseases, Chicago. — U.S.
- J. Maine Ornith. Soc., Portland.*—The Journal of the Maine Ornithological Society, Portland, Me. 550 U.S.
- J. Malac., London.*—Journal of Malacology, London. 8vo. 172 U.K.
- J. Med. Res., Boston, Mass.*—Journal of Medical Research. Continuation of the Journal of the Boston Society of Medical Sciences. Boston, Massachusetts. 559 U.S.
- J. Morph., Boston, Mass.*—Journal of Morphology, Boston, Mass. 183 U.S.
- J. Mus. Sarawak.*—Journal of the Society of the Natural History Museum Sarawak. — Rus.
- J. Ornith., Leipzig.*—Journal für Ornithologie, hrsg. v. Reichenow. Leipzig. [† jährl.] 596 Ger.
- J. Path. Bact., Edinburgh.*—Journal of Pathology and Bacteriology, Edinburgh and London. 176 U.K.
- J. Physiol., Cambridge.*—The Journal of Physiology, London and Cambridge. 8vo. [Includes Proceedings of the Physiological Society.] 177 U.K.
- J. physiol. path. gén., Paris.*—Journal de physiologie et de pathologie générale, dir. Bouchard et Chauveau. Paris. [bimestr.] 410 Fr.
- J. Psychol., Leipzig.*—Journal für Psychologie und Neurologie. Zugleich Zeitschrift für Hypnotismus, red. v. Brodmann. Leipzig. [zwangl.] — Ger.
- J. R. Army Med. Corps, London.*—Journal of the Royal Army Medical Corps., London. — U.K.
- J. S. E. A. & Uganda Soc., London.*—Journal of the South-east Africa and Uganda Natural History Society. London. — U.K.
- J. Straits Asiat. Soc., Singapore.*—Journal of the Straits Branch of the Royal Asiatic Society, Singapore. — Ind.
- J. Trop. Med., London.*—Journal of Tropical Medicine, London. 181 U.K.
- Jaarb. Mijnw. Ned. Ind., Batavia.*—Jaarboek van het Mijnwezen in Nederlandsch-Indië, uitgegeven door het Ministerie van Koloniën, Batavia. 8vo. 29 Hol.
- Jagd u. Wild, Wien.*—Jagd und Wild. Wien. — Aus.
- Jahrb. Kinderheilk., Leipzig.*—Jahrbuch für Kinderheilkunde und physische Erziehung, red. v. Heubner. Leipzig. [3 H. jährl.] 608 Ger.
- Jahrb. Mikrosk., Bamberg.*—Jahrbuch für Fortschritte mikroskopischer Technik, hrsg. v. R. H. France. Bamberg. [jähr.] — Ger.

- Jahrb. Pflanzenkrankh., St. Peterburg.*—Болѣзни растеній. С.-Петербургъ [Jahrbücher für Pflanzenkrankheiten. St. Peterburg]. — Rus.
- Jahrb. Philos., Paderborn.*—Jahrbuch für Philosophie und Spekulative Theologie, hrsg. v. E. Commer. Paderborn. [$\frac{1}{4}$ jährl.] — Ger.
- Jahrb. schles. Forstver., Breslau.*—Jahrbuch des schlesischen Forstvereins, hrsg. v. Schirmacher. Breslau. [jähr.] 618 Ger.
- Jahrb. Vogelschutz, Berlin.*—Jahrbuch des internationalen Frauenbundes für Vogelschutz (deutsche Abteilung) Berlin. [jähr.] — Ger.
- Jahrb. wiss. Bot., Leipzig.*—Jahrbücher für wissenschaftliche Botanik, hrsg. v. Pfeffer u. Strasburger. Leipzig. [4-8 H. jährl.] 620 Ger.
- Jahrb. wiss. Tierzucht, Hannover.*—Jahrbuch für wissenschaftliche und praktische Tierzucht einschliesslich der Züchtungsbiologie, hrsg. v. Müller. Hannover. [jähr.] — Ger.
- Jahresber. Anat., Jena.*—Jahresberichte über die Fortschritte der Anatomie und Entwicklungsgeschichte, hrsg. v. Schwalbe. Jena. [referierend jährl.] 622 Ger.
- Jahresber. oberrhein. geol. Ver. Stuttgart.*—Jahresberichte und Mitteilungen des Oberrheinischen geologischen Vereines, Stuttgart. [jähr.] — Ger.
- Jahresber. Physiol., Stuttgart.*—Jahresbericht über die Fortschritte der Physiologie, hrsg. v. Hermann. Stuttgart. [referierend jährl.] 640 Ger.
- Jahresber. Ver. angew. Bot., Berlin.*—Jahresbericht der Vereinigung der Vertreter der angewandten Botanik. Berlin. — Ger.
- Janus, Leyde.*—Janus, Archives internationales pour l'histoire de la Médecine et la Géographie médicale, Amsterdam. 8vo. 30 Hol.
- Jaroslavlž, Mém. Soc. Nat.*—Труды Ярославскаго естественно историческаго Общества. Ярославль [Mémoires de la Société des naturalistes de Jaroslav. Jaroslav]. 413 Rus.
- Jassy, Bul. Soc. Med.*—Bulletin de la Société des Médecins et Naturalistes de Jassy. Jassy. — Fr.
- Jenaische Zs. Naturw.*—Jenaische Zeitschrift für Naturwissenschaft, hrsg. v. d. medicinisch-naturwissenschaftlichen Gesellschaft zu Jena. Jena. [4 H. jährl.] 650 Ger.
- Jena, Denkschr. med. Ges.*—Denkschriften der medicinisch-naturwissenschaftlichen Gesellschaft zu Jena. [jähr. in zwangl. H.] 647 Ger.
- Jena, Mitt. geogr. Ges.*—Mittheilungen der geographischen Gesellschaft für Thüringen zu Jena. Jena. [jähr.] 648 Ger.
- Jestestv. i geogr., Moskva.*—Естествознание и Географія; научнопопулярный и педагогический журналъ. Москва [Sciences naturelles et géographie; journal scientifique-populaire et pédagogique. Moscou]. 67 Rus.
- Ježeg. Dep. zeml., St. Peterburg.*—Ежегодникъ Главнаго Управленія Землеустройства и Земледѣлія по Департаменту Земледѣлія. С.-Петербургъ [Annales du Ministère de l'Agriculture; département de l'Agriculture, St. Peterburg]. — Rus.
- Ježeg. geol. i miner., Varšava.*—Ежегодникъ по геологii и минералогii Россii. Варшава [Annuaire de la géologie et de la minéralogie de Russie. Varsovie]. 68 Rus.
- Johannesburg Trans. Geol. Soc. S. Africa.*—Transactions of the Geological Society of South Africa, Johannesburg. 8 S. Afr.
- Johns Hopkins Hosp. Bul. Baltimore, Md.*—The Johns Hopkins Hospital Bulletin. Baltimore, Md. — U.S.

- J. Hort. Viticult. Suisse, Genève*—Journal d'horticulture et de viticulture suisse. Genève. — Swi.
- Jugo-rost. choz., Rostov-Don.*—Юго-восточный хозяйинъ. Ростовъ на Дону [L'agriculteur du sud-est. Rostov sur le Don].
- Jurjev, Acta Univ.*—Ученныя Записки Императорскаго Юрьевскаго Университета. Юрьевъ [Acta et commentationes Imperialis Universitatis Jurjevensis (olim Dorpatensis)]. 73 Rus.
- Jurjev, Arch. Naturk. L.-E.-u. Kurl.*—Archiv für die Naturkunde Liv-, Esth- und Kurlands, hrsg. von der Dorpater Naturforscher-Gesellschaft. Jurjev. I. Mineralogische Wissenschaften, Chemie, Physik und Erdbeschreibung. II. Biologische Naturkunde. 74 Rus.
- Jurjev, Sitzb. Naturf.-Ges.*—Протоколы Общества естествоиспытателей при Императорскомъ Юрьевскомъ Университетѣ. Юрьевъ [Sitzungsberichte der Naturforscher-Gesellschaft bei der Universität Jurjev]. 79 Rus.
- Jurjev, Zs. Veterin. med.*—Журналъ научной и практической ветеринарной медицины. Юрьевъ [Zeitschrift für wissenschaftliche und praktische Veterinärmedizin. Jurjev]. — Rus.
- Južn.-russ. sel'sk.-hoz. gazeta, Char'kov.*—Южно-русская сельско-хозяйственная газета. Изд. Харьковскаго Общества сельскихъ хозяевъ. Харьковъ [Journal d'agriculture de la Russie méridionale. Kharkov]. 80 Rus.
- Kairni Z., Kyoto.*—Kairni Zasshi. [Conchological Magazine.] Kyoto. — Jap.
- Kaluga, Izo. Obšč. izuč. prir.*—Извѣстія Калужскаго Общества изученія природы мѣстнаго края. Калуга [Bulletin de la société des naturalistes de Kaluga]. — Rus.
- Kamenec-Podolisk, zap. Podolisk, obšč. jest.*—Записки Общества Подольскихъ испытателей и любителей природы. Каменецъ-Подольскъ [Mémoires de la société des naturalistes de Podolie. Kamenec-Podolisk.] — Rus.
- Kansas Univ. Geol. Surv., Topeka.*—University of Kansas. University Geological Survey, Lawrence. 196 U.S.
- Karlsruhe, Mitt. Ver. Thierärzte.*—Mittheilungen des Vereins badischer Thierärzte, Karlsruhe. [monatl.] 680 Ger.
- Karlsruhe, Mitt. zool. Ver.*—Mittheilungen des Badischen Zoologischen Vereins, hrsg. v. d. Badischen Zoologischen Verein. Karlsruhe. [zwangl.] — Ger.
- Karlsruhe, Verh. natw. Ver.*—Verhandlungen des naturwissenschaftlichen Vereins in Karlsruhe. Karlsruhe. [mehrjähr.] 681 Ger.
- Kavkazsk. Sel'sk. Choz. Tiflis.*—Кавказское сельское хозяйство. Тифлисъ [Économie rurale du Caucase. Tiflis]. 414 Rus.
- Kazanĭ, Med. žurn.*—Казанскій медицинскій журналъ. Казань [Journal médical de Kazan. Kazan]. 85 Rus.
- Kazanĭ, Prot. Obšč. jest.*—Протоколы засѣданій Общества естествоиспытателей при Императорскомъ Казанскомъ Университетѣ. Казань [Procès-verbaux des séances de la Société des naturalistes de l'Université Impériale de Kazan. Kazan]. 415 Rus.
- Kazanĭ, Trd. Obšč. jest.*—Труды Общества естествоиспытателей при Императорскомъ Казанскомъ Университетѣ. Казань [Travaux de la Société des naturalistes de l'Université Impériale de Kazan]. 88 Rus.
- Kazanĭ, Trd. Obšč. pčelovod.*—Труды Казанскаго Общества пчеловодства. Казань [Travaux de la Société d'apiculture de Kazan. Kazan]. — Rus.
- Kazanĭ, Zap. Univ.*—Ученныя Записки Императорскаго Казанскаго Университета. Казань [Mémoires scientifiques de l'Université Impériale de Kazan.] 90 Rus.

- Kazanĭ, Zap. veterin. Inst.*—Ученыя записки Казанскаго ветеринарнаго Института. Казань [Mémoires scientifiques de l'Institut vétérinaire de Kazan. Kazan]. 91 Rus.
- Kazanĭ, Žurn. Obšč. pčelov.*—Журналъ Общества пчеловодства. Казань [Journal de la Société d'apiculture. Kazan]. — Rus.
- Kent. Mag., Maidstone.*—The Kentish Magazine, Maidstone. 184 U.K.
- Kew Bull., London.*—Bulletin of Miscellaneous Information, Royal Gardens, Kew. 185 U.K.
- Khartoum, Rep. Wellcome Res. Lab.*—Report of the Wellcome Research Laboratories at the Gordon Memorial College, Khartoum. Department of Education, Sudan Govt. — Egypt.
- Kiel, Schr. natw. Ver.*—Schriften des naturwissenschaftlichen Vereins für Schleswig-Holstein. Kiel. [jähr.] 691 Ger.
- Kiev, Izv. politechn. Inst.*—Извѣстія Кіевскаго политехническаго Института Императора Александра II. Кіевъ [Bulletin de l'Institut polytechnique de l'Empereur Alexandre II. Kiev]. 416 Rus.
- Kiev, Izv. Univ.*—Университетскія извѣстія. Кіевъ [Bulletin de l'Université Impériale de Kiev]. 94 Rus.
- Kiev, Zap. Obšč. jest.*—Записки Кіевскаго Общества естествоиспытателей. Кіевъ [Mémoires de la Société des Naturalistes de Kiev]. 100 Rus.
- Kilmarnock, Ann. Ramb. Soc.*—Kilmarnock Glenfield Ramblers Society Annals. — U.K.
- Kingston, Ann. Inst. Jamaica.*—Annals of the Institute of Jamaica, Kingston. — W. Ind.
- Kingston, J. Inst. Jamaica.*—Journal of the Institute of Jamaica, Kingston. — W. Ind.
- Kišinev, Trd. Obšč. jest.*—Труды Бессарабскаго Общества естествоиспытателей и любителей естествознанія. Кишиневъ [Travaux de la Société de Bessarabie des naturalistes et des amateurs des sciences naturelles. Kichinev]. — Rus.
- Kjöbenhavn, Arch. Pharm. Chem.*—Archiv for Pharmaci og Chemi, Kjöbenhavn. 25 Den.
- Kjöbenhavn, Atlanten.*—Atlanten. Medlemsblad for Foreningen De Danske atlantekavs'oer. — Den.
- Kjöbenhavn, Ber. Biol. Stat.*—Beretning fra den danske biologiske Station, Kjöbenhavn. 1 Den.
- Kjöbenhavn, Bibl. Laeg.*—Bibliotek for Laeger, Kjöbenhavn. 2 Den.
- Kjöbenhavn, Danm. Geol. Unders.*—Danmarks geologiske Undersøgelser, Kjöbenhavn. 8 Den.
- Kjöbenhavn, Ent. Medd.*—Entomologiske Meddelelser, Kjöbenhavn. 6 Den.
- Kjöbenhavn, Geogr. Tids.*—Geografisk Tidsskrift, Kjöbenhavn. 7 Den.
- Kjöbenhavn, Haven.*—Haven, Medlemsblad for de samvirkende danske Haveselskaber, redigeret af Carl Mariboe, Kjöbenhavn. — Den.
- Kjöbenhavn, Hosp. Tid.*—Hospitalstidende, Kjöbenhavn. 9 Den.
- Kjöbenhavn, Mdskf. Dyrl.*—Maanedsskrift for Dyrlaeger, Kjöbenhavn. 12 Den.
- Kjöbenhavn, Medd. Geol.*—Meddelelser fra dansk geologisk Forening, Kjöbenhavn. 15 Den.
- Kjöbenhavn, Medd. Grönl.*—Meddelelser om Grönland, Kjöbenhavn. 16 Den.
- Kjöbenhavn, Medd. Havunders.*—Meddelelser fra Kommissionen for Havundersøgelser, Kjöbenhavn. — Den.

- Kjöbenhavn, Nath. Medd.*—Videnskabelige Meddelelser fra naturhistorisk Forening, Kjöbenhavn. 18 Den.
- Kjöbenhavn, Ornith. Tids.*—Dansk ornithologisk Forenings Tidsskrift, redigeret af O. Helms. Kjöbenhavn. — Den.
- Kjöbenhavn, Skrifter Havunders.*—Skrifter udgivne af Kommissionen for Havundersøgelser, Kjöbenhavn. — Den.
- Kjöbenhavn, Tids. Landbr. Planteavl.*—Tidsskrift for Landbrugets Planteavl. Hovedorgan for Statens Forsög og Undersøgelser vedrørende Markens Avlsplanter, Kjöbenhavn. — Den.
- Kjöbenhavn, Tids. Skov.*—Tidsskrift for Skovvæsen, Kjöbenhavn. 33 Den.
- Kjöbenhavn, Vid. Selsk. Overs.*—Oversigt over det kongelige danske Videnskabernes Selskabs Forhandlinger, Kjöbenhavn. 19 Den.
- Kjöbenhavn, Vid. Selsk. Skr.*—Det kongelige danske Videnskabernes Selskabs Skrifter. Naturvidenskabelig og matematisk Afdeling, Kjöbenhavn. 20 Den.
- Klagenfurt, Jahrb. Nat.-Hist. LdMus. Kärnten.*—Jahrbuch des Naturhistorischen Landes-Museums von Kärnten, red. v. Karl Frauscher. Klagenfurt. [jähr.] 146 Aus.
- Kleinwelt, Bamberg.*—Die Kleinwelt. Zeitschrift der Deutschen mikrologischen Gesellschaft zur Verbreitung wissenschaftlicher Bildung hrsg. v. R. H. Francé. Bamberg. [monatl.] —Ger.
- Klin. Jahrb., Jena.*—Klinisches Jahrbuch, hrsg. v. Flügge u. v. Mering. Jena. 2-4 H. [jähr.] 694 Ger.
- Klin. Monatsbl. Augenheilk., Stuttgart.*—Klinische Monatsblätter für Augenheilkunde, hrsg. v. Zehender. Stuttgart. 695 Ger.
- Klin-ther. Wochenschr., Hamm.*—Klinisch-therapeutische Wochenschrift, red. v. H. Boruttau etc. Hamm. — Ger.
- Knowledge and Sci. News, London.*—Knowledge and Scientific News, London. 187 U.K.
- Königsberg, Schr. physik. Ges.*—Schriften der physikalisch-ökonomischen Gesellschaft zu Königsberg. [jähr.] 702 Ger.
- Közlem. az összeh. élet. Kört. Kör., Budapest.*—Közlemények az összehasonlító életés Körtan Köréből, Budapest. [Mittheilungen aus dem Gebiete der vergleichenden Physiologie und Pathologie, Budapest.] — Hun.
- Kolozsvár, Orv.-termt. Ért.*—Értesítő az erdélyi Muzeumegylet orvostermészettudományi szakosztályából. [Sitzungsberichte der Medizinisch-naturwissenschaftlichen Section des Erdélyi Muzeumegylet (Siebenbürgischer Museumverein).] I. Orvosi szak. [Medizinische Abtheilung.] II. Természettudományi szak. [Naturwissenschaftliche Abtheilung.] 8 Hun.
- Kol. Rdsch., Berlin.*—Koloniale Rundschau. Monatschrift für die Interessen unserer Schutzgebiete und ihrer Bewohner, hrsg. v. E. Vohsen. Berlin. — Ger.
- Konch. Sek., Gifu.*—Konchū Sekai (The Insect World). Gifu, Japan. 10 Jap.
- KorrBl. D. Ges. Anthr., München.*—Korrespondenzblatt der deutschen Gesellschaft für Anthropologie, Ethnologie und Urgeschichte. München. [monatl.] 312 Ger.
- KorrBl. Iris, Berlin.*—Korrespondenzblatt. Beilage zur Deutschen Entomologischen Zeitschrift „Iris“ hrsg. vom Entomolog. Verein „Iris“ zu Dresden. Berlin. [monatl.] — Ger.
- Kosmos, Lwów.*—Kosmos, czasopismo Polskiego Towarzystwa przyrodników im. Kopernika red. B. Radziszewski, Lwów. 8vo. [monthly.] 21 Pol.

- Kosmos, Stuttgart.*—Kosmos. Handweiser für Naturfreunde hrsg. v. Kosmos. Stuttgart. [monatl.] — Ger.
- Kraków, Bull. Intern. Acad.*—Bulletin International de l'Académie des Sciences de Cracovie, classe des Sciences mathématiques et naturelles, red. J. Rostafiński, Cracovie. 8vo. [monthly.] 11 Rus.
- Kraków, Spraw. Kom. fizyogr.*—Sprawozdanie Komisji fizyograficznej, obejmujące pogląd na czynności dokonane w ciągu roku . . ., oraz Materiały do fizyografii krajowej, Kraków. 8vo. [annual.] 17 Pol.
- Kraków, Rozpr. Akad. B.*—Rozprawy Wydziału Matematyczno-Przyrodniczego Akademii Umiejętności, Dział B, nauki biologiczne, Kraków. 8vo. [monthly.] 15 Pol.
- Krasnojarsk, Izv. Krasn. otd. Russ. Geogr. Obšč.*—Извѣстія Красноярскаго подѣла Восточно-Сибирскаго оtdѣла Императорскаго Русскаго Географическаго Общества. Красноярскъ [Bulletin de la sub-division Krasnoïarsk de la section de la Sibérie orientale de la Société Impériale Russe de Géographie. Krasnoïarsk]. 418 Rus.
- Krefeld, Mitt. Ver. Natk.*—Mitteilungen des Vereins für Naturkunde in Verbindung mit dem Städtischen naturwissenschaftlichen Museum zu Krefeld. [zwangl.] — Ger.
- Kristiania, Forh. Vid. selsk.*—Forhandlinger i Videnskabsselskabet i Kristiania. 12 Nor.
- Kristiania, Norsk Jaegerf. Tidssk.*—Norsk Jaeger og Fiskerforenings Tidsskrift, Kristiania. 15 Nor.
- Kristiania, Skr. Vid. selsk.*—Skrifter udgivne af Videnskabsselskabet i Kristiania. 17 Nor.
- Kristiania, Tidssk. norsk. Landb.*—Tidsskrift for det norske Landbrug, Kristiania. 20 Nor.
- Kristiania, Tidssk. Skogbr.*—Tidsskrift for Skogbrug, Kristiania. 21 Nor.
- KühnArch., Berlin.*—Kühn-Archiv. Arbeiten aus dem landwirtschaftlichen Institut der Universität. Halle a. S. [$\frac{1}{2}$ jährl.] — Ger.
- Laibach, Mitt. MusVer. Krain.*—Mitteilungen des Museal-Vereines für Krain, red. v. Oskar Gratzy Edlen von Wardengg. Laibach. [2 monatl.] 156 Aus.
- Lancet, London.*—Lancet, London. 188 U.K.
- Lancs. Nat.*—The Lancashire Naturalist; a Monthly Journal. Conducted by M. W. W. Western. Darwen, Lancs. — U.K.
- Landtbr.-Styr. Medd., Helsingfors.*—Landtbruksstyrelsens meddelanden. Helsingfors. 4to. 19 Fin.
- Landw. Ann., Rostock.*—Landwirthschaftliche Annalen des mecklenburgischen patriotischen Vereins. Rostock. [wöch.] 717 Ger.
- Landw. Jahrb., Berlin.*—Landwirthschaftliche Jahrbücher, hrsg. v. Thiel. Berlin. [2 monatl.] Nebst Ergänzungs-Bänden. 723 Ger.
- Landw. Jahrb. Schweiz, Bern.*—Landwirthschaftliches Jahrbuch der Schweiz. Bern. 8vo. 51 Swi.
- Landw. Versuchstat., Berlin.*—Die landwirthschaftlichen Versuchs-Stationen. Organ für naturwissenschaftliche Forschungen auf dem Gebiete der Landwirthschaft, hrsg. v. Nobbe. Berlin. [2 monatl.] 725 Ger.
- Landw. Wochenschr., Halle.*—Landwirthschaftliche Wochenschrift für die Provinz Sachsen. Amtsblatt der Landwirthschaftskammer. Halle. 727 Ger.
- Landw. Zs. Strassburg.*—Landwirthschaftliche Zeitschrift für Elsass-Lothringen. Strassburg. [wöch.] 730 Ger.

- Langres, Bull. Soc. Sci. Haute Marne.*—Bulletin de la Société des Sciences naturelles de la Haute-Marne. Langres. 25 cm. — Fr.
- Lansing, Rep. Mich. Acad. Sci.*—Report of the Michigan Academy of Science, Lansing, Mich. 565 U.S.
- Lausanne, Bul. Soc. Sci. Nat.*—Bulletin de la Société vaudoise des sciences naturelles. Lausanne. 8vo. 60 Swi.
- Lawrence, Kan. Univ. Sci. Bull.*—The Kansas University Science Bulletin. Lawrence, Kan. [Includes Kansas University Quarterly.] 555 U.S.
- Leeds, Trans. Geol. Ass.*—Transactions of the Leeds Geological Association, Leeds. 194 U.K.
- Leeds, Trans. Nat. Cl.*—Transactions of the Leeds Naturalists' Club, Leeds. 8vo. 195 U.K.
- Leeds, Trans. Yorks. Nat. U.*—Transactions of the Yorkshire Naturalists' Union, Leeds. 8vo. 196 U.K.
- Leicester, Trans. Lit. Phil. Soc.*—Transactions of the Leicester Literary and Philosophical Society, Leicester.—198 U.K.
- Leiden, Notes Mus. Jentink.*—Notes from the Leyden Museum, edited by F. A. Jentink, Leiden. 8vo. 33 Hol.
- Leiden, Samml. Geol. Reichsmus.*—Sammlungen des Geologischen Reichsmuseums in Leiden. Leiden. 8vo. 35 Hol.
- Leipzig, Abh. Ges. Wiss.*—Abhandlungen der kgl. sächsischen Gesellschaft der Wissenschaften. Leipzig. [jähr.] 738 Ger.
- Leipzig, Ber. Ges. Wiss.*—Berichte über die Verhandlungen der kgl. sächsischen Gesellschaft der Wissenschaften. Leipzig. [jähr. in zwangl. H.] 739 Ger.
- Leipzig, Mitt. Ver. Erdk.*—Mittheilungen des Vereins für Erdkunde zu Leipzig. [jähr.] 742 Ger.
- Leipzig, SitzBer. natf. Ges.*—Sitzungsberichte der naturforschenden Gesellschaft zu Leipzig. Leipzig. [2 jähr.] 744 Ger.
- Leipziger Bienenztg.*—Leipziger Bienenzeitung, red. v. Liedloff. Leipzig. [monatl.] 750 Ger.
- Lěsn. žurn., St.-Peterburg.*—Лѣсной журналъ. С.-Петербургъ [Journal forestier. St.-Petersbourg]. 111 Rus.
- Lěsoprom. věst., St. Peterburg.*—Лѣсопромышленный вѣстникъ. С.-Петербургъ [Messenger de l'industrie forestière. St. Petersburg]. 112 Rus.
- Levallois, Perret. Ann. soc. ent.*—Annales de la Société entomologique Levallois Perret. — Fr.
- Liège, Ann. Soc. géol. Belgique.*—Annales de la Société géologique de Belgique. Liège. [irrégul.] 110 Bel.
- Liège, Mém. Soc. roy. sci.*—Mémoires de la Société royale des sciences de Liège. Bruxelles. 116 Bel.
- Liegnitz, Mitt. Gesch. Ver.*—Mitteilungen des Geschichts- und Altertums-Vereins, für die Stadt und das Fürstentum Liegnitz. Liegnitz. [zwangl.] — Ger.
- Liestal, Tätigkeitsb. Natf. Ges.*—Tätigkeitsbericht der naturforschenden Gesellschaft Baselland, Liestal. — Swi.
- Lille Ann. soc. géol.*—Annales de la société géologique du Nord. Lille (Nord). [bimestr.] 420 Fr.
- Lille, Mém. soc. géol.*—Mémoires de la Société géologique du Nord. Lille (Nord). — Fr.
- Lille, Mém. soc. sci. agricult.*—Mémoires de la société des sciences, de l'agriculture et des arts. Lille (Nord). [trimestr.] 427 Fr.

- Lincoln, Nebr., Trans. Amer. Microsc. Soc.*—Transactions of the American Microscopical Society, Lincoln, Nebr. 198 U.S.
- Lincoln, Nebr., Univ. Stud.*—University Studies, University of Nebraska, Lincoln. 199 U.S.
- Lincoln, Stud. Zool. Lab. Univ. Nebr.*—Studies from the Zoological Laboratory, University of Nebraska, Lincoln. 203 U.S.
- Linz, JahrBer. Mus. Franc. Carol.*—Jahresbericht des Museums Francisco-Carolinum. Nebst der . . . Lieferung der Beiträge zur Landeskunde von Österreich ob der Enns. Linz. 173 Aus.
- Lisboa, Com. Trab. Geol.*—Comunicações dos Trabalhos geológicos de Portugal, Lisboa. 10 Por.
- Lisboa, J. Sci.*—Jornal de Sciencias mathematicas, Physicas e naturaes, publicado pela Academia Real das Sciencias de Lisboa. 11 Por.
- Lisboa, Mem. R. Acad. Sci.*—Memorias da real Academia das Sciencias de Lisboa. 13 Por.
- Lisbonne, Bul. Soc. Port. Sc. Nat.*—Bulletin de la Société Portugaise des Sciences naturelles. Lisbonne. — Port.
- List. Pčelov., Odessa.*—Листокъ пчеловода. Одесса [Journal de l'apiculteur. Odessa]. — Rus.
- Listy Chem., Prag.*—Listy Chemické. Organ Chemické Společnosti; Spolek Chemicků Českých, red. J. Mašín, E. Votoček. Praha. [Chemische Blätter. Organ des Vereines Tschechischer Chemiker.] [10 H. jährl.] 175 Aus.
- Liverpool, Bul. Mus.*—Bulletin of the Liverpool Museums, Liverpool. 8vo. 200 U.K.
- Liverpool, J. Geol. Ass.*—Journal of the Liverpool Geological Association, Liverpool. 201 U.K.
- Liverpool, Proc. Geol. Soc.*—Proceedings of the Liverpool Geological Society, Liverpool. 204 U.K.
- Liverpool, Proc. Lit. Phil. Soc.*—Proceedings of the Literary and Philosophical Society of Liverpool, Liverpool. 205 U.K.
- Liverpool, Proc. Nat. F. Cl.*—Proceedings of the Liverpool Naturalists' Field Club, Liverpool. 8vo. 206 U.K.
- Liverpool, Proc. Trans. Biol. Soc.*—Proceedings and Transactions of the Liverpool Biological Society, Liverpool. 207 U.K.
- Liverpool, Rep. Lancs. Ent. Soc.*—Annual Report of the Lancashire and Cheshire Entomological Society, Liverpool. — U.K.
- Liverpool, Rep. Sci. Stud. Ass.*—Annual Report of the Liverpool Science Students' Association, Liverpool. — U.K.
- Liverpool, Thomson-Yates Lab. Rep.*—Thomson-Yates Laboratories Reports, Liverpool. 209 U.K.
- Locarno, Boll. Soc. Tic. Sci. Nat.*—Bolletino della Società ticinese di Scienze Naturali. Locarno (Impr. A. Pedazzini). — Swi.
- London, Bul. Brit. Ornith. Cl.*—Bulletin of the British Ornithologists' Club, London. 8vo. 215 U.K.
- London, Bul. Imp. Inst.*—Bulletin of the Imperial Institute. (Issued as a quarterly supplement to the Board of Trade Journal.) — U.K.
- London, Geog. J.*—Geographical Journal (Royal Geographical Society), London. 218 U.K.
- London, J. Anthropol. Inst.*—Journal of the Anthropological Institute of Great Britain and Ireland, London. 220 U.K.

- London, J. City Coll. Sci. Soc.*—Journal of the City of London College Science Society, London. 226 U.K.
- London, J. Linn. Soc. Zool.*—Journal of the Linnean Society, London (Zoology). 234 U.K.
- London, J. Quek. Microsc. Cl.*—Journal of the Quekett Microscopical Club, London. 235 U.K.
- London, J. R. Agric. Soc.*—Journal of the Royal Agricultural Society, London. 236 U.K.
- London, J. R. Asiat. Soc.*—Journal of the Royal Asiatic Society, London. 237 U.K.
- London, J. R. Hort. Soc.*—Journal of the Royal Horticultural Society, London. 239 U.K.
- London, J. R. Inst. Pub. Hlth.*—Journal of the Royal Institute of Public Health. London. — U.K.
- London, J. R. Microsc. Soc.*—Journal of the Royal Microscopical Society, London. 240 U.K.
- London, J. Soc. Hellenic Stud.*—Journal of the Society for the Promotion of Hellenic Studies, London. 228 U.K.
- London, J. Trans. Vic. Inst.*—Journal of the Transactions of the Victoria Institute, London. 246 U.K.
- London, Monogr. Palæont. Soc.*—Monographs of the Palæontographical Society, London. 252 U.K.
- London, Mus. J.*—The Museums Journal, the organ of the Museums Association, London. 390 U.K.
- London, Obit. Not. R. Soc.*—Obituary notices of the Fellows of the Royal Society. London. — U.K.
- London, Phil. Trans. R. Soc.*—Philosophical Transactions of the London Royal Society. 254 U.K.
- London, Proc. Entom. Soc.*—Transactions of the Entomological Society (includes Proceedings), London. 8vo. 283 U.K.
- London, Proc. Geol. Ass.*—Proceedings of the Geologists' Association, London. 257 U.K.
- London, Proc. Geol. Soc. v. London, Q. J. Geol. Soc.*
- London, Proc. Linn. Soc.*—Proceedings of the Linnean Society, London. 260 U.K.
- London, Proc. Malac. Soc.*—Proceedings of the Malacological Society of London, London. 8vo. 261 U.K.
- London, Proc. R. Inst.*—Proceedings of the Royal Institution of Great Britain, London. 265 U.K.
- London, Proc. R. Soc.*—Proceedings of the London Royal Society. 267 U.K.
- London, Proc. R. Soc. Med.*—Proceedings of the Royal Society of Medicine, London. — U.K.
- London, Proc. S. Lond. Ent. Nat. Hist. Soc.*—Proceedings of the South London Entomological and Natural History Society, London. 449 U.K.
- London, Proc. Zool. Soc.*—Proceedings of the Zoological Society, London. 271 U.K.
- London, Q. J. Geol. Soc.*—Quarterly Journal of the Geological Society. London. 272 U.K.
- London, Rep. Brit. Ass.*—Report of the British Association for the Advancement of Science, London. 276 U.K.
- London, Rep. Evol. Com. Roy. Soc.*—Report of the Evolution Committee of the Royal Society. London. — U.K.

- London, Rep. S. E. U. Sci. Soc.*—Report and Transactions of the South Eastern Union of Scientific Societies. Tunbridge Wells and London. 422 U.K.
- London, Trans. City Nat. Hist. Soc.*—Transactions of the City of London Entomological and Natural History Society, London. 281 U.K.
- London, Trans. Ent. Soc.*—Transactions of the Entomological Society (includes Proceedings), London. 8vo. 283 U.K.
- Louth, Trans. Lincoln. Nat. U.*—Transactions of the Lincolnshire Naturalists' Union, Louth. 8vo. 299 U.K.
- London, Trans. Linn. Soc.*—Transactions of the Linnean Society, London. 4to. 288 U.K.
- London, Trans. Zool. Soc.*—Transactions of the Zoological Society, London. 297 U.K.
- Los Angeles, Bul. So. Cal. Acad. Sci.*—Bulletin of the Southern California Academy of Sciences, Los Angeles. 204 U.S.
- Łowicz pols., Warszawa.*—Łowicz polski, dwutygodnik poświęcony myśliwstwu, red. J. Sztolcman, Warszawa. 8vo. [fortnightly.] 24 Pol.
- Lübeck, Mitt. geogr. Ges.*—Mittheilungen der geographischen Gesellschaft und des naturhistorischen Museums in Lübeck. Lübeck. [2-3 H. jährl.] 760 Ger.
- Lüneberg, Jahreshefte natw. Ver.*—Jahreshefte des naturwissenschaftlichen Vereins für das Fürstenthum Lüneburg. Lüneberg. [3 jähr.] 763 Ger.
- Lund, Univ. Årsskr.*—Acta Universitatis Lundensis.—Lunds Universitets Årsskrift. Lund. 4to. 14 Swe.
- Luonnon Ystävä, Helsingfors.*—Luonnon Ystävä. Helsingfors. 8vo. 20 Fin.
- Luxembourg, Bul. Soc. Nat.*—Bulletins Mensuels. Société des Naturalistes luxembourgeois. Luxembourg. [mensuel.] — Bel.
- Luxembourg, Pub. Inst.*—Publications de l'Institut grand-ducal de Luxembourg. Section des sciences naturelles et mathématiques. Luxembourg. — Lux.
- Luzern, Mitt. Natf. Ges.*—Mittheilungen der naturforschenden Gesellschaft in Luzern. Luzern. 8vo. 65 Swi.
- Lyon, Ann. Soc. agricult.*—Annales de la société d'agriculture de Lyon (Rhône). [trimestr.] 443 Fr.
- Lyon, Ann. soc. linn.*—Annales de la société linnéenne. Lyon (Rhône). [annuel.] 442 Fr.
- Lyon, Arch. Mus. hist. nat.*—Archives du Musée d'histoire naturelle. Lyon. — Fr.
- Lyon, Bul. soc. anthr.*—Bulletin de la société d'anthropologie de Lyon, dir. Paulet Lyon (Rhône). [annuel.] 445 Fr.
- Lyon, Mém. Acad. sci. bel.-let.*—Mémoires de l'Académie des sciences, belles-lettres et arts de Lyon (Rhône). [annuel.] 458 Fr.
- M. Orv. Archiv., Budapest.*—Magyar Orvosi Archivum, Budapest. [Archiv. der ungarischen Aerzte, Budapest.] 21 Hun.
- Mâcon, Bul. soc. sci. nat.*—Bulletin de la Société des sciences naturelles de Mâcon (Saone et Loire). 928 Fr.
- Madison, Trans. Wis. Acad. Sci.*—Transactions of the Wisconsin Academy of Sciences, Arts and Letters, Madison. 205 U.S.
- Madras, Govt. Mus. Bul.*—Madras Government Museum Bulletin, Madras. 20 Ind.
- Madrid, Act. Soc. Esp. Hist. Nat.*—Actas de la Sociedad española de Historia natural, Madrid. — Spain.
- Madrid, Bol. Com. Map. Geol.*—Boletín del la Comisión del Mapa Geológico, Madrid. — Spain.

- Madrid, Bol. Soc. Esp. Hist. Nat.*—Boletín de la Sociedad Española de Historia Natural, Madrid. — Spain.
- Madrid, Mem. Com. Map. Geol.*—Memorias de la Comisión del Mapa Geológico, Madrid. — Spain.
- Madrid, Mem. Soc. Esp. Hist. Nat.*—Memorias de la Sociedad Española de Historia Natural, Madrid. — Spain.
- Madrid, Rev. Acad. Ci.*—Revista de la Real Academia de Ciencias exactas, físicas y naturales de Madrid. Madrid. — Spain.
- Magdeburg, Abh. Mus. Natk.*—Museum für Natur- und Heimatkunde zu Magdeburg. Abhandlungen und Berichte hrsg. v. A. Mertens Magdeburg. [zwangl.] — Ger.
- Magy. orv. termv. nagygy. évk.*—A magyar orvosok és természetvizsgálók nagygyűléseinek évkönyvei. 1 Hun.
- Malaria, Leipzig.*—Malaria. Internationales Archiv für die Länder deutscher Sprache, hrsg. v. C. Mense. Leipzig. [3 monatl.] — Ger.
- Manchester, Mem. Lit. Phil. Soc.*—Memoirs and Proceedings of the Manchester Literary and Philosophical Society, Manchester. 302 U.K.
- Manchester, N.H., J. Proc. Inst. Arts Sci.*—Journal of Proceedings of the Manchester Institute of Arts and Sciences, Manchester, N.H. — 214 U.S.
- Manchester, Notes Mus.*—Notes from the Manchester Museum, Manchester. — U.K.
- Manchester, Rep. or Trans. Microsc. Soc.*—Report and Transactions of the Manchester Microscopical Society, Manchester. 8vo. 312 U.K.
- Manchester, Stud. Biol. Owens Coll.*—Studies in Biology from the Biological Department of the Owens College, Manchester. 308 U.K.
- Manchester, Trans. Geol. Soc.*—Transactions of the Manchester Geological and Mining Society, Manchester. 310 U.K.
- Man. Conch., Philadelphia, Pa.*—Manual of Conchology. By H. A. Pilsbry, Philadelphia, Pa. — U.S.
- Manila, P.I., Dept. Int. Bur. Govt. Lab. [Pub.].*—Department of the Interior. Bureau of Government Laboratories. [Publications.] Manila, P.I. — U.S.
- Mannheim, Jahresber. Ver. Nath.*—Jahresbericht des Vereins für Naturkunde zu Mannheim. Mannheim. [mehrjähr.] 768 Ger.
- Mans (Le), Bul. soc. agricult. sci.*—Bulletin de la société d'agriculture, sciences et arts de la Sarthe. Le Mans (Sarthe). [trimestr.] 464 Fr.
- Marburg, Schr. Ges. Natw.*—Schriften der Gesellschaft zur Beförderung der gesammten Naturwissenschaften zu Marburg. Marburg. [jähr.] 770 Ger.
- Marburg, SitzBer, Ges. Natw.*—Sitzungsberichte der Gesellschaft zur Beförderung der gesammten Naturwissenschaften in Marburg. Marburg. [zwangl.] 771 Ger.
- Marcellid, Avellino.*—Marcellid, Rivista internazionale di Cecidologia, Avellino. 293 It.
- Mark, Berlin.*—Die Mark. Illustrierte Wochenschrift für Touristik und Heimatkunde, hrsg. v. G. E. Kitzler, Berlin. — Ger.
- Marlborough, Rep. Coll. Nat. Hist. Soc.*—Report of the Marlborough College Natural History Society, Marlborough. 8vo. 315 U.K.
- Marseille, Ann. Soc. sci. Provence.*—Annales de la Société des sciences naturelles de Provence. Marseille. — Fr.
- Marseille, Bul. soc. linn.*—Bulletin de la Société linnéenne. Marseille. — Fr.
- Marseille, Mém. soc. linn.*—Mémoires de la Société linnéenne. Marseille. — Fr.

- Maryland Geol. Surv., Baltimore.*—Maryland Geological Survey, Baltimore. 219 U.S.
- Matér. faun. flor. Ross., Moskva.*—Материалы къ познанію фауны и флоры Россійской Имперіи. Москва [Matériaux concernant l'étude de la faune et de la flore de l'Empire de Russie. Moscou]. 115 Rus.
- Matér. géol. Kavkaza, Tiflis.*—Материалы по геологія Кавказа. Тифлисъ [Matériaux pour la géologie du Caucase Tiflis]. 116 Rus.
- Matér. géol. Ross., St. Peterburg.*—Материалы для геологіи Россіи. С.-Петербургъ [Matériaux pour la géologie de la Russie. St.-Petersbourg]. 117 Rus.
- Math.-natw. Ber. Ungarn, Leipzig.*—Mathematische und naturwissenschaftliche Berichte aus Ungarn. Leipzig. [jähr.] — Ger.
- Math. Termt. Ért., Budapest.*—Mathematikai és Természettudományi Értesítő, Budapest. [Mathematischer und naturwissenschaftlicher Anzeiger, Budapest.] 11 Hun.
- Math. Termt. Közlem., Budapest.*—Mathematikai és Természettudományi Közlemények, Budapest. [Mathematische u. naturwissenschaftliche Mittheilungen, Budapest.] 12 Hun.
- Medan, Meded. Deli-Proefstat.*—Medan, Mededeelingen Deli-Proefstation. — Hol.
- Medd. Geogr. Fören. Finl., Helsingfors.*—Meddelanden af Geografiska Föreningen i Finland. Helsingfors. 8vo. 21 Fin.
- Meded. Vissch., Helder.*—Mededeelingen over Visscherij uitgegeven door Dr. P. P. C. Hoek, Helder. 8vo. 37 Hol.
- Media, Pa., Proc. Delaware Co. Inst. Sci.*—Proceedings of the Delaware County Institute of Science, Media, Pa. — U.S.
- Med. Klinik, Berlin.*—Medizinische Klinik. Wochenschrift für praktische Ärzte, hrsg. v. Th. Axenfeld etc. Berlin [u. Wien]. — Ger.
- Med.-natw. Arch., Berlin.*—Medizinisch-naturwissenschaftliches Archiv. Zeitschrift für die gemeinsamen Forschungsergebnisse der klinischen Medizin und ihrer gesamten Nachbargebiete, hrsg. v. F. Henke etc. Berlin. [zwangl.] — Ger.
- Med. Obozr., Moskva.*—Медицкское Обзоріе. Москва [Revue médicale. Moscou]. 122 Rus.
- Medyc., Warszawa.*—Medycyna, red. Sadowski, Warszawa. 8vo. [weekly.] 25 Pol.
- Meereskunde, Berlin.*—Meereskunde. Sammlung volkstümlicher Vorträge zum Verständnis der nationalen Bedeutung von Meer und Seewesen. Berlin. [monatl.] — Ger.
- Meissen, Mitt. Isis.*—Naturwissenschaftliche Gesellschaft „Isis“ in Meissen. Mitteilungen aus den Sitzungen des Vereinsjahres. [jähr.] — Ger.
- Melbourne, Mem. Nat. Mus.*—Memoirs of the National Museum. Melbourne. — Vict.
- Melbourne, Proc. R. Soc. Vict.*—Proceedings of the Royal Society of Victoria, Melbourne. 9 Vict.
- Melbourne, Trans. R. Soc. Vict.*—Transactions of the Royal Society of Victoria, Melbourne. — Vict.
- Mem. Geol. Surv. Ind., Calcutta.*—Memoirs of the Geological Survey of India, Calcutta. 22 Ind.
- Mem. Geol. Surv. U. K., London.*—Memoirs of the Geological Survey of the United Kingdom, London, Glasgow, etc. 327 U.K.
- Mem. Ind. Mus., Calcutta.*—Memoirs of the Indian Museum. Calcutta. — Ind.

- Mém. Mus. Belgique, Bruxelles.*—Mémoires du Musée Royal d'histoire naturelle de Belgique, Bruxelles. — Bel.
- Mem. Mus. Goeldi, Pará.*—Memorias do Museu Goeldi (Museu paraense) de historia natural e ethnographia, Pará. — Brazil.
- Mém. Soc. Pal. Suisse, Genève. v. Basel, Abh. Schweiz. Pal. Ges.*
- Mende, Bul. soc. agricult.*—Bulletin de la société d'agriculture, industrie, sciences et arts du département de la Lozère, dir. A. Monteils. Mende (Lozère). 487 Fr.
- Mendel J., London.*—The Mendel Journal printed and published for the Mendel Society by Taylor, Garnett, Evans & Co., London. — U.K.
- Meriden, Conn., Trans. Sci. Ass.*—Transactions of the Meriden Scientific Association Meriden, Conn. 226 U.S.
- Mess. ent., Kiev.*—Энтомологический вѣстникъ. Кіевъ [Messenger entomologique Kiev]. — Rus.
- Mess. méd. vét. soc., St. Peterburg.*—Вѣстникъ общественной ветеринарии. С.-Петербургъ [Messenger de Médecine vétérinaire sociale. St.-Pétersbourg]. — Rus.
- Mess. ornith., Moskva.*—Орнитологический вѣстникъ. Москва [Messenger ornithologique, Moscou]. — Rus.
- Metz, Bul. soc. hist. nat.*—Bulletin de la société d'histoire naturelle de Metz. Metz. [unbest.] — Ger.
- Metz, Mém. de l'ac.*—Mémoires de l'académie de Metz. Lettres, sciences, arts et agriculture, hrsg. v. der Akademie. Metz. [jähr.] — Ger.
- Mexico, Bol. Inst. Geol.*—Boletín del Instituto Geológico de Mexico. — Mex.
- Mexico, Mem. Soc. Ant. Alzate.*—Memorias de la Sociedad Científica "Antonio Alzate." Mexico. 8vo. — Mex.
- Michigan, Rep. Geol. Surv., Lansing.*—Reports of the Michigan Geological Survey, Lansing. 230 U.S.
- Microgr. prépar., Paris.*—Micrographe (le) préparateur, dir. Tempère. Paris [bimestr.] 493 Fr.
- Mikrokosmos, Stuttgart.*—Mikrokosmos. Zeitschrift für praktische Betätigung aller Naturfreunde, hrsg. v. A. Reitz. Stuttgart. — Ger.
- Milano, Atti Soc. ital. sc. nat.*—Atti della Società italiana di scienze naturali, e del museo civico di Storia naturale, Milano. 102 It.
- Milano, Mem. Ist. lomb.*—Memorie dell' Istituto lombardo di scienze e lettere, Milano. 104 It.
- Milano, Mem. Soc. ital. sc. nat.*—Memorie della Società italiana di scienze naturali, Milano. 95 It.
- Milano, Rend. Ist. lomb.*—Rendiconti dell' Istituto lombardo di scienze e lettere, Milano. 106 It.
- Milwaukee, Bul. Wis. Nat. Hist. Soc.*—Bulletin of the Wisconsin Natural History Society, Milwaukee. 235 U.S.
- Minneapolis, Bul. Minn. Acad. Nat. Sci.*—Bulletin of the Minnesota Academy of Natural Sciences, Minneapolis. 247 U.S.
- Minneapolis, Occ. Papers. Minn. Acad. Nat. Sci.*—Occasional Papers of the Minnesota Academy of Natural Sciences, Minneapolis. 249 U.S.
- Minnesota Bul. Geol. Surv., St. Paul.*—Bulletin of the Minnesota Geological and Natural History Survey, St. Paul. 251 U.S.
- Minnesota Geol. Nat. Hist. Surv. Rep., St. Paul.*—The Geological and Natural History Survey of Minnesota. The Geology of Minnesota. Final Report. St. Paul, Minn. 154 U.S.

- Misc. ent., Narbonne.*—Miscellanea entomologica. Revue entomologique internationale (édition française). Narbonne (E. Barthe, édit.). [mensuel.] — Fr.
- Missoula, Bul. Univ. Mont.*—Bulletin University of Montana. Missoula, Mont. 552 U.S.
- Missouri Rep. Geol., Jefferson City.*—Biennial Report of the State Geologist, Jefferson City, Mo. 259 U.S.
- Mitt. D. Schutzgeb., Berlin.*—Mittheilungen von Forschungsreisenden und Gelehrten aus den deutschen Schutzgebieten. Wissenschaftliche Beihefte zum deutschen Kolonialblatt, hrsg. v. Danckelmann. Berlin. [$\frac{1}{4}$ jährl.] 803 Ger.
- Mitt. D. Weinbauver., Mainz.*—Mitteilungen des deutschen Weinbau-Vereins. Mainz. [monatl.] — Ger.
- Mitt. Forstl. VersWesen. Öst., Wien.*—Mitteilungen aus dem forstlichen Versuchswesen Österreichs. Wien. 195 Aus.
- Mitt. Gesch. Med., Hamburg.*—Mitteilungen zur Geschichte der Medizin und der Naturwissenschaften, hrsg. unter Red. v. W. A. Kahlbaum, M. Neuburg, K. Sudhoff. [$\frac{1}{4}$ jährl.] — Ger.
- Mitt. Höhlenk., Graz.*—Mitteilungen für Höhlenkunde hrsg. vom Verein für Höhlenkunde in Graz, Schriftl. Prof. I. A. Ippen. [zwangl.] — Aus.
- Mitt. philomath. Ges., Strassburg.*—Mitteilungen der philomatischen Gesellschaft in Elsass-Lothringen. [zwangl.] — Ger.
- Mitt. Vogelwelt, Nürnberg.*—Mitteilungen über die Vogelwelt, hrsg. v. K. Floericke. Nürnberg. [monatl.] — Ger.
- Mitt. Weinbau, Geisenheim.*—Mittheilungen über Weinbau und Kellerwirthschaft, hrsg. v. Goethe. Geisenheim. [monatl.] 810 Ger.
- Mitt. zool. Stat. Neapel, Berlin.*—Mittheilungen aus der zoologischen Station zu Neapel. Berlin. [$\frac{1}{4}$ jährl.] 811 Ger.
- Modena, Atti Soc. nat. mat.*—Atti della Società dei naturalisti e matematici, Modena. 107 It.
- Modena, Mem. Acc.*—Memorie della R. Accademia di scienze, lettere ed arti, Modena. 99 It.
- Moderno zoojatro, Torino.*—Il moderno zoojatro, Torino. 252 It.
- Möllers D. Gärtnerztg, Erfurt.*—Möllers deutsche Gärtner-Zeitung. Erfurt, Leipzig. [wöch.] 813 Ger.
- Monatschr. Geburtsh., Berlin.*—Monatsschrift für Geburtshülfe und Gynäkologie, hrsg. v. Martin u. Saenger. Berlin. 819 Ger.
- Monatschr. Ohrenheilk., Berlin.*—Monatsschrift für Ohrenheilkunde, hrsg. v. Gruber etc. Berlin. 821 Ger.
- Monatschr. Psychiatrie, Berlin.*—Monatsschrift für Psychiatrie und Neurologie, hrsg. v. Wernicke u. Ziehen. Berlin. 823 Ger.
- Monatshefte natw. Unterr., Leipzig.*—Monatshefte für den naturwissenschaftlichen Unterricht aller Schulgattungen, hrsg. v. B. Landsberg u. B. Schmid. Leipzig. — Ger.
- Monatshefte Tierheilk., Stuttgart.*—Monatshefte für praktische Tierheilkunde, hrsg. v. Fröhner u. Kitt. Stuttgart. 828 Ger.
- Monhfte. Landwirtschft., Wien.*—Monatshefte für Landwirtschaft, Zeitschrift für die Theorie und Praxis aller Gebiete der Bodenproduktion, hrsg. von Wilhelm Bersch. Wien u. Leipzig (Wilhelm Frick). — Aus.
- Monit. horticult., Paris.*—Moniteur d'horticulture, arboriculture, viticulture, sciences, arts et industries horticolas, dir. L. Chauré. Paris. [bi-mensuel.] 501 Fr.
- Monitore zool. ital., Firenze.*—Il Monitore zoologico italiano, Firenze.

- Mons, Mém. Soc. sci. arts lettres du Hainaut.*—Mémoires et publications de la Société des sciences, des arts et des lettres du Hainaut. Mons. 129 Bel.
- Montan. Rdsch., Wien.*—Montanistische Rundschau. Wien. — Aus.
- Montbéliard, Mém. soc. émul.*—Mémoires de la société d'émulation de Montbéliard (Doubs). [irrégul.] 510 Fr.
- Montpellier, Mém. sec. sci. Acad. sci. let.*—Mémoires de la section des sciences [de l'] Académie des sciences et lettres de Montpellier (Hérault). [annuel.] 521 Fr.
- Montreal, Canad. Rec. Sci.*—The Canadian Record of Science (Organ of the Montreal Natural History Society), Montreal. 18 Can.
- Morph. Jahrb., Leipzig.*—Gegenbauer's Morphologisches Jahrbuch, hrsg. v. G. Ruge. Leipzig. [½ jährl.] 829 Ger.
- Moskva, Ann. Inst. agron.*—Извѣстія Московскаго сельско-хозяйственнаго Института. Москва [Annales de l'Institut agronomique de Moscou]. 133 Rus.
- Moskva, Bul. Soc. Nat.*—Bulletin de la Société Impériale des Naturalistes de Moscou. 136 Rus.
- Moskva, Dnev. XII Sjězda russ. jest. vrač.*—Дневникъ XII съѣзда русскпхъ естествоиспытателей и врачей. Москва [Journal XII de la conférence des naturalistes et médecins russes. Moskva]. 407 Rus.
- Moskva, Dnev. otd. icht. Imp. R. Obšč. acclimat.*—Дневникъ отдѣла ихтиологии Императорскаго Русскаго Общества акклиматизаціи животныхъ и растений. Москва [Journal de la section ichthyologique de la Société Impériale Russe d'acclimatation des plantes et des animaux. Moscou]. 422 Rus.
- Moskva, Dnev. zool. otd. obšč. љub. jest.*—Дневникъ зоологическаго отдѣленія Императорскаго Общества любителей естествознанія, астрономіи и этнографіи при Имп. Московскомъ Университетѣ. Москва [Journal de la section Zoologique de la Société Impériale des amateurs des sciences naturelles, d'anthropologie et d'ethnographie. Moscou]. — Rus.
- Moskva, Dnev. zool. sada.*—Дневникъ зоологическаго сада. Москва [Messenger du Jardin zoologique. Moscou]. — Rus.
- Moskva, Izv. Obšč. љub. jest.*—Извѣстія Императорскаго Общества любителей естествознанія, антропологии и этнографіи при Императорскомъ Московскомъ Университетѣ. Москва [Bulletin de la Société Impériale des amateurs des sciences naturelles, d'anthropologie et d'ethnographie, près l'Université Impériale de Moscou]. 138 Rus.
- Moskva, Nouv. Mém. Soc. Nat.*—Nouveaux Mémoires de la Société Impériale des Naturalistes de Moscou. 141 Rus.
- Moskva, Ornith. et Avicult.*—Птицевѣдѣніе и птицеводство. Изд. Отдѣленія орнитологии Общества акклиматизаціи. Москва [Ornithologie et Aviculture. Ed. par la section ornithologie de la Société d'Acclimatation. Moscou]. — Rus.
- Moskva, Trd. kom. Šelkov.*—Труды Комитета шелководства Московскаго Общества сельскаго хозяйства. Москва [Travaux du Comité de sériciculture de la société d'agriculture de Moscou.] — Rus.
- Moskva, Trd. kruž. izsl. russ. priv.*—Труды студенческаго кружка для изслѣдованія русской природы, состоящаго при Императорскомъ Московскомъ Университетѣ. Москва [Travaux du cercle des étudiants pour l'exploration de la nature russe attaché à l'Université Impériale de Moscou. Moscou]. 425 Rus.
- Moskva, Trd. sravnitanatom. Inst. Univ.*—Труды сравнительно-анатомическаго Института Имп. Московскаго Университета. Москва [Travaux de l'Institut d'anatomie comparée de l'Université Impériale de Moscou. Moscou]. — Rus.

- Moskva, Trud. II. Sjezda veterin. vrad.*—Труды II. Съезда ветеринарныхъ врачей. Москва [Travaux du II. Congrès des médecins vétérinaires. Moscou]. — Rus.
- Moskva, Věst. zool. sada.*—Вѣстникъ зоологическаго сада. Москва [Messenger du Jardin zoologique. Moscou]. — Rus.
- Moskva, Zap. Univ.*—Ученыя записки Императорскаго Московскаго Университета. Москва [Mémoires de l'Université Impériale de Moscou]. 158 Rus.
- Motorwagen.*—Der Motorwagen. Organ des mitteleuropäischen Motorwagen-Vereins, hrsg. v. Klose. Berlin. [$\frac{1}{2}$ monatl.] 830 Ger.
- München, Abh. Ak. Wiss.*—Abhandlungen der kgl. bayerischen Akademie der Wissenschaften. München. [jähr. in zwangl. H.] 833 Ger.
- München, Ber. biol. Versuchstat.*—Berichte aus der kgl. bayerischen biologischen Versuchstation in München, hrsg. v. B. Hofer. München. [zwangl.] — Ger.
- Münchener med. Wochenschr.*—Münchener medicinische Wochenschrift, red. v. Spatz. München. — 847 Ger.
- München. Mitt. Bot. Ges.*—Mitteilungen der Bayerischen botanischen Gesellschaft zur Erforschung der heimischen Flora. München. [4 N.jähr.] — Ger.
- München, Mitt. ent. Ges.*—Mitteilungen der Münchener entomologischen Gesellschaft, E. V., München. [monatl.] — Ger.
- München, SitzBer. Ak. Wiss.*—Sitzungsberichte der kgl. bayerischen Akademie der Wissenschaften zu München. München. [jähr. in zwangl. H.] 839 Ger.
- München, SitzBer. Ges. Morph.*—Sitzungsberichte der Gesellschaft für Morphologie und Physiologie in München. München. [3 H.jähr.] 840 Ger.
- München, Verh. Ornith. Ges.*—Verhandlungen der ornithologischen Gesellschaft in Bayern. München. [jähr.] [Fortsetzung von München, Jahresber. Ornith. Ver.] — Ger.
- Münster, Jahresber. ProvVer. Wiss.*—Jahresbericht des westfälischen Provinzialvereins für Wissenschaft und Kunst. Münster. [jähr.] 850 Ger.
- Müz. Füz., Kolozsvár.*—Múzeum Füzetek, Kolozsvár. [Naturwissenschaftliche Museumshäfte. Kolozsvár.] — Hun.
- Museumskunde, Berlin.*—Museumskunde. Zeitschrift für Verwaltung und Technik öffentlicher und privater Sammlungen, hrsg. v. K. Koetschau. Berlin. [4 H.jähr.] — Ger.
- Muzeum, Lwów.*—Muzeum, czasopismo Towarzystwa Nauczycieli Szkół wyższych, red. B. Mańkowski, Lwów. 8vo. [monthly.] 26 Pol.
- N. Bahnen, Leipzig.*—Neue Bahnen. Monatschrift für Haus-, Schul- und Gesellschafts-Erziehung. Zugleich Organ der Freien Vereinigung für philosophische Paedagogik, hrsg. unter Mitwirkung namhafter Paedagogen v. H. Scherer. Leipzig (Emil Behrend). 1345 Ger.
- N. Balt. Weidm. Blt., Riga.*—Neue Baltische Weidmannsblätter. Riga. — Rus.
- N. Denkschr. Schweiz. naturf. Ges., Zürich.*—Neue Denkschriften der schweizerischen naturforschenden Gesellschaft. Nouveaux Mémoires de la Société helvétique des sciences naturelles. Zürich etc. 4to. 71 Swi.
- N. Jahrb. Min., Stuttgart.*—Neues Jahrbuch für Mineralogie, Geologie und Paläontologie, hrsg. v. Bauer. Stuttgart. [2 monatl.] Nebst Beilage-Bänden. 854 Ger.
- N. Weltanschauung, Stuttgart.*—Neue Weltanschauung. Monatschrift für Kulturfortschritt auf naturwissenschaftlicher Grundlage, red. v. W. Breitenbach. Stuttgart. — Ger.
- Nancy, Bul. soc. sci.*—Bulletin des séances de la société des sciences de Nancy et de la réunion biologique de Nancy (Meurthe-et-Moselle). [mensuel.] 530 Fr.

- Nancy, C. R. Ass. anat.*—Comptes rendus de l'association des anatomistes. Nancy. — Fr.
- Nantes, Bul. soc. sci. or hist. nat.*—Bulletin de la société des sciences naturelles de l'Ouest. Nantes (Loire-Inférieure). [trimestr.] 537 Fr.
- Napoli, Annuario Museo zool.*—Annuario del Museo zoologico della R. Università di Napoli. 294 It.
- Napoli, Atti Acc. Pontaniana.*—Atti dell' Accademia Pontaniana, Napoli. 111 It.
- Napoli, Atti Acc. sc.*—Atti dell' Accademia delle scienze fisiche e matematiche, Napoli. 115 It.
- Napoli, Atti Ist. incoragg. sc. nat.*—Atti dell' Istituto d' incoraggiamento alle scienze naturali, Napoli. 113 It.
- Napoli Atti R. Acc. med.-chir.*—Atti della R. Accademia medico-chirurgica, Napoli. 114 It.
- Napoli, Boll. Soc. nat.*—Bollettino della Società di naturalisti, Napoli. 118 It.
- Napoli, Rend. Acc. sc.*—Rendiconti dell' Accademia delle scienze fisiche e matematiche, Napoli. 120 It.
- Naša ochota, St. Peterburg.*—Наша охота. С.-Петербургъ [Notre chasse, St. Pétersbourg]. — Rus.
- Naša plicev. zizni, Kišinev.*—Наша птицеводная жизнь. Кишиневъ [L'aviculture chez nous. Kišinev]. — Rus.
- NatCab., Grünberg.*—Das Naturalien-Cabinet. Grünberg i. Schl. [½ monatl.] 862 Ger.
- Nat. Canad., Québec.*—Naturaliste Canadien Cap Rouge, Chicoutimi, Québec. 22 Can.
- Nation. Geog. Mag., New York, N.Y.*—National Geographic Magazine, New York, N.Y. 270 U.S.
- Nat. Novit., Berlin.*—Naturae Novitates. Bibliographie neuer Erscheinungen aller Länder auf dem Gebiete der Naturgeschichte und der exacten Wissenschaften. Berlin. [Bibliographie, 26 Nrn. jährl.] 861 Ger.
- Natur, Leipzig.*—Natur. Zeitschrift der Deutschen Naturwissenschaftlichen Gesellschaft. Leipzig. [½ monatlich.] — Ger.
- Natur u. Erziehg, Stuttgart.*—Natur und Erziehung. Monatschrift zur Verbreitung und Pflege der Naturwissenschaften in Schule u. Haus, hrsg. v. F. Dannemann und K. Smalian. Stuttgart. — Ger.
- Natur u. Kultur, München.*—Natur und Kultur. Zeitschrift für Schule und Leben, hrsg. v. F. H. Völler. München. [½ monatl.] — Ger.
- Naturaleza, Mexico.*—La Naturaleza. Periódico científico de la Sociedad mexicana de Historia natural, Mexico. — Mex.
- Naturalist, London.*—The Naturalist, Leeds and London. 336 U.K.
- Naturalista sicil., Palermo.*—Il Naturalista siciliano, Palermo. 121 It.
- Naturaliste, Paris.*—Naturaliste (le), revue illustrée des sciences naturelles, dir Deyrolle. Paris. [bimensuel.] 541 Fr.
- Nature, London.*—Nature, London. 337 U.K.
- Nature Notes, London.*—Nature Notes (Selborne Society's Magazine), London. 8vo. 338 U.K.
- Nature, Paris.*—Nature (la), revue illustrée des sciences et de leurs applications aux arts et à l'industrie, red. H. de Parville. Paris. [hebdomad.] 542 Fr.
- Naturfreund, St. Peterburg.*—Любитель природы. С.-Петербургъ [Der Naturfreund. St. Peterburg]. — Rus.

- Natw. Rdsch., Braunschweig.*—Naturwissenschaftliche Rundschau, hrsg. v. Sklarek. Braunschweig. [wöch.] 867 Ger.
- Natw. Wochenschr., Jena.*—Naturwissenschaftliche Wochenschrift, red. v. Potonié. Jena. 868 Ger.
- Natw. Zs. Landw., Stuttgart.*—Naturwissenschaftliche Zeitschrift für Land- und Forstwirtschaft, hrsg. v. K. v. Tubeuf und L. Hiltner. Stuttgart. [monatl.] — Ger.
- Nautilus, Boston, Mass.*—Nautilus, Boston, Mass. [formerly Philadelphia, Pa.] 271 U.S.
- Nebraska Geol. Surv., Lincoln.*—Nebraska Geological Survey. Lincoln. — U.S.
- Ned. Tijdschr. Geneesk., Amsterdam.*—Nederlandsch Tijdschrift voor Geneeskunde, tevens Orgaan der Nederlandsche Maatschappij ter bevordering van Geneeskunde, Amsterdam. 8vo. 39 Hol.
- Neubrandenburg, VerBl. landw. Hauptver.*—Vereinsblatt des Landwirtschaftlichen Haupt-Vereins für das Grossherzogtum Mecklenburg-Strehlitz. Fachschrift für Landwirtschaft, Viehzucht, Obst- und Gartenbau und Bienenwirtschaft. Im Auftrage des Direktoriums hrsg. v. E. Schutz. Neubrandenburg. [monatl.] — Ger.
- Neuchâtel, Bul. Soc. Sci. Nat.*—Bulletin de la Société neuchâteloise des sciences naturelles. Neuchâtel. 8vo. 73 Swi.
- Neudamm, Veröff. Inst. Jagdk.*—Veröffentlichungen des Instituts für Jagdkunde Neudamm. [zwangl.] — Ger.
- Neurol. Centrallbl., Leipzig.*—Neurologisches Centralblatt, hrsg. v. Mendel. Leipzig. [$\frac{1}{2}$ monatl.] 873 Ger.
- New Brighton, N.Y., Proc. Staten Is. Ass. Arts Sci.*—Proceedings of the Staten Island Association of Arts and Sciences, New Brighton, N.Y. 274 U.S.
- Newcastle, Proc. Univ. Durham Phil. Soc.*—Proceedings of the University of Durham Philosophical Society, Newcastle-upon-Tyne. — U.K.
- Newcastle, Trans. Nat. Hist. Soc.*—Northumberland, Durham, and Newcastle-upon-Tyne Natural History Society, Newcastle-upon-Tyne. 344 U.K.
- New Haven, Conn., Trans. Acad. Arts Sci.*—Transactions of the Connecticut Academy of Arts and Sciences, New Haven. 279 U.S.
- New Jersey Rep. Geol. Surv., Trenton.*—Annual Report. Geological Survey of New Jersey, Trenton. 284 U.S.
- Newport, Proc. Nat. Hist. Soc.*—Proceedings of the Newport Natural History Society, Newport. 8vo. 346 U.K.
- Newport, R.I., Proc. Nat. Hist. Soc.*—Proceedings of the Newport Natural History Society, Newport, R.I. 286 U.S.
- New York, N.Y., Acad. Sci. Mem.*—New York Academy of Sciences, Memoirs, New York, N.Y. 321 U.S.
- New York, N.Y., Amer. Mus. Nat. Hist. Rep.*—American Museum of Natural History. Annual Report of the President. 329 U.S.
- New York, N.Y., Ann. Acad. Sci.*—Annals of the New York Academy of Sciences, New York, N.Y. 295 U.S.
- New York, N.Y., Bul. Amer. Geog. Soc.*—Bulletin of the American Geographical Society. [Included in New York, N.Y., J. Amer. Geog. Soc.] 296 U.S.
- New York, N.Y., Bul. Amer. Mus. Nat. Hist.*—Bulletin of the American Museum of Natural History, New York, N.Y. 299 U.S.
- New York, N.Y., Bul. Geol. Soc. Amer.*—Bulletin of the Geological Society of America, New York, N.Y. 410 U.S.

- New York, N.Y., J. Amer. Geog. Soc.*—Journal of the American Geographical Society, New York, N.Y. [in which is included the Bulletin of the American Geographical Society]. 317 U.S.
- New York, N.Y., J. Ent. Soc.*—Journal of the New York Entomological Society, New York, N.Y. 319 U.S.
- New York, N.Y., J. Microsc. Soc.*—Journal of the New York Microscopical Society, New York, N.Y. 320 U.S.
- New York, N.Y., Mem. Amer. Mus. Nat. Hist.*—Memoirs of the American Museum of Natural History, New York, N.Y. 322 U.S.
- New York, N.Y., Proc. Linn. Soc.*—Abstract of Proceedings of the Linnean Society of New York, N.Y. 327 U.S.
- New York, N.Y., Proc. Soc. Exp. Biol. Med.*—Proceedings of the Society for Experimental Biology and Medicine. New York. — U.S.
- New York, N.Y., Rep. Zool. Soc.*—Annual Report of the New York Zoological Society, New York, N.Y. 331 U.S.
- New York, N.Y., Trans. Acad. Sci.*—Transactions of the New York Academy of Sciences, New York, N.Y. 334 U.S.
- New York, N.Y. Zool. Soc. Bul.*—Zoological Society Bulletin. New York Zoological Society, New York, N.Y. — U.S.
- Nicosia, Bull. Cyprus Nat. Hist. Soc.*—Bulletin of the Cyprus Natural History Society. Nicosia. — Cyprus.
- Nice, ann. soc. let. sci.*—Annales de la société des lettres, sciences et arts des Alpes Maritimes. Nice (Alpes-Maritimes). [annuel.] 546 Fr.
- Nikolsk Fischzucht., St. Peterburg.*—Изъ Никольскаго рыбодовнаго завода. С.-Петербургъ [Aus der Fischzuchtanstalt Nikolsk. St.-Petersburg]. 164 Rus.
- Nîmes, Bul. soc. étud. sci. nat.*—Bulletin de la société d'études des sciences naturelles. Nîmes (Gard). [mensuel.] 551 Fr.
- Nord. Med. Ark., Stockholm.*—Nordiskt Medicinskt Arkiv. Redigeradt och utgifvet af Axel Key. Stockholm. 8vo. 15 Swe.
- Norges geol. Und., Kristiania.*—Norges geologiske Undersøgelse, Kristiania. 23 Nor.
- Norsk Landm., Kristiania.*—Norsk Landmansblad, Kristiania. 30 Nor.
- Northampton, J. Nat. Hist. Soc.*—Journal of the Northamptonshire Natural History Society and Field Club, Northampton. 349 U.K.
- Norwich, Rep. Mus. Ass.*—Report of the Museum Association. Norwich. — U.K.
- Norwich, Trans. Nat. Soc.*—Transactions of the Norfolk and Norwich Naturalists' Society, Norwich. 8vo. 350 U.K.
- Nottingham, Trans. Nat. Soc.*—Transactions of the Nottingham Naturalists' Society, Nottingham. 12mo. 351 U.K.
- Nour. arch. miss. sci. litt., Paris.*—Nouvelles archives des Missions scientifiques et littéraires. Paris. — Fr.
- Nouv. arch. Muséum, Paris.*—Nouvelles archives du Muséum. Paris. [2 vols. par an.] 558 Fr.
- Novo-Aleksandrija, Zap. Inst. sel'sk. hoz.*—Записки Ново-Александрійскаго Института сельскаго хозяйства и лѣсоводства. Ново-Александрія [Mémoires de l'Institut agronomique et forestier à Novo-Alexandria]. 167 Rus.
- Nov. Zool., Tring.*—Novitates Zoologicae, Tring. 8vo. 352 U.K.
- Nürnberg, Abh. nathist. Ges.*—Abhandlungen der naturhistorischen Gesellschaft zu Nürnberg. [zwangl.] 880 Ger.

- Nürnberg, Mitt. nathist. Ges.*—Mitteilungen der naturhistorischen Gesellschaft zu Nürnberg. Nürnberg, [monatl.] — Ger.
- Nuovo Ercolani, Pisa.*—Il nuovo Ercolani, Pisa. 253 It.
- Nuždy derevni, Moskva.*—Нужды деревни. Москва [Les besoins du village. Moscou]. — Rus.
- Nymegen, Rec. Trav. Bot. Néerl.*—Recueil des travaux botaniques Néerlandais, publié par la Société Botanique Néerlandaise. Nimègne (Macdonald). — Hol.
- Nyt Mag. Naturv., Kristiania.*—Nyt Magazin för Naturvidenskaberne, Kristiania. 24 Nor.
- Oberschlesien, Kattowitz.*—Oberschlesien. Zeitschrift zur Pflege der Kenntnis und Vertretung der Interessen Oberschlesiens. Kattowitz. 1381 Ger.
- Ochotn. gazeta, Moskva.*—Охотничья газета. Москва [Journal de chasse, Moscou]. — Rus.
- Ochotn. vĕst., Moskva.*—Охотничій Вѣстникъ. Москва [Messenger de chasse, Moscou]. — Rus.
- Ochotn. žurn. dĭia vsĕch, Moskva.*—Охотничій журналъ для всѣхъ. Москва [Journal de chasse pour tous. Moscou]. — Rus.
- Odessa, Mém. Soc. Nat.*—Записки Общества естествоиспытателей. Одесса [Mémoires de la Société des naturalistes d'Odessa]. 411 Rus.
- Öfvers. F. Vet. Soc., Helsingfors.*—Öfversigt af Finska Vetenskaps-Societetens Förhandlingar. Helsingfors. 8: o. 26 Fin.
- Oest. FischereiZtg, Wien.*—Oesterreichische Fischerei-Zeitung. Wien. — Aus.
- Öest. Rdsch., Wien.*—Oesterreichische Rundschau, hrsg. von Alfred Freiherrn von Berger und Karl Glossy. Wien. [wöch.] — Aus.
- Offenbach, Ber. Ver. Natk.*—Bericht über die Thätigkeit des Offenbacher Vereins für Naturkunde. Offenbach a. M. [mehrjähr.] 887 Ger.
- Ohio Geol. Surv. Bul., Columbus.*—Geological Survey of Ohio Bulletin. Columbus, Ohio. — U.S.
- Ohio Nat., Columbus.*—Ohio Naturalist. (Biological Club, Ohio State University), Columbus, Ohio. 348 U.S.
- Okóln. Ryb., Kraków.*—Okólnik, organ Krajowego Towarzystwa Rybackiego w Krakowie, red. F. Wilkosz. 8vo. [once in two months.] 31 Pol.
- Opytn. pasĕka, Tula.*—Опытная пасѣка. Тула [Le rucher d'expériences. Tula]. — Rus.
- Orenburg, Izv. Orenb. Otd. Russ. Geogr. Obšč.*—Извѣстія Оренбургскаго отдѣла Императорскаго русскаго Географическаго Общества. Оренбургъ [Bulletin de la Section d'Orenbourg de la Société Impériale russe de Géographie. Orenbourg]. 184 Rus.
- Ornis, London.*—Ornis, London. — U.K.
- Ornis, Paris.*—Ornis, Paris. — Fr.
- Ornith. Beob., Bern.*—Der Ornithologische Beobachter. Monatsberichte für Vogelkunde und Vogelschutz . . . hrsg. von Carl Daut. Bern. — Swi.
- Ornith. Jahrb., Hallein.*—Ornithologisches Jahrbuch. Organ für das paläarktische Faunengebiet hrsg. v. Viktor Ritter von Tschusi zu Schmidhoffen. Hallein. [2 monatl.] 271 Aus.
- Ornith. Monatsber., Berlin.*—Ornithologische Monatsberichte, hrsg. v. Reichenow, Berlin. 892 Ger.
- Ornith. Monatschr., Magdeburg.*—Ornithologische Monatsschrift hrsg. v. deutschen Vereine zum Schutze der Vogelwelt, red. v. Carl R. Hennicke und O. Taschenberg. Magdeburg [früher Gera und Dresden] (Creutz in Komm). 24 cm. 893 Ger.

- Ös. Bot. Zs.*, Wien.—Österreichische Botanische Zeitschrift, hrsg. u. red. v. Richard R[itter] Wettstein v[on Westersheim]. Wien. [monatl.] 231 Aus.
- Osnabrück, Jahresber. natw. Ver.*—Jahresbericht des naturwissenschaftlichen Vereins zu Osnabrück. Osnabrück. [jährl.] 894 Ger.
- Öst. Jahresh. Pharmaz.*, Wien.—Österreichische Jahreshfte für Pharmazie und verwandte Wissenszweige. Gesammelte Abhandlungen und Vorträge aus der Zeitschrift des Allgemeinen Österreichischen Apothekervereines. Wien. 238 Aus.
- Ottawa, Contr. Canad. Pal.*—Geological Survey of Canada. Contributions to Canadian Palaeontology, Ottawa. — Can.
- Ottawa Nat.*—Ottawa Naturalist. (Published by the Ottawa Field Naturalists' Club.) 24 Can.
- Ottawa, Proc. or Trans. R. Soc. Can.*—Proceedings and Transactions of the Royal Society of Canada, Ottawa. 26 Can.
- Ornith. Rdsch.*, Berlin.—Ornithologische Rundschau, hrsg. v. W. Schuster. Berlin. [2 monatl.] — Ger.
- Ottawa, Rep. Fish. Dept. Mar. Can.*—Annual Report of Department of Marine and Fisheries of Dominion of Canada, Ottawa. 3 Can.
- Ottawa, Rep. Geol. Surv. Can.*—Geological Survey of Canada, Annual Reports of the Director, Ottawa. 11 Can.
- Oxford, Rep. Ashmolean Nat. Hist. Soc.*—Report of the Oxfordshire Ashmolean Natural History Society, Oxford. 356 U.K.
- Oxford, Trans. Univ. Jun. Sci. Cl.*—Transactions of the Oxford University Junior Scientific Club, Oxford. 8vo. 361 U.K.
- Pac. Coast Avif.*, Los Angeles, Cal.—Pacific Coast Avifauna. Cooper Ornithological Club of California, Santa Clara, Cal. 355 U.S.
- Padova, Annuario Staz. bacol.*—Annuario della Stazione bacologica, Padova. 128 It.
- Padova, Atti Acc. ven.-trent.*—Atti dell' Accademia scientifica veneto-trentina-istriana, Padova. 130 It.
- Padova, Atti Mem. Acc.*—Atti e Memorie dell' Accademia di scienze, lettere ed arti Padova. 129 It.
- Padova, Bul. Soc. ven.-trent.*—Bullettino della Società veneto-trentina di scienze naturali, Padova. 131 It.
- Päd. Arch.*, Leipzig.—Pädagogisches Archiv. Leipzig. 1309 Ger.
- Päd. Warte, Osterwieck.*—Pädagogische Warte. Zeitschrift für wissenschaftliche Pädagogik, Lehrerfortbildung, Konferenzwesen, Tagesfragen und pädagogische Kritik, hrsg. v. K. O. Beitz u. Ad. Rude. Osterwieck. [$\frac{1}{2}$ monatl.] — Ger.
- Palaeontographica, Stuttgart.*—Paleontographica. Beiträge zur Naturgeschichte der Vorzeit, hrsg. v. E. Koken u. J. F. Pompeckj. Stuttgart. [2-3 H. jährl.] 898 Ger.
- Paleontogr. Italica, Pisa.*—Paleontografia Italica, Pisa. 132 It.
- Palermo, Atti Acc.*—Atti dell' Accademia di scienze, lettere ed arti, Palermo. It.
- Palermo, Giorn. sc. nat. econ.*—Giornale della Società di scienze naturali ed economiche, Palermo. 137 It.
- Pal. Ind., Calcutta.*—Memoirs of the Geological Survey of India, Palaeontologia Indica, Calcutta. (Being figures and descriptions of the organic remains procured during the progress of the Geological Society of India.) 25 Ind.
- Pam. fizyogr.*, Warszawa.—Pamiętnik fizyograficzny, wydawcy W. Wróblewski i B. Znatowicz, Warszawa. 4to. [annual.] 32 Pol.

- Paramaribo, Bul. Landb. West-Indië.*—Bulletin Inspectie van den Landbouw in West-Indië, Paramaribo. 8vo. — Hol.
- Parasitol, Cambridge.*—Parasitology, a supplement to the Journal of Hygiene. Cambridge. — U.K.
- Paris, Ann. soc. ent.*—Annales de la société entomologique de France. Paris. [trimestr.] 574 Fr.
- Paris, C. R. Acad. sci.*—Comptes rendus hebdomadaires des séances de l'Académie des sciences. Paris. 612 Fr.
- Paris C.-R. ass. anatomistes.*—Comptes-rendus de l'association des anatomistes. Paris. [annuel.] 871 Fr.
- Paris, C. R. ass. franç. avanc. sci.*—Comptes rendus de l'association française pour l'avancement des sciences. Paris. [2 volumes par an.] 613 Fr.
- Paris C. R. cong. soc. sav.*—Comptes rendus du congrès des sociétés savantes de Paris et des départements. Section des Sciences. Paris. [annuel.] 283 Fr.
- Paris, C. R. soc. biol.*—Comptes-rendus hebdomadaires des séances et mémoires de la société de biologie. Paris. 615 Fr.
- Paris, Bul. mém. soc. anat.*—Bulletin et mémoires de la société anatomique de Paris, [mensuel.] 576 Fr.
- Paris, Bul. mém. soc. anthr.*—Bulletin et mémoires de la société d'anthropologie de Paris. Paris. [bimestr.] 577 Fr.
- Paris, Bul. Soc. agricult.*—Bulletin des séances de la société nationale d'agriculture de France. Paris. [mensuel.] 582 Fr.
- Paris, Bul. soc. cent. aquicult.*—Bulletin de la société centrale d'aquiculture et de pêche, gér. Senques. Paris. 587 Fr.
- Paris, Bul. soc. ent.*—Bulletin de la société entomologique de France. Paris, [mensuel.] 591 Fr.
- Paris, Bul. soc. géol.*—Bulletin de la société géologique de France. Paris. [mensuel.] 598 Fr.
- Paris, Bul. soc. nat. acclim.*—Bulletin de la société nationale d'acclimatation de France (revue des sciences naturelles appliquées). Paris. [mensuel.] 606 Fr.
- Paris, Bul. Soc. path. exot.*—Bulletin de la Société de Pathologie exotique. Paris (Masson). — Fr.
- Paris, Bul. soc. philom.*—Bulletin de la société philomatique de Paris. [trimestr.] 608 Fr.
- Paris, Bul. soc. zool.*—Bulletin de la société zoologique de France. Paris. [mensuel.] 611 Fr.
- Paris, Mém. Acad. sci.*—Mémoires présentés par divers savants à l'Académie des sciences de l'Institut de France. Paris. [irrégul.] 618 Fr.
- Paris, Mém. soc. géol.*—Mémoires de la société géologique de France. Paris. [irrégul.] 622 Fr.
- Paris, Mém. soc. zool.*—Mémoires de la société zoologique de France. Paris. [bimestr.] 626 Fr.
- Parma Boll. Soc. Med.*—Bollettino della Società medica di Parma. — It.
- Passau, Ber. natw. Ver.*—Bericht des naturwissenschaftlichen Vereins zu Passau. (Eingetragener Verein.) Passau. [mehrjähr.] 900 Ger.
- Pavia, Boll. Soc. med.-chir.*—Bollettino della Società medico-chirurgica, Pavia. 141 It.
- Pčela, Jekaterinoslav.*—Пчела. Екатеринбургъ [L'abeille. Ekaterinoslav]. — Rus.

- Pčelov. mir, Kiev.*—Пчеловодный миръ. Киевъ [Le monde apiculteur. Kiev]. — Rus.
- Pčelovod., Viatka.*—Пчеловодство. Вятка [L'apiculture. Viatka]. — Rus.
- Pčelov. žiznĭ, Viatka.*—Пчеловодная жизнь. Вятка [L'apiculture. Journal illustré de l'apiculture progressive. Viatka]. — Rus.
- Péch.-Chass., Viatka.*—Рыболовъ-охотникъ. Вятка [Le Pêcheur-chasseur. Viatka]. — Rus.
- Pennsylvania Dept. Agric. Bul., Harrisburg.*—Commonwealth of Pennsylvania Department of Agriculture. Bulletin. Harrisburg, Pa. — U.S.
- Pennsylvania Dept. Agric. Div. Zool. Mon. Bul., Harrisburg.*—Pennsylvania Department of Agriculture. Division of Zoology. Monthly Bulletin. Harrisburg, Pa. — U.S.
- Pennsylvania Dept. Agric. Div. Zool. Q. Bul., Harrisburg.*—Pennsylvania Department of Agriculture. Division of Zoology. The Zoological Quarterly Bulletin. Harrisburg, Pa. — U.S.
- Pennsylvania Dept. Agric. Rep., Harrisburg.*—Annual Report of the Pennsylvania Department of Agriculture. Harrisburg, Pa. — U.S.
- Penzance, Trans. Nat. Hist. Soc.*—Transactions of the Natural History and Antiquarian Society, Penzance. 364 U.K.
- Penzance, Trans. R. Geol. Soc., Cornwall.*—Transactions of the Royal Geological Society of Cornwall, Penzance. 365 U.K.
- Perpignan, Bul. soc. agric. sci.*—Bulletin de la société agricole, scientifique et littéraire des Pyrénées-Orientales. Perpignan (Pyrénées-Orientales). [trimestr.] 630 Fr.
- Perth, Bul. Geol. Surv. W. Austral.*—Bulletin of the Geological Survey of Western Australia, Perth. — W. Aus.
- Perth, J. West Austral. Soc.*—Journal of the West Australian Natural History Society, with which is incorporated the Mueller Botanical Society, Perth. — W. Aus.
- Perth, Proc. E. Scot. Soc.*—Proceedings of the East of Scotland Union of Naturalists' Societies, Perth. 8vo. 366 U.K.
- Perth, Trans. Soc. Nat. Sci.*—Transactions of the Perthshire Society of Natural Science, Perth. 367 U.K.
- Perth, Rec. W. Aust. Mus.*—Records of the Western Australian Museum, Perth. — W. Aus.
- Perugia, Ann. Fac. Med.*—Università di Perugia. Annali della facoltà di Medicina. — It.
- Peterborough, Rep. Nat. Hist. Soc.*—Report of the Natural History, Scientific, and Archæological Society, Peterborough. 368 U.K.
- Peterhead, Trans. Buchan F. Cl.*—Transactions of the Buchan Field Club, Peterhead. 369 U.K.
- Petermanns geogr. Mitt., Gotha.*—Petermanns geographische Mittheilungen aus Perthes' geographischer Anstalt. Gotha. [monatl.] Nebst Ergänzungs-Heften. 904 Ger.
- Petrus Camper, Bijdr. Anat., Haarlem.*—Petrus Camper, Nederlandsche Bijdragen tot de Anatomie, Haarlem. 4to. 44 Hol.
- Pfälz. Heimatk., Kaiserslautern.*—Pfälzische Heimatkunde. Monatschrift für heimatliche Archäologie, Anthropologie, Geographie, Geologie und Botanik sowie verwandte Wissenschaften, schriftl. Ph. Fauth. Kaiserslautern. — Ger.
- Pflanzer, Tanga.*—Der Pflanzer. Ratgeber für tropische Landwirtschaft unter Mitwirkung des Biologisch-Landwirtschaftl. Instituts Amani hrsg. durch die „Usambara-Post“. Tanga. [½ monatl.] — Ger.

- Pharm. Post, Wien.*—Pharmazeutische Post. Wochenschrift für die gesamten Interessen der Pharmazie. Offizielles Organ der Österr. Pharmazeutischen Gesellschaft, hrsg. v. Hans Heger. Wien. 274 Aus.
- Pharm. Weekbl., Amsterdam.*—Pharmaceutisch Weekblad voor Nederland, Amsterdam. 8vo. 45 Hol.
- Philadelphia, Cont. Zool. Lab. Univ. Pa.*—Contributions from the Zoological Laboratory of the University of Pennsylvania, Philadelphia. 379 U.S.
- Philadelphia, Pa., J. Acad. Nat. Sci.*—Journal of the Academy of Natural Sciences of Philadelphia, Philadelphia, Pa. 367 U.S.
- Philadelphia, Pa., J. Frank. Inst.*—Journal of the Franklin Institute, Philadelphia, Pa. 369 U.S.
- Philadelphia, Pa., Proc. Acad. Nat. Sci.*—Proceedings of the Academy of Natural Sciences of Philadelphia, Philadelphia, Pa. 371 U.S.
- Philadelphia, Pa., Proc. Amer. Phil. Soc.*—Proceedings of the American Philosophical Society, Philadelphia, Pa. 372 U.S.
- Philadelphia, Pa., Trans. Amer. Ent. Soc.*—Transactions of the American Entomological Society, Academy of Natural Sciences of Philadelphia, Philadelphia, Pa. 364 U.S.
- Philadelphia, Pa., Trans. Amer. Phil. Soc.*—Transactions of the American Philosophical Society, Philadelphia, Pa. 375 U.S.
- Philadelphia, Pa., Trans. Wagner Free Inst. Sci.*—Transactions of the Wagner Free Institute of Science, Philadelphia, Pa. 376 U.S.
- Philippine J. Sci., Manila, P.I.*—The Philippine Journal of Science, Bureau of Science of the Philippine Islands. Manila, P.I. — U.S.
- Phil. Mag., London.*—London, Edinburgh, and Dublin Philosophical Magazine, and Journal of Science. 372 U.K.
- Phot. Rdsch., Halle.*—Photographische Rundschau, hrsg. v. Neuhauss. Halle. [monatl.] 917 Ger.
- Physik. Zs., Leipzig.*—Physikalische Zeitschrift, hrsg. v. Riecke u. Simon. Leipzig. [$\frac{1}{2}$ monatl.] 920 Ger.
- Pietermaritzburg, Rep. Geol. Surv. Nat. Zulul.*—Report of the Geological Survey of Natal and Zululand, Pietermaritzburg. — S. Af.
- Pisa, Ann. Univ. Toscane.*—Annali delle università Toscane, Pisa. — It.
- Pisa, Atti Soc. tosc. sc. nat.*—Atti della Società toscana di scienze naturali, Pisa. 26 It.
- Pisa, Proc. verb. Soc. tosc. sc. nat.*—Processi verbali della Società toscana di scienze naturali, Pisa. 154 It.
- Pittonia, Washington, D.C.*—Pittonia. Catholic University of America, Washington, D.C. 387 U.S.
- Pittsburg, Pa., Ann. Carnegie Mus.*—Annals of the Carnegie Museum, Pittsburg, Pa. 388 U.S.
- Pittsburg, Pa., Mem. Carnegie Mus.*—Memoirs of the Carnegie Museum, Pittsburg, Pennsylvania. 389 U.S.
- Plodovodstvo, St. Peterburg.*—Плодоводство. Органъ російскаго общества плодоводства. С.-Петербургъ [Organe de la Société russe de culture fruitière. St.-Pétersbourg]. 195 Rus.
- Plymouth, J. Mar. Biol. Ass.*—Journal of the Marine Biological Association of the United Kingdom, Plymouth. 374 U.K.
- Plymouth, Rep. and Trans. Devon. Ass.*—Report and Transactions of the Devonshire Association, Plymouth. 8vo. 376 U.K.

- Policlinico, Roma.*—Il Policlinico, Rome (M Sezione Medicina; C Sezione Chirurgia; P Sezione Pratica). 150 It.
- Polit.-anthr. Rev., Leipzig.*—Politisch-anthropologische Revue. Monatsschrift für das soziale und geistige Leben der Völker. Leipzig. — Ger.
- Poltava, Trd. sel'sk.-choz. opyt. st.*—Труды Полтавской сельско-хозяйственной опытной станции. Полтава [Travaux de la station d'essai agricole de Poltava]. — Rus.
- Pomona J. Ent., Claremont, Cal.*—Pomona Journal of Entomology, Pomona College. Claremont, Cal. — U.S.
- Pop. Astr., Northfield, Minn.*—Popular Astronomy, Northfield, Minn. 391 U.S.
- Pop. Sci. Mon., New York, N.Y.*—Popular Science Monthly, New York, N.Y. 392 U.S.
- Porrentruy, Actes Soc. Jurass. Emul.*—Actes de la Société jurassienne d'émulation. Porrentruy, etc. 8°. 74 Swi.
- Portici, Ann. Scuola sup. agric.*—Annali della Scuola superiore di agricoltura. Portici. 152 It.
- Portici, Boll. Lab. zool.*—Bollettino del Laboratorio di Zoologia generale e agraria della R. Scuola superiore d'Agricoltura in Portici. Portici. — It.
- Portland, Me., Proc. Soc. Nat. Hist.*—Proceedings of the Portland Society of Natural History, Portland, Me. 395 U.S.
- Portland, Proc. Soc. Nat. Hist.*—Proceedings of the Portland Society of Natural History, Portland. 8vo. 377 U.K.
- Port of Spain, J. Trinidad Cl.*—Journal of the Trinidad Field Naturalists' Club, Port of Spain. — W. In.
- Port of Spain, Proc. Inst. Trinidad.*—Proceedings of the Victoria Institute of Trinidad, Port of Spain. — W. In.
- Porto, Ann. Sci. Nat.*—Annaes de Sciencias Naturaes, Porto, publicado por A. Nobre. 16 Por.
- Porto, Anuario Ac. Polyt.*—Anuario da Academia polytechnica do Porto. — Por.
- Porto, Rev. Soc. Ribeiro.*—Revista de Sciencias naturaes e sociaes, orgão das Trabalhos da Sociedade Carlos Ribeiro, Porto. — Por.
- Posen, Zs. D. Ges. Wiss.*—Deutsche Gesellschaft für Kunst und Wissenschaft in Posen. Zeitschrift des naturwissenschaftlichen Vereins, hrsg. v. Pfuhl. Posen. [zwangl.] — Ger.
- Postelsia, St. Paul, Minn.*—Postelsia: the Year Book of the Minnesota Seaside Station. St. Paul, Minn. — U.S.
- Potf. Termt. Közl., Budapest.*—Potfüzetek a Természettudományi Közlönyhöz, Budapest. [Beiblätter zu den naturwissenschaftlichen Mitteilungen, Budapest.] 13 Hun.
- Pozsonyi, Orv.-termt. Egyl. Közlem.*—A Pozsonyi Orvos-Természettudományi Egyesület Közleményei. Pozsony. [Verhandlungen des Vereins für Natur- und Heilkunde zu Pozsony (Pressburg), Pozsony.] — Hun.
- Prag, Abh. Böhm. Ges. Wiss.*—Abhandlungen der Mathematisch-Naturwissenschaftlichen Klasse der Königlich Böhmischen Gesellschaft der Wissenschaften. Prag. [zwangl.] 283 Aus.
- Prag, Abh. Lotos.*—Abhandlungen des Deutschen Naturwissenschaftlich-Medizinischen Vereines für Böhmen „Lotos.“ Prag. [zwangl.] 284 Aus.
- Prag, Ber. Versstat. ZuckerInd.*—Bericht der Versuchsstation für Zucker-Industrie in Prag. [jährl.] — Aus.

- Prag, Bul. Ac. Sci. Franç. Jos.*—Académie des Sciences de l'Empereur François Joseph I. Bulletin International. Prag. 289 Aus.
- Prag, Čas. České Spol. Entomology.*—Časopis České Společnosti Entomologické. [Acta Societatis Entomologicae Bohemiae.] Prag. [zwangl.] — Aus.
- Prag, Čas. Math. Fys.*—Časopis pro Pěstování Matematiky a Fysiky. Red. Augustin Pánek a vydává Jednota Českých Matematiků. Praha. [Zeitschrift zur Pflege der Mathematik and Physik, hrsg. vom Vereine Tschechischer Mathematiker.] [5 H. jährl.] 290 Aus.
- Prag, JahrBer. Böhm. Ges. Wiss.*—Jahresbericht der Kön[iglich] Böhmisches Gesellschaft der Wissenschaften. Prag. [jährl.] 294 Aus.
- Prag, Rozpr. České Ak. Frant. Jos.*—Rozpravy České Akademie Císaře Františka Josefa pro Vědy, Slovesnost' a Umění. Praha. [Abhandlungen der Tschechischen Kaiser Franz Josefs-Akademie für Wissenschaft, Literatur und Kunst.] [zwangl.] 302 Aus.
- Prag, SitzBer. Böhm. Ges. Wiss.*—Sitzungsberichte der Königlich Böhmisches Gesellschaft der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. Prag. [jährl.] 305 Aus.
- Prag, SitzBer. Lotos.*—Sitzungsberichte des Deutschen Naturwissenschaftlich-Medizinischen Vereines für Böhmen „Lotos“ in Prag. Prag. [jährl.] 306 Aus.
- Prag, Věstn. České Ak. Frant. Jos.*—Věstník České Akademie Císaře Františka Josefa pro Vědy, Slovesnost' a Umění. Praha. [Anzeiger der Tschechischen Kaiser Franz Josefs-Akademie für Wissenschaft, Literatur und Kunst.] [9 H. jährl.] 312 Aus.
- Prag, Věstn. České Spol. Náuk.*—Věstník Královské České Společnosti Náuk. Třída Mathematicko-Přírodovědecká. Praha. 313 Aus.
- Prakt. Bl. Pflanzenschutz, Stuttgart.*—Praktische Blätter für Pflanzenschutz, hrsg. v. Weiss. Stuttgart. [monatl.] 931 Ger.
- Prakt. Bl. Pflanzenbau, Stuttgart.*—Praktische Blätter für Pflanzenbau und Pflanzenschutz, hrsg. v. L. Hilte. Stuttgart. [monatl.] 931 Ger.
- Prakt. Forstwirt Schweiz, Davos-Platz.*—Der praktische Forstwirt für die Schweiz. Davos-Platz. 8vo. 75 Swi.
- Pretoria, Ann. Transvaal Mus.*—Annals of the Transvaal Museum, Pretoria. 108 S. Afric.
- Pretoria, J. S. Afric. Ornith. Union.*—Journal of the South African Ornithologists' Union, Pretoria. — S.A.
- Preuss. Jahrb., Berlin.*—Preussische Jahrbücher, hrsg. v. H. Delbrück. Berlin. [monatl.] — Ger.
- Princeton, N.J., Univ. Bull.*—Princeton University Bulletin. Princeton, N.J. 582 U.S.
- Prir. i ochota, Moskva.*—Природа и охота (Прилож. Охотничья газета). Москва [Nature et chasse (avec suppl. "Journal cynégétique"). Moscou]. 200 Rus.
- Proc. Amer. Ass. Adv. Sci., Washington, D.C.* [formerly Easton, Pa.]—Proceedings of the Amer. Ass. for the Advancement of Science. Washington, D.C. 138 U.S.
- Proc. Collect. Wyoming Hist. geol. soc. Wikes. Barrée.*—Proceedings and Collections of the Wyoming Historical and Geological Society, Wilks, Pa. — U.S.
- Proc. 7th Intern. zool. Congr., Cambridge, Mass.*—Proceedings of the 7th International Zoological Congress, Cambridge, Mass. — U.S.
- Progress. sadov. ogorod., St. Peterburg.*—Прогрессивное садоводство и огородничество. О.-Петербургъ [Horticulture progressive et industrie potagère. St. Pétersbourg]. — Rus.

- Prometheus, Berlin.*—Prometheus. Illustrierte Wochenschrift über die Fortschritte in Gewerbe, Industrie und Wissenschaft, hrsg. v. Witt. Berlin. 938 Ger.
- Prostějov, Věstn. Kl. Přír.*—Věstník klubu přírodovědeckého. [Mittheilungen des naturwissenschaftlichen Klubs. Prossnitz.] 535 Aus.
- Providence, R.I., Bul. Roger Williams Park Mus.*—Roger Williams Park Museum. Bulletin. Providence, R.I. — U.S.
- Providence, R.I., Monogr. Roger Williams Park Mus.*—Providence, R.I., Monogr. Roger Williams Park Mus. — U.S.
- Przeegl. weter., Lwów.*—Przeegląd weterynarski, red. S. Królikowski, Lwów. 8vo. [monthly]. 45 Pol.
- Przeegl. filoz., Warszawa.*—Przeegląd filozoficzny, red. W. Weryho, Warszawa. 8vo. [quarterly.] 42 Pol.
- Przeegl. lek., Kraków.*—Przeegląd lekarski, red. A. Kwaśnicki, Kraków. 4to. [weekly.] 43 Pol.
- Psov. i ružejn. ochota, Moskva.*—Псовая и ружейная охота. Москва [La chasse à courre et à l'arrêt. Moscou]. 204 Rus.
- Psyche, Boston, Mass.*—Psyche. (Entomological Club), Boston, Mass. 404 U.S.
- Psych. Neur. Blad., Amsterdam.*—Psychiatrische en Neurologische Bladen, uitgegeven door de Nederlandsche Vereeniging voor Psychiatrie, Amsterdam. 8vo. 46 Hol.
- Psych. Rev. Mongr., Baltimore.*—The Psychological Review, series of Monograph Supplements. New York and London. — U.S.
- Psych. Rev., New York, N.Y.*—Psychological Review, New York, N.Y. 405 U.S.
- Psych. Stud., Leipzig.*—Psychische Studien. Monatliche Zeitschrift, vorzüglich der Untersuchung der wenig gekannten Phänomene des Seelenlebens gewidmet, red. v. Maier. Leipzig. [monatl.] 942 Ger.
- Pticevod. choz., Moskva.*—Птицеводное хозяйство. Москва [Oisellerie. Moscou]. 205 Rus.
- Pticevod. žiznĭ, Moskva.*—Птицеводная жизнь. Москва [La vie d'aviculture. Moscou]. — Rus.
- Queensl. Agric. J., Brisbane.*—Queensland Agricultural Journal, Brisbane. — Qnsl.
- Queensl. Nat., Brisbane.*—The Queensland Naturalist. The Organ of the Field Naturalist's Club and its branches. Brisbane, H. Pole & Co. — Qnsl.
- Q. J. Exp. Physiol., London.*—Quarterly Journal of Experimental Physiology. London. — U.K.
- Q. J. Liverpool.*—Liverpool University. Institute of commercial research in the tropics. Quarterly Journal. Liverpool. 8vo. — U.K.
- Q. J. Microsc. Sci., London.*—Quarterly Journal of Microscopical Science, London. 8vo. 381 U.K.
- Raleigh, North Carolina Geol. Bull. Surv.*—Bulletin of the North Carolina Geological Survey, Raleigh. 340 U.S.
- Rameau, Neuchâtel.*—Rameau de Sapin. Neuchâtel. 4to. — Swi.
- Rapid City, Bul. S. Dak. Sch. Mines.*—South Dakota School of Mines, Bulletin. Rapid City, South Dakota. — U.S.
- Reading, Rep. Lit. Sci. Soc.*—Report and Proceedings of the Reading Literary and Scientific Society, Reading. — U.K.
- Rec. Geol. Surv., Calcutta.*—The Records of the Geological Survey of India. Calcutta. — Ind.
- Rec. Ind. Mus., Calcutta.*—Records of the Indian Museum, Calcutta. — Ind.

- Rec. W. Austral. Mus., Perth.*—Records of the West Australian Museum. Perth. — W. Aus.
- Redia, Firenze.*—Redia, Giornale d'Entomologia, Firenze. 297 It.
- Regensburg, Ber. natw. Ver.*—Berichte des naturwissenschaftlichen (früher zoologisch-mineralogischen) Vereins zu Regensburg. (Forts. des Correspondenzblattes.) Regensburg. [2 jährl.] 949 Ger.
- Reims, Bul. soc. sci. nat.*—Bulletin de la société d'étude des sciences naturelles de Reims (Marne). [trimestr.] 654 Fr.
- Rennes, Bul. soc. sci. méd.*—Bulletin de la société scientifique et médicale de l'Ouest. Rennes (Ille-et-Vilaine). [trimestr.] 658 Fr.
- Rep. Austr. Ass. Adelaide, N.S.W.*—Report of the Australasian Association for the Advancement of Science. Adelaide, N.S.W. — N.S.W.
- Rep. Bureau Fisheries, Washington.*—Department of Commerce and Labor. Report of the Bureau of Fisheries. Washington D.C. — U.S.
- Rep. Mich. Acad. Sci., Lansing.*—Report of the Michigan Academy of Science. Lansing, Mich. 565 U.S.
- Rep. Mus. Ass., Canterbury.*—Report of the Museums Association, Canterbury. 474 U.K.
- Rep. Norw. fish., Bergen.*—Report on Norwegian fishery and marine investigations. Bergen. Svo. [irregul.] — Nor.
- Rés. camp. sci., Monaco.*—Résultats des campagnes scientifiques de S. A. le Prince de Monaco, Monaco. — Mon.
- Rev. Argent., Buenos Aires.*—Revista Argentina de Historia natural, Buenos Aires. — Argent.
- Rev. chilena, Valparaiso.*—Revista chilena de historia natural. Organo del museo de Valparaiso. Valparaiso. — Chile.
- Rev. colon., Paris.*—Revue coloniale. Ministère des colonies. Paris. [bimestr.] 675 Fr.
- Rev. crit. paléozool., Paris.*—Revue critique de paléozoologie, dir. Cossmann. Paris. [trimestr.] 678 Fr.
- Rev. Ent., Caen.*—Revue d'Entomologie, réd. A. Fauvel. Caen (Calvados). [mensuel.] 683 Fr.
- Rev. Fr. d'Orn., Paris.*—Revue Française d'Ornithologie Scientifique et Pratique, publiée par M. Louis Denise. Paris. [mensuel.] — Fr.
- Rev. gén. bot., Paris.*—Revue générale de botanique, dir. G. Bonnier. Paris. [mensuel.] 686 Fr.
- Rev. gén. marine march., Paris.*—Revue générale de la marine marchande, publication hebdomadaire illustrée, dir. L. Muller. Paris. 690 Fr.
- Rev. gén. sci., Paris.*—Revue générale des sciences pures et appliquées, dir. L. Olivier. Paris. [bi-mensuel.] 693 Fr.
- Rev. idées, Paris.*—Revue (La) des Idées, Paris. Etudes de critique générale. t, 1, 1904. 25 cm. [mensuel]. — Fr.
- Rev. Inst. Parag., Asuncion.*—Revista del Instituto Paraguayo. Asuncion. — S. Am.
- Rev. Jard. Zool., Buenos Aires.*—Revista del Jardin zoológico de Buenos Aires. Buenos Aires. — Argent.
- Rev. Med., São Paulo.*—Revista Medica de São Paulo (Brazil). São Paulo. — Brazil.
- Rev. Méd. Suisse Rom., Genève.*—Revue médicale de la Suisse romande. Genève. Svo. 80 Swi.

- Rev. Mus., La Plata, Buenos Aires.*—Revista del Museo [de la Plata, Buenos Aires. — Argent.
- Rev. Mus., São Paulo.*—Revista do Musai Paulista, publicada por H. von Ihering, São Paulo. — Brazil.
- Rev. russ. ent., St. Peterburg.*—Русское Энтомологическое Обозрѣніе. С.-Петербургъ [Revue russe d'Entomologie. St.-Petersbourg]. 209 Rus.
- Rev. sci. Bourbon. Moulins.*—Revue scientifique du Bourbonnais et du Centre de la France. Moulins (Allier). [mensuel.] 750 Fr.
- Rev. sci. Limous., Limoges.*—Revue scientifique du Limousin. Limoges (Haute-Vienne). [mensuel.] 752 Fr.
- Rev. sci. nat. ouest, Paris, Tours.*—Revue des Sciences naturelles de l'Ouest. Paris, Tours. [trimestr.] 748 Fr.
- Rev. sci., Paris.*—Revue scientifique de la France et de l'étranger, dir. Ch. Richet. Paris. [hebdomad.] 749 Fr.
- Rev. Soc. Sci., São Paulo.*—Revista da Sociedade scientifica de São Paulo (Brazil). São Paulo. — Brazil.
- Rev. Suisse Méd., Genève.*—Revue Suisse de Médecine. Schweizerische Rundschau für Medizin. 8vo. Genève u. Basel. — Swi.
- Rev. Suisse Zool., Genève.*—Revue suisse de Zoologie. Annales de la Société zoologique suisse et du Musée d'histoire naturelle de Genève. Genève. 8vo. 83 Swi.
- Rev. vétérin., Moskva.*—Ветеринарное обозрѣніе. Москва [Revue vétérinaire. Moskva]. — Rus.
- Rev. Zool. Africaine, Bruxelles.*—Revue Zoologique africaine. Bruxelles. — Bel.
- Reykjavik, Andvari.*—Andvari Timarit hins islenzka thjóðvinafjelags. Reykjavik. 35 Den.
- Reykjavik, Skirnir.*—Skirnir. Timarithiusislenzka bokmentafelags. Reykjavik. Skirnir. Journal of the icelandic literary society. Reykjavik. — Den.
- Reykjavik, Skyrsla nattufr.*—Skyrsla um hid islenzka nattufradisfjelag, Reykjavik. 38 Den.
- Rhodora, Boston, Mass.*—Rhodora. Journal of the New England Botanical Club, Boston, Mass. 408 U.S.
- Riforma med., Roma.*—La Riforma medica, Roma. 158 It.
- Riga, Arb. Naturf.-Ver.*—Arbeiten des Naturforscher-Vereins zu Riga. 210 Rus.
- Riga, Korr.-blt. Naturf.-Ver.*—Korrespondenzblatt des Naturforscher-Vereins zu Riga. 213 Rus.
- Rio de Janeiro, Bol. Comm. geogr. Minas Geraes.*—Boletim da Comissão geographica e geologica do Estado de Minas Geraes, Rio de Janeiro — Brazil.
- Rio de Janeiro, Mem. Inst. Oswaldo Cruz.*—Memorias do Instituto Oswaldo Cruz. Rio de Janeiro. — Brazil.
- Riv. coleottor. ital., Camerino.*—Rivista coleottologica italiana, Camerino. 299 It.
- Riv. fis. mat. sc. nat., Pavia.*—Rivista di fisica, matematica e scienze naturali, Pavia. 164 It.
- Riv. igiene san. pubbl., Torino.*—Rivista d'igiene e sanità pubblica, Torino. 166 It.
- Riv. Ital. Orn., Bologna.*—Rivista italiana di ornitologia, Bologna. — It.
- Riv. ital. paleont., Perugia.*—Rivista italiana di paleontologia Perugia [formerly Bologna]. 167 It.
- Riv. ital. sc. nat., Siena.*—Rivista italiana di scienze naturali, Siena. 168 It.

- Riv. Mens. Pesca, Milano and Pavia.*—Rivista mensile di Pesca. Milano. — It.
- Riv. Neuropatol Catania.*—Rivista italiana di Neuropatologia di Catania. — It.
- Riv. patol. nerv. ment., Firenze.*—Rivista di patologia nervosa e mentale, Firenze. 175 It.
- Rochdale, Trans. Lit. Sci. Soc.*—Transactions of the Rochdale Literary, etc., Society, Rochdale. 8vo. 394 U.K.
- Rochelle (La), Ann. soc. sci. nat. Acad. bel.-let.*—Annales de la section des sciences naturelles de l'Académie des Belles-lettres, sciences et arts de la Rochelle (Charente-Inférieure). [annuel.] 770 Fr.
- Rochester Nat.*—Rochester Naturalist, Rochester. 395 U.K.
- Rochester, N.Y., Proc. Acad. Sci.*—Proceedings of the Rochester Academy of Science, Rochester, N.Y. 411 U.S.
- Roczn. roln., Krakow.*—Roczniki nauk rolniczych, red. Stef. Tentys. Krákov. 8vo. — Pol.
- Roma, Atti Acc. Nuovi Lincei.*—Atti dell' Accademia pontificia dei Nuovi Lincei, Roma. 189 It.
- Roma, Atti Soc. ital. prog. sc.*—Atti della Società italiana per il Progresso dello Scienza, Roma. — It.
- Roma, Atti Soc. romana antrop.*—Atti della Società romana d'antropologia, Roma. 190 It.
- Roma, Atti Soc. studí malaria.*—Atti della Società per gli studí della malaria, Roma. 191 It.
- Roma, Boll. Comitato geol.*—Bollettino del R. Comitato geologico, Roma. 192 It.
- Roma, Boll. Soc. Agric. ital.*—Roma, Bollettino quindicinale della Società degli Agricoltori italiani. — It.
- Roma, Boll. Soc. geol. ital.*—Bollettino della Società geologica italiana, Roma. 197 It.
- Roma, Boll. Soc. zool. ital.*—Bollettino della Società zoologica italiana, Roma. 264 It.
- Roma, Boll. uff Min. Agric.*—Bollettino ufficiale del Ministero di Agricoltura, Industria e Commercio, Roma. [with which is incorporated No. 172.] 262 It.
- Roma, Bul. Acc. med.*—Bullettino dell' Accademia medica, Roma. 201 It.
- Roma, Mem. Acc. Lincei.*—Memorie della R. Accademia dei Lincei, Roma. 203 It.
- Roma, Mem. Acc. Nuovi Lincei.*—Memorie dell'Accademia pontificia dei Nuovi Lincei, Roma. 204 It.
- Roma, Mem. Soc. XL.*—Memorie della Società italiana delle scienze, detta dei XL. Roma. 208 It.
- Roma, Rend. Acc. Lincei.*—Rendiconti della R. Accademia dei Lincei, Roma. 209 It.
- Roma, Ric. Lab. anat. norm.*—Ricerche del laboratorio di anatomia normale della R. Università, Roma. 211 It.
- Rostock, Mitt. geol. Landesanst.*—Mittheilungen aus der grossherzoglich mecklenburgischen geologischen Landesanstalt. Rostock. [jähr.] 959 Ger.
- Rostock, SitzBer. natf. Ges.*—Sitzungsberichte der naturforschenden Gesellschaft zu Rostock. Anhang zum Archiv des Vereins der Freunde der Naturgeschichte in Mecklenburg. Rostock. 1293 Ger.
- Rothesay, Trans. Nat. Hist. Soc. Buteshire.*—Transactions of the Buteshire Natural History Society. Rothesay. — U.K.
- Rotterdam, Verh. Bat. Gen.*—Verhandelingen van het Bataafsche Genootschap der proefondervindelijke wijsbegeerte te Rotterdam, Rotterdam. 4to. 48 Hol.

- Rouen, Bul. soc. amis sci. nat.*—Bulletin de la société des amis des sciences naturelles de Rouen (Seine-Inférieure). [semestr.] 774 Fr.
- Rovart. L., Budapest.*—Rovartani Lapok, Budapest. [Entomologische Blätter, Budapest.] 14 Hun.
- Rugby, Rep. Sch. Nat. Hist. Soc.*—Report of the Rugby School Natural History Society, Rugby. 397 U.K.
- Russ. Geogr. Obšč.*—Извѣстія Императорскаго русскаго Географическаго Общества. С.-Петербургъ [Bulletin de la Société Impériale russe de Géographie. St.-Pétersbourg]. 261 Rus.
- Russ. Ochota, St. Peterburg.*—Русская охота. С.-Петербургъ [La chasse russe. St. Pétersbourg]. — Rus.
- Russ. pčelovod. listok, St. Peterburg.*—Русскій пчеловодный листокъ. С.-Петербургъ [Journal russe d'apiculture. St.-Pétersbourg]. 227 Rus.
- Russ. sudochod., St. Peterburg.*—Русское судоходство. С.-Петербургъ [La navigation russe. St.-Pétersbourg]. — Rus.
- Russ. Vrač, St. Peterburg.*—Русскій Врачъ. С.-Петербургъ [Le médecin russe. St.-Pétersbourg]. 377 Rus.
- Ryborprom. žizni, St. Peterburg.*—Рыбпромышленная жизнь. С.-Петербургъ [Fischgewerbliches Leben, St. Petersburg]. — Rus.
- S. Afric. J. Sci., Cape Town.*—The South African Journal of Science, Cape Town. — S. Afr.
- S. E. Nat., Tunbridge Wells.*—The South Eastern Naturalist, Tunbridge Wells. 8vo. 401 U.K.
- St. Dizier, Mém. soc. let. sci.*—Mémoires de la société des lettres, sciences, arts, de l'agriculture et de l'industrie de St. Dizier (Haute-Marne). [annuel.] 787 Fr.
- St. Gallen, Jahrb. Natw. Ges.*—Jahrbuch der St. Gallischen naturwissenschaftlichen Gesellschaft. St. Gallen. 8vo. 111 Swi.
- St. John's, N.B., Bul. Nat. Hist. Soc. New Brunsw.*—Bulletin of the Natural History Society of New Brunswick, St. John's, New Brunswick. 29 Can.
- St. Louis, Mo., Trans. Acad. Sci.*—Transactions of the Academy of Science of St. Louis, St. Louis, Mo. 414 U.S.
- St. Peterburg, Ann. Mus. zool.*—Ежегодникъ Зоологическаго музея Императорской Академіи Наукъ. С.-Петербургъ [Annuaire du Musée zoologique de l'Académie Impériale des Sciences. St.-Pétersbourg]. 248 Rus.
- St. Peterburg, Ber. Süßwasserst. Naturf.-Ges.*—Труды прѣсноводной біологической станціи Императорскаго С.-Петербургскаго Общества естествоиспытателей. С.-Петербургъ [Berichte der biologischen Süßwasserstation der Kaiserlichen Naturforscher-Gesellschaft zu St.-Petersburg]. 250 Rus.
- St. Peterburg, Bul. Ac. Sc.*—Извѣстія Императорской Академіи Наукъ. С.-Петербургъ [Bulletin de l'Académie Impériale des Sciences de St.-Pétersbourg]. 251 Rus.
- St. Peterburg, Bul. Com. géolog.*—Извѣстія Геологическаго Комитета. С.-Петербургъ [Bulletin du Comité géologique. St.-Pétersbourg]. 252 Rus.
- St. Peterburg, Bul. Jard. bot.*—Извѣстія Императорскаго С.-Петербургскаго Ботаническаго сада. С.-Петербургъ [Bulletin du Jardin Impérial botanique de St.-Pétersbourg]. 253 Rus.
- St. Peterburg, Bul. labor. biol.*—Извѣстія С.-Петербургской біологической лабораторіи. С.-Петербургъ [Bulletin du laboratoire biologique de St.-Pétersbourg]. 254 Rus.
- St. Peterburg, Hor. Soc. Ent. Ross.*—Труды русскаго энтомологическаго Общества въ С.-Петербургѣ [Horae Societatis Entomologicae Rossicae. St.-Pétersbourg]. 256 Rus.

- St. Peterburg, Izv. Lěsn. Inst.*—Извѣстія С.-Петербургскаго Лѣснаго Института. С.-Петербургъ [Bulletin de l'Institut forestier de St.-Pétersbourg]. 257 Rus.
- St. Peterburg, Izv. voenn.-med. Akad.*—Извѣстія Императорской военно-медицинской Академіи. С.-Петербургъ [Bulletin de l'Académie Impériale médico-militaire. St.-Pétersbourg]. 263 Rus.
- St. Peterburg, J. bot.*—Ботаническій журналъ, издаваемый отдѣленіемъ ботаники Императорскаго С.-Петербургскаго Общества естествоиспытателей [Journal botanique, édition de la Section de Botanique de la Société Impériale des naturalistes de St.-Pétersbourg]. — Rus.
- St. Peterburg, Mém. Ac. Sc.*—Записки Императорской Академіи Наукъ по физико-математическому отдѣленію. С.-Петербургъ [Mémoires de l'Académie Impériale des Sciences. Classe des sciences physiques et mathématiques. St.-Pétersbourg]. 266 Rus.
- St. Peterburg, Mém. Com. géol.*—Труды Геологическаго Комитета. С.-Петербургъ [Mémoires du Comité géologique. St.-Pétersbourg]. 267 Rus.
- St. Peterburg, Scripta bot.*—Ботаническія записки, изданіе Императорскаго С.-Петербургскаго Университета. С.-Петербургъ [Scripta botanica publiés par l'Université Impériale de St.-Pétersbourg]. 282 Rus.
- St. Peterburg, Trd. geol. muz. Akad. Nauk v. St. Peterburg, Trav. mus. géol, Ac. sci.*
- St. Peterburg, Trd. Obšč. vrač.*—Труды общества русскихъ врачей. С.-Петербургъ [Travaux de la Société des médecins russes. St.-Pétersbourg]. 288 Rus.
- St. Peterburg, Trav. lab. zool.*—Работы произведенныя въ лабораторіяхъ зоологическаго и зоотомическаго кабинетовъ Императорскаго С.-Петербургскаго Университета, вып. 4 [Travaux accomplis aux laboratoires de zoologie et zootomie de l'Université Imp. de St.-Pétersbourg]. — Rus.
- St. Peterburg, Trav. Mus. géol. Ac. sci.*—Труды геологическаго музея имени Петра Великаго при Имп. Акад. Наукъ. С.-Петербургъ [Travaux du Musée géologique Pierre le Grand près l'Académie Impériale des sciences. St.-Pétersbourg]. — Rus.
- St. Peterburg, Trav. Soc. nat.*—Труды Императорскаго С.-Петербургскаго Общества естествоиспытателей. С.-Петербургъ [Travaux de la Société Impériale des naturalistes de St.-Pétersbourg]. 284 Rus.
- St. Peterburg, Věst. Obšč. Sadov.*—Вѣстникъ Императорскаго русскаго Общества садоводства. С.-Петербургъ [Messager de la Société Impériale russe d'horticulture. St.-Pétersbourg]. — Rus.
- St. Peterburg, Verh. Russ. mineral. Ges.*—Записки Императорскаго С.-Петербургскаго минералогическаго общества. С.-Петербургъ [Verhandlungen der russischen Mineralogischen Gesellschaft. St. Petersburg]. 290 Rus.
- St. Peterburg, Zap. Russ. Geogr. Obšč.*—Записки Императорскаго русскаго географическаго Общества. 3 серіи: 1) по общей географіи; 2) статистикѣ; 3) этнографіи. С.-Петербургъ [Mémoires de la Société Impériale russe de Géographie. En 3 séries: 1) géographie générale; 2) statistique; 3) ethnographie. St.-Pétersbourg]. 291 Rus.
- St. Peterburg, Žurn. Min. Narodn. Prosvěšč.*—Журналъ Министерства народнаго просвѣщенія. С.-Петербургъ [Journal du Ministère de l'instruction publique. St.-Pétersbourg]. 295 Rus.
- Sad i ogorod, Moskva.*—Оадъ и огородъ. Москва [Le jardin et le potager. Moscou]. 232 Rus.
- Sad, ogor. i bachča, Astrachanĭ.*—Оадъ, огородъ и бахча. Астрахань [Le jardin et le potager. Astrachan]. — Rus.
- Sadovod, Rostov-Don.*—Садоводъ. Ростовъ на Дону [Horticulteur. Rostov-Don]. — Rus.

- Säemann, Leipzig.*—Der Säemann. Monatsschrift für pädagogische Reform, Schriftl. C. Götze. Leipzig. — Ger.
- Salatiga, Bul. alg. Proefstat.*—Algemeen proefstation te Salatiga. Bulletin. Malang. A. T. Jahn. 8vo. — Hol.
- Salatiga, Cultuurgids.*—Cultuurgids, landbouwkundigtijdschrift voor alle tropische Berg- en Lauglandcultuurs uitgezonderd de suikercultuur. Orgaan van het Algerneen proefstation op Java. Tweede gedeelte. — Hol.
- Salzburg, Mitt. Ges. Salzb. Ldkde.*—Mitteilungen der Gesellschaft für Salzburger Landeskunde. Salzburg. [jähr.] 340 Aus.
- Samml. anat. Vortr., Jena.*—Sammlung anatomischer und physiologischer Vorträge und Aufsätze, hrsg. von E. Gaupp u. W. Nagel. Jena. [zwangl.] — Ger.
- Sanct Hubertus, Cöthen.*—Sanct Hubertus. Wöchentliche illustrierte Zeitschrift für Jagd, Hundezucht, Fischerei und Naturkunde, red. v. Scheffler. Cöthen. — Ger.
- San Diego, Cal., Trans. San Diego Acad. Nat. Sci.*—Transactions of the San Diego Academy of Natural Sciences. San Diego, California. — U.S.
- San Francisco, Cal., Occ. Paprs. Acad. Sci.*—Occasional Papers of the California Academy of Sciences, San Francisco, Cal. 419 U.S.
- San Francisco, Mem. Cal. Acad. Sci.*—Memoirs of the California Academy of Sciences, San Francisco, Cal. 423 U.S.
- San Francisco, Proc. Cal. Acad. Sci.*—Proceedings of the California Academy of Sciences, San Francisco, Cal. — U.S.
- San Francisco, Proc. Cal. Acad. Sci. Zool.*—Proceedings of the California Academy of Sciences. Zoology. San Francisco, Cal. — U.S.
- Sangyo, Sh., Tokyo.*—Sangyo Shinpo. (Sericultural Journal.) Tokyo. — Jap.
- Santiago, Act. Soc. Chile.*—Actes de la Société scientifique du Chile, Santiago. — Chile.
- Santiago, Ann. Univ. Chile.*—Anales de la Universidad de Chile, Santiago. — Chile.
- Santiago, Bol. Mus. Nac.*—Boletin de Museo Nacional de Chile, Santiago. — Chile.
- Santiago, Verh. Ver. Chile.*—Verhandlungen des deutschen wissenschaftlichen Vereins zu Santiago, Santiago. — Chile.
- São Paulo, Bol. Comm, geogr.*—Boletim da Comissão geographica e geologica da Provincia de S. Paulo. — Brazil.
- Sapporo, J. Coll. Agric.*—Journal of the College of Agriculture. Sapporo. — Jap.
- Sapporo, Trans. Nat. Hist. Soc.*—Transactions of the Sapporo Natural History Society. Sapporo. — Jap.
- Sarajevo, Glasn. ZemMuz. Bosn. Herceg.*—Glasnik Zemaljskog Muzeja u Bosni i Hercegovini, Urednik K. Hörmann. Sarajevo. (Anzeiger des Landsmuseums für Bosnien und die Hercegovina.) [¼jähr.] 341 Aus.
- Sarajevo, Wiss. Mitt. Bosn. Herceg.*—Wissenschaftliche Mitteilungen aus Bosnien und der Hercegovina, hrsg. vom Bosnisch-Hercegovinischen Landes-Museum, red. v. Moritz Hoernes. Wien. [jähr.] 342 Aus.
- Saratov, Ann. Univ.*—Извѣстія Императорскаго Николаевскаго Университета. Саратовъ [Annalen der Kaiserlichen Nicolaus-Universität. Saratov]. — Rus.
- Saratov, Arb. biol. Wolga-Station.*—Работы Волжской биологической станціи. Саратовъ [Arbeiten der biologischen Wolga-Station. Saratov]. — Rus.
- Saratov, Sadovod.*—Саратовскій садоводъ. Журналъ Саратовскаго Общества садоводства. Саратовъ [L'horticulteur de Saratov. Saratov]. — Rus.
- Saratov, Trd. Obšč. jest.*—Труды Саратовскаго Общества естествоиспытателей и любителей естествознанія. Саратовъ [Travaux de la Société des naturalistes de Saratov]. — Rus.

- Sborn. Stud. biolog. kruž., Odessa.*—Сборникъ студенческаго біологическаго кружка при Императорскомъ Новороссійскомъ Университетѣ. Одесса [Recueil du cercle biologique des étudiants de l'Université Impériale d'Odessa. Odessa]. — Rus.
- Sborn. Stud. kruž. ŭub. prir. Charĭk. Univ., Charĭkov.*—Оборникъ студенческаго кружка любителей природы при Императорскомъ Харьковскомъ Университетѣ. Харьковъ [Recueil des travaux du cercle des amateurs d'histoire naturelle à l'Université de Charkov]. — Rus.
- Schaffhausen, Mitt. Schweiz. Entomol. Ges.*—Mitteilungen der schweizerischen entomologischen Gesellschaft. Bulletin de la Société entomologique suisse. Schaffhausen. 8vo. 69 Swi.
- Schles. Bädertag, Reinerz.*—Der schlesische Bädertag und seine Verhandlungen. Reinerz. [jähr.] 984 Ger.
- Schneeberg, Mitt. wiss. Ver.*—Mittheilungen des wissenschaftlichen Vereins (vormals naturwiss. Vereins) für Schneeberg und Umgegend. Schneeberg. [zwangl.] 992 Ger.
- Schwalbe, Wien.*—Die Schwalbe. Berichte des Komitees für ornithologische Beobachtungs-Stationen in Österreich hrsg. von der Ornithologischen Sektion der k. k. Zoologisch-Botanischen Gesellschaft in Wien, red. v. Ludwig Ritter Lorenz von Liburnau. Wien. [2jähr.] 348 Aus.
- Schweiz.-Arch. Thierheilk., Zürich.*—Schweizer-Archiv für Thierheilkunde. Zürich. 8vo. 85 Swi.
- Schweiz. Bienenztg, Aarau.*—Schweizerische Bienenzeitung. Aarau. 8vo. 88 Swi.
- Schweiz. Bl. Gesundhtspf., Zürich.*—Schweizerische Blätter für Gesundheitspflege. Zugleich Korrespondenzblatt für örtliche Gesundheitsbehörden. Zürich. 8vo. 90 Swi.
- Schweiz. Bl. Ornithol., Zürich.*—Schweizerische Blätter für Ornithologie und Kaninchenzucht. Zürich. 4to. 91 Swi.
- Schweiz. Fischereiztg, Pfäffikon.*—Schweizerische Fischereizeitung. Pfäffikon. 8vo. 93 Swi.
- Schweiz. Wochenschr. Chem., Zürich.*—Schweizerische Wochenschrift für Chemie und Pharmacie. Journal suisse de chimie et de pharmacie. Zürich. 8vo. 104 Swi.
- Schweiz. Zs. Forstwesen, Bern.*—Schweizerische Zeitschrift für das Forstwesen. Bern. 8vo. 105 Swi.
- Science, New York, N.Y.*—Science, New York, N.Y. 429 U.S.
- Scientia, Bologna.*—Scientia Rivista di Scienza Bologna. — It.
- Sci. Mem. Med. Ind., Calcutta.*—Scientific Memoirs by the Medical Officers of the Army of India, Calcutta. 27 Ind.
- Sci. Progr., London.*—Science Progress in the Twentieth Century. A quarterly journal of scientific work and thought. Edited by N. H. Alcock and W. G. Freeman. London. — U.K.
- Scot. Nat., Edinburgh.*—The Scottish Naturalist (with which is incorporated The Annals of Scottish Natural History) Monthly Edinburgh (Oliver & Boyd). — U.K.
- Scranton, Pa., Lackawanna Inst. Sci. Ser.*—Scientific Series. Lackawanna Institute of History and Science, Scranton, Pa. 431 U.S.
- Selĭsk. choz. i lĕsovodstvo, St. Peterburg.*—Сельское хозяйство и лѣсоводство. С.-Петербургъ [Economie rurale et forestière. St.-Petersbourg]. 238 Rus.
- Selĭsk.-choz. list. uĕzdn. zemstva, Kamyšĭn.*—Сельско-хозяйственный листокъ Камышинскаго уѣзнаго земства. Камышинъ [Gazette d'agriculture du zemstvo de Kamyschin]. — Rus.

- Selisk.-choz. vĕst. jugovost., Saratov.*—Сельско-хозяйственный вѣстникъ юго-востока. Саратовъ [Messenger d'agriculture du sud-est. Saratov]. — Rus.
- Selisk.-choz. vĕst. St. Petersburg.*—Сельско-хозяйственный вѣстникъ. С.-Петербургъ [Messenger d'agriculture. St. Pétersbourg]. — Rus.
- Selisk. chozĭain, St. Petersburg.*—Сельскій хозяинъ. С.-Петербургъ [L'Agronome. St.-Pétersbourg]. — 237 Rus.
- Semja ochotn., Moskva.*—Семья охотниковъ. Охотничій иллюстрированный журналъ. Москва [La famille des chasseurs. Journal de chasse illustré]. — Rus.
- Semur, Bul. soc. sci. hist. nat.*—Bulletin de la société des sciences historiques et naturelles. Semur en Auxois (Côte d'Or). [annuel.] 803 Fr.
- Sĕvern. choz., St. Peterburg.*—Сѣверное хозяйство. С.-Петербургъ [Agriculture du Nord. St.-Pétersbourg]. 436 Rus.
- 's *Gravenhage, Ber. Ned. Ent. Ver.*—Entomologische Berichte uitgegeven door de Nederlandsche entomologische Vereeniging. — Hol.
- 's *Gravenhage Mitt. Staatl. Bohr. Nederl.*—Mitteilungen der staatlichen Bohrverwaltung in dem Niederlanden. 8vo. — Hol.
- 's *Gravenhage, Tijdschr. Ent.*—Tijdschrift voor Entomologie uitgegeven door de Nederlandsche entomologische Vereeniging, 's Gravenhage. 8vo. 49 Hol.
- Shanghai, J. China R. As. Soc.*—Journal of the China Branch of the Royal Asiatic Society, Shanghai. — China.
- Shrewsbury, Rec. Caradoc F. Cl.*—Record of the Caradoc and Severn Valley Field Club, Shrewsbury. 403 U.K.
- Shrewsbury, Trans. Caradoc F. Cl.*—Transactions of the Caradoc and Severn Valley Field Club, Shrewsbury. — U.K.
- Shrewsbury, Trans. Shropsh. Archæol. Nat. Hist. Soc.*—Transactions of the Shropshire Archæological and Natural History Society, Shrewsbury. 8vo. 404 U.K.
- Sibirsk. vrač. gaz., Irkutsk.*—Сибирская врачебная газета. Иркутскъ [Gazette médicale de la Sibirie. Irkutsk]. — Rus.
- Siena, Atti Acc. fisiocritici.*—Atti dell' Accademia dei fisiocritici. Siena. 212 It.
- Simferopol, Bul. soc. nat. Crimée.*—Записки Крымскаго Общества естествоиспытателей и любителей природы. Симферополь [Bulletin de la société des naturalistes et des amis de la Nature en Crimée. Simferopol]. — Rus.
- Simferopol, Trd. jest. mus.*—Труды естественно-историческаго музея Таврическаго Губернскаго земства. Симферополь [Travaux du Musée d'histoire naturelle du zemstvo du gouv. de Tauride. Simferopol]. — Rus.
- Sioux City, Iowa, Proc. Acad. Sci.*—Proceedings of the Academy of Sciences and Letters of Sioux City. Sioux City, Iowa. — U.S.
- Skand. Arch. Physiol, Leipzig.*—Skandinavisches Archiv für Physiologie, hrsg. v. Tigerstedt. Leipzig. [monatl.] 1005 Ger.
- Soc. Entomol., Frankfurt a. M.*—Societas entomologica. Frankfurt a. M. [14 tägig.] — Ger.
- Soc. Entomol., Stuttgart.*—Societas entomologica. Stuttgart. — Ger.
- Solothurn, Mitt. Natf. Ges.*—Mitteilungen der Naturforschenden Gesellschaft in Solothurn. 8vo. — Swi.
- Southampton, Proc. Hants F. Cl.*—Proceedings of the Hampshire Field Club, Southampton. 406 U.K.
- South Dakota Bul. Geol. Surv., Vermilion.*—South Dakota Geological Survey. Bulletin, Vermilion. 434 U.S.

- Southport, Rep. Lancashire ent. Soc.*—Annual report of the Lancashire and Cheshire entomological society. Liverpool. — U.K.
- Southport, Rep. Soc. Nat. Sci.*—Report of the Southport Society of Natural Science Southport. 8vo. 407 U.K.
- Spelunca, Paris.*—Spelunca, Bulletin et Mémoires de la société de spéléologie, dir. Martel. Paris. [trimestr.] 806 Fr.
- Sperimentale, Firenze.*—Lo Sperimentale, Firenze. 215 It.
- Spolia Zeylan., Colombo.*—Spolia Zeylanica. Issued by the Colombo Museum, Ceylon. Colombo. — Ind.
- Sprav. list. pticev., Revel.*—Оправочный листокъ птицеводства. Ревель [Nachschlageblatt der Vogelzucht. Revel]. — Rus.
- Springfield, Ill., Bul. St. Mus. Nat. Hist.*—Bulletin of the Illinois State Museum of Natural History, Springfield, Ill. 435 U.S.
- Stafford, Trans. N. Staff. F. Cl.*—Transactions of the North Staffordshire Naturalist's Field Club, and Archæological Society, Stafford. 463 U.K.
- Stanford University, Cal. Leland Stanford Jnr. Univ. Pub. Univ. Ser.*—Publications. University Series. Leland Stanford Junior University, Palo Alto, Cal. — U.S.
- Staten Is. Proc. Nat. Sci. Ass. Arts. Sci., Lancaster, Pa.*—Proceedings of the Staten Island Association of Arts Sci. Lancaster, Pa. 274 U.S.
- Stavanger, Mus. Aarsb.*—Aarsberetning for Stavanger Museum, Stavanger. 26 Nor.
- Stavropol', Trd. obšč. izuč. sčv. kavk. kraja.*—Труды ставропольскаго Общества для изученія Обверо-Кавказскаго края. Ставрополь [Travaux de la société pour l'exploration du territoire du Caucase septentrional de Stravropol]. — Rus.
- Stein d. Weisen, Wien.*—Der Stein der Weisen. Wien. [24 H. jährl.] — Aus.
- Stepnoje pčelov., Novočerkask.*—Степное пчеловодство. Новочеркасскъ [L'apiculture dans la steppe. Novočerkask]. — Rus.
- Stettiner ent. Ztg.*—Stettiner entomologische Zeitung, red. v. Dohrn. Stettin, Berlin. [monatl.] 1016 Ger.
- Stimmen Maria - Laach, Freiburg i. B.*—Stimmen aus Maria-Laach. Freiburg i. B. [10 H. jährl.] Nebst Ergänzungs-Heften. 1017 Ger.
- Stirling, Trans. Nat. Hist. Soc.*—Transactions of the Stirling Natural History, etc., Society, Stirling. 8vo. 409 U.K.
- Stockholm, Biol. För. Förh.*—Biologiska Föreningens Förhandlingar. Stockholm. — Swe.
- Stockholm, Geol. För. Förh.*—Geologiska Föreningens i Stockholm förhandlingar. Stockholm. 8vo. 23 Swe.
- Stockholm, Skogsvårds För. Tidskr.*—Skogsvårds föreningens tidskrift, utgifven af Föreningen för skogsvård. Stockholm. 8vo. — Swe.
- Stockholm, Sv. Geol. Unders.*—Sveriges Geologiska Undersökning. Serien A. Kartblad med. beskrifningar. Serien B. Öfversigtskartor, Specialkartor. Serien C. Afhandlingar och uppsatser. 35 Swe.
- Stockholm, Vet.-Ak. Årsbok.*—Kungl. Svenska Vetenskaps-Academiens årsbok. Stockholm. 8vo. — Swe.
- Stockholm, Vet.-Ak. Handl.*—Kongl. Svenska Vetenskaps-Akademiens Handlingar. Stockholm. 4to. 40 Swe.
- Stockholm, Vet.-Ak. Öfvers.*—Öfversigt af Kongl. Vetenskaps-Akademiens förhandlingar. Stockholm. 41 Swe.

- Stone, Rep. N. Staff. F. Cl.*—Annual report and transactions of the North Staffordshire Naturalists' Field Club, and Archæological Society, Stone. 410 U.K.
- Strassburg, Mitt. geol. Landesanst.*—Mittheilungen der geologischen Landesanstalt von Elsass-Lothringen. Strassburg. [jähr.] 1019 Ger.
- Stratford, Essex Nat.*—Essex Naturalist (Essex Field Club), Stratford. 123 U.K.
- Studi sassaresi, Sassari.*—Studi sassaresi, Sassari. 258 It.
- Stuttgart, Jahreshefte Ver. Natk.*—Jahreshefte des Vereins für vaterländische Naturkunde in Württemberg. Stuttgart. [jähr.] 1021 Ger.
- Stuttgart, Mitt. geol. Abt. stat. Landesamt.*—Mittheilungen der geologischen Abteilung des kgl. württh. statistischen Landesamtes. Stuttgart. [zwangl.] — Ger.
- Südd. landw. Tierzucht, München.*—Süddeutsche landwirtschaftliche Tierzucht. Organ süddeutscher Züchtereinigungen hrsg. v. Vogel. München u. Leipzig. [wöch.] — Ger.
- Südd. Monatshefte, München.*—Süddeutsche Monatshefte, hrsg. v. W. Weigand. München. — Ger.
- Suisan Chō. Hō., Tōkyō.*—Suisan Chōsa Hōkoku. [Reports of the Fisheries Bureau.] Tōkyō, Japan. 17 Jap.
- Suppl. ent., Berlin.*—Supplementa entomologica, hrsg. v. Deutschen entomologischen Museum. Berlin. [zwangl.] — Ger.
- Sv. Bot. Tidskr., Stockholm.*—Svensk botanisk tidskrift utgifven af Svenska botaniska föreningen. Stockholm. 8vo. — Swe.
- Sv. Mosskult. Tidskr., Jönköping.*—Svenska Mosskultur-föreningens Tidskrift. Jönköping. 8vo. 47 Swe.
- Sydney, N.S.W., J. R. Soc.*—The Journal and Proceedings of the Royal Society, Sydney, N.S.W. 3 N.S.W.
- Sydney, N.S.W., Mem. Austr. Mus.*—Memoirs of the Australian Museum, Sydney, N.S.W. 4 N.S.W.
- Sydney, N.S.W., Mem. Geol. Surv. N.S. Wales.*—Memoirs of the Geological Survey of New South Wales, Sydney, N.S.W. 5 N.S.W.
- Sydney, N.S.W., Proc. Linn. Soc. N.S. Wales.*—Proceedings of the Linnean Society of New South Wales, N.S.W. 6 N.S.W.
- Sydney, N.S.W., Rec. Austr. Mus.*—Records of the Australian Museum, Sydney, N.S.W. 7 N.S.W.
- Sydney, N.S.W., Rec. Geol. Surv. N.S. Wales.*—Records of the Geological Survey of New South Wales, Sydney, N.S.W. 8 N.S.W.
- Taškent, Izv. Turk. Otd. Russ. Geogr. Obšč.*—[Bulletin de la Section du Turkestan de la Société Impériale russe de Géographie. Tachkent]. 301 Rus.
- Tasmanian Nat.*—Tasmanian Naturalist. — Tas.
- Taunton, Proc. Somerset. Archæol. Nat. Hist. Soc.*—Proceedings of the Somersetshire Archæological and Natural History Society, Taunton. 418 U.K.
- Termt. Közl., Budapest.*—Természettudományi Közlöny, Budapest. [Naturwissenschaftliche Mittheilungen, Budapest.] 16 Hun.
- Teysmannia, Batavia.*—Teysmannia, Batavia. — Hol.
- Tharander forstl. Jahrb.*—Tharander forstliches Jahrbuch, hrsg. v. Kunze. Berlin. [jähr.] 1039 Ger.
- Ther. Monatshefte, Berlin.*—Therapeutische Monatshefte, hrsg. v. Liebreich. Berlin. 1042 Ger.
- Tierwelt, Aarau.*—Die Tierwelt. Zeitung für Ornithologie, Geflügel- und Kaninchenzucht. Aarau. 4to. 114 Swi.

- Tierärztl. Rdsch., Friedenau.*—Tierärztliche Rundschau (früher Tierärztlicher Centralanzeiger), hrsg. v. Schaefer. Friedenau. [wöch.] — Ger.
- Tidskr. Jäg. Fisk., Helsingfors.*—Tidskrift för Jägare och Fiskare. Helsingfors. 8vo. 30 Fin.
- Tierarzt, Leipzig.*—Der Tierarzt, red. v. Anacker. Leipzig. [monatl.] 1044 Ger.
- Tijdschr. Veearts., Utrecht.*—Tijdschrift voor Veeartsenijkunde en Veeteelt, Utrecht. 8vo. 51 Hol.
- Tobol'sk, Ann. Mus.*—[Annuaire du Musée de Tobolsk.] 315 Rus.
- Thür. Monatsbl., Eisenach.*—Thüringer Monatsblätter. Verbands-Zeitschrift des Thüringer Waldvereins. Eisenach. 1053 Ger.
- Tiflis, Mitth. Kavk. Mus.*—[Mittheilungen des Kaukasischen Museums. Tiflis.] 309 Rus.
- Tiflis, Zap. Kavk. Otd. Russ. Geogr. Obšč.*—[Mémoires de la Section caucasienne de la Société Impériale russe de Géographie. Tiflis.] 314 Rus.
- Tijdschr. plantenziekten, Wageningen.*—Tijdschrift over plantenziekten, Wageningen. [six fois par an.] — Hol.
- Tiflis, Izv. Kavk. Otd. Russ. Geogr. Obšč.*—[Bulletin de la Section Caucasienne de la Société Impériale russe de Géographie. Tiflis.] 307 Rus.
- Tōkyō, Bull. Coll. Agric.*—The Bulletin of the College of Agriculture, Imperial University of Tōkyō, Japan. *European languages.* 21 Jap.
- Tōkyō, Chishits. Z.*—Chishitsugaku Zasshi. [Journal of the Geological Society of Tōkyō.] 23 Jap.
- Tōkyō, J. Coll. Agric.*—Journal of the College of Agriculture. Tōkyō. — Jap.
- Tōkyō, J. Coll. Sci.*—The Journal of the College of Science, Imperial University of Tōkyō, Japan. *European languages.* 28 Jap.
- Tōkyō, Mitt. med. Fac.*—Mittheilungen aus der medicinischen Facultät der Kaiserlich-Japanischen Universität zu Tōkyō. *German language.* 34 Jap.
- Tōkyō, Mitt. ost. Ges.*—Mittheilungen der ostasiatischen Gesellschaft. *German language.* Tōkyō, Japan. 35 Jap.
- Tokyo, Nip. Konch. Kw. Ho.*—Nippon Konchugakkwai Kwaiho. [Transactions of the Entomological Society of Japan.] Tokyo. — Jap.
- Tōkyō Nip. Nō. Kw. Hō.*—Tōkyō, Dai Nippon Nō Kwai Hō. [Journal of the Agricultural Society of Japan.] — Jap.
- Tōkyō, Nip. Sanrin. Kw. Z.*—Dai Nippon Sanringaku Kwai Zasshi. [Journal of the Society of Forestry of Japan.] Tōkyō, Japan. 37 Jap.
- Tōkyō, Nip. Sanshi Kw. Hō.*—Tōkyō, Dai Nippon Sanshi Kwai Hō. [Journal of the Japanese Sericultural Association.] — Jap.
- Tōkyō, Nōji Shi. Toku. Hō.*—Nōji Shikenjō Tokubetsu Hōkoku. [Special reports of the Experimental Farm.] Tōkyō, Japan. 12 Jap.
- Tōkyō, Proc. Dept. Nat. Hist.*—Tōkyō, Proceedings of the Department of Natural History, Tōkyō Imperial Museum. — Jap.
- Tommasi, Napoli.*—Il Tommasi. Napoli. — It.
- Tomsk, Izv. technol. Inst.*—Извѣстіе Томскаго технологическаго Института. Томскъ [Bulletin de l'Institut technologique de Tomsk]. — Rus.
- Tomsk, Izv. Univ.*—Извѣстія Императорскаго Томскаго Университета. Томскъ [Bulletin de l'Université Impériale de Tomsk.] 316 Rus.
- Tomsk, Pat. Kniž. Tomsk. gubern.*—Памятная книжка Томской губерніи [Almanach du gouvernement de Tomsk]. — Rus.
- Toreka, Trans. Kan. Acad. Sci.*—Transactions of the Kansas Academy of Science, Toreka. 446 U.S.

- Torino, Atti Acc. sc.*—Atti della R. Accademia delle scienze, Torino. 220 It.
- Torino, Boll. Musei zool. anat.*—Bollettino dei Musei di zoologia e di anatomia comparata della R. Università, Torino. 224 It.
- Torino, Giorn. Acc. med.*—Giornale della R. Accademia di medicina, Torino. 226 It.
- Torino, Mem. Acc. sc.*—Memorie della R. Accademia delle scienze, Torino. 228 It.
- Toronto, Proc. Canad. Inst.*—Proceedings of the Canadian Institute, Toronto. 33 Can.
- Toronto, Rep. Ent. Soc. Ont.*—Annual Report of the Entomological Society of Ontario, Toronto. — Can.
- Toronto, Stud. Univ. Biol. Ser.*—Studies from the University of Toronto, Biological Series. 36 Can.
- Toronto, Stud. Univ. Geol. Ser.*—Studies from the University of Toronto, Geological Series. — Can.
- Toronto, Stud. Univ. Psychol. Ser.*—Studies from the University of Toronto, Psychological Series. 37 Can.
- Toronto, Trans. Canad. Inst.*—Transactions of the Canadian Institute, Toronto. 40 Can.
- Torquay J. Nat. Hist. Soc.*—Journal of the Natural History Society, Torquay. — U.K.
- Toulouse, Bul. soc. hist. nat.*—Bulletin de la société naturelle de Toulouse (Haute-Garonne). [trimestr.] 815 Fr.
- Toulouse, Bul. soc. Ramond.*—Bulletin de la société Ramond. Bagnères de Bigorre (Hautes-Pyrénées) Toulouse. [trimestr.] 159 Fr.
- Toulouse, Bul. soc. sci. phys. nat.*—Bulletin de la société des sciences physiques et naturelles de Toulouse (Haute-Garonne). 817 Fr.
- Toulouse, Bul. stat. pisc. hydrobiol.*—Bulletin de la station de pisciculture et d'hydrobiologie de l'Université de Toulouse. Toulouse. — Fr.
- Toulouse, Mém. Acad. sci. inscrip.*—Mémoires de l'Académie des sciences, inscriptions et belles lettres de Toulouse (Haute-Garonne). [annuel.] 822 Fr.
- Trans. Amer. Microsc. Soc., Decatur.*—Transactions of the American Microscopical Society, Decatur. 198 U.S.
- Transv. Med. J., Johannesburg.*—The Transvaal Medical Journal, Johannesburg. — S. Afric.
- Trav. Lab. étud. soie, Lyon.*—Travaux du Laboratoire d'études de la soie, fondé par la Chambre de commerce de Lyon par la commission administrative. Lyon. — Fr.
- Trav. Lab. géol., Grenoble.*—Travaux du laboratoire de géologie de l'Université de Grenoble. Grenoble. — Fr.
- Trav. mém. Fac. Lille.*—Travaux et mémoires des Facultés de Lille (Nord). 834 Fr.
- Trav. Sect. géolog. Cab. S. M. I., St. Peterburg.*—Труды геологической части кабинета Его Императорскаго Величества. С.-Петербургъ [Travaux de la Section géologique du Cabinet de Sa Majesté Impériale. St.-Pétersbourg]. 319 Rus.
- Trav. sect. Troick.-Kjacht. Russ. Geogr., St. Peterburg on Moskva.*—Труды Троицкосавско-Кяхтинскаго отдѣла. Приамурскаго отдѣла Императорскаго русскаго Географическаго Общества. С.-Петербургъ или Москва [Travaux de la subdivision de Troizkosavsk-Kjachtita de la Section du territoire de l'Armour de la Société Impériale russe de Géographie. St.-Pétersbourg ou Moscou]. 155 Rus.

- Trav. Univ., Rennes.*—Travaux scientifiques de l'Université de Rennes, Rennes. [Reprinted from Rennes Bul. soc. sci.] — Fr.
- Trencsén m. termt. társ. évk.*—Trencsén megyei természettudományi társulat évkönyvei, Trencsén. [Jahrbuch des Trencséner naturwissenschaftlichen Vereins, Trencsén.] 17 Hun.
- Trd. B. entom. Učen. Kom. M. Zeml., St. Peterburg.*—Труды Бюро по энтомологии Ученого Комитета Министерства Земледѣлія и Государственныхъ Имуществъ. С.-Петербургъ [Travaux du Bureau entomologique du Comité scientifique du Ministère d'Agriculture et des Domaines. St.-Pétersbourg]. 444 Rus.
- Trd. bur. zootechn., St. Peterburg.*—Труды Бюро по зоотехнии. С.-Петербургъ [Travaux du Bureau de zootechnique. St.-Pétersbourg]. — Rus.
- Trd. gidrobiol. st. Glubokoe, Moskva.*—Труды гидробиологической станціи на Глубокомъ Озерѣ. Москва [Travaux de la station hydrobiologique au lac Gloubokoe, Moscou]. — Rus.
- Trd. Kavk. šelkovodstv. st., Tiflis.*—Труды Кавказской шелководственной станціи. Тифлисъ [Travaux de la station Caucasienne séréricole. Tiflis]. 320 Rus.
- Trd. lěsn. opytn. dělu Ross., St. Peterburg.*—Труды по лѣсному опытному дѣлу въ Россіи. С.-Петербургъ [Mitteilungen aus dem forstlichen Versuchswesen Russlands. St. Peterburg]. — Rus.
- Trd. Obšč. izsléd. Volyni, Žitomir.*—Труды Общества изслѣдователей Волыни. Житомиръ [Travaux de la Société pour l'exploration de la Volynie. Žitomir]. — Rus.
- Trd. Otd. ichtiol. Obšč. akklim., Moskva.*—Труды отдѣла ихтиологии Императорскаго Русскаго Общества акклиматизации животныхъ и растений. Москва [Travaux de la Section ichthyologique de la Société Impériale russe pour l'acclimatation des animaux et des plantes. Moscou]. 323 Rus.
- Trd. Troick-Kjacht. Otd. Russ. Geogr. Obšč., Moskva.*—Труды Троицкосавскаго Кяхтинскаго отдѣленія Приамурскаго отдѣла Императорскаго русскаго Географическаго Общества. Москва [Travaux de la subdivision de Troickosavsk-Kjachta de la Section du territoire de l'Amour de la Société Impériale russe de Géographie. Moscou]. 155 Rus.
- Trieste, Boll. Soc. Adriat. Sci. Nat.*—Bollettino della Società Adriatica di Scienze Naturali in Trieste, red. Antonio Valle. Trieste. [irregol.] 376 Aus.
- Tromsø Mus. Aarsh.*—Aarshefter fra Tromsø Museum, Tromsø. 27 Nor.
- Trondhjem, kgl. Vid. selsk. Skr.*—Det kongelige norske Videnskabernes Selskabs Skrifter, Trondhjem. 28 Nor.
- Tropenpflanzer, Berlin.*—Der Tropenpflanzer. Zeitschrift für tropische Landwirthschaft, hrsg. v. Warburg u. Wohltmann. Berlin. [monatl.] Nebst Beiheften. 1058 Ger.
- Truro, J. R. Inst. Cornwall.*—Journal of the Royal Institution of Cornwall, Truro. 420 U.K.
- Tübingen, Arb. path. Inst.*—Arbeiten auf dem Gebiete der pathologischen Anatomie, u. Bakteriologie aus dem pathologisch-anatomischen Institut zu Tübingen, hrsg. v. v. Baumgarten. Braunschweig. [zwangl.] 1059 Ger.
- Tübingen, Bl. Albver.*—Blätter des schwäbischen Albvereins. Tübingen. [monatl.] 1060 Ger.
- Tuft's College, Mass., Tuft's Coll. Stud.*—Tuft's College Studies. (Scientific Series.) Tuft's College, Mass. — U.S.
- Turkest. sel'sk. choz., Taškent.*—Туркестанское сельское хозяйство. Ташкентъ [Agriculture de Turkestan. Tachkent]. — Rus.

- Turkest. Věd., Taškent.*—Туркестанскія Вѣдомости. Ташкентъ [Bulletin de Turkestan. Tachkent]. 328 Rus.
- Tyg. lek., Lwów.*—Lwowski Tygodnik lekarski, organ lwówskiego Towarzystwa lekarskiego. Lwów. — Pol.
- Ufa, Sel'sk. choz. list. gub. zemstva.*—Сельско-хозяйственный листокъ Уфимскаго губернскаго земства. Уфа [Gazette agronomique du zemstvo du gouvernement Ufa. Ufa]. — Rus.
- Ulm, Jahreshefte Ver. Math.*—Jahreshefte des Vereins für Mathematik und Naturwissenschaften zu Ulm. [unbest.] 1066 Ger.
- Umschau, Frankfurt a. M.*—Die Umschau. Uebersicht über die Fortschritte und Bewegungen auf dem Gesamtgebiet der Wissenschaft, Technik, Litteratur und Kunst, hrsg. v. Bechhold. Frankfurt a. M. [wöch.] 1068 Ger.
- Uns. Welt, Godesberg.*—Unsere Welt. Illustrierte Monatschrift zur Förderung der Naturerkenntnis hrsg. v. Keplerbund. Godesberg. — Ger.
- Unterrichtsbl. Math., Berlin.*—Unterrichtsblätter für Mathematik und Naturwissenschaften, hrsg. v. Schwalbe u. Pietzker. Berlin. [2 monatl.] 1071 Ger.
- Upps. Prakt. Entomol., Stockholm.*—Uppsatser i Praktisk Entomologi med statsbidrag utgifna af Entomologiska Föreningen i Stockholm. Stockholm. 8vo. 54 Swe.
- Upsala, Bul. Geol. Inst.*—Bulletin of the Geological Institution of the University of Upsala, ed. Hj. Sjögren. Upsala. 8vo. 55 Swe.
- Upsala, Läkaref. Forh.*—Upsala Läkareförenings Förhandlingar. Upsala. 8vo. 57 Swe.
- Upsala, Soc. Scient. Acta.*—Nova acta Regiæ Societatis Scientiarum Upsaliensis. Upsala. 4to. 58 Swe.
- Urania, Wien.*—Urania, illustrierte populär-wissenschaftliche Wochenschrift redigiert von Albert Edlen von Obermayer, Alfred Till und Heinrich Jaschke. Wien. (Konegen.) — Aus.
- Urbana, Bul. Ill. Lab. Nat. Hist.*—Bulletin of the Illinois State Laboratory of Natural History, Urbana and Champagne. 448 U.S.
- Urbana, Stud. Univ. Ill.*—University Studies. University of Illinois, Urbana. 451 U.S.
- Utrecht, Onderz. Physiol. Lab.*—Onderzoekingen gedaan in het physiologisch Laboratorium der Utrechtsche Hoogeschool, Utrecht. 8vo. 54 Hol.
- Varšava, Izv. politechn. Inst.*—Извѣстія Варшавскаго политехническаго Института Императора Николая II. Варшава [Bulletin de l'Institut polytechnique de l'Empereur Nicolas II à Varsovie. Varsovie]. 330 Rus.
- Varšava, Izv. Univ.*—Варшавскія университетскія извѣстія. Варшава [Bulletin de l'Université Impériale de Varsovie]. 331 Rus.
- Varšava, Prot. Obšč. jest.*—Протоколы Варшавскаго Общества естествоиспытателей. Варшава [Procès-verbaux de la Société des naturalistes de Varsovie]. — Rus.
- Varšava, Rab. zool. kab. Univ.*—Работы изъ зоологическаго кабинета Варшавскаго Университета. Варшава. [Travaux du cabinet zoologique de l'Université de Varsovie. Varsovie]. — Rus.
- Varšava, Trav. soc. nat. Proc. verb. réun. gén.*—Труды Варшавскаго Общества естествоиспытателей. Протоколы общаго собранія. Варшава [Travaux de la société des naturalistes de Varsovie. Procès-verbaux de la réunion générale]. 336 Rus.

- Vendôme, Bul. soc. archéol. sci.*—Bulletin de la société archéologique, scientifique et littéraire du Vendômois. Vendôme (Loir-et-Cher). [trimestr.] 843 Fr.
- Venezia, Atti Ist. ven.*—Atti del R. Istituto veneto di scienze, lettere ed arti, Venezia. 235 It.
- Venezia, Mem. Ist. ven.*—Memorie del R. Istituto veneto di scienze, lettere ed arti, Venezia. 236 It.
- Verh. D. KolKongr., Berlin.*—Verhandlungen des deutschen Kolonial-Kongresses, Berlin. — Ger.
- Verh. D. otol. Ges., Jena.*—Verhandlungen der deutschen otologischen Gesellschaft. Jena. [jähr.] 1080 Ger.
- Verh. D. path. Ges., Jena.*—Verhandlungen der deutschen pathologischen Gesellschaft. Jena. [jähr.] 1081 Ger.
- Verh. D. zool. Ges., Leipzig.*—Verhandlungen der deutschen zoologischen Gesellschaft. Leipzig. [jähr.] 1082 Ger.
- Verh. Ges. D. Natf., Leipzig.*—Verhandlungen der Gesellschaft deutscher Naturforscher und Aerzte. Leipzig. [jähr.] 1083 Ger.
- Verh. internat. zool. Kongr., Jena.*—Verhandlungen des internationalen Zoologen-Kongresses. Jena. [zwangl.] — Ger.
- Verh. intern. MathCongr., Leipzig.*—Verhandlungen des internationalen Mathematiker-Kongresses. Leipzig. [unbest.] 1088 Ger.
- Verh. intern. Ornith. Kongr., Berlin.*—Verhandlungen des internationalen Ornithologen-Kongresses. Berlin [zwangl.] — Ger.
- Verh. intern. zahnärztl. Kongr., Berlin.*—Verhandlungen des internationalen zahnärztlichen Kongresses. Berlin [unbest.] — Ger.
- Verh. Kongr. inn. Med., Wiesbaden.*—Verhandlungen des Kongresses für innere Medicin. Wiesbaden. [jähr.] 1076 Ger.
- Verh. pomm. Forstver., Stettin.*—Verhandlungen des pommerschen Forstvereins. Stettin. [jähr.] 1089 Ger.
- Verh. Schweiz. Natf. Ges.*—Verhandlungen der Schweizerischen naturforschenden Gesellschaft. Aarau, Basel etc. 8vo. 116 Swi.
- Vermont Rep. Geol., Burlington.*—Report of the State Geologist on the Mineral Industries and Geology of certain areas of Vermont. Burlington, Vt. 585 U.S.
- Vermont Rep. Geol., Montpelier.*—Report of the State Geologist on the Mineral Industries and Geology of certain areas of Vermont. Montpelier. 585 U.S.
- Versailles, Mém. soc. sci. nat.*—Mémoires de la société des sciences naturelles et médicales de Seine-et-Oise. Versailles (Seine-et-Oise). [trimestr.] 847 Fr.
- VerSchr. ForstJagdNatkd., Prag.*—Vereinsschrift für Forst-, Jagd- und Naturkunde. Organ der Forstlichen Landesversuchsstelle für das Königreich Böhmen, red. v. Fried[rich] Croy und W. Sallač. Prag. [2 monat.] 390 Aus.
- VerSchr. GörresGes., Cöln.*—Görres-Gesellschaft zur Pflege der Wissenschaft im katholischen Deutschland. Vereinsschriften. Cöln. [3 H. jähr.] 1094 Ger.
- Versl. landbouwk. onderz. Rijkslandbouwproefstat., 's Gravenhage.*—Verslagen van landbouwkundige onderzoekingen der Rijkslandbouwproefstation, s' Gravenhage. — Hol.
- Versl. Staat Ned. Zeevissch., 's Gravenhage.*—Verslag van den Staat der Nederlandsche Zeevisscherijen, 's Gravenhage. 4to. 56 Hol.
- Věst. ljub. akv. i terr., Kiev.*—Вѣстникъ любителя аквариума и террариума. Кіевъ [Messenger de l'amateur de l'aquarium et du terrarium. Kiev]. — Rus.

- Věst. obšč. gígieny, St. Peterburg.*—Вѣстникъ общественной гигіены, судебной и практической медицины. С.-Петербургъ [Messenger d'hygiène publique et de médecine légale et usuelle. St.-Pétersbourg]. 343 Rus.
- Věst. Obšč. pčelovod., St Peterburg.*—Вѣстникъ русскаго общества пчеловодства. С.-Петербургъ [Messenger de la Société russe d'apiculture. St.-Pétersbourg]. 344 Rus.
- Věst. psychol., St. Peterburg.*—Вѣстникъ психологій, криминальной антропологій и гипнотизма. С.-Петербургъ [Messenger de psychologie, d'anthropologie criminelle et de hypnotisme. St.-Pétersbourg]. — Rus.
- Věst. ryboprom., St. Peterburg.*—Вѣстникъ рыбопромышленности; органъ Русскаго Общества рыбоводства и рыболовства. С.-Петербургъ [Messenger du commerce de poissons; organe de la Société russe de pisciculture et de pêche. St.-Pétersbourg]. 354 Rus.
- Věst. sacharn. promyšl., Kiev.*—Вѣстникъ сахарной промышленности. Кіевъ [Messenger de l'industrie du sucre. Kiev]. 355 Rus.
- Věst. sadov. plodov. ogorodn., St. Peterburg.*—Вѣстникъ садоводства, плодородства и огородничества. С.-Петербургъ [Messenger d'horticulture, de culture fruitière et potagère. St.-Pétersbourg]. — Rus.
- Věst. sel'sk. hoz., Moskva.*—Вѣстникъ сельскаго хозяйства. Москва [Messenger d'agriculture. Moscou]. 356 Rus.
- Věst. vinoděl., St. Peterburg & Odessa.*—Вѣстникъ винодѣлія. С.-Петербургъ [Messenger de viticulture. St.-Pétersbourg]. 357 Rus].
- Věst. znan., St. Peterburg.*—Вѣстникъ знанія. С.-Петербургъ [Messenger des sciences. St.-Pétersbourg]. — Rus.
- Veterin. fel'dš. věst., Moskva.*—Ветеринарно-фельдшерскій вѣстникъ. Москва [Messenger des aides vétérinaires. Moscou]. — Rus.
- Veterin. vrač, St. Peterburg.*—Ветеринарный врачъ. С.-Петербургъ [Le Vétérinaire. St.-Pétersbourg]. — Rus.
- Veterin. žizn', Moskva.*—Ветеринарная Жизнь. Москва [Vie vétérinaire. Moscou]. — Rus.
- Vjotka, Pam. kniž. Vjatk. gub.*—Памятная книжка Вятской губерніи. Вятка [Almanach du gouvernement de Vjatka. Vjatka]. — Rus.
- Vict. Dept. Mines Bul. Geol. Surv., Melbourne.*—Victoria, Department of Mines. Bulletins of the Geological Survey, Melbourne. — Vict.
- Vict. Dept. Mines Mem. Geol. Surv., Melbourne.*—Victoria, Department of Mines. Memoirs of the Geological Survey of Victoria. Melbourne. — Vict.
- Vict. Dept. Mines Rec. Geol. Surv., Melbourne.*—Victoria, Department of Mines. Records of the Geological Survey of Victoria, Melbourne. — Vict.
- Vict. J. Dept. Agric., Melbourne.*—Journal of the Department of Agriculture, Victoria. Melbourne. 23 Vict.
- Vict. Nat., Melbourne.*—The Victorian Naturalist. Melbourne. 19 Vict.
- VierteljSchr. Philos., Leipzig.*—Vierteljahrsschrift für wissenschaftliche Philosophie, hrsg. v. Barth. Leipzig. 1097 Ger.
- Vladimir, Trd. Obšč. l'ub. jest.*—Труды Владимірскаго Общества любителей естествознанія. Владиміръ [Travaux de la Société des amateurs des sciences naturelles de Vladimir. Vladimir]. — Rus.
- Vogelfreund, Münster i. W.*—„Vogelfreund“ Monatschrift zum Schutze und zur Erforschung der heimischen Vogelwelt. Münster i. W. — Ger.
- Vogelwelt, Münster i. W.*—„Vogelwelt“ Monatschrift zum Schutze und zur Erforschung der heimischen Vogelwelt. Organ des Rhein-Westf-Lipp. Vogelschutz- und Kanarienzüchter-Verbandes. Münster i. W. — Ger.

- Voroněž, Vet. chron.*—Ветеринарная хроника Воронежской губернии. Воронежъ [Chronique vétérinaire du gouvernement de Voronež]. — Rus.
- Vortr. EntwMech., Leipzig.*—Vorträge und Aufsätze über Entwicklungsmechanik der Organismen, hrsg. v. W. Roux. Leipzig. [zwangl.] — Ger.
- W. Amer. Sci., San Diego, Cal.*—West American Scientist, San Diego, Cal. 454 U.S.
- Wageningen, Meded. Hoog. Land-Tuin-Boschbouws.*—Mededeelingen van de Ryks Hoogere Land- Tuin- en Boschbouwschool en van de daaraan verbonden Instituten, onder redaktie van het bestuur dezer inrichting. Wageningen. Veenman. 8vo. — Hol.
- Waidmannsheil, Klagenfurt.*—Waidmannsheil. Illustrierte Zeitschrift für Jagd, Fischerei, Schützen- und Hundewesen red. v. Friedrich Leon. Klagenfurt. [$\frac{1}{2}$ monatl.] 398 Ger.
- Wanderer, Hirschberg.*—Der Wanderer im Riesengebirge. Organ des Riesengebirgs-Vereins. Hirschberg. [monatl.] 1102 Ger.
- Wanderer Ostpr., Elbing.*—Wanderer durch Ost- und Westpreussen. Illustrierte Monatschrift zur Pflege heimatlicher Interessen. Bundeszeitschrift des Verkehrsverbandes für Ost- und Westpreussen. Elbing. — Ger.
- Warszawa, Spraw. Tow. Nauk.*—Sprawozdania Towarzystwa Naukowego Warszawskiego. [Proceedings of the Scientific Society in Warsaw. Warsaw.] — Pol.
- Warwick, Proc. F. Cl.*—Proceedings of the Warwickshire Naturalists' and Archæologists' Field Club, Warwick. 424 U.K.
- Washington, D.C., Bul. Phil. Soc.*—Bulletin of the Philosophical Society of Washington, Washington, D.C. 456 U.S.
- Washington, D.C., Bul. U. S. Dept. Agric. Div. Biol. Surv.*—Bulletin, U. S. Department of Agriculture. Division of Biological Survey, Washington, D.C. 459 U.S.
- Washington, D.C., Bul. U. S. Fish Com.*—Bulletin of the U. S. Fish Commission, Washington, D.C. 467a U.S.
- Washington, D.C., Carnegie Inst. Pub.*—Carnegie Institution Publication. Washington, D.C. — U.S.
- Washington, D.C., Carnegie Inst. Year Book.*—Carnegie Institution of Washington Year Book, Washington, D.C. 468 U.S.
- Washington, D.C., Cir. U. S. Dept. Agric. Bur. Anim. Indust.*—Circular, U. S. Department of Agriculture. Bureau of Animal Industry, Washington, D.C. 469 U.S.
- Washington, D.C., Cir. U. S. Dept. Agric. Bur. Ent.*—Circular, U. S. Department of Agriculture. Division of Entomology, Washington, D.C. 474 U.S.
- Washington, D.C., Dept. Comm. Lab. Bul. Bur. Fish.*—Department of Commerce and Labor. Bulletin of the Bureau of Fisheries, Washington, D.C. — U.S.
- Washington, D.C., Dept. Comm. Lab. Bul. Bur. Stand.*—Department of Commerce and Labor. Bulletin of the Bureau of Standards. Washington, D.C. — U.S.
- Washington, D.C., Dept. Comm. Lab. Bur. Fish. Doc.*—Department of Commerce and Labor. Bureau of Fisheries Document. Washington, D.C. — U.S.
- Washington, D.C., Dept. Int. Bul. U. S. Geol. Surv.*—Department of the Interior. Bulletin of the United States Geological Survey, Washington, D.C. 516 U.S.
- Washington, D.C., Dept. Int. Rep. U. S. Geol. Surv.*—Department of the Interior. Annual Report of the U. S. Geological Survey, Washington, D.C. 482 U.S.
- Washington, D.C., Dept. Int. U. S. Geol. Surv. Monogr.*—Department of the Interior. U. S. Geological Survey. Monographs, Washington, D.C. 483 U.S.

- Washington, D.C., Dept. Int. U. S. Geol. Surv. Prof. Paprs.*—Professional Papers. Department of the Interior. U. S. Geological Survey. Washington, D.C. — U.S.
- Washington, D.C., George Washington Univ. Bul.*—The George Washington University Bulletin. Washington, D.C. — U.S.
- Washington, D.C., J. Acad. Sci.*—Journal of the Washington Academy of Sciences, Washington, D.C. — U.S.
- Washington, D.C., Mem. Nation. Acad. Sci.*—Memoirs of the National Academy of Science, Washington, D.C. 486 U.S.
- Washington, D.C., Proc. Acad. Sci.*—Proceedings of the Washington Academy of Sciences, Washington, D.C. 486a U.S.
- Washington, D.C., Proc. Biol. Soc.*—Proceedings of the Biological Society of Washington, Washington, D.C. 488 U.S.
- Washington, D.C., Proc. Ent. Soc.*—Proceedings of the Entomological Society of Washington, Washington, D.C. 489 U.S.
- Washington, D.C., Rep. U. S. Com. Fish.*—U.S. Commission of Fish and Fisheries. Report of the Commissioner, Washington, D.C. 493 U.S.
- Washington, D.C., Rep. U. S. Dept. Agric.*—Annual Report of the Department of Agriculture, Washington, D.C. 494 U.S.
- Washington, D.C., Smithsonian Inst., Cont. Knowl.*—Smithsonian Institution. Smithsonian Contributions to Knowledge, Washington, D.C. 496 U.S.
- Washington, D.C., Smithsonian Inst., Misc. Collect.*—Smithsonian Institution, Smithsonian Miscellaneous Collections, Washington, D.C. 497 U.S.
- Washington, D.C., Smithsonian Inst. Misc. Collect. Q.*—Smithsonian Institution. Smithsonian Miscellaneous Collections, Quarterly, Washington, D.C. 497 U.S.
- Washington, D.C., Smithsonian Inst. Nation. Mus. Bul.*—Smithsonian Institution. U. S. National Museum. Bulletin, Washington, D.C. 498 U.S.
- Washington, D.C., Smithsonian Inst. Nation. Mus. Proc.*—Smithsonian Institution. U. S. National Museum. Proceedings, Washington, D.C. 500 U.S.
- Washington, D.C., Smithsonian Inst. Nation. Mus. Rep.*—Smithsonian Institution. U. S. National Museum. Annual Report of the Board of Regents of the Smithsonian Institution, Washington, D.C. 492 U.S.
- Washington, D.C., Smithsonian Inst. Nation. Mus. Sp. Bul.*—Smithsonian Institution. U. S. National Museum. Special Bulletin, Washington, D.C. 501 U.S.
- Washington, D.C., Smithsonian Inst. Rep.*—Smithsonian Institution. Annual Report of the Board of Regents, Washington, D.C. 502 U.S.
- Washington, D.C., Smithsonian Inst., Proc. U. S. Nation. Mus.*—Smithsonian Institution. U. S. National Museum. Proceedings, Washington, D.C. 500 U.S.
- Washington, D.C., Tech. Ser. U. S. Dept. Agric. Bur. Ent.*—Technical Series. U. S. Department of Agriculture. Bureau of Entomology, Washington, D.C. 505 U.S.
- Washington, D.C., Treas. Dept. Hyg. Lab. Bul.*—Treasury Department, U. S. Public Health and Marine Hospital Service. Bulletin. Hygienic Laboratory Bulletin. Washington, D.C. — U.S.
- Washington, D.C., Treas. Dept. Publ. Health, Rep. Pub. Illth. Mar. Hosp. Serv. U.S.*—Treasury Department, Public Health and Marine Hospital Service. Public Health Reports. Washington D.C. — U.S.
- Washington, D.C., U. S. Dept. Agric. Bur. Anim. Indust. Bul.*—U. S. Department of Agriculture. Bureau of Animal Industry, Washington, D.C., Bulletin. 457 U.S.

- Washington, D.C., U. S. Dept. Agric. Bur. Biol. Surv. Bul.*—U. S. Department of Agriculture. Bureau of Biological Survey. Bulletin. Washington, D.C. 459 U.S.
- Washington, D.C., U. S. Dept. Agric. Bur. Biol. Surv. N. Amer. Fauna.*—U. S. Department of Agriculture. Bureau of Biological Survey, North American Fauna, Washington, D.C. 510 U.S.
- Washington, D.C., U. S. Dept. Agric. Bur. Ent. Bul.*—U. S. Department of Agriculture. Bureau of Entomology. Bulletin. Washington, D.C. 462 U.S.
- Washington, D.C., U. S. Dept. Agric. Bur. Plant Ind. Bul.*—U. S. Department of Agriculture. Bulletin of the Bureau of Plant Industry, Washington, D.C. 540 U.S.
- Washington, D.C., U. S. Dept. Agric. Farm. Bul.*—U. S. Department of Agriculture. Farmer's Bulletin, Washington, D.C. 508 U.S.
- Washington, D.C., U. S. Dept. Agric. Off. Exp. Sta. Rec.*—U. S. Department of Agriculture. Office of Experiment Stations. Experiment Station Record, Washington, D.C. 511 U.S.
- Washington, D.C., U. S. Dept. Agric. Rep. Bur. Anim. Indust.*—U. S. Department of Agriculture. Annual Report of the Bureau of Animal Industry, Washington, D.C. 512 U.S.
- Washington, D.C., U. S. Dept. Int. Bul. Geol. Surv.*—Department of the Interior. Bulletin of the United States Geological Survey, Washington, D.C. 516 U.S.
- Washington, D.C., U. S. Dept. Int. Geol. Atlas Geol. Surv.*—Department of the Interior. Geological Atlas of the United States. U. S. Geological Survey, Washington, D.C. 517 U.S.
- Washington, D.C., Yearbook U. S. Dept. Agric.*—Yearbook of the U. S. Department of Agriculture, Washington, D.C. 529 U.S.
- Watford, Trans. Herts Nat. Hist. Soc.*—Transactions of the Hertfordshire Natural History Society and Field Club, Watford and St. Albans. 148 U.K.
- Weidmann, Braunschweig.*—Der Weidmann. Blätter für Jäger und Jagdfreunde, red. v. Dr. L. Staby. Braunschweig-Charlottenburg. [wöch.] 1106 Ger.
- Wellington Coll., Ann. Rep. Nat. Sci. Soc.*—Annual Report of the Wellington College Natural Science Society, Wellington. 8vo. 425 U.K.
- Wellington, Trans. and Proc. N. Zeal. Inst.*—Transactions and Proceedings of the New Zealand Institute, Wellington. — N.Z.
- Wettevreden, Veearts. Meded. Lab.*—Veeartsenijkundige Mededeelingen uit het Geneeskundig Laboratorium te Wettevreden, Batavia, 8o. 59 Hol.
- Wernigerode, Schr. natw. Ver.*—Schriften des naturwissenschaftlichen Vereins des Harzes in Wernigerode. Wernigerode. [zwangl.] 1112 Ger.
- West Ind. Bul., Barbados.*—West Indian Bulletin, the Journal of the Imperial Agricultural Department for the West Indies, Barbados. -- W. Ind.
- West Virginia, Morgantown, Pub. Geol. Surv.*—Publications of the West Virginian Geological Survey, Morgantown. 531 U.S.
- Weinbau, Mainz.*—Weinbau und Weinhandel. Organ des deutschen Weinbauvereins, red. v. Dahlen u. v. Zabern. Mainz. [wöch.] 1108 Ger.
- Wien, Abh. Geol. RchsAnst.*—Abhandlungen der k. k. Geologischen Reichs-Anstalt. Wien. [zwangl.] 404 Aus.
- Wien, Abh. ZoolBot. Ges.*—Abhandlungen der k. k. Zoologisch-Botanischen Gesellschaft in Wien, red. v. Anton Handlirsch. Jena. [zwangl.] 405 Aus.
- Wien, Alm. Ak. Wiss.*—Almanach der Kaiserlichen Akademie der Wissenschaften Wien. [jähr.] 407 Aus.

- Wien, Ann. Natlhist. Hofmus.*—Annalen des k. k. Naturhistorischen Hofmuseums, red. von Franz Steindachner. Wien. [$\frac{1}{4}$ jährl.] 408 Aus.
- Wien, Anz. Ak. Wiss.*—Anzeiger der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. [27 H. jährl.] 409 Aus.
- Wien, Arb. Zool. Inst. Univ.*—Arbeiten aus den Zoologischen-Instituten der Universität Wien und der Zoologischen Station in Triest, hrsg. v. Karl Grobben und Berthold Hatschek. Wien. [zwangl.] 411 Aus.
- Wien, Beitr. Pal. Geol. ÖstUng.*—Beiträge zur Paläontologie und Geologie Österreich-Ungarns und des Orients. Mitteilungen des Paläontologischen und Geologischen Institutes der Universität Wien, hrsg. mit Unterstützung des hohen Ministeriums für Kultus und Unterricht von Viktor Uhlig und G[ustav] von Arthaber. Wien. [$\frac{1}{4}$ jährl.] 415 Aus.
- Wien, Bl. a.d. Wald.*—Blätter aus dem Walde. Zeitschrift des Niederösterreichischen Forstvereins red. v. Gustav Eisenmengor. Wien. [monatl.] — Aus.
- Wien, Denkschr. Ak. Wiss.*—Denkschriften der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. Wien. [zumindest jährl.] 420 Aus.
- Wien, JahrBer. Entom. Ver.*—Jahresbericht des Wiener Entomologischen Vereines. Wien. [jährl.] 430 Aus.
- Wien, Jahrb. Geol. RchsAnst.*—Jahrbuch der k. k. Geologischen Reichsanstalt. Wien. [$\frac{1}{4}$ jährl.] 425 Aus.
- Wien, JahrBer. Ver. Adria.*—Jahresbericht des Vereines zur Förderung der naturwissenschaftlichen Erforschung der Adria. Wien. [jährl.] — Aus.
- Wien, Mitt. Anthr. Ges.*—Mitteilungen der Anthropologischen Gesellschaft in Wien, red. v. Leo Bouchal. Wien. [2 monatl.] 435 Aus.
- Wien, Mitt. Geol. Ges.*—Mitteilungen der geologischen Gesellschaft. Wien. — Aus.
- Wien, Mitt. Natur. Ver. Univ.*—Mitteilungen des Naturwissenschaftlichen Vereines an der Universität Wien. Selbstverlag. [8-10 N. jährl.] — Aus.
- Wien, Mitt. Öst. RchsBd. Vogelk.*—Mitteilungen des Österreichischen Reichsbundes für Vogelkunde und Vogelschutz in Wien. Wien. [monatl.] 447 Aus.
- Wien, Mitt. Polyxena.*—Mitteilungen des entomologischen Vereines Polyxena. Wien. [monatl.] — Aus.
- Wien, Mitt. Sekt. Natkde.*—Mitteilungen der Sektion für Naturkunde des Österreichischen Touristen-Klubs, red. v. C. R. von Keissler. Wien. [monatl.] 451 Aus.
- Wien, MonBl. Ver. Landeskde.*—Monatsblatt des Vereines für Landeskunde von Niederösterreich. Wien. 460 Aus.
- Wien, Oest. Fischerei Ztg.*—Oesterreichische Fischerei-Zeitung. Wien. — Aus.
- Wien, Schr. Ver. Verbr. Natur. Kenntn.*—Schriften der Vereines zur Verbreitung Naturwissenschaftlicher Kenntnisse in Wien. [Nebentitel:] Populäre Vorträge aus allen Fächern der Naturwissenschaft, hrsg. vom Vereine zur Verbreitung Naturwissenschaftlicher Kenntnisse in Wien. Wien. [jährl. bzw. in zwangl. H.] 471 Aus.
- Wien, SitzBer. Ak. Wiss.*—Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Mathematisch-Naturwissenschaftliche Klasse. Wien. [in 4 Abt. zwangl.] 472 Aus.
- Wien, Tierärztl. ZentrBl.*—Tierärztliches Zentralblatt hrsg. vom Vereine der Tierärzte in Österreich. Wien. [$\frac{1}{3}$ monatl.] 476 Aus.
- Wien, Verh. Geol. RchsAnst.*—Verhandlungen der k. k. Geologischen Reichsanstalt. Wien. [18 H. jährl.] 477 Aus.

- Wien, Verh. ZoolBot. Ges.*—Verhandlungen der k. k. Zoologisch-Botanischen Gesellschaft in Wien, red. v. A[nton] Handlirsch. Wien. [10 H. jährl.] 479 Aus.
- Wiesbaden, Jahrb. Ver. Natk.*—Jahrbücher des nassauischen Vereins für Naturkunde. Wiesbaden. [jähr.] 1121 Ger.
- Wild u. Hund, Berlin.*—Wild und Hund, red. v. Stahlecker. Berlin. [wöch.] 1123 Ger.
- Wilson Bul., Oberlin, Ohio.*—Wilson Bulletin. (Wilson Ornithological Club.) Oberlin, Ohio. 347 U.S.
- Wilts. Archæol. Mag., Devizes.*—The Wiltshire Archæological, and Natural History Magazine, Devizes. 426 U.K.
- Winterthur. Mitt. Natw. Ges.*—Mitteilungen der Naturwissenschaftlichen Gesellschaft in Winterthur, red. Dr. Robert Keller. Winterthur. 8vo. — Swi.
- Wisconsin, Madison, Geol. Nat. Hist. Surv. Bul.*—Wisconsin Geological and Natural History Survey. Bulletin. Madison. 534 U.S.
- Wissen, Berlin.*—Das Wissen. Ill. Halbmonatschrift, hrsg. von der Vereinigung Die wissenschaft für Alle. Berlin. — Ger.
- Wiss. Meeresunters., Kiel.*—Wissenschaftliche Meeresuntersuchungen, hrsg. v. d. Commission zur wissenschaftlichen Untersuchung der deutschen Meere in Kiel u. der Biologischen Anstalt auf Helgoland. Kiel. [zwangl.] 1127 Ger.
- Wiss. Rdsch., Leipzig.*—Wissenschaftliche Rundschau. Zeitschrift für die allgemein wissenschaftliche Fortbildung des Lehrers, hrsg. H. Baege. Leipzig. — Ger.
- Wochenschr. Aquarienkunde, Braunschweig.*—Wochenschrift für Aquarien- und Terrarienkunde hrsg. v. W. Wolterstorff. Braunschweig. — Ger.
- Wood's Holl, Mass., Mar. Biol. Lab. Lect.*—Marine Biological Laboratory. Biological Lectures, Wood's Holl, Mass. 536 U.S.
- Woolhope, Trans. Nat. F. Cl.*—Transactions of the Woolhope Naturalists' Field Club, Hereford. 8vo. 427 U.K.
- Worcester, Trans. Nat. Cl.*—Worcester. The transactions of the Worcestershire Naturalists' Club. [Established 1847.] — U.K.
- Wr. EntomolZtg, Wien.*—Wiener Entomologische Zeitung, red. v. Alfred Hetschko und Edmund Reitter. Wien. [10 H. jährl.] 493 Aus.
- Wr. Klin. Wochschr., Wien.*—Wiener Klinische Wochenschrift. Organ der k. k. Gesellschaft der Ärzte in Wien, red. v. Alexander Fraenkel. Wien. 496 Aus.
- Wr. Klin. Rdsch., Wien.*—Wiener Klinische Rundschau. Organ für die gesante praktische Heilkunde sowie für die Interessen des ärztlichen Standes, red. v. F. Obermeyer und Karl Kunn. Wien. [wöch.] 495 Aus.
- Wr. Med. WochSchr., Wien.*—Wiener Medizinische Wochenschrift, red. v. Heinrich Adler. Wien. 499 Aus.
- Wszechświat, Warszawa*—Wszechświat, tygodnik poświęcony naukom przyrodniczym, red. Br. Znałowicz, Warszawa. 4to. [weekly.] 57 Pol.
- Würzburg, SitzBer. physik. Ges.*—Sitzungsberichte der physikalisch-medicinischen Gesellschaft zu Würzburg. Würzburg. [jähr. in zwangl. H.] 1140 Ger.
- Würzburg, Verh. physik. Ges.*—Verhandlungen der physikalisch-medicinischen Gesellschaft zu Würzburg. Würzburg. [jähr. in zwangl. H.] 1141 Ger.
- Wurzen, Mitt. Gesch-Ver.*—Mitteilungen des Wurzener Geschichts- und Altertumsvereins, hrsg. v. O. E. Schmidt. Wurzen. — Ger.
- Yak, Z., Tokyo.*—Yakugaku zasshi. [Pharmaceutical Magazine.] Tokyo. — Jap.
- Ymer, Stockholm.*—Ymer. Tidskrift utgifven af Svenska Sällskapet för Antropologi och Geografi. Stockholm. 8vo. 61 Swe.

- York, Rep. Phil. Soc.*—Annual Report of the Council of the Yorkshire Philosophical Society, York. 8vo. 431 U.K.
- Yorks. Proc. Geol. Polyt. Soc.*—Proceedings of the Yorkshire Geological and Polytechnic Society, Halifax. 430 U.K.
- Zs. wiss. Zool., Leipzig.*—Zeitschrift für wissenschaftliche Zoologie, hrsg. v. Kölliker u. Ehlers. Leipzig. [8 H. jährl.] 1249 Ger.
- Zagreb, Rad. Jugoslav. Ak.*—Rad Jugoslavske akademije znanosti i umjetnosti. [Transactions of the South Slav Academy of Art and Science.] Zagreb. — Croat.
- Zap. Krymsk. gorn. kluba, Odessa.*—Записки Крымскаго горнаго клуба. Одесса [Mémoires du Club des alpinistes de la Crimée. Odessa]. 379 Rus.
- Zap. lěsn. Suvalsk. okr., Suwalki.*—Записки лѣсничихъ Сувалскаго Округа. Сувалки [Mémoires des forestiers du district de Suwalki]. — Rus.
- Zap. Obšč. selisk. hoz. Južn. Ross., Odessa.*—Записки Императорскаго общества сельскаго хозяйства Южной Россіи. Одесса [Mémoires de la Société Impériale d'Agronomes de la Russie méridionale. Odessa]. 380 Rus.
- Zaragoza Bol. soc. Arag.*—Boletin de la Sociedad Aragonesa de Ciencias Naturales, Zaragoza. — Spain.
- Zdrowie, Warszawa.*—Zdrowie, red. W. Janowski, Warszawa. 8vo. [monthly.] 59 Pol.
- Zemledělec, St. Peterburg.*—Земледѣлецъ. Иллюстрированный Журналъ по сельскому хозяйству и естествознанію. С.-Петербургъ [L'agronome. Journal illustré d'agriculture et de sciences naturelles. St.-Petersbourg.] 449 Rus.
- Zentralbl. Bauverw., Berlin.*—Zentralblatt der Bauverwaltung, red. v. Sarrazin. Berlin. [½ wöch.] 275 Ger.
- Zentralbl. inn. Med., Leipzig.*—Zentralblatt für innere Medicin, red. v. Unverricht. Leipzig. [wöch.] 280 Ger.
- ZentrBl. Physiol., Wien.*—Zentralblatt für Physiologie. Unter Mitwirkung der Physiologischen Gesellschaft zu Berlin und der Morphologisch-Physiologischen Gesellschaft zu Wien hrsg. von R. du Bois-Reymond, O. von Fürth u. A. Kreidl. Wien und Leipzig. [2 wöch.] 510 Aus.
- ZentrBl. Forstwes., Wien.*—Zentralblatt für das gesamte Forstwesen. Organ der k. k. Forstlichen Versuchsanstalt hrsg. von K. Böhmerle u. A. Cieslar. 506 Aus.
- Zool. Ann., Würzburg.*—Zoologische Annalen. Zeitschrift für Geschichte der Zoologie, hrsg. von Max Braun. Würzburg. — Ger.
- Zool. Anz., Leipzig.*—Zoologischer Anzeiger, hrsg. v. Eugen Korschelt. Leipzig. [2-3 Nrn monatl.] 1148 Ger.
- Zool. Beob., Frankfurt a. M.*—Zoologischer Beobachter. Organ der zoologischen Gärten Deutschlands hrsg. v. d. Neuen zoologischen Gesellschaft. Frankfurt a. M. [monatl.] — Ger.
- Zool. Jahrb., Jena.*—Zoologische Jahrbücher, hrsg. v. Spengel. 1. Abt. für Anatomie. 2. Abt. für Systematik. 3. Abt. für allgemeine Zoologie und Physiologie der Tiere. Jena. [Die Abth. 4 H. jährl.] Nebst Supplementen. 1151 Ger.
- Zool. Jahresber., Berlin.*—Zoologischer Jahresbericht, hrsg. v. d. zool. Station zu Neapel, Berlin. [referierend jährl.] 1152 Ger.

- Zoologica, Stuttgart.*—*Zoologica.* Original-Abhandlungen aus dem Gesamtgebiete der Zoologie, hrsg. v. Chun. Stuttgart. [3-4 H. jährl.] 1153 Ger.
- Zoologist, London.*—*The Zoologist, London.* 8vo. 434 U.K.
- Zool. Rec., London.*—*The Zoological Record, London.* 435 U.K.
- Zool. Zentralbl., Leipzig.*—*Zoologisches Zentralblatt*, hrsg. v. Schuberg. Leipzig. [referierend 26 Nrn jährl.] 1149 Ger.
- Zs. allg. Physiol., Jena.*—*Zeitschrift für allgemeine Physiologie*, hrsg. v. Max Verworn. Jena. [unbest.] 1279 Ger.
- Zs. angew. Mikrosk., Leipzig.*—*Zeitschrift für angewandte Mikroskopie und Klinische Chemie* hrsg. v. Marpmann. Leipzig. [monatl.] 1157 Ger.
- Zs. angew. Psychol., Leipzig.*—*Zeitschrift für angewandte Psychologie und psychologische Sammelforschung* hrsg. v. W. Stern u. O. Lipmann. [Erweiterte Fortsetzung der Beiträge zur Psychologie der Aussage.] Leipzig. [zwangl.] — Ger.
- Zs. Augenheilk., Berlin.*—*Zeitschrift für Augenheilkunde*, red. v. Kuhnt u. v. Michel. Berlin. [monatl.] 1160 Ger.
- Zs. Biol., München.*—*Zeitschrift für Biologie*, hrsg. v. O. Frank, M. von Frey u. E. Voit. München. [$\frac{1}{4}$ jährl.] 1168 Ger.
- Zs. biol. Techn., Strassburg.*—*Zeitschrift für biologische Technik und Methodik*, hrsg. v. M. Gildemeister. Strassburg. — Ger.
- Zs. Ethn., Berlin.*—*Zeitschrift für Ethnologie*, red. v. Bartels etc. Berlin. [2 monatl.] Nebst: Nachrichten über deutsche Alterthumskunde. 1181 Ger.
- Zs. exper. Path., Berlin.*—*Zeitschrift für experimentelle Pathologie und Therapie*, hrsg. v. L. Brieger etc. Berlin. [zwangl.] — Ger.
- Zs. Fischerei, Berlin.*—*Zeitschrift für Fischerei und deren Hilfswissenschaften*, hrsg. im Auftrage des Deutschen Fischerei-Vereins von P. Schiemenz und F. Fischer. Berlin. 1280 Ger.
- Zs. Fleischhyg., Berlin.*—*Zeitschrift für Fleisch- und Milchhygiene*, red. v. Ostertag. Berlin. [monatl.] 1183 Ger.
- Zs. Flugtechnik, München.*—*Zeitschrift für Flugtechnik und Motorluftschiffahrt*, Hrsg. u. Schriftl. A. Vorreiter. München. — Ger.
- Zs. Forstw., Berlin.*—*Zeitschrift für Forst- und Jagdwesen.* Berlin. [monatl.] 1184 Ger.
- Zs. Geburtsh., Stuttgart.*—*Zeitschrift für Geburtshilfe und Gynäkologie*, hrsg. v. Olshausen u. Hofmeier. Stuttgart. [6 H. jährl.] 1186 Ger.
- Zs. Getreidew., Berlin.*—*Zeitschrift für das gesamte Getreidewesen.* Technische und wissenschaftliche Monatshefte für Landwirtschaft, Müllerei und Bäckerei, hrsg. V. T. Buchwald und M. P. Neumann. Berlin. — Ger.
- Zs. Hyg., Leipzig.*—*Zeitschrift für Hygiene und Infektionskrankheiten*, hrsg. v. Koch u. Flügge. Leipzig. [8 H. jährl.] 1193 Ger.
- Zs. Immunforsch., Jena.*—*Zeitschrift für Immunitätsforschung und experimentelle Therapie*, hrsg. v. E. Friedberger, R. Kraus, H. Sachs u. P. Uhlenhuth. Jena. [zwangl.] — Ger.
- Zs. indukt. Abstammgslehre, Berlin.*—*Zeitschrift für induktive Abstammungs- und Vererbungslehre*, hrsg. v. C. Correns u. a Berlin. [zwangl.] — Ger.
- Zs. Infektkrankh. Haustiere, Berlin.*—*Zeitschrift für Infektionskrankheiten, parasitäre Krankheiten und Hygiene der Haustiere*, hrsg. v. R. Ostertag. Berlin. [zwangl.] — Ger.
- Zs. Jagdschutzver., Berlin.*—*Zeitschrift des allgemeinen deutschen Jagdschutz-Vereins sowie der deutschen Versuchs-Anstalt für Handfeuerwaffen.* Berlin. 827 Ger.

- Zs. klin. Med., Berlin.*—Zeitschrift für klinische Medizin, red. v. v. Leyden u. Klemperer. Berlin. [15 H. jährl.] 1199 Ger.
- Zs. Kolloide, Dresden.*—Zeitschrift für Chemie und Industrie der Kolloide, hrsg. v. R. Ditmar. Dresden. [monatl.] — Ger.
- Zs. Krebsforschg, Berlin.*—Zeitschrift für Krebsforschung. In Verbindung mit dem klinischen Jahrbuch red. von v. Hansemann und George Meyer. Berlin. [zwangl.] — Ger.
- Zs. Landw. VersWes., Wien.*—Zeitschrift für das Landwirtschaftliche Versuchswesen in Österreich. Vom k. k. Ackerbauministerium subventioniertes Organ für wissenschaftliche Forschung auf dem Gebiete der Landwirtschaft und der landwirtschaftlichen Gewerbe, red. v. E. Meissl etc. Wien, Pest, Leipzig. [monatl.] 520 Aus.
- Zs. Laryng., Würzburg.*—Zeitschrift für Laryngologie, Rhinologie und ihre Grenzgebiete, hrsg. v. F. Blumenfeld. Würzburg. [2 monatl.] — Ger.
- Zs. LehrmWes., Wien.*—Zeitschrift für Lehrmittelwesen und pädagogische Literatur, hrsg. v. Franz Frisch. Wien. [10 H. jährl.] — Aus.
- Zs. Morph., Stuttgart.*—Zeitschrift für Morphologie und Anthropologie, hrsg. v. Schwalbe. Stuttgart. [zwangl.] 1213 Ger.
- Zs. Natw., Leipzig.*—Zeitschrift für Naturwissenschaften. Organ des naturwissenschaftlichen Vereins für Sachsen und Thüringen. Leipzig. [2 monatl.] 1214 Ger.
- Zs. Ohrenheilk., Wiesbaden.*—Zeitschrift für Ohrenheilkunde, hrsg. v. Knapp etc. Wiesbaden. [7 H. jährl.] 1217 Ger.
- Zs. Oologie., Berlin.*—Zeitschrift für Oologie. Organ für Wissenschaft und Liebhaberei. Berlin. 1308 Ger.
- Zs. Pflanzenkrankh., Stuttgart.*—Zeitschrift für Pflanzenkrankheiten, hrsg. v. Sorauer. Stuttgart. [2 monatl.] 1222 Ger.
- Zs. Philos., Leipzig.*—Zeitschrift für Philosophie und philosophische Kritik, hrsg. v. Falckenberg. Leipzig. [¼ jährl.] 1223 Ger.
- Zs. Philos. Päd., Langensalza.*—Zeitschrift für Philosophie und Pädagogik, hrsg. v. Flügel u. Rein. Langensalza. [2 monatl.] 1224 Ger.
- Zs. physik. Chem., Leipzig.*—Zeitschrift für physikalische Chemie, hrsg. v. Ostwald u. van't Hoff. Leipzig. [½ monatl.] 1225 Ger.
- Zs. prakt. Geflüzucht, Jena-Stettin.*—Zeitschrift für praktische Geflügelzucht und Vogelkunde. Stettin. [monatl.] — Ger.
- Zs. Psychol., Leipzig.*—Zeitschrift für Psychologie und Physiologie der Sinnesorgane, hrsg. v. Ebbinghaus und König. Leipzig. [18 H. jährl.] 1229 Ger.
- Zs. Tiermed., Jena.*—Zeitschrift für Tiermedizin, red. v. Albrecht etc. Jena. [2 monatl.] 1234 Ger.
- Zs. Unters. Nahrungsmittel, Berlin.*—Zeitschrift für Untersuchung der Nahrungs- und Genussmittel, hrsg. v. v. Buchka etc. Berlin. [monatl.] 1237 Ger.
- Zs. Veterinärk., Berlin.*—Zeitschrift für Veterinärkunde mit besonderer Berücksichtigung der Hygiene, red. v. Grammlich. Berlin. [monatl.] 1244 Ger.
- Zs. vet. Med., Jurjev.*—Журналъ научной и практической ветеринарной медицины. Юревъ [Zeitschrift wissenschaftlicher und praktischer Veterinärmedizin. Jurjev]. — Rus.
- Zs. wiss. Insektenbiol., Berlin.*—Zeitschrift für wissenschaftliche Insektenbiologie [früher: Allg. Zs. Ent.], hrsg. v. C. Schröder. Berlin. [monatl.] — Ger.
- Zs. wiss. Mikrosk., Leipzig.*—Zeitschrift für wissenschaftliche Mikroskopie und mikroskopische Technik, hrsg. v. Behrens. Leipzig. [¼ jährl.] 1248 Ger.

- Zs. wiss. Zool., Leipzig.*—Zeitschrift für wissenschaftliche Zoologie, hrsg. v. Kölliker u. Ehlers. Leipzig. [8 H. jährl.] 1249 Ger.
- Zs. ZuckInd., Prag.*—Zeitschrift für Zuckerindustrie in Böhmen. Red. v. M. Něvole und Fr. Herles. Prag. [11 H. jährl.] 530 Aus.
- Zürich, Abh. Schweiz. pal. Ges.*—v. Basel, *Abh. Schweiz. pal. Ges.*
- Zürich, Mitt. Schweiz. Forstl. Versuchsw.*—Mitteilungen der schweizerischen Centralanstalt für das forstliche Versuchswesen. Zürich. 8vo. 123 Swi.
- Zürich, Neujahrbl. natf. Ges.*—Neujahrsblatt der Naturforschenden Gesellschaft in Zürich. 4to. — Swi.
- Zürich, Vierteljahrsch. Natf. Ges.*—Vierteljahrschrift der naturforschenden Gesellschaft in Zürich. Zürich und München. 8vo. 125 Swi.
- Žurn. nejrop. psichiatr. imeni Korsakova, Moskva.*—Журналъ нейропатологии и психиатрии имени О. О. Корсакова. Москва [Journal de névrologie et de psychiatrie publié en mémoire de S. S. Korsakoff. Moscou]. 393 Rus.
- Žurn. Obšč. ljub. komn. rast., St. Peterburg.*—Журналъ Общества любителей комнатныхъ растений и аквариумовъ. С.-Петербургъ [Journal de la Société des Amateurs de plantes et d'aquariums. St.-Petersbourg]. 394 Rus.
- Zwickau, Jahresber. Ver. Natk.*—Jahresbericht des Vereins für Naturkunde zu Zwickau. Zwickau. [jährl.] 1253 Ger.

INDEX TO NAMES
OF
NEW GENERA AND SUBGENERA
RECORDED IN THIS VOLUME

(INCLUDING NEW NAMES FOR GENERA PREVIOUSLY ESTABLISHED).*

- | | |
|---|--|
| <i>Acalleoymia Leicester</i> Ins. 387 | <i>Adelomyia Ulmer</i> Ins. 371 |
| <i>Acalorrhynchus Reitter</i> Ins. 238 | <i>Adersia Austen</i> Ins. 395 |
| <i>Acalyptonotus Walter</i> Arach. 36 | <i>Adesha Cameron</i> Ins. 283 |
| <i>Acanthepedanus Roewer</i> Arachn. 30 | <i>Adiastylis Stebbing</i> Crust. 31 |
| <i>Acanthocharax Eigenmann</i> Pisces 37 | <i>Adolfus Sternfeld</i> Rept. 26 |
| <i>Acanthodiscus Uhlig</i> Moll. 97 | <i>Adroctenes Jordan</i> Ins. 423 |
| <i>Acanthognathus Duncker</i> Pisces 43 | <i>Advenardus Reitter</i> Ins. 238 |
| <i>Acantholapitha Cameron</i> Ins. 292 | <i>Aedemoses Walsingham</i> Ins. 365 |
| <i>Acantholiparis Gilbert & Burke</i> Pisces 50 | <i>Aëdomyia Edwards</i> Ins. 387 |
| <i>Acanthonotiphila Lamb</i> Ins. 411 | <i>Aegophagomyia Austen</i> Ins. 395 |
| <i>Acanthopeplus Poppius</i> Ins. 423 | <i>Aenigmina Le Cerf</i> Ins. 313 |
| <i>Acanthoplesiops Regan</i> Pisces 44 | <i>Aenoplegimorpha Viereck</i> Ins. 277 |
| <i>Acanthorutilus Berg</i> Pisces 38 | <i>Aeolochroma Prout</i> Ins. 347 |
| <i>Acarichthys Eigenmann</i> Pisces 46 | <i>Aerophasmus Enderlein</i> Ins. 283 |
| <i>Acarolotes Kieffer</i> Ins. 379 | <i>Aeschradia Hampson</i> Ins. 328 |
| <i>Acatopygia Kröber</i> Ins. 397 | <i>Afrindella Annandale</i> Bry., Brach. 11 |
| <i>Acentrella Bengtsson</i> Ins. 444 | <i>Agasthenopoda Schmiedeknecht</i> Ins. 277 |
| <i>Acentroides Leonhard</i> Ins. 238 | <i>Ageneiogarra Garman</i> Pisces 39 |
| <i>Acestrocephalus Eigenmann</i> Pisces 36 | <i>Agloë Pascher</i> Prot. 57 |
| <i>Acontophiops Sternfeld</i> Rept. 26 | <i>Aglossochloris Prout</i> Ins. 347 |
| <i>Acorduloccridea Rohwer</i> Ins. 295 | <i>Aglummyia Townsend</i> Ins. 407 |
| <i>Acraspisa Kröber</i> Ins. 397 | <i>Agmus Eigenmann</i> Pisces 40 |
| <i>Acroblapticus Schmiedeknecht</i> Ins. 277 | <i>Agoschema Prout</i> Ins. 347 |
| <i>Acrobolbia Ohaus</i> Ins. 223 | <i>Agrippina Strickland</i> Prot. 52 |
| <i>Acropivesa Schmidt</i> Ins. 428 | <i>Agromyzaphagus Gahan</i> Ins. 287 |
| <i>Athortia Kröber</i> Ins. 397 | <i>Agylloides Strand</i> Ins. 315 |
| <i>Actinocyclus Schrammen</i> Por. 5 | <i>Aioretomyia Leicester</i> Ins. 387 |
| <i>Actinoscelis Meyrick</i> Ins. 365 | <i>Alatanadata Strand</i> Ins. 315 |
| <i>Actoceles Enderlein</i> Ins. 412 | <i>Albanites Arthaber</i> Moll. 97 |
| <i>Acunotus Reitter</i> Ins. 238 | <i>Aldrovandia Enderlein</i> Ins. 390 |
| <i>Acupalpa Kröber</i> Ins. 397 | <i>Aldrovandiella Enderlein</i> Ins. 390 |
| <i>Adelodus Hermann</i> Ins. 398 | <i>Alectridium Gilbert & Burke</i> Pisces 48 |

* The total number of names in this index is 2,275; distributed as follows, viz.:—Protozoa 60; Porifera 36; Coelenterata 17; Echinodermata 43; Vermidea 68; Brachiopoda 3; Bryozoa 5; Mollusca 117; Crustacea 81; Arachnida 90; Myriopoda 37; Insecta 1,495; Prochordata 5; Pisces 87; Reptilia and Batrachia 18; Aves 82; Mammalia 31. The total last year was 1,841.

- Alenella Strand* Ins. 315
Alenophalera Strand Ins. 315
Aleptinoides Barnes & McDunnough
 Ins. 329
Aloutinops Reitter Ins. 238
Aloxandrella Chevreux Crust. 34
Alexiola Suvorov Ins. 238
Alfaro Meek Pisces 43
Alisteranus Mathews Aves 133
Alisterornis Mathews Aves 125
Allantidea Rohwer Ins. 295
Allarthrum Hagedorn Ins. 244
Allochiton Fucini Moll. 59
Allochrosis Strand Ins. 347
Allochrostes Prout Ins. 347
Allodiplosis Rübsaamen Ins. 379
Allodontermes Silvestri Ins. 440
Allomengea Strand Arachn. 26
Allopeza Bergroth Ins. 420
Allopheidole Forel Ins. 269
Allorhogas Gahan Ins. 283
Alluropus Silvestri Myr., Arachn. 42
Alopecorhinus Broom Rept. 30
Alophorella Townsend Ins. 407
Alpheoides Barnes & McDunnough
 Ins. 355
Amalopina Brunetti Ins. 390
Amathomyia Hermann Ins. 398
Amaurosiphon Rübsaamen Ins. 379
Ambages Gude Moll. 79
Ambalangoda Distant Ins. 428
Amberbakia Distant Ins. 431
Amblardiella Kieffer Ins. 379
Amesicrium Enderlein Ins. 382
Ametrodiplosis Rübsaamen Ins. 379
Amidorinus Kožančikov Ins. 220
Amioides Radcliffe Pisces 45
Ammelaphus Heller Mamm. 48
Ammosphaerulina Cushman Prot. 49
Amosilnus Reitter Ins. 238
Amphecostephanus Rehn. Ins. 450
Amphielada Meyrick Ins. 365
Anapausis Enderlein Ins. 390
Anaretella Enderlein Ins. 382
Anarpia Chapman Ins. 355
Anchicolurus Stebbing Crust. 31
Anchonoeranus Marshall Ins. 239
Anciliplana Heath & McGregor Verm. 31
Ancistrotermes Silvestri Ins. 440
Aneylocoelium Nicoll Verm. 32
Andinomyia Townsend Ins. 407
Andrarian Godwin-Austen Moll. 77
Andremiopsis Chatanay Ins. 233
Androclasma Enderlein Ins. 391
Andromina Navás Ins. 444
Aneflomorpha Casey Ins. 246
Anepilecta Warren Ins. 329
Anepsyra Casey Ins. 246
Aneurothrips Karny Ins. 436
Angustispira Pelseneer Moll. 72
Aniarella Enderlein Ins. 382
Animasaurus Case & Williston Rept. 29
Anisitsia Viereck Ins. 277
Anisopteromalus Ruschka Ins. 287
Anocomis Casey Ins. 246
Anomalaria Dahl Arachn. 26
Anomalosipho Dautzenberg & Fischer
 Moll. 62
Anopistoscena Enderlein Ins. 439
Anoplogomphus Prell Ins. 224
Anotodonta Strand Ins. 315
Ansorgia Boulenger Pisces 40
Antabhoga Distant Ins. 428
Antennalia Casey Ins. 246
Anthraconeilo Girty Moll. 89
Antichira Rübsaamen Ins. 379
Antichiridium Rübsaamen Ins. 379
Antipaluria Enderlein Ins. 442
Antiurus Ridgway Aves 112
Antoniaustralia Becker Ins. 401
Antrogastra Bernhauer Ins. 209
Antrosedes Reitter Ins. 215
Apatagium Enderlein Ins. 277
Apegusoneura Cameron Ins. 292
Apelmocreagris Enderlein Ins. 382
Aphrania Jordan & Rothschild Ins. 423
Aphyodite Eigenmann Pisces 37
Apicotermes Holmgren Ins. 440
Apilitermes Holmgren Ins. 440
Apioeicoceras Becker Ins. 397
Apiomorphus Wagner Ins. 239
Apiomyia Kieffer Ins. 379
Apistops Ogilby Pisces 49
Aplonyx De Stefani Perez Ins. 379
Apocera Schaus Ins. 355
Apollenia Bezzi Ins. 407
Apophthegma Handlirsch Ins. 449
Aproaspidops Annandale Rept. 28
Apsylla Crawford Ins. 432
Apygoplus Roewer Arachn. 30
Arachnanthus Carlgren Coel. 14
Arammichnasus Reitter Ins. 238
Aranihus Reitter Ins. 238
Archaeobalbis Prout Ins. 348
Archaeocrunoecia Ulmer Ins. 371
Archaeoneureolipsis Ulmer Ins. 371
Archactinodes Ulmer Ins. 371
Archaulus Gilbert & Burke Pisces 49
Ardonipsa Dyar Ins. 316
Arduenna Railliet & Henry Verm. 42
Arenobius Chamberlin Myr., Arachn. 42
Arenophilus Chamberlin Myr., Arachn. 42
Argentinoeme Bruch Ins. 246
Argyrocoris Van Duzee Ins. 423
Argyrographa Prout Ins. 348
Argyrotelaenus Reuter & Poppius Ins. 423
Arianites Arthaber Moll. 97
Arigorytes Rohwer Ins. 265
Aristopeplus Poppius Ins. 423
Arkansia Ortman & Walker Moll. 89

- Armatocillenus *Dupuis* Ins. 204
 Arnoldina *Hannibal* Moll. 89
 Arrup *Chamberlin* Myr., Arachn. 42
 Arsaciodes *Schaus* Ins. 330
 Artapocyrtus *Heller* Ins. 240
 Arytrura *Zahn* Ins. 330
 Ascometra *Cholodkovskij* Verm. 34
 Ashmeadopria *Kieffer* Ins. 292
 Asidina *Casey* Ins. 234
 Asidopsis *Casey* Ins. 234
 Asphaerorrhynchus *Reitter* Ins. 238
 Aspiopsis *Zugmayer* Pisces 38
 Astenocypris *Müller* Crust. 43
 Asternaulax *Viereck* Ins. 277
 Asthenoteuthion *Pfeffer* Moll. 98
 Astochia *Becker* Ins. 399
 Astrochlamys *Kochler* Echin. 52
 Atanycolidea *Viereck* Ins. 283
 Ateleobranchium *Gilbert & Burke* Pisces
 43
 Athleta *Walsingham* Ins. 365
 Atopocrius *Clark* Echin. 54
 Atopodon *Forel* Ins. 270
 Atopula *Emery* Ins. 270
 Aulacomyia *Ulmer* Ins. 371
 Auophyllodes *Prout* Ins. 348
 Australophion *Morley* Ins. 277
 Austrartamus *Mathews* Aves 124
 Austrochaperina *Fry* Rept. 31
 Austrostigmus *Turner* Ins. 265
 Austrothemis *Ris* Ins. 445
 Autanthema *Warren* Ins. 330
 Automolina *Hermann* Ins. 399
 Avia *Navás* Ins. 374
 Axechina *Hentschell* Por. 8

 Babina *Thompson* Rept. 30
 Bactrochalcis *Kieffer* Ins. 287
 Bactropus *Gravier* Crust. 39
 Bactrothrips *Karny* Ins. 436
 Baeoprymna *Cameron* Ins. 263
 Balaga *Navás* Ins. 374
 Balanobothrium *Hornell* Verm. 34
 Baliga *Navás* Ins. 374
 Balioxena *Meyrick* Ins. 363
 Bankisus *Navás* Ins. 374
 Banyutus *Navás* Ins. 374
 Baramia *Hirst* Arachn. 30
 Barbouria *Rathbun* Crust. 29
 Barlacus *Fairmaire* Ins. 234
 Barunoides *Distant* Ins. 428
 Basidechenella *Richter* Arachn. 6
 Basidentitermes *Holmgren* Ins. 440
 Bathropsis *Hermann* Ins. 399
 Bathycolpodes *Prout* Ins. 348
 Batyleoma *Casey* Ins. 247
 Beatites *Arthaber* Moll. 98
 Beatragus *Heller* Mamm. 48
 Belchera *Mathews* Aves 117
 Belonalys *Kröber* Ins. 397
 Benjaminia *Viereck* Ins. 277
 Benthoscolex *Horst* Verm. 51
 Besobarvus *Reitter* Ins. 238
 Bessacta *Warren* Ins. 331
 Bidentia *Walcott* Crust. 37
 Bijaurana *Distant* Ins. 426
 Billimuna *Strand* Arachn. 28
 Bistica *Dyar* Ins. 331
 Bistramia *Hoek* Brach. 5
 Bivibranchia *Eigenmann* Pisces 37
 Blaesoxiphella *Villeneuve* Ins. 407
 Blanchardiomyia *Brunetti* Ins. 388
 Blandex *Burr* Ins. 448
 Blanfordia *Uhlig* Moll. 98
 Blantyreia *Rocwer* Arachn. 30
 Blastodiplosis *Kieffer* Ins. 379
 Blechromopsis *Warren* Ins. 348
 Boancerges *Thayer & Bangs* Aves 135
 Bolitesia *Schrammen* Por. 6
 Bombotelia *Hampson* Ins. 331
 Boriesia *Doncieux* Moll. 96
 Bothrasida *Casey* Ins. 234
 Bothryopterum *Wagner* Ins. 240
 Botrucnidifer *Carlgrén* Coel. 14
 Botryosella *Schrammen* Por. 6
 Bowyeria *Mathews* Aves 124
 Brachixiphosoma *Viereck* Ins. 277
 Brachychaetuma *Verhoeff* Myr.,
 Arachn. 44
 Brachydiastylis *Stebbing* Crust. 31
 Brachydiplosis *Rübsaamen* Ins. 379
 Brachyglanis *Eigenmann* Pisces 40
 Brachygonarea *Ribaut* Myr., Arachn. 43
 Brachygramma *Girault* Ins. 287
 Brachyostracon *Brown* Mamm. 53
 Brachysaccus *Johnston* Verm. 32
 Brachysymbola *Meyrick* Ins. 365
 Brannerillus *Hannibal* Moll. 68
 Braunsomeria *Turner* Ins. 265
 Bregmatothrips *Hood* Ins. 436
 Brevicella *Kenrick* Ins. 356
 Brookula *Iredale* Moll. 73
 Bryna *Evans* Ins. 308
 Buccinella *Thiele* Moll. 62
 Bucculatriplex *Viereck* Ins. 283
 Buddelundia *Michaelsen* Crust. 34
 Bueacola *Sjöstedt* Ins. 453
 Burgessia *Walcott* Crust. 37
 Burnupia *Walker* Moll. 84
 Buwatia *Chamberlin* Myr., Arachn. 44
 Byrsophrys *Enderlein* Ins. 404
 Bytosmesus *Reitter* Ins. 238

 Cabralis *Navás* Ins. 375
 Cacochloris *Prout* Ins. 348
 Caenosynteles *Dyar* Ins. 348
 Caenozona *Kröber* Ins. 397
 Calliades *Mabille & Boulet* Ins. 311
 Calliblennius *Barbour* Pisces 48
 Callibrochis *Schrammen* Por. 6

- Callibryastis Meyrick* Ins. 363
Callicylix Schrammen Por. 6
Callimastix Weissenberg Prot. 57
Callimico Ribeiro Mamm. 39
Calliscyllium Tanaka Pisces 33
Callisteuma Prout Ins. 348
Caloderella Bernhauer Ins. 209
Calogalesus Kieffer Ins. 292
Caloscirtus Bruner Ins. 455
Calyozina Enderlein Ins. 292
Calyptrella Schrammen Por. 6
Cambarincola Ellis Verm. 54
Campbellornis Mathews Aves 124
Campoctonus Viereck Ins. 277
Campoletidea Viereck Ins. 277
Campomyrma Wheeler Ins. 270
Campoplegidea Viereck Ins. 277
Camptodiplosis Kieffer Ins. 379
Camptozada Hampson Ins. 332
Canaria Becker Ins. 401
Cantharoctonus Viereck Ins. 283
Carazzoides Grandori Crust. 40
Cardenius Bolivar Ins. 455
Cardiocladus Kieffer Ins. 386
Caridinicola Annandale Verm. 31
Caridinopsis Bouvier Crust. 29
Carnarvonina Walcott Crust. 36
Carruthersella Garwood Coel. 14
Carterornis Mathews Aves 118
Caspionema Derzhavin Coel. 11
Castronia Jones Ins. 317
Cataclinoneurum Becker Ins. 397
Catantopsis Bolivar Ins. 455
Catarata Walsingham Ins. 365
Catataxis Kertész Ins. 395
Cathydata Prout Ins. 348
Catoxyethira Ulmer Ins. 371
Caulocampus Rohwer Ins. 295
Celebothemis Ris Ins. 445
Celidomphax Prout Ins. 348
Cenochromyia Hermann Ins. 399
Centistina Enderlein Ins. 283
Centorisoma Becker Ins. 412
Centracontium Popofsky Prot. 51
Centrechinus Jackson Echin. 37
Centrobiella Girault Ins. 287
Centrochlora Dyar Ins. 333
Centrolonche Popofsky Prot. 51
Cephalochrysa Kertész Ins. 395
Cephalopsis Townsend Ins. 406
Cephalotermes Silvestri Ins. 440
Ceratosciara Enderlein Ins. 382
Ceratoporella Hickson Coel. 13
Cerdelcus Reitter Ins. 238
Ceriantheopsis Carlgren Coel. 14
Cerithiopsilla Thiele Moll. 65
Cerocyphonistes Prell Ins. 224
Cervibunus Roewer Arachn. 30
Cestobrissus Lambert Echin. 37
Cestradoretus Ohaus Ins. 223
Cestropsis Townsend Ins. 408
Ceylonitermes Holmgren Ins. 441
Chactopsis Kraepelin Arachn. 25
Chaetomyia Leicester Ins. 388
Chaetoneurophora Malloch Ins. 404
Chaetophorocera Townsend Ins. 408
Chaetophorus Fuchs Ins. 244
Chaetosisyrops Townsend Ins. 408
Chaetothrips Schille Ins. 437
Chagasella Machado Prot. 53
Chalciosphaerium Enderlein Ins. 219
Chalcorychus Handlirsch Ins. 443
Chalipecten Strand Ins. 317
Chamaigenes Eigenmann Pisces 40
Charibditeuthis Vivanti Moll. 98
Charopsimorpha Viereck Ins. 278
Chasarocuma Derzhavin Crust. 31
Chasmocranus Eigenmann Pisces 40
Chaubattiana Distant Ins. 418
Chelonorhogas Enderlein Ins. 284
Cheroscelis Prout Ins. 348
Cheteoscelis Prout Ins. 348
Chionanthobius Pierce Ins. 240
Chiridioteuthis Pfeffer Moll. 98
Chironax Andersen Mamm. 40
Chlamydamoeba Collin Prot. 47
Chloethripa Hampson Ins. 333
Chloriola Hampson Ins. 333
Chlorogaster Duboscq Crust. 44
Chlorohippus Bruner Ins. 455
Chloronesia Townsend Ins. 408
Chloroparda Prout Ins. 349
Chlorophytis Meyrick Ins. 366
Chloroplaga Hampson Ins. 333
Chlorosterrha Prout Ins. 349
Chlorozada Hampson Ins. 333
Chlorozancla Prout Ins. 349
Choilisanus Reitter Ins. 238
Chordeuma Jungersen Crust. 40
Chromeurytoma Cameron Ins. 288
Chrotogale Thomas Mamm. 42
Chrysaegliodes Strand Ins. 317
Chrysanthemya Becker Ins. 397
Chrysoxena Meyrick Ins. 363
Chtonolasius Ruzskij Ins. 270
Chytriodinium Chatton Prot. 61
Cinclidella Schrammen Por. 6
Cipangopaludina Hannibal Moll. 68
Cirorrhynchus Reitter Ins. 238
Cirrhigaleus Tanaka Pisces 33
Cirrodistis Dyar Ins. 333
Cissophyllus Railliet & Henry Verm. 42
Cistugo Thomas Mamm. 40
Cladiscophleps Enderlein Ins. 412
Cladophyllus Houlbert Ins. 220
Cliopectera Williams Moll. 86
Cluthaira Cameron Ins. 288
Clydonodzus Enderlein Ins. 391
Clytoleptus Casey Ins. 247
Cnemidocarpa Huntsman Proch. 6

- Cnephalodopsis Townsend* Ins. 408
Cnephalomyia Townsend Ins. 408
Coarctatotermes Holmgren Ins. 441
Coccidoctonus Crawford Ins. 288
Coccimyxoides Lo Giudice Prot. 55
Coelobranchus Izuka Verm. 51
Coelodontus Roman Ins. 284
Coelopterapion Wagner Ins. 240
Coenocentrotus Clark Echin. 38
Coleia Mathews Aves 129
Collacerothorax Lea Ins. 213
Collinia Kieffer Ins. 380
Colobopyga Bréthes Ins. 435
Colonemyia Leicester Ins. 388
Colposelandria Enslin Ins. 295
Columbaeris Bruner Ins. 455
Comastroerinus Clark Echin. 56
Conflata Schmidt Ins. 428
Coniophyrta Breddin Ins. 422
Conopomyia Leicester Ins. 388
Conulopsis Hawkins Echin. 39
Coptocatus Montandon Ins. 426
Coptottigia Bolivar Ins. 455
Coriantipus Bergroth Ins. 421
Coripareius Garman Pisces 39
Corsocasis Meyrick Ins. 366
Cosina Navás Ins. 375
Costolimnaea Dybowski Moll. 84
Cotocripus Bréthes Ins. 386
Courteia Kieffer Ins. 380
Courtella Kieffer Ins. 288
Craterocephalus McCulloch Pisces 47
Cratodecatoma Cameron Ins. 288
Cremastidea Viereck Ins. 278
Cremnomys Wroughton Mamm. 45
Crenetermes Silvestri Ins. 441
Crepidaspis Spaeth Ins. 252
Crepidopachys Enderlein Ins. 404
Cricothrips Trybom Ins. 437
Crioceridea Wickham Ins. 252
Crioceridea Van Duzee Ins. 424
Cristallosphaera Popofsky Prot. 51
Crossotides Hintz Ins. 247
Crossotofrea Hintz Ins. 247
Cruriopsis Jordan Ins. 318
Crusimetra Meyrick Ins. 363
Cryptochrysis Pascher Prot. 57
Cryptomysis Hansen Crust. 30
Cryptoptilum, Rehn & Hebard Ins. 452
Cryptothripa Hampson Ins. 334
Cryptovenia Bolton Ins. 447
Ctenacroscelis Enderlein Ins. 391
Ctenocyphonistes Prell Ins. 224
Ctenothea Prout Ins. 349
Culpinia Prout Ins. 349
Cumberlandia Ortman Moll. 90
Curtocephalus Fleutiaux Ins. 228
Cyanonedys Hermann Ins. 399
Cyathocormus Oka Proch. 6
Cyclidiosoma Janson Ins. 225
Cyclobothrium Southwell Verm. 34
Cyclolumpus Tanaka Pisces 49
Cyclometra Clark Echin. 57
Cylophorus Eysell Ins. 388
Cyelorhipidion Hagedorn Ins. 244
Cylostigma Schrammen Por. 6
Cyclothea Prout Ins. 349
Cymatozus Enderlein Ins. 412
Cymodusopsis Viereck Ins. 278
Cyncoterpna Prout Ins. 349
Cynodobracon Cameron Ins. 284
Cyropocilus Regan Pisces 42
Cystodinium Klebs Prot. 61
Cystopomatus Gravier Verm. 51

Daetylostylis Richardson Crust. 33
Dahlia Enderlein Ins. 383
Daetimorpha Viereck Ins. 278
Darwinella Enderlein Ins. 234
Dastilbe Jordan Pisces 35
Dasycapsus Poppius Ins. 424
Dasycosymbia Grossbeck Ins. 349
Dasymyia Leicester Ins. 388
Dasynephila Dahl Arachn. 26
Dasyurotaenia Beddard Verm. 34
Daveyia Lea Ins. 214
Decapheidole Forel Ins. 271
Decaturia Barnes & McDunnough Ins. 356
Deferunda Distant Ins. 428
Delfimeus Navás Ins. 375
Delhandus Reitter Ins. 238
Delhina Distant Ins. 428
Dendrolasius Ruzskij Ins. 271
Dendromoneron Verhoeff Myr., Arachn. 45
Dendrouterina Führmann Verm. 34
Denhama Werner Ins. 450
Derallimus Caudell Ins. 453
Dermatias Radcliffe Pisces 51
Derogenoides Nicoll Verm. 32
Desmocoeraerula Strand Ins. 318
Desmomyia Brunetti Ins. 396
Deuteragenia Suster Ins. 266
Diaulinopsis Crawford Ins. 288
Dibredus Reitter Ins. 238
Diceraopsylla Crawford Ins. 432
Dichodiplosis Rübsaamen Ins. 380
Dieranocentroides Imms Ins. 459
Dietyaster De Stefani Echin. 39
Digonogastra Viereck Ins. 284
Dihexaclonus Enderlein Ins. 391
Dihyboecereus Enderlein Ins. 442
Dindicodes Prout Ins. 349
Dineterogomphus Prell Ins. 224
Dineuridea Rohwer Ins. 295
Dinosphaera Kofoid & Michener Prot. 61
Diopsittaca Ridgway Aves 110

- Dipaustica Meyrick* Ins. 334
Diplodinium Klebs Prot. 61
Diplogale Thomas Mamm. 42
Diplogasteroides Man Verm. 42
Dipluerina Chapman Ins. 357
Dipteropeltis Calman Crust. 42
Dirona MacFarland Moll. 76
Dirrhinoidea Girault Ins. 288
Dispharynx Railliet, Henry & Sisoff
 Verm. 42
Dispongia Popofsky Prot. 51
Dissmeryngodes Hermann Ins. 399
Ditrichocorycaeus Dahl Crust. 40
Diversitermes Holmgren Ins. 441
Djeboa Viets Arachn. 36
Djiboutia Vayssière Moll. 71
Dolaea Oudemans Arachn. 33
Dolichohippus Heller Mamm. 51
Dolichosaccus Johnston Verm. 32
Dolichostoma Townsend Ins. 408
Dolichothrips Karny Ins. 437
Dolidiria Busck Ins. 366
Dolosis Prout Ins. 349
Doratopsylla Jordan & Rothschild Ins.
 417
Dormeyeria Enderlein Ins. 206
Doryctophasmus Enderlein Ins. 284
Doryphorophaga Townsend Ins. 408
Doryctuthis Naef Moll. 99
Dostacabus Reitter Ins. 238
Dounia Strand Prot. 53
Doxa Walsingham Ins. 366
Doxomysis Hansen Crust. 30
Dugastella Bouvier Crust. 29
Dulciornis Mathews Aves 122
Dunama Schaus Ins. 319
Dunkeriana Roewer Arachn. 30
Durgades Distant Ins. 431
Dyacoferus Andersen Mamm. 40
Dyodiplosis Rübsaamen Ins. 380
Dyottornis Mathews Aves 129
- Ecballogonia Walsingham* Ins. 366
Ecchaunornis Ridgway Aves 114
Ecestomus Reitter Ins. 238
Echidnogryllacris Griffini Ins. 453
Echinobunus Roewer Arachn. 30
Echinuria Solovjev Verm. 42
Ecoptolonthus Bernhauer Ins. 210
Ecoptosoma Gebien Ins. 234
Ectactia Enderlein Ins. 390
Ectaga Walsingham Ins. 366
Ectemnostega Enderlein Ins. 426
Ectetamenochir Enderlein Ins. 284
Echetopyga Pierce Ins. 241
Ectophasia Townsend Ins. 408
Ectopimorpha Viereck Ins. 278
Ectopioglossa Perkins Ins. 263
Ecuadorana Townsend Ins. 408
- Edelengus Reitter* Ins. 238
Eggysodon Roman Mamm. 51
Egydelenus Reitter Ins. 238
Eichochoitophorus Essig Ins. 433
Eilithyia Distant Ins. 428
Eiolo Cameron Ins. 284
Eipeliella Schumacher Ins. 418
Ekdiastylis Stebbing Crust. 32
Ekleptostylis Stebbing Crust. 32
Ekrinomyia Leicester Ins. 388
Elachertoidea Girault Ins. 288
Elaphaspis Bezzi Ins. 413
Elassodiscus Gilbert & Burke Pisces 50
Elchranus Reitter Ins. 238
Electracanthinus Ulmer Ins. 372
Electragapetus Ulmer Ins. 372
Electraulax Ulmer Ins. 372
Electrocercum Ulmer Ins. 372
Electrocrunoecia Ulmer Ins. 372
Electrodiplectrona Ulmer Ins. 372
Electrographa Meyrick Ins. 366
Electrohelicopsyche Ulmer Ins. 372
Electropsilotes Ulmer Ins. 372
Electrotrichia Ulmer Ins. 372
Elegistis Meyrick Ins. 366
Elemana Distant Ins. 419
Elleipsisema Franca Prot. 53
Elvandrinus Reitter Ins. 238
Emeraldella Walcott Arachn. 8
Emeryopone Forel Ins. 271
Empheriella Enderlein Ins. 439
Emydochampsia Broom Rept. 30
Emydops Broom Rept. 30
Enchastes Lamb Ins. 413
Enderleinellus Fahrenholz Ins. 436
Enderleiniella Becker Ins. 413
Endocrypta Fraser Cocl. 11
Energia Walsingham Ins. 366
Enigmomorphus Hermann Ins. 399
Enneascelio Kieffer Ins. 293
Enoditis Meyrick Ins. 363
Enoplocotyle Tagliani Verm. 32
Enoploides Saveljev Verm. 42
Enoploion Pfeffer Moll. 99
Eochlaenius Semenov Ins. 206
Eomymar Perkins Ins. 292
Eosuchus Watson Rept. 30
Epalpodes Townsend Ins. 408
Epaphrodites Hermann Ins. 399
Ephierodula Giglio-Tos Ins. 450
Ephippicoris Poppius Ins. 424
Epiaphelops Cook Mamm. 51
Epichlorops Becker Ins. 413
Epicrisias Dyar Ins. 319
Epidexia Townsend Ins. 408
Epilamyra Becker Ins. 399
Epimasicera Townsend Ins. 408
Epistethe Preston Moll. 75
Eprahenus Reitter Ins. 238
Eremadoretus Ohaus Ins. 223

- Eremotermes Silvestri* Ins. 441
Ergiferanus Reitter Ins. 238
Eribolus Becker Ins. 413
Erigonopsis Townsend Ins. 408
Erpetosuchus Moodie Rept. 32
Eryciniola Strand Arachn. 27
Estenalla Navás Ins. 375
Ethclornis Mathews Aves 117
Ethopolys Chamberlin Myr., Arachn. 43
Euacemyia Townsend Ins. 408
Euantedon Clark Echin. 57
Eubocorix Roewer Arachn. 30
Euceromasia Townsend Ins. 408
Eucopidocaulus Prell Ins. 224
Eucrotus Bean Pisces 47
Eucurtia Mjöberg Ins. 216
Eucystomastax Brues Ins. 284
Eudasytites Wickham Ins. 231
Eudechnella Richter Arachn. 7
Eudejeania Townsend Ins. 408
Eudoria Chapman Ins. 357
Eueana Prout Ins. 350
Euexorista Townsend Ins. 408
Eugnathia Warren Ins. 335
Eugymnochaeta Townsend Ins. 408
Euhamitermes Holmgren Ins. 441
Euheterospila Strand Ins. 335
Euicrium Enderlein Ins. 383
Eujivarus Bruner Ins. 455
Eumastusia Bruner Ins. 455
Eumetula Thiele Moll. 65
Eunihus Reitter Ins. 238
Eupachyrrhynchus Heller Ins. 241
Eupackardia Cockerell Ins. 320
Euparaphyto Townsend Ins. 408
Euparmacella Simroth Moll. 77
Euphyeus Kröber Ins. 397
Euphyonarthex Schmidt Ins. 428
Eupodauchenius Roewer Arachn. 30
Euprosopis Perkins Ins. 259
Eupsilocephala Kröber Ins. 397
Eurhinocola Crawford Ins. 432
Eurycamptus Morley Ins. 279
Euryconus Aulmann Ins. 432
Euryleptodes Heath & McGregor Verm. 31
Eurymen Gilbert & Burke Pisces 49
Euryphora Horváth Ins. 427
Euryschalis Brunetti Ins. 383
Euselenomyia Townsend Ins. 408
Eusitalces Bruner Ins. 456
Eusomalina Casey Ins. 219
Eussoia Preston Moll. 68
Eutermellus Silvestri Ins. 441
Eutheganopteryx Shelford Ins. 449
Euthelaira Townsend Ins. 408
Euthersia Townsend Ins. 408
Euza Navás Ins. 375
Euzenilla Townsend Ins. 409
Evius Moreira Crust. 27
Evynnis Jordan & Thompson Pisces 45
Exala Meyrick Ins. 367
Excirrolana Richardson Crust. 33
Exmerodon Becker Ins. 406
Exochoblastus Schmiedeknecht Ins. 279
Eyramytis Mathews Aves 124

Fadrina Navás Ins. 375
Falcatulula Strand Ins. 320
Feltiella Rübsaamen Ins. 380
Fiebrigia Viereck Ins. 279
Fieldia Walcott Crust. 36
Fisherola Hannibal Moll. 84
Fissilamoncodes Pic Ins. 236
Folia Mayer Coel. 15
Foliaceiscala De Boury Moll. 71
Fondajenus Reitter Ins. 238
Foordella Longstaff Moll. 74
Foraminitermes Holmgren Ins. 441
Forculus Distant Ins. 428
Franklinothrips Back Ins. 437
Frogettornis Mathews Aves 100
Fronnia Viguier Verm. 52
Freopsis Hintz Ins. 248
Frieronia Ortmann Moll. 87
Fricsecomelitta Ihering Ins. 259
Frovina Thiele Moll. 67
Fryeria Bolivar Ins. 452
Fullawayia Essig Ins. 433
Fumua Schouteden Ins. 420
Fustigerinus Wasmann Ins. 214

Gagatellus Fleutiaux Ins. 228
Gahrlicpia Oudemans Arachn. 34
Gainella Chevreux Crust. 35
Galeops Broom Rept. 30
Gallicana Lallemand Ins. 430
Gama Navás Ins. 375
Gamma Zavattari Ins. 263
Gampsonycha Bernhauer Ins. 210
Gandulus Navás Ins. 375
Gangaridopsis Grünberg Ins. 320
Ganguilus Navás Ins. 375
Ganocapsus Van Duzee Ins. 424
Ganussa Navás Ins. 376
Gargettoscrancia Strand Ins. 320
Garleppa Roewer Arachn. 31
Gastroplakacna Strand Ins. 320
Gastrothrips Hood Ins. 437
Gaullea du Buysson Ins. 276
Gecana Swinhoe Ins. 311
Geisonhoynoria Rübsaamen Ins. 380
Geitonomyia Leicester Ins. 388
Genycharax Eigenmann Pisces 36
Geomerinus Brölemann Myr., Arachn. 43
Gephyrocharax Eigenmann Pisces 36
Gephyrometra Clark Echin. 57
Gephyromma Enderlein Ins. 383

- Gepus Navás* Ins. 376
Geropa Casey Ins. 248
Gerutha Budde-Lund Crust. 34
Gesneriella Villeneuve Ins. 409
Ghagasella Machado Prot. 53
Gigantothoa Prout Ins. 350
Gilbertornis Mathews Aves 125
Glandulocauda Eigenmann Pisces 36
Glaphyropus Rehn & Hebard Ins. 452
Glaucocrinus Parks & Alcock Echin. 57
Glironia Thomas Mamm. 53
Globibunus Roewer Arachn. 31
Globitermes Holmgren Ins. 441
Glyphotoma Cameron Ins. 289
Glyptasida Casey Ins. 234
Glyptothrips Hood Ins. 437
Gnathomerium Rebaut Myr., Arachn. 43
Gnathonophorus Schmiedeknecht Ins. 279
Gnathoplasma Enderlein Ins. 413
Gnathoprosopis Perkins Ins. 260
Gnophosema Prout Ins. 350
Goethalsia Nelson Aves 113
Golafrus Navás Ins. 376
Gombora Schouteden Ins. 421
Gonasida Casey Ins. 234
Goneccalypsis Hermann Ins. 399
Goniocalpe Hampson Ins. 336
Goniocarpa Huntsman Proch. 6
Gonioxestris Hampson Ins. 336
Gosibius Chamberlin Myr., Arachn. 43
Gosiphilus Chamberlin Myr., Arachn. 43
Grahamella Brumpt Prot. 56
Grallatotermes Holmgren Ins. 441
Grammopsittaca Ridgway Aves 110
Granobunus Roewer Arachn. 31
Granularion Germain Moll. 77
Gravieria Vayssière Moll. 76
Greenomyia Brunetti Ins. 383
Gribodia Zavattari Ins. 264
Grippina Dall Moll. 95
Grossbeckia Barnes & McDunnough Ins. 350
Gryllapterus Bolivar Ins. 452
Gryposoba Hampson Ins. 336
Guambius Chamberlin Myr., Arachn. 43
Guanchia Burr Ins. 448
Guasacris Sjöstedt Ins. 452
Guignonia Kieffer Ins. 380
Gumilla Navás Ins. 376
Gumnoclinus Gilbert & Burke Pisces 48
Gussonea Monterosato Moll. 63
Gymnandrosoma Dyar Ins. 363
Gymnobranchichthys Eigenmann Pisces 38
Gymnodinioides Minkiewicz Prot. 62
Gyrocraepedum Becker Ins. 401
Gyrophthalmus Becker Ins. 397
Gyrtonides Hampson Ins. 337
Gyrtothripa Hampson Ins. 337
Habelia Walcott Arachn. 8
Habrobraconidea Viereck Ins. 279
Habrochila Horváth Ins. 421
Habrosium Schrammen Por. 6
Haeckoliani Girault Ins. 289
Hagiomyrma Wheeler Ins. 272
Hallomyia Kieffer Ins. 380
Hallornis Mathews Aves 123
Halosalda Reuter Ins. 425
Halterina Navás Ins. 376
Hamannia Ruilliet, Henry & Sisoff Verm. 43
Hamotocellus Raffray Ins. 214
Hanibotus Reitter Ins. 238
Hanoniscus Búdde-Lund Crust. 34
Hapalogenius Hagedorn Ins. 244
Hapalopegma Schrammen Por. 6
Hapalopsittaca Ridgway Aves 110
Haplocampa Silvestri Ins. 458
Haplodiplosis Rübsaamen Ins. 380
Haploparaskis Cholodkovskij Verm. 34
Haplophryne Regan Pisces 52
Harpinorrhynchus Reitter Ins. 238
Harpoyoluta Thiele Moll. 61
Harringia de Beauchamp Verm. 46
Harriwhitea Mathews Aves 115
Hartigiola Rübsaamen Ins. 380
Hartmanella Alexeieff Prot. 47
Hartmannia Alexeieff Prot. 47
Hasemania Ellis Pisces 37
Hazaya Soos Moll. 79
Heathilla Hannibal Moll. 68
Helicoptilum Nutting Coel. 13
Helicotrema Odhner Verm. 32
Heliococcus Sule Ins. 435
Heloparia Enderlein Ins. 413
Hemetheinopsis Prout Ins. 351
Hemiboeckella Sars Crust. 40
Hemicallidium Casey Ins. 248
Hemicampa Silvestri Ins. 458
Hemimorus Cameron Ins. 293
Heminecsara Karny Ins. 453
Hemipera Nicoll Verm. 32
Hemipoophilus Jacobi Ins. 430
Hemisphaerocoris Poppius Ins. 424
Hemitheinopsis Dyar Ins. 351
Hemithiscia Schmidt Ins. 428
Hepatophylus Quidor Crust. 40
Hermannia Kröber Ins. 397
Hermenias Meyrick Ins. 364
Heronia Mabilie & Bouillet Ins. 311
Hesperocetus True Mamm. 53
Hesperophylum Reuter & Poppius Ins. 423
Hesperothripa Hampson Ins. 337
Heterasida Casey Ins. 234
Heterenchelys Regan Pisces 42
Heterobiantes Roewer Arachn. 31
Heterocharax Eigenmann Pisces 37
Heterochiton Fucini Moll. 59

- Heterocpedanus Roewer* Arachn. 31
Heterogomphidium Prell Ins. 224
Heterolabis Borelli Ins. 448
Heterolacurbs Roewer Arachn. 31
Heterolagynion Pascher Prot. 58
Heterommides Strand Arachn. 28
Heterommiola Strand Ins. 337
Heteromuricus Imms Ins. 459
Heteropelidnota Ohaus Ins. 223
Heteropodoctis Roewer Arachn. 31
Heteroprion Mathews Aves 100
Heterorissia Iredale Moll. 68
Heteroscotolemon Roewer Arachn. 31
Heteroseymnus Tanaka Pisces 33
Hexamastix Alereieff Prot. 58
Hierochthonia Prout Ins. 351
Hierodoris Meyrick Ins. 367
Hierodulella Giglio-Tos Ins. 451
Himotica Meyrick Ins. 367
Hirtitermes Holmgren Ins. 441
Histiochromius Pfeiffer Moll. 99
Hoffmannella Müller Ins. 216
Holmbergeria Jørgensen Ins. 260
Holomrasus Reitter Ins. 238
Holoplagia Enderlein Ins. 390
Holostylis Stebbing Crust. 32
Homolagoa Barnes & McDunnough Ins. 337
Homolomania Ihle Crust. 27
Homosura Melichar Ins. 429
Hoplandrothrips Hood Ins. 437
Hoplitogomphus Prell Ins. 225
Hoploplatystylus Schmicdeknecht Ins. 279
Hoplosphyrum Rehn & Hebard Ins. 452
Hormiellus Enderlein Ins. 284
Hospitalitermes Holmgren Ins. 441
Howeavis Mathews Aves 117
Hurdia Walcott Crust. 36
Hyalochlora Prout Ins. 351
Hyalopeplodes Poppius Ins. 424
Hyattechinus Jackson Echin. 42
Hybopleurax Enderlein Ins. 279
Hybozelodes Hermann Ins. 399
Hydatothrips Karny Ins. 437
Hydrophylax Matheson Ins. 289
Hylomyrma Forel Ins. 272
Hylophilodes Hampson Ins. 338
Hylospingus Nelson Aves 132
Hymenospimecis Viereck Ins. 279
Hymenosyneches Viereck Ins. 279
Hypnodinium Klebs Prot. 61
Hypobapta Prout Ins. 351
Hypodermodes Townsend Ins. 409
Hypodoxa Prout Ins. 351
Hypopterida Warren Ins. 338
Hyposcota Hampson Ins. 338
Hyracotaenia Beddard Verm. 35
Hyrcanocuma Derzhavin Crust. 32
Hysteronotus Eigenmann Pisces 36
Hystriothrips Karny Ins. 437
Icharonia Reitter Ins. 216
Iceriomastax Enderlein Ins. 392
Ictidopsis Broom Rept. 30
Idiochlora Prout Ins. 351
Idiogaster Wasmann Ins. 210
Idiomerus Imms Ins. 459
Idioplanoides Barbour Verm. 31
Idiopyrgus Pilsbry Moll. 68
Iheringocantharus Bernhauer Ins. 210
Imitomyia Townsend Ins. 409
Incamiya Townsend Ins. 409
Ingramia Edwards Ins. 388
Iniocyphus Raffray Ins. 214
Ioteuthion Pfeiffer Moll. 99
Iphimedeia Fruhstorfer Ins. 307
Iridothreuthis Naef Moll. 99
Isancistrum Beauchamp Verm. 32
Isobremia Kieffer Ins. 380
Isodiplosis Rühsaamen Ins. 380
Isogenoides Klapálek Ins. 443
Isolasia Warren Ins. 338
Isomasus Gravier Verm. 52
Isoneuromyia Brunetti Ins. 383
Isopheidole Forel Ins. 272
Isotamia Bezzi Ins. 401
Iulops Prout Ins. 351
Jacnimitya Townsend Ins. 409
Jafuna Distant Ins. 427
Jassidophthora Perkins Ins. 289
Jathopogon Becker Ins. 399
Jaya Navás Ins. 376
Jeannea Iredale Moll. 63
Jeffreysiella Thiele Moll. 68
Jenantus Reitter Ins. 238
Joguina Navás Ins. 376
Jordania Sekera Verm. 31
Karaiocoris Schumacher Ins. 419
Kayania Distant Zool. Rec. 1910 Ins. 430
Kempia Mathews Aves 116
Kempynus Navás Ins. 376
Keniicola Sjöstedt Ins. 454
Kethops Chamberlin Myr., Arachn. 43
Kilianella Uhlig Moll. 99
Kincaidella Hannibal Moll. 84
Kirkaldyia Montandon Ins. 426
Kisuma Budde-Lund Crust. 34
Klapalekus Navás Ins. 376
Kleiduchus Burr Ins. 448
Kleiniella Aulmann Ins. 432
Koninekopora Lee Bry., Brach. 12
Kossmatia Uhlig Moll. 99
Krakatania Enderlein Ins. 403
Krohnittella Germain & Joubin Verm. 46
Kunobius Chamberlin Myr., Arachn. 43

- Labiotermes Holmgren* Ins. 441
Laboides Zavattari Ins. 264
Lacessititermes Holmgren Ins. 441
Lacetasiates Schumacher Ins. 427
Lacocnesus Reitter Ins. 238
Ladislavella Dybowski Moll. 84
Lambornia Prout Ins. 351
Lampracanthia Reuter Ins. 425
Lampristis Meyrick Ins. 368
Lamprodiplosis Kieffer Ins. 381
Lamprophorus Burr Ins. 448
Lamprotelcia Kieffer Ins. 293
Lamprothripa Hampson Ins. 338
Lanthanusa Ris Ins. 445
Largidea Van Duzee Ins. 424
Larrakeeya Ashton Ins. 427
Lasiodictis Meyrick Ins. 368
Lasiodiplosis Kieffer Ins. 381
Lasionota Warren Ins. 338
Lasiopleura Becker Ins. 414
Lasiosina Becker Ins. 414
Lathromerella Girault Ins. 289
Lathromeroidea Girault Ins. 289
Layahima Navás Ins. 376
Leancoilia Walcott Crust. 37
Lecanophora Aurivillius Ins. 241
Lecythina Dangeard Prot. 48
Lecythodella Enderlein Ins. 285
Ledrotypa Distant Ins. 431
Lecuwenia Karny Ins. 437
Leggeornis Mathews Aves 123
Leicesteriomyia Brunetti Ins. 388
Leiporaphes Bernhauer Ins. 210
Leluthinus Enderlein Ins. 285
Lembopsis Pearse Crust. 35
Lepidauchen Nicoll Verm. 32
Lepidechinoides Olsson Echin. 43
Lepsiella Iredale Moll. 63
Leptogastrothrips Trybom Ins. 438
Leptoglanis Eigenmann Pisces 40
Leptomiopteryx Chopard Ins. 451
Leptoperilissus Schmiedeknecht Ins. 279
Leptotrigonum Becker Ins. 414
Lestinogomphus Martin Ins. 446
Letaba Dyar Ins. 338
Leucaster Koehler Echin. 51
Leuconysius Poppius Ins. 421
Leucophanera Hampson Ins. 339
Leucopsar Stresemann Aves 133
Leurocerus Bruner Ins. 456
Lewisister Bickhardt Ins. 217
Liasemum Casey Ins. 248
Lichenopsis Schmidt Ins. 429
Lichtwardtia Enderlein Ins. 403
Licinoderecyllus Kuntzen Ins. 206
Limatogaster Reitter Ins. 238
Limnichalia Casey Ins. 219
Limnobasilissa Hannibal Moll. 91
Limnoithona Burckhardt Crust. 41
Linnopneumella Enderlein Ins. 383
Lioligus Casey Ins. 219
Liomela Weise Ins. 253
Liometophilus Fall Ins. 241
Lioon Casey Ins. 219
Liouvillea Chevreux Crust. 35
Liriarchus Mayer Crust. 36
Lissarcha Cameron Ins. 280
Lisseurytoma Cameron Ins. 280
Lissonycteris Andersen Mamm. 40
Listomus Casey Ins. 219
Litasida Casey Ins. 235
Lithocharis Warren Ins. 351
Lithococcus Pilsbry Moll. 68
Lithoxus Eigenmann Pisces 41
Littlera Mathews Aves 117
Loewinella Hermann Ins. 399
Lolatismus Reitter Ins. 238
Longipeditermes Holmgren Ins. 441
Longipeltina Bernhauer Ins. 210
Lophacanthus Hentschel Por. 7
Lophalia Casey Ins. 248
Lophiaspis Depéret Mamm. 52
Lophoceraca Hermann Ins. 400
Lophocrama Hampson Ins. 339
Lophomachia Prout Ins. 351
Lophopelma Prout Ins. 351
Lophosema Hampson Ins. 339
Lophostola Prout Ins. 351
Lorenzoo De Stefani Perez Ins. 285
Loschia Chatton Prot. 48
Lovenechinus Jackson Echin. 44
Loxaspis Rothschild Ins. 423
Loxotrema Kobayashi Verm. 33
Lupercalia Busck Ins. 368
Lutrochites Wickham Ins. 220
Lycogastroides Strand Ins. 287
Lycogastrula Strand Ins. 287
Lynceiopsis Daday Crust. 37
Lyperosiops Townsend Ins. 409
Mabusana Distant Ins. 419
Maccoyornis Mathews Aves 123
Machilontus Silvestri Ins. 459
Machlotrichia Meyrick Ins. 368
Mackayia Waterston Ins. 440
Macrobumus Roewer Arachn. 31
Macrocyrtus Heller Ins. 241
Macropeplus Poppius Ins. 424
Macrorhonyx Mathews Aves 119
Macrotinactis Meyrick Ins. 362
Macrotrema Regan Pisces 52
Mæcruroides Radcliffe Pisces 43
Madrastra Navás Ins. 376
Magallanes Navás Ins. 376
Magnamytis Mathews Aves 124
Mahensia Fryer Ins. 322
Majetnecus Reitter Ins. 238
Makrokylindrus Stebbing Crust. 32
Malaya Leicester Ins. 389
Mallochia Viereck Ins. 280

- Malpighia Enderlein* Ins. 392
Malthophia Casey Ins. 248
Manaos Rohwer Ins. 296
Maniconeurodes Ulmer Ins. 372
Maracandinus Roewer Arachn. 31
Mariobezzia Becker Ins. 401
Marrella Walcott Arachn. 7
Marsupiobdella Goddard & Malan Verm. 55
Matapoides Druce Ins. 312
Matherella Walcott Moll. 73
Mattingleya Mathews Aves 125
Maula Navás Ins. 376
Mecistocirrus Railliet & Henry Verm. 43
Medecticus Uvarov Ins. 454
Meckechinus Jackson Echin. 44
Meekia Warren Ins. 352
Megacephalon Hilzheimer Mamm. 51
Megacyllene Casey Ins. 248
Megalodoris Meyrick Ins. 364
Megalonema Eigenmann Pisces 40
Megaloplastinx Schmidt Ins. 429
Megalopsobius Silvestri Ins. 459
Megalosphys Enderlein Ins. 384
Megapygus Hawkins Echin. 44
Megarceys Klapálek Ins. 443
Megasida Casey Ins. 235
Megathripa Hampson Ins. 339
Megistomastix Alexander Ins. 392
Melambyrsus Breddin Ins. 419
Melanoteuthis Joubin Moll. 100
Melanum Becker Ins. 414
Melasomnus Reitter Ins. 238
Melisoides Strand Ins. 323
Melloria Mathews Aves 124
Melyroidea Shelford Ins. 449
Menacanthus Neumann Ins. 440
Menodora Horváth Ins. 421
Meriplodus Reitter Ins. 238
Merizocera Fage Arachn. 26
Mermiglossa Friese Ins. 261
Merochlora Prout Ins. 352
Merothrips Hood Ins. 438
Meruterrana Sjöstedt Ins. 454
Merycomyia Hine Ins. 396
Mesaniomus Reitter Ins. 238
Mesanopin Enderlein Ins. 414
Mesoplatypus Strohmeier Ins. 244
Mesospio Gravier Verm. 52
Mesosuchus Watson Rept. 30
Mesotrimeron Verhoeff Myr., Arachn. 45
Messoracarus Silvestri Arachn. 33
Metacincta Prout Ins. 352
Metalaphria Ricardo Ins. 400
Metaleptamphopus Chevreux Crust. 35
Metamarthana Roewer Arachn. 31
Metaphya Laidlaw Ins. 446
Metapocyrtus Heller Ins. 241
Metasclenca Roewer Arachn. 31
Metasparatta Borelli Ins. 448
Metathysanus Dahl Ins. 431
Metaverpulus Roewer Arachn. 31
Metazaleptus Roewer Arachn. 31
Metazahnnoxia Roewer Arachn. 31
Metapedanus Roewer Arachn. 31
Metopiops Townsend Ins. 410
Metopiorrhynchus Reitter Ins. 238
Metopleura Busck Ins. 368
Metoposcopa Strand Ins. 340
Metopotropis Enderlein Ins. 404
Metriocampa Silvestri Ins. 459
Micracanthia Reuter Ins. 425
Micraleyone Mathews Aves 111
Micrartamus Mathews Aves 124
Micrella Essig Ins. 433
Micriscadia Hampson Ins. 340
Microbarasa Hampson Ins. 340
Microcallidium Casey Ins. 248
Micrococcyx Ridgway Aves 113
Microdiscula Thiele Moll. 69
Microgalesus Kieffer Ins. 293
Microglanis Eigenmann Pisces 40
Micrognathus Duncker Pisces 43
Microkerkus Godwin-Austen Moll. 78
Microliobunum Roewer Arachn. 31
Micromeson Strickland Ins. 280
Micronetaria Dahl Arachn. 27
Micronetata Dahl Arachn. 27
Micropardalis Meyrick Ins. 368
Microphilmon Mathews Aves 129
Microphobetron Djar Ins. 323
Microphora Krüber Ins. 397
Microptilotis Mathews Aves 128
Microptychis Longstaff Moll. 66
Microsalomona Karny Ins. 454
Micropshecia Bartel Ins. 313
Microthripa Hampson Ins. 340
Microtipula Alexander Ins. 393
Microtoridea Viereck Ins. 280
Microxestis Hampson Ins. 340
Microzada Hampson Ins. 340
Migranaja Hannibal Moll. 91
Milena Evans Ins. 312
Milligania Mathews Aves 123
Mimanomma Wasmann Ins. 210
Mimbyasa Evans Ins. 298
Mimikana Distant Ins. 419
Mimofrea Hintz Ins. 249
Miniophyllodas Joannis Ins. 340
Minulus Eggert Ins. 244
Miosilpha Wickham Ins. 216
Misenatus Reitter Ins. 238
Mitadilcus Reitter Ins. 238
Mitarodes Reitter Ins. 238
Mitomiris Reitter Ins. 238
Mitothrips Trybom Ins. 438
Mitrarium Alexeieff Prot. 48
Mitraspora Fujita Prot. 55
Mixeophanes Prout Ins. 352
Mizonocara Uvarov Ins. 456

- Mnemonic* *Meyrick* Ins. 368
Mnesichara *Walsingham* Ins. 368
Mniothripa *Hampson* Ins. 340
Modiglianiella *Schmidt* Ins. 430
Molaria *Walcott* Arachn. 8
Mollisonia *Walcott* Arachn. 7
Monacanthomyia *Brunetti* Ins. 395
Monaxonium *Popofsky* Prot. 52
Mongomella *Enderlein* Ins. 393
Monocorycaeus *Dahl* Crust. 41
Monogonogastra *Viereck* Ins. 285
Monomastix *Scherffel* Prot. 58
Monophana *Edwards* Ins. 393
Morganornis *Mathews* Aves 119
Moriloma *Busck* Ins. 368
Moroca *Poppius* Ins. 424
Mosoia *Roewer* Arachn. 31
Mothonica *Walsingham* Ins. 368
Moza *Navás* Ins. 376
Mucogobius *McCulloch* Pisces 48
Munneurycope *Stephensen* Crust. 33
Munnopsurus *Richardson* Crust. 33
Murtula *Schouteden* Ins. 420
Mycetomorpha *Potts* Crust. 45
Mycterella *Kertész* Ins. 414
Myersia *Viereck* Ins. 285
Myloleuciscus *Garman* Pisces 38
Myoglanis *Eigenmann* Pisces 40
Myrmamblys *Forel* Ins. 273
Myrmecioptychium *Schrammen* Por. 6
Myrmecomedon *Bernhauer* Ins. 211
Myrmeleodes *Navás* Ins. 376
Myrmentoma *Forel* Ins. 273
Myrmepomis *Forel* Ins. 273
Myrmeurynota *Forel* Ins. 273
Myrmicocrypta *Forel* Ins. 273
Myrmobrachys *Forel* Ins. 273
Myrmogigas *Forel* Ins. 273
Myrmogonia *Forel* Ins. 273
Myrmophilina *Silvestri* Ins. 452
Myrmophyma *Forel* Ins. 273
Myrmorhachis *Forel* Ins. 273
Myrmosaga *Forel* Ins. 273
Myrmosericus *Forel* Ins. 273
Myrmosphineta *Forel* Ins. 273
Myrmotarsus *Forel* Ins. 273
Myrmothrix *Forel* Ins. 273
Myrmotrema *Forel* Ins. 273
Myrmoturba *Forel* Ins. 273
Myrtopsen *Rübsaamen* Ins. 294
- Nacliodes* *Strand* Ins. 323
Naegleria *Alexeieff* Prot. 48
Namertanus *Reitter* Ins. 238
Nannopsittaca *Ridgway* Aves 110
Nanomitus *Navás* Ins. 377
Napaea *Schrammen* Por. 6
Naraoia *Walcott* Crust. 37
Narberia *Burr* Ins. 448
Narosopsis *Dyar* Ins. 323
Nasisqualus *Smith* Pisces 33
Natalobatrachus *Hewitt & Methuen* Rept. 31
Nathorstia *Walcott* Arachn. 7
Nauarchus *Bigelow* Coel. 12
Naumachocrinus *Clark* Echin. 59
Ncactaeonina *Thiele* Moll. 77
Ncadmontia *Townsend* Ins. 410
Neagolius *Košančikov* Ins. 221
Ncamia *Radcliffe* Pisces 45
Nearomyia *Stein* Ins. 414
Necedes *Walsingham* Ins. 368
Nectoliparis *Gilbert & Burke* Pisces 50
Nectopyramis *Bigelow* Coel. 12
Neglurus *Navás* Ins. 377
Negretus *Navás* Ins. 377
Neguitus *Navás* Ins. 377
Nehrodistus *Reitter* Ins. 238
Nelces *Navás* Ins. 377
Nelus *Navás* Ins. 377
Neolardus *Distant* Ins. 429
Neobalbis *Prout* Ins. 352
Neobaryxenus *Prell* Ins. 225
Neobrachista *Girault* Ins. 289
Neobrachistella *Girault* Ins. 289
Neobudemus *Reitter* Ins. 238
Neocapritermes *Holmgren* Ins. 442
Neocatocha *Felt* Ins. 381
Neocentrobia *Girault* Ins. 289
Neoceratina *Perkins* Ins. 261
Neochalcites *Mathews* Aves 113
Neochrysocharis *Kurdiumov* Ins. 289
Neoclima *Mathews* Aves 126
Neocomites *Uhlig* Moll. 100
Neocyrtopogon *Ricardo* Ins. 400
Neopedanus *Roewer* Arachn. 31
Neofusulinella *Deprat* Prot. 50
Neogreencia *Viereck* Ins. 280
Neohaliplus *Netolitzky* Ins. 207
Neohydrophilus *d'Orchymont* Ins. 208
Neojalla *Schumacher* Ins. 419
Neometra *Clark* Echin. 59
Neonegeta *Hampson* Ins. 340
Neonortonia *Viereck* Ins. 280
Neonothippus *Roewer* Arachn. 31
Nepardalotus *Mathews* Aves 127
Nepasiphae *Perkins* Ins. 261
Neophilemon *Mathews* Aves 129
Neophion *Morley* Ins. 280
Necophorocera *Townsend* Ins. 410
Necopinplodes *Viereck* Ins. 280
Neopodoctis *Roewer* Arachn. 31
Necopoppia *Rohwer* Ins. 296
Neopristomerus *Viereck* Ins. 280
Neoprociphilus *Patch* Ins. 434
Necosaropogon *Ricardo* Ins. 400
Neoscotolemon *Roewer* Arachn. 31
Neosericornis *Mathews* Aves 123
Neosittella *Mathews* Aves 126

- Neostyringomyia Alexander* Ins. 393
Neotetrastichus Perkins Ins. 289
Neothelaira Townsend Ins. 410
Neothereva Kröber Ins. 397
Neothias Iredale Moll. 63
Neothrinax Enslin Ins. 296
Neotrafoia Townsend Ins. 410
Neowinnertzia Townsend Ins. 410
Neoxiphidion Karny Ins. 454
Neoxystoma Bedel Ins. 242
Nephoris Jacobi Ins. 431
Nepioteuthion Pfeffer Moll. 100
Neptunimyia Felt Ins. 381
Nercsheimeria Uebel Verm. 36
Neseulata Ehrmann Moll. 80
Nesofregetta Mathews Aves 100
Nesoglomeris Verhoeff Myr., Arachn. 45
Nesohoplia Scott Ins. 222
Nesozosterops Mathews Aves 126
Neuromachaerota Schmidt Ins. 430
Neuroteleia Kieffer Ins. 293
Neusmia Navás Ins. 377
Nicerus Navás Ins. 377
Nihus Reitter Ins. 238
Nilepolemis Reitter Ins. 238
Ninetus Navás Ins. 377
Ninguta Navás Ins. 377
Nitocrameira Liddell Crust. 41
Nomineia Kieffer Ins. 293
Nophis Navás Ins. 377
Nora Navás Ins. 377
Norba Horváth Ins. 422
Nordenskjöldella Enderlein Ins. 211
Normotionus Reitter Ins. 238
Nothapocyrtus Heller Ins. 242
Notheterogomphus Prell Ins. 225
Notiasida Casey Ins. 235
Notothectina Bernhauer Ins. 211
Nototodarus Pfeffer Moll. 100
Nubidanus Reitter Ins. 238
Nuculopsis Girty Moll. 92
Nudechinus Clark Echin. 45
Nuglerus Navás Ins. 377
Nuzonia Spaeth Ins. 254
Nyala Heller Mamm. 49
Nyctiophylacodes Ulmer Ins. 373
Nyctipolus Ridgway Aves 112

Obrasilus Reitter Ins. 238
Obus Navás Ins. 377
Obvoderus Reitter Ins. 238
Occasitermes Holmgren Ins. 442
Ochlus Enderlein Ins. 386
Ochmacanthus Eigenmann Pisces 41
Ochrothripa Hampson Ins. 341
Octopodstenthopsis Pfeffer Moll. 100
Octostruma Forel Ins. 273
Ocybola Turner Ins. 324
Ocyropsis Mayer Coel. 15

Ocyrtosoma Townsend Ins. 410
Odomas Jacobi Ins. 431
Odontacolus Kieffer Ins. 293
Odontestis Hampson Ins. 341
Odontofornica Enderlein Ins. 285
Odontomerella Hendel Ins. 415
Odontopharynx Man Verm. 43
Odontotermes Holmgren Ins. 442
Odopadus Reitter Ins. 238
Odoraia Walcott Crust. 36
Ocdesiella Becker Ins. 415
Oedieraspis Hampson Ins. 341
Oestrogaster Townsend Ins. 410
Oestrohystricia Townsend Ins. 410
Ogmomyia Ulmer Ins. 373
Ogmophasmus Enderlein Ins. 285
Oidardis Hermann Ins. 400
Okenana Distant Ins. 429
Oldenbergia Kröber Ins. 397
Oligacanthopus Rehn & Hebard Ins. 452
Omoplax Horváth Ins. 422
Onclus Navás Ins. 377
Oncotoechus Schrammen Por. 6
Onomacritus Distant Ins. 427
Onychocorycaeus Dahl Crust. 41
Onychopterus Clarke & Ruedemann
Arachn. 9
Onychothecus Boucomont Ins. 221
Oodinium Chatton Prot. 61
Ooeidicera Becker Ins. 397
Opabinia Walcott Crust. 37
Opeatocerus Hermann Ins. 400
Ophiogastrella Brues Ins. 280
Ophioperla Koehler Echin. 53
Ophoelis Olivier Ins. 231
Ophthalmomegas Dehaut Mamm. 40
Opisthocystis Sekera Verm. 31
Oppenheimia Cossman Echin. 45
Opuntiaphila Pierce Ins. 242
Oreodorcas Heller Mamm. 49
Oreobis Chapman Aves 104
Oreometra Clark Echin. 59
Orestes Girty Moll. 74
Orientospilus Morley Ins. 280
Oriscelio Kieffer Ins. 293
Ornithobilhorzia Odhner Verm. 33
Orostygia Müller Ins. 216
Orrodoretus Ohaus Ins. 223
Orscoliella Kieffer Ins. 381
Orthactia Kröber Ins. 397
Ortheterogomphus Prell Ins. 225
Orthocosta Bolton Ins. 447
Orthocraspeda Prout Ins. 352
Orthocraspis Hampson Ins. 341
Orthopsittaca Ridgway Aves 110
Orthorisma Prout Ins. 352
Oscinella Becker Ins. 415
Oscinomima Enderlein Ins. 415
Osmobodes Reitter Ins. 238
Othoniomyia Hermann Ins. 400

- Otiditaenia Beddard* Verm. 35
Otiomimus Reitter Ins. 238
Otismotilus Reitter Ins. 238
Otobius Banks Arachn. 34
Otomasicera Townsend Ins. 410
Owenavis Mathews Aves 113
Owra Ashton Ins. 427
Oxexorista Townsend Ins. 410
Oxyapium Becker Ins. 414
Oxycryptis Meyrick Ins. 369
Oxynops Townsend Ins. 410
Oxypora Warren Ins. 353
Oxyrhizium Schrammen Por. 6
Oxyurostylis Calman Crust. 32
Ozaenina Enderlein Ins. 415
Ozias Jacobi Ins. 431
- Pachista Prout* Ins. 353
Pachycentrotus Clark Echin. 45
Pachygenia Kröber Ins. 397
Pachyledra Schumacher Ins. 431
Pachymetana Strand Ins. 324
Pachymetoides Strand Ins. 324
Pachypalaminus Thompson Rept. 32
Pachypeltopsis Poppius Ins. 424
Pachyrhinadorctus Ohaus Ins. 223
Pachysima Forel Ins. 273
Pachystylus Olfers Ins. 459
Pachytheclus Cameron Ins. 285
Padilehus Reitter Ins. 238
Paederopsis Wasmann Ins. 211
Pagiphora Horváth Ins. 427
Paitobius Chamberlin Myr., Arachn. 43
Palaeagapetus Ulmer Ins. 373
Palaeocomatella Clark Echin. 59
Palaeocrunoccia Ulmer Ins. 373
Palaeofurius Poppius Ins. 425
Palaeofusulina Deprat Prot. 50
Palaeohelicopsyche Ulmer Ins. 373
Palaeolepidostoma Ulmer Ins. 373
Palaeolestes Devis Aves 108
Palaeotachea Jooss Moll. 80
Palaeotaria Leriche Mamm. 43
Palmacorixa Abbott Ins. 426
Palparellus Navás Ins. 377
Panchaetothrips Bagnall Ins. 438
Pandorosemus Reitter Ins. 238
Parabaeus Kieffer Ins. 293
Parabiantes Hirst Arachn. 31
Parabinarea Brues Ins. 285
Parabolinopsis Steinmann & Hoek
 Arachn. 8
Paracania Viereck Ins. 281
Paracardenius Bolivar Ins. 457
Parachaeraps Smith Crust. 28
Parachloea Horst Verm. 53
Parachloritis Ehrmann Moll. 80
Paraclytus Casey Ins. 249
Paracomeron Heller Ins. 249
Paracordyla Hallmann Por. 9
Paracretonia Dyar Ins. 341
Paradechenella Richter Arachn. 8
Paraferreola Sustera Ins. 267
Paragagrella Roewer Arachn. 32
Paragitona Kröber Ins. 415
Paragnorima Warren Ins. 353
Paragoceras Arthaber Moll. 100
Parahexacentrus Karny Ins. 454
Paraheydenia Cameron Ins. 290
Paraketumala Distant Ins. 429
Parallelodiplosis Rübsaamen Ins. 381
Paralteutha Scott Crust. 41
Paramallus Casey Ins. 249
Paramellinus Rohwer Ins. 267
Paramysidopsis Zimmer Crust. 31
Paranannastacus Stebbing Crust. 32
Paranothippus Roewer Arachn. 32
Paranteris Kieffer Ins. 293
Parapambolus Dahl Ins. 285
Parapetillia Schouteden Ins. 420
Paraphisis Karny Ins. 454
Paraphloeobius Jordan Ins. 246
Parapleciomyia Brunetti Ins. 390
Parapneustes Koehler Echin. 46
Parapodia Joannis Ins. 369
Paraporia Townsend Ins. 410
Parapsectis Warren Ins. 353
Parapsilocephala Kröber Ins. 397
Paraptera Ortmann Moll. 92
Paraptila Meyrick Ins. 364
Parapygoplus Roewer Arachn. 32
Parardelio Hendel Ins. 415
Pararutilus Berg Pisces 38
Parascotolemon Roewer Arachn. 32
Parasida Casey Ins. 235
Parasintula Dahl Arachn. 27
Parasipho Dautzenberg & Fischer Moll.
 63
Parasitalces Bruner Ins. 457
Parasitosyllis Potts Verm. 53
Parasphyraenops Bean Pisces 45
Paraspiniphora Malloch Ins. 404
Parastega Meyrick Ins. 369
Parastremma Eigenmann Pisces 36
Parasyneura Malloch Ins. 404
Parateleopus Radcliffe Pisces 41
Paratrachogramma Girault Ins. 290
Paratrigla Ogilby Pisces 49
Paraxyela Macgillivray Ins. 296
Parazenopsis Cligny Pisces 44
Pardalotinus Mathews Aves 127
Parectecephala Becker Ins. 415
Parepedanus Roewer Arachn. 32
Pareparchus Burr Ins. 448
Parepeolus Ducke Ins. 262
Parepidosis Kieffer Ins. 381
Parepimeria Chevreux Crust. 35
Parexcelsa Pearsall Ins. 353
Parhierodula Giglio-Tos Ins. 451

- Parhylophila *Hampson* Ins. 342
 Paribalonius *Roewer* Arachn. 32
 Parioglossus *Regan* Pisces 47
 Parlax *Burr* Ins. 448
 Parmaschema *Heller* Ins. 218
 Parochlus *Enderlein* Ins. 387
 Paronychora *Joannis* Ins. 353
 Parossa *Bruner* Ins. 457
 Parvulinus *Mercet* Ins. 292
 Paryphoconus *Enderlein* Ins. 387
 Patapius *Horváth* Ins. 427
 Pectinidens *Pilsbry* Moll. 85
 Pectinometra *Clark* Echin. 59
 Pehlkea *Enderlein* Ins. 393
 Pelmatoops *Enderlein* Ins. 415
 Peltacanthina *Enderlein* Ins. 415
 Peltidopeplus *Poppius* Ins. 425
 Peltobothrys *Enderlein* Ins. 254
 Peltogasterella *Krüger* Crust. 45
 Pelusca *Bolívar* Ins. 457
 Penisia *Warren* Ins. 342
 Pentacora *Reuter* Ins. 425
 Pentanchus *Smith* Pisces 33
 Pentastruma *Forel* Ins. 273
 Pentheochlora *Prout* Ins. 353
 Penthctor *Andersen* Mamm. 40
 Pentathyrus *Enderlein* Ins. 439
 Periconta *Dyar* Ins. 342
 Perirrhytus *Burr* Ins. 448
 Perissomyia *Ulmer* Ins. 373
 Perithalera *Prout* Ins. 353
 Perlodina *Klapálek* Ins. 443
 Peronista *Matheus* Aves 95
 Perrinella *Hannibal* Moll. 85
 Perua *Townsend* Ins. 410
 Pctalorrhynchus *Reitter* Ins. 238
 Petalurichthys *Regan* Pisces 43
 Petasometra *Clark* Echin. 59
 Peteliacma *Meyrick* Ins. 364
 Petropteron *Cockerell* Ins. 429
 Peytoia *Walcott* Coel. 13
 Pfeifferinella *Leger & Hollande* Prot. 53
 Phacelodocera *Enderlein* Ins. 393
 Phacidium *Breddin* Ins. 419
 Phaenopsis *Townsend* Ins. 410
 Phacogryllus *Bolívar* Ins. 452
 Phacothripa *Hampson* Ins. 342
 Phalacrotophora *Enderlein* Ins. 404
 Phalacrus *Schrammen* Por. 6
 Phalangodella *Roewer* Arachn. 32
 Phalangodinus *Roewer* Arachn. 32
 Phalantorrhynchus *Reitter* Ins. 238
 Phallusioides *Huntsman* Proch. 7
 Pharkidonotus *Girty* Moll. 75
 Phasiopsis *Townsend* Ins. 410
 Phasmatoteuthion *Pfeffer* Moll. 101
 Phaulex *Burr* Ins. 448
 Pherecardites *Horst* Verm. 53
 Phenacotaxus *Dall* Moll. 81
 Phennecium *Normand* Ins. 215
 Pheositis *Strand* Ins. 325
 Philogalleria *Cameron* Ins. 281
 Philopuntia *Pierce* Ins. 242
 Phlebacrocyma *Enderlein* Ins. 415
 Phloeonemites *Wickham* Ins. 218
 Phlyctidobia *Kieffer* Ins. 381
 Pholidechinus *Jackson* Echin. 46
 Pholidotus *Hermann* Ins. 400
 Phorhynchus *Brunetti* Ins. 405
 Phthirpedicinus *Fahrenholz* Ins. 436
 Phygetis *Andersen* Mamm. 40
 Phyllobothroides *Southwell* Verm. 35
 Phymatodina *Casey* Ins. 249
 Physocrema *Forel* Ins. 274
 Phytomimia *Walsingham* Ins. 369
 Picrospora *Meyrick* Ins. 369
 Piczocalanus *Grandori* Crust. 42
 Pilgramilla *Sekera* Verm. 31
 Pinduchus *Reitter* Ins. 238
 Pinta *Zavattari* Ins. 264
 Piopisidus *Reitter* Ins. 238
 Pirostovedus *Reitter* Ins. 238
 Pisidice *Jacobi* Ins. 430
 Pizarroa *Hoek* Brach. 6
 Planctoteuthis *Pfeffer* Moll. 101
 Plagiops *Townsend* Ins. 410
 Plagiozopelma *Enderlein* Ins. 403
 Planopriella *Kieffer* Ins. 293
 Planostocha *Meyrick* Ins. 364
 Platagarista *Jordan* Ins. 325
 Platasida *Casey* Ins. 235
 Platycarenum *Kröber* Ins. 398
 Platypeltocoris *Poppius* Ins. 425
 Platypolyzoon *Annandale* Bry., Brach. 12.
 Platysympus *Stebbing* Crust. 32
 Platytyphlops *Stebbing* Crust. 32
 Plectascus *Schrammen* Por. 6
 Plesiomegatherium *Roth* Mamm. 53
 Plesiosphaeropyx *Cameron* Ins. 285
 Pleurochorium *Schrammen* Por. 6
 Pleuromastix *Scherffel* Prot. 59
 Pleuropyge *Schrammen* Por. 6
 Pleurothyris *Schrammen* Por. 6
 Pleurotrema *Schrammen* Por. 7
 Plexippica *Meyrick* Ins. 369
 Pliadonus *Reitter* Ins. 238
 Pliniola *Strand* Ins. 325
 Plionoma *Casey* Ins. 249
 Plocamosaris *Meyrick* Ins. 369
 Plusiocampa *Silvestri* Ins. 459
 Plutodiplosis *Kieffer* Ins. 381
 Pneumocystis *Delanoë* Prot. 53
 Pnyxia *Johannsen* Ins. 384
 Poabius *Chamberlin* Myr., Arachn. 43
 Poaphilus *Chamberlin* Myr., Arachn. 43
 Pocodalcmes *Reitter* Ins. 238
 Pocusogetus *Reitter* Ins. 238
 Podomincus *Reitter* Ins. 238
 Podonebistus *Reitter* Ins. 238

- Podoropelmus *Reitter* Ins. 238
 Podoserica *Breit* Ins. 222
 Pola *Swinhoe* Ins. 312
 Poliothripa *Hampson* Ins. 342
 Polistomima *Enderlein* Ins. 416
 Polyorycta *Warren* Ins. 342
 Polypera *Burke* Pisces 50
 Polyselasmus *Schmiedeknecht* Ins. 281
 Polyspira *Minkiewicz* Prot. 62
 Polystigmatium *Schrammen* Por. 7
 Polythyris *Schrammen* Por. 7
 Porassia *Marcus* Crust. 36
 Porcellanopsis *Rathbun* Crust. 27
 Porotergus *Eigenmann* Pisces 38
 Porzanoiidea *Mathews* Aves 98
 Postaremus *Reitter* Ins. 238
 Postupatus *Reitter* Ins. 238
 Povilla *Navás* Ins. 444
 Praedo *Nelson* Aves 116
 Prapolithites *Meyrick* Ins. 369
 Priamaster *Koehler* Echin. 51
 Prilisvanus *Reitter* Ins. 238
 Primnodendron *Nutting* Coel. 14
 Prionina *Casey* Ins. 249
 Prionothrips *Schille* Ins. 438
 Privesomorphus *Schmidt* Ins. 429
 Proatta *Forel* Ins. 274
 Probolodus *Eigenmann* Pisces 36
 Procacritermes *Holmgren* Ins. 442
 Procarinites *Arthaber* Moll. 101
 Proctamoeba *Alexeieff* Prot. 48
 Procytettix *Bolivar* Ins. 457
 Prodeminus *Reitter* Ins. 238
 Prodoridunculus *Thiele* Moll. 76
 Prodromoteuthis *Pfeffer* Moll. 101
 Prohamitermes *Holmgren* Ins. 442
 Prohelea *Kieffer* Ins. 387
 Prolobodorus *Fleutiaux* Ins. 229
 Prometra *Clark* Echin. 59
 Promyrma *Forel* Ins. 274
 Proneptunea *Thiele* Moll. 63
 Pronomiophora *Enderlein* Ins. 405
 Pronomopsis *Hermann* Ins. 400
 Proparmacella *Simroth* Moll. 78
 Proremus *Reitter* Ins. 238
 Prorhynchopsis *Beauchamp* Verm. 31
 Prorocorypha *Rehn* Ins. 457
 Proselandria *Rohwer* Ins. 296
 Prosepidosis *Kieffer* Ins. 381
 Prosopantrum *Enderlein* Ins. 416
 Prosthiacantha *Enderlein* Ins. 286
 Prosthiacanthina *Enderlein* Ins. 416
 Prosthodocis *Enderlein* Ins. 281
 Prostromboceros *Rohwer* Ins. 296
 Protapate *Wickham* Ins. 233
 Protarcys *Klapálek* Ins. 443
 Proteneus *Barker & Covey* Verm. 33
 Protichisma *Hermann* Ins. 400
 Protocacritermes *Holmgren* Ins. 442
 Protochrysis *Pascher* Prot. 59
 Protodexia *Townsend* Ins. 411
 Protogenes *Mabille & Boulet* Ins. 312
 Protogonia *Townsend* Ins. 411
 Protohamitermes *Holmgren* Ins. 442
 Protolaelaps *Trägårdh* Arachn. 33
 Protomeliturga *Ducke* Ins. 262
 Protomyzostomum *Fedotov* Verm. 54
 Protopalaeaster *Hudson* Echin. 52
 Protoxyela *Macgillivray* Ins. 296
 Protropites *Arthaber* Moll. 101
 Protyllocera *Bezzi* Ins. 406
 Proutoseia *Schaus* Ins. 354
 Provadilus *Reitter* Ins. 238
 Prowazekella *Alexeieff* Prot. 59
 Prytaneutis *Meyrick* Ins. 369
 Psalidesma *Becker* Ins. 405
 Psalidodon *Eigenmann* Pisces 36
 Psammomyrma *Forel* Ins. 274
 Psaronius *Enderlein* Ins. 393
 Psectrosciara *Enderlein* Ins. 385
 Pselaphocompsus *Rafray* Ins. 214
 Pscudaelara *Heller* Ins. 249
 Pseudagrionoptera *Ris* Ins. 446
 Pseudanthura *Richardson* Crust. 33
 Pseudapines *Bergroth* Ins. 419
 Pseudapocyrtus *Heller* Ins. 243
 Pseudartamus *Mathews* Aves 124
 Pseudopimeria *Chevreaux* Crust. 36
 Pseudeuophrys *Dahl* Arachn. 29
 Pseudibidion *Casey* Ins. 249
 Pseudobalbillus *Jacobi* Ins. 431
 Pseudoberaeodes *Ulmer* Ins. 373
 Pseudocasinaria *Schmiedeknecht* Ins. 281
 Pseudochoragus *Petri* Ins. 246
 Pseudocyphoderus *Imms* Ins. 459
 Pseudodinusa *Bernhauer* Ins. 212
 Pseudofentonia *Strand* Ins. 325
 Pseudoficalbia *Theobald* Ins. 389
 Pseudogergithus *Schmidt* Ins. 429
 Pseudogramma *Girault* Ins. 290
 Pseudohypocera *Malloch* Ins. 405
 Pseudoloxocera *Krüber* Ins. 398
 Pseudolychas *Kraepelin* Arachn. 25
 Pseudomesystoechus *Ohaus* Ins. 224
 Pseudomicrotermes *Holmgren* Ins. 442
 Pseudomitraceras *Roewer* Arachn. 32
 Pseudomoina *Sars* Crust. 38
 Pseudoneptunides *Csiki* Ins. 226
 Pseudonicsara *Karny* Ins. 454
 Pseudontaster *Koehler* Echin. 52
 Pseudopachylus *Roewer* Arachn. 32
 Pseudopemmatites *Fraipont* Por. 7
 Pseudophalangodes *Roewer* Arachn. 32
 Pseudopucroliia *Roewer* Arachn. 32
 Pseudorhabditis *Sziits* Verm. 43
 Pseudorthoceras *Girty* Moll. 101
 Pseudosagitta *Germain & Joubin* Verm. 46
 Pseudothamnurgus *Eggers* Ins. 245

- Pseudothiscia Schmidt* Ins. 429
Pseudotoucasia Douvillé Moll. 95
Pseudotritonia Thiele Moll. 76
Pseudoxestomyza Kröber Ins. 398
Pseudozosime Scott Crust. 42
Psilacrum Becker Ins. 416
Psiletorogomphus Prell Ins. 225
Psilomegalosphys Enderlein Ins. 385
Psilommiscus Enderlein Ins. 286
Psilomonodes Warren Ins. 343
Psilopsiagon Ridgway Aves 110
Psiloscirtus Bruner Ins. 457
Psilozona Ricardo Ins. 400
Psoidia Lesne Ins. 233
Psygmotocera Enderlein Ins. 290
Pterodercylus Kuntzen Ins. 206
Pteronidia Bolton Ins. 447
Pterygonepion Pfeiffer Moll. 101
Ptilonycterus Ridgway Aves 112
Ptychocardia Thiele Moll. 95
Ptychodesia Schrammen Por. 7
Pycnocrepis Enderlein Ins. 393
Pycnofurius Poppius Ins. 425
Pycnonotida Casey Ins. 235
Pyuropsis Michaelsen Proch. 7
Pyxinioides Tregouboff Prot. 52
- Quoyornis Mathews* Aves 125
Quoyula Iredale Moll. 64
- Rachipopogon Ricardo* Ins. 400
Radhades Distant Ins. 431
Rambea Poppius Ins. 425
Ramphocorixa Abbott Ins. 426
Ramsayornis Mathews Aves 128
Raynalius Chatanay Ins. 235
Redingtonia Barnes & McDunnough
 Ins. 343
Reichertella Enderlein Ins. 390
Reichertia Enderlein Ins. 243
Retispinopora Brydone Por. 10
Rhabdechinus Lambert Echin. 48
Rhabdoceratites Rehn & Hebard Ins.
 450
Rhabdopygus Roewer Arachn. 32
Rhabdoscirtus Bruner Ins. 457
Rhadinomphax Prout Ins. 354
Rhadinopsylla Jordan & Rothschild Ins.
 417
Rhadinorhinus Riggs Mamm. 51
Rhagadochir Enderlein Ins. 443
Rhamphadoretus Ohaus Ins. 224
Rhcgmoclema Enderlein Ins. 390
Rheinholdia Mathews Aves 100
Rhinochaetula Friese Ins. 262
Rhinosardinia Eigenmann Pisces 35
Rhipidolestes Ris Ins. 446
Rhizedra Warren Ins. 343
Rhoadsia Fowler Pisces 37
Rhodostoma Sollas & Sollas Echin. 53
- Rhomboderula Giglio-Tos* Ins. 451
Rhopalogastrum Bernhauer Ins. 212
Rhopalopria Kieffer Ins. 294
Rhopalopsole Klapálek Ins. 443
Rhopalospathius Cameron Ins. 286
Rhopalothrips Hood Ins. 438
Rhynchotria Klunder van Gijen Ins. 360
Rhynchomicropteron Annandale Ins.
 405
Rhynchophion Enderlein Ins. 282
Rhynchotettix Bolívar Ins. 457
Rhynchothrips Hood Ins. 438
Rhynchothrips Karny Ins. 438
Richardiodes Hendel Ins. 416
Rileya Olivier Ins. 231
Rimenostolus Reitter Ins. 238
Rinamba Cameron Ins. 286
Riponus Casey Ins. 250
Rodriguesia Dyar Ins. 343
Rogersornis Mathews Aves 134
Ronyerus Pic Ins. 236
Rosina Mathews Aves 123
Rossiella Nuttall Prot. 55
Rosvolestus Reitter Ins. 238
Rothschildella Enderlein Ins. 417
Roya Iredale Moll. 75
Royella Iredale Moll. 66
Royigerygone Mathews Aves 117
Rusnepranus Reitter Ins. 238
Rustavelia Horváth Ins. 427
Ryania Mathews Aves 123
- Sacadodes Dyar* Ins. 343
Safole Jordan Pisces 44
Samuela Mathews Aves 119
Sarasinella Uhlig Moll. 101
Sarophora Schrammen Por. 7
Sassandria Roewer Arachn. 32
Satnalistus Reitter Ins. 238
Satrapister Bickhardt Ins. 217
Sauterellus Enderlein Ins. 282
Savinaster Lambert Echin. 48
Scabrobunus Roewer Arachn. 32
Scandia Fraser Coel. 12
Scapanulus Thomas Mamm. 41
Scaphorhinadoretus Ohaus Ins. 224
Scelacanthina Enderlein Ins. 416
Sceodamia Poppius Ins. 425
Schellwienia Staff Prot. 51
Scherffelia Pascher Prot. 59
Schismatogobius Beaufort Pisces 48
Schistometra Cholodkovskij Verm. 35
Schistura Olivier Ins. 232
Schizodinium Chatton Prot. 61
Schizodiplosis Kieffer Ins. 381
Schizopria Kieffer Ins. 294
Schizoproetus Richter Arachn. 8
Schizoribautia Brölemann Myr., Arachn.
 43

- Schultessinia Sjöstedt* Ins. 454
Scioptila Warren Ins. 344
Sclerocyrtus Heller Ins. 243
Scleronycteris Thomas Mamm. 41
Scodionista Joannis Ins. 354
Scoliopsyllopsis Enderlein Ins. 439
Scoliphia Banks Ins. 268
Scopaeothrips Hood Ins. 438
Scoparona Chapman Ins. 358
Scottia Bolivar Ins. 452
Scranciana Strand Ins. 326
Sculptiferussacia Germain Moll. 83
Scutasta Hermández Por. 7
Scutulina Cossmann Moll. 75
Scymnognathus Broom Rept. 30
Scythropochroa Enderlein Ins. 385
Semiramis Becker Ins. 401
Sennia De Stefani Perez Ins. 290
Sennia Pascher Prot. 59
Senoclidea Rohwer Ins. 296
Sepidium Levy Moll. 101
Sepietta Naef Moll. 101
Sepiolina Naef Moll. 101
Septosaccus Duboscq Crust. 45
Serrofurius Poppius Ins. 425
Serropeltis Poppius Ins. 425
Sesioctonus Viereck Ins. 286
Sesioplex Viereck Ins. 282
Setopagis Ridgway Aves 112
Seychellesia Bolivar Ins. 452
Shania Evans Ins. 306
Sheffieldia Druce Ins. 310
Sibibius Chamberlin Myr., Arachn. 44
Sigmoceros Heller Mamm. 49
Sillophora Warren Ins. 344
Silvanolomus Reitter Ins. 218
Silveira Navás Ins. 378
Silvestrina Kieffer Ins. 381
Simomesia Enderlein Ins. 416
Sinocharis Püngeler Ins. 344
Sitades Distant Ins. 431
Sjostedtina Schouteden Ins. 420
Skeiromyia Leicester Ins. 389
Skobeleva Klapálek Ins. 443
Smeryngolaphria Hermann Ins. 400
Sogona Chamberlin Myr., Arachn. 44
Sogophagus Chamberlin Myr., Arachn. 44
Sogra Navás Ins. 378
Solconasus Eigenmann Pisces 50
Solter Navás Ins. 378
Someropsis Strand Ins. 326
Sonibius Chamberlin Myr., Arachn. 44
Soniphilus Chamberlin Myr., Arachn. 44
Sowubius Chamberlin Myr., Arachn. 44
Sozibius Chamberlin Myr., Arachn. 44
Spaniocentra Prout Ins. 354
Spathidexia Townsend Ins. 411
Spathimya Townsend Ins. 411
Spathiohormius Enderlein Ins. 286
Spatulipalpa Kröber Ins. 398
Spengelomenia Heath Moll. 59
Sphaeconophilus Becker Ins. 379
Sphaeripara Poche Verm. 36
Sphaeroterme Holmgren Ins. 442
Sphagnella Sekera Verm. 31
Sphaleropalpus Ulmer Ins. 373
Sphenomorphaidea Heller Ins. 243
Spheterista Meyrick Ins. 364
Spialia Swinhoe Ins. 312
Spintherobolus Eigenmann Pisces 36
Spirasigma Hallmann Por. 8
Spodocellinus Reitter Ins. 238
Squaliolus Smith Pisces 33
Statiropsis Boschmann Ins. 236
Stauropussa Strand Ins. 326
Stegasmonotus Enderlein Ins. 393
Stegomyrmex Emery Ins. 275
Steinomyia Malloch Ins. 411
Stelgidophora Bergroth Ins. 419
Stenapion Wagner Ins. 243
Steniscadia Hampson Ins. 344
Stenobatyle Casey Ins. 250
Stenodictyoneura Leriche Ins. 447
Stenoecia Warren Ins. 344
Stenonycteris Anderson Mamm. 40
Stenoptilomyia Ulmer Ins. 373
Stenostauridia Strand Ins. 326
Stenosticta Hampson Ins. 344
Stenotyphlops Stebbing Crust. 32
Stephanothrips Trybom Ins. 438
Stereochlamis Schrammen Por. 7
Stethasida Casey Ins. 235
Sthenaropsis Poppius Ins. 425
Sthenodectes Gregory Mamm. 52
Stibadocera Enderlein Ins. 393
Stichmapteryx Schrammen Por. 7
Stictobremia Kieffer Ins. 381
Stictothripa Hampson Ins. 345
Stiroxophanes Cameron Ins. 282
Stirostoma Cameron Ins. 286
Stomatothrips Hood Ins. 438
Stomphastis Meyrick Ins. 370
Strandibalonius Roewer Arachn. 32
Strandiella Friese Ins. 262
Strepselydna Warren Ins. 345
Streptopharagus Blanc Verm. 44
Stroblia Schmiedeknecht Ins. 282
Strombocodia Hermann Ins. 400
Strumadorotus Ohaus Ins. 224
Studeriotus Thomson Coel. 14
Stupamacus Reitter Ins. 238
Stygnogonaloidea Strand Ins. 287
Stylocontarium Popofsky Prot. 52
Stylocephalus Ellis Prot. 53
Suarezia Théry Ins. 228
Sublacuna Thiele Moll. 67
Subulitermes Holmgren Ins. 442
Swammerdamella Enderlein Ins. 390
Sympodomma Stebbing Crust. 32

- Syncterogomphus *Prell* Ins. 225
 Syngropia *Hampson* Ins. 361
 Synhamitermes *Holmgren* Ins. 442
 Synhimantus *Railliet, Henry & Sisoff*
 Verm. 44
 Syntomcrea *Strand* Ins. 327
 Syringium *Schrammen* Por. 7
 Syringogaster *Cresson* Ins. 416
 Systellodiscus *Enderlein* Ins. 416
 Systellura *Ridgway* Aves 112

 Tabiphilus *Chamberlin* Myr., Arachn. 44
 Taborcella *Sekera* Verm. 31
 Tachychlora *Prout* Ins. 354
 Taenogera *Krüber* Ins. 398
 Tahulus *Navás* Ins. 378
 Taiyubius *Chamberlin* Myr., Arachn. 44
 Taiyuna *Chamberlin* Myr., Arachn. 44
 Talimeda *Cameron* Ins. 282
 Tambusana *Distant* Ins. 430
 Tamenes *Gounelle* Ins. 250
 Tampiya *Chamberlin* Myr., Arachn. 44
 Tanyphatnidea *Rohwer* Ins. 297
 Taranomis *Casey* Ins. 250
 Tarsolarkus *Thor* Arachn. 35
 Tasmanornis *Mathews* Aves 123
 Tathothripa *Hampson* Ins. 345
 Tauridella *Sekera* Verm. 32
 Taurops *Broom* Rept. 30
 Tebennotoma *Enderlein* Ins. 286
 Tecutinus *Reitter* Ins. 238
 Tegellula *Breddin* Ins. 422
 Teliocrinus *Döderlein* Echin. 60
 Telolsuca *Reuter* Ins. 426
 Temnaster *Lambert* Echin. 49
 Tenuirostretermes *Holmgren* Ins. 442
 Tepperella *Cameron* Ins. 291
 Terataner *Emery* Ins. 275
 Teratochrysis *Semenov* Ins. 276
 Teratomorpha *Walsingham* Ins. 370
 Termatophylidea *Reuter & Poppius* Ins.
 423
 Termitoquedius *Bernhauer* Ins. 212
 Termitocena *Wasmann* Ins. 212
 Teromyia *Leicester* Ins. 389
 Tessmannella *Hedieke* Ins. 294
 Tetractinomyxon *Ikeda* Prot. 56
 Tetramyrma *Forel* Ins. 275
 Tetrasphaera *Popofsky* Prot. 52
 Thalassothemis *Ris* Ins. 446
 Thalperus *Burr* Ins. 448
 Thalycrynchus *Reitter* Ins. 238
 Thaumateiana *Girault* Ins. 291
 Thaumaticthys *Smith & Radcliffe*
 Pisces 52
 Thaumtolita *Walsingham* Ins. 370
 Thaumtophrya *Collin* Prot. 62
 Thaumatotypidea *Viereck* Ins. 286
 Theatria *Walsingham* Ins. 370
 Thecoxidion *Karny* Ins. 454
 Thectocercus *Ridgway* Aves 110
 Thelepides *Gravier* Verm. 54
 Thelyccra *Prout* Ins. 355
 Thecobaldiomyia *Brunetti* Ins. 389
 Theridicellum *Dahl* Arachn. 26
 Thermopteryx *Hampson* Ins. 361
 Thomasia *Rübsaamen* Ins. 382
 Thrasydoxa *Meyrick* Ins. 370
 Thyestarcha *Meyrick* Ins. 370
 Thylacoides *Gravier* Crust. 42
 Thylacomorpha *Enderlein* Ins. 439
 Thyretarctia *Strand* Ins. 327
 Thyrisca *Gilbert & Burke* Pisces 49
 Tigribaphe *Mathews* Aves 105
 Timocratica *Meyrick* Ins. 370
 Timorocrinus *Wanner* Echin. 60
 Timpina *Chamberlin* Myr., Arachn. 44
 Tiora *Evans* Ins. 311
 Tipulodina *Enderlein* Ins. 394
 Titella *Navás* Ins. 439
 Titsona *Chamberlin* Myr., Arachn. 46
 Tmetonema *Longstaff* Moll. 75
 Tocasta *Busck* Ins. 370
 Tonirdus *Mathews* Aves 98
 Tomopaguroides *Balss* Crust. 28
 Tontoia *Waleott* Arachn. 8
 Topomyia *Leicester* Ins. 389
 Toseytus *Reuter* Ins. 425
 Tothrix *Swinhoe* Ins. 312
 Tracheterogomphus *Prell* Ins. 225
 Trachiehnemon *Viereck* Ins. 282
 Trachyopterus *Morley* Ins. 282
 Trechmannia *Longstaff* Moll. 75
 Tregellasia *Mathews* Aves 125
 Triacudorsum *Roewer* Arachn. 32
 Trichagalma *Mayr* Ins. 294
 Trichapion *Wagner* Ins. 243
 Trichiasida *Casey* Ins. 235
 Trichilicinus *Poppius* Ins. 207
 Trichocolletes *Cockerell* Ins. 262
 Trichodere *North* Aves 128
 Trichodiplosis *Kieffer* Ins. 382
 Trichogorytes *Rohwer* Ins. 269
 Trichohalticella *Cameron* Ins. 291
 Trichomegalosphys *Enderlein* Ins. 385
 Trichoptya *Warren* Ins. 346
 Trichorhabda *Meyrick* Ins. 371
 Trichorhynchomyia *Brunetti* Ins. 389
 Trichothyrsa *Meyrick* Ins. 371
 Tricommatum *Roewer* Arachn. 32
 Triconus *Hérouard* Echin. 35
 Tridentifrons *Warren* Ins. 346
 Trigonarthron *Boppe* Ins. 250
 Trigonochorium *Stein* Ins. 417
 Trigonogenius *Hagedorn* Ins. 245
 Trigonophasmus *Enderlein* Ins. 286
 Trilobatum *Popofsky* Prot. 52
 Trinervitermes *Holmgren* Ins. 442
 Trionyxella *Roewer* Arachn. 32
 Tripteria *Enderlein* Ins. 286

- Trisopsis *Kieffer* Ins. 382
 Tristeleuta *Strand* Ins. 307
 Trochaclis *Thiele* Moll. 72
 Troglodytella *Brumpt & Joyeux* Prot. 62
 Trogobriga *Hampson* Ins. 346
 Tropidostropha *Longstaff* Moll. 75
 Trypanodinium *Chatton* Prot. 62
 Tuberculitermes *Holmgren* Ins. 442
 Tugelana *Distant* Ins. 428
 Tullgrenia *Van der Goot* Ins. 434
 Tumulitermes *Holmgren* Ins. 442
 Tunaria *Hoek* Brach. 7
 Turitia *Schumacher* Ins. 431
 Turrisipho *Dautzenberg & Fischer* Moll. 64
 Tuzoia *Walcott* Crust. 36
 Tylcus *Casey* Ins. 250
 Tylicus *Casey* Ins. 219
 Tylobronchus *Eigenmann* Pisces 37
 Tylopterus *Clarke & Ruedmann* Arachn. 9
 Tympanopleura *Eigenmann* Pisces 40
 Typhloplanella *Sekera* Verm. 32
 Typhluloma *Lea* Ins. 235

 Udamochiras *Enderlein* Ins. 405
 Udamolepis *Enderlein* Ins. 439
 Udenopogon *Becker* Ins. 400
 Udonodus *Reitter* Ins. 238
 Udosellus *Reitter* Ins. 238
 Uhleroides *Distant* Ins. 428
 Uleella *Rübsaamen* Ins. 382
 Ulometra *Meyrick* Ins. 371
 Ulozenus *Reitter* Ins. 238
 Uradiophora *Mercier* Prot. 53
 Urangela *Busck* Ins. 371
 Urbanella *Schepotieff* Prot. 48
 Urias *Richardson* Crust. 33
 Urocorycaeus *Dahl* Crust. 42
 Urocystidium *Beddard* Verm. 35
 Urorrhynchus *Reitter* Ins. 238

 Vachushtia *Šugurov* Ins. 458
 Vahlkampfia *Chatton & Lalung-Bonnaire* Prot. 48
 Vania *Clark* Echin. 55
 Vaughaniana *Garwood* Coel. 15
 Vedopranus *Reitter* Ins. 238
 Velocitermes *Holmgren* Ins. 442
 Vesicatruss *Eigenmann* Pisces 36
 Vibrissomyia *Townsend* Ins. 411
 Vicoranius *Reitter* Ins. 238
 Villanovia *Strobl* Ins. 411
 Vima *Hirst* Roewer Arachn. 32
 Viroprius *Reitter* Ins. 238
 Volgocuma *Derzhavn* Crust. 32
 Voruchiella *Poppius* Ins. 425
 Vulturops *Townsend* Ins. 439

 Walkerola *Hannibal* Moll. 85
 Wanachia *Schulze* Ins. 236
 Wandesia *Schechtel* Arachn. 36
 Waptia *Walcott* Crust. 37
 Watersia *Calvet* Bry., Brach. 13
 Watersiana *Calvet* Bry., Brach. 13
 Watophilus *Chamberlin* Myr., Arachn. 44
 Weelcus *Navás* Ins. 378
 Wernzia *Navás* Ins. 378
 Wewokolla *Girty* Por. 7
 Whiteornis *Mathews* Aves 117
 Whitlocka *Mathews* Aves 126
 Wilsonavis *Mathews* Aves 117
 Winnertziola *Kieffer* Ins. 382
 Witlesia *Chapman* Ins. 362
 Wollemannia *Schrammen* Por. 7
 Wollmannia *Mocsáry* Ins. 276

 Xanthourytoma *Cameron* Ins. 291
 Xanthocharops *Morley* Ins. 282
 Xanthodermus *Bernhauer* Ins. 213
 Xenoconger *Regan* Pisces 42
 Xenomedon *Fall* Ins. 213
 Xenopharynx *Nicoll* Verm. 33
 Xenosomina *Pierce* Ins. 244
 Xenotermes *Holmgren* Ins. 442
 Xestips *Hagedorn* Ins. 245
 Xestomyzina *Kröber* Ins. 398
 Xiliphius *Eigenmann* Pisces 40
 Xylophruridea *Viereck* Ins. 283

 Yakobsonia *Kožančikov* Ins. 221
 Yohioia *Walcott* Crust. 37

 Zacharops *Viereck* Ins. 283
 Zadrehus *Reitter* Ins. 238
 Zaisania *Suvorov* Ins. 244
 Zalagium *Rohwer* Ins. 297
 Zalmoxida *Rocwer* Arachn. 32
 Zalophancylus *Hannibal* Moll. 85
 Zalophia *Casey* Ins. 250
 Zamacrophya *Rohwer* Ins. 297
 Zamansa *Viereck* Ins. 283
 Zamesochorus *Viereck* Ins. 283
 Zamicroodus *Viereck* Ins. 286
 Zaplethocornia *Viereck* Ins. 283
 Zarielus *Reitter* Ins. 238
 Zasternaulax *Viereck* Ins. 283
 Zatranoosema *Viereck* Ins. 283
 Zavodesus *Reitter* Ins. 238
 Zelomorphidea *Viereck* Ins. 286
 Zelotomelus *Reitter* Ins. 238
 Zetesima *Walsingham* Ins. 371
 Zeugnomyia *Leicester* Ins. 390
 Zinapolys *Chamberlin* Myr., Arachn. 44
 Zoonogenus *Nicoll* Verm. 33
 Zosteropicola *Johnston* Verm. 36
 Zuleika *Distant* Ins. 430
 Zumoffenia *Fourtau* Echin. 50
 Zustalestus *Reitter* Ins. 238
 Zygonna *Enderlein* Ins. 385

351681①

Kunze

This preservation photocopy
was made and hand bound at BookLab, Inc.
in compliance with copyright law. The paper,
Weyerhaeuser Cougar Opaque Natural,
meets the requirements of ANSI/NISO
Z39.48-1992 (Permanence of Paper).



Austin 1994

SMITHSONIAN INSTITUTION LIBRARIES



3 9088 01350 8718