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elevations; it even occurs near the sea. Its flight is very rapid if pursued." (J. As. Soc. Bengal, 1905, 501).

TACHYRIS GALBA.

Plate 558, fig. 2, 2a ♂ (*Wet form*), 2c, d ♂ (*Dry form*).

Tachyris Galba, Wallace, Trans. Ent. Soc. 1867, p. 378, ♂.

Appias Galba, Butler, Ann. Nat. Hist. 1885, p. 339.

Catophaga Galba, Watson, Journ. Bombay N. H. Soc. 1894, p. 499.

Tachyris Nero, Wood-Mason and de Nicéville, Journ. As. Soc. Bengal, 1886, p. 372. Elwes, Tr. Ent. Soc. 1888, p. 418. de Nicéville, Sikkim Gazetteer, 1894, p. 169. Swinhoe, Tr. Ent. Soc. 1893, p. 310. Fruhstorfer, Iris, 1902, p. 293; *id.* Soc. Ent. 1903, p. 41.

Appias Nebo, Grose-Smith, Rhop. Exot., App. pl. 1, fig. 1, 2 ♂ (1894)—(*Dry form*). Adamson, List Burm. Butt. p. 43 (1897).

Wet-season Brood (Plate 558, fig. 2, 2a ♂).

Male. *Forewing* more acute at the apex than in typical *Nero*. Upperside. Ground-colour of both wings dark crimson (varying in some specimens to a much paler ochreous-red tint); all the veins distinctly black lined. *Forewing* with base of costa and basal area slightly speckled with yellowish and black scales; a blackish-scaled outer marginal sinuous border decreasing posteriorly from the apex to submedian, preceded by a discal transverse excurved series of black-scaled angled vein-spots, which extend from the third subcostal branch to lower median veinlet, these spots being very slightly joined along the vein borders to the opposite angle of the outer band. *Hindwing* with the abdominal area yellowish-ochreous, the veins basally slightly and exteriorly distinctly black lined, and merging into an outer marginal black-scaled somewhat macular band, this band in the paler red specimens being quite macular. Underside. *Forewing* much paler, the costal border and apex yellowish-ochreous, the outer band and discal markings of the upperside being slightly apparent. *Hindwing* yellowish-ochreous, very sparsely and indistinctly irrorated with minute dusky scales, except on the outer discal area, where their absence forms a slightly paler submarginal fascia. Female not examined.

Expanse, ♂ $2\frac{3}{4}$ to $2\frac{1}{4}$ inches.

Intermediate form. Male. Upperside. Both wings uniformly pale crimson. *Forewing* with all the veins black-lined throughout, the marginal and discal markings being entirely absent. *Hindwing* with the outer veins externally black-lined; no marginal markings. Underside. *Forewing* reddish-ochreous, the apex palest. *Hindwing* uniformly deep ochreous-yellow. Khasia Hills.

Expanse, $2\frac{3}{4}$ inches.

Dry-season Brood (Plate 558, fig. 2c, d ♂).

Male. Upperside. *Forewing* either paler crimson than in *wet* form or ochreous-

red; outer margin and end of the veins for some distance inward black scaled. *Hindwing* either paler crimson or paler ochreous-red, than on the forewing, basally, merging to pale reddish-ochreous externally to extreme outer margin, the upper veins sometimes with a few blackish scales at their tip. Underside. *Forewing* pale reddish-ochreous or ochreous-yellow basally, merging to pale yellowish-ochreous externally. *Hindwing* pale reddish-ochreous basally, merging to pale ochreous-yellow externally, or uniformly pale ochreous-yellow.

Expanse, ♂ $2\frac{3}{4}$ to $3\frac{1}{4}$ inches.

HABITAT.—Lower Sikkim; Assam; Cachar, Khasias; Manipur; Upper Burma; Shan States; Siam; Tonkin.

DISTRIBUTION.—Mr. H. J. Elwes records it as “of very rare occurrence in Sikkim, where,” he says, “I have never seen it. Mr. O. Möller has one or two specimens from the low outer Hills” (Tr. Ent. Soc. 1888, 418). The type specimen of *Galba* was taken by Major J. Lind Sherwill, probably, in Assam. In Mr. W. S. Atkinson’s Collection were specimens from “Dansuri, Assam.” Col. C. Swinhoe records “many examples from the Khasia Hills” (Tr. Ent. Soc. 1893, 310). Mr. J. Wood-Mason obtained “a single female at Irangmara, Cachar, in July” (J. As. Soc. Beng. 1886, 72). Dr. G. Watt caught “several specimens near Manipur” (Ann. N. H. 1885, 339). Col. C. H. E. Adamson obtained the type specimen of *Nebo* “in the Hills of the extreme north of the Chindwin District, Upper Burma, in the cold weather” (List, p. 43). “In Mr. L. de Nicéville’s Collection are both sexes of *Nebo*, from Upper Burma, which were taken in the same locality as the type, in April, and is, I believe, only a spring *dry* form” (J. As. Soc. Beng. 1895, 501). It is also recorded from the Shan States; Siam, and Tonkin.

Of our illustrations on Plate 558, fig. 2, 2a, are from the male type of *Galba*, in our own Collection; fig. 2b, is from a Malayan male of *Figulina*, and fig. 2c, d, from the type of *Nebo*, in the possession of Col. Adamson, at Newcastle.

INDO-MALAY SPECIES.—*Tachyris Nero* (Pap. Nero, Fabricius, Ent. Syst. iii. i. p. 153, ♂ (1793). Donovan, Ins. Ind. pl. 32, fig. 1 (1800). Pieris Nero, Boisd. Spec. Gén. Lep. p. 485 (1836). Doubleday, Gen. D. Lep. i. p. 51 (1847). Moore, Catal. Lep. Mus. E. I. C. i. p. 70 (1857). Trigonina Nero, Geyer, Hübner’s Zutr. v. p. 21, fig. 881-2, ♂ (1837). *Tachyris Nero*, Wallace, Tr. Ent. Soc. 1867, p. 378. Butler, Catal. Fabr. Lep. B. M. p. 209 (1869). Pieris Thyria, Godt. Enc. Méth. ix. p. 147 (1819). Griffith, Cuv. Ins. pl. 21, fig. 1, ♂; Guérin, *id.* pl. 77, fig. 1. Lucas, Lep. Exot. pl. 25, fig. 3 (1835). *Pontia Thyria*, Horsfield, Zool. Journ. v. p. 69, pl. 4, fig. 2, ♂ (1829). *Habitat.* Java.

Tachyris Figulina (Pieris Figulina, Butler, Ann. Nat. Hist. 1867, p. 399, pl. 8, fig. 1, ♀. Appias Figulina, Butler, Tr. Linn. Soc. Zool. 1879, p. 551. *Tachyris Nero* (pt.), Wallace, *l.c.* p. 378 (1867). Appias Nero, Distant, Rhop. Malay. p. 311,

pl. 24, fig. 9, 10, ♂ ♀ (1885). Doherty, J. As. Soc. Beng. 1889, p. 121. de Nicéville, J. As. Soc. Beng. 1895, p. 500. T. Perakana, Fruhstorfer, Iris, 1902, p. 178. *Habitat.* Malay Peninsula; Sumatra; Borneo.

Tachyris Ramosa (Catoph. Ramosa, Fruhstorfer, Berl. Ent. Zeit, 1898, p. 328; *id.* Deuts. Ent. Zeit. 1902, p. 293. *Habitat.* Nias Island.

Tachyris Flavius (Appias Flavius, Grose-Smith, Ann. Nat. Hist. 1892, p. 427, ♂ ♀. *Habitat.* Taganac Island, N.W. Borneo.

Tachyris Hainanensis (Tach. Hainanensis, Fruhstorfer, Iris, 1902, p. 178. *Habitat.* Hainan Island, Wien.

Tachyris Domitia (Pieris Domitia, Felder, Ent. Monats. vi. p. 285, ♂ (1862). *Tachyris Domitia*, Wallace, Tr. Ent. Soc. 1867, p. 379. Appias Domitia, Semper, Reis. Phil. Lep. p. 244, pl. 40, fig. 1-5, ♂ ♀ (1891). P. Asterope, Felder, *l.c.* p. 286, ♀. Pieris Zamboanga, Feld. *l.c.* p. 285, ♀. Appias Mindanaensis, Butler, Ann. Nat. Hist. 1883, p. 421. *Habitat.* Philippines.

Genus LEPTOSIA.

Leptosia, Hübner, Verz. bek Schmett. p. 95 (1816). Scudder, Proc. Amer. Acad. A. et S. Boston, 1875, p. 204. Distant, Rhop. Malay, p. 287 (1885). Kirby, Allen's Nat. Libr. Butt. ii. p. 176 (1896).

Pontia (sub-gen.) *Nina*, Horsfield, Catal. Lep. Mus. E. I. Company, p. 140 (1829).

Pontia, Boisduval, Spec. Gén. Lep. i. p. 430 (1836). Doubleday, Gen. D. Lep. i. p. 40 (1847). Kirby, Syn. Catal. D. Lep. i. p. 439 (1871). Crotch, Cist. Ent. i. p. 66 (1872). Schatz, Exot. Schmett. ii. p. 65 (1886).

Nychitona, Butler, Cistula Entom. i. pp. 34, 41 (1870). Moore, Lep. of Ceylon, i. p. 117 (1881).

IMAGO.—Wings very delicate. *Forewing* subpyriform, apical margin very convex; costal vein extending two-thirds the margin; subcostal branches far apart, first branch at one-third before end of the cell, second immediately before the end, third and fourth (or upper radial) on a foot-stalk one-third beyond the cell; lower radial from upper end of the cell; discocellular veinlet deeply concave; cell more than half length of the wing; middle median at one-eighth and lower at nearly one-half before end of the cell; submedian vein recurved. *Hindwing* triangularly-oval, exterior margin very convex; precostal vein short; costal vein arched at the base; first subcostal branch much curved, emitted at one-third before end of the cell; upper discocellular bent outward near the subcostal, lower outwardly oblique, radial from angle of upper near subcostal; middle median at one-fourth and lower at one-half before end of the cell; submedian vein straight, internal recurved. *Body* very slender; palpi pilose beneath, projecting beyond the head; antennæ with a long compressed pointed club.

LARVA AND PUPA.—“Very like those of *Terias Hecabe*, but more delicately formed.

Larva green, with a pale glaucous tinge about the bases of the legs, and slightly hairy. Pupa sometimes green, but oftener of a delicate pink shade" (Davidson and Aitken, J. Bombay N. H. S. 1896, 569).

TYPE.—*L. Xiphia*.

LEPTOSIA XIPHIA.

Plate 559, fig. 1 ♂, 1a, b ♀.

Papilio Xiphia, Fabricius, Spec. Ins. ii. p. 43 (1781); Mant. Ins. p. 20 (1787).

Pontia Xiphia, Butler, Catal. Fabr. D. Lep. Brit. Mus. p. 229 (1869). Kirby, Syn. Catal. D. Lep. p. 439 (1871). Druce, Proc. Zool. Soc. 1873, p. 354; *id.* 1874, p. 107. Swinhoe, P.Z.S. 1885, p. 135; *id.* Tr. Ent. Soc. 1893, p. 309. Elwes, Tr. Ent. Soc. 1888; p. 407.

Leptosia Xiphia, Distant, Rhop. Malay. p. 288, pl. 26, fig. 8 (1885). de Nicéville, Journ. As. Soc. Bengal, 1885, p. 49; *id. l.c.* 1895, p. 486, 1899, p. 210; *id.* Sikkim Gaz. 1894, p. 165. Hampson, J. As. Soc. Beng. 1888, p. 361. Watson, J. Bombay N. H. Soc. 1888, p. 25; *id. l.c.* 1891, p. 51; 1895, p. 669; *id.* J. As. Soc. Beng. 1890, p. 267. Semper, Reis. Phil. Lep. p. 251, pl. 42, fig. 1, 2 (1891). Ferguson, J. Bombay, N. H. S. 1891, p. 443. Kirby, Allen's Nat. Libr. Butt. ii. p. 176 (1896). Mackinnon and de Nicéville, J. Bombay N. H. S. 1898, p. 535. Adamson, List Burm. Butt. p. 40 (1897). Fruhstorfer, Deuts. Ent. Zeit. 1902, p. 269.

Nychitona Xiphia, Butler, Cist. Ent. i. p. 41 (1870). Moore, P.Z.S. 1878, p. 837; *id.* Lep. of Ceylon, i. p. 118, pl. 46, fig. 6. 6a (1881); Journ. Linn. Soc. Zool. 1886, p. 45. Taylor, List Orissa Butt. p. 13 (1888). Davidson and Aitken, Journ. Bombay N. H. Soc. 1896, p. 569.

Papilio Nina, Fabricius, Ent. Syst. iii. i. p. 194 (1793).

Pontia Nina, Horsfield, Catal. Lep. Mus. E. I. Company, p. 140 (1829). Boisduval, Spec. Gén. Lep. p. 430 (1836). Doubleday, Gen. D. Lep. i. p. 40 (1847). Moore, Catal. Lep. Mus. E. I. Company, i. p. 69 (1857). Wallace, Tr. Ent. Soc. 1867, p. 317. Lang, Ent. Mo. Mag. 1864, p. 102; Chaumette, *id. l.c.* 1865, p. 36; Rothney, *id. l.c.* 1882, p. 35. Snellen, Mid. Sumatra, p. 22 (1880). Staudinger and Schatz. Exot. Schmett. ii. p. 65 (1886).

Pieris Nina, Godart, Encyl. Méth. ix. p. 162 (1819).

Leptosia chlorographa, Hübner, Zuträge, fig. 47, 48 (1818).

Male. Upperside pure white. *Forewing* with the base of costal border marked with slender black outwardly-oblique striæ; a black apical marginal band which is broad anteriorly and angled at the radial veinlet, and from thence to the middle median narrow and macular; in the discal interspace of upper and middle median is a large black outwardly-oblique quadrate spot, which more or less slightly extends over each veinlet, and sometimes a few scales from its lower outer end reach the opposite marginal spot. *Hindwing* either unmarked, or (probably *wet* brood) with an outer marginal black fine slender broken line. Underside white. *Forewing* with the costal border and apex more or less faintly tinted with olivescence-yellow and flecked with delicate dusky-grey short strigæ, the extreme outer margin being slenderly black scaled between the veins. *Hindwing* crossed by very slender dusky-grey irregular strigæ, those across the upper and lower discal area being more regular and form

ill-defined fasciæ, the extreme outer marginal edge slightly black scaled between the veins. *Body*, legs, and palpi white; antennæ black above, white beneath.

Female. Upperside pure white. *Forewing* with the costal base as in male, the black apical border and oblique discal spot slightly broader. *Hindwing* as in male, the extreme outer marginal line being also inwardly edged with blackish scales. Underside similar to the male.

Expanse, ♂ $1\frac{2}{10}$ to $2\frac{6}{10}$, ♀ $1\frac{6}{10}$ to $1\frac{8}{10}$ inches.

HABITAT—Upper and Lower India; Ceylon; Burma; Tenasserim; Malay Peninsula; Sumatra; Borneo; Java; Philippines; Formosa.

DISTRIBUTION, HABITS, LARVA, ETC. (within our area).—In the North-west it was found, by Mr. P. W. Mackinnon, “in the Dehra Dun, elevation about 2,000 feet, S. of Masuri, commonly almost throughout the year” (J. Bombay N. H. Soc. 1898, 538). Capt. A. M. Lang writes: “I have seen this insect but in one place, a forest in the interior of Oudh, in the month of October. Under the bushes which formed the low underwood on the skirts of the forest, this delicate-winged insect flapped with weak flight, seeming to shun publicity, and to be afraid to fly boldly from the shelter of the bushes” (Ent. Mo. Mag. 1864, 102). North-eastward, it is recorded by Mr. H. J. Elwes, as “not common in Sikkim, but I have taken it below Mongpo in June, and it occurs up to 4,000 or 5,000 feet, from April to October” (Tr. Ent. Soc. 1888, 407). Col. C. Swinhoe notes it as being “common in the Khasia Hills” (*id. l.c.* 1893, 309). Capt. Chaumette writes, “Found in great abundance in Calcutta, flying very softly about, as if blown by the wind, in March and April” (Ent. Mo. Mag. 1865, 36). Mr. J. Rothney also obtained it in the “neighbourhood of Calcutta, in shady lanes from May to September. Never seen in the sun. Has a slow weak flight, and fond of ditches” (Ent. Mo. Mag. 1882, 35). Mr. L. de Nicéville records it as being “met with in the neighbourhood of Calcutta almost throughout the year” (J. As. Soc. Bengal, 1885, 49). Mr. W. C. Taylor found it “common at Khorda in Orissa” (List, p. 13, 1888). Col. C. Swinhoe obtained it in “Bombay in October, November, and December, in Poona from October to June; and on the Matheran Hill” (P. Z. S. 1885, 135). Messrs. J. Davidson and E. H. Aitken write: “This butterfly is met with in all parts of the N. Kanara District of Bombay, flitting about among underwood in shady places. Like many of the Pierinæ it is absent, or almost so, from June to September. We have bred the larva on Capers (*Capparis Heyneana*, *horrida*, *sepiaria*, and *Cratæva religiosa*). Both the larva and pupa are very like those of *Terias Hecabe*, but more delicately formed. The larva is green, with a pale glaucous tinge about the bases of the legs, and slightly hairy. The pupa is sometimes green, but oftener of a delicate pink shade” (J. Bombay N. H. S. 1896, 569). Mr. G. F. Hampson obtained it in the “Nilgiris, at from 1,000 to 7,000 feet elevation” (J. As. Soc. Bengal, 1888, 361). Capt. E. Y. Watson obtained it in

“ Madras, very common, from March to August ” (J. As. Soc. Beng. 1890, 267), also in “ Mysore in November ” (J. Bombay N. H. S. 1890, 7). Mr. H. S. Ferguson found it “ not common in Travancore, in the Hills at 1,000 to 4,000 feet ” (*id. l.c.* 1891, 443).

In Ceylon, Mr. F. M. Mackwood records it as “ a low country butterfly, with a slow flight, and seldom seen away from low brushwood, its favourite haunt.” Capt. Wade found it “ very common at Kandy, and easy to capture.” Capt. Hutchison took it at Matale, and in Colombo from June to December; flight slow, scarcely rising above the ground ” (Lep. Ceylon, i. 118). Dr. N. Manders found it “ widely distributed over Ceylon, and not uncommon in low country jungles ” (J. As. Soc. Beng. 1899, 210).

In Burma, Col. C. H. E. Adamson records it as “ very common in shady places throughout the country ” (List Burm. Butt. 1897, 40). Capt. E. Y. Watson took it at “ Pauk in November, and at Tilin from November to May ” (J. Bombay N. H. S. 1891, 51). Capt. Watson also found it “ common in the Upper Chindwin District, in the dry season, between January and June ” (*id. l.c.* 1897, 669). Dr. J. Anderson took it in Mergui, Tenasserim, in November, and on Elphinstone Island in March ” (J. Linn. Soc. Zool. 1886, 45).

LEPTOSIA NICOBARICA.

Nychitona Xiphia, var. *Nicobarica*, Doherty, Journ. As. Soc. Bengal, 1886, p. 262.

Male. Upperside. *Forewing* with the apical marginal black band comparatively narrower than in Ceylon, Indian, or Burmese specimens of *Xiphia*, the discal oblique spot being much smaller, transversely narrower, and less prominent. Underside. *Forewing* with the costal and apical flecks and discal spot indistinctly defined. *Hindwing* with the strigæ much less numerous and indistinctly defined.

Expanse, $1\frac{4}{10}$ to $1\frac{6}{10}$ inches.

HABITAT.—Great and Little Nicobar Island.

Sub-family COLIINÆ.

Coliinae, Swainson, Cabinet Cyclo. p. 87 (1840).

Rhodoceridae, Dupouchel, Catal. Méth. Lep. Eur. p. 26 (1844). Jutt. Brit. Butt. pp. 86, 251 (1896).

Rhodoceridi, Stephens, Catal. Brit. Lep. B. M. p. 2 (1850). Scudder, Butt. U. S. ii. p. 1,040 (1889).

Pieridi (pt.), Stephens, List Brit. Lep. B. M. p. 3 (1850). Stainton, Manual Brit. Lep. p. 15 (1857).

Dryadae, Schatz, Exot. Schmett. ii. p. 66 (1886).

Callidryinae, Kirby, Allen's Nat. Libr. Butt. ii. p. 207 (1896).

Anthocharinae (pt.), Kirby, *l.c.* p. 185.

Eurymini (pt.), Grote, Proc. Amer. Phil. Soc. 1900, p. 46.

Frugacia et Fidelia (pt.), Hübner, Verz. bek. Schmett. pp. 96, 98 (1816).

IMAGO.—*Forewing* with four subcostal branches, the second branch being trifid, the fourth (or upper radial) emitted from the subcostal beyond end of the cell, and the lower radial from the discocellulars; or, the third subcostal is bifid, the fourth, or upper radial being emitted beyond the cell; or, in others, both radials freely start from the discocellulars.

Genus COLIAS.

- Colias* (sect. ii.), Fabricius, Illiger's Mag. vi. p. 284 (1807). Oechsenheimer, Schmett. Eur. iv. p. 31 (1816).
- Colias*, Latreille, Cons. Gén. p. 440 (1810). Crotch, Cist. Ent. i. p. 66 (1872). Scudder, Amer. Acad. A. et Sci. Boston, 1875, p. 146. Kirby, Allen's Nat. Libr. Butt. ii. p. 220 (1896).
- Gonepteryx*, Leach, Edinb. Encyc. ix. p. 128 (1815). Samouelle, Ent. U. Comp. p. 236 (1819). Jermyn, Butt. Coll. Vad. M. pp. 46, 66 (1824). Curtis, Brit. Ent. pl. 173 (1827). Stephens, Illust. Brit. Ent. Haust. i. p. 8 (1827). Children, Phil. Mag. 1829, p. 18. Rennie, Consp. Butt. p. 1 (1832). Doubleday, Gen. D. Lep. i. p. 69 (1847). Stainton, Man. Brit. Lep. i. p. 15 (1857). Butler, Cist. Ent. i. pp. 34, 45 (1870). Schatz, Exot. Schmett. ii. p. 68 (1886). Dixey, Proc. Ent. Soc. 1905, p. 37.
- Gonoptera*, Dalman, in Billb. Enum. Ins. p. 76 (1820).
- Goniapteryx*, Westwood, Int. Ins. ii. Gen. Syn. p. 87 (1840).
- Gonioptera*, Wallengren, Rhop. Scand. p. 145 (1853).
- Rhodocera*, Duponchel, Pap. Fr. D. Suppl. p. 386 (1832). Godart and Dup. Lep. Eur. p. 27 (1844). Staudinger, Catal. Lep. Eur. p. 6 (1871).
- Rhodocera* (pt.), Boisduval and Leconte, Lep. Amer. Sept. p. 70 (1833). Boisd. Spec. Gén. Lep. p. 597 (1836).
- Anteos*, Hübner, Verz. bek. Schmett. p. 99 (1816).
- Earina*, Speyer, Isis, 1839, p. 98.

IMAGO.—Wings subtriangular, broad, rather short. Underside of *hindwings* with the subcostal median and submedian vein thickened and densely clothed with laxly raised modified scales. *Forewing* with the costa much arched at the base and end, the apex projected and acutely angulated, the exterior margin very slightly sinuated below the apex, posterior angle rounded, cell long and broad, extending to beyond half the wing; costal vein ending at half the margin; first subcostal branch emitted at fully one-third and second at one-sixth before end of the cell, fourth at one-third before lower end of the third, the fourth terminating before the apex, the fifth (or upper radial) at some distance from beyond the cell; discocellular bent deeply inward at its middle, the radial from its upper angle; median branches wide apart; submedian much curved from the base. *Hindwing* broad, base of costa broadly lobate, apex rounded, exterior margin very slightly sinuated hindward, its angle at end of the middle median more produced and broader; abdominal margin long; cell long and very broad at the end. *Body* stout; thorax and head very hairy; palpi short, laterally

compressed and densely hairy beneath; antennæ rather short, stout, with a gradually thickened elongated blunt club.

LARVA.—Adult. Cylindrical, slightly tapering at each end, dorsally rounded, vertically somewhat flattened, the lateral ridge rather sharply edged; the head and dorsal area finely set with minute black dots, each emitting a short pale bristle. Colour dull glaucous-green, with a sublateral greyish-white stripe; spiracles inconspicuous; ventral surface paler green. Feeds on *Rhamnus catharticus* and *frangulus*.

PUPA.—Pointed at each end; thorax dorsally humped anteriorly and the abdomen slightly keeled to the tip, shoulders angulated; a lateral ridge thence to the tip; wing-cases produced in front to a curved narrow ridge enclosing the tongue-case, projecting beyond the ventral line of the abdomen, the latter curving gently to the tip. Colour pale green; lateral ridge yellowish, frontal point and the shoulder purplish-brown.

EGG.—Flask-shaped, cylindrical, set on end; with twelve longitudinal ribs and parallel intermediate fine lines; deposited singly on the rib of upper or underside of the leaf.

BROODS.—Stephens (*l.c.* p. 9) says *Rhamni* “is apparently double-brooded, the first brood appearing about June, and the second in the autumn, and of the latter many of both sexes remain throughout the winter, and make their appearance on the first sunny day in spring.”

TYPE.—C. *Rhamni*.

COLIAS NEPALENSIS.

Plate 559, fig. 2, 2a, b, c, d ♂, 2e, f, g ♀.

Rhodocera Rhamni, Kollar, Hügel's Kaschmir, iv. p. 410 (1844).

Rhodocera Rhamni (var.), Gray, Lep. Ins. of Nepal, p. 9, pl. 5, fig. 1, ♂ (1846). Doherty, Journ. As. Soc. Bengal, 1836, p. 136.

Gonepteryx Nepalensis, Doubleday, Gen. D. Lep. i. p. 71 (1847). Moore, Catal. Lep. Mus. E. I. Company, i. p. 59 (1857); *id.* Proc. Zool. Soc. 1865, p. 493. Lang, Ent. Mo. Mag. 1868, p. 33. Butler, Ann. Nat. Hist. 1885, p. 407; *id.* *l.c.* 1888, p. 199. de Nicéville, Rept. Pamir Boundy. Comm. p. 43 (1898); *id.* Journ. Bombay N. H. Soc. 1898, p. 589. Dixey, Proc. Ent. Soc. Lond. 1905, p. 37.

Gonepteryx Carnipennis, Butler, Ann. Nat. Hist. 1885, p. 407.

Male. Upperside sulphur-yellow, deeper than in *Rhamni*. *Forewing* with some black scales at the base, and a small ferruginous-red spot on the angle of lower discocellular veinlet; a slender, mostly continuous, dusky, ferruginous line extending along the extreme costal edge from the costal vein to the apex and outer marginal edge and its cilia, to the middle median veinlet; each vein tip being indicated by a

darker point. *Hindwing* with a few black scales at the base; a large red lower discocellular spot, variable in size; the outer angle between the lower veins and its adjacent cilia ferruginous-red. Underside pale olivescient-yellow; the extreme marginal markings paler red; the discocellular spots being purple-brown with a pale centre. *Forewing* basally tinged with pale sulphur-yellow. *Hindwing* with the subcostal median and submedian vein thickened, and densely clothed with raised modified scales. *Body*, legs, and palpi, pale yellow; abdomen above blackish; thorax above clothed with long silky-white hairs; antennæ reddish.

Female. Upperside pale olivescient-white; extreme marginal markings blackish; discocellular spot paler. Underside pale olivescient-white; discocellular spot similar; basal area of forewing white. *Hindwing* with the subcostal median and submedian vein thickened and scaled as in male.

Expanse, ♂ ♀ $2\frac{1}{2}$ to $2\frac{3}{4}$ inches.

HABITAT.—N. W. Himalayas; Nepal.

DISTRIBUTION.—Capt. A. M. Lang records it as being “abundant in the N. W. Himalayas from 3,000 to 10,000 feet elevation” (P. Z. S. 1865, 493). “It is very common in gardens at Kasauli; also in woods all the way to Kotgarh” (*id.* MS. Notes). Mr. W. S. Atkinson possessed specimens taken at Pir Pinjal and Wardwun Valley, Kaschmir. Dr. G. B. Longstaff found it very “abundant in October, throughout the journey from Simla (7,200 feet) to Fagu (8,200 feet), being especially common at Theog, 7,400 feet elevation (Tr. Ent. Soc. 1905, p. 64). Mr. P. W. Mackinnon found it “very common in Masuri from April to November; the larva feeds on *Rhamnus Dahuricus* (N.O. *Rhamneæ*)” (J. Bombay N. H. S. 1898, 589). Mr. H. Grose-Smith has specimens taken in Gilgit. It was also “taken in Chitral during the Pamir Boundary Mission” (Report, p. 43). Specimens from Narkunda, taken by Capt. H. McArthur, are in Mr. J. H. Leech’s Collection. Males from Ladak, and from Shushi Kuh Valley, Chitral, are in the British Museum. Col. J. W. Yerbury found it “common round Campbellpur in the spring; also in the Chach Plain on the banks of the Indus, at Murree, and Thundiani. Specimens were also taken at Akhor and Chittar Pahar in April, at Hassan Abdal in May, and at Thundiani in August” (Ann. N. H. 1888, 199). Mr. W. Doherty obtained it in “Kumaon generally, from 3,000 to 8,000 feet elevation” (Journ. A. S. Beng. 1886, 136). We possess specimens from Nepal, taken by Gen. G. Ramsay. It is not recorded from Sikkim by Mr. Elwes or by Mr. de Nicéville.

COLIAS ZANEKA.

Plate 560, fig. 1, 1a ♂, 1b, c ♀.

Gonepteryx Zaneka, Moore, Proc. Zool. Soc. 1865, p. 493, pl. 31, fig. 18, ♂. Doherty, Journ. As. Soc.

Bengal, 1886, p. 136. Butler, Ann. Nat. Hist. 1888, p. 119. de Nicéville, Journ. Bombay N. II. Soc. 1898, p. 589. Dixey, Proc. Ent. Soc. 1905, p. 38.

Gonepteryx Wallichii, Lang. Ent. Mo. Mag. 1864, p. 101.

Both sexes with the middle of the costa of *forewing* slightly constricted or depressed, and the apex more prolonged and acutely pointed; the *hindwing* more deeply and broadly dentated than in *Nepalensis*. Both sexes also with the costal and outer area of both wings more or less wrinkled with transverse impressed strigæ between the veins; and the subcostal median and submedian vein of the *hindwing* thickened, and clothed beneath with raised scales.

Male. Upperside. *Forewing* sulphur-yellow; a few black scales at the base; extreme costa anteriorly, and outer margin anteriorly with its cilia, more or less very slenderly edged with ferruginous-black scales, the vein tips being indicated by a more distinct pointed dot; the discocellular ferruginous-red spot very small. *Hindwing* pale olivescient yellowish-white; a few black scales at the base; the tip of lower veins, and cilia, ferruginous-black; discocellular ferruginous-red spot small, somewhat triangular. Underside pale olivescient yellowish-white; discocellular spot purplish-black; vein tips as above. *Forewing* with a subapical excurved series of four or five minute black-scaled very slender short streaks, one in each interspace. *Hindwing* also with a lower discal similar series of minute black dots.

Female. Upperside. Both wings pale olivescient yellowish-white, impressed with strigæ as in the male; discocellular spot paler; vein tips less distinct. Underside paler; vein tips distinct; discocellular spot much paler. *Forewing* with subapical series of minute streaks, and *hindwing* with lower discal dots as in male. *Body* white; abdomen above blackish; antennæ greyish-black above, whitish beneath.

Expanse, ♂ 2 to 2½, ♀ 2 inches.

HABITAT.—N. W. Himalayas.

DISTRIBUTION.—Capt. A. M. Lang writes (Epist. July, 1865), "This is an inhabitant of rich forests 6,000 to 8,000 feet elevation, in Upper Kunawur. I have seen it only in the thick dark forests about Kotgurh and Narkunda. I have also taken it in Narkunda and Phagoo from April to June. It is a wonderful insect for remaining always in a normally battered faded condition. I have seen a good many this year (1865) and last year, but not one specimen could I keep, so utterly worn and poor were they all." Specimens from Narkunda, taken in October, and Jalouri Pass in May, are in Mr. J. H. Leech's Collection. Mr. P. W. Mackinnon records it as "rare; occurring in Masuri, and in the interior from April to August" (J. Bombay N. H. S. 1898, 589). Mr. W. Doherty obtained it at "Naini Tal, Lohughat, in Kumaon, at 6,000 to 8,000 feet elevation" (J. A. S. Beng. 1886, 136). We verified a specimen in Mr. W. S. Atkinson's Collection, labelled "Nowboog, Kaschmir,

7,000 feet." Col. J. W. Yerbury captured it at Thundiani in April, September and October.

COLIAS CHITRALENSIS.

Male. Upperside. *Forewing* with the pale sulphur-yellow area restricted to less than the basal half; discocellular spot less distinct and dull coloured. *Hindwing* basally tinged with pale sulphur-yellow.

Expanse, 2 to $2\frac{1}{4}$ inches.

HABITAT.—Chitral.

DISTRIBUTION.—Specimens taken at Jhela Drosh, Chitral, by Capt. S. W. Harris, and from the Shishikuh Valley in July and August, at 9,000 to 14,000 feet elevation by Capt. G. H. Colomb, are in the British Museum Collection.

COLIAS ZANEKOIDES.

Plate 560, fig. 2, 2a ♂, 2b, c ♀.

Gonepteryx Zaneoides, de Nicéville, Journ. As. Soc. Bengal, 1897, p. 564, pl. 1, fig. 2, ♂, 7 ♀.

Male. "Differs from the same sex of *Zaneka* in having the *forewing* markedly broader, the costal margin not constricted at half its length, but straight, the apex not so produced. *Hindwing* distinctly broader, almost of the same shade of brimstone as the *forewing*, the outer slightly paler than the basal half of the wing, in *Zaneka* it is pale cream colour of a uniform shade.

Female. *Forewing* agrees in shape with the male, consequently differs from the same sex of *Zaneka* in being broader with a straight instead of excavated costa, and the apex less produced. The highly dentate *hindwing* in both sexes will distinguish *Zaneka* and *Zaneoides* from *Aspasia*."

Expanse, ♂ ♀ 2.1 inches.

HABITAT.—Upper Burma.

DISTRIBUTION.—"Described by Mr. de Nicéville from specimens captured by Mr. L. A. Thurston, at 7,000 feet elevation in the Southern Chin Hills, during the rains. Capt. E. Y. Watson also has a specimen in his Collection. Geographically, *Zaneka* and *Zaneoides* are widely separated, and it is highly improbable that any species linking them together will be found in the mountains which lie between the Western Himalayas and Upper Burma" (*l.c.* 565).

NOTE.—Dr. N. Manders (Tr. Ent. Soc. 1890, p. 534) notices a "*Gonepteryx Himalayensis*" which he took in the Shan States, in April and September. We do not know of any published description of a "*Gor. Himalayensis*," and, as *Zaneoides* is the only Burmese species of the genus, it is possibly the one to which he refers.

CHINA AND JAPAN SPECIES.

Colias maxima (Gonepteryx maxima, Butler, Ann. Nat. Hist. 1885, p. 407. Pryer, Rhop. Nippon, p. 7, pl. 2, fig. 5 (1886). G. Rhamni, var. Leech, Butt. China and Japan, p. 439, pl. 35, fig. 4 ♂ ♀ (1893). *Habitat.* W. and E. China; Korea; Japan.

Colias acuminata (Gonepteryx acuminata, Felder, Wien. Ent. Monat. vi. p. 23 (1862). Pryer, Rhop. Nippon, p. 7, pl. 2, fig. 6 (1886). Leech, Butt. China, &c., p. 443 (1893).

Colias Amintha (Gonepteryx Amintha, Blanchard, Comp. Rend. 1871, p. 810). *Habitat.* Moupin.

Colias Alvinda (Gonepteryx Alvinda, Blanchard, *l.c.* p. 810. *Habitat.* Moupin.

Genus DERCAS.

Dercas, Doubleday, Gen. D. Lep. i. p. 70 (1847). Moore, Catal. Lep. Mus. E. I. Company, i. p. 59 (1857). Butler, Cistula Ent. i. p. 54 (1870). Distant, Rhop. Malayana, pp. 287, 308 (1885). Leech, Butt. of China, Japan, &c. p. 445 (1893). Kirby, Allan's Nat. Libr. Butt. ii. p. 224 (1896). de Nicéville, Ann. Nat. Hist. 1898, p. 78).

Male. *Forewing* subtriangular, short, very broad; costa very much arched from the base, apex with an acute projected point—more prolonged and acute in the female; outer margin very slightly oblique and dentated below the apex, posterior margin slightly curved from the base and thence almost straight to the angle; cell short, extending to less than half the wing, broad; costal vein reaching to nearly middle of margin; first subcostal branch emitted at one-fourth and second immediately before the end of the cell, fourth from below the third at half its length and ending before the apex, fifth (or upper radial) at one-third beyond the cell; upper discocellular short, lower long, each concave, angled above the middle, the lower radial from the angle; middle median near end of the cell. *Hindwing* short, very broad, quadrate; costa broadly lobate at the base, obliquely-convex outward, apex obliquely angled, exterior margin broadly produced and angled at end of upper median veinlet, its upper and lower edge almost straight, anal angle pointed, both angles being more produced in the female; cell short; precostal vein bent inward at about its middle; costal vein rather short; first subcostal branch from near upper end of the cell; discocellulars very oblique, the upper short, lower long and concave at its upper end, the radial from the angle; middle median from near end of the cell; submedian vein straight, ending at anal angle; internal vein recurved. *Body* stout; thorax above clothed with fine silky hairs; palpi short, compressed, com-

pactly clothed beneath with fine hairs; antennæ somewhat slender, with a gradually thickened blunt-tip club.

TYPE.—D. Verhnell [Doubledayi].

DERCAS WALLICHII.

Plate 561, fig. 1, 1a, b ♂, 1c, d ♀.

Gonepteryx Wallichii, Doubleday, Proc. Ent. Soc. v. p. 47 ♂ (1848).

Rhodocera Wallichii, Butler, Proc. Zool. Soc. 1866, 452.

Dercas Wallichii, Wallace, Trans. Ent. Soc. 1867, p. 398. Elwes, Proc. Zool. Soc. 1882, p. 402; *id.* Tr. Ent. Soc. 1888, p. 415. Leech, Butt. of China, &c. p. 446 (1893). de Nicéville, Sikkim Gaz. 1894, p. 167; *id.* Ann. Nat. Hist. 1898, p. 482.

Gonepteryx Urania, Butler, Proc. Zool. Soc. 1865, p. 458, pl. 26, fig. 5 ♀.

Dercas Urania, Swinhoe, Tr. Ent. Soc. 1893, p. 308.

Male. Upperside sulphur-yellow. *Forewing* with a small black somewhat quadrate apical patch, reaching to the upper radial, below which it marginally extends narrowly and sinuously to beneath the upper median veinlet, and followed by a very small spot on the middle median and then a dot on the lower median; anteriorly the patch is slenderly continued sinuously and interrupted along the costa to tip of the costal vein; a large black rounded discal spot placed somewhat inwardly-oblique between the upper and middle medians, this spot being more or less indistinctly and narrowly bordered posteriorly by ferruginous, a few similar coloured scales also forming a short obsolescent fascia below it. *Hindwing* with a minute black dot at end of the veins. Underside somewhat paler yellow than above. Both wings basally sprinkled with a few ferruginous dots, and a small bilobed, or geminate ferruginous discocellular mark, bipupilled with glossy-white. *Forewing* with the apical and marginal markings more restricted, ferruginous, the apical patch centred with a glossy-white streak; the discal rounded spot dark ferruginous, inwardly bordered with blackish scales, its centre being paler ferruginous; a narrow ill-defined ferruginous-scaled oblique discal sinuous fascia extends from the apical patch to the discal spot and then below it to near the submedian vein. *Hindwing* with a basal ferruginous spot centred with glossy-white; a transverse discal ill-defined narrow ferruginous sinuated fascia, which is bent inward at the middle median, each portion of which between the veins being marked inwardly by a dark lunate dot; a similar marked ferruginous spot is also present in the costal interspace above end of the cell, and one also basally between the lower median and submedian; veins with a black dot at their tip.

Female. Upperside much paler, somewhat whitish basally. *Forewing* with black markings, similar to the male, except that the outer band is more restricted, deeply sinuate below the apex, and more macular posteriorly, the discal spot is also

somewhat larger. *Hindwing* with a black dot at end of the veins. Underside with all the markings as in the male.

Expanse, ♂ $2\frac{1}{2}$ to $2\frac{3}{4}$, ♀ $2\frac{3}{4}$ inches.

HABITAT.—Sikkim; Assam; Khasia and Naga Hills; Central China.

DISTRIBUTION.—Mr. H. J. Elwes records “a single specimen brought from the interior of Sikkim by native collectors, is the only one I have ever seen or heard of from Sikkim” (Tr. Ent. Soc. 1888, 415). Col. C. Swinhoe has received “several examples of both sexes from his native collectors in the Khasia Hills” (Tr. Ent. Soc. 1893, 308). Mr. L. de Nicéville has specimens from the Lachung Valley in Native Sikkim, the Khasia Hills and Upper Assam” (Ann. N. H. 1898, 482). Mr. W. Doherty notes that he obtained “a large series of *D. Wallichii*, at or near Mao, Manipur. It flew in June and disappeared in July” (P. Z. S. 1891, 251). Col. C. T. Bingham has a male taken at Themaghat, Assam, in June.” In Mr. J. H. Leech’s Collection are specimens from Omei Shan, Chang Yang, and Kwei Chow, Central China.

DERCAS LYCORIAS.

Plate 561, fig. 2, 2a ♂.

Rhodocera Lycorias, Doubleday, Gray’s Zool. Misc. p. 77 ♂ (1842); *nec.* ♀.

Gonepteryx Lycorias, Doubleday, Gen. D. Lep. i. p. 71 ♂ (1847).

Dercas Decipiens, de Nicéville, Ann. Nat. Hist. 1898, pp. 480, 483 ♂.

Dercas Brindhaba, Swinhoe, Ann. Nat. Hist. 1899, p. 107 ♂.

Male. Upperside similar to the same sex of *D. Wallichii*, except that in the *forewing* the large rounded discal black spot is absent, a very few ferruginous scales being slightly visible transversely in the upper and lower median interspaces, and the apical patch comparatively smaller. Underside also similar to *Wallichii*, except that in the *forewing* the discal rounded spot is absent, the ferruginous fascia being uniform in its entire course.

Female. Unknown.

Expanse, ♂ $2\frac{2}{10}$ to $2\frac{4}{10}$ inches.

HABITAT.—Khasia Hills.

DISTRIBUTION.—The male type specimen of *Lycorias*, described by Mr. E. Doubleday, is recorded from Silhet. Our specimens, under examination, from the Khasia Hills, entirely agree with his description. Mr. L. de Nicéville records his specimens of *decipiens* from the “Khasias, where it appears to be as numerous as *D. Wallichii*. The Rev. W. A. Hamilton having sent me many examples of both species from thence, which were obtained by his native collectors” (Ann. N. H. 1898, 483). Col. C. Swinhoe’s type of *Brindaba* were also taken in “the Khasia Hills, from whence

numerous examples were received by him from his native collectors" (Ann. N. H. 1899, 107).

DERCAS DOUBLEDAYI.

Plate 562, fig. 1, la, b, c ♂, d, e ♀.

Dercas Verhuellii, Doubleday, Gen. D. Lep. i. p. 71, pl. 8, fig. 3 ♂ (1847); *id.* List Lep. Brit. Mus. App. p. 10 (1848). Moore, Catal. Lep. Mus. E. I. Company i. p. 59 (1857). Butler, Cist. Ent. i. p. 45 (1870). Elwes, Tr. Ent. Soc. 1888, p. 414. de Nicéville, Sikkim Gaz. 1894, p. 167. Swinhoe, Tr. Ent. Soc. 1893, p. 308. Watson, Journ. Bombay N. H. Soc. 1897, p. 671. Adamson, List Burm. Butt. p. 42 (1897). de Nicéville, Ann. Nat. Hist. 1898, p. 480; *id.* Journ. Bombay N. H. Soc. 1899, p. 334.

Rhodocera Lycorias (pt.), Doubleday, Gray's Zool. Misc. pp. 77, 78, fig. ♀ (1842).—*nec.* ♂.

Male. Upperside deep sulphur-yellow. *Forewing* with a large somewhat quadrate vinaceous-black apical patch, which continues narrowly and decreasingly sinuously hindward, from above lower radial veinlet to below the lower median; the patch slightly varies in size, and its inner anterior side is slightly outwardly-oblique and uneven, its upper angle extending inward very slenderly and interruptedly along the costal edge to tip of the costal vein, and its entire inner edge from the costa hindward is bordered by a narrow pale ochreous-red band; a similar-coloured narrow transverse discal fascia also extends from the inner lower angle of the black patch obliquely to the submedian vein; a pale ochreous-red recurved streak also borders the discocellulars; cilia anteriorly ochreous-red. *Hindwing* with a black dot at end of each vein. Underside paler yellow. *Forewing* with markings, as on upperside, purplish-red, the apical portion of outer band washed with dark purple-grey and crossed by a glossy violet oblique streak, the whole traversed by darker slender strigæ; centre of the discocellular streak glossy violet and its base dark purple, the transverse discal fascia pale and inwardly edged with dark purple-grey. *Hindwing* with a black dot at end of the veins, a slightly-defined transverse discal purple-red fascia extending straight from the costal vein to middle median and then bent inward to lower median, its inner edge being more distinct; a discocellular similar coloured trilobed mark with glossy violet centre.

Female. Upperside pale olivaceous yellowish-white. *Forewing* with the apical patch and marginal band blacker, the patch somewhat longitudinally narrower and its lower inner angle prolonged inward, the ochreous inner border absent, and the discal fascia obsolescent. *Hindwing* with a black dot at end of the veins. Underside very pale sulphur-yellow, the markings as in male; the apical band of forewing paler.

Expanse, ♂ $2\frac{1}{2}$ to $2\frac{3}{4}$, ♀ $2\frac{3}{4}$ to 3 inches.

HABITAT.—Sikkim; Bhotan; Assam; Cherra Pungi; Khasias; Manipur; Burma; Upper Tenasserim.

DISTRIBUTION.—Mr. H. J. Elwes records it as “not uncommon in Sikkim, in certain places, up to 4,000 feet elevation, from May to October” (Tr. Ent. Soc. 1888, 414). We possess both sexes from Bhotan. Col. C. Swinhoe observes “common in the Khasia Hills” (Tr. Ent. Soc. 1893, 308). Specimens from Manipur, taken by Dr. G. Watt, are in the British Museum. Col. C. H. E. Adamson writes, “this is a rare butterfly in Burma. I have only seen one specimen, which I captured in April at Tounggya Sekkan” (List, p. 42). Mr. T. A. Hauxwell obtained “a single male on the Taungoo Hills, 4,000 feet elevation, in May, and since this another in the Chindwin Valley” (J. Bombay N. H. S. 1899, 334). Col. C. T. Bingham has a single specimen, taken at Taungjah, Daunat Range in April. Capt. E. Y. Watson obtained two specimens in the Chin Hills, 3,000 feet elevation in the rainy season” (J. Bombay N. H. S. 1897, 671). Dr. Leonardo Fea took it in the Karen Hills, in August.

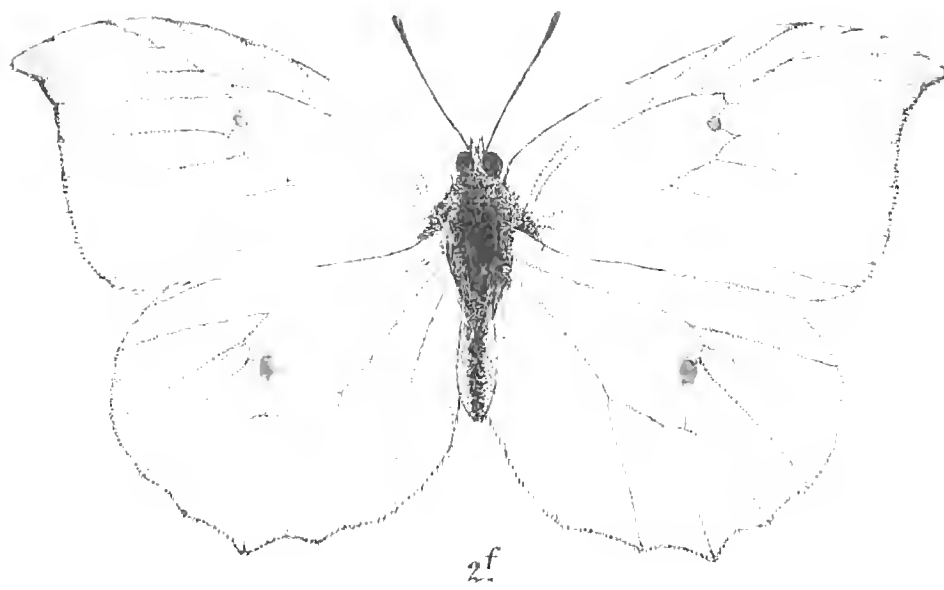
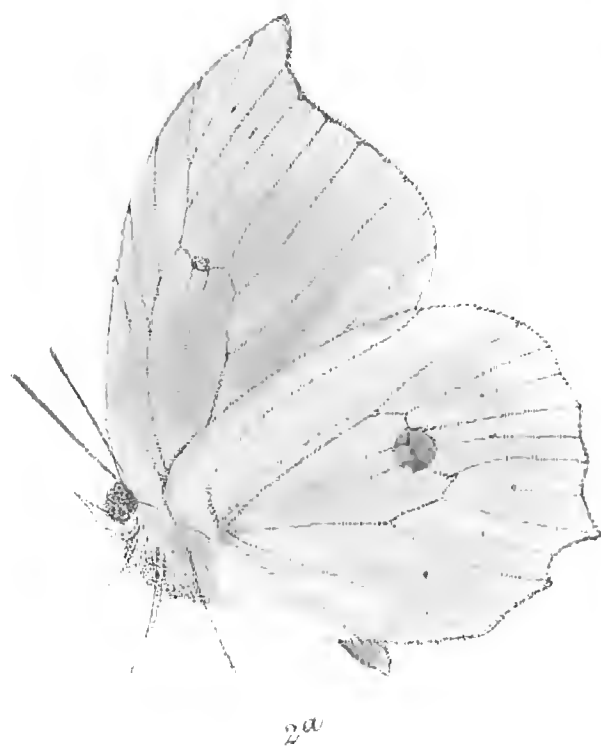
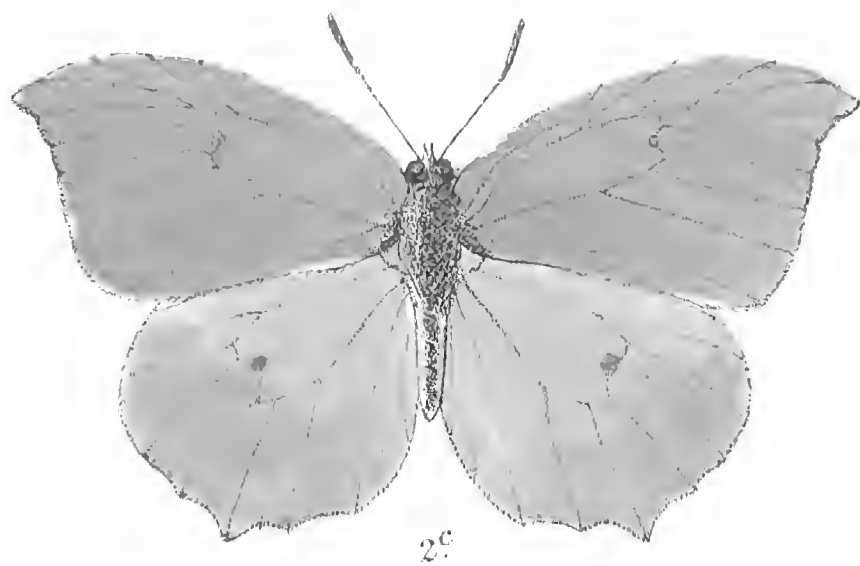
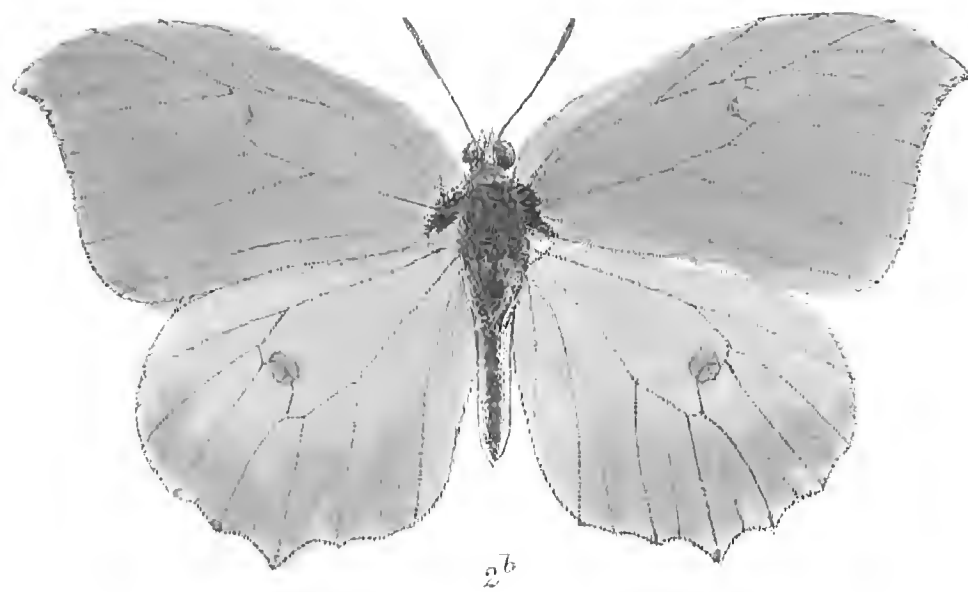
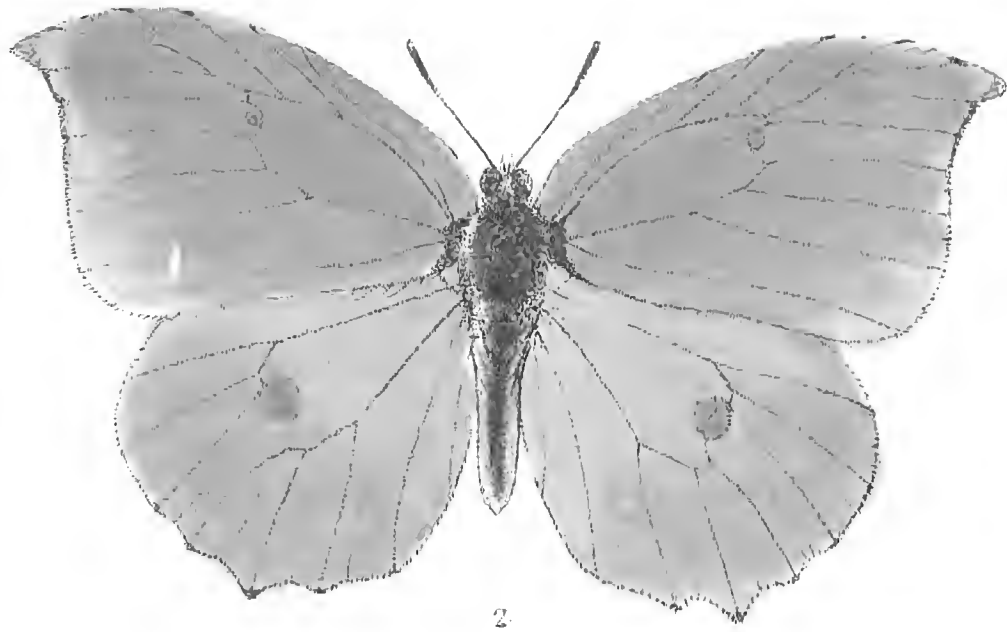
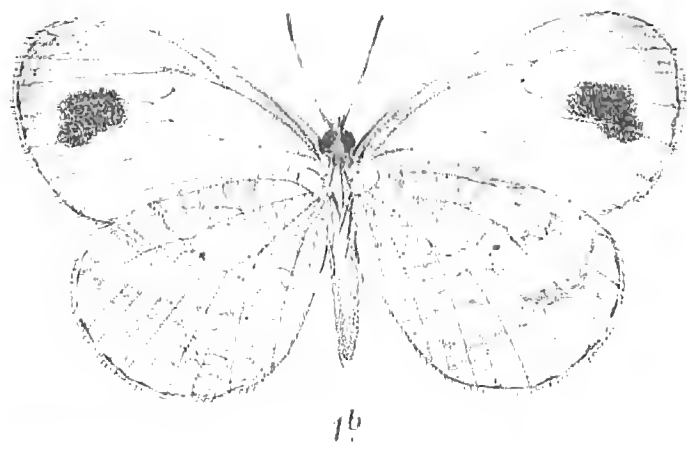
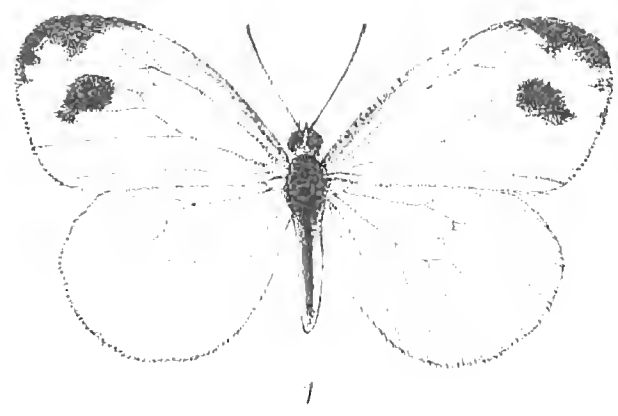
INDO-MALAYAN AND CHINA SPECIES.

Dercas Verhuellii (*Colias Verhuellii*, Van der Hoeven, Tijd. voor Nat. Gesch. en Phys. v. p. 341, pl. 8, fig. 3, 3a ♀ (1839). *Dercas Verhuellii*, Fruhstorfer, Deuts. Ent. Zeit. Iris, 1902, p. 275; *id.* Soc. Ent. 1903, p. 25. *Forewing* with the apical patch in both sexes longitudinally longer and transversely narrower than in *D. Doubledayi*. *Habitat.* S. China; Hongkong.

Dercas Skertchlyi, de Nicéville, Ann. Nat. Hist. 1898, p. 481, ♂ ♀. “Differs from *Verhuellii*, in the forewing lacking on both surfaces the large apical patch. In *Skertchlyi* the costa from about the middle to the apex of the wing, and thence as far as the termination of the first median nervule, has a narrow black border of about equal breadth throughout. Otherwise the two species do not differ. This cannot be a seasonal form of *Verhuellii*, as both species fly together in Hongkong in May, which is the only month in which Mr. E. F. Skertchly has obtained it. It seems to be fairly common in the Island.” *Habitat.* Hongkong.

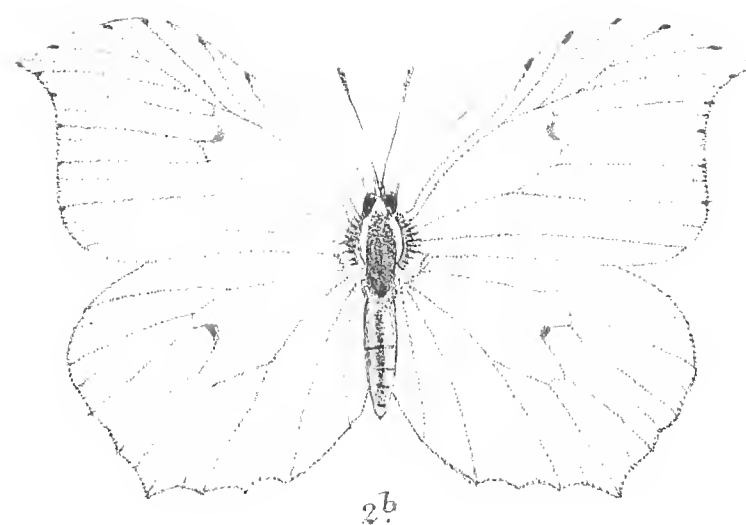
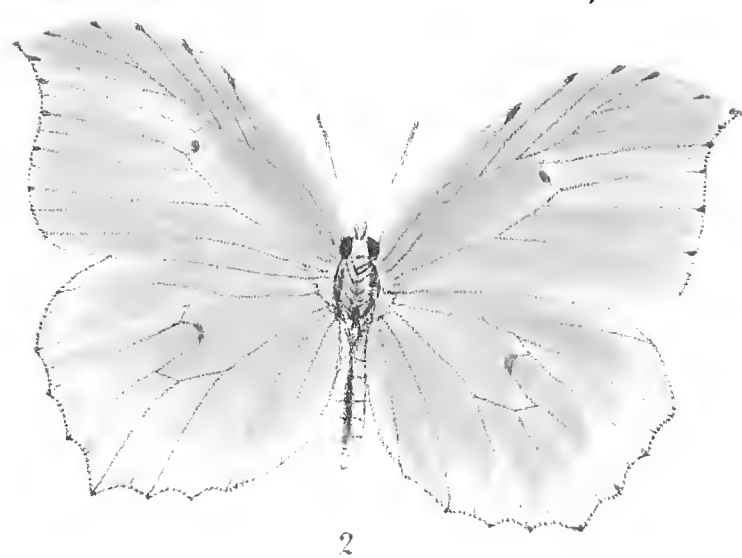
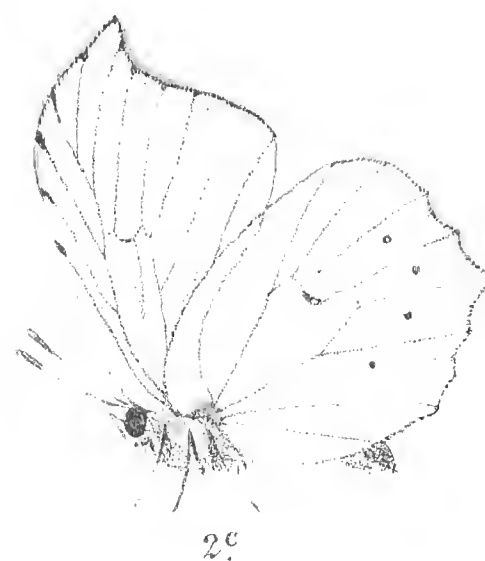
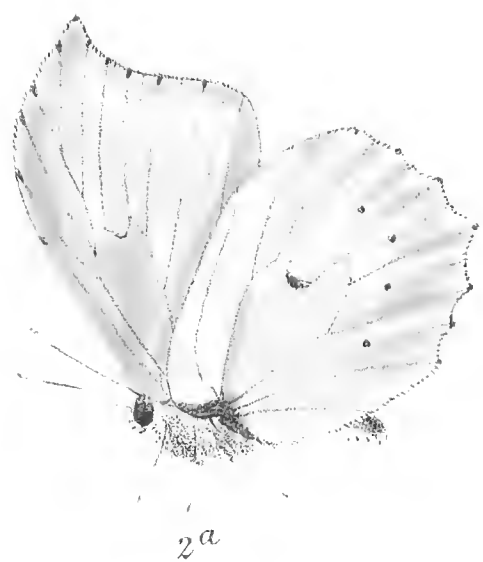
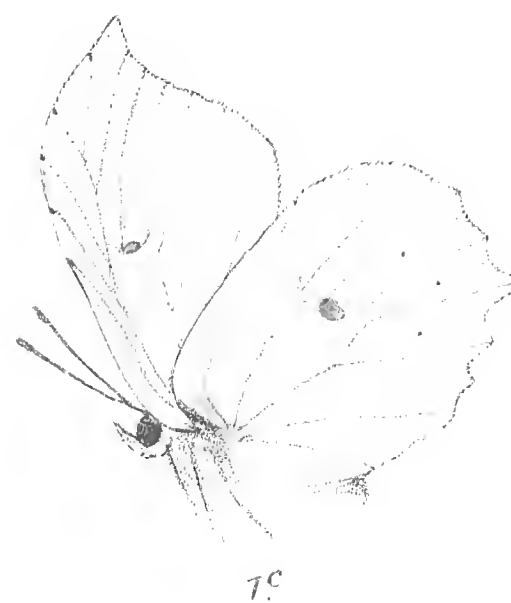
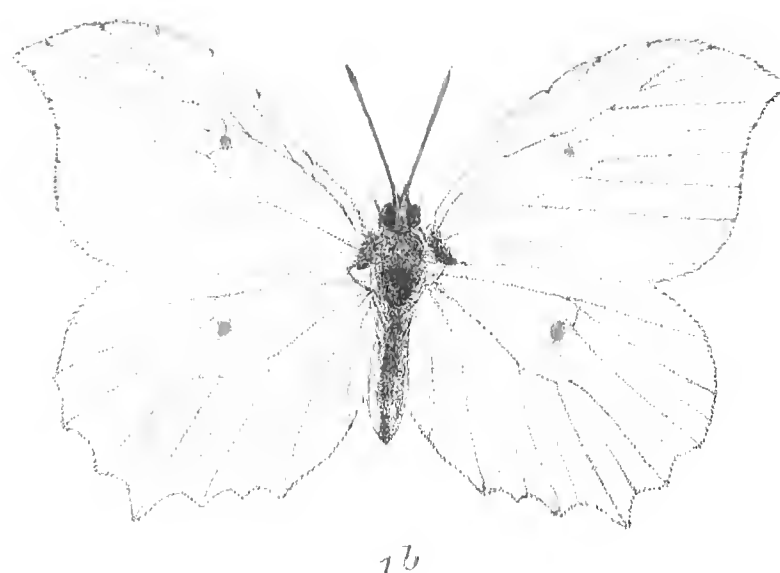
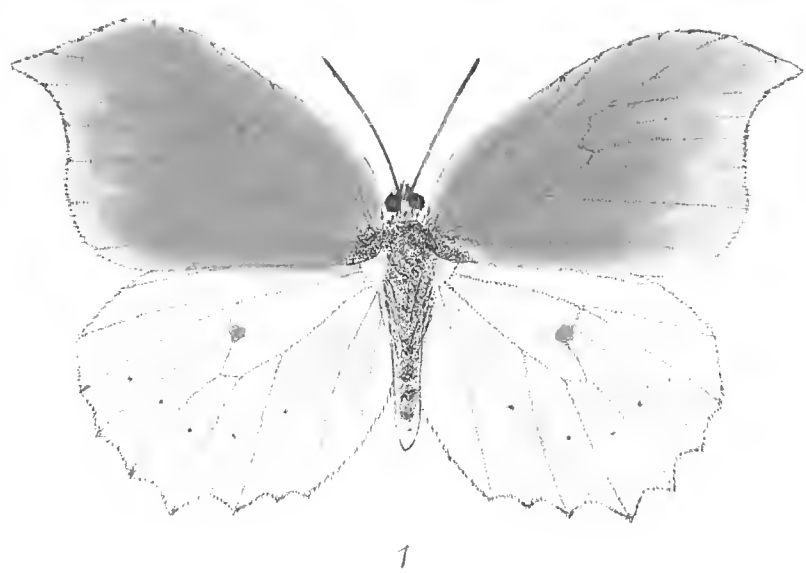
Dercas difformis, de Nicéville, Ann. Nat. Hist. 1898, p. 483, ♂ ♀. *Syn.* *D. Wallichii*, Leech, Butt. of China, &c. p. 445, pl. 35, fig. 3 ♂ (1893). *D. Enara*, Swinhoe, Ann. Nat. Hist. 1899, p. 107, ♂ ♀. *Habitat.* C. and W. China.

Dercas Gobrias (*Gonepteryx Gobrius*, Hewitson, Trans. Ent. Soc. 1864, p. 246, pl. 16, fig. 1 ♂. Butler, Pr. Zool. Soc. 1865, p. 432, pl. 25, fig. 4 ♂. Vollenhoven, Mon. Pieridæ, p. 63 (1865). Druce, P. Z. S. 1873, p. 356. *Dercas Gobrias*, Wallace, Tr. Ent. Soc. 1867, p. 398. Distant, Rhop. Malay. p. 303, pl. 26, fig. 18 ♂ (1885); *id.* Ann. Nat. Hist. 1887, p. 271. de Nicéville, Journ. As. Soc. Bengal, 1896, p. 500; *id.* Ann. Nat. Hist. 1898, p. 481. *Habitat.* Malay Peninsula; Sumatra; Borneo; ? Java.



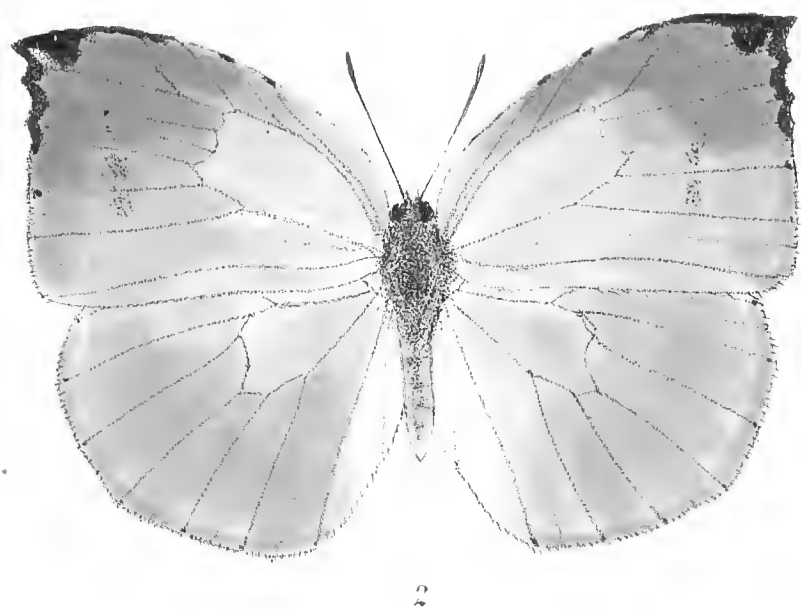
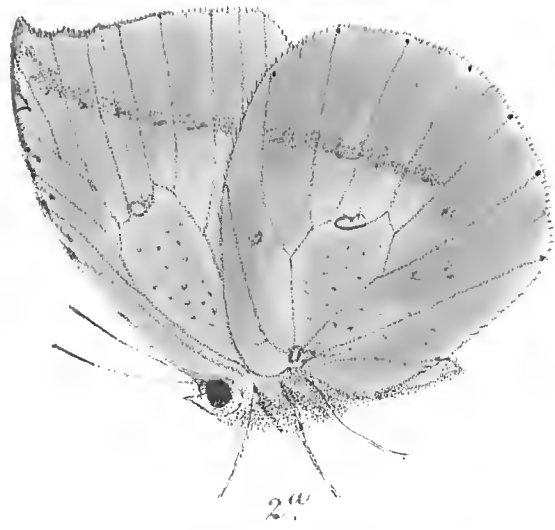
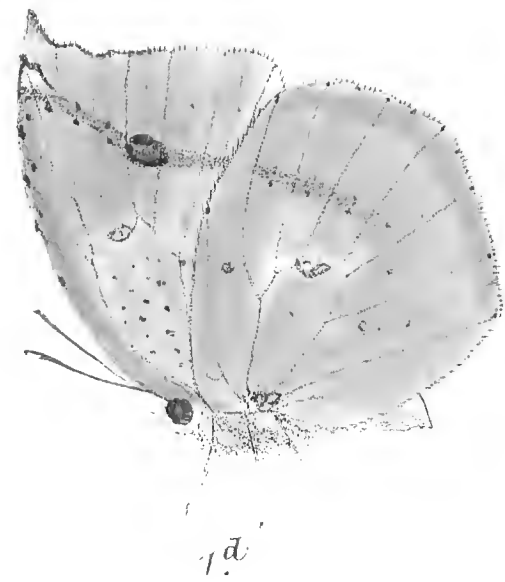
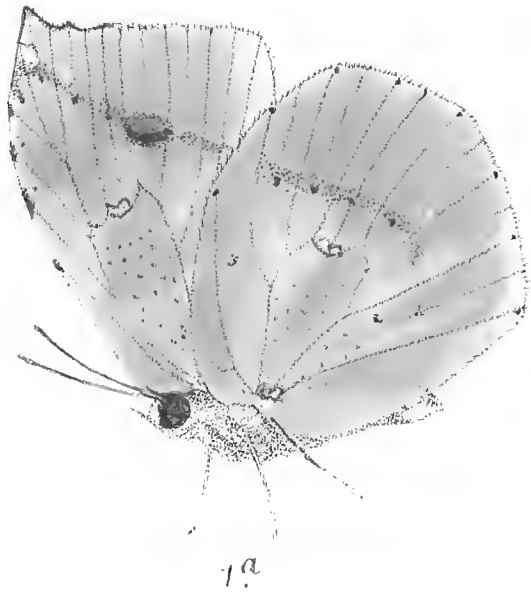
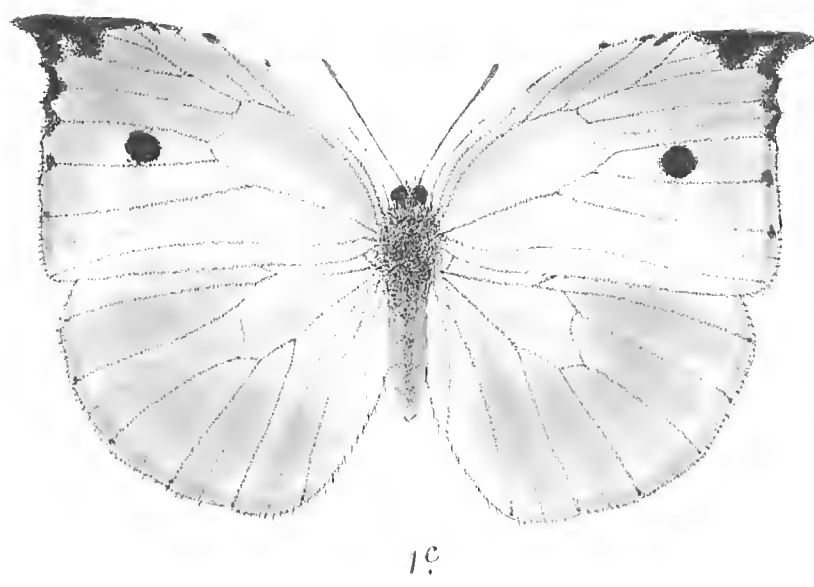
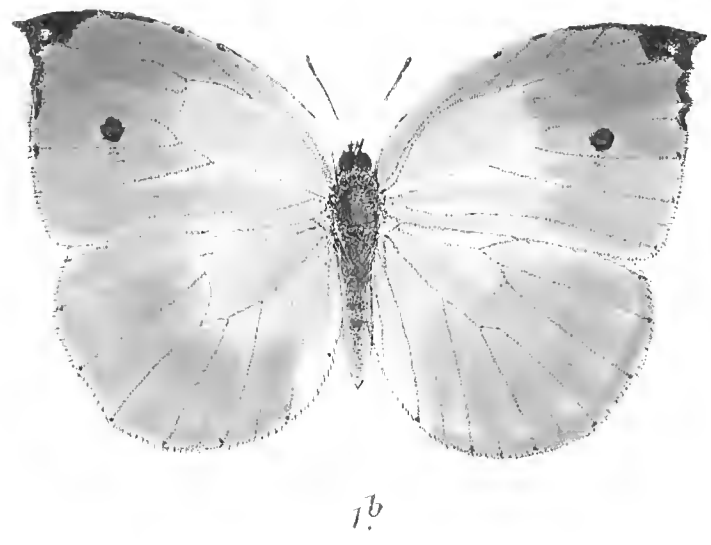
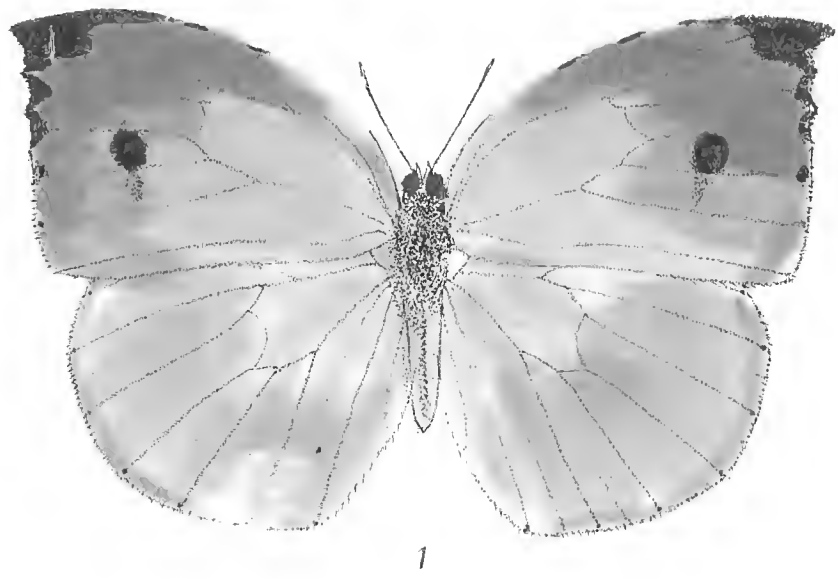
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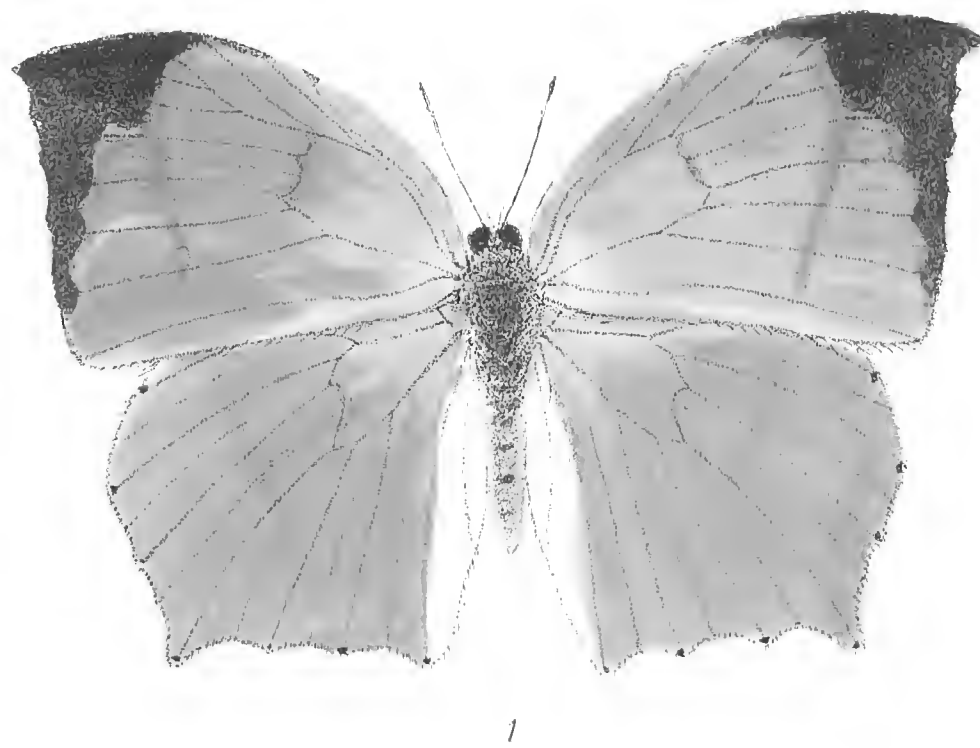
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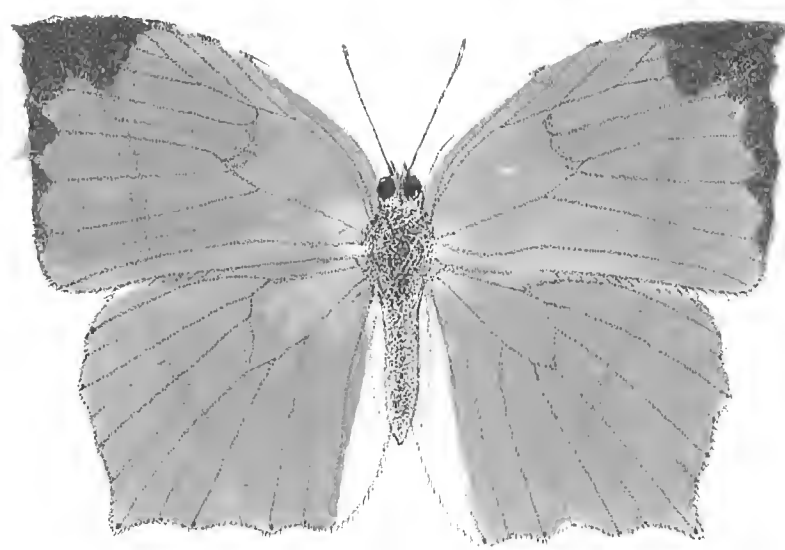
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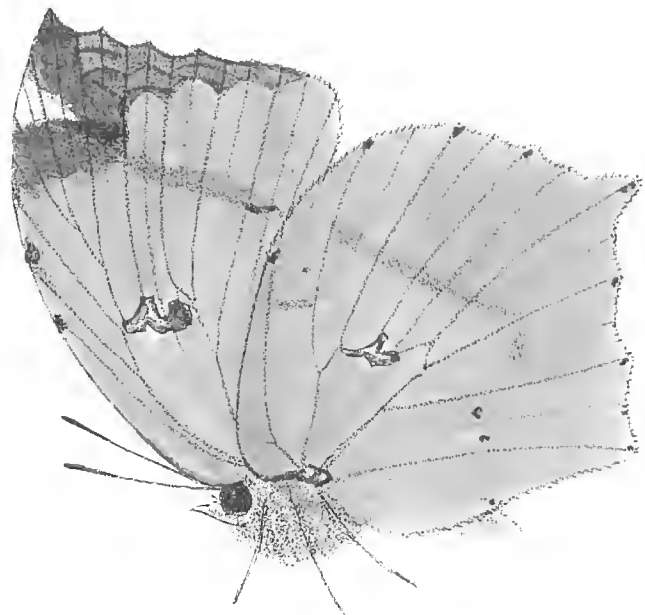




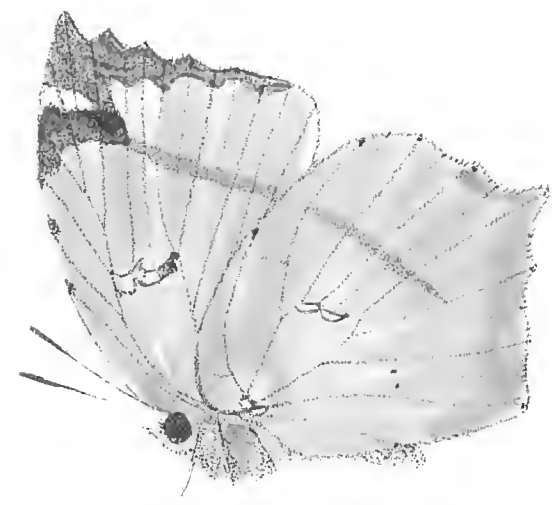
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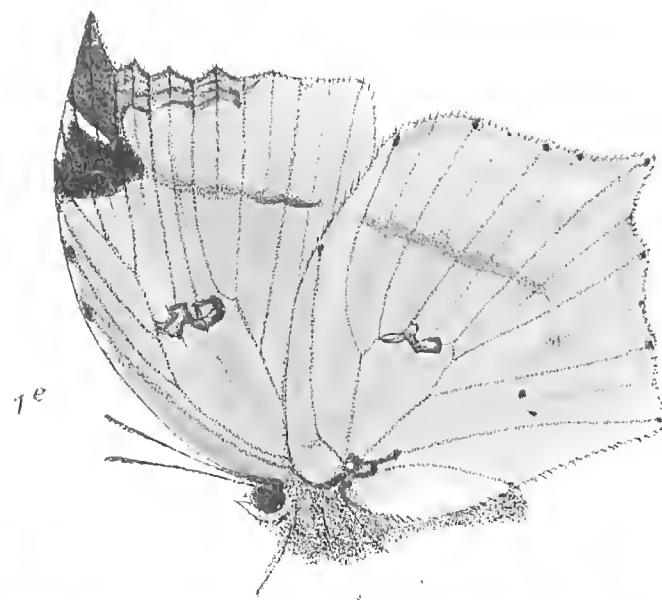
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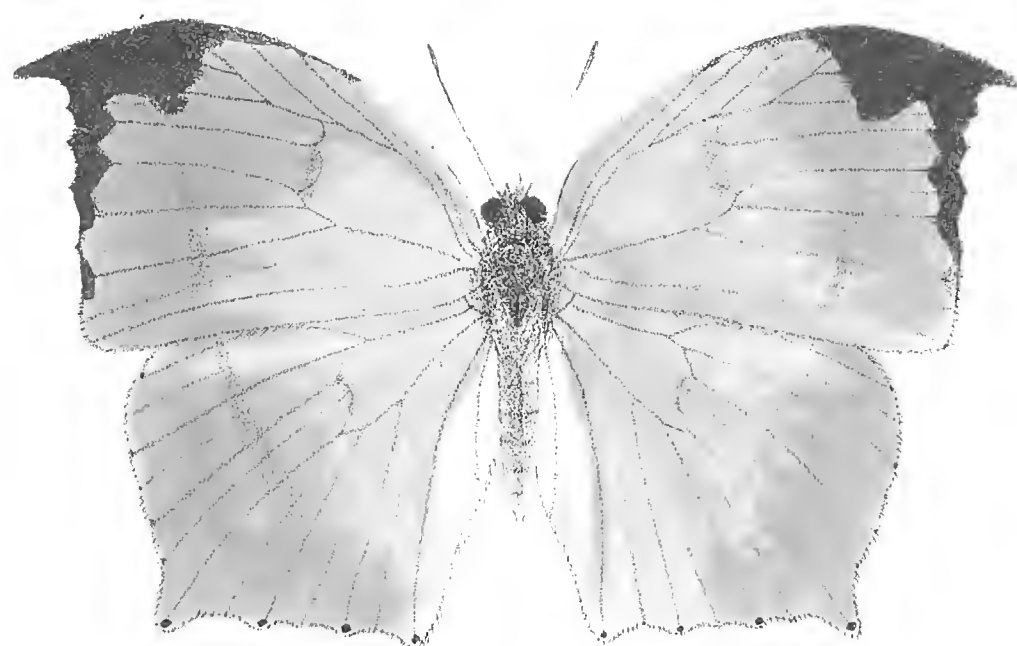
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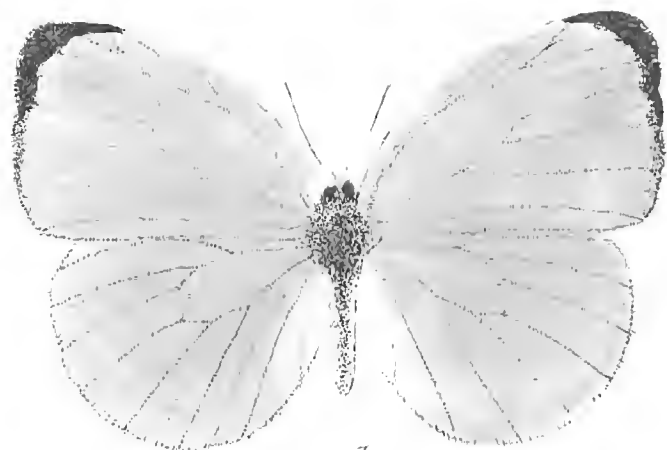
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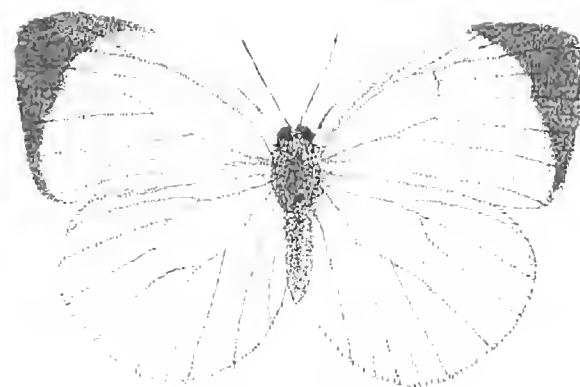
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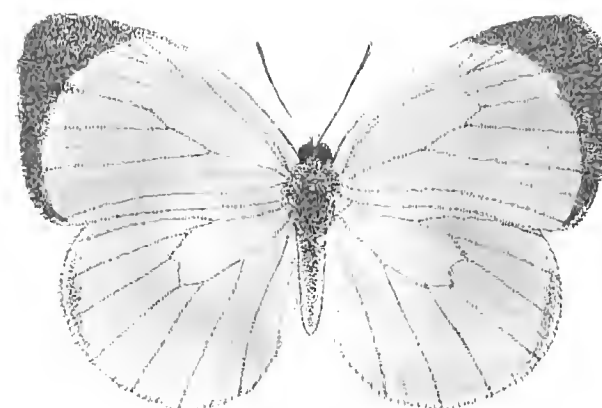
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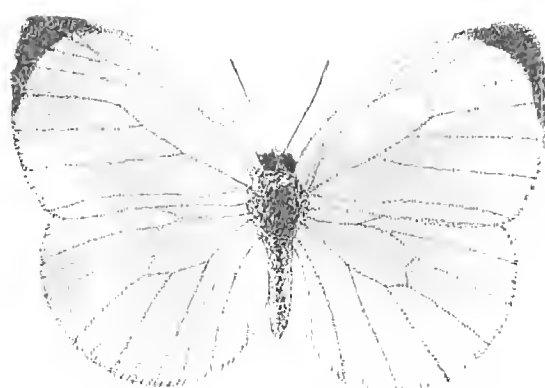
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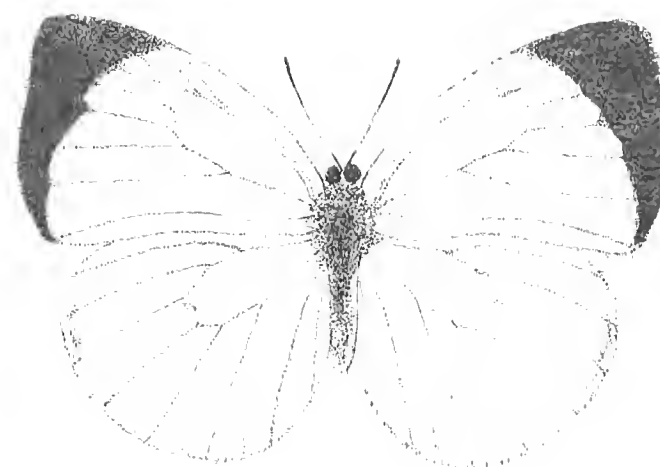
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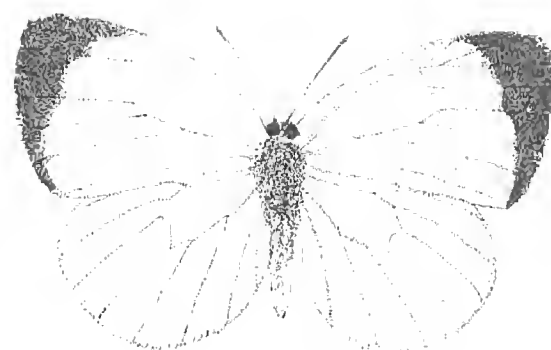
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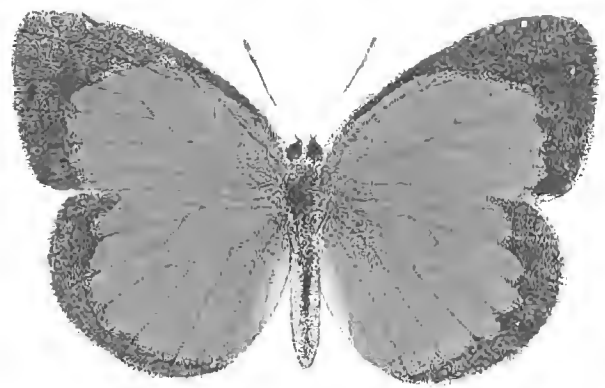


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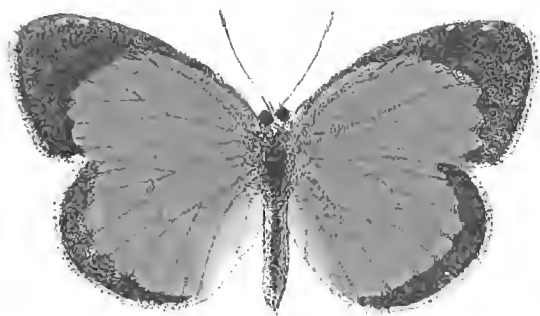
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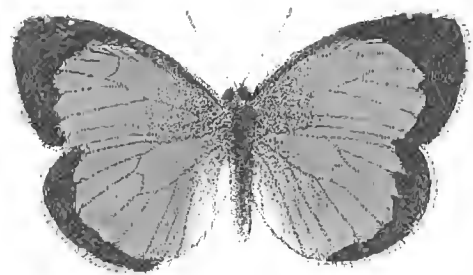
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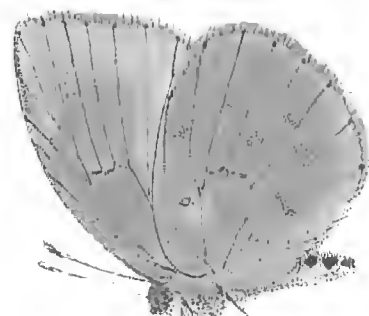
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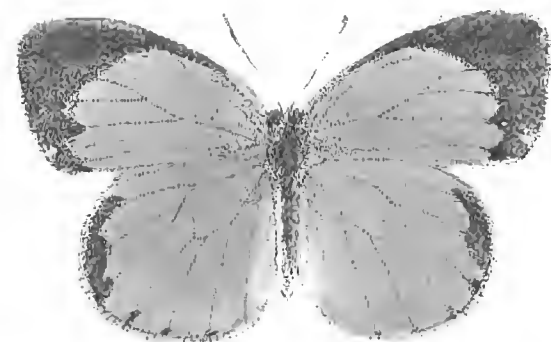
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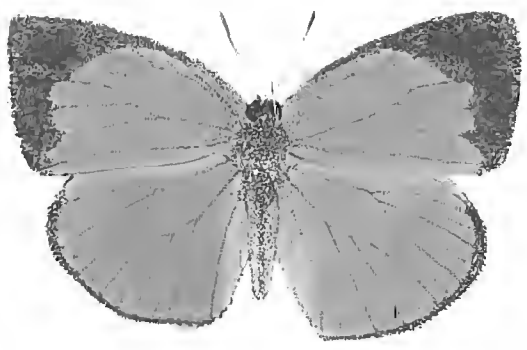


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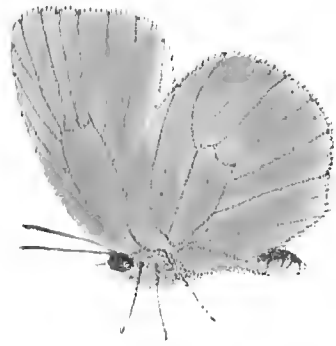
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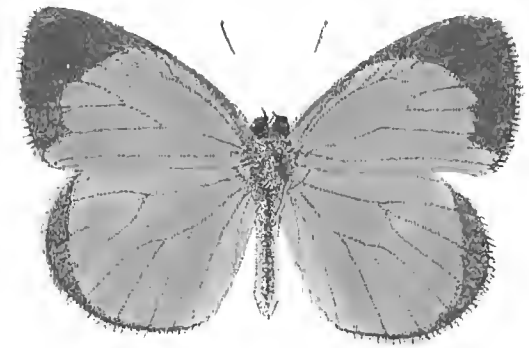
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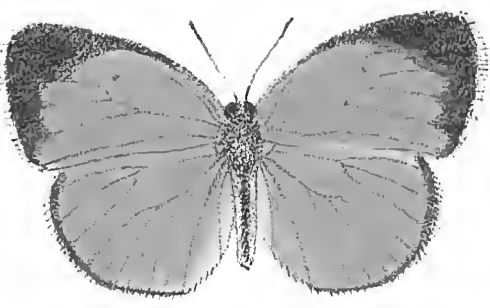
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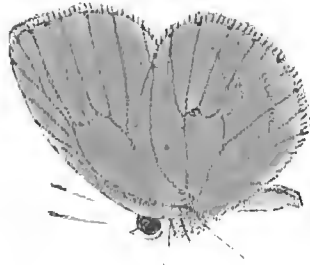
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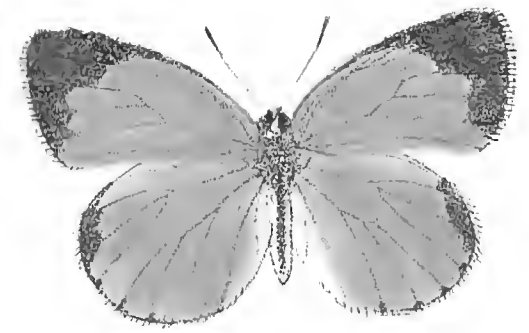
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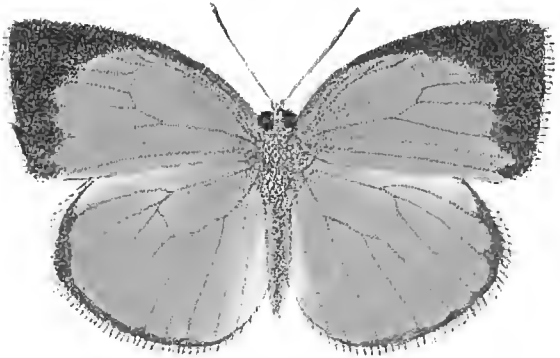
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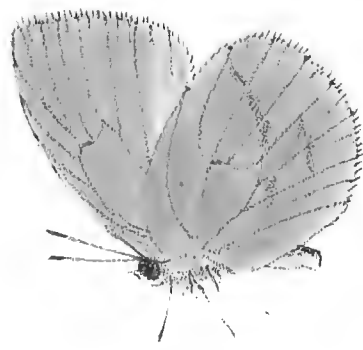
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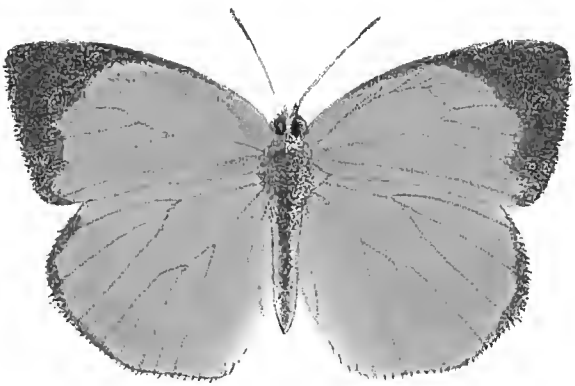
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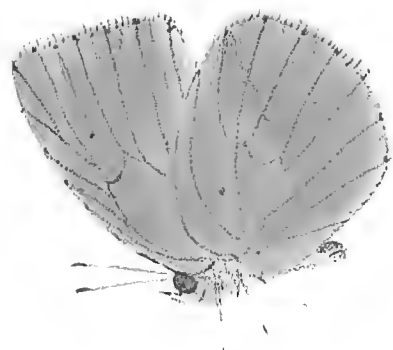
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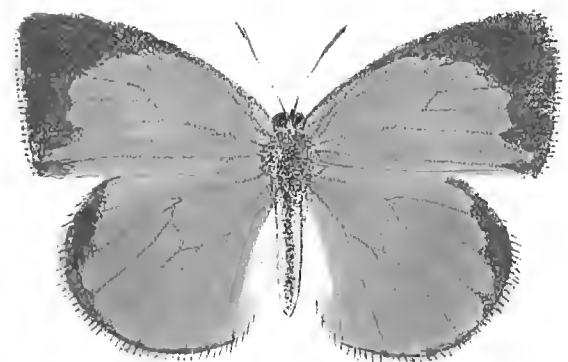
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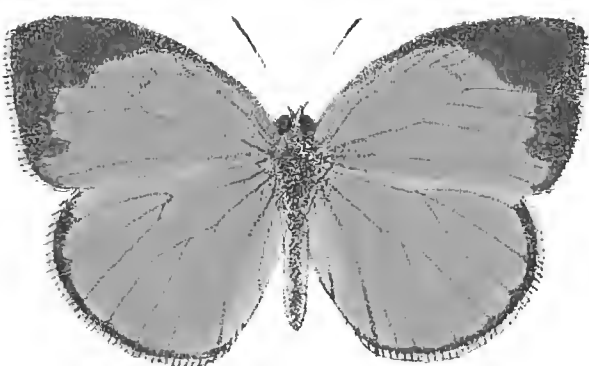
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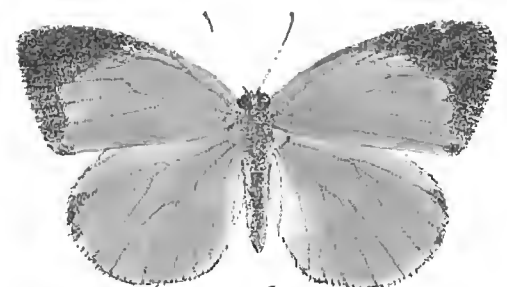


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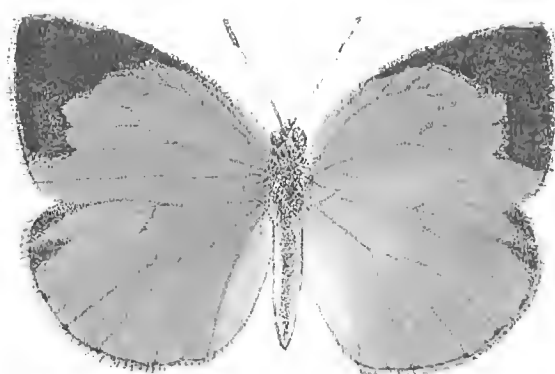


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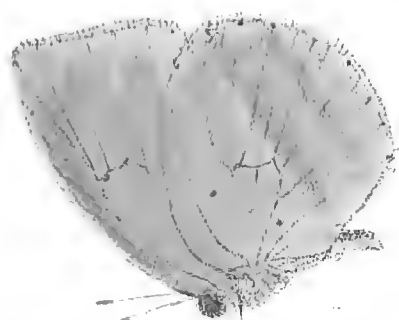
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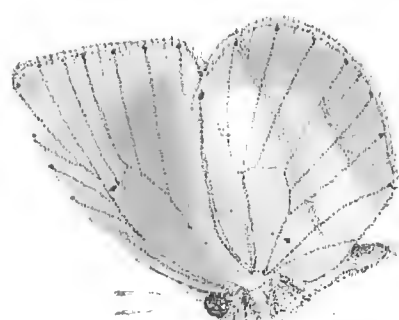
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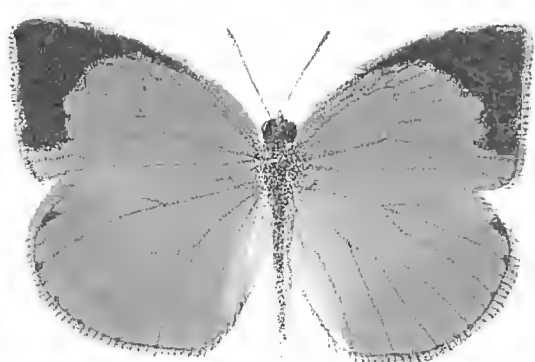
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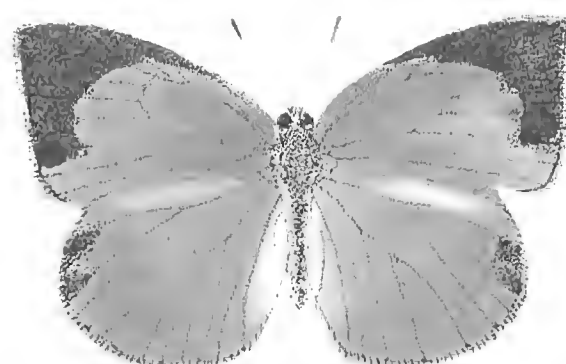
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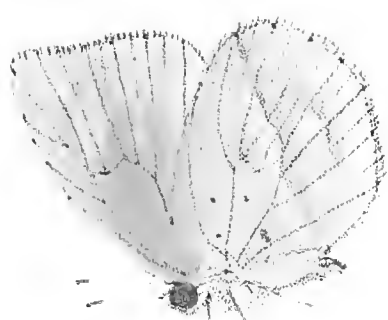
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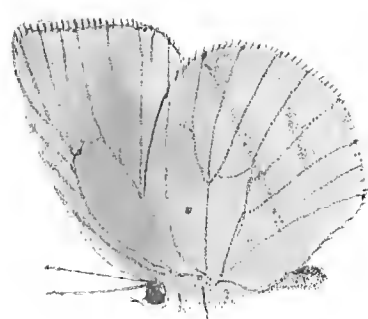
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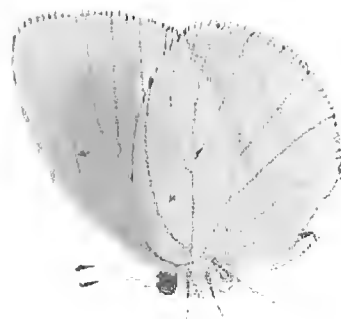
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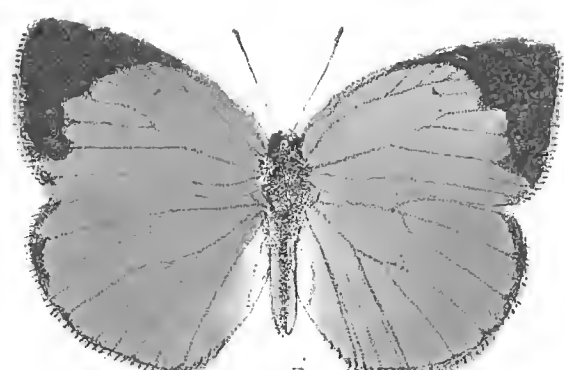
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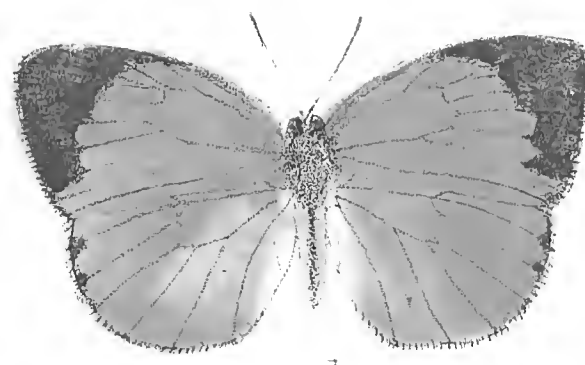
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