these curious fungi to our Irish flora. I exhibit a drawing (plate 1) of the three specimens which he was fortunate enough to discover; and, in giving the history of the middle and most conspicuous specimen, I give that of the others also. The following is from Mr. Hogan's notes :--" The larva, bearing the Sphæria, was taken on the 10th of March, 1853, while digging for pupze at the roots of an oak tree, in Mount Merrion, the demesne of the Right Honourable Sydney Herbert, and the residence of E. Vernon, Esq.; at this time they were quite young, the tallest not being more than a quarter of an inch in height. On examining the larva, on the 12th of April, which, acting on the advice of Professor Harvey, had been kept moist in a vessel filled with clay and moss, and covered with a piece of glass, I moist in a vessel filled with clay and moss, and covered with a piece of glass, I found fully one dozen fresh sprouts on it, pure white, and one of them about one line in height, shaped like a dagger; from that time the Sphæria continued to grow, some more and some less, rapidly for several months, always retaining the white point at the end of each stem, till, at length, the cold of winter seemed to deaden, though it did not destroy their vitality; meantime, none of the shoots showed any sign of fructification. As early spring opened, the Sphæria again threw out fresh shoots; some of the latter forming branches from the old ones, whose extremities had withered away at this stage of their growth. However, the space in which they were confined being manifestly too small, and seeming to cramp their existence, I could not resist the temptation (though, from the extreme delicacy of the plants, I knew it to be attended with great risk) of transferring the whole into a larger vessel, where they might enjoy more space, more light, and more air; but this experiment proved fatal, from what special cause I know not, and the entire nursery died away by slow degrees." Though it is a pity that none of these Sphæria fructified, so as to enable one to determine, with certainty, their species, yet it would appear that these Irish Sphærias are not either entomorrhiza or militaris, which are the only two that have been found in England. I forwarded to the Rev. Mr. Berkeley the Sphæria, No. 3, and he most kindly forwarded me, by return of post, the following :--- "There is no doubt that the Sphæria is quite different from S. entomorrhiza. I know of no insect Sphæria like it. Of others, it most resembles S. filiformis."

It is to be hoped that Irish entomologists meeting with any fresh examples of these Sphæria will preserve them, and, if practicable, rear them until they fructify, as by this means alone will it be possible to determine, with accuracy, the species. I hope I may be excused for the imperfect manner in which I have accomplished my task; but, in introducing to your attention the recently mentioned Irish examples, I thought it better to give a sketch, however slight, of what is known to naturalists concerning them.

The President remarked on the advantages resulting to science from the careful collection of scattered portions of information on a subject, hitherto so little studied, as that of Mr. Wright's paper ; and expressed a hope that more satisfactory results might yet arise relative to the Irish Sphæria.

Dr. Carte exhibited a fine specimen of the Egg of the Ivory Gull (Larus eburneus), which had been taken, by Captain M Clintock, in the arctic regions. He observed the gull sitting on her nest, which was composed of dry sea-wrack, and, on a near approach to her, she flew away, leaving the single egg exhibited in the nest. Only one other specimen of this very rare egg seems to have been preserved before.

DESCRIPTIONS OF INSECTS FIGURED, AND REFERENCES TO PLATES ILLUSTRATING THE NOTES ON-KERRY INSECTS. BY A. H. HALIDAY, ESQ., M.A.

N.B.—The following symbols are used in common with all the figures, where such are requisite :—

X, body; C, head; Cc, epistoma; O, eye; Oo, ocellus; B, antenna; E, mouth; L', labrum; M', mandible; M, maxilla; Mm, mala; L, labium; Ll, ligula; P, Palpus; P', maxillary; P", labial; Q, thorax; K, sternum; A, wing; S, leg; S', fore; S", middle; S"', hind; Sc, coxa; St, trochanter; F, femur; T, tibia; Tc, spur; D, tarsus; Du, unguis; Dy, onychium; Dy', empodium;

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U, abdomen; V, belly; Y, hypopygium, or vagina; Z, terebra; e, a joint; a, front; z, back; b, base; o, tip; l, upper; g, under; p, side face; \bigoplus , larva; \bigoplus , pupa.

Ord.-COLEOPTERA.

Fam.-HYDROPHILIDÆ.

Ochthebius rufomarginatus, pl. 3, fig. 1.

Erichson. K. M. Br. i. 199. 2;-Bohem. Act. Holm. X. 46. 3 (1854). On the silt of the Castlemaine river along with O. bicolor, July.

a the casticination first along with 0. bicolor, our

Cercyon depressum, pl. 3, fig. 2.

Stephens's Mand. ii. 138. 5; - Manual 93. 721; - C. dorsostriatum. Bohem. Act. Holm. X. 54. 2.

Under fuci on sandy coasts with C. littorale, but less abundant.

Ord.-HYMENOPTERA.

Fam.-TENTHREDINIDÆ.

Gen.-HEPTAMELUS, Hal.-Melicerta* Steph. Mand. vii. 94, xxvi.

Antennæ 7-articulatæ, filiformes.

Alæ anticæ areolis radialibus 2; cubitalibus 3, 1ma. et 2da. venulam quaque excipiente; brachialibus conterminis; analis venulâ obliqua;† posticæ areolis discalibus 2 conterminis.

Heptamelus ochroleucus, pl. 2, fig. 1.

Melicerta id. Steph. Mand. vii. 95.

Long $2\frac{1}{2}$, Exp. $4\frac{1}{2}$ lines. Nearly linear, with head as broad as thorax, and depressed abdomen. Head shining black, finely stippled, and with pale pubescence; vertex with a longitudinal impression behind each lateral ocellus; epistoma with the edge nearly straight. Antennæ a little longer than the thorax, 7-jointed, pubescent, the first two joints yellowish, shorter, but scarcely thicker than the rest, 3d twice as long as 2d, the rest longer by a half only, the last not elongated. Mandibles rufescent, dusky at the tip; other parts of the mouth pale yellow; labrum entire; palpi long and slender, probably 6 and 4-jointed, respectively. Thorax shining, very faintly stippled and pubescent, rufotestaceous, bleure under the wings and metathorax black; sutures of mesonotum joined some way before the scutellum. Wings hyaline, with the root and tegulæ whitish, the costal vein and stigma yellow, the other veins light brown. Stigma broad oval, Radial areolets 2; cubital 3, 1st elongated, receiving the 1st discal veinlet about the middle, 2d oblong-hexagonal, receiving the 2d discal veinlet in the middle, and the radial veinlet opposite to it; pobrachial areolet not extending beyond the præbrachial, nor longer than the posterior discal; the oblique veinlet of the anal area arising as a continuation of pobrachial veinlet. Lower wings, with the two brachial areolets, of equal length, the anal one-third shorter, the two discal conterminous. Legs of moderate length, rather slender, finely pubescent, pale yellowish; spurs of tibiæ, pale, slender, subulate. Tarsi simple; ungues be-neath acutely toothed in the middle. Abdomen with the first segment blackish; the following ones above with a transverse, dusky spot, attenuated at the sides, and interrupted by a pale dot in the middle; sometimes these spots are connected into a broad, jagged, dorsal band; the hindmost segments and the underside are immaculate.

This species seems to connect *Blasticotoma filiceti*, Klug. (pl. 2, fig. 2‡), and the group with 9-jointed filiform antennæ (*Emphyti*, &c.). The number of areolets, the broad stigma, and origin of the radial veinlet, agree in both genera. Peculiar to *Heptamelus* is the short pobrachial areolet, which, in the *Tenthredinidæ*, usually extends a good deal beyond the end of the prebrachial. In *Plagiocera*, also, they are conterminous; § but the pobrachial is twice as long as the posterior discal; and

* Pluries lect.

‡ Copied from Klug.

† "Area lanceolata nervo obliquo," Hartig. § Klug. jb. ins. pl. 2, fig. 5.

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that genus, belonging to the group with clavate antennæ, has little affinity in other respects to *Heptamelus*.

Found on the oak, Holywood (County Down), Blarney (Cork), Blackstones (Kerry)-July. Devonshire, Stephens, I. l.

Ord.-HEMIPTERA.

Fam.-LYGEIDÆ.

Gen.-DIPSOCORIS, Hal.-Cryptostemma,* H. Sch.

Proboscis 3-articulata, subarcuata, prosternum non superans.

Antennæ articulis 2 extremis elongatis capillaceis.

Ocelli oculorum margini appositi.

Hemelytra clavo intus appendiculato incumbente, cuneo discreto, membrana bivenia, venis medio connexis.

Tarsi articulo 2do longissimo.

Dipsocoris alienus, pl. 2, fig. 3.

Cryptostemma id. H. Schaeff. fn. g. 135. 11.-Meyer. schw. rhynch.

Long 1, Exp. 2 lines. Oblong-ovate, fusco-ferruginous, with whitish silky pile ; paler beneath; abdomen brown; antennæ and legs pale yellowish; cuneus, membrane, and sutural appendage of hemelytra, glossy iridescent; wings yellowish-white, with faint ferruginous veins ; head equilateral triangular, front even ; ocelli ruby-red, adjacent to the upper margin of the eyes; eyes rather small, with few facets, and some fine hairs interspersed; antennæ half as long as the body; 1st joint little longer than broad; 2nd three times as long as the first, both pubescent; 3rd and 4th twice as long as the second, very slender and flexible, thinly beset with long hairs. Proboscis somewhat hairy, with the three segments of nearly equal length, the base more arched and free than usual, the last joint slender, not extending back beyond the fore coxæ, between which it reposes; thorax trapezoid, gradually widened behind in continuation of the outline of the head, onehalf shorter than its anterior breadth, the fore edge nearly straight, the sides slightly sinuated, the hind edge nearly straight, the hinder angles slightly rounded; scutellum triangular, broader than long, but the apex acuminate. Wings ample, extending beyond the abdomen on all sides, and rather broader than the thorax; the fore pair with the exterior vein of the corium thick, dividing before one-third of its course into two branches, the exterior curved, approaching and then following the costal edge, the interior branch oblique, running to join the internal vein at the tip, and connected with it by a tranverse veinlet before that; veins of the clavus united before the tip, the inner edge dilated into a narrow triangular, membranous ap-pendage, superincumbent in repose. Cuneus separated from both corium and membrane, triangular, and nearly membranous itself, marked with two oblique impressed lines; the anterior suture diaphanous, notched at the costa. Membrane ample, obliquely traversed by two veins, arising from the end of the clavus and its appendage respectively, connected about the middle by a transverse veinlet, and diverging a little as they approach the margin behind the apex. Lower wings with a deep narrow incision of the hinder edge, corresponding to the costal notch of the opposite hemelytrum when incumbent; a simple vein runs from the base to this incision, another originates from a thickned root, near the base of the wing, between this vein and the costal; from the latter, at about one-third of its course, a fainter vein springs, which soon parts into two branches, that reuniting enclose a small lanceolate arcolet, and then runs towards the tip of the wing. Legs of moderate length; the fore femora especially rather thick; the posterior tibiæ armed with a few weak spines; the fore pair merely pubescent, thickened at the tip, under which lies a very minute, narrow, membranous hollow (far less deve-loped than in Xylocoris). Tarsi with the first joint very short; the second twice as long as the third; the ungues as long as the latter, simple, acute, curved at the base; empodium very minute; anterior tarsi short. Abdomen brown, shining and naked above, pubescent beneath.

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* Bis. lect.

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Inhabits the banks of rivers, throughout the summer, gliding among the wet gravel, its silky down protecting it from the wet. It takes flight readily, even off the surface of water. The yellowish larvæ and pupæ are found in the same situation, leaping like the perfect insect.

Herrich Schæffer, the first describer, has pronounced no opinion on the affinities of this insect. Meyer doubtingly refers it to the *Capsida*, influenced probably by the supposed want of ocelli, which both these authors have overlooked. It seems to me better to place it, for the present, with the *Lygeidæ*, in a peculiar section, next the *Anthocorini*, and approaching, perhaps, to the *Capsidæ*, with both of which it has considerable likeness in the wings; although the dilated and imbricated sutural margin of the hemelytra is peculiar to it, and the rather short, detached proboscis makes some approach to the structure of the *Reduvidæ*. On the whole, *Xylocoris* is probably the nearest allied native genus. In its habits it most resembles the *Saldæ*, but shuns the light more than they do.

Ord.-DIPTERA.

Fam. -CHIRONOMIDÆ.

Gen.-CLUNIO.

Proboscis obsoleta.

Antennæ 11-articulatæ, articulis 3tio et ultimo elongatis. Alæ alutaceæ, venis longitudinalibus furcatis binis, transversis nullis. Tarsi postici articulo tertio subelongato.

Clunio marinus, pl. 2, fig. 4.

Long 4, Exp. 8 lines. Head rounded, dusky ferruginous, concealed under the projecting front of thorax, the mouth inflected to the prosternum. Eyes round, composed of few facets, with some hairs interspersed, approximate on the face. Antennæ inserted near the mouth, shorter than the thorax, 11-jointed, whitish, the 3rd joint elongated, the others short and more dusky, the last again elongated and thickened, elliptical. Proboscis obsolete, only the lower margin of the head scalloped, the rounded lateral lobes a little hairy at the tip, perhaps representing palpi, and the intermediate divided lobe the labium. Thorax dusky ferruginous, with the scutellum and pleuræ yellowish ; oblong, a little compressed ; the mesonotum tripartite by two impressed parallel longitudinal lines, an elevated line down the middle, ending in the depression before the scutellum; this convex, semicir-cular; metathorax very short; mesosternum gibbous backwards. Legs rather short, compressed, dingy white, pubescent; the hind tibiæ at the tip, and the hind tarsi ciliated. Fore coxa twisted, the trochanter toothed, and the base of the femur curved. Tibiæ blackish at the very base, armed at the tip with a minute black pointed spur. Anterior tarsi with the first joint linear, the following ones short suborbiculate, the last ovate; hind tarsus with the first and third linear, the second oblong, half as long as the third, the fourth short suborbiculate. Ungues dusky; empodium apparently dilated more than the onychia. Posterior coxæ extending backwards under the base of the abdomen. Wings oblong, with the axillary sinus semicircular, and the anal angle strong ; the membrane adiaphanous, dingy whitish, microscopically stippled, glabrous, only the margin finely pubescent. The veins faint, the first* ending a little before the middle of the costa, the next[†] is forked opposite the end of the first, the posterior branch running to the tip, the anterior ending not far before it; another truns to the posterior margin, becoming forked beyond the middle, with the posterior branch§ curved, and another very faint simple vein accompanies the course of this. Halteres whitish. Abdomen scarcely as long as the thorax, gradually widened behind, of 7 segments, dusky, with a hoary bloom, and a pearly gloss on the posterior segments. Hypopygium as long as the abdomen, and thicker, fusco-ferruginous, with yellowish silky down, and composed of an oblong plate below, rounded at the tip, and a pair of massive compressed lateral arms, with a double ridge beneath, and rounded at the tip, where they are articulated to a smaller compressed piece, dilated at the tip, and truncated (mallet-shaped). The female unknown.

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* Radial.

+ Præbrachial.

t Pobrachial.

§ Subanal.

Anal.

Found on gravelly sea-coasts below high-water mark, walking with the wings half raised, and in rapid vibration, without taking flight. In such a situation I found, also, the empty puparia lying about, somewhat like those of a *Chironomus*. I have observed the insect only in blustery weather, as it happened, and could not find any trace of the female among them. When shut up in a box they survived but a few minutes, and all the limbs curled up.

There are two other small Diptera known, which seem to bear an affinity to this species-viz., Corynocera ambigua, Zett. Ins. Lap. 856, 1, from the shore of an Alpine lake in Lapland; and Monodicrana terminalis, Loew Bernst. Fna. 32, an amber insect.

Fam.-DOLICHOPIDÆ.

Dolichopus prætextatus, pl. 2, fig. 5.

Pallide viridi-æneus, antennis nigris, arista glaberrima, pedibus flavis, tarsis posticis fuscis basi flavis, alis apice nigro-marginatis, alulis pallido-ciliatis, lamellis obtusis fuscis, Mas. (Metatarso postico mutico, ciliis genarum pallidis). Long 2½, Exp. 5 lines. Robust; brassy-green, with hoary bloom; the thorax faintly streaked in front. Face narrow, shorter than the eyes, silvery white; lower occiput with yellowish beard. Antennæ black, short, third joint obcordate. Arista glabrous, arched, the penultimate joint as long as the third of antennæ, the last twice as long, slender. Palpi black. Wings hyaline, the eip with a narrow black edge the bind marcin sinuated, the subcostal arcolet long. the subanical vein black edge, the hind margin sinuated, the subcostal areolet long, the subapical vein sinuated, the discal veinlet straight. Alulæ with pale fringe. Legs rather short, testaceous; coxæ cinereous; femora below, the anterior pairs only at the base, ciliated with fine pale hairs; the posterior ones above ciliated with black bristles; before the tip, in front, two spines on the middle, one on the hind thigh. Fore tarsus short, the metatarsus as long as the following three joints together; middle tarsus dusky at the joints, hind pair dusky, with only the base of the metatarsus yellowish; this is spineless and shorter than the following joint. Hypopygium, two-thirds of the length of the abdomen, and closely applied to the ventral surface; aculeus shorter than it, internally bidentate, the tip produced into a straight spine; next a forceps, with nearly linear arms, angulated near the tip; near the apex another forceps, with broader, somewhat curved, triangular lobes, pale, with dusky tip, extending beyond the lamellæ, which are blackish brown, broad at the tip, obtuse, and slightly ciliated. The length of the subcostal areolets indicates an approach to Argyra.

A single specimen found among the sea-reeds, on the sandhills of Rossbegh Point (Kerry), in July.

Rhaphium flavicolle, pl. 2, fig. 6.

Mg. Zw. iv. 56. 24 .- Wlk. Ins. Br. i. 195. 1.-Pallidum, Ztt.

Aphrosylus celtiber, pl. 2, fig. 7.

Obscure schistaceus, femoribus apice posterioribus fere totis rufopiceis, antennis nigris; Mas, lamellis fuscis longe crinitis, tarsi antici articulis 2 primis subincrassatis.

Long 21, Exp. 51 lines. Dark slate-gray, head above and mesonotum blackish, the latter with two faint lighter streaks in front. Antennæ black ; third joint conical, thickened at the base, twice as long as the two preceding together in female, yet longer in male. Arista about as long as the antenna, naked, thick the base, very slender at the tip. Face ochre-brown; epistoma blackish, in male hoary. Proboscis black and glossy, except the wrinkled membranous space at the base in front. Palpi dusky ferruginous; outwardly silvered and naked in male, duller white and with black pubescence in female. Beard yellowish, with some blackish hairs next the orbit. Prosternum at each side, with three black spines (as in A. raptor). Wings sooty-hyaline, with blackish veins. Legs grayish black, the fore femora rufescent at the tip, the posterior femora almost wholly piceous; the armature of the legs as in A. raptor, the spur of fore tibia springing directly from the straight tip of this, under the thin, fluted, whitish, transparent edge. In the male, the fore metatarsus is gradually thickened to the

tip, the following joint more thickened at the base, and tapering to the end, scarcely compressed. In A. raptor (Wlk. Ins. Br. i. 221, 1), these two joints are much more slender and compressed, the second a little gibbous at the base only, the metatarsus still less thickened at the very extremity (fig. 8). In other respects the two species are singularly like, except in colour, and differ equally from the third species, A. ferox (Wlk. Ins. Br. i. 221, 2), see fig. 9.

Not uncommon on the wet rocks and tangle at Smerwick Bay (Kerry), in July.

Fam.-MUSCIDÆ.

Trib.—GEOMYZINI.

Geomyza cingulata, pl. 2, fig. 10.

Ferruginea nitida, thoracis vittis lateralibus abdominisque cingulis fuscis, articulo tarsorum extremo apice nigro, alis immaculatis.

Long 1, Exp. $2\frac{1}{2}$ lines. Pale ferruginous, shining; a dusky band of the pleuræ ending under the wing, and a fainter one above it, dusky; the hind edge of the abdominal segments in the male, the second segment entirely, dusky; in the female only the edge of the second and following segments dusky, and this interrupted in the anterior ones. Face with two black bristles at each lower angle, a few very minute ones along the cheeks. Antennæ with the third joint rounded, arista hairy black. The tip of the last tarsal joint and the claws black; fore femora with a black spine beneath beyond the middle, besides a few slighter, scattered bristles. In the male, the hind femora are ciliated beneath with very short black hairs. Wings hyaline, rounded at the tip; the costal vein yellowish, minutely and sparingly pectinated, the rest light brown; the præbrachial veinlet before the middle of the discal areolet. Halteres pale.

On the silt of the Castlemaine river (Kerry), among the reeds, in July, not rare.

Trib.—EPHYDRINI.

Canace nasica, pl. 2, fig. 11.

Hal. Ann. Nat. Hist. iii. 411.-Wlk. Ins. Brit. ii. 269.

Cinereous, with pale pubescence, inclining to ferruginous on the mesonotum and scutellum, elsewhere rather glaucous. Head broader than thorax, as long as broad, above brassy-green, except the orbit and the stemmatic triangle, at each side of which there is a small impression; the ocelli very minute; the orbit with pale cilia. Eyes transversely oval, glabrous. Face, cheeks, and epistoma, glossy whitish; face short, convex in the middle, concave under the antennæ, faintly ciliated at the lower angles; cheeks broad; epistoma ample, vaulted. Antennæ short black, first joint very short, second transverse, third rounded, rather broader than long; arista finely pubescent, penultimate joint black, as long as third of antenna, the last twice as long, slender, pale. Labium glaucous gray, palpi and liplets rusty yellow. Wings whitish or obscure hyaline, veins brown, towards the base yellowish, costal vein dusky ferruginous; subapical and cubital both straight, parallel; discal veinlet straight, a little oblique, distant by little more than its own length from the end of the pobrachial vein; præbrachial veinlet a little beyond the first third of the discal areolet; mediastinal vein distinct, rejoining the subcostal at the end. Tibiæ ferruginous at the base and tip; trochanters sometimes tinged with the same colour; tarsi rusty yellow, the last joint dusky; ungues curved, black; onychia large, whitish; empodium setaceous, pubescent, pale. Abdomen somewhat conical, depressed, of seven segments, the second larges; hypopygium of male ending behind in two very short and stout black spines.

A maritime species, not rare at Rossbegh creek; found also at Smerwick Bay; July to September.

Glenanthe ripicola, pl. 2, fig. 12.

Hal. Ann. Nat. Hist. iii. 404.-Wlk. Ins. Br. ii. 258.

On grassy sea-coasts; Holywood, Portmarnock, Carragh creek, &c.