

[27 February 1915]

III. The authorship and first publication of the "Jurinean" Genera of *Hymenoptera*: Being a reprint of a long-lost work by Panzer, with a translation into English, an Introduction, and Bibliographical and Critical notes. By the Rev. F. D. MORICE, M.A., and JNO. HARTLEY DURRANT.

[Read December 3rd, 1913.]

This paper deals with a problem, which must first be solved, before any attempt to fix the Generic Nomenclature of Hymenoptera according to the principle of "Priority" can be accepted as final. The problem is simply this—when were a number of Genera accredited by some authorities to Panzer, and by others to Jurine, first technically "published", and who was their real "author"?

We believe that a complete answer to both questions is supplied by a long-forgotten Article, which is here reproduced by photographic processes from the only copy of it whose existence we have been able to recover. This Article was published at Erlangen in May 1801, and contains inter alia a Synoptic List of the Panzer-Jurine Genera in which they are compared with the Genera adopted by Fabricius in Ent. Syst. Vol. 2 (1793) and its Supplementum (1798). We shall refer to this Synopsis in future as the "Erlangen List," and give reasons why Jurine is to be considered the author of any Generic Name made valid by it.

This Article appeared anonymously in two instalments in a weekly publication. But in a footnote on p. 7 of Krit. Rev. (1806) Panzer acknowledges himself to have been its author, and his statement is entirely borne out by internal evidence contained in the Article itself. This, however does not apply to the Synoptic List above mentioned. That Panzer claims in Krit. Rev., and what he manifestly has a right to claim, is not the first publication of any Names at all (!) but we have explained in this Article the method first devised by Jurine for classifying Hymenoptera, viz. the so-called "alary system" adopted in Jurine's Nouvelle Méthode (a work first announced for publication in 1799, submitted to Panzer for inspection at some time previous to May 1801, and ultimately published at Geneva in 1807).

The present writers were led to make the investigations which have enabled them to republish these long-forgotten documents as follows—They were in correspondence as to the probable correctness or otherwise of certain conclusions arrived at by Mr. Rohwer in his recent publications dealing with the Genotypes of Sawflies, and had arrived, by different lines of argument, at the same result: viz. that while Mr. Rohwer's conclusions generally seemed to follow logically from his premisses, certain of those premisses had been arrived at without examination of all available evidence, and had therefore been accepted

somewhat prematurely. Conspicuously this appeared to them to be the case with Mr. Rohwer's treatment of the "Jurinean" Genera. For various reasons they felt convinced that there was some mystery involved here, and that Mr. Rohwer had not succeeded in getting to the bottom of it. And it suddenly struck them both simultaneously (their letters on the subject actually crossing each other in the Post!) that the mystery might possibly be solved by ascertaining what exactly it was that Panzer had said in the Articles alluded to by him on p. 7 of *Krit. Rev.* Vol. 2. They determined therefore, if possible, to search out and examine those Articles.

For a long time, however, it seemed that this search was doomed to failure, and that the Articles had disappeared beyond hope of recovery. Enquiry was made after them in all possible quarters, but not a trace of them could anywhere be found. At last, on a happy suggestion of Dr. K. Jordan, application was made to the authorities of the University at Erlangen; and, through the most kind and courteous assistance of Oberbibliothekar Dr. Heiland, it was ascertained that a copy of the *Erlangen Litteratur-Zeitung* for 1801, containing the Articles in question, still existed in the Library of the University. It was too rare (perhaps even unique?) to be sent abroad for any purpose whatever; but we were most kindly provided with photographs (paper negatives) of the documents themselves, and from these negatives Messrs. André and Sleigh have made "blocks" from which our facsimile reproductions are now being printed. It has unfortunately been necessary to cut up the blocks, and thereby somewhat alter the appearance of the Articles, which were printed originally in 4to with double columns (in the style of the *Isis*, *Societas Entomologica*, etc.). Such an arrangement could only have been employed in the Pages of these Transactions, by making our reproductions copies on so reduced a scale of the negatives sent to us, that for any practical purpose they would have been almost, if not absolutely, useless. Except as above, we have tried to lay before our readers not only the substance but the actual form of the original publication. As a preliminary to this we have thought it may be worth while to put together a few notes—as follows—on the period in which Panzer and Jurine flourished, and the circumstances under which their chief works were produced.

THE Year of Grace 1793 was politically and socially one of the most eventful in European history. Nine of its months fall within Year I of the French Republican Calendar. It began with the trial and execution of Louis XVI (in January), and ended with the hideous massacre, etc., at Nantes (in December). It witnessed the first appearance in actual warfare of Napoleon Bonaparte, and the assumption of practical Dictatorship by Robespierre; also the guillotining of Marie Antoinette, Madame Roland, Charlotte Corday, and Philippe Égalité; the fall of the Girondins; the establishment of the "Reign of Terror"; the overthrow of the French Church and the deifying of Reason, etc., etc. In this year also commenced the long series of duels between France and Monarchical Europe.

in which Republics, Kingdoms and even Empires rose and perished, and the very foundations of the world seemed to be breaking up.

Yet amid all this distress of nations and perplexity, a more peaceful revolution—or rather evolution—quietly pursued its course. The scientific movement which we associate with the name of Linné was spreading and progressing in a manner which, considering the unrest and preoccupation in other matters of educated Europe in that age, cannot but seem to us surprising. Simultaneously Kirby in England, Lamarck and Latreille in Paris, Jurine in Switzerland, Klug in Germany, Fabricius in Denmark, Schrank in Austria, Rossi in Italy, and many other able men, continued to devote their best abilities to one and the same object, viz. a revised classification of the Linnean "Classis" *Insecta*. Many of these men had nothing else in common. Schrank was a Jesuit; Kirby a country clergyman; Lamarck and Latreille called themselves (perforce or voluntarily) "Citoyens," and worked under the aegis of the French Republic. Yet all considered themselves colleagues, and disciples of one master, the incomparable Linné (ob. 1778).

The present paper proposes *inter alia* to consider how certain of these men handled respectively one particular Ordo of the Linnean *Insecta*, viz. the *Hymenoptera*. These at that date had been divided into twenty genera, one of which was *Apis*. About a century later, the late E. Saunders was able to publish a list, from Britain alone, of twenty-eight genera, universally recognised as distinct, which in 1793 were still all included in the single genus *Apis*.

It was in this year (1793) that there appeared at Nuremberg, with a Preface dated the 21st of August, twelve sets of coloured figures with short diagnoses of German insects. Each figure, and each description, was on a separate sheet, and the sheets were not bound together, but packed in a sort of wrapper or envelope of coloured paper, bearing the date of its publication and a list of the insects figured therein. Corresponding titles were engraved on the plates, and printed as headings to the descriptions. This was the first instalment of a highly successful serial publication, which (with occasional intervals of suspension for a year or more at a time) continued to appear till 1813, certainly, and perhaps a little longer, under the direction of its first

editor, Dr. G. W. F. Panzer. Afterwards (at Regensburg) the work was continued by another editor; and it was finished, or left unfinished, about 1844. At present we are concerned only with Panzer's share in this work; and have nothing to say about its continuation in a later generation.

We purposely did not include Panzer among the systematists enumerated in a former paragraph, because his work was in no sense intended to be a contribution to systematics, but, simply, as an assistance to collectors in naming their insects according to the system adopted (at the time of his publication) by one particular author—viz. Fabricius, whom—to put the matter shortly—he treated as infallible. The title he gave to his work, which we shall cite hereafter as *Fn. Ins. Germ.*, was *Faunae Insectorum Germaniae Initia*—it was a book for beginners, and dealt only with one local Fauna. He publishes as “new” many species; but he neither characterises, nor intends to introduce as new to science, a single genus—at any rate when dealing with *Hymenoptera*. His own speciality, so far as he had one, was the *Coleoptera*; and he does not seem to have taken any considerable interest in *Hymenoptera* till some years after he commenced publication of *Fn. Ins. Germ.* Nor did he even attempt to make any contribution of his own to the systematics of that Order till 1806 (in a work to which we shall presently refer). It may be taken, therefore, that if, according to any of our present Codes, the mention of a generic name by Panzer in *Fn. Ins. Germ.* before 1806 makes Panzer its “author,” he was its author, not by intention but *malgré lui!*

Whatever, from a modern point of view, may be thought as to the scientific or artistic merits of Panzer's Figures and descriptions, their publication undoubtedly gave a great stimulus to work on the *Hymenoptera*, and also, as we imagine, on other Orders, not in Germany only, but also in France and England, and this influence lasted as long as the publication itself continued. It is constantly quoted as evidence for the identification of particular species by such authors as—to take a few names at random—Kirby, Stephens, Shuckard, F. Smith in England; Latreille, Lepeletier de Saint Fargeau, Lucas in France; Klug, Taschenberg, and many others in Germany. And even now, it is occasionally necessary to consult it for the above purpose; though, for any other, it is practically obsolete. But it was never intended, nor thought to

be intended, as a contribution to the systematics of *Hymenoptera*.

Consultation of Panzer's *Fn. Ins. Germ.* is attended by several difficulties: (a) the plates are arranged in no order—one may represent a Bee, the next a Spider, the next a Beetle, etc.; (b) they were published with no Index, nor even List of Species for the whole work, only with a list on each envelope of the species figured in it; (c) the generic names used by Panzer are often no longer used in Panzer's sense, and he sometimes gives the same insect one name in an earlier fascicule (Heft) and another in a later; (d) the date of any particular Figure or diagnosis can seldom be ascertained without examining the wrapper which contained it, and not always then—besides, bound copies of the work often do not include these wrappers. Many of these difficulties may be to a large extent overcome by using the excellent Index published by the late E. Saunders, F.R.S. (Gurney and Jackson, London, 1888), to which the present writers desire to own their great obligation. But even this Index does not help us as to Panzer's obsolete and varying use of certain names: e. g. a Hymenopterist would suppose that *Macrocera lutea* cited in Saunders's Index must be a Bee, but it is in fact a *Dipteron*! And many of the species listed in the Index under *Tiphia* would not have been referred by Saunders himself to that Genus: one is a Bee, another some small parasitic species akin to the Proctotrupids, etc., another a Fossorial-wasp which Saunders would have called *Astata boops*. The addition to the Index of Saunders's own identification of each Panzerian species would have made the work not only invaluable, but almost unimprovable!

The particular authority invoked by Panzer to settle all questions as to the proper naming of Genera was (at any rate up to, and including, 1801) Vol. 2 of Fabricius's *Entomologia Systematica*, 1793; a *Supplement* to this work appeared in 1798, and thereafter Panzer follows the *Supplement* also. (N.B. *Entomologia Systematica* must not be confounded with the earlier *Systema Entomologiae* of the same author, 1775, though it is, more or less, a recasting of it!) The *Ent. Syst.* was a very ambitious work, and intended not merely as a contribution to, but as a settlement of, the systematics of all *Insecta* from all parts of the world. Some of the Generic Names in it appear

there *for the first time*; others are repeated from the author's *earlier works*, and of these some were *not* first proposed by Fabricius, *but by Linné*. All these, however, when cited by Panzer, are accredited to Fabricius; and when writing of them collectively, he calls them the "*Fabrician Genera*" [*Fabriciussche* in 1801, *Fabriziussche* (sic) in 1806!]. Every single Generic Name adopted for a Hymenopteron in *Fn. Ent. Germ.* up to 1799 is taken straight from *Ent. Syst.* or its *Supplement*, and is used, or meant to be used, *exactly in the Fabrician sense*.

But, about 1799, Panzer began to fall under a new influence, tending in a measure to draw him away from his former absolute dependence on Fabricius. He was getting into more and more frequent and intimate correspondence with an incomparably better Hymenopterist than Fabricius; with a man, in fact, who was the first real specialist on that Order; and who already, after many years' study of the subject, had practically completed an independent and highly original revision of the Order, relying especially on a character which Fabricius had left unnoticed, viz. the differences in "neuration" of their wings.

This new friend of Panzer's lived in 1799 at Bern; but soon after he removed to Geneva, where he became a Professor in its University, and there—but not till 1807—published, in its final form, the magnificent work, which he had practically completed, and even announced for publication, in 1799. (*Cf. Jurine, Nouvelle Méthode, 1807, p. 13, foot-note.*)

Jurine's *Nouvelle Méthode*, as it appeared in 1807, was (1) incomparably the most beautifully illustrated work dealing with *Hymenoptera* in existence, (2) a work introducing several entirely original characterisations of Genera, many of which remain to this day as foundations on which all systematists in dealing with this Order mainly build. But its real importance in entomological literature depends on neither of the above facts, but rather upon this—It ousted altogether (not at once, but within a very few years after its publication!) Fabricius and his "*Systema*" from the supremacy they had held so long. [Fabricius died in 1808, it is said from grief at the British bombardment of Copenhagen in 1807.] A new "*Systema*" had appeared, which on the whole may be said to have held the field ever since; though some of our best

Hymenopterists have succeeded in seeing for themselves and convincing others that the *neurition-characters* must no more be made an idol than the *instrumenta cibaria* of Fabricius, and that neither Fabricius nor Jurine can claim to have shown us once for all the infallible "characteres essentielles," by which Nature has *branded* or ticketed all living creatures in order that Man may be able to distinguish them! This is what the pre-Darwinian entomologists really meant by a "character," and the notion which still exists that there is some *essential* difference between "generic" and "non-generic" characters, "structural" characters and "colour" characters, "specific" characters and "varietal" characters, etc., etc., etc., is really not very different.

But though we now talk of Jurine's invention as a *System*—the "Alary System," and so forth—neither Jurine himself nor his contemporaries ever called it so. It was invariably called—not a System, but a Method. What is the difference? It seems to be this.

A System, or rather *The System*, is the *actual grouping of existences* which makes up the Universe. There can obviously be only *one* such System, and this Linné had called the "Systema Naturae," never claiming for a moment that he had made it or devised it, but only that he had *discovered* it. But a *Method* (μέθοδος) is something much humbler. It is simply a "way-towards" some desired goal. What Jurine claimed was simply this, to have devised a *new manner* of getting to the heart of things;—an easier, more rapid method, than that of Fabricius—but nothing more. This will have to be remembered, if we try to understand how it was possible for Panzer to think that Jurine's "Method" might be accepted without abandoning the only possible or conceivable "Systema," which "systema" to him meant simply—the Fabrician conception of an *Animal Kingdom based on certain essential differences between Animals which Nature had indicated by fashioning their "instrumenta cibaria" differently*. Believing this, and that such characters were the only really infallible and "natural" characters, Panzer could, and did, hold also, that animals might likewise have other characters, not in the strict sense "natural," but (as a matter of fact) so frequently accompanying the "natural" characters, that the presence of such and such an "artificial" character might give us a useful hint what the natural characters

of an animal possessing such an artificial character were likely to be.

One of the great merits which Panzer found in Jurine's wing-characters was just this—that they seemed to run more or less parallel with the Fabrician mouth-characters, and, in so far as they did so, to be approximately, even if not really, “natural.” And Jurine himself either did not wish, or did not dare, openly to reject the claim made for the Fabrician characters that they were “natural.” On the contrary, by figuring *mandibles* and antennae, as well as wings, in his Plates, he managed, very prudently, if it was done intentionally, to give the impression that far from attacking the Fabrician characters, he was reinforcing them. And honest Panzer was only too willing to look at things in so satisfactory a light!

It is interesting to trace—for which purpose see Appendix A following this Introduction—the steps by which Panzer's confidence in Jurine is seen gradually ripening.

(a) First in 1799 we find Panzer telling the world through his *Fn. Ins. Germ.* that one Mr. Jurine of Bern was a very acute entomologist, who had got some “method” of his own for determining insects by their wings, who had sent him (Panzer) such and such insects, given him particulars of their “habitats,” and was kindly going to give him more in future.

(b) Then in 1800, a year when the French and Austrians were cannonading each other under the walls of Nuremberg, Panzer publishes no instalment of the *Fn. Ins. Germ.* but waits for quieter times, and probably finds leisure to go more carefully into the “Proofs” and “Figures” of Jurine's forthcoming book, advertised last year, but not yet out.

(c) By May 1801 he had become convinced that this *Nouvelle Méthode* is an excellent idea, very convenient, and perfectly orthodox. He will give it a start, but in a quiet way, taking no responsibility for anything. So he gives it a favourable notice, not at Nuremberg (where his authorship would be recognised at once) but at Erlangen, where a new *Zeitung* in which he had some sort of interest was being started. The thing would make good “copy” for an Editorial; and he could do his friend a good turn without bringing his own name in at all, or making the readers of *Fn. Ins. Germ.* wonder if they were wanted to rename all their specimens. So he leaves his Articles

unsigned, and takes care to describe himself vaguely as "a German naturalist," whereas he gives the greatest possible prominence to the name of Jurine, and pays him the highest compliment he can by representing him as an able new aide-de-camp of the illustrious Fabricius.

Then once more he brings out a new instalment of *Fn. Ins. Germ.* containing several Figures contributed by and attributed to Jurine; mentions him repeatedly as authority for habitats, etc.; figures certain Jurinean species with Jurine's name attached, and even slips in a few Generic Jurinean names (once at least quite erroneously) in his Synonymy, while retaining Fabrician names on the corresponding Plates. He does not call these Jurinean Genera "inedit" (by which formula he denotes in all his works unpublished names of genera or species), because they had already been published at Erlangen!

(d) Three years pass during which the *Fn. Ins. Germ.* is again suspended. In the last of them Fabricius brings out (1804) his *Piezatorum*. Panzer girds himself again and brings out (1805) a new instalment of *Fn. Ins. Germ.*, at last using Jurinean names quite freely, even on the Plates, sometimes even where other names were employed for the same Genera in the *Piezatorum*. We suspect that this was accidental. Fabricius himself had introduced certain Jurinean Generic names into the *Piezatorum*, and Panzer may not have realised that he had rejected others, and thought that the new nomenclature as a whole had received Fabricius's imprimatur. [Or perhaps the Plates were engraved before the *Piezatorum* reached Panzer, and it was too late to alter them; even as Jurine had to explain in *Nouvelle Méthode* (1807) that he was obliged to leave certain names on the Plates, simply because the latter had been engraved long ago and could not now be altered.]

(e) Next year (1806) again no *Fn. Ins. Germ.*, but instead of it Panzer's first serious attempt to grasp and compare the nomenclature of Jurine and Fabricius (the latter as amended in the *Piezatorum*). This took the form of two small Volumes printed in Nuremberg, and entitled *Kritische Revision der Insektenfauna Deutschlands*—suggesting that it was meant *inter alia* as a sort of Guide-book to accompany the Plates, etc., of *Fn. Ins. Germ.* This title sufficiently describes its first Volume, which deals with *Coleoptera*. But Vol. 2 is devoted to *Hymenoptera*, and this Volume has an alternative title, which shows that Panzer had more

in his mind than a simple revision of his past work. The alternative title is as follows—

ENTOMOLOGISCHER VERSUCH
DIE
JÜRINESCHEN
GATTUNGEN
DER
LINNÉSCHEN HYMENOPTERN
NACH DEM
FABRIZIUSSCHEN SYSTEM
ZU PRÜFEN: *etc.*

This is followed by a sort of Essay, written exactly in the style of the Erlangen Articles, and evidently a composition of the same writer. Like those Articles it maintains the thesis that the Jurinean Genera, far from upsetting the Fabrician system, really support it. Jurine's characters are excellent and practically most useful. They are easy to see and to distinguish. They indicate just the same divisions which Fabricius has discovered and Nature established in the Animal Kingdom. Really and essentially Animals are separated, and ought to be distinguished, by the differences in their mouth-parts, the *instrumenta cibaria*. This is the high-road to Truth, and Fabricius has shown it to us. But the high-road is long and sometimes rugged and difficult. We may shorten it, and make it easier, if we can, by taking side-paths and short-cuts, provided that we come back ultimately to the high-road, and own (even while we stray from it) that it is the one and only "Natural" method of approaching the Truth. Jurine's Method is such a short-cut. It is not the high-road itself, but it runs parallel with it, leads to the same goal, and is easier to follow. Therefore Jurine's "method" is lawful, as long as it does not lead us to abandon the Fabrician "system"; and that it in fact does not do so, is one of its principal merits.

(The above is not a translation, nor even a condensation

of Panzer's actual language, but we believe it represents fairly the thesis which he is maintaining.)

This Essay, then, to which the secondary Title really refers, is a sort of Apologia—minimising the differences between Jurinean and Fabrician methods, and showing that no one need feel any scruple or difficulty in using the former, so long as he retains his belief in the essential "naturalness" of the latter.

The rest of the book is mainly occupied with classifying the *Hymenoptera* previously figured and described by Panzer without order in the Plates of *Fn. Ins. Germ.* It only professes, as did the *Fauna* itself, to deal with German species. These are now arranged under Fabrician Generic names for the most part, but now and then with a Jurinean Genus upheld as a convenient receptacle for species which it was difficult to bring under Fabrician categories, or mentioned as synonymous with some section of a Genus, indicated by Fabricius, but not yet provided by him with a name of its own.

The Fabrician Genera of *Krit. Rev.* are, however, no longer taken solely from *Ent. Syst.* Fabricius in 1804 had revised his own classification and nomenclature in a new work dealing with *Hymenoptera* only, the *Systema Piezatorum*. It is this revised list of Genera which Panzer now adopts, and it is into these revised Fabrician Genera that he tries as far as possible to fit the species known to him, and often figured and described by him in the past under names which Fabricius once used but has now abandoned. In short the *Syst. Piez.* 1804 is to the *Krit. Rev.* 1806 exactly what *Ent. Syst.* 2. 1792 was to *Fn. Ins. Germ.* 1793–1798, the source of its nomenclature, and the ultimate authority to which all enquirers are to be referred. There is, however, this difference in the situation—that Panzer has now undertaken not only to cite Generic names, but to distinguish Genera. And he has also a more difficult task before him than in 1793–8: (a) because he has to reconsider a previous nomenclature to which he had committed and accustomed himself, part of which is to be retained, and part abandoned; to do which he must ascertain for himself what Fabricius's recent changes in his nomenclature really amount to; (b) because he now recognises that some of the Jurinean Genera deserve names of their own, with which Fabricius apparently has not provided them; (c) because in the *Fn. Ins. Germ.* of the preceding

year, probably having then not thoroughly assimilated the substance of Fabricius's new proposals, he had done his best to popularise at least one Jurinean Generic name, for which Fabricius was now proposing another; (d) because Jurine was a friend whom he admired, to whom he was under great obligations, which he had tried to repay by doing all that he could to get Jurine's views a hearing from the "entomological public"; and he naturally did not wish to withdraw from his support of Jurine, if he could support him without rebelling against Fabricius.

It would require a very long and minute examination of the *Krit. Rev.* Vol. 2 to discover exactly how far Panzer succeeds in reconciling these conflicting motives, and carrying out the complicated programme which he has set himself, in this, his first attempt to come before the public in the character of a systematist.

It may be said, however, at once, that the *Revision* is a book in which it is often difficult to realise what are the author's own views, or whether he has any view of his own at all, on the merits of the nomenclature which he is discussing. The book is made also very puzzling by the author's eccentric way of quoting synonyms. First, in capitals, he gives the names which are to be sunk, and afterwards, in small italics, those which he intends to be adopted—thus exactly reversing the usual habit of authors! As a sort of Key to the scattered Figures, etc., of *Fn. Ins. Germ.* and a definition—such as it is—of the Fabrician, and a few of the Jurinean Genera, the book was probably more or less helpful to the German collectors for whom the *Fn. Ins. Germ.* had been intended. But it contributes absolutely nothing that can be called original to the systematics of its subject. At that we may leave it, adding only (if anything need be added) that the book is printed and generally "got up" in a very odd and as it were amateurish style, which reminds us that it appeared when the publishing and printing trade at Nuremberg was being conducted under disturbing circumstances, for it was in this same year that Napoleon was terrorising the Nuremberg booksellers, shooting one (Palm), and driving others to hide themselves, because a pamphlet had appeared there, of which he disapproved.

Although we may be blamed for importing into a question of entomological nomenclature so much of matter which may be thought extraneous and inadmissible as "not

evidence," we will venture a little further in that direction, and glance for a moment at the state of things in Switzerland, when Jurine, instead of publishing at Bern when his work was "actually in the press," transferred himself from Bern to Geneva and took his proofs with him. This we now know occurred between Aug. 1799 and May 1801. Consulting an *Encyclopedia* we come across a passage stating that "from 1799 to 1801 Switzerland was the theatre of the wars between the French, Russians, and Austrians." We find too that Geneva had been annexed by France in 1798, and that in 1801 the Peace of Amiens and the First Consulate of Napoleon filled mankind with hopes (which however were soon to be disappointed) that a new era of peace and prosperity had set in for all Europe, and more especially for France, now at the height of her greatness. Geneva, then, in 1801 seemed likely to be a desirable residence for a student and an author in prospect. Bern, on the contrary, was still in trouble politically; the French had upset its old government in 1798, and affairs there were still in chaos, till Napoleon finished what he called his "Mediation" of Switzerland in 1802. May we not conjecture from this, why it was that Jurine left Bern at this particular time, and why he did not publish there? Further, when arrived at Geneva, he would naturally not set about publishing *at once*. He had other things to think of, a new career to be taken up, new surroundings in which he had to "find his feet." Also he had now a new collecting ground; and in fact he tells us in the *Nouvelle Méthode* that he would have published sooner, if he had not formed exaggerated hopes of increasing his list of new Genera!

We have now seen how, when, and where the Jurinean Genera were first published: viz. as part of an Article, the rest of which was certainly written by Panzer, but for which he was careful to incur no responsibility till 1804 and throughout which he expressly and consistently called the Genera Jurinean (*Jurinesche!*) and brought Jurine's name to the front on every possible occasion; we know also now that these names date from May 30, 1801, and that they were published in a Journal which was purchasable by all men at Erlangen.

If we next proceed to compare the Erlangen List with the contents of the *Nouvelle Méthode* as finally published, we find that exactly the same Genera, numbered and arranged similarly, and applied to the same groups of species

occur in both publications with these differences: (1) One Genus has changed its name between the two publications and Jurine mentions that he has made this change, and says that he has done so deliberately. (2) Many species are added in the Geneva List to those mentioned in the Erlangen List. (3) Several new Genera are introduced in the Geneva List, and these Genera are not numbered at all, because, as Jurine explains to us, he was not acquainted with them when he had completed the body of his work and had also had his original Plates engraved. These therefore were supplementary—added to the work since 1800 when Panzer saw it.

We think these facts clearly indicate that though the Erlangen Articles were written by Panzer, the authorship of the List should be accredited to Jurine; and we have ourselves no doubt whatever, that the actual List was received by Panzer from Jurine, and that round it—so to speak—he wrote the Articles.

In support of our contention, we quote this Rule of the Zoological Congress (Berlin 1901, p. 951):—

—“S’il ressort clairement de la publication que ce” [i. e. celui qui l’a publié] “n’est pas l’auteur de celle-ci, mais bien un autre auteur qui est le créateur du nom et de la définition ou description, ce dernier doit être considéré comme l’auteur légitime du nom.”

This Rule seems to express exactly the view which we venture to take; and we hold accordingly that Jurine and not Panzer is the “author” of all new names in the Erlangen List. They are expressly accredited to him there; and he unquestionably created and defined them himself. Panzer did not, and could not (in 1801) do anything of the kind, his own acquaintance with the characters of *Hymenoptera* being as yet far too superficial. In 1806, we believe, he made his *first* attempt in that direction when he proposed and defined the Genus *Osmia*.

It may still be asked—Why, then, did Jurine in the *Nouvelle Méthode*, 1807, seem to disclaim his authorship and accredit names of his own to Panzer? But we do not think much of this. Jurine could not foresee our present definitions of publication, authorship, etc., nor the importance now attached to Priority, Validity, etc., etc. After all, Panzer had first passed the Names through the press at Erlangen, and Jurine may have had no particular desire to take credit for them, just as Panzer had felt

no scruple about accrediting Linnean names to Fabricius. Similarly, when in the same work Jurine meets some criticisms on his method (neuration, etc.) made by Klug in 1803 with the retort that he had never published anything at that time "sur ce sujet," we need not consider whether or no he here disclaims authorship of the Genera, for (a) "ce sujet" surely means the neuration-characters, not the names of Genera; (b) it was quite true that the remarks on the merits of these characters in the Erlangen Articles were published by Panzer and not by Jurine; and (c) if, as a fact, and as "authorship" is now defined, Jurine was author of the names, no subsequent disclaimer can affect the situation in any way. If he *was* the author, he *was* the author, and no more needs to be said!

It is probable that Panzer was not the only colleague who had a sight of Jurine's work in its earliest form. But of this we have no positive proof. It is clear that Klug knew something about it in 1803; but he says nothing that he might not have learnt from the Erlangen publication in 1801.

Several allusions to Jurinean names are made by Latreille in Paris before the *Nouvelle Méthode* had appeared, as for instance when he mentions "*Astatus* dans le sens de Jurine et de Panzer"—the order in which he cites these names suggesting that he accredited the Genus to Jurine rather than to Panzer. So much, however, and also his attributing the name *Urocère* (meaning *Urocerus*) to "notre collègue Jurine," may merely indicate that he had seen certain Figures and descriptions in *Fn. Ins. Germ.*, viz. 83·12 (published in 1801) and 85·10 (*Astatus* on the Plate, *Urocerus* in the Text), 11, and 12 (published in 1801). But he says, also, and this implies more knowledge of the matter, that "ce savant" (*i. e.* Jurine) "publiera incessamment une nouvelle méthode" (*sic*) "sur les hyménoptères, qui ne pourra manquer d'être bien accueillée." And in 1807 (the year when the *Nouvelle Méthode* at last appeared) Latreille remarks, as he finishes Vol. 3 of his *Gen. Crust. Ins.*, that just as the first part of his own book was going to press he received from his "friend" (*ami*) Jurine a copy of the magnificent new work just published at Geneva by the latter. (Which should be noted *inter alia* because it proves that, of these two works published both in 1807—the *Nouvelle Méthode* and *Gen. Crust. Ins.* Vol. 3—the former was first published!)

Latreille proceeds to describe the form and contents of *Nouvelle Méthode* very fully and correctly; does full justice to the splendour of the illustrations, and the general excellence of the work; compares its terminology with his own; and quotes the whole List of Genera as we now find them there. He does not entirely endorse Jurine's views, still insisting that, when all is said, the *instrumenta cibaria* however minute, however difficult, etc., do yet supply the *primary* characters, but his criticism is very temperate and courteous, and he makes one entirely reasonable objection to Jurine's Ordo III, viz. that it is a very mixed group and requires, to make it satisfactory, much further subdivision. This remark is certainly not unjustified, for the Ordo in question besides Bees, Fossors, Ants, and Wasps, includes likewise the *Ichneumonidae* and *Braconidae*, and also *Chrysis*, *Leucospis*, and many minute parasitic groups!

And what did Fabricius himself think of the rival who was destined to overthrow him?

Practically he treated him rather badly. Somehow or other he got knowledge of quite a number of Jurinean names before 1804, in which year he published the *Systema Piezatorum*. And of these names he ignored some silently, e.g. *Bremus*, adopting instead Latreille's later name *Bombus*. Others he calmly appropriated to his own use without acknowledgment, e.g. *Prosopis*, which he cannot have invented independently since he uses it in the Jurinean sense. Others (the most flagrant case being that of *Cryptus*) he also appropriates without apology, and commits the unpardonable sin of deliberately creating a homonym! The older *Cryptus* of Jurine was a Sawfly! The new *Cryptus* of Fabricius was (and is still) the current name for an Ichneumonid! and this indefensible act of undetected piracy at present vitiates the whole nomenclature of an immense group of modern Genera. And the rest of the acts of Fabricius, and the evil that he did, and the Names that he stole from Jurine, will be discussed in our critical Notes. But at least he did try to make some kind of reparation to his victim by paying to him, in the Preface of *Systema Piezatorum*, a compliment, which, however grudgingly expressed, shows that Fabricius did not look on his rival as a mere ignorant upstart who had to be brought to his senses by a good shaking, or an obscure nobody whose claims to be an "author" were ridiculous, and who ought to be too thankful that the great Fabricius

should condescend to use his Names at all whether in his own sense or in any other.

This is what Fabricius says, enumerating those authors who had in various ways contributed to the progress of Entomology, and whose works he advises the "Lector Benevolus" to make use of until (as he amiably puts it) others produce better ones.

"Auctores hujus classis numerosi.

"*Scientiæ heroes systema condunt et characteribus certis bene elaboratis firmant. Linné, Latreille, et forte Jurine.*"

Then he goes on to enumerate lower orders of workers such as Ichniographi (here including Panzer), Descriptores, Observatores, Monographi, etc. But these do not now concern us. The point to be noted is that Fabricius himself, who of all men must have been most tempted to belittle Jurine, had the grace to acknowledge his rival's architectonic genius, and to rank him even hypothetically on a level with Linné and Latreille.

Appendix A. Jurine and Panzer.

The following Plates, or descriptions, of *Fn. Ins. Germ.* may be applied to for information as to the relations between Panzer and Jurine in certain years—

1799.	Heft 62.	Plates	6, 7, 8, 10, 13, 14, 18, 19.
1800.	Heft 76.	„	11, 15, 16, 17, 18, 20.
1801.	Heft 82.	„	10, 11, 12, 13.
	83.	„	11, 12, 14.
	84.	„	11, 12, 13, 20, 21, 22.
1804.	Heft 86.	„	13.
	90.	„	13.

besides others which we may have failed to notice. The great falling-off in numbers in the above List after 1801 requires explanation. It was probably due to the publication in 1804 of the *Piezatorum* which recalled Panzer's chief attention to his old master and led, *inter alia*, to the publication of *Krit. Rev.* in 1806.

Appendix B. Jurine and Fabricius.

To judge of the real progress in Classification made by Jurine before 1801 we may notice that—

Fabricius before 1804 had dealt with:—(a) *Three* (palæarctic) Genera of Jurine's Ordo I, *i. e.* Sawflies; (b) *Two* of

Jurine's Ordo II, *i. e.* *Evania*, etc.; (c) *Twenty-four* of Jurine's Ordo III, *i. e.* Aculeates, and Parasitica (except *Evania*, etc.). = 29 in all.

Whereas in 1801 Jurine had named (a) *Eleven* (palae-arctic) Genera of his Ordo I; (b) *Four* of his Ordo II; (c) *Forty-eight* of his Ordo III. = 63 in all

—thus more than doubling the palae-arctic List of known Genera! [Fabricius, however, had also dealt with many Exotic Genera which were unknown to Jurine.]

Appendix C. Panzer and Fabricius.

The following "Fabrician" names were adopted by Panzer from *Ent. Syst.* Vol. 2 before the appearance of the Erlangen List and introduced first into *Fn. Ins. Germ.* at the dates stated.

Andrena, Apis, Bembex, Chrysis, Crabro, Scolia, Tenthredo (1793).

Leucospis, Vespa (1794).

Chalcis, Hylaeus, Nomada (1796).

Ichneumon, Mutilla, Philanthus, Tiphia (1797).

Formica (1798).

Cynips, Eucera, Evania, Mellinus, Sirex, Spheg (1799).

Also from the Supplementum of *Ent. Syst.*

Banchus, Pompilus (1798).

Till after the appearance of the Erlangen List, Panzer never even alludes to any other Genus of *Hymenoptera* except the above. Nor does he, we believe, intentionally (apart from allusions in his Synonymies) accept and introduce any others into *Fn. Ins. Germ.* before 1804.

We now reproduce the Article in its original German form, and also the Titles (shewing dates, pagination, etc.) of the two issues of the Zeitung containing it. Three curious slips of the original editor, or printer, will be noticed: viz. (a) both Numbers are headed "N^{ro}. 21"—they should be "N^{ro}. 20" and "N^{ro}. 21" respectively!; (b) "*entomolischen*" (*sic*) is used for "*entomologischen*" in the heading prefixed to both parts of the article; (c) most perplexing of all, the dates given by the publishers are Saturday May 25th, and Saturday May 30th, 1801, which is obviously absurd. We imagine that the *real* dates were May 23rd, and May 30th, 1801, both of which fell on a Saturday.

154

No. 21.

153

Grades pour Pan
1 18. de 100 pag.

indévilig. Num.

qui dément des
(Pr. 76 c. et 1 fr.

effins, sculpture.
vans, exposés au
no 8. (Pr. 75 c.)

tenant une notice
ctears, les pièces
30 c. et 2 fr. 25 c.

INTELLIGENZBLATT

DER

LITTERATUR-ZEITUNG.

Erlangen, Sonntags am 25. May 1801.

Ich bemerke nur, daß es mit dem, was *Mesch.* *Pensee*
und *Zopf* von dieser Bibel sagen, übereinkommt. Nur in
den Blätterzahlen haben sich die Genannten geirrt. Wenn

I.
Bemerkung eines auf der Universitätsbibliothek zu

V. Vermischte Nachrichten.

Nachricht von einem neuen entomologischen Werke, des Hrn. Prof. Jurine in Geneve.

Verschiedene öffentliche Blätter und Zeitschriften, haben schon vorläufige Nachricht von einem für die Entomologie äußerst wichtigen Unternehmen gegeben, dem sich einer der achtungswürdigsten und vorzüglichsten Entomologen, Hr. Prof. *Jurine* in Geneve unterziehen werde. Gegenwärtig kann man diese Nachricht nicht nur bestätigen, sondern sie auch mit der Anzeige dahin erweitern, daß dieses Unternehmen, wirklich seiner Vollendung nahe, das Werk selbst unter der Presse ist, und bereits *sieben* vortrefflich gestochene Kupfertafeln, in med. quarto, von dem Hrn. Verf. einem teutschen Entomologen, als Probe, zur vorläufigen Einsicht überlassen worden sind.

Man kann daher das entomologische Publikum, nun einstweilen, bis das Werk selbst sprechen kann, etwas näher mit dem Plane dieses Unternehmens bekannt machen, und die Absicht des *Hrn. Verf.*, den vorliegenden Blättern gemäß, vorläufig detailliren.

Zum Hauptgegenstande seiner entomologischen Beschäftigungen, wählte Hr. Prof. *Jurine* seit Jahren, fast ausschließlich und mit Vorliebe, diejenige Klasse der Insekten, welche der seel. Archiater von *Linne* *Hymenoptera* und Hr. Prof. *Fabricius* *Piezata* genannt haben, und klassificirte solche nach einer neuen vorhin nicht angewendeten *Methode*.

Das Fundament derselben beruht auf den Flügeln der darunter gehörigen Arten, vorzüglich aber, auf den dieselbst bald mehr, bald minder netzartig sich vertheilenden Gefäßen, oder den sogenannten Nerven und Adern. Jedoch sind die drey Ordnungen, in welche diese Insektenklasse von dem Hrn. Prof. *Jurine* subdividirt worden ist, lediglich von dem Sitze und der Anheftung des *Unterleibes* (*Abdomen*), an das *Bruststück* (*Thorax*) hergenommen. nämlich so: Ordo I. *Abdomine prorsus sessili*. Ordo II. *Abdomine supra thoracem infixo*. Ordo III. *Abdomine petiolato: petiolo pone thoracem infixo*.

Unter diesen *drey* Ordnungen stehen nun die sämtlichen *Gattungen* (*Genera*) der hierher gehörigen *Gall-Schlupf-Blatt-Gold* u. s. w. *Wespen*, der *Wald-Blumen-Trauer Bienen*, *Hummeln*, *Mutillen*, *Ameisen* u. s. w.

INTELLIGENZBLATT DER LITTERATUR-ZEITUNG.

Erlangen, Sonnabends am 30. May 1801.

I. Vermischte Nachrichten.

Nachricht von einem neuen entomologischen Werke, des Hrn. Prof. Surin in Genua (Beschluss).

Die Hauptcharaktere (Characteres primar.) der Gattungen selbst, beruhen zwar vorzüglich und fast ausschließlich, auf den Gefäßen oder den Nerven und Adern der Flügel, je nach dem jene bald mehr bald minder,

Z. B., so bestimmte die zweyte *Cellula cubitatis* mit ihrem Stielgen (*petiolata*) den vorzüglichen generischen Charakter von *Nycton*: die *cellula cubitatis incompleta*, den ganz eigenen der *Chrysis*: so wie eine eigene *lineola scans* der *cellula radiatis*, den Charakter der Gattung *Bremus*.

Die II, III, IV und Vte Knypstafel verfinnlicht nun diese generischen Characteres, in genau und hinreichend

I. Vermischte Nachrichten.

Nachricht von einem neuen entomologischen Werke, des Hrn.
Prof. Jurino in Geneve (Beschluß).

Die Hauptcharaktere (Characteres primarij) der Gattungen selbst, beruhen zwar vorzüglich und fast ausschließlich, auf den Gefäßen oder den Nerven und Adern der Flügel, je nach dem jene bald mehr bald minder, durch ihre anastomosenartigen Verkettungen, und netzförmigen Verbindungen, sich verflechten, und dadurch verschiedentlich geformte Cellen, Geflechte und Netze bilden; indessen, und um diesen stehenden — durch jene möglichen grossen Modifikationen, zur Errichtung natürlicher Generum äusserst pertinenten — Charakter, nicht in eine zwangvolle Einseitigkeit ausarten zu lassen, sind zugleich auch die verschiedenen Formen der Fühlhörner (Antennae), so wie die Kinnladen (Mandibulae), als Characteres secundarij, mit in subsidium genommen worden, doch sind die Anastomosen der Flügeladern und Nerven, stets die ersten oder stehenden Characteres der generum.

Indessen verhält es sich, bey Errichtung der Generum mit diesen Anastomosen doch so, daß einige den Charakter der Gattungen bestimmen, andere hingegen, und zwar stets auf dem nämlichen Flügel, den Charakter der Arten (Species) angeben.

Jeder Flügel, der unter diese Klasse gehörigen Insekten, wird im Allgemeinen nach seinem Umrisse eingetheilt: in 1) Basis, 2) Apex, und 3, 4) Margines.

Jeder Flügel wird ferner nach seinem Flächeninhalte den die sich durchkreuzenden Gefäße, und daher entstehenden Anastomosen der Nerven, bilden, abgetheilt: 1) in das Punctum, 2) den Radius, 3) den Cubitum, 4) die Nervos brachiales, 5) die Cellulas radiales, 6) die Cellulas cubitales, und 7) in die Nervos recurrentes. Die 5. 6. 7. geben indessen genau nur diejenigen characteres generum ab, die bey Errichtung der Gattung unentbehrlich sind: sie sind daher auf Tab. I, der Instruktionstafel, roth gezeichnet, um diesen Charakter sogleich in das Auge fassen zu können.

Z. B., so bestimmt die zweyte *Cellula cubitalis* mit ihrem Stielgen (*petiolata*) den vorzüglichen generischen Charakter von *Nysson*: die *cellula cubitalis incompleta*, den ganz eigenen der *Chrysis*: so wie eine eigene *lineola secans* der *cellula radialis*, den Charakter der Gattung *Bremus*.

Die II, III, IV und Vte Kupfertafel versinnlicht nun diese generischen Charactere, in genau und hinreichend vergrößert abgebildeten *Flügeln*, sehr deutlich. Die II, IIIte, stellt jede, in 20 viereckigten Fächern, eben so viele Flügel, oder eben so viele Genera dar; auf jeder der folgenden (IV und V) aber sind in 24 etwas kleinern Fächern, eben so viele Flügel oder Genera, mit ihrer Nomenklatur, gezeichnet. -Man kann nun, wenn man den *Clavem methodi* bestimmt gefasst hat, sich sehr leicht zu rechte finden. Ueber alles aber gehen, um die Kenntniß dieser Methode zu erleichtern, die auf den nachfolgenden Tafeln (jede zu neun viereckigten Fächern) und zwar, nach den nunachahmlich genauen und schönen Mählereyen des Hrn. Prof. *Jurine*, von der Meisterhand des Bürgers *Maffol*, ganz ausgestochenen Arten, so das einem jeden eigenen Genus, auch eine besondere Art gewidmet ist. Nicht nur enthält demnach, jedes Fach oder Viereck, das ganze Insekt complett, und wenn es nöthig war, auch ansehnlich vergrößert, sondern auch besonders ein Fühlhorn, öfters auch dieses nach beyden Geschlechtern, so wie eine Kinnlade unter stärker Vergrößerung, nebst dem Namen des abgebildeten Insekts. Auf diesem Weg wird es fast unmöglich sich zu irren, und wenn man bey eigenen Untersuchungen, auch von den nicht vorgestellten, die Gattungsrechte auszumitteln sucht, so wird man, wenn man nur vorher, die Flügeltafeln consuliren will, sich mit Beyhülfe dieser generischen Tafeln, so zu rechte finden, das sodann in der Folge jeder Verirrung sicher ausgewichen werden kann.

Die Gattungen selbst, werden durch die über Erwartung *einigen* Charactere der Flügel, Fühlhorner und Kinnladen auferst *natürlich*; das scheinbare, gesuchte oder künstliche, hört dann stufenweise auf künstlich zu seyn,

Erl. Litt-Ztg. I. 163 (30. V. 1801).

und man sieht dann nur, die selbst von der Natur, unter eine Firma zusammen gestellten Arten, die nach so richtigen Regeln an einander gereiht sind, so daß es zu verwundern ist, warum man sie der Natur nicht schon früher abgelauschet hat.

Um daher die Freunde dieser Insekten vorläufig selbst mit den, nach dieser Methode errichteten *Generibus* bekannt zu machen, so werden hier solche nicht nur mitgetheilt, sondern auch den bereits bekannten *Fabricius'schen* gegenüber gestellt, wornach es denn leichte wird, diese Genera des Hrn. Prof. *Jurins* mit denen des Hrn. Prof. *Fabricius* zu vergleichen, oder, wenn es angeht, zu combiniren.

Ordo I. Abdomine prorsus sessili.

<i>Jurins.</i>	<i>Fabricius.</i>
Gen. 1 <i>Tenthredo</i>	<i>Tenthredo</i> : antennis clavatis
Gen. 2 <i>Cryptus</i>	<i>Tenthredo</i> : antennis inarticulatis
Gen. 3 <i>Allantus</i>	<i>Tenthredo</i> : <i>Scrophul. viridis</i> etc.
Gen. 4 <i>Dolerus</i>	<i>Tenthredo germanica</i> , <i>gonagra</i> etc.
Gen. 5 <i>Nematus</i>	<i>Tenthredo capraea</i> , septentrional. etc.
Gen. 6 <i>Pteronus</i>	<i>Tenthredo</i> : antennis pectinatis.
Gen. 7 <i>Cephalcia</i>	<i>Tenthredo</i> : antennis multiarticul.
Gen. 8 <i>Oryssus</i>	<i>Oryssus</i> Supplem.
Gen. 9 <i>Astans</i>	<i>Sirex pygmaeus</i> . <i>Banchus spinipes</i> Panzer (<i>Banchus viridator</i> Fabric. inedit.)
Gen. 10 <i>Urocerus</i>	<i>Sirex</i> Camelus, Dromedarius.
Gen. 11 <i>Sirex</i>	<i>Sirex</i> Gigas.

Ordo II. Abdomine supra thoracem infixo.

Gen. 1 <i>Evania</i>	<i>Evania</i> appendigaster, minuta: praeter utramque nulla.
Gen. 2 <i>Foenus</i>	<i>Foenus</i> Supplem.
Gen. 3 <i>Aulacus</i>	
Gen. 4 <i>Stephanus</i>	<i>Ichneumon ferrator</i> Supplem.

Erl. Litt-Ztg. I. 163 (30. V. 1801).

Ordo III. Abdomine petiolato: petiolo pone thoracem infixo.

Gen. 1 <i>Ichneumon</i>	<i>Ichneumon.</i>
Gen. 2 <i>Anomalon</i>	<i>Ichneumon.</i>
Gen. 3 <i>Bracon</i>	<i>Ichneumon desertor, denigrator.</i>
Gen. 4 <i>Pompilus</i>	<i>Pompilus Supplem.</i>
	<i>Evania punctum.</i>
Gen. 5 <i>Sphex</i>	<i>Sphex.</i>
Gen. 6 <i>Psen</i>	<i>Sphex atra.</i>
Gen. 7 <i>Stigmus</i>	
Gen. 8 <i>Apius</i>	<i>Sphex figulus.</i>
Gen. 9 <i>Larra</i>	<i>Larra.</i>
Gen. 10 <i>Dimorpha</i>	<i>Tiphia abdominalis Panzer.</i>
Gen. 11 <i>Tiphia</i>	<i>Tiphia.</i>
Gen. 12 <i>Scolia</i>	<i>Scolia.</i>
Gen. 13 <i>Sapyga</i>	<i>Scolia Prisma.</i>

Erl. Litt-Ztg. I. 164 (30. V. 1801).

<i>Jurine.</i>	<i>Fabricius.</i>
Gen. 14 <i>Myrmosa</i>	<i>Hylaeus thoracicus.</i>
Gen. 15 <i>Vespa</i>	<i>Vespa.</i>
Gen. 16 <i>Bombex</i>	<i>Bombex.</i>
Gen. 17 <i>Mafaris</i>	<i>Ma'aris.</i>
Gen. 18 <i>Simblephilus</i>	<i>Philanthus pictus Panzer.</i>
Gen. 19 <i>Mellinus</i>	<i>Mellinus ruficornis. Crabro U savum Hellwig.</i>
Gen. 20 <i>Arpactus</i>	<i>Mellinus myraceus, quinquecincus.</i>
Gen. 21 <i>Alysson</i>	<i>Sphex fuscata. Pompilus spinosus Panzer. Pompilus tumidus Panzer.</i>

Eri. Litt-Ztg. 1. 164 (30. V. 1801).

- | | |
|---|--|
| Gen. 22 <i>Nysson</i> | <i>Crabro spinosus</i> : trimaculat. <i>Roff.</i>
<i>Mellin. interruptus. Fabr.</i>
<i>Pompil. maculatus. Fabr.</i> |
| Gen. 23 <i>Philanthus</i> | <i>Philanthus laetus, arenarius.</i>
<i>Crabro labiatus Fabr.</i> |
| Gen. 24 <i>Gonius</i> | |
| Gen. 25 <i>Miscophus</i> | |
| Gen. 26 <i>Dinctus</i> | <i>Crabro pictus, Pompilus guttatus.</i> |
| Gen. 27 <i>Crabro</i> | <i>Crabro.</i> |
| Gen. 28 <i>Cemonus</i> | <i>Crabro unicolor Panzer.</i> |
| Gen. 29 <i>Oxybelus</i> | <i>Crabro lineatus, uniglumis, biglu-</i>
<i>mis.</i> |
| Gen. 30 <i>Profopsis</i> | <i>Sphex annulata, signata Panzer.</i>
<i>Hylaeus annulatus Fabr.</i>
<i>Mellinus atratus Fabr. inedit.</i> |
| Gen. 31 <i>Nomada</i> | <i>Nomada ruficornis etc.</i> |
| Gen. 32 <i>Andrena</i> | <i>Andrena succincta, bicolor.</i> |
| * Bullae alarum in <i>Nom-</i>
<i>adis et Andrenis</i> | <i>Andrena (Nomad. Fabr. ine-</i>
<i>dit) lobata Panzer. Nomada</i> |
| semper reperiuntur in | <i>gibba Fabr, Andrena mulci-</i> |
| nervis cubitalibus et | <i>form. Roff. (Nomada Nigrita</i> |
| recurrentibus, | <i>Fabr. inedit.)</i> |
| Gen. 33 <i>Lasus</i> | <i>Apis quadrimaculata Panzer.</i> |
| Gen. 34 <i>Crocisa</i> | <i>Apis punctata. Nomada scutellata,</i>
<i>Andrena armata Panzer.</i> |
| Gen. 35 <i>Apis</i> | <i>Apis mellifica: praeter hanc nulla.</i> |
| Gen. 36 <i>Trachusa</i> | <i>Apis maculata, bicornis, fusca,</i>
<i>rufa.</i>
<i>Apis coenigera. Roff. fronticornis.</i>
<i>(Taurus Fabr. inedit.)</i>
<i>- Panzer. aterrima Panzer. *</i> |
| Gen. 37 <i>Bremus</i> | <i>Apes bombinatrices.</i> |
| Gen. 38 <i>Mutilla</i> | <i>Mutilla.</i> |
| Gen. 39 <i>Formica</i> | <i>Formica.</i> |
| Gen. 40 <i>Cynips</i> | <i>Cynips. Ophion cultellator.</i> |
| Gen. 41 <i>Chelonus</i> | <i>Ichneumon oculator.</i> |
| Gen. 42 <i>Chrysis</i> | <i>Chrysis. Ichneumon auratus. semi-</i>
<i>auratus.</i> |
| Gen. 43 <i>Omalus</i> | |

<i>Jurine.</i>	<i>Fabricius.</i>
Gen. 44 <i>Ceraphron</i>	
Gen. 45 <i>Leucopfis</i>	<i>Leucopfis.</i>
Gen. 46 <i>Codrus</i>	
Gen. 47 <i>Chalcis</i>	<i>Chalcis. Cynips armata Panzer.</i> <i>plaresque Ichneum. minuti.</i>
Gen. 48 <i>Psilus.</i>	<i>Tiphia cenoptera Panzer.</i>

Aus voranRehender Parallele bemerkt man leicht, wie sich die *Jurineschen* Gattungen gegen die *Fabriciussehen* verhalten; wie sehr sich manche jener, diesen nähern; wie natürlich auch viele *Fabriciusche* Gattungen sind, die selbst durch die Anwendung dieser neuen Methode nicht verdrängt werden konnten; das aber auch diese Insektenklasse durch letztere wieder darum ungemein vieles gewinnen mußte, weil Hr. P. *Jurine* neben den Flügeln auch auf diejenigen Theile Bedacht nahm, deren Dignität Hr. P. *Fabricius* bey seiner Klassifikation mit so viel Scharfsinn beherrzte.

Ein Mehreres noch über Hrn. Prof. *Jurine's* Unternehmen zu sagen, würde zu sehr die Grenzen eines bloß verläufigen Anzeigs überschreiten. Es sey das bisher Gesagte hinreichend, bis dieses Werk selbst zu Wort kommen kann.

TRANSLATION.

When the translation here following was written, we had not yet decided to reproduce in facsimile more of the original Articles than the tabulation of the Genera; and accordingly more pains were taken than now seem necessary to retain the precise form of the original even in minute details, such as the use of Capitals, and Italics, the varying employment of Latin and German in technical terms, the involved syntax of the author (often making his meaning obscure to a foreign reader), and the frequently erratic punctuation. A freer version, under the present circumstances, might have been more useful to the generality of readers; but we think it hardly necessary that the whole work should be done over again, and therefore rest content with adding explanatory notes where we feel any

doubt, either as to what is really meant in certain obscure passages, or as to whether we have succeeded in expressing what we believe to be their meaning intelligibly.

(1) THE FIRST PART OF THE ARTICLE (23 May, 1801).

(“*Sonnabends am 25 May, 1801*”)

V. Miscellaneous Notices.

Notice of a new Entomological Work by Hr. Prof. Jurine of Geneva.

Several published Papers and Serials have already given Notice in advance of an Enterprise extremely important to Entomology, which is to be undertaken by one of the most estimable and excellent of Entomologists, Hr. Prof. *Jurine* of Geneva. We can now not only confirm this Notice, but supplement it by the Statement, that this Enterprise is now really near Completion, the Work is actually in the Press, and already *seven* admirably engraved Copper-plates in med. quarto have been communicated by the Author to a German Entomologist* as Proofs for Inspection in Advance.

Provisionally therefore, until the Work can speak for itself, we can now make the entomological Public somewhat more closely acquainted with the Plan of this Enterprise, and detail in advance the Design of the *Author*, according to the Sheets that lie before us.

As Main-subject of his entomological Pursuits, Hr. Prof. *Jurine* has for years chosen, almost exclusively and by Preference, that Class of the Insects, which the late Chief-physician † von *Linne* has named *Hymenoptera* and Hr. Prof. *Fabricius Piezata*; and classified them by a novel *Method* ‡ never previously employed.

Its Foundation rests on the *Wings* of the Insects included therein, but especially on the Vessels dividing them, sometimes more, sometimes less reticulately, or what are called the Nerves and Veins. The three Orders, however, into which this Class of Insects has been subdivided by Hr.

* No doubt Panzer himself.

† Linné held this appointment in the Court of the King of Sweden.

‡ *Nouvelle Méthode*, it will be remembered, is the title which *Jurine* adopted for his book.

Prof. Jurine, are taken solely from the Situation and Attachment of the *Unterleib* (Abdomen) on to the *Bruststück* (Thorax), in short as follows: Ordo I. *Abdomine prorsus sessili*. Ordo II. *Abdomine supra thoracem infixo*. Ordo III. *Abdomine petiolato: petiolo pone thoracem infixo*. Accordingly under these three Orders are placed the whole company of *Gattungen* (Genera) *Gall-Schlupf-Blatt-Gold-etc. Wespen*, the *Wald-Blumen-Trauer Bienen, Hummeln, Mutillen, Ameisen,** etc.

(2) THE SECOND PART OF THE ARTICLE (30 May, 1801).

("Sonabend am 30 May, 1801.")

I. Miscellaneous Notices.

Notice of a new Entomological Work, by Hr. Prof. Jurine of Geneva. (Conclusion.)

The *Main characters* (*Characteres primarij*) of the *Genera* themselves, rest indeed chiefly and almost exclusively on the Vessels or the Nerves and Veins of the Wings, according as these sometimes more, sometimes less, interlace themselves by their anastomosis-like † Concatenations and reticulate Connections, and form thereby variously shaped Cells, Lattices and Nets; but at the same time, lest this standing Character—so admirably adapted by reason of these it may be great Modifications, for the Establishment of natural Genera—should deteriorate into a cramping One-sidedness, the various Shapes of the *Fühlhörner* (*Antennae*) and likewise the *Kinnladen* (*Mandibulae*) are also taken in subsidium as *Characteres secundarii*; though the Anastomoses of the Wing-veins and Nerves are still always the foremost or standing Characters of the genera.

At the same time it so happens that in the Establishment of the Genera by help of these Anastomoses, some

* Panzer uses these same popular German names, along with the Latin names cited from *Syst. Ent.*, throughout his *Fn. Ins. Germ.* Most of them are still in use colloquially in German; but we do not know whether this is the case as to the *Waldbienen*, *Blumenbienen*, and *Trauerbienen*, and have failed to gather from his work how he distinguished these groups from one another. Together they seem to include most *Anthophila*, except the *Humble-bees* (*Hummeln*).

† By this technical word Panzer's contemporaries (e.g. Kirby) were accustomed to express the running of one nervure into another, as a tributary *discharges* into a river, cf. (French) *déboucher* and (Engl.) *disembogue*. στόμα = bouche, mouth.

of them indicate the Character of the Genera, while others on the contrary, and that regularly in the self-same Wing, declare the Character of the *Arten* (Species).*

Every Wing of the Insects belonging to this Class is divided as to its general Outline : into (1) *Basis*, (2) *Apex*, and (3, 4) *Margines*.

Every Wing is further divided as to the Areas contained in it shaped by its interlacing Vessels, and the resulting Anastomoses of the Nerves : into (1) the *Punctum*, (2) the *Radius*, (3) the *Cubitus*, (4) the *Nervi brachiales*, (5) the *Cellulae radiales*, (6) the *Cellulae cubitales*, and (7) the *Nervi recurrentes*.† 5, 6, 7, however, furnish precisely those characteres generum only, which are absolutely necessary for Establishment of the Genus : they are therefore marked red † in *Tab. I of the Instructionstafel*, to make this Character catch the eye at once.

So, for Instance, the *second Cellula cubitalis* with its *Stielgen* (*petiolata*) betokens the principal generic Character of *Nysson* : the *cellula cubitalis incompleta* the altogether exceptional one of *Chrysis* : just as a peculiar *lineola secans* in the *cellula radialis* § indicates the character of the Genus *Bremus*.

Plates II, III, IV and V bring out very clearly these generic Characters in exactly || and adequately enlarged representations of *Wings*. II and III each represent, in 20 quadrangular Compartments, just so many *Wings* or just so many *Genera* : on each of those following (IV and

* The meaning here may perhaps be made clearer by giving an example. The Genus *Miscophus* is known by a peculiar "petiolated" cell, and its various Species show, in the same cell, further characteristic differences of their own.

† Panzer here and elsewhere, after the old German fashion, treats the Latin terms which he is quoting according to the rules of Latin syntax, *i. e.* writes them as *accusatives*. We have thought it unnecessary to follow the original in this respect.

‡ This is not the case in the copies of the *Nouv. Méth.* 1807 which have been consulted. In these the "characteristic" nervures are indicated otherwise, *viz.* by dotted lines, and the Plate referred to by Panzer as the "Instructionstafel" is altogether uncoloured, as are those following until Plate 6.

§ Here Panzer accidentally misrepresents Jurine, who says quite correctly that the feature in question—a real but very inconspicuous one and generally ignored by describers—is found in the 1st *cubital* cell (not the *radial*!).

|| We understand Panzer to mean that the enlargements are made *correctly to scale* and to an extent convenient for practical use.

V) in 24 Compartments, but somewhat smaller ones, are shown just so many Wings or Genera with their Nomenclature.* One can now, if one has distinctly grasped the *Clavis methodi*, very easily guide oneself aright. But what tends above all to facilitate the Comprehension of this Method are the figures of Species on the Plates following (each with nine quadrangular Compartments) reproduced perfectly in gravure by the Master-hand of Citizen *Massol* from the incomparably accurate and beautiful Paintings of Hr. Prof. *Jurine*, in such manner that to each particular Genus there is assigned also one particular species.† Accordingly, not merely does each Compartment or Quadrangle contain the entire Insect complete, and, if needful, considerably enlarged also: but likewise apart from this an Antenna, often also one for both Sexes, as well as a Mandible much enlarged, accompanied by the Name of the Insect. In this Way it is made almost impossible to go wrong,‡ and if in one's own Investigations, it is desired to ascertain the Generic-rights, even of unpublished insects, by merely first consulting the Plates of Wings, one will be so put in the right way by help of these Generic Tafeln, that all error can in consequence be avoided with certainty.

Since the Characters of the Wings, Antennae, and Mandibles are *uniform* beyond all Expectation, the Genera themselves become extremely *natural*: the apparent,§ forced or artificial, ceases consequently by degrees to be

* If this account of the Plates is compared in detail with the actual Plates 1 to 5 of the *Nouvelle Méthode* as published it will be found that they agree exactly.

† The statements in this last sentence do not quite agree with what seem to be the facts of the case. On the (coloured) Plates VI and VII of the *Nouv. Méth.* as published, and also on all those following (except the last, which is unsigned and was evidently added later), appear the names of *Mlle.* (sic) *Jurine* as artist and *Gaisler* (or ? *Gaisler*) as engraver. And it is stated by Klug (*Mon. Sic.*, p. 5, 1803) that *Jurine's* Figures were produced by his (*Jurine's*) daughter. We must leave these discrepancies of evidence as they stand. Possibly further facts may come to light which will account for them.

The words "to each particular Genus there is assigned also one particular species" deserve attention as indicating that the author had a more or less distinct conception of what are now called Genotypes—the fixation of a Genus by a species selected *ad hoc*!

‡ Panzer, however, did go wrong in certain cases when he tried to apply the Method himself.

§ We suppose this to mean "merely apparent"—(unreal or superficial?).

artificial, and one then sees simply the Species actually combined by Nature into a single Association, arranged among themselves according to Rules so precise, that it is wonderful why one has not learnt them from Nature long ago.

To make Lovers of these Insects acquainted in advance with the *Genera* established by this Method, the latter shall be here not only communicated, but also placed over against the *Fabrician* genera published already, so that it will then be easy to compare these genera of Hr. Prof. *Jurine* with those of Hr. Prof. *Fabricius*, or, if it seem good, to combine them.

[Here follows the (Latin) Tabulation of the Genera, which need not be repeated, and the Article then proceeds as follows]—

From the above Parallels one can easily see, how the *Jurinean* Genera are related to the *Fabrician*; how very closely many of the former approximate to the latter; how natural too are many *Fabrician* Genera, not liable to be superseded even by the Employment of this novel Method; and yet that this Class of Insects was bound to profit* in its turn enormously thereby, since Hr. Prof. *Jurine*, as well as the Wings, took also into consideration those Parts, on whose Importance Hr. Prof. *Fabricius* insisted with such Acuteness of perception.

To say more of Hr. Prof. *Jurine's* Enterprise would be too much of a transgression over the Limits of a merely preliminary Announcement. Let the above Statement suffice, till this Work can tell its own Tale.

The following works will be continually referred to in our notes:—

FABRICIUS, J. C.—Ent. Systematica 2 (1793): Suppl. (1798)—Systema Piezatorum (1804).

PANZER, G. W. F.—Fauna Ins. Germaniae 1-9 (Heft 1-109) (1793-1810)—[73-80 (1800): 81-4 (*ante* 3. IX. 1801): 85 (1801): 86-96 (*ante* 1. X. 1804)].

LATREILLE, P. A.—Précis Caract. Insectes (1796)—Hist. Nat. des Fourmis (IV. 1802)—Nouv. Dict. Hist. Nat. 24 (1804)—Hist. Nat. Crust. Ins. 3 (V-IX. 1802): 13 (1804-5): 14 (1804-5)—Genera Crust. Ins. 3 (1807): 4 (1809)—Concid. Générales (1810).

LAMARCK, J. M.—Système des Animaux sans Vertèbres (I. 1801).

JURINE, L., éd. PANZER, G. W. F.—Erlangen Litteratur-Zeitung 1. 160 (23. V. 1801): 161-5 (30. V. 1801)—JURINE, L.—Nouvelle Méthode de classes les Hyménoptères (1807).

* Panzer means, no doubt, the *Study* of this Class of Insects, etc.

"Ordo I. Abdomine prorsus sessili" (Jrn. Erl. Litt-Ztg. 1. 163 no. 1-11).

1.

1.1. TENTHREDO (L.) Jrn. Erl. Litt-Ztg. 1. 163.

"Gen. 1 Tenthredo—Tenthredo : antennis clavatis."

[i. e. TENTHREDO L. Syst. Nat. (ed. 10) 1. 555-9 no. 214 sp. 1-40 (1758); F. Ent. Syst. 2. pp. iv, 104-7 no. 138 sp. 1-11 (1793): Suppl. 214 (1798)—*lutea* L., etc.]

CIMBEX Olvr. (1790)

= TENTHREDO (p.) L. (1758) Jrn.; = CLAVELLARIUS Olvr. (1789) MN.; = †CLAVELLARIA (Olvr.) Lmk. (1801).

Type: *Tenthredo lutea* L. ([Lmk. 1801]; Ltr. 1802, 1804, 1810).

CIMBEX Olvr. [= CLAVELLARIUS Olvr. Enc. Meth. HN. 4. (Ins. 1) 22 no. 33 (1789) MN.]. CIMBEX Olvr. Enc. Meth. HN. 5. (Ins. 2) 760-72 sp. 1-16 (1790)—[sixteen species including *lutea* L.]: 6. (Ins. 3) 18 (1791); Ltr. Préc. Car. Ins. 107-8 no. 4 (1796). †CLAVELLARIA Lmk. Syst. An. sans Vert. 264 no. 116 (1801)—[Type: *lutea* L.]. *TENTHREDO Jrn. Erl. Litt-Ztg. 1. 163 no. 1 (1801). CIMBEX Ltr. HN. Crust-Ins. 3. 300 (1802)—[Type *lutea* L.]: 13. 119-23 no. 325 sp. 1-11 Pf. 99.1 (1804-5): Nouv. Dict. HN. 24. 172, 199 no. 370 (1804); F. Syst. Piez. pp. vii, 15-18 no. 1 sp. 1-12 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 15 (1806). *TENTHREDO Jrn. Nouv. Méth. Hym. 45-8 no. 1 Pf. 2.1, 6.1 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 390 (1882). CIMBEX Ltr. Gn. Crust-Ins. 3. 225-8 no. 425 (1807); Cons-Gén. Crust-Ins. 293, 435 no. 380 (1810); Crt. Br. Ent. 1. expl. Pl. 41 (1824); Wstwd. Syn. Gn. Br. Ent. 51 (1840); Rwr. US. Dp. Agr. (Ent.) Tech. Ser. 20. 77, 95 (1911).

[Olivier substituted *Cimbex* in lieu of *Clavellarius* Olvr. MN., considering the latter too close to CLAVARIA (BOTANY)].

[nec *CLAVELLARIA (Lmk.) Crt. Br. Ent. 2. expl. Pl. 93 (1825)—*amerinae* L. (PSEUDOCALAVELLARIA Schulz)].

Jurine intended to apply the name *Tenthredo* L. to the species included by that author and Fabricius in the group "*Antennis clavatis*." That group had at an earlier date (1790) been separated from *Tenthredo* by Olivier under the name *Cimbex*, the author at the same time withdrawing a name (*Clavellarius*) which he had suggested, but without including in it any species, in the previous year.

The Type of *Cimbex* Olvr. (= *Tenthredo* Jrn.) is *lutea* L., which was designated by Latreille in "An. X" (i. e. between 22 Sept. 1801 and 21 Sept. 1802), and again in 1804, and 1810.

Already, in 1789, Thünberg had recognised that some distinction might be drawn between such species as *lutea* L., *obscura* L., etc. (i. e. the group with clavate antennae),

* *Bullae alarum in Nomadis et Andrenis semper reperiuntur in nervis cubitalibus et recurrentibus.*"

[i.e. ANDRENA F. Ent. Syst. [26], 376-8 no. 118 sp. 1-14 (1775): Ent. Syst. 2. pp. vi, 307-14 no. 157 sp. 1-31 (1793)—*succincta* L., *bicolor* F., etc.]

ANDRENA F. (1775)

Type 1: *Apis succincta* L. [*nec* Ltr., *nec* Auctt.] (Lmk. 1801).

ANDRENA F. Syst. Ent. [26], 376-8 no. 118 sp. 1-14 (1775)—[4. *bicolor* F.; 14. *succincta* L., and twelve other species]: Ent. Syst. 2. pp. vi, 307-14 no. 157 sp. 1-31 (1793); Pzr. Fn. Ins. Germ. 7·10 (1793): 7·13, (2 edn.) 35·22 (1796): 46·15-17 (1797): 53·19, 55·5, 56·1-3 (1798): 64·16-20, 65·18-20, 70·22, 72·15-16 (1799): 74·10 (1801): 85·15, 90·14-15, 94·10-11 (1804): 97·18-19, 107·14 (1809); Ltr. Préc. Car. Ins. 136-7 (1796); Lmk. Syst. An. sans Vert. 272 no. 133 (I. 1801)—[Type: *succincta* L.]; Jrn. Erl. Litt-Ztg. 1. 164 no. 32 (30. V. 1801).

[*nec* COLLETES Ltr. HN. Crust-Ins. 3. 372 (1802): 13. 359 no. 406 (1804-5): Nouv. Dict. HN. 24. 181-2, 199 no. 450 (1804); Ltr. Cons-Gén. Crust-Ins. 331, 438 no. 507 (1810)—Type: *glutinans* Cvr. (= * *succincta* [*nec* L.] Ltr.).]

Type 2: *Apis cineraria* L. (Ltr. 1810).

* ANDRENA Ltr. HN. Crust-Ins. 3. 372-3 (1802): 13. 362-4 no. 408 sp. 1-4 (1804-5): Nouv. Dict. HN. 24. Tbl. Méth. 182 no. 452 (1804); Jrn. Nouv. Méth. Hym. 227-31 no. 32 Pf. 4·32, 11·32 (1807); Ltr. Gn. Crust-Ins. 4. 150-1 no. 652 (1809): Cons-Gén. Crust-Ins. 332, 439 no. 510 (1810)—[Type: *cineraria* L., F.]; Wstwd. Syn. Gn. Br. Ins. 84 (1840).

Type 3: *Andrena bicolor* F.

* ANDRENA Pzr. Krit-Rev. Ins. Deutsch. 2. 193-204 (1806).

Type 4: *Melitta nitida* Kby (Crt. 1826).

* ANDRENA Crt. Br. Ent. 3. expl. Pl. 129 (1826)—[Type: *nitida* Kby.].

Lamarck, in January 1801, made *succincta* L. the Type of *Andrena*. Latreille, in 1802, also cited *succincta* L. as a type, but of another genus, viz. *Colletes* Ltr. At first sight it might appear that *Colletes* Ltr. would consequently have to become a synonym of *Andrena* F. (isogenotypic), but before so deciding it will be wise to consult the original description of *succincta* L. [Syst. Nat. (ed. 10) 1. 576]. The character there mentioned which at once arrests attention is "*rostrum subulatum*"—this in our judgment makes it perfectly certain, that whatever *succincta* L. was, it was not a *Colletes*. In *Colletes* the tongue is short, broad, and bifid at the apex—"subulatum" is of all possible words least applicable to it! Next we note that *succincta* has four white bands (presumably four only) on the abdomen, whereas *Colletes* species generally have all the segments

banded. Linné's description can only refer to one of the *Acutilingues* (such as *Andrena* F., *Halictus* Ltr., and *Cilissa* Leach)—of these, *Cilissa* has an extremely subulate tongue; *Halictus* also one which is distinctly subulate; and *Andrena* one, which as compared with that of *Colletes* might be called so. Yet there seems no doubt that Linné named and placed in his cabinet as *succincta* a specimen of *Colletes*. Kirby, in 1800, saw this specimen, and noticed at once that the tongue did not agree with Linné's description. Nylander also (about 1850) examined the specimen, and has stated that it was a *Colletes*, not however the insect now commonly called *succincta*, but a specimen of *fodiens* Geoffr-Fourcr. Kirby and Latreille were in correspondence about this insect, and it is quite certain that to both these authors "*succincta*" meant the species so-named in the Linnean cabinet, viz. a *Colletes*, and not an *Andrena*. But Lamarck's *Andrena succincta* F. (*Apis succincta* L.) was as certainly not a *Colletes*, for his diagnosis of the genus states expressly "Machoires et langue fort allongées"—plainly, therefore, reckoning it among the *Acutilingues*. The designation therefore of *succincta* L. as Type of *Andrena*, in the modern sense, may be accepted until it is shown for certain that the insect really described by Linné (NB.—not the specimen in his Cabinet!) was not, after all, a *Halictus* (such as *quadricinctus* F.), or a *Cilissa* (such as *leporina* Pzr.).

Colletes Ltr. being a good genus, and not a synonym of *Andrena* F., therefore stands, but the species which is its Type must not be called *succincta*. Latreille, as Kirby tells us, sent the species to him with the name "*glutinosus*"—this was published by Cuvier as *Hylaeus glutinans* (*Apis glutinans*)—Tbl. Element. HN. 493-4 (An. VI.= 1797-8), and is mentioned as a synonym of *Colletes succincta* by Latreille (HN. Crust-Ins. 13. 355, 359). The species should be known as *Colletes glutinans* Cuvier (= **succincta* [nec L.] Ltr.).

48

III-33. LASIUS Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 33 Lasius—*Apis quadrimaculata* Panzer."

[nec §LASIUS F. Syst. Piez. pp. xi, 415-8, Ind. 18, no. 78 sp. 10 (1804)].

LASIUS Jrn. (1801)

PODALIRIUS Ltr. (1802); = ANTHOPHORA Ltr. (1803);
MEGILLA F. (1804).

Type 1: *Apis quadrimaculata* Pzr. (Jrn. 1801).

LASIVUS Jrn. Erl. Litt-Ztg. 1. 164 no. 33 (30 V. 1801)—[Type: *quadrimaculata* Pzr.]; Pzr. Fn. Ins. Germ. 86·16, 89·15 (1804); Jrn. Nouv. Méth. Hym. 235-8 no. 33 Pf. 4·33, 11·33 (1807): P-G. K. & K. MT. Schweiz. Ent. Ges. 6. 397 (1882).

Type 2: *Apis pilipes* F. (Ltr. 1810).

PODALIRIUS Ltr. HN. Fourmis etc. 430-1 (IV. 1802)—[1. *rotundata* F.; 2. *retusa* L. (= *acervorum* F., Ltr.); 3. *pilipes* F. [*pilipes* F. (1775) ♂; = *hirsuta* F. (1787) ♀]; 4. *versicolor* F.; 5. *crassipes* F.; 6. *lanipes* F.]: HN. Crust-Ins. 3. 371, 378-9 (1802)—[*pilipes* F.; *versicolor* F.]; *crassipes* F.]. = ANTHOPHORA (nn.) Ltr. Nouv. Dict. HN. 18. 167-9 (1803); 24. Tbl. Méth. 183, 199 no. 458 (1804) ["Voyez Podalirie": 1. *pilipes* F. (= *hirsuta* F., Ltr.); 2. *versicolor* F.]: HN. Crust-Ins. 13. 375-7 (1804-5) ["*Anthophore*—mot substitué à celui de *podalirie* que Lamarck avoit déjà donné à un genre de plante"]: 14. 45-8 no. 414 sp. 1-3 (1804-5) [*anthophora*, = *podalirie*, = *lasius* Pzr.]: Gn. Crust-Ins. 4. 174-6 no. 567 (1809): Pzr. Fn. Ins. Germ. 99·16, 105·18-9; 106·19 (1809); Cons-Gn. Crust-Ins. 340, 439 no. 537 (1810)—[Type: *pilipes* F.]. MEGILLA F. Syst. Piez. pp. xiii, 328-35 no. 63 sp. 1-33 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 193, 207-9, 224-7, 227-9, 246-7, 257, 260 (1806).

Type 3: *Apis parietina* F. (Ltr. 1804).

ANTHOPHORA Ltr. An. Mus. HN. Paris 3. 251-9 Pf. 22·1A-B (II·1804)—[*parietina* F.—not an original Type].

Type 4: *Apis retusa* L. (Crt. 1831).

ANTHOPHORA Crt. Br. Ent. 8. expl. Pl. 357 (1831)—[Type: *retusa* L.].

Lasius Jrn. of the Erlangen List (1801) is a monotypical genus founded on *Apis quadrimaculata* Pzr. 56·7 (= §*vulpina* Pzr. 56·6, Jrn.)—both these names were published together in 1798. Dalla Torre lists the species as "*Podalirius vulpinus* Pzr.," treating *quadrimaculata* Pzr. as a synonym, but §*Apis vulpina* Pzr. (1798) is invalid, being homonymous with *Apis vulpina* Christ (1791)—the species should therefore be known as *Lasius quadrimaculatus* Pzr.* Later, and therefore unavailable, synonyms of *Lasius* Jrn. (1801) are *Podalirius* Ltr. (1802), *Anthophora* Ltr. (1804-5) and *Megilla* F. (1804)—Panzer adopted the last of these in the Krit. Rev (1806).

Until recently *Lasius* Jrn. was almost universally called *Anthophora* Ltr., but in Dalla Torre's Catalogue (1896), and immediately after in Friese's Monograph of the genus (1897), *Podalirius* Ltr. has been restored—Friese applying

* *Apis vulpina* Christ is utterly unlike *Lasius quadrimaculatus* Pzr. (= *Apis vulpina* Pzr.)—it may possibly be = *parietina* F., if Palae-
arctic (but the locality is not stated).

the name both to the genus as a whole, and also (*sensu stricto*) to a section.

In the *Systema Piezatorum* Fabricius made use of Jurine's name *Lasius*, but applied it to a genus of Ants which he separated from *Formica* L., and later authors have ignored Jurine's *Lasius*, no doubt because the publication of the *Piezatorum* (1804) antedates that of the *Nouvelle Méthode* (1807). But the real date of *Lasius* Jrn., as we now learn, is May 30, 1801 (Erlangen List)—§*Lasius* F. (1804) therefore sinks as a homonym of the earlier *Lasius* Jrn.

A new name for §*Lasius* F. is necessary, there being, apparently, no existing synonym, we therefore propose that it be called **DONISTHORPEA** in recognition of Mr. H. St. J. K. Donisthorpe's careful investigations into the bionomics of this and other Heterogynous genera.

DONISTHORPEA, nn.

Type: *Formica nigra* L. (= *Lasius niger* F.).

= §*LASIVS* F. Syst. Piez. pp. xi, 415-8 no. 78 sp. 1-10, Ind. 18 (1804); Auctt.—[*nec LASIVS* Jrn. (1801)].

49

III-34. *CROCISA* Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 34 *Crocisa*—*Apis punctata*. *Nomada scatellata*. *Andrena armata* Panzer."

CROCISA Jrn. (1801)

= *THYREUS* Pzr. (1806).

Type 1: *Melecta histrionica* Illig. (= **scutellaris* [nec F.] Pzr.; Ltr. 1810—[= †*scatellata* Jrn.]).

CROCISA Jrn. Erl. Litt-Ztg. 1. 164 no. 34 (30. V. 1801). [1. *punctata* F. (*punctata* F. 1775, Jrn.; = *armata* Pzr. 1799, Jrn.); 2. *histrionica* Illig. (= **scutellaris* [nec F.] Pzr.; †*scatellata* Jrn.)]. *THYREUS* Pzr. Krit. Rev. Ins. Deutsch. 2. 263-4 (1806)—[Type: *histrionica* Illig. (= **scutellaris* [nec F.] Pzr.)]. *CROCISA* Jrn. Nouv. Méth. Hym. 239-41 no. 34 Pf. 4-34, 12-34 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 397 (1882); Ltr. Gn. Crust-Ins. 4. 172 no. 565 (1809); Cons-Gn. Crust-Ins. 338, 439 no. 532 (1810)—[Latreille's generic description excluded *punctata* F. (the Type of *MELECTA* Ltr.) and consequently restricted *CROCISA* to *histrionica* Illig. (= **scutellaris* Pzr.) which thus became the Type—*histrionica* Illig. is congeneric with *histrionica* F. which was not an original type].

[NB. *Crocisa histrionica* Illiger.—*Melecta histrionica* Illig. Mag. Ins. 5. 99 sp. 10 (1806). = *Nomada *histrionica?* (nec F.) Rossi Fn. Etrusc. 2. 110 sp. 930 (1790). = *Nomada *scutellaris* (nec F.) Pzr. Fn. Ins. Germ. 32-7 (1796). = *Nomada †scatellata* Jrn. Erl. Litt-Ztg. 1. 164 no. 34 (1801).]

The genus *Mutilla*, which originated with Linné in 1758, contained eight species including *occidentalis* L., *europaea* L., and *acarorum* L.

In 1779 Blumenbach cited *occidentalis* L. as the typical exponent of *Mutilla*, while Lamarck (1801) designated *europaea* L. as the Type, and was followed by Latreille (1802-10), Curtis (1825) and Westwood (1840).

It should be noted that Müller [Zool. Dansk. Prod. An. 166 no. 1938 (1776)], in a merely local list of a limited fauna, mentions one species only as a *Mutilla*, viz. *acarorum* L., but this, even if it were the citation of a Type, could not be maintained, for *acarorum* (a *Pezomachus*) was only doubtfully included in *Mutilla* by Linné: ("*Haec differt a reliquis quod glabra nec tomentosa sit, & videtur potius Sphex aptera esse*").

54

III-39. FORMICA (L.) Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 39 Formica—Formica."

[i.e. FORMICA L. Syst. Nat. (ed. 10) 1. 343, 579-82 no. 218 sp. 1-17 (1758)—*rufa* L., *fusca* L. etc.]

FORMICA L. (1758)

Type 1: *Formica rufa* L. (Lmk. 1801; Crt. 1839).

FORMICA L. [Fn. Suec. (ed. 1) 305-6 sp. 1019-23 (1746) MN.]: Syst. Nat. (ed. 10) 1. 343, 579-82 no. 218 sp. 1-17 (1758)—[seventeen species including 2 *rufa* L., 3 *fusca* L.]: Fn. Suec. (ed. 2) [43] 426-7 sp. 1720-6 (1761): Syst. Nat. (ed. 12) 1 (2). 539 no. 249, 966-8 no. 250 sp. 1-10 (1767); F. Syst. Ent. [26], 391-6 no. 122 sp. 1-27 (1775); Blmbch. HB. Naturges. 1. 385-6 no. 61 sp. 1-5 (1779)—[*rufa* L., etc.]: F. Ent. Syst. 2. pp. v, 349-65 no. 161 sp. 1-60 (1793): Sppl. 279-81 (1798); Ltr. Préc. Car. Ins. 120-1 no. 22 (1796): Pzr. Fn. Ins. Germ. 54.1-2 (1798): Lmk. Syst. An. sam Vert. 268 no. 124 (L. 1801)—[Type: *rufa* L.]; Jrn. Erl. Litt-Ztg. 1. 164 no. 39 (V. 1801); Ltr. HN. Fourmis etc. 88-296 (IV. 1802); HN. Crust-Ins. 3. 353-7 (1802): 13. 254-6 no. 362 sp. 1-8 (1804-5); Nouv. Dict. HN. 9. 20-37 (1803): 24. Tbl. Méth. 178 no. 40 (1804): F. Syst. Piez. pp. xi, 395-414 no. 77 sp. 1-75, Ind. 12-1 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 11, 214-6 (1806); Jrn. Nouv. Méth. Hym. 269-73 no. 39 Pl. 5-39, 12-39 (1807); F. & K. & K. MT. Schweiz. Ent. Ges. 6. 391 (1882); Ltr. Gn. Crust-Ins. 4. 125-6 no. 528 (1809): Cons-Gen. Crust-Ins. 311, 437 no. 4 (1810)—[*herculanea* L., *rufa* L.]; Crt. Br. Ent. 16. expl. Pl. 7 (1839)—[Type: *rufa* L.].

Type 2: *Formica fusca* L. (Wstwd. 1840).

FORMICA (L.) Wstwd. Syn. Gn. Br. Ins. 83 (1840)—[Type: *fusca* L.].

III-40. **CYNIPS** (L.) Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 40 Cynips—Cynips. *Ophion cultellator*."

[i.e. **CYNIPS** L. Syst. Nat. (ed. 10) 1. 343, 553-5 no. 213 sp. 1-14 (1758)—*quercus-folii* L., etc.]

CYNIPS L. (1758)

Type 1: *Cynips quercus-folii* L. (Lmk. 1801; Wstwd. 1840).

CYNIPS L. Syst. Nat. (ed. 10) 1. 343 no. 212, 553-5 no. 213 sp. 1-14 (1758)—[fourteen species including 1. *rosae* L., 5. *quercus-folii* L., 13. *psenes* L.]: Fn. Suec. (ed. 2) [40-1], 385-88 sp. 1518-32 (1761): Syst. Nat. (ed. 12) 1 (2). 539, 917-20 no. 241 sp. 1-19 (1767): F. Syst. Ent. [25], 315-7 no. 104 sp. 1-15 (1775); Blmbch. HB. Naturges. 1. 377 no. 53 sp. 1-3 (1779)—[*quercus-folii* L., etc.]; F. Ent. Syst. 2. pp. iv, 100-4 no. 137 sp. 1-22 (1793): Sppl. 213-4 (1798); Ltr. Préc. Car. Ins. 108-9 no. 6 (1796); Pzr. Fn. Ins. Germ. 51.1 (1798): 74.9, 79.7 (1800): 87.16, 88.10-13, 95.12 (1804); Lmk. Syst. An. sans Vert. 266 no. 121 (I. 1801)—[Type: *quercus-folii* L., F.]; F. Syst. Piez. pp. vii, 143-8 no. 20 sp. 1-23, Ind. 10-11 (1804); Pzr. Krit. Rev. Ins. Deutsch. 92-3 (1806); Jrn. Nouv. Méth. Hym. 284-6 no. 40 Pf. 5.40, 12.40 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 391 (1882); Wstwd. Syn. Gn. Br. Ins. 56 (1840)—[Type: *quercus-folii* L.].

Type 2: *Ichneumon bedeguaris* L. (Ltr. 1810).

CYNIPS (L.) Ltr. HN. Crust-Ins. 3. 312-4 (1802): 13. 221-5 no. 349 (1804-5): Ltr. Nouv. Dict. HN. 5. 480-5 (1803): 24. Tbl. Méth. 175-6 no. 394 (1804): Gn. Crust-Ins. 4. 28 no. 454 (1809): Cons. Gen. Crust-Ins. 303-4, 436 no. 415 (1810)—[Type: *bedeguaris* L., F.]

Type 3: *Cynips quercus-radiceis* F. (Crt. 1838).

***CYNIPS** (L.) Crt. Br. Ent. 15. expl. Pl. 688 (1838)—[*quercus-radiceis* F. is cited as Type; but this was not one of the species included in the genus by Linné.]

[*acc* ***CYNIPS** Jrn. Erl. Litt-Ztg. 1. 164 no. 40 (I. 1801)—*leucospoides* Hochenw. 1785 (= *cultellator* F., 1793, Jrn.). (**IBALIA** Ltr. 1802 (= *SAGARIS* Pzr. 1806)].

Jurine, Erlangen List (1801) does not affect the genus *Cynips* L., for "*cultellator*" was not included in the genus by Linné.

III-41. **CHELONUS** Jrn. Erl. Litt-Ztg. 1. 164.

"Gen. 41 Chelonus—*Ichneumon oculator*."

CHELONUS Jrn. (1801)

Type 1: *Ichneumon oculator* F. (Jrn. 1801; Crt. 1837).

CHELONUS Jrn. Erl. Litt-Ztg. 1. 164 no. 41 (30. V. 1801)—

CHALCIS F. Mant. Ins. 1. pp. xv no. 115, 272-3 no. 116 sp. 1-7 [1787]—[1. *sispes* L., and six other species]: Ent. Syst. 2. pp. v, 194-8 no. 142 sp. 1-11 (1793); Sppl. 242-3 (1798); Pzr. Fn. Ins. Germ. 32·6 (1796): 76·14, 77·11, 78·15-16, 84·16 (1801): 88·15 (1804); Lmk. Syst. An. sans Vert. 266 no. 120 (I. 1801)—[Type: *sispes* L.]; Jrn. Erl. Litt-Ztg. 1. 165 no. 47 (V. 1801); Ltr. HN. Crust-Ins. 3. 311-12 (1802)—[Type: *sispes* L., F.]: 13. 219-21 no. 348 sp. 1-6 (1804-5); Nouv. Dict. HN. 4. 572-3 (1803): 24. Tbl. Méth. 175 no. 393 (1804); F. Syst. Piez. pp. x, 159-67 no. 24 sp. 1-33, Ind. 7 (1804); Pzr. Krit. Rev. Ins. Deutsch. 2. 92, 93, 95, 97-9 (1806); Jrn. Nouv. Méth. Hym. 312-16 no. 47 Pf. 5·47, 13·47 (1807); F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 392 (1882); Ltr. Gn. Crust-Ins. 4. 25-7 no. 452 (1809); Cons-Gen. Crust-Ins. 303, 436 no. 413 (1810). *SMIERA* (Spin.) Crt. Br. Ent. 10. expl. Pl. 473 (1833). CHALCIS Wstwd. Syn Gn. Br. Ins. 65 (1840).

63

III·48. *PSILUS* Jrn. Erl. Litt-Ztg. 1. 165.

"Gen. 48 *Psilus*—*Tiphia cenoptera* Panzer."

PSILUS Jrn. (1801)

= **OMALUS* Jrn. (1801 LN.; 1807); = **BETHYLUS* [nec Ltr.] Wstwd.

Type: *Tiphia cenoptera* Pzr. (Jrn. 1801).

PSILUS Jrn. Erl. Litt-Ztg. 1. 165 no. 48 (30. V. 1801)—[Type: *cenoptera* Pzr.]. **OMALUS* Jrn. [Erl. Litt-Ztg. 1. 164 no. 43 (30. V. 1801) LN.]: Nouv. Méth. Hym. 300-1 no. 43 Pf. 5·43, 13·43 (1807)—[*cenoptera* Pzr., and two other species]; F-G. K. & K. MT. Schweiz. Ent. Ges. 6. 392 (1882). **BETHYLUS* (nec Ltr.) Wstwd. Syn. Gn. Br. Ins. 76 (1840)—[Type: *cenoptera* Pzr.].

[nec **PSILUS* Pzr. Fn. Ins. Germ. 83·11 (1801)—[*cornutus* Pzr.]; Krit. Rev. Ins. Deutsch. 2. 93 (1806)—[*cornutus* Pzr.]; Jrn. Nouv. Méth. Hym. 317-19 no. 48 Pf. 5·48, 13·48 (1807)—[*cornutus* Pzr., and three other species]—*cornutus* Pzr. (*SPARASION* Ltr.).

Psilus of the Erlangen List (1801) had as Type *Tiphia cenoptera* Pzr., which was referred to the genus *Ceraphron* (Jrn.) Pzr., by Panzer in 1806, while the *Psilus* of Panzer (1801) included only a single species *Psilus cornutus* Pzr. (†*cornutus* Pzr.) now placed in the genus *Sparasion* Ltr. Westwood, in 1840, cited *Tiphia cenoptera* Pzr. as the Type of *Bethylus* Ltr., but *Bethylus* Ltr. (1802) was a monotypical genus founded on *Tiphia hemiptera* F.

XIII. *New Species of Lepidoptera-Heterocera from S.E. Brazil.* By E. DUKINFELD JONES, F.E.S., F.Z.S.

PART II.

[Read March 18th, 1914.]

Fam. NOCTUIDAE.

Subfam. HADENINAE.

Eriopyga lycophotia, sp. n.

♀. Palpi light brown with some darker scales at sides; pectus and legs dark brown; antennae brown; head and thorax brown mixed with ochreous; abdomen light brown, darker beneath. Fore-wings light brown suffused with dark brown; antemedial line dark brown, straight from costa to median nervure, excurved below median to inner margin, preceded by dark shade; postmedial line oblique from costa to discal fold, then bent inwards to near middle of inner margin, forming a rather rounded right angle on the fold; an indistinct broken subterminal line; orbicular and reniform small, indistinctly defined by dark brown; cilia light brown. Hind-wings ochreous, costa and margins broadly suffused with brown. Underside of fore-wings; the cell clothed with long silky hairs lying evenly outwards.

Expanse 36 mm.

Hab. CASTRO, Paraná.

Eriopyga suffusa, sp. n.

♀. Palpi light and dark brown mixed; frons, head, tegulae, thorax and patagia pinkish brown, the scales tipped with ochreous; abdomen brown, dorsally suffused with fuscous. Fore-wings pinkish brown; a diffused dark spot at base of cell; antemedial line indicated on costa, median nervure and vein 1; a very distinct double reddish brown bar below orbicular from cell to vein 1; a diffused reddish brown medial shade, excurved in cell; a diffused reddish brown postmedial line excurved from costa to vein 4, then slightly incurved to inner margin, followed by lighter shade and distinct fuscous dots on veins; a diffused lighter subterminal line, almost straight; the terminal area suffused with reddish brown;

TRANS. ENT. SOC. LOND. 1914.—PARTS III, IV. (FEB.)