

**THE APPLICATION TO BE GIVEN TO A TRIVIAL NAME WHICH, WHEN FIRST PUBLISHED, WAS BOTH APPLIED TO A PARTICULAR SPECIES OR TO PARTICULAR SPECIMENS AND ALSO STATED TO BE A SUBSTITUTE NAME FOR SOME PREVIOUSLY PUBLISHED TRIVIAL NAME OR WAS CLEARLY IMPLIED TO BE SUCH A SUBSTITUTE: AN APPEAL TO ZOOLOGISTS FOR ADVICE**

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(Secretary to the International Commission on Zoological Nomenclature)

**(Commission's reference Z.N.(S.)361)**

(For the decision by the Thirteenth International Congress of Zoology that an investigation should be made in regard to this subject, see 1950, *Bull. zool. Nomencl.* **4** : 502)

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(a) Case where a trivial name, when first published, is both directly applied to a given species or given specimens and is expressly stated also to be a substitute name for a previously published name or for some incorrect use of such a name

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### Preliminary Considerations

**1. Introductory:** The present paper is concerned with the application to be given to a trivial name, when, on being first published, that name (i) is applied to a particular species or to particular specimens and (ii) is stated also to be a substitute name for some previously published trivial name or is clearly implied to be such a substitute. The present is the fifth of the seven problems relating to the *Règles* which the Thirteenth International Congress of Zoology at its meeting held in Paris in 1948 considered required attention but which, in its opinion, needed further study before decisions were taken thereon; that Congress accordingly requested me, as Secretary to the International Commission on Zoological Nomenclature, to confer on this subject with interested specialists, with a view to the preparation of a comprehensive Report, with recommendations, for consideration by the Fourteenth International Congress of Zoology when it meets at Copenhagen in 1953.

**2.** The problem with which the present investigation is concerned is a rare one—in my own reading I have only once encountered a case of this kind. This is fortunate, in that it makes it easier both to lay down a logically based rule of general application, while restricting within a very narrow compass the number of individual cases where the application of such a rule would lead to an undesirable disturbance of nomenclatorial practice. Our aim must therefore be to elicit from specialists such examples as they may be able to provide from their own experience and thus to determine the way in which this problem has been most generally handled, when it has arisen. The fact that this problem is one of rare occurrence makes it impossible to achieve any effective progress, except by means of a general consultation. It is for the purpose of initiating such a consultation that I have prepared the present paper, in which I have taken as illustrations of various aspects of this problem the two cases which have been submitted to the International Commission by individual specialists, the preliminary consideration of which led to the decision that the present investigation should be undertaken. The first of these applications (Z.N.(S.)179) was received from Dr. W. J. Arkell, F.R.S. (then of the University Museum, Oxford, now of the Sedgwick Museum, Cambridge), and was concerned with the present problem, as it arises in connection with certain names given to ammonites. The second of these applications (which, by a curious coincidence, was received on the same day as Dr. Arkell's application) is an application (Z.N.(S.)180) submitted by Dr. H. E. Hinton (then of the British Museum (Natural History), London, now of the University of Bristol) and was concerned with a name given to a beetle. The problem with which we are concerned was raised in the simplest and most direct form in the case submitted by Dr. Hinton, while the case submitted by Dr. Arkell was complicated by certain special features. For the sake of simplicity in the presentation of the present problem, I have thought it convenient to describe first the case submitted by Dr. Hinton, and a similar case submitted by Dr. Arkell, before dealing with the more complicated case set out in the second part of the application submitted by Dr. Arkell.

**3.** I hope very much that Nomenclature Committees of Natural History Museums and similar scientific institutions will be good enough to furnish

particulars of cases in which the problem with which the present paper is concerned may have been met with by their members in the course of their work, together with statements setting out the views of their members as to the best way of dealing with this subject. It is very much hoped also that individual specialists who have encountered the present problem will be good enough to furnish particulars of the cases concerned and will state how in those cases the problem involved has been dealt with by specialists in the group concerned.

4. I am most anxious that the Reports on the problems specifically referred to me by the Paris Congress should be completed in sufficient time to enable them to be published in the *Bulletin of Zoological Nomenclature* well before the meeting of the Copenhagen Congress in 1953. It will be a great help from this point of view if Nomenclature Committees and individual specialists responding to the present appeal for advice will be good enough to furnish their comments on the present problem not later than 31st July, 1952.

5. For the reasons explained in the preliminary note to the present series of papers, the work of the Secretariat of the Commission (which possesses no whole-time clerical and typing staff) will be greatly assisted if communications in regard to the present case are prepared in typescript, on one side of the page only, double-spaced and with wide margins and if they are furnished in duplicate.

6. All communications in response to the present appeal should be clearly marked with the Commission's Reference Number Z.N.(S.)361, and should be addressed to myself, as Secretary to the Commission (address: 28 Park Village East, Regent's Park, London, N.W.1, England).

**(a) Case where a trivial name, when first published, is both directly applied to a given species or given specimens and is expressly stated also to be a substitute name for a previously published name or for some incorrect use of such a name**

7. The case of the name "*Ptinus tectus*" Boieldieu, 1856, raised by Dr. H. E. Hinton: The problem which arises when a specific name is published simultaneously as a new name for a given species or for given specimens and also as a substitute name for some other specific trivial name previously published for some nominal species may be illustrated by the particular example submitted to the International Commission on Zoological Nomenclature by Dr. H. E. Hinton (Commission File Z.N.(S.)180), which was concerned with the application of the trivial name *tectus* Boieldieu, 1856, as published in the binominal combination *Ptinus tectus* (Class Insecta, Order Coleoptera). Boieldieu applied this name to a Tasmanian insect, which he explained that he regarded as identical with a species already named *Ptinus pilosus* White, [1846]; it was only because, so he made clear, White's name was a junior homonym of the name *Ptinus pilosus* Müller, 1821, that he did not apply that name to the Tasmanian insect with which he was concerned and felt bound to provide a new name (*Ptinus tectus*) for White's *Ptinus pilosus*. Dr. Hinton went on to explain that subsequent investigation had shown that the Tasmanian

insect to which Boieldieu applied his new name *Ptinus tectus* was not only not conspecific with *Ptinus pilosus* White, but actually belonged to an entirely different group, Boieldieu's Tasmanian insect being a true Ptinid, while White's *pilosus* was an Anobiid. The question submitted by Dr. Hinton was whether the trivial name *tectus* Boieldieu, 1856, should be held to apply (1) to the Tasmanian Ptinid described by Boieldieu under that name or (2) to the Anobiid species to which White had (in 1846) applied the trivial name *pilosus*, for which Boieldieu expressly stated that the trivial name *tectus* was proposed as a substitute (*nom. nov.*).

**8. The case of the name "Quenstedtoceras douvillei" Maire, 1938 raised by Dr. W. J. Arkell:** A problem exactly parallel to that presented by the name *Ptinus tectus* Boieldieu, 1856, was raised in the first part of the application submitted to the International Commission by Dr. W. J. Arkell in regard to names published for species of ammonites by V. Maire in 1938. The nominal species so established were denominated as "nom. mut." (presumably the equivalent of the expression "nom. nov."); in all the cases in question the nominal species so named were based partly upon newly figured specimens and partly upon references to previously published descriptions and figures. In some cases the trivial name selected for the newly named nominal species was based upon the name of the author to whose previously published papers reference was made in the description of the newly named nominal species; for example, the new name *Quenstedtoceras douvillei* was published as a "nom. mut.", the species so named being based partly upon newly figured material and partly upon descriptions and figures previously published by Douvillé.

**9. Three possible ways of interpreting names published in the manner in which the names "Ptinus tectus" and "Quenstedtoceras douvillei" were published by their respective authors:** There are three ways in which it would be possible to interpret a trivial name published in the manner in which Boieldieu published the name *Ptinus tectus* and Maire published the name *Quenstedtoceras douvillei*. These are:—

- (1) The nominal species so named could be treated as being, at the time of the publication of its name, a composite nominal species comprising both the species bearing the name rejected and replaced by the new name in question and also the species described (and/or figured) under the new name. If this view were adopted, the nominal species concerned would become subject to the provisions of Article 31 of the *Règles*, as revised by the Paris Congress (1950, *Bull. zool. Nomencl.* **4**: 74-76); the new trivial name would then adhere to whichever of the comprised taxonomic species (i.e., either that to which the rejected and replaced name is applicable or the species which was actually described under the new name) was first selected under the foregoing Article by a subsequent author to be the species to which the trivial name should be applied. The application of Article 31 in such a case would automatically provide the newly named nominal species with a lectotype or with a figure or previously published description to represent the lectotype.

(2) It would be possible to establish a rule under which a specific name (binominal combination of generic name and trivial name) published in the manner instanced by Dr. Hinton would be held to have been published twice over in different senses in the same paper: first, as applying to whatever species was represented by the nominal species (in the case cited by Dr. Hinton, the nominal species *Ptinus pilosus* White), for the name of which the new name was published as a substitute; second, as applying to the species actually described under the new name. If this view were taken, the author of the new name (in Dr. Hinton's example, the author Boieldieu) would be held to have published two names which were identical homonyms of one another. The relative precedence to be given to these names could then be determined by the application of the principle of page—and, if necessary, of line—precedence. This is the solution suggested by Dr. Hinton in his application in regard to the name *Ptinus tectus* Boieldieu, and which in a paper published in 1941 (*Bull. ent. Res.* **31** (4): 357-359) he had already provisionally adopted. Later this view was contested by Dr. W. J. Brown (1944, *Canad. Ent.* **76**: 9-10), who considered that no question of homonymy as between two names published by Boieldieu arose in this case which he argued should be settled under the provisions of Article 31 (see Alternative (1) above).

(3) Finally, it would be possible to argue that, if a name is definitely published as a substitute for some other name, there can be no escape from the objective fact so established, the new name so published adhering in all circumstances to the species to which the rejected name is applicable. According to this view, it would be entirely irrelevant from a nomenclatorial point of view if the author giving the new name (say Boieldieu, when publishing the name *Ptinus tectus*) also at the same time erroneously applied it to some species other than that to which the rejected name was properly applicable. An author using a name in this way would, according to this view, merely have misidentified his new species (in Boieldieu's case, his Tasmanian insect) with a previously described species (in the present example, *Ptinus pilosus* White), which by an irrelevant coincidence the author concerned had renamed in the same paper. This is the solution advocated by Dr. Arkell in his application regarding the interpretation of V. Maire's ammonite names.

**10. Considerations relevant to reaching a decision on the question of interpretation raised by such names as " *Ptinus tectus* " Boieldieu, 1856:** There are certain considerations which, I consider, need to be evaluated in the Report ultimately to be submitted to the Commission in regard to this matter and on which, therefore, it would be extremely helpful to receive the views of interested specialists. The considerations in question may be summarised as follows:—

(i) In some cases it would be relatively simple to determine in which of two senses (whether as a substitute name or as a name for a new

species) a given trivial name was first used in any given paper; in other cases (as in Maire's ammonite names) the two concepts are introduced so nearly simultaneously that it would be extremely difficult, if not, in some cases, impossible, to determine, even by applying the principle of line precedence, in which sense the name was first employed. It is inevitable, therefore, that, if a Rule were to be introduced that cases of this kind are to be treated as though the author concerned had published in the same paper two specific names, each a homonym of the other, it would often be impossible, by means of that Rule, to obtain a clear and unequivocal answer to the question at issue, namely to which of the two species concerned the trivial name should adhere, and, in consequence, such an answer could be obtained only by the reference of the cases in question to the Commission for individual decision. This solution is open also to the objection that it involves a fundamental distortion of the intentions of the author of the name in question, who certainly never regarded himself as applying the same name simultaneously to two different species. It would seem, therefore that this solution is not one which would be desirable to adopt if there is any other available which is free from these serious defects.

- (ii) A decision that cases such as that presented by the name *Ptinus tectus* Boieldieu should be treated as constituting the publication of the name of a composite species and therefore that the question of the species to which the trivial name in question should adhere should be determined under Article 31 would provide a procedure which could be readily applied and one which would provide in each case a clear-cut answer, thus avoiding the necessity of referring individual cases to the Commission for decision. Where however we are concerned not (as in the above case) with the problem presented by a single trivial name having been applied to two distinct species, but with the problem of the specimens to be regarded as being eligible for selection as the lectotype of a nominal species expressly described by its original author as a *nom. nov.* and based partly upon new material and partly upon material that has already been described and figured, the application of Article 31 would not necessarily give an equally satisfactory result; for, as Dr. Arkell pointed out in his application in regard to Maire's ammonite names, the question of the author by whom the described material had previously been studied and the locality in which that material had been collected here becomes a matter of considerable importance. The first of these situations may be illustrated by the name *Quenstedtoceras douvillei* published by Maire as a "*nom. mut.*" partly for specimens previously described and figured by Douvillé and partly for fresh material figured for the first time by Maire himself. It could not be regarded as satisfactory if, under Article 31, one of Maire's new specimens were selected to be the lectotype of this species, in place of one of those studied by Douvillé, after whom the new substitute trivial name *douvillei* was given; for such a selection

would clearly do violence to Maire's intentions. An example of the second of the situations is presented by the name *Quenstedtoceras reesidei* published by Maire as a "nom. mut." and based partly upon American specimens previously described and figured by Reeside and partly upon additional material collected in France and figured by Maire for the first time. If in such a case the lectotype were to be determined under Article 31, it would be perfectly legitimate for an author to select as such one of the French specimens figured by Maire. The result would however be most unsatisfactory, for it would provide this species with a lectotype of French origin, notwithstanding the fact that the name *Quenstedtoceras reesidei* was published as a substitute name for an American species originally described and figured by the American Reeside. It is for these reasons that Dr. Arkell has recommended that, where a specific name is expressly published as a substitute name (by the use of the expression "nom. nov." or some equivalent such as "nom. mut.") for some other name (or for some invalid use of another name by a previous author), (1) the type specimen of the nominal species bearing the substitute name shall be the specimen which is the holotype of the nominal species, the name of which (or the name used for which) has been rejected in those cases where that nominal species had a holotype, or the lectotype of that species where a lectotype has been selected, and (2) that, where the original nominal species does not possess a holotype and has had no lectotype selected for it, the only specimens which shall be eligible for selection as the lectotype of the nominal species bearing the substitute name shall be the syntypes of the original species. As part of the foregoing proposal Dr. Arkell has proposed also that there should be inserted in the *Règles* two new *Recommandations* as follows: First, a *Recommandation* urging authors, when proposing substitute names for species described and/or figured by a previous author, not to select as the trivial name of that species a word composed of the earlier author's name or of the locality from which that author's specimens were collected, if it is not intended that the earlier author's specimens should constitute the syntypes of the newly named nominal species. Second, a *Recommandation*, urging that, where an author publishes a name for a species believed to be identical with one previously figured but incorrectly identified by some earlier author, the author publishing the new name should avoid using the expression "nom. nov." or its equivalent, unless the figures published by the earlier author are at least as good as those which could be provided from new material.

- (iii) It will be seen from the foregoing that the proposals submitted by Dr. Arkell deal with cases such as that presented by Boieldieu's name *Ptinus tectus* at least as satisfactorily as, if not better than, any of the other solutions which have been suggested, while his is the only proposal so far brought forward which deals satisfactorily with the kindred problem presented by names such as *Quensted-*

*toceras douvillei* and *Q. reesidei* published for ammonites by Maire in 1938.

**11. Likelihood of the existence of divergent practice among specialists in interpreting names such as "Ptinus tectus" Boieldieu, 1856:** It is likely in this, as in other cases where the meaning to be attached to a given provision in the *Règles* is in doubt, that the problem of interpretation presented by such names as *Ptinus tectus* Boieldieu has been dealt with differently by specialists in different groups, while in this particular case we know, from the particulars given in paragraph 9(2) above, that specialists in the same group have taken different views with consequent instability and lack of uniformity in the nomenclature of the species concerned. For the purpose of ascertaining the manner in which the rare cases of the foregoing type have been dealt with when they have arisen, it would be extremely helpful if specialists would be so kind as to furnish examples of any cases of this sort which they are aware of in their own groups.

**12. Probable need for a saving clause to prevent the interpretation now to be given from causing confusion and undesirable name-changing in particular cases:** Whatever decision is ultimately given by the International Congress of Zoology as to the interpretation of names of the kind with which we are here concerned, it is likely that the automatic application of that decision would give rise to confusion and undesirable name-changing in the minority of cases where that decision ran counter to current nomenclatorial practice. In order to deal with this contingency, it will, no doubt, be desirable, as in the case of generic names published in generic synonymies discussed in the immediately preceding paper in the present series of pre-Congress papers (1952, *Bull. zool. Nomencl.* 7 : 117—118), that the Congress, when taking its decision, should impose also upon the International Commission on Zoological Nomenclature the duty of taking such special action as may be necessary to prevent any objectionable disturbance of existing nomenclatorial practice from arising as the result of the new provision. Cases such as *Ptinus tectus*, where specialists in the same group are in disagreement with one another and in consequence have interpreted a given specific name in different ways will need to be dealt with individually on their merits, that is, either by applying the new rule (whatever it may be) to them or, if the case is considered to be of sufficient importance, by the submission of the case to the Commission as one possibly calling for the use by the Commission of its plenary powers.

**13. Questions on which the advice of specialists is now sought:** The questions on which the advice of specialists is now sought are:—(1) Do you know of any cases in your own group in which a specific name, when first published (i) was expressly stated to be a substitute name for some previously published specific name, and (ii) was also accompanied by a description of a given species (or of specimens belonging to a given species) different from that to which the rejected specific name is correctly applicable? If so, please give examples, at the same time stating how specialists have interpreted the specific name in question. (2) Which of the following possible rulings by the Com-

mission and the Congress would, in your opinion, be the best, in the sense of being the most logical and the most easily applicable ruling in such cases and the one calculated to lead to the minimum of disturbance in current nomenclatorial practice: (a) a ruling that a nominal species established in the foregoing manner is to be treated as a composite species and therefore that the species to which the new trivial name is to adhere should be a matter for determination under Article 31; (b) a ruling that in such a case two nominal species, bearing identical specific names (i.e. identical combinations of generic name and specific trivial name) are to be deemed to have been established, one of these names to be held to apply to the species bearing the rejected specific name, the other to the species described under the new name, the relative priority to be accorded to these two homonyms to be determined in accordance with the procedure laid down for determining the relative priority to be accorded to any pair of names published in the same book and on the same date; (c) a ruling that the new specific name in question is to be treated as applying automatically to the species bearing the rejected name (i.e. that such a name should be treated strictly as a substitute name), the other use of the new name being treated as having been due to a misidentification on the part of the author concerned?

**(b) Case where a trivial name, when first published, is both (1) directly applied to a given species or specimens and (2) is implicitly treated as being a substitute for some previously published name or for some incorrect use of such a name**

**14. Historical introduction:** In the second part of the application discussed in paragraph 2 above, Dr. W. J. Arkell raised a problem which closely resembles that raised by the names *Ptinus tectus* Boieldieu (paragraph 7 above) and *Quenstedtoceras douvillei* Maire (paragraph 8 above) but which differs in that the name calling for interpretation was not expressly published as a substitute name (nom. nov.) for a previously published name or for a particular previously published usage of a name, though it was made clear by the author of the new name that, in part, the new name was applied in this sense.

**15. Two examples cited in Dr. Arkell's application:** Dr. Arkell illustrated the situation specified above by citing, as examples, the specific names *Quenstedtoceras lorioli* Maire, 1938, and *Cardioceras uhligi* Maire, 1938. These examples are exactly parallel to one another in every respect:—(1) Each of these nominal species was described by Maire as a new species ("sp. nov."); (2) Each of these nominal species was described, partly on the basis of new material and partly upon the basis of previously published figures; (3) In each case the name of the previous author by whom the cited figures had been published was selected by Maire as the basis for the trivial name of the new nominal species—

in the first instance, the name de Loriol, in the second instance, the name Uhlig. Dr. Arkell points out in his application that an exactly similar situation would arise if an author published a name for a new nominal species (i.e. name published as "sp. nov." or equivalent), that species being based partly upon new material and partly upon previously published descriptions or figures, the word chosen for the trivial name of the new nominal species being composed of, or based upon, the name of the locality in which one or more of the previously described or figured specimens then cited had been obtained.

**16. The proposal submitted by Dr. Arkell:** The proposal submitted to the Commission by Dr. Arkell was that in a case such as that presented by the specific name *Quenstedtoceras lorioli* Maire the only specimen or specimens which should be regarded as eligible for selection by a later author as the lectotype of the species concerned should be the specimen or specimens described by the earlier author, which had been cited by the author of the new specific name, when publishing that name, i.e., that in the case instanced above the only specimens described, figured or cited by Maire when publishing the new name *Quenstedtoceras lorioli* which should be eligible for selection as the lectotype of the nominal species so named should be those specimens for which Maire cited bibliographical references to earlier papers by de Loriol. Dr. Arkell further proposed that a similar rule should apply to cases where the trivial name of a nominal species published as a new species is composed of, or is based upon, the name of the locality in which one or more of the specimens, to previously published descriptions or figures of which bibliographical references were cited in the description of the new nominal species. Under a provision such as that proposed above, if enacted in mandatory form, the new material brought forward by the author (e.g., Maire) by whom the new specific name was published would be rendered ineligible for selection as the lectotype of the nominal species so named, while if the provision took the form of a non-mandatory *Recommandation*, that material would be material which authors would be recommended to ignore when selecting a lectotype for such a species.

**17. Questions on which the advice of specialists is now sought:** The questions on which the advice of specialists is now sought (i.e. the questions supplementary to those enumerated in paragraph 13 above) are: (1) Are you in favour of a provision that, where a new nominal species (i.e. a nominal species described as *sp. nov.* or equivalent) established without a designated or indicated holotype (a) is based partly upon previously published descriptions and/or figures and partly upon new material and (b) is given a trivial name based upon the name of the previous author by whom descriptions and/or figures cited by the author of the new specific name had been published, the only specimen or specimens eligible for selection as the lectotype of the new nominal species so named should be that specimen or those specimens which the earlier author had described and/or figured in the work cited by the author of the new specific name? (2) Are you in favour of a provision under which, in a situation differing from that described above only in that the word chosen





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