

ON THE VALIDITY OF WALCKENAER'S NAMES: A FORUM OF FACT AND OPINION**INTRODUCTION.** G. B. Edwards

I would like to thank the participants in this forum for their response to my article in Peckhamia 1 (2). I had hoped to obtain this kind of response, so that we who are less experienced in taxonomic matters might receive the wisdom of our more experienced colleagues, especially on such a touchy subject. Special thanks are due to Drs. C. D. Dondale and H. W. Levi for specific references in articles in the International Code of Zoological Nomenclature, and to Drs. W. J. Gertsch and B. J. Kaston for their continuous perceptive and informative correspondence. All contributions are either articles submitted to Peckhamia, or excerpts from personal correspondence to myself or to D. E. Hill.

In my original article I stated, as had earlier authors, that since the Abbot illustrations were unpublished, any description of them was invalid, and that the I.C.Z.N. did not allow for the type of a species to be other than an actual specimen anyway. I also gave the opinion that since the literature was being cluttered with two names for many species of spiders, the Walckenaerian names should be discarded. This opinion was based on the belief that if no revision was available as an authority and the species name was disputed, reasonable doubt probably existed as to the identity of Walckenaer's species.

To clear the misconceptions that I seem to have caused in my earlier article, I did not mean to imply that if a description was published without an illustration or without a type being designated that it should be considered invalid. This would clearly create havoc if accepted. My primary objection was based on the fact that (contrary to most other early araneologists) for the most part, Walckenaer did *not* have a specimen in hand when he made his description; he described a drawing. Even though some of Abbot's drawings are sufficiently diagnostic, and admittedly other authors of the time wrote brief descriptions of species, Walckenaer could hardly be expected to adequately describe any diagnostic characteristics of a species from a drawing. I believe this same objection has been a major factor in the opposition to the use of Walckenaer's names.

While I had scattered support, most replies disagreed with my opinion. Topics discussed included the history of the controversy, analogies to other early araneologists, the validity of names, the use of types, the legality of drawings as types, the options open to a reviser, and the applicability of specific drawings.

MUSINGS OF A JACK PINE SAVAGE I (first part). Bruce Cutler

Peckhamia has become a useful "tool" for the dissemination of original observations, and for the airing of original opinions. In the interest of generating more heat (not light, jack pine savages value heat more than light), I would like to add a few meager branches to the flames.

In regard to the Walckenaerian name controversy, I believe that the first reviser principle is the one to observe. However, as Edwards pointed out, use of these names is a violation of ICZN rules since the type cannot be an illustration. I would not like to see *Eris marginata*, *Metaphidippus galathea* and *M. protervus* fall because of this. These names are too firmly entrenched in the literature. Another problem of less importance, but still annoying are the

numerous "*Attus*" species resurrected by Chamberlin and Ivie. Perhaps we will eventually have to go to the ICZN with the problems posed by those names based upon Abbot's illustrations.

SOME COMMENTS ON THE NAMES OF WALCKENAER. Jon Reiskind (Poetic license applied for)

There once was a man, Walckenaer,¹
 Who gave names to some drawings, quite rare,
 Of spiders, by Abbot,
 An artist whose habit
 Was making his paintings with care.
 In the summer of '87, McCook²
 In Great Britain did find the rare book.
 All the drawings were there
 And to him it was clear
 That the names of N. Hentz were well shook.

In '01 they're "ignored" by N. Banks³
 Who gave Walckenaer clearly no thanks
 For making these pictures

Such permanent fixtures
For workers (misguided) and cranks.

Then along came the team, C and I⁴
Who refused to let sleeping dogs lie.
Had they left them alone
We'd avoid strident tone,
Letting out, in relief, a small sigh.

Again comments are flowing quite free
In "Peckhamia," begun by G. B.:
"Attack" and "defend,"
"The rules to suspend?"
The end of this we cannot see.

¹Walckenaer, C. A. 1841 *Histoire Naturelle des Insectes Aptères*, 2, Paris.

²McCook, H. C. 1888 *Proc. Acad. Nat. Sci. Phila.* For 1888: 74-79.

³Banks, N. 1901 *J. N. Y. Ent. Soc.* 9: 182-189.

⁴Chamberlin, R. V., and Ivie, W. 1944 *Bull. Univ. Utah* 8(5): 1-267.

ON WALCKENAER'S SPIDER NAMES. C. D. Dondale

G. B. Edwards (*Peckhamia* 1:2) feels that Walckenaer's (1837, after Abbot's drawings) names for spiders are "in violation of established ICZN rules" because (1) they are based on *unpublished* illustrations, and (2) no type specimens exist. The truth is that numerous spider names are perfectly acceptable under the rules even though they were accompanied by no illustrations and the original specimens are either lost or destroyed. As examples, it is only necessary to think of Clerck's names, and several of Banks', Chamberlin's, and Blackwall's for which no illustrations or types exist. We can be sure, however, that these workers had at least one specimen in hand when they wrote or drew; that specimen, whether in a collection or thrown into the garbage, is the type.

Walckenaer's names violate none of the ICZN rules, as I read the latter. They

were published according to the provisions of Articles 7 to 9. They fully meet the criteria of availability (Arts. 10 to 20). They have priority over many later names (Arts. 23, 24), and their authorship is not in doubt (Arts. 50, 51). The problem with application of these names is that in many cases the descriptions are so equivocal that we can't tell what modern species they represent, and this problem is a big one. What is the procedure? Clearly it resolves nothing to regard an illustration, whether published or unpublished, as the type; we can argue till doomsday about them. Two courses are, however, open to the reviser. (1) If he is satisfied that a name can not be applied with confidence to any particular taxon, he can declare in his revision that the name is a *nomen dubium*. Jim Redner and I so designated the name *Philodromus abboti* Walckenaer, 1837. (2) He can select a specimen matching as closely as possible the original data and designate it as neotype of the species. Article 75 of the rules sets forth the rather stringent conditions regarding neotype designation, one of which is that the reviser "should satisfy himself that his proposed designation does not arouse objections from other specialists in the group." Such a specimen, once its description has been published, becomes available for study at a recognized institution. Chamberlin and Ivie in 1944 so designated a neotype for *Lycosa crassipes* Walckenaer, 1837; if they had not done so, it would have been necessary for Jim and me to do it, for *crassipes* is one of three closely similar species (of *Schizocosa*) in Georgia, and Walckenaer's description was completely equivocal. At least one of Hentz's species is now represented by a properly designated neotype, for similar reasons.

As salticid genera come under revision, it should be possible to dispose of Walckenaer's 1837 names in one of these two ways.

A NOTE ON WALCKENAER'S NAMES. Herbert W. Levi

I agree with the purpose of your note in *Peckhamia* (1:2) on Walckenaer's names. Dondale is correct that according to Article 72(a) of the Code, an illustration which received a name cannot be the type; the type has to be a specimen.

A requirement of the code is that the new name and description is published, but it is *not* a requirement that the object named is published; thus Seely (1928) is wrong.

Is a name valid that names an illustration? Availability is treated in Section IV of the Code, Articles 10-20. There is nothing in the Code that makes the Walckenaerian name unavailable. I of course agree that it is most undesirable to use these names unless they are entrenched in the literature or they were used by a reviser.

THE WALCKENAERIAN SPIDER NAMES. W. J. Gertsch

The matter of the Walckenaerian names is the business of the younger systematists of this country. For the most part I have not been obliged to take a stand on many of them. The photographs of the Abbot drawings in black and white, and color, available to

Ivie were excellent. The Chamberlin and Ivie pictures are, or at least were, in the American Museum. I think that Ivie did a very creditable job of identifying the Walckenaerian pictures and descriptions.

It would be worthwhile for intensive collecting to be done in Georgia, as Ivie did, to continue this work until a conclusion can be reached. As I see it,

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the disagreeable names are legal ones and they should be used whenever they can be recognized with certainty. Even though authorship is only of biographical use and Walckenaer couldn't care less anyway, I see no method short of legal rejection to get rid of the names. I would be delighted to get rid of those nasty names; Emerton would say the same for the nomenclature that had superseded that of him and Banks. The fifty year rule does not seem to be operative in the case of a great many of the Walckenaerian names. It probably is in the case of the C. L. Koch names.

Up to the time of Banks no Americans designated types; those of Emerton in the M.C.Z. are not legally designated as lectotypes; they were labeled so by Bryant and others that followed. Peckham designated no types and I doubt that any of them have been dubbed as lectotypes. Types have nothing to do with the legality of the Walckenaer names whether based on specimens or only on Abbot's drawings. These names represent the work of two men of whom only one gets the credit.

I doubt very much that any serious student of nomenclature would regard these names as being invalid. For a long time I was against use of the Walckenaerian names, but gradually I used a few in the groups on which I worked. Being "against using Walckenaer's names" has nothing to do with validity. Some of the names were actually based on specimens in addition to figures by Abbot and these which are so identified must be valid by such a criterion. The only solution of this problem is in petitioning for suppression of the names in the interest of stability. Since 1944, many of the names have been accepted by students and I suspect that some of these might be relinquished with the same hurt feelings that older students had for Hentzian names. The matter has become very complicated and reflects the fact that we are very late in attacking such a difficult problem. Rejection of all the Walckenaerian names would be a poor solution of the problem. If some way of sorting out the acceptable ones for preservation and then rejection of the others can be worked out, I am all for such a solution.

COMMENTS ON WALCKENAER'S NAMES. B. J. Kaston

Modern taxonomists indicate a type specimen and where it is deposited. But for those of a century or more ago many did not indicate types; are their names to be discarded? I cannot see that those of Walckenaer should be on this basis. Also, even if he did not see the actual specimen, but just a drawing made by Abbot, the fact is that somebody did see the specimen, and in Walckenaer's day many people contributed descriptions without drawings, so to say that the drawings were not published and consider that this is cause for rejection of Walckenaer's names seems to me a dangerous precedent. After all, Linnaeus is credited as the describer of many large African mammals (elephant, lion, etc.), yet there are no "types" for these, and in many cases he based his short description (without illustration) on what was told him by explorers who had seen them. I will admit that some of Walckenaer's names cannot be used because of the difficulty of matching his descriptions with actual specimens now; however we cannot reject because of the two points raised by Edwards.

In the matter of the Walckenaer names the arguments are apt to go on and on. I suppose I can say that I was one of the early backers of the 1944 paper by Chamberlin and Ivie, since some of the collecting done by Ivie in Georgia was done right in my own back campus. I was then teaching in north Georgia and had Ivie stay at my home over the weekend.

Some of the arguments that have been used against Walckenaer's names could

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be used against Hentz as well. He did not use types, and often his descriptions and/or drawings fit more than one species. True, and elephant or lion may be distinctive enough. But when the early araneologists did their describing they thought their specimens at hand were distinctive as well, and hence the descriptions were, for the most part, quite brief. It was only in later years that there were found close relatives of the species earlier described, and the early description could be found to fit them all. It was quite unusual for authors of that period to describe immatures; they did not take into account differences in genitalia. Naturally, more than one species would later be found to fit.

Whenever a species is described from an immature (where the author definitely indicates such) we should hold the name suspect. The trouble is that many times the author didn't realize that he had an immature female at hand. I can recall from my own experience that I thought a female *Clubiona* was mature when in reality it turned out to be a sub-adult (penultimate instar).

Ordinarily the results and opinions of a "first reviser" would be generally accepted. But that would be if a particular problem was addressed and discussed, and the reviser gave arguments showing why a certain view is more acceptable than another.

There were a number of names changed for the second edition of *How to Know the Spiders*, and there will be others for the third now being printed. The *Peucetia* has been changed to *viridans*, not because of Walckenaer's name being invalid, but because the other name has priority. As to *Synemosyna*, there is still uncertainty as to what Walckenaer's species is, in Galiano's opinion. She

refers to the fact that Chamberlin & Ivie “establecen la sinonimia y consideran que *lunata* tiene prioridad.” It becomes a matter of opinion as to who you will follow.

Since spiders do not come labeled by nature, it is up to us to give the name which we feel is proper. As people vary tremendously, we must expect differences with respect to which name should be used. I have very few hardbound ideas about them, and have changed many from time to time.

SOME THOUGHTS ON WALCKENAER'S NAMES FOR SALTICIDS AFTER AN EXAMINATION OF ABBOT'S DRAWINGS.

David B. Richman

G. B. Edwards' article (1977) provoked a number of comments on the use of Walckenaer's (1837) names. I think that such controversy is good for arachnology in that it causes students to think in new ways and to reason out their particular stands on an issue. In general, I agree with Edwards that Chamberlin and Ivie (1944) caused more confusion than they dispelled by reintroducing almost forgotten names into the literature. Of course Walckenaer's names are valid, but many of the illustrations (Abbot, 1792) upon which the names are based are, in the light of more modern concepts of systematics, at best ambiguous. Thanks to the help of Dr. H. W. Levi of the Museum of Comparative Zoology, Harvard University, I was able to examine color slides of several important Abbot illustrations of jumping spiders, as well as a microfilm of the entire manuscript. When revisions of the various genera are made these illustrations must be consulted to settle any questions of nomenclature raised by Walckenaer's sketchy descriptions. To a large extent, the use of Walckenaer's names depends on whether these illustrations can be placed with a given species. I am presenting here my own observations on selected illustrations, which may or may not be followed by future revisers.

The numbers refer to line drawings (Figs. on p. 59) copied from projections of the slides by David E. Hill.

- 1-2. Abbot Figures 18 and 504. *Attus canosus* Walckenaer
Stoidis canosa Chamberlin and Ivie

This species was synonymized with *Corythalia aurata* (Hentz). The illustrations resemble *C. aurata* very closely, at least as well as Hentz's drawing (see 1875, Pl. 9, Fig. 6). Barnes (1958, p. 44) used *S. canosa* while Edwards et al. (1974) used *S. aurata*. Bryant (1940) placed the species in *Corythalia* and used *C. aurata*. I can, however, see no valid reason to reject Walckenaer's name and thus *Corythalia canosa* may have to be recognized as the proper name for this species.

3. Abbot Figure 33. *Attus rimator* Walckenaer
Phidippus rimator Chamberlin and Ivie

This drawing is obviously of an immature specimen and does not match any *Phidippus clarus* Keyserling (its supposed junior synonym) that I have seen. I am of the opinion that *P. clarus* should be preferred over *P. rimator*. Ivie himself identified some specimens as *P. clarus* for Kurczewski and Kurczewski (1968).

- 4-5. Abbot figures 82 and 442. *Attus ceruleus* Walckenaer
Agassa cerulea Chamberlin and Ivie

Figure 82 (4) is not of an *Agassa* at all. It instead resembles a *Tutelina*. Abbot notes that he captured the spider on a pine tree. He later states that Figure 442 is of the only spider of the kind that he had collected. While it is possible that Figure 442 is of an *Agassa*, it is by no means certain that it is not of an immature *Zygoballus*. I have seen several of the latter which might resemble the figure. It is my opinion that Hentz's name, *Agassa cyanea*, should be preferred.

6. Abbot Figure 201. *Attus pulcher* Walckenaer
Phidippus pulcher Chamberlin and Ivie

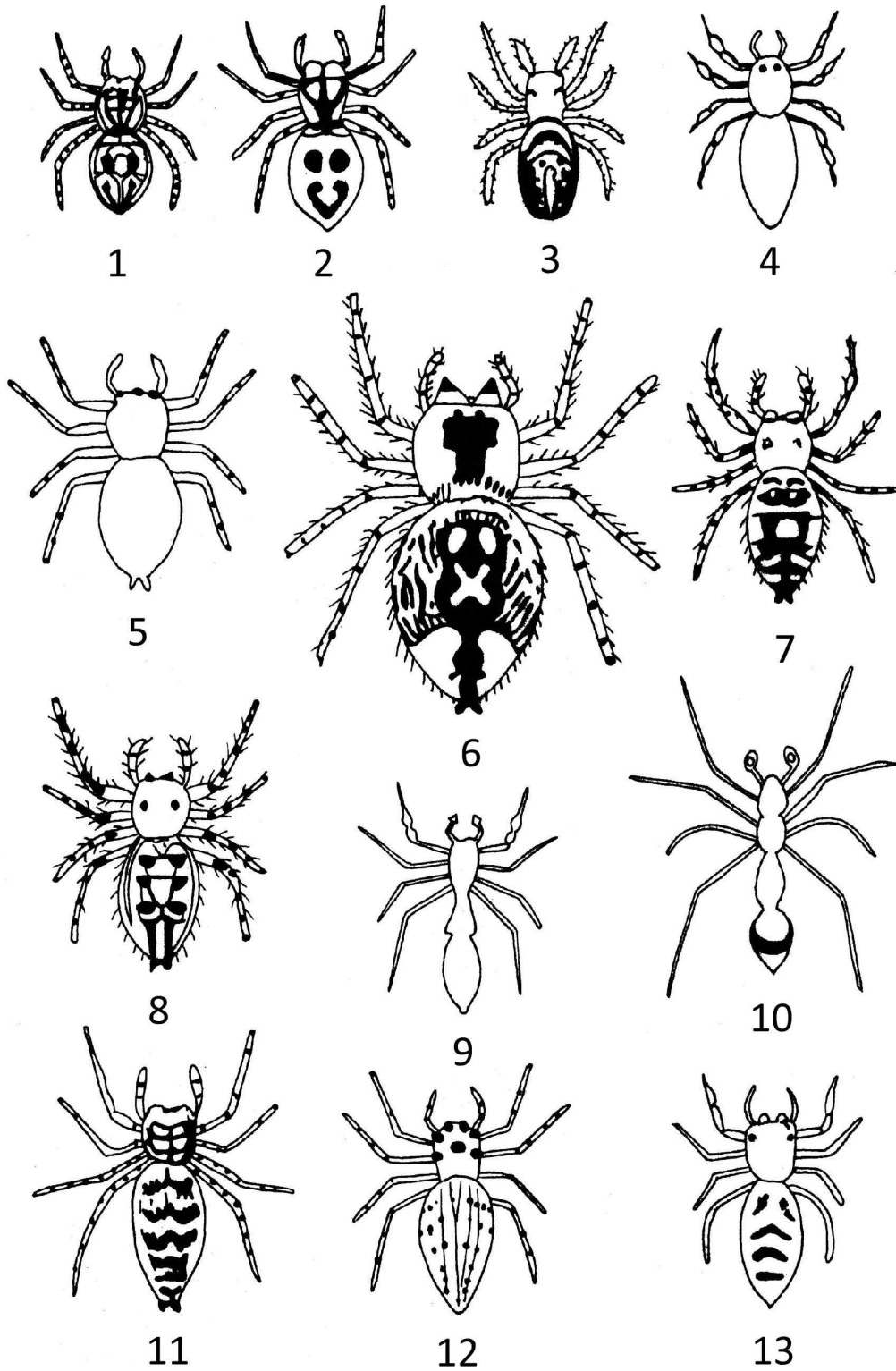
This is without doubt a female or immature of the same spider Hentz called *Attus otiosus*. A future reviser may have to use *P. pulcher* unless some argument is made for suppressing the name based on usage. Abbot even states that the specimen was collected on an oak tree, the usual habitat for *P. otiosus*.

- 7-8. Abbot Figures 209 and 210. *Attus fraudulentus* Walckenaer
Phidippus fraudulentus Chamberlin and Ivie

Both of the specimens figured may have been immature when drawn. I cannot recognize the species; synonymy with *P. insignarius* C. L. Koch is doubtful. Figure 210 (8) looks more like some immature specimens of *P. pulcherrimus* Keyserling.

9. Abbot Figure 212. *Myrmecium caliginosum* Walckenaer
Peckhamia caliginosa Chamberlin and Ivie

This illustration is difficult to identify, and while Abbot may have used a *Peckhamia* for his illustration, there is no way to link this figure with *P. americana* (Peckham and Peckham). Several other species of *Peckhamia* are also



Figs. 1-13. Line drawings of salticids based upon photographs of the original illustrations by Abbot (1792).

known from Georgia (Cutler 1970).

10. Abbot Figure 214. *Myrmecium lunata* Walckenaer
Synemosyna lunata Chamberlin and Ivie

This illustration could represent either *S. formica* Hentz (which mimic *Pseudomyrmex brunneus* F. Smith) or *S. petrunkevitchi* (Chapin) (which mimics *P. pallidus* F. Smith). It has dark markings on the abdomen (although shaped differently) as does *S. formica*, but the rest of the body is light in color like *S. petrunkevitchi*. Abbot's Figures 12 and 14, which I only had in black and white, resemble his Figure 212, which is a *Peckhamia*. I would thus prefer *S. formica*, as did Galiano (1966), for this ant-like salticid.

11. Abbot Figure 413. *Attus inclemens* Walckenaer
Maevia inclemens Chamberlin and Ivie

Barnes (1955) may have been in error when he chose this name over *Maevia vittata* (Hentz). There are several closely related species of *Maevia* (including *Paramaevia*) in Georgia and Florida and it is difficult to guess which the illustration really represents. *M. inclemens* may be too entrenched in the literature to be replaced.

12. Abbot Figure 508. *Attus irroratus* Walckenaer
Thiodina irrorata Chamberlin and Ivie

This female specimen was collected on an oak tree, the habitat of *T. sylvana* (Hentz). *T. puerpera* (Hentz), the supposed junior synonym of *T. irrorata*, is found primarily on grasses and in old fields. The females and immatures of these two species, which Chickerling (1946) did not even recognize as separate, are very difficult to distinguish. I would prefer the name *T. puerpera* because of this.

I have only black and white copies of Abbot's figures of *Attus iniquus* Walckenaer (= *Thiodina iniquus* Chamberlin and Ivie). However, based upon Abbot Figures 84, 159 (the so-called type), 208 and 580, it seems likely that Abbot may have utilized several different species of spider for his drawings. I agree that Figures 84 (female) and 208 (male) are probably of *T. sylvana*. The habitat for these spiders (oak trees or bushes) is correct for *T. sylvana*. The identity of Figure 159 (female) is debatable and Figure 580 (male) is probably not the species in question. Abbot notes for Figure 580 that this is the only specimen of the species that he has seen. Because of the ambiguity of the illustration, I would prefer to use *T. sylvana*. The copies I have are, unfortunately, not sufficiently clear for reproduction here.

13. Abbot Figure 510. *Attus ambiguus* Walckenaer
Hentzia ambigua Chamberlin and Ivie

Abbot Figures 67 and 258 also show this species. This is probably the same as the species called *Hentzia palmarum* (Hentz) by many arachnologists. The illustrations are good representations of the patterns found in females of *H. palmarum*. I may have to alter my previous position and accept *H. ambigua* as the correct name for this species.

These observations have been offered to present some of the difficulties involved in interpreting Abbot's drawings. They were excellent illustrations for their time and many are superior to those of Hentz. I thus mean no criticism of Abbot or his work, but am only pointing out some of the problems

which await those who attempt to revise these genera in the future. It is unfortunate that Chamberlin and Ivie did not reproduce all of Abbot's drawings, so that future students would have them readily available.

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DISCUSSION AND SUMMARY. G. B. Edwards

While most angles of the controversy have been covered by the preceding forum participants, at least one further item remains. Chamberlin and Ivie (1944) designated certain of the Abbot drawings as “types” for the Walckenaer descriptions. While David Richman and I were prepared to use these “type drawings” in the same manner as holotypes, we found this designation to be invalid, since a type must be a specimen (Article 72a). Also, since the specimens are lost, none of the figures can be designated as lectotypes, as such a designation is treated as designation of the specimen represented by the figure (Article 74b). However, since types were not designated in Walckenaer’s time, use of the “type drawings” (which presumably are most representative of the species in question, according to Chamberlin and Ivie) may be a useful tool for modern araneologists in determining whether or not to use one of Walckenaer’s names, particularly in those cases where more than one drawing was given the same name.

An excellent point brought out by Dr. Kaston is that, if a reviser uses (or does not use) one of Walckenaer’s names, he should explain why. To use an example which I presented earlier (Peckhamia 1:2), in the case of *Maevia inclemens* (Walck.), Barnes (1955) has absolutely no discussion of why he chose this name over *M. vittata* (Hentz); nor did he select a neotype. In the earlier article I have already discussed why I felt the choice of *M. inclemens* was inappropriate.

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The general consensus of the forum participants is that identification of specimens with Abbot’s drawings is often difficult; however, no provisions of the I.C.Z.N. invalidate Walckenaer’s names. These names are no different from those of other early araneologists except for the fact that Walckenaer made his descriptions from drawings of spiders seen by Abbot, whereas in most cases, the other araneologists made their descriptions from specimens in hand. Problems in applying Walckenaer’s names to actual specimens can be resolved by declaring a particular case a *nomen dubium* if it is unrecognized or by selecting a neotype for a description equivocal among species. Alternatively, in the interest of stability, the I.C.Z.N. may be petitioned to suppress an older name if a junior synonym has been used much more often in the literature.