and second vice-president be established to permit the IABG to meet at the Botanical Congress and at the Horticultural Congress with reasonable assurance that either the president or one of the vice-presidents would be present to preside at any scheduled meetings. The members of the commission approved the plan for meetings at both Congresses, with the permission of the respective officials, but stipulated that officers be elected only at the Botanical Congresses to serve until the succeeding Botanical Congress. Nominations for officers are to be requested from the membership at large through an announcement in *Taxon* with provision for additional nominations during the official meeting.

The next meeting of the International Association of Botanic Gardens is scheduled to be held during the Xth Botanical Congress in Edinburgh, Scotland, in August of 1964. A request for nominations of officers along with an announcement of the program will appear in a subsequent issue of *Taxon*.

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**BOTANICAL NOMENCLATURE, PUNCHED CARDS, AND MACHINES - A COMMENT**

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The article under this title in a recent number of *Taxon* (*Taxon* 12. 2-12. 1963) is a detailed and wholly unfavourable review of the first volume of the International Plant Index (Gould, 1962). The authors of the review, C. E. Wood, R. S. Cowan and G. Buchheim, are members of the Subcommittee for Family Names appointed by the IX International Botanical Congress, and speak with obvious authority. Yet their pronouncements are depressingly sterile. The tone is set by the opening sentence: “The use of machines . . . . has been highly publicised as a sort of panacea for many of the difficult or tedious problems of science”.

This condemnation of Gould's Index is said to be based on three main criticisms: 1. the inadequacy of the 30-column card for nomenclatural citation, 2. the “ignoring of internationally accepted nomenclatural practices” and 3. the confusion of nomenclature with taxonomy. Let us consider each of these in turn. The authors are shocked that because the standard 30-column punched card is being used . . . “the method appears to be dictating the subject-matter, rather than the other way round”. They are apparently insensitive to the fact that their own bibliographic researches on the basis of a legal Code could be — and indeed are being — criticised in very similar terms by the ordinary botanist who has to use plant names. The Code, after all, aims at stability of nomenclature, and in the eyes of most botanists, must be judged by its success or failure in this respect. The “subject-matter” of Botany consists of plants, to which names are given for convenient reference. The activities of professional nomenclaturists look suspiciously like “the method dictating the subject-matter”. We must accept that if a convenient mechanization using a standard card will achieve a 95% satisfactory system of data-processing, we should be prepared to “cut our coat according to the cloth”. In any case the criticism of inadequate bibliographic citation is surely met by the existence of the set of “bibliography cards” which carry the full information in typewritten form, and only the publication code number punched. (A specimen sheet of the projected Bibliography is included in “Family Names”.)

The present “system” of data-processing for taxonomy is really so archaic and in parts so chaotic that even an imperfect system could quickly effect a revolutionary
improvement. Of course careful planning of the new system is needed, and the Gould Index can and should be criticised freely by all botanists (not only those professionally involved in nomenclature) who are concerned about the inadequacy of existing data-processing. Such criticism has been invited from several hundred botanical taxonomists to whom this "pilot volume" was sent. The criticism would be made, one might hope, against the background of the existing methods of data-processing, not against some ideal standard game which it pleases the "high priests" of nomenclature to play.

The second charge against Gould is that his system "ignores internationally accepted nomenclatural practices". There seems to be some substance in this charge; and indeed, it is clear from the Introduction to "Family Names of the Plant Kingdom" that Gould is unwilling to accept some of these practices, (for example, that of establishing exact date of publication instead of accepting a title-page date). Of course, Gould is not alone in chafing at the limitations of nomenclatural case-law and code; his sin, perhaps, lies more in the apparent levity and inconsistency with which he treats the nomenclatural game than in his advocacy of change.

The final charge is, to my mind, the only serious one of the three: namely that the Index "confuses nomenclature with taxonomy". The authors rightly stress that Gould's system of assigning numbers to "operative" names (prefixed by V) and not to "inoperative" ones (S) presupposes a taxonomic decision. They say that such a procedure is at best inaccurate and at worst wholly misleading; that it causes confusion even at the level of family names; and that to carry this to the level of genus and eventually species would be impossible. Gould's defence is that the assigning of a name to the category "V" ("operative") is a temporary device; if "the experts" wish to change this by agreement, they can do so and the cards can be re-made. In this Gould is too naïve; he does not realize — or perhaps prefers not to think — how fluid or debated taxonomic judgments are in practice, and in preparing the Index his choice of "operative" names is obviously determined by the literature conveniently available to him. Yet two things should be said in support of the "operative" name convention. Firstly the system of relating "synonyms" (S) to the operative name by a single number means that all the names to be considered can be readily supplied to any worker who needs them; and secondly (as in List 6A in the "Family Names") a straight-forward alphabetical listing of names without taxonomic judgment can be supplied without difficulty from the cards. Neither of these points is mentioned by the authors criticising Gould.

A good deal of space in the review is taken up with detailed examples of inaccuracies in Gould's work which range from abstruse questions of citation to incorrect choice of "operative" names. There are certainly a good many errors, and it is obvious that the first volume has suffered from the fact that expert taxonomic and nomenclatural advice was not available during the detailed compilation. In any future expansion of the scheme, an essential condition would seem to be that such expert help was made available. At this stage, however, what is needed is an unbiased assessment of the potentialities of the method for taxonomy. What these critics have provided is a partisan attack. It is to be hoped that other voices may be heard, particularly from those who are concerned with taxonomy only as users and not as producers. The Plant Index is really intended to improve communication for biologists as a whole, and should be judged in this light.

I am grateful to Mr. J. S. L. Gilmour, Dr. V. H. Heywood and Dr. F. H. Perring for reading a draft of this paper, and expressing their general agreement with it. The responsibility for the final form is, however, mine alone.