

INDEXING THE COMPILED CODE

[To Mr. J. Van der Zee, an experienced indexer, the important and difficult task of preparing an adequate index to the *Compiled Code* was intrusted by the Iowa code commission. A brief statement of his work for the commission is included in *A Review of the Work of the Iowa Code Commission* which appears in this number of the IOWA JOURNAL OF HISTORY AND POLITICS. In the following pages he gives a fuller account of the *Indexing of the Compiled Code*. — Editor.]

There can be no doubt, indeed it is almost axiomatic, that a law book of any kind is only as good as its index, because the users of such a volume obtain their information mostly through the index; and if the law which they seek is indexed insufficiently or improperly or not indexed at all, it is practically lost to them and they condemn the book. The law in a code, therefore, is of much less value if it is not readily accessible; and if the usefulness of the whole code depends on that, the greatest care and the utmost consideration may well be devoted to the compilation of an index.

Simply stated, every indexer's goal should be the saving of the time and energy of people who come to consult his product. If no part of a book is to be thumbed and examined more than the index, the question always uppermost in the compiler's consciousness should be how he can best serve the purpose and convenience of readers. If an Iowa code index is to help the people of the State frequently during the period of its existence, it must be a time-saver, for time is money — the more quickly it can send consultants to the law they seek, the better it will conserve the patience, temper, and time of the people who are to be served. The main body of a law book may be the worst kind of jumble and be thrown into the utmost confusion but

if its index is properly prepared, the volume with all its imperfections will still be quite useful.

Convinced of the importance of having a good index for their compilation of the statute law of Iowa, the code commission at once took up correspondence with various law book publishers, asking not only for criticisms of existing Iowa code indexes but also for the suggestions and advice of experts as to a new one. Upon being told, among other things, that the ideal indexer is not easy to find because his work calls for "ox-like patience and, when well done, makes a heavy drain on the nerves," after inquiry and consideration of the necessary qualifications of an indexer, the commission employed the writer of this article. Immediately after his appointment, the indexer made a study of the indexes of important law publications and particularly those in the more recent Iowa code volumes because the knowledge of defects detected there was expected to be invaluable in the preparation of a superior index for the future. The following criticism, therefore, is intended to bring out the main principles on which the index to the *Compiled Code* was constructed.

The faults of the code indexes issued in Iowa during the past twenty-five years ought not to be perpetuated. In regard to the out-of-date index to the *Code of 1897*, the searcher for information is justified in saying that it was always most unsatisfactory because it was compiled to suit the convenience of the maker: he lightened his own task as much as possible and in so doing failed to enlighten those whom an index is supposed to aid. Under each index word or head, for instance, references to sections are presented in sequential order, that is, the same order as the sections and the pages of the code to which they refer. Such an index throws upon the user the burden of finding and grouping all references to related matters, and the effect of such

an arrangement is that the searcher must be prepared to read every reference under the index head which he consults in order to find the desired information. This would not be a serious fault if only a few references were placed under each index head, but where as frequently happens (as under "Cities" and "Taxation") the list of references is stretched out at great length, the user might just as well try to find a grain of wheat in a pile of chaff. The method of indexing followed in 1897 is now regarded as archaic and has been generally abandoned because it does not assemble related subject-matter. Indeed, the index of 1897 is nothing more than a sort of appendage to the code, included merely because it was customary to have an index and not because it was a key to the law.

A glance at the content of index lines in the *Code of 1897* reveals the greatest variety of wording. References most frequently begin with prepositions — a practice no longer regarded as either necessary or proper. Other lines end with prepositions and carry the reader back to the index head above, an arrangement which at least enables the user to make sense out of what he reads. The repeated use of prepositions at the end of lines in such a way, however, is monotonous, superfluous, and quite unnecessary to the attainment of simplicity and intelligibility of statement.

The index of 1897 contains numerous cross-references, both when they follow immediately after the index head and cite the reader to some other place and also when they appear in the list of references under an index head. It is hard to see how the copious employment of cross-references in any index can be dispensed with. In the first place, the consultant who wishes to find a point of law may look under any one of two or more index heads for his information. If he does not find it under the head to which he turns, he is told exactly by a cross-reference where to go and that

should be to the more familiar legal head. Obviously the same material need not be indexed under different index heads of the same meaning, or the index would be swelled to twice or three times its normal size. Compelling the searcher to look elsewhere in the index under not more than one other head is not unjustifiable, but to make him turn to two or more index heads with the expectation of obtaining desired information under each is just as provoking as it is indefensible. Again, if the practitioner wants the code sections which deal with security for costs and naturally consults "Costs", he is well directed by one of many references to see "Security for Costs" where related provisions are indexed. The important thing is that related propositions be bunched somewhere in the index, and cross-references may properly guide the consultant to that place. The index of 1897 does not always meet this test. For instance, under "Animals" several references are grouped beneath the subheads "Estrays" and "Dogs", but upon turning to the main index heads "Estrays" and "Dogs" we find the same references repeated and some others in addition. It is difficult to see the need of duplicating or repeating index contents in that way. It would have been sufficient and appropriate to give a section reference after the index head "Estrays" and also a cross-reference to "Animals". This criticism, however, is not a serious one and wholly beside the point if no limits are set to the length of the index. It is better that an indexer err on the side of profusion than on the side of meagerness or insufficiency: a law book is rarely criticised on the ground that its index is too complete.

Every section of the *Code of 1897* has been referred to in the index, but the index entries almost without exception state the conclusions of the sections indexed—in other words, the index is more in the nature of a prolonged table of contents. The index entries are usually long because

they are attempts at brief summaries of the propositions of law contained in the code. Index lines should be concise and need not state conclusions: it is enough if they direct one to the sections of the book where the propositions are discussed.

An examination of the index of 1897 also reveals that the analysis or general scheme of stating references under many heads is often too intricate with too many sub-divisions. Except perhaps in rare instances, a good readable index should have no more than one indentation. To avoid too much sub-division in the analysis of code matter under a single head the index might have been supplied with more numerous heads, each with as little matter under it as possible. This idea is to some extent well illustrated in many parts of the index: it contains twenty different heads beginning with the word "School", instead of placing the same material under the single head "Schools". All law that relates to cities and towns might be classified under that head, but the matter is distributed under very many heads, thus effecting greater simplification and convenience than the index prepared in 1915.

The foregoing criticism applies to the indexes of the code supplements of 1902 and 1907, which were based on the old index of 1897 for the reason that so many users had become more or less acquainted with it and innovation was not deemed advisable. The index of 472 pages issued in 1915 to cover the *Code of 1897* and its supplements represents an important departure from its Iowa predecessors: the compiler adhered closely to the general plan of the Minnesota code index. The index heads are printed in black face capitals and references are to section numbers only. Best of all, references appear in alphabetical order, the indexer having attempted generally to bring the most pertinent or suggestive word in the idea sought to be conveyed to the

beginning of each index line. Subordination of such lines to the index head is clearly indicated by a slight indentation, and the essential words are nearly always nouns, although this rule is frequently violated by making prepositions or adjectives the initial words of index lines. The searcher who comes upon such an arrangement without a definite idea of what he wants too often will not stop long enough to analyze the idea he seeks, and so he rapidly runs down the column of alphabetical references in the hope that his eyes may light on the matter sought. It is, nevertheless, the opinion of the writer that the index of 1915 is more satisfactory than the earlier ones.

The worst and most exasperating fault of the index of 1915 is the frequent resort, under index heads which cover the larger topics such as "Cities and Towns", first to an alphabetical arrangement of the lines, then below them to the insertion of bold-face sub-heads in alphabetical order, and under these again subordinate divisions indicated by small cap heads: this arrangement sprawled over sixty-three pages mystifies the searcher. Where division and sub-division are necessary, the same result could have been more effectively secured by means of simply one alphabetization with indentations, such as the indexer followed under "Supreme Court". The larger topical heads, moreover, such as "Schools", might also have been broken up and the references placed under many suitable heads as was done in earlier indexes. Another fault which makes a heavy tax on one's patience is that many index heads only partially cover the material desired and then by means of cross-references send the user to several other places. Turning, for instance, to "Stock" one obtains only three references, but cross-references tell the user to see several other index heads. To consult all these for information about "Stock" takes time and may be useless in the end. Cross-references

in such profusion are hard to justify. They can easily be put in their alphabetical places among the references under the index head either with citations or with directions to specific index heads and sub-heads.

Having discovered the main defects of the indexes which have recently served the people of Iowa as keys to their store-house of law, the indexer of the *Compiled Code* also studied similar work done for other States. In the desire to accomplish a satisfactory piece of work, he gave some thought to the possible utilization of the American Digest Classification Scheme, but concluded that the contents of the ordinary code of statute law differ so materially from the contents of a volume of court decisions, particularly in the fact that the former is predominantly administrative law and the latter almost wholly concerned with individual rights of person and property, that there is consequently a wide variance between the two lists of heads or titles suitable for indexing the matters usually contained in two such volumes of law.

This criticism may be offered of any code index compiled along the lines of the American Digest Classification Scheme: the user of the index would necessarily have to keep the explanation of the scheme itself before him or at least have it well enough in mind to be sure what he would find included or excluded under a particular head. That would be asking too much of thousands of users of the code who are not practitioners of law, and it may be questioned whether it is not even asking too much of the lawyer. Any index constructed upon such principles must lack readiness of reference unless the user is thoroughly acquainted with these principles. It is submitted that familiarity with the American Digest Classification Scheme can only be gained by considerable study, and it is doubtful whether many busy lawyers will go that far and, if they do, whether the

effects of the study will remain with them long enough to be of real practical value. The American Digest Classification Scheme is cumbersome and complicated, although it can be mastered by persons who are permanently engaged in indexing and is probably of the greatest service to them in overcoming the difficulties which they frequently encounter; but if their index is to be really serviceable to the user he must know as much as they: he can know how to use it only by knowing how they made it.

The real problems involved in the making of an index became apparent only after the actual work of indexing the *Compiled Code* commenced. The indexer was not slow in reaching the conclusion that "the tedious and sublunary task" of grasping and holding the eel of legal science is more than ordinarily difficult. The General Assembly had given the commission only one direction in regard to the compilation of an index: the principal words in each section of the code should be indexed alphabetically by giving "the number of section, chapter or title as best adapted to find a section sought without again referring to the index." The policy followed with regard to the profuse employment of cross-references in the index of 1915, the "snake-chasing-its-tail" or "ring-'round-a-rosey" index, was doubtless aimed at in this provision.

The *Compiled Code* index of 293 pages — nearly two hundred pages shorter than that of 1915 — is believed to give effect to the reasonable intent of the General Assembly. Law which may be looked for under different heads in the index can be found in different places without extensive duplication of index contents. For instance, under "Agricultural College" is a detailed index of the law on the subject, but if the user should turn to "College of Agriculture and Mechanic Arts", he will not find the same index repeated but only a reference to the section numbers of the

general chapter of the code applicable, followed in parenthesis by the words "For a more detailed index see 'Agricultural College' ". By this device the reader is always given a reference to the law and sent on his way with some feeling of satisfaction. A single subject in the law can thus be indexed completely under one head while it may appear under synonymous heads without necessitating undue duplication. If this rule had not been followed, the result might have been an index almost as voluminous as the law itself. Whatever the legislature may have had in mind, the entire elimination of cross-references from an index is not reasonably possible unless the expense of paper and the excessive length of the index are not taken into consideration at all. Nevertheless, the indexer did not by any means exhaust the possibility of using synonyms: for instance, where the index gives only the words of the law, such as "Sabbath" or "Illegitimate Children", it might have included also the more familiar heads "Sunday" and "Bastardy".

For general purposes Iowa code law naturally falls into three main divisions: administrative law, which covers State and local government; substantive law, which provides rules for the every-day conduct of individuals and corporations; and procedural law, which deals with court procedure in civil and criminal actions. When one views the law as a whole in this way, it is clear that the bulk of it directly concerns thousands of public officials, while the remainder affects the life of perhaps two thousand lawyers, large commercial and professional classes, and the people generally. In other words, the code will be consulted by an army of State, county, district, city and town, township, and school officials, by comparatively fewer practitioners, and by a very considerable number of laymen engaged in business, trade, or the professions. Bearing this fact in mind, the indexer should group related matters in the index

so as to make all the law on any topic readily accessible not only to lawyers but to other classes of the population as well. In the construction of an index he should, therefore, always remember the needs of the particular people affected by the law, and to serve them he should aim at three primary requirements: simplification of arrangement, readiness of reference, and completeness of detail. Does the new index meet such a standard?

Simplification of arrangement is not so easy to achieve as it might seem at first thought. Public officials will look for specific titles. State officers' titles and the titles of State boards, commissions, and departments are not grouped in one part of the index, each preceded by the adjective "State", but are scattered throughout the index, each head beginning with the suggestive or key word of the title so that we find such index headings as "Secretary of State"; "Mine Inspectors, State"; "Railroad Commissioners, Board of"; "State Institutions, Board of Control of"; "Insurance Department, State"; and "Animal Health, Commission of". Particular State institutions, moreover, appear under such index heads as "Feeble-minded, Institution for"; "Insane, State Hospitals for"; "University, State"; "Teachers' College, State"; and "Penitentiary and Men's Reformatory". In cases where the user might look under another head, the index is prepared to help, as under the heads "Reform Schools"; "Hospitals, State"; and "Educational Institutions"; in which event references and cross-references assist the user on his way. Index heads on these institutions could have been further simplified if the locality had been added in parenthesis or as was done under the head, "Hospital for Indigents at Iowa City".

County institutions have been conveniently arranged under "Counties" or separately as "County High

Schools", "County Hospitals", and so on. County officers are all given as main index heads immediately after "Counties": this arrangement is believed to be better than distributing their titles throughout the index, although, if the user should turn to "Sheriff", he will find one reference to the chapter of law applicable and a cross-reference to a more detailed index under "County Sheriff". The adjective "county" has been chosen as the key word for index purposes, just as "district", "city", "school", and "township" were employed in order to group institutions and officers administering the affairs of all such local areas. Local officers in each particular case are better served by finding each other associated in the index the same as in the actual work of administration. The result of this arrangement is that all law relating to each unit of local government has been given one place in the index with the reference material distributed under all possible and necessary main index heads. Thus, instead of putting all references to the school law under the sole head "Schools", as was done in the index of 1915, the law is now referred to under nineteen separate heads such as "School Bonds", "School Buildings and Grounds", "School Directors", "School Districts", "School Elections", and so on. In like manner, where the index of 1915 devoted sixty-three pages to "Cities and Towns" and "Cities under Special Charters" by including all officers and institutions under those two heads, the new index breaks up the contents of the municipal code and groups only twenty-one pages of references under more than fifty heads — a simplification which, it is believed, will appeal to municipal officers who have hitherto been at a loss to locate the law. City park commissioners, however, will be surprised that the index apparently treats them so slightingly: owing to the printer's carelessness in making up the column, most of the index on their

powers and duties has been separated and misplaced immediately above the index head.

In the arrangement of the index for public officials, a vast body of law which is applicable in general terms to all officers or certain large groups has been indexed under general heads, so that the references there have not been inserted under the titles of specific officers or institutions. It is hard to see how this arrangement could have been avoided without entailing an incalculable amount of labor. Accordingly, particular public officials are placed under the necessity of consulting also such general heads as "Judges"; "Office, Public"; "Officers, Public"; "Reports of State Officers"; "State Boards, Commissions, and Departments"; "State Officers"; "State Institutions"; "State Funds"; "District Officers"; "County Officers"; "City Officers"; "Township Officers"; and "School Officers". Other subjects of interest to them are "Oaths", "Bonds", "Accounts of Officers", "Vacancies in Office", "Removal from Office", and "Warrants". It is clear that if, whenever the law treats of generic matters, the indexer should undertake to distribute each reference among index heads covering specific matters, he would be engaged on the endless and somewhat dangerous task of reaching and stating conclusions of law that may in the end mislead the reader. A public official, therefore, who needs to consult the index for something must ask himself first whether he seeks the generic or the specific — the arrangement of the new index is unfortunately not so simple as to obviate the need of certain mental processes on the part of users.

Simplification of arrangement has been sought not only in the determination and statement of the main index heads, but also in other respects. The index references are concise, usually only one line long because the indexer has not attempted to state conclusions of law; and the lines, ar-

ranged in alphabetical order, begin with the most important or suggestive words of points of law to which the reader wishes to refer. The difficulty about the latter arrangement is no doubt that the user, in order to locate a reference quickly, must try to choose in his mind the same word that the indexer used, but it is the best arrangement thus far discovered in index-making. Those index lines, moreover, which describe matters to which the code makes several references have been raised to the dignity of subheads and stand out in black-face type to catch the reader's eye — a device employed with good effect in the index to the *Code of 1897*. In a few places where these subhead topics have been further subdivided under sub-subheads, the arrangement tends to become complicated and the effect is confusing unless the user keeps his wits about him. Especially noticeable is the frequency of division and sub-division under such large titles as "Civil Practice and Procedure" and "Criminal Procedure", and it will require some study by the lawyer or judge to discover to what length the indexer has gone in his analysis of those branches of the law which most concern them. Knowing and remembering what the indexer has done in such and other cases the user ought to encounter no more difficulty in finding his point than if the subheads under such a large title had been scattered all through the index as main heads. It is impossible to avoid the conclusion that certain classes of users like lawyers and judges, who consult the index frequently, if they would understand it, must devote some time to its study (just as they would to any other source of information) and remember how it is put together — that is not asking too much although it is an honor not usually accorded to the humble index by the busy man. What is true of learning in general can be said of indexes to volumes of law in particular: there is no royal road to their contents.

At the commencement of his work the compiler of an index of law may as well take for granted that most users of indexes wish to find immediately what they want or else a stormy time is promised. Has the law been rendered readily accessible to them in the new index? This raises the point whether a code index should be merely a list of legal words or phrases, alphabetically arranged like a dictionary, with all necessary references under each. In other words, should a code index consist of a long series of short indexes each of which is headed by some word familiar to the student of law? Or is it not preferable to arrange words which relate to the same general subject under such large heads as "Contracts"; "Criminal Law"; "Civil Practice and Procedure"; "Criminal Procedure"; "Damages"; "Corporations"; "Property, Real"; "Sales"; "Negotiable Instruments"; and the like? The new index was constructed more on the latter principle, and many will hold, therefore, that the plan does not conform to one primary requirement for a good index: readiness of reference. For example, if the lawyer wants the law on "tender" and looks under "Tender", he will be disappointed; but if he turns to "Contracts", he discovers a subhead "Tender". Again, if the judge seeks the law on "instructions" or "verdicts", he will not find these as main index heads, but the former under subhead "Trials" of either "Civil Practice and Procedure" or "Criminal Procedure"; and the latter as a special subhead of the same two heads.

If all the index references under large heads had been repeated and duplicated under scores of other heads scattered everywhere, as in the index of 1915, the arrangement of the index would have been greatly simplified for those who are ignorant of its present plan of construction. But the compiler of the new index worked on the theory (perhaps mistakenly) that all matters of procedural law had

better be bunched under two headings and arranged chronologically in the same order as the steps taken in every cause of action, and that statutory rules of substantive law should also be indexed under large headings. If this kind of index treatment has resulted in some difficulty to lawyers and judges, their training and knowledge of the law must be relied upon to guide them through what they will at first regard a wilderness; nor should they forget that different subjects of the law in their various ramifications necessarily overlap each other and must, therefore, be looked for under several different index heads.

A short preface to the index, explaining clearly its plan of construction as described above, would not have been out of place: on the contrary, such an explanation would serve as a guide to the method of using the index. The omission of such a general key, however, has been partially atoned for by the insertion of parenthetical notes immediately below index heads which deal with a score of subjects in the code. Thus, a series of explanatory notes under "Cities and Towns" tells the reader what that head covers; and another note under "Criminal Law" shows how to use the index there by stating that on account of the difficulty of naming statutory offenses, numerous penal provisions of the code must be found under the names of classes of persons concerned or under the names of things the laws relating to which have been violated.

If the new index meets the requirement of completeness of detail, the compiler must have made the closest analysis of each section of the code by saving every essential idea conveyed. Public officials, State and local, have been particularly kept in mind and specific index references are given to all their powers and duties. Where a section of the new compilation incorporates another section by mere reference, the index gives the number of the former followed

by the second in parenthesis. This is done especially in the index on cities under special charters, thus saving the user a considerable amount of time. Paragraphs of long sections are also indicated whenever they bear numbers or letters. Had the State Constitution also been included in the *Compiled Code*, the index to the State's whole "written law" would have been more complete than it is. Extensive use of the index, however, alone can tell whether it is as full as it should be and whether, as the code commission believes in its letter of transmittal to the Governor and the General Assembly, "the simplified and shortened index will be satisfactory" to the thousands whom it is intended to serve. If the *Compiled Code* is adopted as the official code of the State in 1921, the index may have a considerable time to live, but if as contemplated a new permanent code takes its place in 1921, its usefulness will be very much cut short. Even though one can not guarantee perfection in the new index, which was intended as a temporary expedient, the principles on which it was constructed and specific criticisms of its content and structure can be utilized in the preparation of a better index when the time comes; and it is hoped that all errors and omissions may be reported to the author.

In conclusion, to those who wish to know something of the mechanics of index-making, it may be of interest to indicate briefly the various steps pursued. Commencing after the middle of May, when copy of the new compilation began to come from the hands of the code commissioners, and continuing until the second week of October the indexer was busy writing references to the subject-matter of code sections, one reference to a card. These references in long-hand were then transferred by typewriter to other cards, and as fast as code titles were finished the cards were arranged in alphabetical order and each title index was then

typewritten and sent out, one copy to each commissioner. Two assistants were depended upon to handle the cards after they left the hands of the indexer. Nearly 50,000 cards were consumed in the work.

After the entire code had been subjected to such a process, four weeks were devoted to revising and editing the cards so that the completed index could be put into the best possible shape for transcribing on large sheets of paper. On November 4th the card index was boxed up and shipped to Des Moines; and after the indexer himself had gone over the whole index once more, rearranging and adding materials and otherwise improving in order to obviate the necessity of making alterations in the printer's galley proof, a force of stenographers and proofreaders worked a week to prepare final copy for the printer. With the aid of a copyholder the indexer then spent one week at the Homestead Printing Company's plant reading galley and page proofs, completing the work on November 21st.

The index of 293 pages represents, therefore, a little more than six months of toil. Owing to the fact that the *Compiled Code* was required by law to be ready for distribution on December 1st, the indexer was under constant pressure to speed up with the result that there was no opportunity to subject the section numbers of the printed index to a thorough verification before they finally went to press. When the user of the index realizes that the references to code sections had passed through the hands, eyes, ears, and mouths of over a dozen different people before printing and from six to eight weeks could have been used simply to effect a final verification, he need not be surprised if some errors have crept into the finished product.

It will be well for any critic of the *Compiled Code* and its index to remember that most shortcomings are due to the brief time allowed for the work. If there is one thing more

than another that should be realized in connection with such services as have just been performed for the State, it is this: allowing only six or eight months for a task of such magnitude has the effect of hurrying those whose chief assets ought to be plodding patience and careful analysis of everything that passes through their hands: in the very nature of the case the mill can not well be adjusted to grind quickly a grist that has always been supposed to be exceedingly fine.

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