

of knowledge is divided into nine chief classes numbered by the digits from 1 to 9. A tenth class for matter too general in nature to fall in any one of the other nine is numbered 0. The following are the primary classes:

0 General works.	5 Natural sciences.
1 Philosophy.	6 Useful arts.
2 Religion.	7 Fine arts.
3 Sociology.	8 Literature.
4 Philology.	9 History.

Each of these classes is again divided into nine divisions with a tenth for general matter, and each division is separated into nine sections. The sections are again subdivided, and the process may be carried as far as is desired. To show clearly the workings of the system, the divisions of Class 6 (useful arts) and the sections of Division 2 of this class (engineering) are given below:

600 Useful arts.	620 Engineering.
510 Medicine.	621 Mechanical.
620 Engineering.	622 Mining.
630 Agriculture.	623 Military.
640 Domestic science.	624 Bridge and roof.
650 Communication and commerce.	625 Road and railway.
660 Chemical technology.	626 Canal.
670 Manufactures	627 River and harbor.
680 Mechanic trades.	628 Sanitary.
690 Building.	629 Other branches.

It will be seen that the first digit gives the class; the second, the division; and the third, the section. Thus, 625 indicates Section 5 (road and railway engineering) of Division 2 (engineering) of Class 6 (useful arts). Further subdivision is indicated by the digits following the decimal point, which is placed as a matter of convenience after the section digit. For instance, 625.7 indicates highway engineering; 625.75, highway construction equipment; 625.753, highway consolidating machinery; 625.753.2, road rollers; 625.753.23, steam road rollers, and finally, 625.753.231, steam road rollers for macadam.

Following the classification list herein is the relative index, in which the terms of the classification are arranged alphabetically, each with its proper number. This index is manifestly incomplete, as it is impossible to include in it every subject that might come up in engineering practice. The skeleton is there, however, and the user may extend it further if he finds it advisable.

There are certain modifications in the use of the Dewey system. To avoid the writing of long numbers, a single letter may be used for the first three or four digits. Thus "H" might be used by a highway engineer in place of 625, "W" by a waterworks man in place of 628.1, and so forth.

Another modification consists in the use of an alphabetical arrangement for certain subsections where it is convenient, while retaining the decimal arrangement for the main divisions. For instance, under 625.821 (stone for macadam highways) the various varieties might be arranged alphabetically if desired. This is most useful where there are a large number of such minute divisions.

The use of "form divisions" is another useful modification. There are certain set forms, given on page 631, which are used throughout the range of the Dewey system. They may be still further extended thus:

- o64 Exhibits (under societies)
- o72 Laboratories (under universities)

They are usually enclosed in parentheses and annexed to the usual class number. Thus 62(o7) indicates engineering education and 628.184(o08) refers to patents regard-

ing water sterilization and disinfection. If an engineer were particularly interested in patents, for example, he could reverse the usual manner of writing the class number and write it thus, (o08)628.184, so that all the cards referring to patents would come together in his index.

Fig. 1 shows a set of cards for indexing a book or pamphlet and comprises both author and subject cards. These would be arranged alphabetically in the card drawers. To distinguish two cards having the same number, it is customary to write under the class number the initial or first two or three letters of the author's or publisher's name, though there are elaborate numerical lists published for this purpose.

625.892.212*

Gutter Construction for Streets and Road. T. Hugh Boorman. (Granite curbing and vitrified brick gutter.)

Canadian Engineer. Sept. 14, 1914. XXVII. 473.

625.892.22*

Gutter Construction for Streets and Roads. T. Hugh Boorman. (Standard type of combined concrete curb and gutter.)

Canadian Engineer. Sept. 14, 1914. XXVII. 473.

625.95*

Gutter Construction for Streets and Roads. T. Hugh Boorman. (Preparation of curb and gutter construction materials: concrete, asphalt, brick, wood or stone.)

Canadian Engineer. Sept. 14, 1914. XXVII. 473.

Fig. 2.

For references to articles in the engineering press, the writer uses the form shown in Fig. 2. These cards are arranged numerically in the drawers, and it is necessary to find the class number of subject under investigation before referring to them. This class number may be found in the relative index. The asterisk after the class number indicates that the article in question is in the writer's clipping file.

Three years' experience with the system outlined has convinced the writer that it is as near perfection as it is possible to get. It requires some intelligent attention to keep it in shape, but that is true of any system. It is hoped that the lists herein will be of value to city engineers, superintendents of waterworks, streets and sewers and others in municipal engineering work.