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# MINUTES OF PROCEEDINGS

OF

# THE INSTITUTION

OF

# CIVIL ENGINEERS.

## SUBJECT INDEX:

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# PREFACE.



This Subject-matter Index deals with the whole of the publications of the Institution down to the end of the session 1878–79, and includes, besides the fifty-eight 8vo. volumes of Minutes of Proceedings, three 4to. volumes of Transactions printed in the early days of the society, or in all the contents of sixty-one volumes. It differs materially from the two General Indexes to the Minutes of Proceedings issued in 1865 and in 1871, which referred respectively to volumes I. to XX. and volumes XXI. to XXX. of that series, inasmuch as in those indexes the names of the Authors of Papers and of those who took part in the discussions formed principal entries, and were embraced in one alphabet with the subjects. This is purely a Subject Index, the names of authors and of speakers being treated as subordinate. It is essentially analytical, and the alphabetical arrangement has been combined with a certain amount of classification, thereby affording facility for consultation, by which it is hoped any given subject of inquiry may be reached with the least expenditure of time and trouble. The principle will be understood from a few examples. General references and historical notices are first disposed of, and then particular branches of the subject are taken up. Each large subject is subdivided under leading headings, in each of which the title of the main subject is repeated. In this way, extensive subdivision has been practised,

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where needful, whilst the main subject is, by repetition, kept steadily before the eye. "Artillery," for instance, carries thirteen subheads, and it will only be necessary to glance over the several subheads, for each of which the word Artillery is repeated, to discover immediately the section in which the subject of search is to be found. "Breakwaters" may also be quoted, and in this case, as well as in others, after the general entries, there is an alphabet of places referring to special works. For "Bridges" there are twenty-nine entries, in which every kind or class of bridge, or individual bridge, described in the Proceedings, is plainly distinguished. "Permanent way" and "Railways" have been similarly treated, and occupy sixteen and thirty-two pages respectively. Where it appeared necessary, the entries have been repeated under different headings, but where there were numerous entries which might have been placed under the same heading, the use of cross-references has been freely adopted, so as to comprehend as far as possible every matter of engineering interest that has arisen either in the Papers or in the discussions during the period of forty-two years.

In respect to the type employed, it will be noticed that headings are printed in capitals, and the word referred to in cross-references in italics.

THE INSTITUTION OF CIVIL ENGINEERS,
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*October* 1, 1881.

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AND

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