ometric participation therein." It is pointed out in the book that a catalyst sometimes undergoes a physical change in the course of its action, the instance given being that of manganese dioxide which passes from a crystalline to an amorphous condition when used in the preparation of oxygen from potassium chlorate, but in this case the material is strongly heated, and this may be the cause as much as any specific action as a catalyst.

Many of the common industries are now dependent on catalytic methods for proper and economic operation, and the more important of these are described in concise and convenient form. The general style, printing and arrangement of the book are commendable.

HENRY LEFFMANN.

DICTIONARY OF EXPLOSIVES. By Arthur Marshall, A.C.G.I., F.I.C., F.C.S., Chemical Inspector, India Ordnance Department., 8vo. xiv-159 pages. Philadelphia, P. Blakiston's Son & Co. \$3.75, net.

The extensive experience of the author of this book and his success in presenting the literature of it in highly satisfactory form, prevents any doubt as to the value of the present compilation. It presents brief statements of the composition of the several hundred explosives that are now known, enumerated alphabetically by their trade names and also classified according to their uses. The classes are: coalmine, blasting, high, miscellaneous and propelling. The resources of language have been strongly drawn on for the many names that have been coined to indicate the changes that have been rung on the comparatively few mixtures and compounds that are available for use as explosives. The reviewer has been a little puzzled by an allusion to an explosive termed "imperialite," the name being derived from that of the Marquis Imperiali, who used his private means in experimenting on explosives. He started a factory for the manufacture of some, and on the first day of its operation an explosion killed five workers. He rebuilt the factory and the day after it was re-started it blew up again, and the marquis was killed. The puzzling item in the account is that Marshall states that its history is that of the explosive that we meet "in the comic papers." There must be a joke here, but the reviewer is not "on to it."

The book contains a large amount of information, and will be of much use to chemists who cannot afford the more expensive works on the subject. The reviewer is moved to ask why there is no recent authoritative and comprehensive work on explosives emanating wholly from American sources, especially from the experts of the great du Pont works.

HENRY LEFFMANN.

NOTES ON CHEMICAL RESEARCH: AN ACCOUNT OF CERTAIN CONDITIONS WHICH APPLY TO ORIGINAL INVESTIGATION. By W. P. Dreaper, O.B.E., F.I.C. Second edition, small 8vo, xv-195 pages, no index. Philadelphia, P. Blakiston's Son & Co. \$2.50, net.

As the author said in the preface to the first edition, modern science is based on the record of past investigation. He might have added that a feeling of gratitude should actuate all who practice a profession or a science which will induce each one to labor as far as in him lies to increase the stock of