to the cathartic action of bile salts. The probable causes of this phenomenon and its dependency on daily application are discussed.

6. The results of a single assay, using a 1:15 dilution of fluidextract of senna, indicate that its cathartic effect remains practically unchanged following daily administration of bile salts to mice.

7. Approximately four hours are required to develop maximum cathartic action of bile salts in mice.

8. Bile salts induce catharsis more rapidly than senna under the conditions described.

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Book Reviews

Anhydrous Aluminum Chloride in Organic Chemistry, by CHARLES ALLEN THOMAS in collaboration with MARY BALUK MOSHIER, HERBERT E. MORRIS and R. W. MOSHIER. xiii + 972 pages. 6 x 9 in. 1941. American Chemical Society Monograph No. 87. New York: Reinhold Publishing Corporation. $15.00.

The spectacular achievements in the field of synthetic organic chemistry, exemplified especially by the syntheses of vitamins, hormones, chemotherapeutic agents and rubber substitutes are known to everyone. Less spectacular, and consequently not so well known or appreciated, are the discoveries in the purely academic phases of chemistry; however, without these developments, products such as those which have been mentioned never could have been synthesized.

The applications of aluminum chloride in organic chemistry were initiated and studied quite extensively by the two collaborators, the Frenchman, Friedel, and the American, Crafts, purely as an academic project. Subsequent discoveries by hundreds of other investigators have increased the range of usefulness of aluminum chloride to an astonishing extent. The collection of the vast amount of data in this monograph, and its arrangement under pertinent chapter headings, have made information readily available; the laborious task, performed by the author and collaborators, is one which must be recognized with gratitude not only by the professional chemist, but also by the layman who benefits by the industrial exploitation of chemical syntheses.

This monograph deals not only with Friedel-Crafts syntheses but, as the title indicates, with all types of transformations of organic compounds in which aluminum chloride can play a role.

It is stated in the preface that "Every effort has been made to make it complete and to include all references of published material, both of a purely scientific and industrial nature, including the available patent literature;" these objectives have been realized to an admirable degree. Furthermore, the usefulness of the book has been increased greatly by the inclusion of numerous tabulations of reactions and reaction products and a patent and author index, in addition to the customary subject index.

In view of the obvious importance of the subject, and its excellent and exhaustive treatment, it seems hardly necessary to state that this monograph will be recognized as an indispensable book for every organic chemist.

The binding, printing and paper are of the same fine quality found in the other American Chemical Society Monographs.—F. F. BLICKE.