lication the morphology of the coffee flower will be treated in detail.

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ON THE REACTION OF ANTHOCYANINS WITH THE SULFITES

ANTHOCYANINS were extracted from the flowers of *Pelargonium zonale* and of various other plants by means of a hot 5 per cent. solution of citric acid.

The red-colored liquids were carefully treated with powdered sodium sulfite and sodium hydrosulfite ($Na_2S_2O_4$), respectively. On account of the reduction of anthocyanins the extracts became colorless. When afterwards some tincture of iodine was added in an adequate amount the original red color of anthocyanins reappeared unchanged as to its strength and shade.

A red pigment which was obtained by a reduction of flavonols by means of magnesium in the presence of hydrochloric acid did not become decolorized by the sulfites, and it turned orange-yellow if afterwards some iodine was added.

The flavonols, extracted from the yellow flowers of various plants, did not produce any red color after their treatment with sodium hydrosulfite, and with magnesium in the presence of organic acids, respectively. This latter decolorized the above extracts of anthocyanins in the absence of air more or less irreversibly.

The results of the above reactions corroborate the old hypothesis on the formation of anthocyanins by an oxidation of anthocyanogens, and, on the other hand, they indicate that the hypothesis, put by Willstätter, according to which anthocyanidins are formed in nature by a reduction of flavonols, does not seem to be fully justified.

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IODINE THERAPY FOR GOITER

APROPOS of Mr. Alexander's article in the March 6 issue of SCIENCE (pp. 230–231) with special reference to Dr. McCay's note on Boussingault, I may perhaps be permitted to point out that a decade ago I called attention, in this journal (SCIENCE, 63: 428, August 23, 1926) to that early investigator's remarks and there gave some references that may be of interest.

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SCIENTIFIC BOOKS

RECENT BOOKS ON ASTRONOMY FOR THE GENERAL READER

The Solar System and Its Origin. By HENRY NORRIS RUSSELL. 144 pages, 14 × 20 cm. The Macmillan Company, New York, 1935. Price, $2.00.

A DISTINGUISHED astronomer gives an account of the present state of our knowledge of the solar system. Within the modest covers of this book there is a wealth of information for the scientist and the general reader alike, presented in the author's characteristic informal, sparkling style. The first two chapters consider the properties of the system as they are known to-day, including the important conclusions from the researches of the past few years. The third chapter treats of the theories of its origin. Dr. Russell's conclusion that no one can yet say how our system originated in detail, leaves the reader with the thought, not of the necessary futility of such inquiries, but rather of the magnitude of the problem to be solved. And his guarded reference to something that may have happened two thousand million years ago, in which the earth's beginning was only a minor item, suggests that the problem is not being abandoned.

Stars and Telescopes. By JAMES STOKLEY. xiii + 319 pages, 15 × 22 cm. Harper and Brothers, New York, 1936. Price, $3.00.

THIS attractive book, by the associate director in charge of the Fels Planetarium, in Philadelphia, is an answer to the frequent queries of visitors to the planetarium for the name of a book on astronomy that is suited to the general reader. It presents in a simple but authoritative way, as Dr. Walter S. Adams remarks in the preface, much of the romantic history of astronomy and the striking developments which have resulted from the application of modern instruments and modern methods. One of the many pleasing features is the well-told story of the telescope itself, from its invention to the present day.

Astronomy. By JOHN CHARLES DUNCAN. Third edition. xvii + 448 pages, 15 × 22 cm. Harper and Brothers, New York, 1935. Price, $3.75.

THE appearance of the third edition of this familiar text book for beginning classes in colleges and universities, first published in 1926, bears witness to its continued success. The new edition contains extensive revisions, particularly in the later chapters which deal with sidereal and structural problems. The star maps, on a blue background as before, are more clearly reproduced. The author has accomplished very creditably his expressed aim to keep pace in the new edi-