1.4 mg of thiamin and 2.7 mg of riboflavin. These values refer to the food as purchased and should be reduced by probably 10 per cent. to reflect the values for food as consumed.

The list of foods, per adult per week, is as follows:

Bread	1 lb.	Sw. potatoes	1 lb.
Oatmeal	½ "	Potatoes	3 lbs.
Cornmeal	½ "	Cabbage	2 "
Sugar	1.2 lbs.	Lettuce	½ lb.
Milk	3½ qts.	Carrots	1 "
Cheese	¾ lb.	Beets	1 "
Butter	½ "	Canned corn	½ "
Eggs	7 (lg. Gr. A)	Oranges	2 lbs.
Lard	¼ lb.	Apples	1 lb.
Side bacon	¼ "	Bananas	1 "
Beef chuck roast	2½ lbs.	Dried prunes	½ "
Pink salmon	1 lb.	Canned peaches	½ "

Five stores were included in the 1939 survey, six in 1940, seven in 1941 and nine in 1942, 1943 and 1944. Three of the stores in the 1939 list and four in the subsequent lists are members of chains. A large co-operative store was included. All small stores were deliberately omitted as well as one or two stores which cater to luxury trade and are recognized as atypical in respect to distribution costs and retail prices.

In the case of canned goods the cheapest brands were priced. It is believed that the nutritive qualities were reasonably comparable. To obtain maximum economies in purchasing, quantity prices (up to 10 pounds) were used whenever feasible as the basis for the calculations (see Table 1).

The increases reported since 1939 are not to be considered as indicative of the extent to which the cost of living has increased. This is because cost-of-living indices include many items other than food, and also because liberal diets are low in cereal products (which have increased but little) and rich in fresh vegetables, fruits, fish, eggs, dairy products and meat (which have increased considerably). For example, there has been no increase in Palo Alto in the retail price of bread, cornmeal and oatmeal during the six-year period, but very substantial increases in fresh vegetables and meat.

TABLE 1
COST OF DIET

	1939	1940	1941	1942	1943	1944
Average cost at retail	2.28	2.28	2.96	3.59	4.72	4.26
Percentage increase over 1939	...	0	30	57	107	87

A substantial decrease in price is apparent since the 1943 survey. This is largely due to decreases in the retail price of fresh vegetables (down 23 to 67 per cent.), beef and bacon (down 12 and 28 per cent., respectively).

The point value of the diet has changed but little in the past year: 37 red and 10 blue in 1943; 35 red and 12 blue in 1944. This consideration is of relatively little importance since substitutions (fresh fish, poultry, rabbit, game, meats other than beef) capable of cutting substantially the red point value are quite possible from time to time.

The assistance of Barbara Davey, Charlotte Gibb, Betty Judson and Nancy Smith, in collection and compilation of the data, is gratefully acknowledged.

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SCIENTIFIC BOOKS

NORTH AMERICAN FOSSILS

Index Fossils of North America. By HERVEY W. SHIMER and ROBERT R. SHROCK. A Publication of the Technology Press, Massachusetts Institute of Technology. New York: John Wiley and Sons, Inc. $20.00.

EVER since "North American Index Fossils" went out of print, Shimer has been working on a revision, which now, with Shrock's enthusiastic cooperation, has come out as a new book. It is no mere compilation; its 837 pages and 303 plates are crammed with new information and illustrations. It is a library in itself. Many a course in invertebrate paleontology could be given with this book alone. With it in hand, the instructor will be saved endless time which would otherwise be employed in hunting out illustrations in separate publications.

Best of all, it is up to date, or as nearly so as is humanly possible in a printed work. Genera and species bear their correct names, vouched for by specialists. Seldom has there been such an example of perfect cooperation, an obvious tribute to the authors.

Full credit for assistance is given to all collaborators, even to the present writer, who did little more than to say yes or no, as problems came up. Certain sections are credited entirely to the specialists who contributed original manuscripts. Thus we find, as primarily responsible for their sections, Joseph A. Cushman, Loyd G. Henbest and W. Storrs Cole, Foraminifera; Lewis M. Cline, Blastoidea; Raymond C. Moore and Lowell R. Laudon, Crinoidea; Edwin B. Branson and Maurice G. Mehl, conodonts; G. Arthur Cooper, Brachiopoda; J. Brookes Knight and Josiah Bridge, Paleozoic Gastropoda; Frank M. Carpenter, Insecta; Raymond E. Peck, Charophyta; and J. Harlan Johnson, calcareous algae. In this list of impor-

tant collaborators the phrase "assisted by the authors" occurs. This remark applies to the whole book. Never before have we had such short, concise, yet ample taxonomic descriptions. Paleontologists (and others) would do well to "read, mark, learn, and inwardly digest." The bibliographic references are full and well chosen.

Shimer and Shrock have managed to combine the strictly scientific with the fully utilitarian. Paleontologists will thank them for the time they have spent in determining genotypes, time saved for the individual worker. Stratigraphers will thank them for the excellent illustrations and lucid descriptions. Every geologist and paleontologist must have access to a copy, and to those whose livelihood depends upon stratigraphic knowledge it is indispensable.

I shall not use the trite expression that it is a "labor of love" on the part of the authors. It is a labor of service. They get nothing from it except the thanks of those whom they have so well served and the realization that a long arduous task is finally done, and I think all will agree with me, extremely well done.

The book has, of course, the inevitable minor faults. A few letters and figure numbers got misplaced, and some authors are free, who should be in brackets. But the whole work gives evidence of the most painstaking care; and of careful selection of those fossils most likely to prove useful. Some workers will deprecate the fact that almost twice as many pages are devoted to the crinoids as to the Foraminifera, for the latter are thousands of times more abundant than the former, and infinitely more useful. But there are good manuals for the identification of "forams," whereas the determination of a crinoid until now has been a matter of lengthy search. Moore and Laudon's diagrams are most helpful in bringing the crinoids within the grasp of the non-specialist. Cooper's chapter, 89 pages, goes a long way toward restoring the brachiopods to their once honored position as highly important index fossils. All in all, this book gives to the general practitioner much that has been the property of the specialist. Accurate identifications can be made far more easily than heretofore. It is the greatest contribution to advancement in our branch of science since the first edition of the Eastman-Zittel Text-book of Paleontology .

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VEGETABLE FATS AND OILS

Vegetable Fats and Oils (Their Chemistry, Production and Utilization for Edible, Medicinal and Technical Purposes). By GEORGE S. JAMIESON. Second edition. 508 pp. New York City: Reinhold Publishing Company. 1943. $6.75.

IN writing the second edition of his book, Dr. Jamieson has again performed a valuable service to all those engaged in the study and use of vegetable fats and oils. Although there has been no extensive alteration of the arrangement of subject-matter, Dr. Jamieson has corrected several misstatements and many awkward phrases that crept into the earlier edition. The ideas are now clearly expressed.

Several devices have been used to bring the book up to date. Whole paragraphs or pages of new material have been added, especially in the description of fats and oils analyzed only since the publication of the first edition and in the chapter on methods. At other points, new literature references were added to the lists furnished previously with many sections throughout the book or, as on page 16, a sentence refers the reader to a symposium and another book in the field.

The reviewer had hoped that, in bringing out his second edition, Dr. Jamieson would attempt a more critical appraisal of the existing literature. With his intimate acquaintance of so many varied approaches to the subject and his acknowledged prestige, the author was in a unique position for that kind of much needed writing. The book does serve to introduce the newcomer to the field and to provide the specialist with a well-organized body of useful information on the source, the general and detailed characteristics and composition, methods of analysis and the uses of the vegetable oils and their component fatty acids.

HERBERT E. LONGENECKER

AMERICAN MEN OF SCIENCE

SCIENTIFIC MEN RECEIVING STARS IN THE SEVENTH EDITION

FOR the seventh edition of the Biographical Directory of "American Men of Science," there have been selected, by the same objective methods as have been used in previous editions, two hundred and fifty-five names of those not included in earlier selections who are regarded by their colleagues as among the leading scientific workers in the United States. This method has been fully described in the fourth and earlier editions of the work. Table 1 gives the number of those now living that have appeared in each of the seven editions of the directory.

The names, given below, of those who received stars