used. There was small reduction in loaf volume and the loaves were darker in color as compared with the loaves without the yeast or germs. The texture was not such as would be rated highest by any expert scorer, but all were attractive and had excellent flavors. It should be pointed out that every criterion of quality upon which commercial breads are judged, such as loaf volume, oven break, external and internal color, crumb, etc., represent fictitious standards having no relation whatever to nutritive value of the bread.

Bread is a low-cost food. It is a basic staple. Nothing more effective in safeguarding the nutritional status of the poor can be done then to encourage the making and consumption of bread of the highest possible nutritive value. It should be so nutritious that it can make good most of the deficiencies of any other foods included in a simple and monotonous diet. The inclusion of the ingredients recommended would go a long way toward accomplishing this objective. This can not be said of the presently promoted "enriched" bread.

Dr. Williams is correct in stating that I have ignored sociological, industrial and legal precedent in my recommendations concerning bread improvement. It has long been my belief that eventually industry must adjust itself in matters involving foods to the physiological needs of consumers. For this reason I have offered suggestions concerning what bread should be composed of with no other objective than to acquaint the public with facts which are supported by scientific investigations. Success in putting into effect such a bread program would seem to be no difficult undertaking, provided the plan has the support of scientific and industrial leaders whose primary interest is safeguarding the nutrition of the people.

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ONE-PARENT PROGENY OF TUBIFICID WORMS

IN a five-years' study of the activities of tubificid worms (*Tubifex* and *Limnodrilus*) it is indicated that these hermaphroditic forms are apparently able to effect self-fertilization and to produce young. Supporting this statement are the results from nine one-worm cultures, each treated as follows:

(1) The worm was isolated shortly after birth, when about one week old. (2) Was placed in a shell vial with 0.5 cc or less of mud examined under ×20 (approximately) to make sure that no additional worms or their eggs were present. (3) Was fed weekly by adding autoclaved sewage solids, in suspension. (4) When young worms appeared, they were removed from the culture.

The worms become sexually mature in three or four months after birth. Six of the above one-worm cultures, now about seven months old, have to date (late March, 1945) produced 208 young. Another worm, isolated as above and now more than two years old, produced 19 young during its first year and 148 during its second year.

My first observation of the above phenomenon occurred on August 11, 1943.

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SCIENTIFIC BOOKS

RELATIVITY

The Meaning of Relativity. By ALBERT EINSTEIN. 135 pp. Princeton, N. J.: Princeton University Press. 1945. $2.00.

THE book is a reissue of a book first presented in lecture form at Princeton University in 1921, and published by Methuen and Company in Great Britain and by the Princeton University Press in the United States. In this edition an appendix extending the theory of relativity to the "Cosmologic Problem" is added. Attention is also called to other developments, among them the solution of the fundamental problem—so long delayed—in which the law of the "geodesic," which, in the classical treatment, is superposed upon the law of the field equations, is shown to be the analytical equivalent of the restriction placed upon the motions of the singularities by the fact that the equations are non-linear.

The main text is divided into four chapters—"Space and Time in Pre-Relativity Physics"—"The Theory of Special Relativity"—"The General Theory of Relativity"—"The General Theory of Relativity (Continued)."

The treatment follows what may be called normal lines and, coming from the "Father of Relativity," is naturally authoritative and interesting in approach. It is, moreover, concise and to the point.

As to how far the book fulfils the promise of its title is to some extent an open question. It is often characteristic of one outstanding in originality that the concepts which are real and which form the workable elements of his thinking are, to a considerable extent, individualistic. They are apt to be strong and occupy positions of very positive conviction. Indeed, is it not the strength of these convictions which provide the stimulus for discovery? Sometimes, how-