advantage in that he is teaching his physics to students whom his department will be examining later on; but it is a very different matter to get these different aspects of physics a definite place in the curriculum of medical schools all over the country. The first thing, of course, is to get a responsible body of people to express an opinion as to whether it is desirable, and if it is, then immediate steps should be taken to give effect to responsible opinion.

Traité de biocolloïdologie. Par W. Kopaczewski. Tome 1: *Pratique des colloïdes.* Deuxième édition entierement remaniee et mise à jour. Fascicule 1: *Propriétés mecaniques des colloïdes.* Pp. xviii + 166 + iv. (Paris: Gauthier-Villars et Cie, 1930.) 40 francs.

DURING the past eight years the author has produced eight volumes dealing with various branches of colloid science, with catalysis, hydrogen ions, and mineral waters. The present treatise appeared first in 1922, but is now being expanded to a series of five volumes, dealing with colloid technique, bio-colloids, conditions of equilibrium of bio-colloids, the colloidal state and biology, and the colloidal state and medicine, respectively. The first section of the first volume, which has now been issued as a separate part, under the general heading of mechanical properties of colloids, covers the preparation and properties of pure water, the preparation of hydrosols and hydrogels, determination of density of liquids, determination of micellar dimensions, diffusion, ultra-filtration, dialysis, and the swelling of gels.

In the preface to the new edition, the author himself describes the success that has attended his work, explains why his book has been so successful, points out that no similar book exists in scientific literature, and issues a warning as to the treatment that will be meted out to those who quote his work without acknowledging the source from which they have borrowed their material. Since the first volume, when complete, will include about 600 pages and is to be followed by four others, it is clear that the literature of 'biocolloidology', like the gels described in the last chapter of the present issue, is likely to undergo considerable swelling in the near future.

A Simplified Presentation of Einstein's Unified Field Equations. By Prof. Tullio Levi-Cività. Authorized translation by Dr. John Dougall. Pp. 22. (London, Glasgow and Bombay: Blackie and Son, Ltd., 1929.) 2*s.* net.

AT the beginning of 1929, Einstein published his unified field theory of gravitation and electromagnetism, based on the concept of parallelism at a distance with respect to four orthogonal vectors of reference. Levi-Cività discards this concept and uses Ricci's coefficients of rotation. This is termed a simplified presentation of Einstein's theory, but it really differs from it in one important respect. It is perhaps more elegant than Einstein's work, and obtains Maxwell's electromagnetic equations and the gravitational equations of the older relativity theory exactly, whereas Einstein now obtains these only as first order approximations. The fact that Einstein's new equations, in their exact form, contain both gravitational and electrical terms in a way that defies separation, however inconvenient it may be mathematically, is yet the most attractive feature from the physical point of view, as it may possibly lead to the discovery of new experimental facts on the interaction of gravitation and electricity. Up to the present, in spite of improvements in the mathematical presentation of Einstein's work, little progress has been made on the physical side, and the problem of incorporating the quantum theory with relativity remains still unsolved.

H. T. H. P.

Differential Geometry of Three Dimensions. By Prof. C. E. Weatherburn. Vol. 2. Pp. xii + 239. (Cambridge: At the University Press, 1930.) 12*s.* 6*d.* net.

THE distinctive feature of Prof. Weatherburn's treatment is the great use that is made of vector analysis. At first sight a page full of terms such as *div*, *rot*, *grad*, and *dyadic* looks rather alarming, and the Clarendon type used for vectors stands out from the ordinary type used for scalars, producing a somewhat unattractive mixture, as if the printing had been done by an unskilled hand. However, a careful study will show the advantage of vector methods. They are very concise, and yet they emphasise the geometric considerations which are often obscured by the use of co-ordinates.

The book contains thirteen chapters, the majority based on Prof. Weatherburn's own researches. Chapters i. and v. deal with differential invariants; ii., iii., and viii. with families of curves on a surface; iv. and vi. with families of surfaces; vii. with dyadics; ix. with Levi-Civita's parallel displacements; x. with projection and allied topics; xi. and xii. with deformation and flexion; xiii. with congruences of curves. There are twelve sets of examples, eleven diagrams (we could wish for more), and an index. H. T. H. P.

The Annual Register: a Review of Public Events at Home and Abroad for the Year 1929. Edited by Dr. M. Epstein. Pp. xiv + 326 + 164. (London, New York and Toronto: Longmans, Green and Co., Ltd., 1930.) 30*s.* net.

THIS valuable work again contrives to cover a survey of the world's history within the compass of a few hundred pages. Its hundred and seventy-first issue speaks for its usefulness. Little change is made in the customary arrangements. Part I., which constitutes more than half the volume, is devoted to English, Imperial, and foreign history; for this year the sections on India and the Dominions are grouped together. Mandated territories are included in the foreign section but the colonies seem to be omitted. Part II. begins with a chronicle of outstanding events followed by reviews of literature, science, art, finance, and law, and a number of biographies. The scientific section has ten pages of an admirable summary of work in the biological and physical sciences. Appendices give the text of certain treaties of the year.