most complete of many written on the natural history of this worm. It exemplifies a case in which mucus was overlooked in attempting to determine the feeding method of a plankton feeder.

A slime net is as efficient as any structure that one may imagine, for, though a dye in solution will pass through it as though it were not there, the slime net will entrap the smallest particles which are visible by the aid of an oil immersion lens. With bottom feeding forms this microscopic material consists in large part of bacteria. In SCIENCE, 1932,[4] I gave an account of a successful feeding experiment in which a pure culture of bacteria was used by a mud flat animal, and it is difficult to think of any structural device other than such a mucus net which would screen bacteria from water. The abundance and availability of marine bacteria for food have since been confirmed by ZoBell and Anderson[5] and other marine bacteriologists.

Apparently little is known of the chemical composition of mucin, particularly in the lower animals, and I believe nothing is known of its physical characteristics. A detailed account of the use of mucus by plankton feeders is in the process of preparation and should be ready for publication within the next year.

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DIET AND RESISTANCE TO COLDS

SPIESMAN and Arnold recently[1] reported their observation that carbohydrate restriction reduces the incidence of colds, and they pointed out that Paton[2] and Orr and Gilks[3] made similar observations. I recently[4] also had occasion to refer to previous reports on this subject made by McQuarrie[5] and Higgins[6] as well as by Paton and by myself.[7] However, Spiesman and Arnold state that they have no explanation to offer for the beneficial results obtained by carbohydrate restriction, although McQuarrie, Higgins and I attributed the benefits to a reduction in tissue hydration. Adlersberg and Porges[8] likewise noted the dehydrating effect of a low carbohydrate diet and found that it "can be employed with good success not only in edemas of various origins but also in inflammatory exudates, for limitation of the quantity of sputum in bronchiectasis and, finally, as an 'antiphlogistic diet' in certain inflammatory processes."[9] Before this, Glasscheib[10] advocated the use of acid salts and vitamin D to reduce hydration for the control of vasomotor rhinitis. Glasscheib, however, distinguished between vasomotor rhinitis and common colds, which he still[11] believed were due to infection and not preventable by a dehydrating regimen. Nevertheless, Glasscheib's ideas are pertinent to the subject in view of the fact that Speisman and Arnold emphasize the rôle of vasomotor responses in susceptibility to upper respiratory infections.

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CORRELATION OF RIVER TERRACE REMNANTS

RIVER terrace remnants have been correlated on the basis of their absolute elevations as obtained by approximate or precise measurement. Such correlation involves the assumption that the relief of the ancient flood-plain from which the terraces were derived was negligible.

Geomorphic studies[1] of flood-plains of present-day rivers show that the magnitude of their relief may often be sufficient to throw doubt on such correlations. It can be demonstrated, for example, that two terrace remnants differing seventy-five feet in their relative elevation may represent portions of the same ancient surface of deposition.

Typical flood-plains are normally diversified by such features as bars and swales, abandoned channels, natural levees of the main stream and its tributaries, meander scars and minor depositional features. This multiplicity of possible forms and their occurrence spatially in any order produce a terrain of unpredictable irregularity. Upon this terrain unadjusted tributaries may deposit alluvial fan material of varying thickness and extent.

It is apparent that the maximum relief of the flood-plain, excluding effects due to deposition by lateral tributaries, is limited, though not necessarily determined, by the maximum possible range of the major water plane. An examination of large-scale contour maps showing details of flood-plains of several major rivers has established the fact that the absolute relief, as measured from the low-water surface of the master stream, may exceed fifty feet and often averages twenty-five feet. In the case of small graded streams

4 G. E. MacGinitie, SCIENCE, 76: 1978, 490, 1932.
5 Claude E. ZoBell and D. Quentin Anderson, *Bull. Am. Assoc. Petrol. Geol.*, 20: 3, 258–269, 1936.
1 *Am. Jour. Dig. Dis. and Nutrition*, 4: 438, 1937.
2 *Brit. Med. Jour.*, 1: 738, 1933.
3 Med. Research Council. Special Report No. 155, 1931.
4 *Jour. Amer. Med. Assoc.*, 108: 2156, 1937.
5 *Jour. Nutrition*, 2: 31, 1929.
6 *New England Jour. Med.*, 203: 145, 1930.
7 *Proc. Soc. Exp. Biol. and Med.*, 25: 454, 1928, and SCIENCE, 68: 301, 1928.
8 *Klin. Wochenschr.*, 12: 1446, 1933.
9 Quoted from abstract in *Jour. Amer. Med. Assoc.*, 101: 1766, 1933.
10 *Monatschr. f. Ohrenheilkunde*, 62: 168, 1928.
11 Personal communication, dated November 26, 1928.
1 Pursued as a university fellow of Columbia University, in consultation with Professor Douglas Johnson.

so high a relief will not be attained, for the magnitude of the relief will be found roughly proportionate to the size of the master stream.

The deposition by unadjusted tributaries at their débouchement has an important local influence upon the relief of the flood-plain. Along the flood-plain borders alluvial fans, which may be closely spaced, sometimes accentuate the relief by more than sixty feet. The extent and thickness of these fans are usually not closely related genetically to the size and development of the main stream; hence large fans may accumulate upon narrow flood-plains. Because of their low angle of slope and fairly large areal extent these deposits are but difficultly recognizable in the field, a rise of forty or fifty feet in one or more miles being scarcely noticeable.

From the foregoing, it follows that before the investigator of river terraces can assign any particular terrace remnant to a postulated ancient surface of deposition, he must consider, among other things, whether the remnant which he is studying may represent (1) some portion of the surface of a broad alluvial fan, a portion perhaps sixty or more feet above the normal level of the ancient flood-plain; (2) an interfan area, which itself may have been part of a natural levee, an abandoned channel, a bar, a swale or some other feature of the complex surface called the "flood-plain," embracing a possible difference in relief of more than fifty feet.

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SPECIAL CORRESPONDENCE

INTERNATIONAL ENCYCLOPEDIA OF UNIFIED SCIENCE

RECENT years have witnessed a striking growth of interest in the scientific enterprise as a whole and especially in the unity of science. The concern throughout the world for the logic of science, the history of science and the sociology of science reveals a systematic tendency to consider science as a whole in terms of the scientific temper itself. A science of science is appearing. This is an indispensable corrective of the extreme specialization of scientific research. It is an urgent task of science to work out the synthesis of its results and methods. Otherwise science will not have carried to its limit the fulfilment of its own task as science, nor will it perform adequately its educational rôle in the modern world.

The unity of science movement has found an organized contemporary expression in the International Congresses for the Unity of Science, administered by an international committee composed of the following persons: N. Bohr, M. Boll, H. Bonnet, P. W. Bridgman, E. Brunswik, R. Carnap, E. Cartan, J. Clay, M. R. Cohen, J. Dewey, W. Dubislav, F. Enriques, P. Frank, M. Fréchet, F. Gonseth, J. Hadamard, P. Janet, H. S. Jennings, J. Joergensen, E. Kaila, H. Kelsen, T. Kotarbinski, A. Lalande, P. Langevin, K. S. Lashley, C. I. Lewis, J. Lukasiewicz, G. Mannoury, R. von Mises, C. W. Morris, O. Neurath, C. K. Ogden, J. Perrin, H. Reichenbach, A. Rey, C. Rist, L. Rougier, B. Russell, L. S. Stebbing, J. H. Woodger.

Three such congresses have been held, and preparations are now being made for a congress to be held at Harvard University from September 5 to 10, 1939. This congress includes among its sponsors the American Association for the Advancement of Science, the Association for Symbolic Logic and the American Philosophical Association. The theme will be "Logic of Science."

For some time it has been felt that a systematic expression of the point of view and results of the unity of science movement was necessary. This need has led to the development of a plan for the publication of an "International Encyclopedia of Unified Science." The general purpose of this work is to bring together material pertaining to the scientific enterprise as a whole. Its task will not be to present the detailed results of the special sciences but rather to stress the logical structure of the special sciences considered in relation to one another. The Encyclopedia will therefore be concerned with the development of a unified scientific language; with problems concerning the logical analysis of, and correlations between, concepts and fundamental principles of the various sciences; with questions of scientific procedure; and with the various senses in which science may be considered a unified whole. Treatment of these fundamental matters will be supplemented by presentations of the history of scientific thought, the sociology of science, the newer logical techniques and the general theory of signs. It is planned to show explicitly gaps in the system of knowledge and questions which still remain open; where agreement has not been reached, divergent opinions will be presented side by side.

The wish to insure impartiality has led to a selection of collaborators with somewhat different points of view, but who agree in considering the unity of science as the ideal aim of their efforts, in eliminating any form of speculation other than that recognized in science, in stressing the importance of logical analysis in various fields, and in taking into account the historical development of scientific concepts and regulative prin-