bert on the question. In recent years, Eakin[6] has concluded that it is operative for the lower 600 miles of the Yukon and that it influences the pattern of the Missouri River. The deflective force acting on any moving body varies with its mass, its velocity, and the sine of its geographic latitude. The factor of latitude is of such importance that the law has seldom been considered in explaining the courses of streams other than those in comparatively high latitudes. The factors mass and velocity are such that the possibility of an asymmetric effect appears to be reduced to insignificance in the case of smaller streams. Geologists are by no means united in an opinion that even under favorable conditions valleys, thalwegs, stream-threads, or stream patterns demonstrate unquestionably a morphologic effect of earth's rotation. Sir Archibald Geikie[7] states, "When, however, we consider the comparatively small volume, slow motion and continually meandering course of rivers, it may reasonably be doubted whether this *vera causa* can have had much effect generally in modifying the form of river-channels."

With but little effort an array of examples may be marshaled in support of Baer's Law, for example, those considered by Eakin, taken from the course of the Missouri River; or, equally convincing facts may be cited against it. The most rigorous test of the whole hypothesis, in all probability, has been that applied by Exner,[8] who finds that the swift-flowing, relatively large and well-established Danube at Vienna has about one one-thousandth more corrasive effect upon the right half of its bed than upon the left. In the light of Exner's rigorous computation of the deflective force acting on the Danube it seems utterly absurd to invoke the rotation of the earth as an explanation of conspicuous slope asymmetry in valleys of small streams and rills in southern Ohio and in New Jersey, apart from the fact that the phenomena cited in my paper are not limited to right banks.

In a series of observations on the geology and geomorphology of Louisiana now being undertaken by members of the school of geology at this university the thesis advanced in Baer's Law will be closely scrutinized. Though the latitude is somewhat less than that of southern Ohio and New Jersey, adequate compensation should exist in the slight degree of induration of the sediments being cut by streams flowing across the Coastal Plain.

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[6] H. M. Eakin, "The Influence of the Earth's Rotation upon the Lateral Erosion of Streams," *Jour. Geol.*, 18: 435–447, 1910.

[7] *Text-Book of Geology, London* (Macmillan and Company, 1: 23, 1903.

[8] Felix M. Exner, "Zur Wirkung der Erddrehung auf Flussläufe," *Geog. Annaler*, 9: 173–180, 1927.

LIGHT A FACTOR IN RANCIDITY[1]

RESULTS of experiments conducted in the Food Research Division of the Bureau of Chemistry and Soils show that certain wave-lengths of light play an important rôle in producing rancidity of oil-bearing foods.

Rice bran and rice polish were used in this investigation. When these products were kept under color filters such as blue, purple, blue-green, yellow and various shades of red, they showed characteristics of rancidity when examined organoleptically and by the modified Schiff's test. When kept under sextant green and sextant red filters, however, they showed no evidence of deterioration either by odor or in tests with the fuchsine sulphurous acid reagent. It is evident that the green filter, which approximates chlorophyll green, absorbs all photochemically active wave-lengths conducive to rancidity, allowing only chemically inert wave-lengths to pass through. The sextant red filter, being virtually black, accomplished the same result by absorbing practically all light. Screening out certain wave-lengths of light from oil-bearing foods and feeds, therefore, prevents or delays oxidation of the oil.

Antioxidants, such as pyrogallol, hydroquinone and substituted hydroxylamines, when added to oil-bearing foods may prevent or delay rancidity, but their use is considered objectionable on account of their possible physiological effects.

The keeping qualities of foods, such as salad oils, mayonnaise, butter, lard and potato chips, may be greatly enhanced by the use of properly colored wrappers, bottles, etc., capable of screening out active light wave-lengths.

A U. S. public service patent and foreign patents covering this discovery have been applied for. The application of the principle embodied in these patents should prove of great economic value to producers of package foods.

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TWISTED TREE TRUNKS ON THE GASPÉ PENINSULA

IN connection with recent discussions in SCIENCE relative to the twisting of tree trunks during growth I should like to call attention to a forested area in Eastern Canada which should prove interesting to any one working on the growth of such trees. While encircling the Gaspé peninsula in the Province of Quebec over the new Perron Boulevard, we observed, among the logs which had been brought down from the mountain forests for pulp wood, a great many which were noticeably twisted, and where the more open agricultural land is divided by rail fences,

[1] Food Research Division Contribution No. 137.