

weakness of the original discharges, the distance covered, absorption in the atmosphere, how much of it will be audible?

Just what relationship exists among these five factors in the rumbling of thunder, if this relationship can be determined definitely, should prove most interesting.

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#### A New and Effective Hemostatic Agent

Local agents for the control of bleeding have fallen within three groups: (1) physical, such as pressure; (2) protein precipitating, such as Monsel's solution or tannic acid; (3) coagulation accelerators, such as fibrinogen or thromboplastin. Alginic acid derived from marine kelp may be added to the latter group.

When seaweed is broken or damaged in the water, the injury is healed by the plant juices coming into contact with the calcium ion of the sea water. While the alginic acid may be a transitional product in the synthesis of the carbohydrate of the plant, it also acts as a protective colloid and guards the plant against injury. This clotting and healing action may be likened to that of glycoproteins in the animal and the gums of land plants such as cherry, peach, and acacia.

Alginic acid prepared as a powder and applied to bleeding points combines with the calcium and immediately forms a coagulum that seals the wound. The styptic action is prompt, and new tissue is formed. It has been suggested that the nonirritating character of the coagulum is due to a detoxifying property characteristic of acids derived from kindred carbohydrates such as glucuronic acid.

Alginic acid has been used on a series of 100 cases of extraction and minor oral surgery of the mouth. In no case has there been untoward reaction; healing has been unusually prompt and the control of bleeding an added comfort to both patient and operator.

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#### Actualités Médico-chirurgicales

At this time, when scientists in formerly occupied countries find great difficulty in bringing themselves up to date on advances that have occurred during the war, it seems appropriate to mention one program designed to this end which has already been under way for some months. Due to the initiative of Prof. E. J. Bigwood, of the University of Brussels, who came to this country during the war, a series of pamphlets, *Actualités médico-chirurgicales*, have been printed here in the French language and are being circulated in Belgium under the joint sponsorship of the Belgian-American Foundation in New York and the Fondation Franqui of Brussels. The authors have been principally American, and the translation has been made by Belgian scientists in this country. Both authors and translators have donated their services. Pamphlets on blood transfusion, penicillin, sulphonamides,

protein metabolism, parenteral feeding, viruses, chemotherapy, and pyrogens have already been printed, while others on burns, tuberculosis, DDT, neurology, cancer, virus diseases, and infant psychology are scheduled to appear in the near future. The pamphlets are designed to provide brief surveys to orient the readers to the new developments in a general way, or as a starting point for those who may need to go further into the literature. The pamphlets have been very well received in Belgium, and a limited number have been sent to other countries.

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#### Note on the "Purple" Test for Alloxan

In studying further the "purple" test for alloxan previously described (*Science*, 1945, 101, 536; *Arch. Biochem.*, 1945, 8, 1), we have come to recognize that if iron is present in the solution tested, it may constitute an interfering factor since it gives rise to an evanescent violet color.

The test, as applied to alloxan, consists in reduction by means of cysteine hydrochloride or ascorbic acid, followed by the addition of barium hydroxide to slight alkalinity; a purple color or purple precipitate is then formed. E. Baumann (*Z. physiol. Chem.*, 1883-84, 8, 299) discovered that an aqueous solution of cysteine gives a blue color with ferric chloride, and V. Arnold (*Z. physiol. Chem.*, 1910-11, 70, 314) observed that, on making alkaline, this blue changes to a violet which quickly fades but reappears on shaking. Ascorbic acid also gives a violet color under these conditions (R. W. Herbert, *et al. J. chem. Soc.*, 1933, 1270).

Hence, the test is likely to lead to erroneous conclusions if applied to extracts containing iron.

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#### The Record and the Metric System

Under "Scanning Science" (*Science*, 1946, 103, 446) I notice that a few dates have been omitted. At least two of them are of major importance. In 1866 Congress passed a bill making the metric system lawful in the United States. In the same year Congress directed the Treasury to furnish to each state a set of standard weights and measures of the metric system. In 1893 the Treasury issued an order recognizing the meter and kilogram as fundamental standards and that the customary units will be derived from them.

As to coinage, in 1866 Congress fixed the weights of the 5-cent piece at 5 grams. In 1873 Congress fixed the weights of other coins as follows: half dollar, 12.5 grams; quarter dollar, 6.25 grams; and the dime, 2.5 grams.

In the "Scanning Science" mentioned, the omission of the above facts may give unwarranted comfort to opponents of the metric system.

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