The general morphologic, cultural and biochemical attributes of the contaminant, when compared with authentic strains, indicated that it was *B. megatherium,* a common non-pathogenic spore-forming aerobic bacillus. It is ordinarily stated that this species is a normal contaminator, but such a conclusion does not hold as regards this laboratory, certainly not to the extent noted. The germs were unquestionably storm-borne.

In order to determine the form in which the organisms were transported, several portions of dust were collected from the tops of the desks in one of the laboratories which had not been in use on the day of the storm. One specimen was mixed with water and examined directly under the microscope. The results, however, were quite unsatisfactory. Another sample weighing about 1 g was suspended in 5 cc of physiological saline and heated at 60° C. for 1 hour to kill vegetative cells if present. Nutrient agar surfaces were subsequently streaked with the suspension, and after incubation colonies identical with the ones originally observed appeared in large numbers. Naturally other varieties of microbic life were present, but no attempt was made to identify the total flora.

It is, therefore, assumed that the organisms in the spore state were swept up by the wind with the dust particles and were transported mechanically for great distances in the upper atmosphere.

It would be interesting to know whether or not this species predominates in the native soil of Nebraska and South Dakota, the alleged origin of the dust particles.

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CAMBRIAN GRAPTOLITES

THE writer has in Bulletin No. 3, Vol. 12 (1933) of the Public Museum of the City of Milwaukee published an account of the Cambrian graptolites as far as they are known. All are Dendroidea. As this is the first time that Cambrian graptolites have been reported from various regions of America (Lower Canada, Vermont, Wisconsin and Minnesota, Tennessee and Dakota) it is of great importance that the record should be correct and no errors introduced into this new field. However, as the paper was several years in printing, some determinations have meanwhile been changed and also some labels have been found to have been misleading.

It is now known that all these graptolites are from the Upper Cambrian only and no Middle or Lower Cambrian graptolites occur. *Dictyonema schucherti* was described as coming from the Lower Cambrian of Vermont (top of Colchester formation) and thus regarded as the oldest graptolite known. Professor B. F. Howell has since found that the form comes from an Upper Cambrian horizon (Russell slate formation). Likewise *Dendrograptus edwardsi major* and *Callograptus antiquus,* which are described as coming from the Elbrook formation of Tennessee, which is Middle Cambrian, according to Dr. Chas. E. Resser, were obtained in the Nolichucky shale, which is latest Upper Cambrian. Dr. Resser also informs me that the form which he collected in an unnamed Upper Cambrian formation on the "North side of the Shoshone Canyon, just above bridge, west of Cody, Wyoming" and which I described and figured as *Dictyonema cf. minnesotense* on pp. 322–323 (*op. cit.*) may now be cited as coming from the "Deadwood series," equivalent to the Upper Cambrian. As it is a new species, distinguishable from *Dictyonema minnesotense* by the more rapid bifurcation, it may be known as *Dictyonema wyomingense.*

As the bulletin on the Cambrian graptolites had been already widely distributed by the Milwaukee Museum before I became aware of the necessary changes in age determinations, the students interested in these faunas are asked to make the changes indicated above in their copies.

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THE MECHANISM OF METHYLENE BLUE ACTION ON BLOOD

THE mechanism of the action of methylene blue as a catalytic agent in CN and CO poisoning[1] has been questioned by various writers.

Wendel[2] claims that in CN poisoning the dye changes hemoglobin to methemoglobin in the bloodstream, that this unites with CN to form a stable compound and that in this way CN is taken out of the blood stream. Henderson[3] and Haggard and Greenberg[4] claim the same action for methylene blue and conclude from this that if, as they suppose, the dye inactivates a certain per cent. of the hemoglobin by forming methemoglobin, its use in CO poisoning is a hindrance rather than an aid to recovery.

Haggard and Greenberg[4] have made experiments on dogs in which the oxygen capacity of blood containing methylene blue was determined, according to the Van Slyke-Hiller method. They found from 8 to 12 per cent. reduction of oxygen capacity, which is supposed to indicate that this proportion of the oxyhemoglobin is transformed to methemoglobin.

The writer has, however, shown by experiments on

[1] M. M. Brooks, *Proc. Soc. Exp. Biol. Med.,* 29: 1228, 1932; 30: 493, 1933. *Amer. Jour. Physiol.,* 102: 145, 1932; 104: 139, 1933.

[2] W. B. Wendel, *Jour. Amer. Med. Assoc.,* 100: 1054, 1933.

[3] Y. Henderson, SCIENCE, 78: 408, 1933.

[4] H. W. Haggard and L. A. Greenberg, *Jour. Amer. Med. Assoc.,* 100: 2001, 1933.