

nov., sp. nov. is proposed for this new organism. A more complete description of the organism and the histology of the disease will be published shortly. JOHN A. ELLIOTT

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THE SYNCHRONAL FLASHING OF FIREFLIES

IN *SCIENCE* for February 4, 1916, E. S. Morse, under the title, "Fireflies Flashing in Unison," mentions having seen fifty years before a striking instance of the synchronal flashing of fireflies. Morse again discusses briefly the same subject in *SCIENCE* for September 15, 1916. He states that he has never since observed this phenomenon in the flashing of these insects. McDermott, in *SCIENCE* for October 27, 1916, also discusses the question of fireflies flashing in unison.

The synchronal flashing of fireflies appears to be a very rare phenomenon in North America. So rarely does it seem to occur that one may consider himself fortunate if he has observed the phenomenon even once in a lifetime. The writer about twelve years ago observed a most remarkable instance of the simultaneous flashing of fireflies in Oxford, Mass. On the night this phenomenon occurred a heavy thunderstorm had recently passed over, followed by a profound calm. From time to time dazzling flashes of lightning illuminated the landscape. The air was very warm and humid, and fireflies became unusually abundant and active, especially in a low field adjoining some woods. Here thousands of these insects were sailing low over the ground, flashing incessantly as far as the eye could see. After a while a most remarkable synchronism in the flashing appeared to take place. From time to time, as if moved by a common impulse, great numbers would flash so closely in unison over the entire field that an extensive sheet of tiny light-points would gleam upon the vision for a moment—and then vanish. This remarkable synchronism in the flashing sometimes continued several times in succession, giving one the impression of alternate waves of illumination and darkness in the distance. At times the rhythmic impulse ceased

for a considerable period over the entire field. At other times it appeared to take place only in large groups occupying particular areas of the field. Although the writer has given a great deal of attention to the flashing of fireflies during the last twelve years, synchronism in the flashing of these insects has never since been observed. Depending more or less upon atmospheric conditions, fireflies show considerable variation in the character of their flight and the flashing impulse. At times the insects seem loath to leave the low herbage. On certain evenings they appear to confine their flight over the fields largely to the lowermost stratum of the atmosphere; at other times they rise upward in myriads from the grass early in the evening and drift away in all directions toward the crowns of the trees. At such times the upward flight is frequently accompanied by a weak, prolonged emission of light so that the insects appear to be tiny, glowing sparks propelled upward by gentle air currents.

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QUOTATIONS

THE NEWCASTLE MEETING OF THE BRITISH ASSOCIATION

For the third time the British Association has held its annual meeting during the great war. There are some obvious reasons for suspending such meetings, to which brief reference has already been made on the previous occasions, and to which has been since added the further restriction of available members by the adoption of universal service. But there are also good reasons for "carrying on," the best of them being provided by experience. The meetings have been eminently successful, if success is properly gauged with due account taken of the difficulties. In using the word it is not implied that the numbers present were large compared with the average numbers in peace time: at Newcastle the tickets sold were indisputably below that average—even much below it: we must think rather of what might have been, under the deplorable circumstances. The sections might have been empty, whereas they were well attended, in