people (who had not the same reason to dread the malaria), and in the very lowest, dampest and hottest part of the town. The Governments and the great commercial houses who sent *employés* to the tropics and paid their expenses—especially their funeral expenses, which were considerably larger than the mere cost of the hearse—should have something to say on the matter. The nation had not paid sufficient attention to the shocking mortality in its tropical possessions. They shuddered to hear of a few guinea-pigs being inoculated with disease in the laboratory, but looked on with indifference at the infection by natural means of thousands of their countrymen and of millions of our colored subjects in the tropics. They spent floods of money in the tropics on what was called sanitation and maintaining costly medical service, but such expenditure was more or less perfunctory; it was part of the Budgets, and it was allocated without much intelligence, and he feared, largely wasted. Fifty years ago a new parasite called the ankylostoma duadenale was discovered. It was now known, chiefly as the result of investigation by private persons, to cause an immense amount of sickness and mortality among our colored subjects. Although the presence of the parasite could easily be detected by the microscope, its name hardly found a place in our statistics of disease. A few years ago Giles studied the mode in which it gained an entry into our bodies. Since then no one had repeated his observations or taken the slightest interest in them. It had not been thought worth while to check the ravages of that disease. Again, some years ago a parasite was found which might perhaps cause that terrible and widespread disease, dysentery. No attempt had been made by Englishmen to clear up that important point; and the life-history of the parasite which was studied years ago by Cunningham seemed to have been completely forgotten. Twenty years ago Manson ascertained that the parasite which caused elephantiasis was carried by the mosquito. Until last year not a single person had made any adequate attempt to verify his work—much less to act upon it for the prevention of the disease. In India alone the mortality ascribed to fever was five million persons annually. Besides the mortality vast tracts of fertile possessions were rendered uninhabitable by this disease. Twenty years ago the parasite which caused the disease was found, but not a microscope or pen was used by Englishmen for seven years. During those seven years 35 million persons died from fever in India alone. Then a single Englishman, Vandyke Carter, took up Laveran's discovery. He was now dead. For that and other noble work he received no reward. Not another Englishman moved in the matter for another seven years, lazy, indifferent, and imbecile scepticism holding the ground. Then a few young countrymen of ours commenced to study the subject, years after other great nations had been attacking it with vigor, and now they did find medical men and others who paid some attention to it in the British dominions. Now there was an awakening everywhere. The Royal Society itself, assisted by Mr. Chamberlain and the Colonial Office, had taken up the matter with energy. The tropical schools of London and Liverpool had been founded by leading citizens, and scientific missions were being sent to different parts of the world. He had spoken that day in the hope of increasing sympathy in the great cause. A thousandth part of the energy now spent on numberless philanthropic schemes in Great Britain was likely at that moment to produce a thousand times as much fruit if properly expended in the cause of imperial sanitation. They had much reason to hope that in a year or two they would not only have a complete knowledge of how malaria was produced, but would foresee a cheap and practical mode of prevention.

NAVY REPORT ON WIRELESS TELEGRAPHY.

THE U. S. Navy Board has reported on the Marconi system of wireless telegraphy as follows: It is well adapted for use in squadron signaling under conditions of rain, fog, darkness and motion of speed. Wind, rain, fog, and other conditions of weather do not affect the transmission through space, but dampness may reduce the range, rapidity and accuracy by impairing the insulation of the aërial wire and the instruments. Darkness has no effect.

We have no data as to the effects of rolling and pitching, but excessive vibration at high speed apparently produced no bad effect on the instruments, and we believe the working of the system would be very little affected by the motion of the ship. The accuracy is good within the working ranges. Cipher and important signals may be repeated back to the sending station, if necessary, to insure absolute accuracy. When ships are close together (less than 400 yards) adjustments easily made of the instruments are necessary. The greatest distance that messages were exchanged with the station at Navesink was 16.5 miles. This distance was exceeded considerably during the yacht races, when a more efficient set of instruments was installed there. The best location of instruments would be below, well protected, in easy communication with the commanding officer. The spark of the sending coil or of a considerable leak, due to faulty insulation of the sending wire, would be sufficient to ignite an inflammable mixture of gas or other easily lighted matter, but with the direct lead (through air space, if possible) and the high insulation necessary for good work, no danger of fire need be apprehended.

When two transmitters are sending at the same time, all the receiving wires within range receive the impulses from transmitters, and the tapes, although unreadable, show unmistakably that such double sending is taking place. In every case, under a great number of varied conditions, the attempted interference was complete. Mr. Marconi, although he stated to the Board before these attempts were made that he could prevent interference, never explained how nor made any attempt to demonstrate that it could be done. Between large ships (heights of masts 130 and 140 feet) and a torpedo boat (height of mast 45 feet), across open water, signals can be read up to seven miles on the torpedo boat and eighty-five miles on the ship. Communication might be interrupted altogether when tall buildings of iron framing intervene. The rapidity is not greater than twelve words per minute for skilled operators. The shock from the sending coil of wire may be quite severe and even dangerous to a person with a weak heart. No fatal accidents have been recorded. The liability to accident from lightning has not been ascertained. The sending apparatus and wire would injuriously affect the compass if placed near it. The exact distance is not known and should be determined by experiment. The system is adapted for use on all vessels of the navy, including torpedo boats and small vessels, as patrols, scouts and despatch boats, but it is impracticable in a small boat. For landing parties the only feasible method of use would be to erect a pole on shore and then communicate with the ship. The system could be adapted to the telegraphic determination of differences of longitude in surveying. The Board respectfully recommends that the system be given a trial in the navy.

SCIENTIFIC NOTES AND NEWS.

WE record with much regret the death of Dr. Elliott Coues, the eminent naturalist, on December 25th, in his 57th year.

A MEMORIAL meeting in honor of the late Daniel G. Brinton will be held in Philadelphia on January 16th, under the auspices of the American Philosophical Society, and with the coöperation of some twenty-four societies. A portrait of Dr. Brinton, a memorial medal and a set of his works will be presented to the Philosophical Society.

PROFESSOR E. B. WILSON, of Columbia University, has been elected president of the American Society of Naturalists, in succession to Professor W. G. Farlow, of Harvard University.

DR. WILLIAM MCMURTRIE, of New York City, has been elected president of the American Chemical Society, in succession to Professor Edward W. Morley.

THE New Year's honors annually conferred in Great Britain include a peerage for Sir John Lubbock, a knighthood for Dr. T. Lauder Brunton, the physiologist, and a K. C. B. for Captain W. de W. Abney, the physicist, assistant Secretary of the Science and Art Department.

A MOVEMENT has been started in Baltimore to pay some special tribute to President Daniel Coit Gilman of Johns Hopkins University, in