be a residuum of men who, either because they cannot tolerate quinine or from some other reason, will not use it as a preventive of fever. The more common method in vogue in Lagos is to take daily doses of from two and one-half to five grains, but several take a large dose weekly and others irregularly. As a general prophylactic for the native he gives some interesting figures, showing that it would take seventy tons of quinine a year to efficiently protect the entire population of three millions at a grain a day regular dosing. This is an economic impossibility, and their efforts are being concentrated on the foreign population.—*British Medical Journal*, 1901, No. 2124, p. 680.

Prophylaxis in Malaria.—DR. H. BLANCHARD, in an interesting and complete paper on the mosquitoes of Paris, shows that that city is more than well supplied with various species of Anopheles, and he formulates the following general rules for the prophylaxis of malaria, which follow closely those laid down by Laveran in 1900: 1. In quarters where Anopheles are found it is indispensable to make use of mosquito netting during the sleeping hours. Such mosquito netting arrangements should be so constructed as to permit of plenty of air and yet not admit the insects. 2. To protect the body from the bites of mosquitoes the author has found that the most efficient lotion is one from quassia—prepared by simple maceration in water. The various pomades and tinctures advised have been found less efficient. 3. To drive mosquitoes from the rooms he recommends the use of formaldehyde vapor, freshly generated from a lamp. This should be done about an hour before retiring. For those who are particularly susceptible to this vapor, pyrethrum pastilles may be burned. 4. He further advises the use of wire screens. 5. To treat the actual sting, tincture of iodine is an efficient remedy. 6. The breeding places should be carefully drained.—*Bulletin de l'Académie de Médecine*, 1901, vol. lxx., p. 223.

Treatment of Malarial Fever by Iodine and Potassium Iodide.—DR. A. REGNAULT, while recognizing the great value of quinine in the treatment of malaria, says that it is now becoming a matter of general recognition that the quinine-series of drugs is of service only during certain developmental periods of the disease. It is only while the parasite is undergoing its definite evolutionary history that these agents are poisonous enough to kill, and it is the practice at the present time, in France, at least, to administer quinine from six to eight hours preceding the onset of the fever, in order to cut short the stage of the division of the parasite. He also points out, by analogy, with certain septicæmic and pyæmic organisms, that the chill of malarial fever is to be interpreted as a chemical reaction to a toxin; and certain nervous manifestations of the disease, notably malarial polyneuritis, seem to corroborate this view. It is held that the toxæmia is developed with great rapidity just at the time of the division of the parasites, and the fever is therefore but a sign of the reaction to these protozoal poisons. It is with the idea of bringing about a chemical destruction of such poisonous bodies that the author has suggested the use of iodine and potassium iodide, iodine being a body which has a special affinity for bodies of the alkaloid class, and presumably for the supposed analogies of these

toxins. The results obtained are reported as being very striking, in that not only were the attacks aborted, but the action on the fever itself was striking and immediate, chills, vomiting, and malaise disappearing rapidly. The remedies were employed in the following strength: Tincture of iodine and potassium iodide, of each, 1; distilled water, 25. A teaspoonful in a little water at the beginning of an attack; a second teaspoonful fifteen or twenty minutes later, if required. In these patients in whom vomiting is a prominent symptom fifteen minims of ether may be added to the first dose. The use of Lugal's solution in chronic malaria is old, but this remedy has rarely been used in the attacks. It should be borne in mind that there is a chemical antagonism between iodine and quinine, and that when both are used enough time should elapse to permit of the elimination of ether.—*Revue de Médecine*, 1901, vol. xxi., p. 804.

Antidotes for Cyanide Poisoning.—DRS. C. J. MARTIN and R. A. O'LEARY, of Melbourne, commenting on the fact that cyanide poisoning had become not infrequent among the Australian miners since the introduction of the use of the cyanides in the extraction of gold, present a careful series of studies to determine, if possible, a practical course to pursue in the treatment of this condition. Hydrogen dioxide and the salts of cobalt have of late years been extolled, Robert writing at great length of the value of the former antidote. Shott first pointed out the desirability of forming insoluble cobalt cyanide. Ferrous hydrate has had much vogue in hereditary text-book writings. These investigators have studied these three agents in particular. Pure chemicals were employed, and rabbits were used in the animal experiments. In these animals 1 to 100,000 of potassium cyanide produced, within seven minutes, staggering gait, very rapid respirations, followed shortly by labored breathing; convulsions of varying intensity always occurred, and at times appeared within three minutes after the introduction of the drug. Exhaustion followed the spasms. Respiration then consisted of heaving movements of the chest and abdomen. The breathing became shallower and shallower, and the animals died. If the animal did not die within thirty minutes it usually survived. Hydrogen dioxide as recommended, subcutaneously in 3 per cent. solution and by the stomach in 2 per cent. solutions, was employed. When introduced subcutaneously it was immediately broken up, and its effects were nil—the animals all died; a similar result was obtained by its use by the stomach, even when the poison and its supposed antidote were introduced mixed. The authors say that hydrogen dioxide does oxidize cyanides, but such action is too slow to be of therapeutic value, and they detail a series of experiments to determine the velocity of this reaction ($2 \text{HCN} + \text{H}_2\text{O}_2 = \text{C}_2\text{O}_2\text{N}_2\text{H}_2$). This interaction requires from twenty to seventy minutes, and any antidote for potassium cyanide must act instantaneously. Cobalt chloride was then studied in the same careful manner. Twenty-six experiments pointed to the fact that the cobalt chloride was capable of forming an insoluble cyanide, but that it must be given in excess; the acid of the gastric juices does not interfere with the reaction. Cobalt chloride itself, however, as pointed out by Stuart, is not free from poisonous action, producing severe gastro-enteric symptoms. This should be carefully guarded. Ferrous hydrate when added to a cyanide