

region well known to be deadly to the white man, from the severity of its malarious diseases. The disastrous results of that expedition are well known. Of the two ships crews, none escaped more or less severe attacks of fever; few returned alive to England; and the expedition was necessarily abandoned, after two years of struggle with the fearful endemics of the swamps of that deadly river.

More recently, in 1854-55, the British Government determined to renew the effort to explore the Niger. They again sent two vessels, to remain in the river during two years. The results of the second expedition were very different from those of the first. Few of the officers or crew were attacked with fever, and in those attacked the disease was slight and easily controlled. The apparent cause of this striking difference in the health of the crews of the two expeditions was believed to lie in the free and daily use of quinine by the officers and men of the expedition, from the time of entering the river until they left it. The quantity administered to each individual daily was five grains, which was required to be taken in the morning, before exposure on the decks of the vessel. Under this treatment it was found that no attacks of fever occurred during the time the vessels were in the river. As soon as the vessels left the river, which they were obliged to do by the annual fall of its waters, the quinine was discontinued. Some of the crew was then attacked with fever which, however, speedily yielded to renewed doses of quinine, showing that its continued use during several months had not destroyed the susceptibility of the system to its remedial action. In consequence of the occurrence of these cases of fever, the quinine was resumed as a daily allowance, and no other cases occurred. It was finally ascertained, as the result of several subsequent trips up the river, that it was necessary to continue the use of quinine for fifteen days after prolonged exposure to the malarious influences of the river, in order to ensure entire immunity from attacks of fever. It is, moreover, stated that during the time the quinine was being administered, the general health of the officers and men improved much, and their general aspect was that of men in robust health.

The importance of these facts to a country abounding, like our own, with malarious forms of disease, is undoubted. The question of how far quinine may be depended upon as a protective against malarial fever and to what degree it can induce in the white man a capability of living in health, while exposed to the fatal miasma of our swamps and cultivated lands, becomes one of deep import to us. Is quinine a prophylactic against malarious fevers? If it is, can it be taken safely without injury to the general health, and for how long periods? The last of these questions has been answered to a certain extent by the results of the Niger expedition. For two years the crews of the exploring vessels took quinine daily for a period of from three to five months, not only without injury, but with absolute benefit to their general health. And not only was their general health benefited, but if they were attacked with fever from discontinuing the remedy too early after exposure the curative powers of the drug were as marked, as if it never had been used before. For how long a period this may be continued, a fact within my own knowledge may tend somewhat to show. I was much interested in the statement made to me at the time, but as it was then only an isolated case, not sufficient of itself to justify positive conclusions, it was retained as a subject for future investigation. The results of the second Niger expedition now give to this case a vastly enhanced value.

An overseer agreed to take charge of several rice plantations in one of the sickliest regions of rice culture, undertaking to spend the summer months on one of the plantations. He made no inquiry as to the health of the one chosen as his residence; it was selected from its convenient locality. When warned of the danger of his residing there in summer, he said he would not have the fever. His own confidence in his capacity to resist malarious disease seemed unlimited. The result fully justified this confidence. He lived ten years or more in that neighbourhood, spending every summer on the plantation, varied only by an occasional visit to the healthy pine land where his family resided during the summer. He visited his rice fields without hesitation at any