

how, if measles be caused principally by mildews on the straw of bedding, the natives of Fiji, a tropical island free from grain, should have suffered with such unexampled severity. I may premise that the Fijians live in cane huts, with high roofs and low entrances—the interior being dark. They lie on mats of grass, sedge, flax, or vegetable fibre of some kind, and the mats are mostly old and rotten. They are vegetable feeders, and the *débris* of their food is scattered about their huts. When the ex-King Cacobau and his son landed convalescent from measles from H. M. S. *Dido*, they returned to their own quarters near Levuka. Within three weeks most of the tribe about Cacobau were attacked with the disease, which flew like wild-fire all over the islands, and within four months over 40,000 natives died—a third of the population. It will be observed that this rapidity of extension shuts out the supposition of propagation by direct contagion; for it is patent that the contagium of measles passes from body to body with less efficiency than that of plague, or small-pox, or scarlet fever. Therefore, since this measles epidemic involved a greater number in a given time than the Great Plague, or than any known epidemic of small-pox or scarlet-fever, it is an inference that its propagation was not due to a *contagium vivum* transmitted from person to person. In fact, the rate of measles propagation here was such that it is not explicable except by the assumption of a cause common to certain areas. I suggest that when Cacobau and his son passed their excreta on the surface in the vicinity of their huts, the straw fungi contained in the excreta quickly reverted on exposure to the air to their original form. These parasites, modified by submergence in the fluids of the body, were no sooner released than they returned to their old shape of aerial mildews, and in this shape, under the favouring conditions of heat and moisture, rapidly overran every particle of available substrate. As there was abundance of decaying vegetable matter strewn about, the spores of the mildew soon found their way to the huts, and flourished on the sleeping-mats. Then, when the disease declared itself suddenly among the tribe living in close proximity to Cacobau, there was a panic and a flight. Every infected native who fled of course established an independent centre of infection by means of his excreta, from which other lines of infection radiated in a similar way.

It is sufficiently obvious that my view is that the most effectual way for civilised people to avoid measles is either to discard straw altogether from their bedrooms, or to air palliasses in the sun, or dry them by the fire. . . . I may mention that when the extensive epidemic occurred in this colony I gave the easy method of averting the disease here indicated as much publicity as possible. The suggestion was, of course, generally disregarded. Some persons, however, although they may have thought the notion fanciful or speculative, had yet common sense enough to argue that the drying and airing of their children's beds was a wholesome proceeding