

problem was hardly a fair assignment for a student. They therefore passed the problem on to the Department of Scientific and Industrial Research. The Department remembered that the Japanese obtained their agar from seaweed, and passed the problem on to its Botany Division. The Botany Division, armed with an illustrated text-book on seaweeds (technically known as *algæ*), went out and collected some seaweed.

Now, a matai always looks like a matai, and once you have seen a totara you can be fairly sure of identifying any other you meet, and so with most of the denizens of the plant world; but seaweeds vary according to the depth at which they grow, the temperature of the water, the type of bottom, and currents and surges, and so on, so that three or four specimens of the same species of weed may be so different in appearance as to appear like different species. Our botanist therefore collected specimens of everything that resembled at all the ones marked in the book, took them back, and tried them out in test-tubes.

It was found that the most satisfactory *algæ* belonged to the family Gelidiaceæ, and that of this family the most suitable one was called *Pterocladia lucida*. Unfortunately, few seaweeds have common names, so it is difficult to avoid the scientific terminology. *Pterocladia lucida* is a pinkish or reddish fern-like seaweed, quite common in coastal waters round the North Island, particularly up the East Coast and in the Bay of Plenty. Finding out just where the weed grew in suitable quantities was, incidentally, a problem in itself.

At this stage a chemist from one of the meat-canneries asked why, since the extraction of agar required no special machinery or chemicals that would have to be imported, some one did not try it out. With this piece of encouragement the Department obtained half a ton of weed and set to work to try an experimental batch. For this purpose the children of Native schools in the Bay of Plenty were recruited, and with the co-operation of the school-teachers sufficient weed was soon obtained, hung to dry on the school fences, and forwarded to the Department.

The results were most encouraging, and the problem then became one of collecting the material on a commercial scale and of finding a firm to undertake the manufacture. A certain amount of negotiation about prices, a small advertising campaign, and the weed began to come in. Native schools again helped, and the fact that the children invariably sent in the right weed showed the feasibility of the scheme. Then School Committees and parents began to realize that the additional £5 or £10 added to



Agar is found at areas marked—e.g., Castle Point, Kaikoura, &c.

the school funds came from seaweed, and gradually the idea of money from seaweed spread. The coastal Maoris in particular were enthusiastic; a day's picnic by the beach, unlimited swimming and skylarking in the water, and finally a cheque. Kapai! The local store-keepers saw money coming into their districts, and assisted; school-teachers co-operated. The *School Journal* lent itself to propaganda, and the weed began to roll in. Some of it came in sacks, some was pressed into wool-bales, some had been pressed and baled in hay-balers,