



Figure 7.3 Method of sodium alginate extraction from brown seaweed (adapted from Sachan, Pushkar [6]).

7.3 Evolution of Alginate in Restorative Dentistry

Although alginate impression material was first used in the 1930s, the introduction of alginate as an alternative impression material in dentistry was, however, attributed to the scarcity of agar impression material during the Second World War [9]. Unlike agar, alginate is an elastic, irreversible hydrocolloid impression material [17]. Giordano 2nd [18] and Craig and Robert [19] alleged that the hydrophilic nature of irreversible hydrocolloids enables alginate to capture accurate impressions in the presence of blood and saliva. In addition, alginate has an ability to sufficiently record details of tooth undercut with sufficient elastic recovery [20].