Several methods of preparing ſalep have been pro­posed and practiſed. Geoffroy has delivered a very ju­dicious proceſs for this purpoſe in the *Hiſtoire de l'Academie Royale des Sciences,* 1740; and Retmus, in the Swediſh Tranſactions 1764, has improved Geoffroy’s method. But Mr Moult of Rochdale has lately favour­ed the public with a new manner of curing the orchis root; by which ſalep is prepared, at leaſt equal, if not ſuperior, to any brought from the Levant. The new root is to be waſhed in water; and the fine brown ſkin which covers it is to be ſeparated by means of a ſmall bruſh, or by dipping the root in hot water, and rubbing it with a coarſe linen cloth. When a ſuſſicient number of roots have been thus cleaned, they are to he ſpread on a tin-plate, and placed in an oven heated to the uſual degree, where they are to remain fix or ten minutes, in which time they will have loſt their milky whiteneſs, and acquired a tranfparency like horn, without any di­minution of bulk. Being arrived at this ſtate, they are to be removed, in order to dry and harden in the air, which will require ſeveral days to effect; or by uſing a very gentle heat, they may be finiſhed in a few hours.

Salep thus prepared, may be afforded in thoſe parts ofEngland where labour bears a high value, at about eight-pence or ten-pence per pound: And it might be ſold ſtill cheaper, if the orchis were to be cured, with­out ſeparating from it the brown ſkin which covers it; a troubleſome part of the proceſs, and which does not contribute to render the root either more palatable or ſalutary. Whereas the foreign ſalep is now ſold at five or fix ſhillings per pound.

Salep is ſaid to contain the greateſt quantity of ve­getable nouriſhment in the ſmalleſt bulk. Hence a very judicious writer, to prevent the dreadful calamity of fa­mine at ſea, has lately propoſed that the powder of it ſhould conſtitute part of the proviſions of every ſhip’s company. This powder and portable ſoup, diſſolved in boiling water, form a rich thick jelly, capable of ſupporting life for a conſiderable length of time. An ounce of each of theſe articles, with two quarts of boiling wa­ter, will be ſufficient ſubſiſtence for a man a day; and as being a mixture of animal and vegetable food, muſt prove more nouriſhing than double the quantity of rice-cake, made by boiling rice in water: which laſt, how­ever, ſailors are often obliged ſolely to ſubſiſt upon for ſeveral months; eſpecially in voyages to Guinea, when the bread and flour are exhauſted, and the beef and pork, having been ſalted in hot countries, are become unfit for uſe.

“But as a wholeſome nouriſhment (ſays Dr Percival@@\*), rice is much inferior to ſalep. I digeſted ſeveral alimentary mixtures prepared of mutton and water, beat up with bread, ſea-biſcuit, ſalep, rice-flower, ſago powder, potato, old cheeſe, &c. in a heat equal to that of the human body. In 48 hours they had all ac­quired a vinous ſmell, and were in briſk fermentation, except the mixture with rice, which did not emit many air-bubbles, and was but little changed. The third day ſeveral of the mixtures were ſweet, and continued to ferment; others had loſt their inteſtine motion, and were four; but the one which contained the rice was become putrid. From this experiment it appears, that rice as an aliment is flow of fermentation, and a very weak corrector of putrefaction. It is therefore an im­

proper diet for hoſpital-patients; but more particu­larly for ſailors in long voyages; becauſe it is inca­pable of preventing, and will not contribute much to check, the progreſs of that fatal diſeaſe, the sea ſcurvy. Under certain circumſtances, rice ſeems diſpoſed of itſelf, without mixture, to become putrid; for by long keeping it ſometimes acquires an offenſive foetor. Nor can it be conſidered as a very nutritive kind of food, on account of its difficult ſolubility in the ſtomach. Experience confirms the truth of this concluſion; for it is obſerved by the planters in the Well Indies, that the negroes grow thin, and are leſs able to work, whilſt they ſubſiſt upon rice.

“Salep has the ſingular property of concealing the taſte of salt water; a circumſtance of the higheſt im­portance at ſea, when there is a ſcarcity of freſh water. I diſſolved a dram and a half of common ſalt in a pint of the mucilage of ſalep, ſo liquid as to be potable, and the ſame quantity in a pint of ſpring-water. The ſalep was by no means diſagreeable to the taſte, but the water was rendered extremely unpalatable. This experiment ſuggeſted to me the trial of the orchis root as a corrector of acidity, a property which would render it a very uſeful diet for children. But the ſolution of it, when mixed with vinegar, ſeemed only to dilute like an equal proportion of water, and not to cover its ſharpneſs. Salep, however, appears by my experiments to retard the acetous fermentation of milk; and conſequently would be a good lithing for milk-pottage, eſpecially in large towns, where the cattle being fed upon ſour draff muſt yield aceſcent milk.

“Salep in a certain proportion, which I have not yet been able to aſcertain, would be a very uſeful and profitable addition to bread. I directed one ounce of the powder to be diſſolved in a quart of water, and the mucilage to be mixed with a ſufficient quantity of flour, ſalt, and yeaſt. The flour amounted to two pounds, the yeaſt to two ounces, and the ſalt to 8c grains. The loaf when baked was remarkably well fermented, and weighed three pounds two ounces. Another loaf, made with the ſame quantity of flour, &c. weighed two pounds and 12 ounces; from which it ap­pears that the ſalep, though uſed in ſo ſmall a propor­tion, increaſed the gravity of the loaf ſix ounces, by abſorbing and retaining more water than the flour alone was capable of. Half a pound of flour and an ounce of ſalep were mixed together, and the water added ac­cording to the uſual method of preparing bread. The loaf when baked weighed 13 ounces and an half; and would probably have been heavier if the ſalep had been previouſly diſſolved in about a pint of water. But it ſhould be remarked, that the quantity of flour uſed in this trial was not ſuſſicient to conceal the peculiar taſte of the ſalep.

“ The reſtorative, mucilaginous, and demulcent qua­lities of the orchis root, render it of conſiderable uſe in various diſeaſes. In the ſea-ſcurvy it powerfully obtunds the acrimony of the fluids, and at the ſame time is eaſily aſſimilated into a mild and nutritious chyle. In diar­rhoeas and the dyſentery it is highly ſerviceable, by ſheathing the internal coat of the inteſtines, by abating irritation, and gently correcting putrefaction. In the ſymptomatic fever, which ariſes from the abſorption of pus from ulcers in the lungs, ſrom wounds, or from am­putation, ſalep uſed plentifully is an admirable demul-

@@@ \* [m] Essays Medical and Experimental.