

So far as "rubbled" gums are concerned, there seems to be no doubt that this method is the best so far used for cleaning grades from the $\frac{1}{4}$ in. size upwards, as the mud balls, charcoal, and wood almost all sink. Some diggers propose treating only these grades in salt solutions, and getting up the chips and dust just as is done in the ordinary way; others are proposing to put the whole yield through a salt bath, considering that there need not be the same attention given to getting so much of the dirt out when in the rubbing-tub. The decision on the part of the digger as to how he will treat his material from the rubbing-tub will probably depend on the specific gravity of the chips, as well as the supply of water at hand. The gum and chips treated in a salt bath will require to be thoroughly washed to free the grades from salt. This is merely a matter of washing, but in localities where water is scarce it may be impossible to wash the chips sufficiently, and it will remain for the digger to arrange, if he can do so, with some one in Auckland to receive the chips and give the final washing there. To those diggers who have a good supply of water the final washing, after as much salt as possible has been recovered, should take the form of "floating and sinking," and the gum can be automatically graded at the same time into sinkers and floaters.

When discussing the question of cleaning gum in the salt bath it is worthy of mention that, in the case of chips and dust that will sink in the strongest salt solution possible, the bolder pieces from the same tubful will float in a comparatively weak solution. Just why this is so is not certain, but, judging from the brittleness and the colour of the chips that salt cannot float, these at some time have been affected by fire, and it is possible that some chemical change has taken place. Pieces of gum of all grades and sizes have been tested at this office, and no single piece from nub size upwards has been found to sink in a salt solution. Samples have been taken from chips and gum of the heaviest class, and investigation is now being made, and any results obtained will be published next year. In the meantime it can be taken for granted by diggers that very little loss, if indeed any, will occur through the sinking of any gum that will not stop on a $\frac{3}{8}$ in. sieve. If any such gum is found it is hoped that the digger will forward to this office a sample of both chips and gum, so that an examination may be made and a reason sought.

For the purposes of cleaning gum any brands of commercial salt such as used by butchers will do. It will be found that some brands contain a larger percentage of impurities which are not soluble in water, and this is usually reflected in the price. Salt-baskets should always be used, instead of putting the salt into the water. A rough wooden frame covered with ordinary scrim such as is used for papering houses will do admirably, but ordinary sacking will be found too closely woven for the purpose. The idea is to suspend the basket full of salt in the vessel containing the water, and when sufficient strength has been obtained the basket is withdrawn. By this means the solution can be got to exactly the strength required, and there is no unnecessary waste of salt, whilst the insoluble portions remain in the basket and can be thrown out. If diggers find any difficulty in obtaining salt in quantities at reasonable prices, full information can always be obtained from this office for the asking. The recovery of the salt from the materials treated will perhaps be somewhat irksome to the digger, but it will be found a costly practice, and one that cannot be afforded, to throw away too much salt. As the salt is soluble in water it could all be washed out of the gum and dirt and recovered, but this would involve the use of large receptacles, as the final washings would contain only a very small salt content. The storage available will mostly limit the amount of salt a digger in a small way can recover. Considering that plenty of firing is generally obtainable at the workings it is worth the digger's while to consider boiling the weak solutions in tins and getting rid of the excess of water in that way. At all events, it will pay handsomely to go to a good deal of trouble to recover the great bulk of the salt used, and this can easily be accomplished. To this end the use of a hydrometer as recommended in the foregoing will be found indispensable.

R. P. GREVILLE, Kauri-gum Superintendent.

The Under-Secretary for Lands.

STATEMENT OF ACCOUNTS FOR THE YEAR ENDED 31ST MARCH, 1922.

KAURI-GUM INDUSTRY ACCOUNT.

Receipts and Payments.

<i>Receipts.</i>	£	s.	d.	<i>Payments.</i>	£	s.	d.
Cash in hand, 1st April, 1921	7,401	0	3	Wages, &c., to workmen, overseers, and gum-buyers	3,017	17	3
Sales of kauri-gum	22,942	11	5	Plant, machinery, stores, &c.	1,203	5	3
Miscellaneous receipts	50	6	7	Purchases of kauri-gum	39,671	19	8
Interest on inscribed stock	87	0	3	Freights, &c.	3,894	10	11
Debentures raised	22,000	0	0	General and office expenses, administration, &c.	1,540	6	7
				Interest on loan debentures and sinking fund	1,207	12	8
				Cash in hand, Treasury, 31st March, 1922	1,945	6	2
	£52,480	18	6		£52,480	18	6