

cent. At 82 per cent. it would be worth £5 5 2, or \$25.44 per ton. Hence the following net profit:

Value at Liverpool,	25 5 2	\$25.44
Total Cost at Liverpool,	2 13 8	12.00
Net profit per ton,	£2 11 9	\$12.52

Finally, it may be stated that while the foregoing estimates of expenses are not absolute for all the districts in which apatite is found, they fairly represent the average outlay. From some mines the cost is less, from others more, though probably not varying \$2.00 (8 shillings) per ton from the estimates given; but with a moderately productive property and suitable management the net profit here shown may be relied upon.

It has sometimes been urged against investments in Canadian phosphate lands, that the veins and deposits are not continuous for any considerable depth; that they are merely pockets, and altogether unreliable. The principal cause of this method of reasoning is the manner in which the operations of mining have been carried on, particularly in the earlier years of this industry, and the force of this statement is much better appreciated after a careful inspection of the mode of occurrence of apatite in the different districts. The mineral is frequently found in lenticular masses, the contracted portions of which give to the vein the appearance of having "pinched out," if not entirely, at least to the extent that further mining becomes comparatively unprofitable; the pits are then abandoned and operations are transferred to other places or ceased altogether. But in numerous instances the rock or vein matter separating these "pockets" has been removed and the phosphate found again, often in larger quantities and of a better quality than before, much to the benefit of those most interested in the work. The writers have yet to learn of a single instance in which a vein has pinched out entirely, and frequently, as depth is gained, the mineral increases in quantity and purity. Familiarity with the different deposits in the district is of much value in directing operations; and ignorance of the principles of mining, and the art of breaking down a maximum amount of mineral with a minimum