

that the little island was really wealthier than Gournià, which at the time (about 1700-1400 B.C.) was probably the local provincial capital of the isthmus district. This wealth must have been due to seafaring trade, and probably to a great fishing industry, for agriculture there could be none on Pseira, even if in those days (as seems likely) there were water springs which now have dried up.

Then, about the end of the First Late Minoan Period (about 1500 B.C.), came a catastrophe. The town, which, like other settlements of the Cretan thalassocrats, even on the coast, was undefended by walls and open to attack, was taken, destroyed, and sacked by some unknown enemy. It never recovered, being only occupied for a short time during the Roman period.

To this disaster we owe, as Mr. Seager well points out, the preservation of so many objects of high interest. Gold, silver, and bronze were all looted and carried off; hence the comparative rarity of metal objects. But the fine pottery which is of so great interest to us now as evidence of the culture of its makers was unvalued by sea-robbers, and so, here, as elsewhere in ancient towns which have been destroyed by a catastrophe, we find this pottery and other remains of value to us exactly where it was left by the expelled or destroyed owners, or where the rage of the conqueror cast it forth. "On all sites the period of destruction is the one which leaves the richest harvest for the excavator. As long as a site is in continuous occupation the earlier deposits are only the refuse of breakage and objects which have ceased to be of service to their owners. They are thrown into rubbish-heaps and used as artificial fillings to make even floors over naturally uneven surfaces. Where, as at Pseira, the town was destroyed in the height of its prosperity, with no extensive later settlements to disturb its ruins, the finds are, of course, unusually rich" (p. 10).

I have no space for any critical discussion of technical points of archaeology, but may say that Mr. Seager's description of his finds in this summary report is both able and interesting. The publication is well produced, its plates are admirable, and its line illustrations well and accurately drawn. It is a worthy addition to the series of anthropological publications of the Pennsylvania University Museum, of which it forms the first number in the third volume. Soon we hope to see a similar report on Mr. Seager's later and still more interesting discoveries at Mokhlos, another isle, east of Pseira, where tombs have yielded gold treasures like those of Trov, and as old. Mr. Seager is to be congratulated on his admirable contributions to the great work, important and useful alike to science and to art, which is being carried out by the excavators of ancient Crete.

H. R. HALL.

#### THE LEAD GLAZE QUESTION.<sup>1</sup>

THE report referred to below is the outcome of the deliberations of a committee appointed by Lord Gladstone in May, 1908, to consider a question which has engaged the attention of the Home Office and Parliament for several years past, and has already been the subject of inquiry by several departmental committees. It is a matter of common knowledge that persons engaged in the making of earthenware and china are subjected to considerable risk to health from two main causes—dust and lead. The

<sup>1</sup> Report of the Department Committee appointed to inquire into the Dangers attendant on the use of Lead and the Danger or Injury to Health arising from Dust and other Causes in the Manufacture of Earthenware and China and in the Processes incidental thereto, including the Making of Lithographic Transfers. Presented to both Houses of Parliament by Command of His Majesty. Vol. i. Report. Pp. vii + 150. (London: H.M.S.O., 1910.) Price 1s. 5d.

dust arises from the finely-divided silicious matter, mainly ground flint, employed in various stages and processes of ceramic manufacture; this when breathed gives rise to distressing bronchial and lung troubles, and in an aggravated form leads to the malady known as "potter's rot."

The danger arising from dust may be largely obviated by the use of mechanical and other appliances whereby the operative is prevented from inhaling the dust-laden atmosphere. By the more general use of exhaust-fans or other suitable ventilating machinery, and by the employment of respirators, cases of "potter's rot" are less frequent now than formerly. At the same time much remains to be done by a more stringent application of these remedial measures. It was only in 1894 that the Home Office issued the first code of special rules dealing with dusty processes. The evil is patent and notorious; it is, however, not very satisfactory to be told that we must wait for the statistics of 1920-2 before we can estimate the real value of these special rules. If public opinion moved as fast on the dust problem as it has on the lead question, we should not have to wait ten or twelve years before this crying evil was absolutely stamped out, and "potter's rot" become as much a thing of the past as "phossy jaw."

It is, however, mainly to the dangers attendant on the use of lead in pottery manufacture that public sentiment has been roused, and it has been largely in deference to this feeling that the several departmental committees above alluded to have been appointed. It is only by "pegging away" in this manner that such amelioration as has been secured has been reached.

The pottery industry in this country is mainly centred in North Staffordshire. Of the 63,000 workers in the 550 factories scattered throughout the United Kingdom, 48,000 are employed in the 329 "pot-banks" in the district known as the "Potteries." Owing to special circumstances, arising largely from local conditions of employment, no systematic attempts to grapple with the evil of lead poisoning have been made by the manufacturers as a body. Individual firms, with intelligent management, have succeeded in minimising the mischief, but the laxity of other firms has at times more than neutralised the benefits which have been secured by the more general adoption of the precautionary measure which common-sense seemed to indicate and experience has shown to be adequate. The manufacturers as a body have, in fact, been content to wait until outside pressure has forced them into action, mainly by rules and regulations issued by the Home Office, and based on the suggestions or recommendations of departmental committees appointed *ad hoc*.

The committee which has now reported has gone over much of the ground already traversed by its predecessors, or which occupied the attention of those engaged in the prolonged arbitration under Lord James, leading up to the special rules of December, 1903. But it cannot be said that any real progress has been made. Although it has been established that a large amount of earthenware can be made without the use of lead in any form, and even in the cases where lead must be used, it has been proved that the lead may be so combined that it is practically innocuous, the manufacturers as a body have hitherto resisted any attempt to prescribe a schedule of articles which should be made with leadless glaze, or to bind themselves to use glazes in which the lead is in an innocuous form. They, in fact, demand unrestricted liberty to use any materials they think necessary for their purposes. The loud cry of "foreign competition" is sufficient to drown the still, small voice of pity raised on behalf of the workers.

Now it is absolutely certain that under such conditions lead-poisoning in pottery manufacture will continue to occur. The leading manufacturers, through their counsel, in the course of the arbitration proceedings before Lord James of Hereford in 1903, promised the extirpation of lead-poisoning under the rules then proposed, but that promise has not been kept. On the contrary things are as bad as ever. That more might be done under the rules as they stand would seem to follow from the statistical information furnished by the committee. They examined into the record of the 550 potteries which have been placed under these special rules during the period 1904 to 1908, and they find that during these five years:—

|  |   |   |   |       |
|--|---|---|---|-------|
| 5 potteries have been responsible for 75 cases |   |   |   |       |
| 17   | " | " | " | 119 " |
| 151  | " | " | " | 323 " |
| In all 173                                     | " | " | " | 517 " |

leaving 377 potteries out of the 550 in which no cases have occurred at all. In other words, 32 per cent. have an average of three cases every five years, while 68 per cent. are entirely free from the disease. In the 173 potteries in which the disease has occurred there are 4,800 workers as against some 2,000 in the other potteries. The conclusion would seem to be obvious. It is in certain relatively large works that the cases of lead-poisoning are most frequent, and this can only be due to bad management, imperfect supervision, or inadequate protective appliances.

During the period 1901-9, 865 cases of lead-poisoning in pottery workers were reported. Of these 788 arose from glaze processes, whereas only 51 were due to decorative processes. Lead glaze is therefore the main cause of the evil.

It cannot be said that the conclusions of the committee now reporting have tended in the slightest degree towards a solution of this grave evil. All the conditions to which lead-poisoning in ceramic manufacture is due are perfectly well known, but the committee was apparently unable or unwilling to make any definite suggestions as to remedies. The committee pleads that it was in a difficult position. The members of the committee representing the manufacturers were entirely opposed to any restriction in the use of raw lead; the representatives of the workers, seeing the comparatively harmless character of low-solubility glazes, would be glad to see them generally introduced, "but have to consider the grave risk of loss of employment which any dislocation of the industry due to their introduction might entail." *Might*, not would. Taking the question of glazes as a whole, two facts, says the committee, are beyond dispute:—

"In the first place, the danger to the workers of handling raw lead is very real; in the second, it is evident that however unsuitable leadless and low solubility glazes may be for certain classes of ware, there is a considerable quantity made for which they are quite satisfactory."

But the members of the committee are unable to make up their minds what classes of ware are represented by this "considerable quantity," although the facts were before them. They think, however,

"that every inducement and encouragement should be given to the manufacturers both to persevere with their experiments in search of satisfactory and low-solubility glazes, and to introduce them whenever possible."

Also efforts should be made to arouse the interest of purchasers in the question. The members think "it was established that pottery made with leadless and low-solubility glazes can be obtained of excellent quality," and they "consider that the desirability of insisting on being supplied with such ware should be

NO. 2148, VOL. 85]

brought home to the public at large." Lastly, they are of opinion that—

"the observance of the special rules has been far from satisfactory. In the past many of the manufacturers do not appear to have regarded it as incumbent on them personally to insist upon it; they have left the initiative to the factory inspectors, and in future they should be made to realise that they are themselves responsible."

The committee obviously had not the courage of its convictions. It is difficult to imagine any more feeble or inconclusive "conclusions." No constructive action seemed to be possible to it; its only policy was that of *laissez-faire*. The net upshot of the inquiry is that the whole position is not one whit ameliorated; the operatives apparently are still to remain the victims of lax surveillance or of indifference, and of official non-interference.

The matter, however, cannot be allowed to rest in this position. If the manufacturers' claim for unrestricted liberty to use such dangerous materials as they please is to be allowed, they must be made to feel the responsibility they thereby incur by far more stringent measures than have hitherto been brought to bear upon them.

#### THE NEW ENCYCLOPÆDIA OF SPORT.<sup>1</sup>

WHETHER by design or by accident, the new edition of this work has appeared at an opportune time, since the success of the Vienna Exhibition has attracted an even more than ordinary amount of attention to sports and pastimes of all sorts during the year now rapidly coming to a close. Those who



Photo.]

[W. S. Berridge.

Himalayan Tahr. From "The Encyclopædia of Sport."

possess the first volume of the original edition will find, on comparing it with its successor, a great change in regard to much of the subject-matter, aviation having been practically created since the date of the appearance of the first edition, while during the same period motors have come to the front as a means of communication, and everything in connection

<sup>1</sup> "The Encyclopædia of Sport and Games." Edited by the Earl of Suffolk and Berkshire. New and enlarged edition. Vol. i., A to Cricket. Pp. viii+496. (London: W. Heinemann, 1910.) Price, 10s. 6d. net at home; 12s. 6d. net abroad.