

We still think that Tell el-Kheleifi is the site of Ezion-Geber. A problem that we previously dealt with is how to explain the distance of the tell from the seashore. The tell is now 556 m. from the shore. A month's residence here has, I believe, furnished the additional explanation required beyond that given in a recent issue of the Bulletin. The prevailing wind here is from the north. Day in and day out, there is an unceasing flow of sand from the Arabah, which moves seaward. The shallow rooms at the north end of the tell which we cleared out at the beginning of the season had to be cleared out again by the time Beaumont and Henschel got around to planning and levelling these rooms. They had more than half filled up with sand. When occasionally a proper sand storm blows, so that one eats, drinks, and breathes sand, then a layer of three to five centimeters of sand may be found extending all the way from the tell down to the very edge of the water. We have not attempted any scientific measurements, but it is obvious that the seashore is being extended southward at the rate of ~~about~~ centimeters a year. Over a period of three thousand years, approximately, it is easy to see how the site of the tell has constantly receded from the sea, or rather, more exactly, how the sea has retreated from it. In fact the builders of Ezion-Geber could not have chosen a worse place along the entire seashore for building their city than the present site. It is situated almost exactly half way between the east and west ends of the Arabah, and exposed to the full blast of the winds from the north, and to the accompanying sand. We have had the experience of being in a sandstorm here at Tell el-Kheleifi, and then by the simple process of driving about four kilometres to Aqabah to the east, (which is in a ~~xxxx~~ less exposed position on the slope of the hills which stretch down to the edge of the gulf on the east side), of getting out of the storm. In fact by driving only about half that distance! The builders of Ezion-Geber, however, had method in their madness, so to speak. They wanted a site, which would be exposed to the full strength of the winds from the north. And from the nature of some of the buildings it is clear that the prevailing winds say in the 10th to the 8th century B.C. ~~was~~ also from the north. I shall go into this matter more in detail when I return to Jerusalem and have time to write a proper preliminary article on the results of the excavations for the Bulletin, which can then serve also as a report to the American Philosophical Society, which furnished \$900 towards the carrying out of the work.

~~THEXIXXAN~~ To judge from the excavations, Ezion-Geber occupied itself with three things in particular, namely, a) the smelting of copper; b) the manufacture of copper implements, particularly spear-heads, fish-hooks, nails, fibulae, etc.; c) sea-trade, building of ships, and fishing. In addition there was certainly weaving, probably of yarn for nets, and beads were manufactured from carnelian, agate, crystal, and mother-of-pearl. (Aside from numerous large and small fragments of stones of these various materials, and hundreds of shells, we found one jewel casket consisting of a jar with its neck slightly broken but stopped up with a small shell, and in the jar sixty-three beads of various kinds). It was busy, unfortified town of about five hundred inhabitants, to judge from present indications, the importance of which by far transcends the brief references accorded to it in the pages of the Bible.

Primarily, Ezion-Geber was a refining center, where the copper mined in the vicinity was smelted, and worked up. There is also more than a possibility that much of the copper mined in the Arabah, and crudely smelted in a number of the mining- and smelting sites that have been described in Annual XV, may have been brought here to be further refined, and worked up into the copper articles mentioned above. We have up till now opened up about 45 rooms in the tell, going from the north end to the south. A third of those rooms belongs to a separate block of buildings devoted completely to the smelting and refining of copper. This smelting and refining plant occupies the entire northwest corner of the mound, and is, so far as my recollection goes, the only complete plant of its kind, which is so extensive and so comparatively intact, in the entire ancient Near East. On the very north end of the mound are a series of four small rooms, in which were crucibles. In the south walls of these rooms are numerous flues, some of which penetrate to channels ~~in the~~ running along the center of the walls, and others of which go clear through the walls to some large rooms, which have flues in each wall of each room. ~~There are also a series of~~ The south ends of several of these large rooms border on a long, rectangular room, oriented east-west, whose north wall contains two series of horizontal flues. These rooms are connected with each other not only through the flues which penetrate from one room to the other, but also through the fact that canals built inside the walls lead from one wall to another, making one interconnected whole out of the entire block of rooms. In most of these rooms are large, heavy, hand-made pottery crucibles in a more or less ruined state, placed over a layer of loose stone debris and burnt brick debris. There were also numerous fragments of other crude hand-made pottery vessels in these rooms. Our present idea is that the ore to be smelted was placed in the crucibles in all the rooms of the smelting plant, then the crucibles were surrounded and covered by charcoal, and the entire series of rooms fired at the same time. Great masses of ~~burned~~ burned wood and ash and pulverized burned brick were found in these rooms. During the next two weeks that I propose to spend here at Tell el-Kheleifi, one of my chief tasks will be to devote much time to a much more careful study of the smelting plant than I have been able to devote to it thus far. By placing one's hand over any one of the flue holes at the south end of one of the walls of any of the rooms, one can feel the strong draft that still courses through these flues. One of the main reasons, therefore, we feel, that the ancient inhabitants of Tell el-Kheleifi chose this particular site, was because they needed a constant draft from ~~an~~ a known direction to ~~work their~~ help work their smelting and refining furnaces. It need be added here only that all indications point to the fact that the main period of this site, and the best buildings belong to the period of King Solomon. In addition to owning and working the copper deposits in the Arabah, he apparently engaged extensively, together with his subjects, ~~in the~~ not only in the smelting and refining of the ore, but in the manufacture of copper articles. One thinks again of the description of Palestine (the Arabah) in Deuteronomy 8,9 as "a land whose stones are iron, and out of whose hills you can dig copper"

Another of the most interesting facts about our site is the pottery discovered here. What we have previously emphasized about Transjordanian pottery is truer here than any other place or section in Transjordan. We have previously said that while Early Iron Age pottery ~~is the same as that found in Transjordan~~ in Transjordan had definite affinities and similarities to Early Iron Age (we speak especially of the period from the 13th to the 8th century B.C.) pottery of Palestine, there were sufficient differences to mark it as a type of pottery in its own right, and furthermore to enable the expert to differentiate between the pottery of various parts of Transjordan. We have said also that the main connections of Transjordanian pottery were rather with Syria to the north than with Palestine to the west. On a future occasion in some article in the Bulletin I shall have something to say about the connections between the pottery of Transjordan and the pottery of Cyprus, and point out that in all probability many types particularly of banded painted ware in Transjordan which are similar to wares in Cyprus precede the wares in Cyprus. It may even be possible that somehow the Cypriote wares were influenced by the Transjordanian wares, in much the same way as the Ionic capital seems to have come from the east to the west. The fact that Transjordanian pottery may therefore ~~be described as belonging on~~ the whole to a class of its own, applies with equal and more force to the pottery of Ezion-Geber. Not only does the pottery of Ezion-Geber stand out as being different from Early Iron Age pottery in Palestine, (although again we emphasize that there are definite affinities and ~~innumerable~~ numerous similarities), but it is necessary to go one step farther and say now that the pottery of Ezion-Geber belongs to its own particular class, and can most easily be differentiated also from the pottery in the rest of Transjordan. Let me hasten to point out that I am not getting to the point where I believe that not only each country but each town had its own pottery. It must be remembered that Ezion-Geber is far removed from the fertile uplands of Edom and Judaea. A great wilderness separates it from both. It should also be remembered that Ezion-Geber's immediate cultural connections are more directly at hand than with Edom and Judah. Today, Aqabah is the only trading post for many miles for a large part of ~~Sinai~~ northeastern Sinai, and for a large part of northwestern Hejaz or Saudi Arabia. Even so in the Early Iron Age, Ezion-Geber was connected directly with Sinai and with Midian, and only indirectly with Edom and Judah, to which countries nevertheless at one time or the other it belonged. In a word then we believe that the pottery of Ezion-Geber which is so distinctive from all other known types of Palestinian and Transjordanian is not limited to Ezion-Geber, but will possibly be found to be characteristic of the Early Iron Age pottery of Sinai and of Midian, when Early Iron Age sites in Sinai and in Midian (i.e. along the n.w. part of the Gulf of Aqabah) are discovered and excavated. The only other possibility for the explanation of the distinctiveness of the pottery from Ezion-Geber is that it was conditioned by the type of work ~~which was~~ to which it was devoted. While that, however, is partly true, it cannot, we believe, give the complete answer to the question

