From the * enslation given above it appears:

1. That the author recognized the difference between underground and surface mining.

2. That gold, silver, iron, and 'brass' were obtained in his day by mining, followed by metallurgical treatment—doubtless a simple reduction by fusion with carbon.

3. That the relatively superior fineness of placer gold was well known, and, consequently, that no 'refining' of gold, as it occurs in nature alloyed with silver, was practised. The 'refining' of other gold was probably only a crude fusion of minerals contain' to free gold.

4. That underground mining was done by sinking shafts, in which the miners were suspended by ropes, and by sinking drifts "to the bound ary of the darkness".

5. That the fracture and enrichment of the rocks underground was ascribed to volcanic causes, with the action of which, on the surface, as men were familiar. This, however, is not a scientific perception, deduction, or prevision.

6. That surface mining had gone so far as to involve the diversion of streams into artificial channels, for the purpose of 'bar-mining'. Possibly verse 11 may indicate the employment of coner-dams, to lay bare single auriferous bars, without diverting the whole stream. The whole description indicates the well-known capacity of the ancients for bestowing immense labor upon the execution of crude methods.

7. That coral, pearls, and sundry gems not to be positively identified, were recognized as objects of industry and commerce, and that their market value, as well as that of gold itself, was increased by the artistic work of lapidaries and jewelers.

8. That the commerce in such products was interential, so that Ophir and Ethiopia were already trade-marks, indicating special quality and price.

9. That rock-crystal (not, in my judgment, glass, though this rendering is preferred by the revisers) and used in artistic jewelers' work, being carved and then adorned with cora, gold, etc. This is not evidence of an advanced state of the metallurgical art. Whatever could be done by simple patience and manual skill has been repeatedly done by primitive tribes, ignorant of the principles of the mechanical arts; and many achievements of such barbaric artificers have been simply the lucky outcome of experiments, involving a vast amount of unlucky and, therefore, rejected results. Numerous instances of ancient art, offered as proof that the early peoples knew in some respects as much, and in other respects more, than we do, break down under this test. The modern art involves a knowledge of conditions and means, and consequent ability, to accomplish with certainty the end desired. In other words, its perfection is measured, in inverse proportion, by the number of 'rejections' which it