"ANCIENT WORKINGS" is a popular term; possibly it is not quite so popular as it was in the late nineties, when the possession of a few traces of half-obliterated excavations named after the Queen of Sheba or her Royal protector, made many a man's fortune. But it is still a popular term, and is used, somewhat uncritically, to designate any trace of mining operations which date back to the period before the occupation of Southern Rhodesia by the British.

It is generally assumed that all of these workings were made in search of gold, the demand for which was so largely stimulated by the unprecedented quantities used by King Solomon in the decoration of his new Temple at Jerusalem about the year 960 B.C. Unfortunately, investigation has shown that iron, copper, tin, rock crystals, corundum; yellow ochre, red ochre and plumbago have all been sought after, and that the surface wash, due to the torrential rains, is so rapid that if any workings existed three thousand years ago they have either been washed away or buried beneath a changed land surface.

We must conclude, therefore, that the workings we trace in all parts of the country are of a much more recent origin.

The area over which these workings occur occupies the whole of the central tableland of South Africa between the Zambesi Valley and the Rand. Although this area is so large, the methods of mining are the same throughout.

Major Trevor, Mining Commissioner for Northern Rhodesia states that as far as the evidence goes, all the mines should be attributed to one people, though the work must have extended over long periods of time. (T.G. Trevor, "The Journal of the Chemical and Metallurgical and Mining Society of S.A.," vol. XIX, No. 12, p. 287)
But although there is nothing to choose in skill and method between the workings to the north and those to the south of the Limpopo River, there is one very important distinction - the former are mainly for gold and the latter mainly for copper. This distinction is very marked at the old copper mines south of Pietersburg, where several phenomenally rich outcrops of gold had been left untouched, as though the old workers were ignorant of, or indifferent to, them. (F.E.B. Fripp. "Old Mine Workings of Transvaal and Rhodesia," Proceedings, Rhodesia, Scientific Association, vol. XI., part 3, p. 163). In the northern region, on the other hand, although copper has been by no means neglected, practically every outcrop of gold has been worked.

From the scanty data of archaeological finds in the ancient workings, we are able to piece together a picture of a primitive people carrying on an industry with few and simple tools at an immense cost of human labour.

The commonest metal tools are the gads, generally of iron, but sometimes of steel, some as Nos. 2, b, c, and d. are pointed at both ends, and must have been hafted by being set in a knobbed stick in the manner of modern native axes, and used as picks. Others, however, seem to have been used as wedges and driven into the crevices of the rock with stone hammers, which have been worn into well defined hollows by driving such wedges.

Judging from the quantities of charcoal found in the workings, it is evident that the miners shattered the rock by firing it, but as there are many places where this could be done, in sinking a shaft, for example, it is possible that the rock was battered out with a small boulder set in a stout forked stick. The labour of working a hard rock as quartz with such primitive methods must have been immense; we therefore find that the old miners showed great care in clearing out every scrap of paying material from the workings, and also that they made their shafts and leads very small indeed. So small are they that some observers
"Colonel Valentine was cutting a ditch the other day when one of the local natives said to him, 'It is just here where the woman was buried in the tunnel,' and sure enough, just then they came across the skeleton arm with the rusted iron bracelet still encircling the bone."

These iron bracelets are objects used only by the women votaries of one of the Mdzukwa cults, to obtain the protection of the particular Shavi or spirit concerned.

The finding of several of these rings in the old workings at the Gaika Mine in 1911, proves that in these workings, which are considered amongst the most extensive known, women were employed who had the same cults as modern kafir folk. One of these rings is shown in Fig. 2 A.

The way in which native mining in the reef persisted up to a comparatively recent date is shown by the account Thomas Baines gives of the mining he found in progress in the Lomagundi district in 1872 ("The Gold Regions of S.E. Africa," p. 42). He also mentions old workings near Hartley which natives told him had been made by their fathers, who sold the gold to some while men who lived in a house, the ruins of which could still be seen.

The Matabele whom Selous met on his early expeditions into this country, insisted that when they invaded Rhodesia they found the natives working gold in the "amaguti", or deep holes on the quartz reef. In 1884 Selous visited the head of the filled -in shaft, where he found that the whole process of burning and crushing the quartz had been carried on. On clearing out the shaft part of the roof was found to be supported with mapi ni poles, with the bark still on them; they showed no signs of any great age, and had been felled by narrow bladed native axes.

In 1891, Mr. Kock, a prospector, found a bark bucket and rope at the bottom of a shaft 120 feet deep on the Umsweaswi River. It is impossible to believe that articles made of such perishable matter
made of such perishable material to be very old.

The accounts left us by the Portuguese explorers on the 16th and 17th centuries fully confirm the Bantu origin of the mines, and nothing is more difficult to understand than the legend that these writers make no mention of mining at depth by the natives.

The following quotation seems to be conclusive:—

"River gold is extracted all the year, but more abundantly during the rainy seasons and at the end thereof, when the rivers are going down. The gold from the mines in Manica is also extracted all the year, but in Mokaranga only in the three months which are called Duorimo, that is August, September and October, because in these months, after the harvests have been gathered, moderate rains begin, so that the miners have water for their use to wash and sift gold. Afterwards, in November, the rains increase, so that the Marondas, that is the wells or holes in which they dig for the gold, are flooded, and the work cannot be continued. Very often the Marondo yields very little but some of them yield from one to three thousand pastas."

The method of extracting it is as follows:—

"A countless number of kaffirs, with their wives and children, assemble at the place where they choose to open Marondas; the chief of each village forms a separate party with his people, and each begins to open his Marondo in the fashion of a well. The mouth is so narrow that a man may stand with his legs extended from one side to the other. They make steps to go up and down within the circumference of the well, and one of these the kaffirs stationed themselves, passing the mataca, or earth which is dug away from hand to hand, which the diggers passed to them in pandes or wooden bowls. The first mataca does contain any con
considerable quantity of gold, the mataca which contains it is well known, and when they come upon it, or upon gold in stone, as sometimes happens, they do not desist until it is exhausted, following the vein under the earth in every direction.

"Sometimes it happens that such a rush of water bursts into the mine that it is flooded, and it is impossible to extract the mataca, and still less the quartz, which has to be broken with great labour. Some of these marondos, containing infinite quantities of gold are abandoned for want of skill to pump out the water.

"When the earth or quartz is taken out of the ground there are found in it many pieces and fragments of gold of notable size, and the earth which adheres to these pieces is scented and very healthy. The stone is then ground to powder, and this powder, together with the mataca which contains gold, is washed in the neighbouring rivers until the water has washed away all the earth or stone powder, and the gold being the heaviest, is left at the bottom of the bowl in small scales or very fine glittering sand. — Manuel Barretto, 1667, Records, Vol. III., p. 489, S. E. Africa."

Dos Santos ("Records, S. E. Africa," Vol. VII., p. 218) describes the three methods by which gold was obtained, the first and most usual manner by making "deep holes and mines", the second by "collecting it from water courses during the rains", and, thirdly when "the gold is extracted from certain stones which are found in particular mines".

Dos Santos also informs us that "this gold from stones is called by the kaffirs matuca; it is inferior and of few carats fineness. All other gold they call dahabo, whether it be in powder or in pieces."
It is difficult to understand how a separate price for matuca could have become recognised, unless it was produced in considerable quantities, or how it could be produced in quantity if it was not mined from the reef.

That gold was produced in quantity is indicated by the large price at which the trade monopoly with the Sofala and the Zambezi was formed out. Ray de Mello de Sampaio agreed in 1615 to pay annually £7,500 for the privilege and support all Government charges, including the presents to kaffir dignitaries (the only exception being the ordinary expenses of the Fortress of Mozambique), and to pay a tax of 1½½ on all his imported goods.

That the profits were considerable we may judge from Nuno Vello Pereira, who expected in three years to clear nine tons of gold from the trade with Sofala and the territory of the Monomotapa ("Records, S.E. Africa," Vol. VIII p. 416).

The enormous profits made in trade also point to a glut of gold. Father Moncharo, in 1572 calculated that the profits on importing beads from India and selling them to the kaffirs for gold amounted to 3,000%.

Luiz Froes ("Records, S.E. Africa," Vol. II, p. 120) mentions the curious fact that kaffirs valued cows more than gold.

From all this we may judge that in the 16th century the exploitation of the richest and most accessible deposits of gold was still continuing, and had not then been of long duration.

Thesal notes that no mention is made by the Portuguese writers of the "ancient workings". This omission is natural enough if the mines from which Pereira hoped to draw his nine tons of gold, and the traders their 3,000% profits, were none other than our ancient workings, which in the 16th century were in full production.
That this was actually the case is proved beyond all doubt by the discovery, 40 feet below the surface, in an "ancient" filled-in stope of the Quagga Mines, Odzi, of a sixpenny piece of Queen Elizabeth, dated 1572.

The distinction of the gold mining area north of the Limpopo and the copper mining to the south also finds an echo in the Portuguese records. When De Gama reached the mouth of the Limpopo on January 6, 1498, he found such quantities of copper in use by the natives that the Portuguese called it the Copper River. It is difficult to believe that this copper was not derived from the "ancient workings" of the Transvaal, and that the gold he obtained further north was not from the "ancient workings" of Rhodesia.

This development of gold mines in the north and copper in the south, would lead us to suppose that the native races had come under a civilising influence, which at the beginning of the sixteenth century had not spread south of the desolate country which borders the Limpopo.

We know from the "Chronicle" of Kilwa that this is exactly what had happened.

At an uncertain date, but probably early in the eleventh century, the Arab town of Madagoxo had commenced the trade with the natives for gold and ivory, which led to the founding of Sofala. Jao de Barros quotes the "Chronicle" to the effect that before "that time it (gold and ivory) had never been exported from that part of the coast of Sofala" ("Records," S.E. Africa, Vol. VI, p. 273), and we have no reason to believe that this statement is other than literally true.

During the five hundred years that elapsed between this event and the Portuguese Conquest, the Arabs and Persians had established several trading posts on the coasts of what is now Portuguese East Africa; and had penetrated up the Zambesi Valley at least as far as Sena. They certainly never attempted to conquer the country, and we have no evidence that they actually mined for the gold, but they developed a thriving trade by bartering it against the
cloth and beads which they imported from India.

We have no means of estimating the quantity of gold that was extracted as a result of this trade, but even if it were as large as the guesswork figure of £75,000,000 quoted by R.N. Hall, it could have been absorbed by the luxurious Courts which flourished during the middle ages in India, and:

"Where the gorgeous East with richest hand
Pours on her Kings barbaric pearl and Gold".

The Arab influence was spread by indirect means as far south as the Tugela, for in 1858 the survivors of the wreck of the "St. Albert" found that north of that river the natives would only take cloth in barter, and refuse the iron nails and pieces of copper, which had been in such demand further south, where cloth was unknown and without value.

After having been completely submerged by the Portuguese Conquest, the Arab power again revived, and in 1729 Mombasa was reconquered, and between that date and the middle of last century it seemed likely that Central Africa would be a great Arab State. Arab traders penetrated into the Congo valley, and Rhodesia, and seem to have left their mark on native tradition in the Transvaal. ("Prehistoric Period in South Africa?" J.P. Johnson, p. 106).

The rise of the Zulu power and the Matabele conquest of Rhodesia, put an end to these activities in South Africa, and any mining activity that they may have stimulated died out, and was remembered only in half forgotten legends.

On the facts before us, I think we can conclude that the ancient workings both in Rhodesia and the Transvaal are the work of people of the Bantu race.

Briefly summarised my conclusion are as follows:- That the Bantu are the only recorded people having a sufficiently high culture to make the mines, who have occupied both Rhodesia and the Transvaal.
We are assured on the evidence of trustworthy observers that between 1550 and 1872 the Bantu of Rhodesia were engaged in mining gold from the reef, and there is no doubt that they were actively engaged in the industry at a much earlier date.

We also know that copper was extensively used by the Bantu tribes on the Limpopo at the beginning of the sixteenth century. This historical evidence is corroborated by the workings themselves, which in Rhodesia are mainly for gold and in the Transvaal mainly for copper.

All skeletons recovered from ancient workings are those of Bantu, a large proportion are women and young girls. As the leads and shafts are often to small to be worked by men, it is probable that the usual miners were women and children, which would be entirely consistent with the Bantu racial character, but is inconsistent with slave labour under foreign exploitation.

That the finding of a Queen Elizabeth sixpence dated 1572, forty feet below the surface, in the Quagga Mine, shows that this mine was being worked at the end of the sixteenth century. As the Portuguese did not usually mine for gold, it is probable the miners were Bantu.

That the rapid surface changes in Rhodesia fill in workings and shafts soon after they are abandoned, and thus assure us that finds made in them are contemporary with the mines.

That the gold mines of Rhodesia were worked by Bantu under the stimulus of the cloth and beads imported by the Arabs and Portuguese, both of which races found it more profitable to barter the gold from the kaffirs than to mine for it themselves.

That the Portuguese authorities of the sixteenth and seventeenth centuries indicate that a large quantity of gold was obtained by these means.

That gold mining at depth on the reef practically ceased with the Matabele invasion, though it lingered on in
a modified form until as late as 1872.

That we have no evidence that would justify giving a date earlier than the medieval period to any mine in South Africa.

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<th>Place</th>
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<td>Umtali</td>
<td>&quot;S. Africa,&quot; 23-II-23</td>
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<td>Proceedings, R.S.A. Vol., XXIII</td>
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<td>&quot;Man&quot; (1909, No. 41, p. 68)</td>
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