

The first is of the sacred city of Benares, seen from a boat on the Ganges early in the morning of a great festival. Behind the river bank rise the temples, rank on rank, imposing and secure. The ghats leading to the river are packed with noisy pilgrims pressing down to bathe, some with garlands which they dip in the water and put back round the neck. Each bather dips himself twice or more, drinks a little, pours water over his head, the more devout folding their hands and saying a prayer, and then dips again and washes vigorously. From the burning ghats a thin coil of smoke rises from a flower-strewn shrouded body. In the temples, as we had seen the day before, the worshippers are hurrying noisily through, sprinkling water on each idol of their choice and ringing a bell to make the god listen, while a piper plays in a niche above and sacred cows wander about, listless and bored.

The second memory is of the drawing-room of the Bishop's House at Kottayam in Travancore, looking out through the peaceful garden to the cathedral a quarter of a mile away. Beyond the garden wall the crowds are returning to the city after the packed service for Christian workers. The Indian Bishop Jacob sits opposite me. He is not tall but is very erect, with glasses and thinning grey hair, a man vigorous and independent, but without an ounce of pomposity or conceit. You do not have to talk long with him to realize his deep love for Christ and for the souls of men, and his qualities of leadership.

The Bishop had talked of present needs and opportunities. Then I asked, "Will India ever, as a *nation*, turn to Christ? Has not the opportunity gone?"

In reply he spoke of the great advance of the past century. And then he concluded, "Give us a little more time, and India will turn to Christ. We need the gift of *impatience* for work, and the gift of patience for waiting. India *will* turn to Christ," he repeated. "Where are the gods and goddesses of Greece and Rome? And time moves more slowly in the East."

## Unearthing Ancient Jericho

BY THE REV. PROFESSOR R. K. HARRISON, M.A., PH.D.

**T**HERE are many sites in the Holy Land whose identification is extremely doubtful, to say the least. Some have been shown by modern archaeological excavation to correspond with the locations ascribed to them in the Old and New Testaments. But many others still have to be verified, and in certain cases it will prove to be difficult, if not entirely impossible, to do this.

A great number of sites have retained their traditional location without too much apparent difficulty, especially where they were centres of cultural or commercial activity. One extremely ancient site which has survived through the centuries is that of Jericho. At the present time it constitutes a long, eroded mound, whose modern name

is Tell es-Sultan, and it is situated about five miles west of the Jordan river, and a little north of the modern city.

The importance of this location is evident when considerations of geography are born in mind. Jericho was situated in the Jordan Rift, a deep, wide gorge through which the Jordan river flowed. Standing some five hundred feet above the level of the Dead Sea, it was still about eight hundred feet below the level of the Mediterranean Sea, and was sheltered by a range of steep barren hills. To the east stretched the plateau which formed the uplands of Moab, so that in effect, Jericho was amply protected from the ravages of weather on both sides.

In summer, the temperature at the bottom of the rift-valley reached tropical proportions, whilst in winter, the snow and cold of Jerusalem, some seventeen miles or so to the south-west, provided an unpleasant contrast to the warmth experienced in the valley. These climatic conditions were made bearable by the presence of a sweet spring which provided a steady flow of water for man and beast. The modern name of this fountain is Ain es-Sultan, and in antiquity it was the perennial source of water for those who frequented the locality. In the medieval period, the spring was named "Elisha's Fountain", because by tradition its waters had been purified, at the request of the inhabitants, by the disciple and successor of Elijah. All other supplies of water in the vicinity have been brackish for many centuries.

Though ancient Jericho might have been regarded as the natural location for a village or town because of its water supply which, when irrigated, would ensure an abundant harvest of crops and tropical fruits, it claimed at least one other significant feature. It stood at the junction of several of the routes which were followed by the ancient Oriental spice-caravans, and it was also of strategic importance because it commanded access to one of the chief permanent fords across the Jordan river.

Since the ancient trading routes linked up various cultures in northern India, Mesopotamia and Egypt, a centre such as Jericho might be expected to throw considerable light on the history of civilization and culture in the ancient Near East. Because the site guarded the approaches to Canaan, it would claim great importance for military and economic, if for no other reasons, from at least the fifteenth century B.C., when Canaan was an Egyptian dependency.

But despite the potentialities of the location, little serious attempt was made to probe into the secrets of Jericho until our own century. The Palestine Exploration Fund, which was established in 1865, sent a British army officer, Charles Warren, to Jerusalem in 1867, with instructions to excavate that site. During his stay in Palestine he made rather desultory attempts to investigate the mound of ancient Jericho, but with no success.

The matter rested there until 1907, when a German expedition spent two years at the site. They unearthed a considerable amount of pottery, and discovered a large stone wall, going back to the later part of the Middle Bronze period (c. 1900-1500 B.C.). However, the chronology which resulted from these excavations left much to be desired, and it was only in 1908 that systematic and accurate observation began to show something of the total picture, with the work of the

American expedition under Reisner, which excavated Jericho and Samaria.

After the first World War, Professor Garstang, of Liverpool University, was encouraged by the British mandate in Palestine to do further work at the mound. During the six years of work there it became apparent that Jericho was one of the earliest civilized communities in the Middle East. Garstang showed that the earliest stratum went back at least three thousand years earlier than that which the German excavators, Sellin and Watzinger, had examined. It was thought that the location had been the choice of nomadic groups since the Mesolithic period (c. 7000 B.C.), and this opinion was arrived at when it became evident that the earliest levels did not indicate a settled community life to the degree apparent in a later period occurring in the middle of the Palestinian Neolithic (c. 6000-4000 B.C.).

The excavations showed that the Neolithic period saw the erection of permanent dwellings, made of *terre pisée* (beaten earth) or small mud-bricks. Floors were of clay, laid upon a shallow layer of limestone chippings, and carefully levelled. Garstang found that the walls and floors were treated with lime, painted in patches, and then rubbed smooth by means of a flat stone. A shrine which was discovered consisted of an entrance chamber which led to a larger room, some thirty square yards in area. Animal figurines, human marl statues and phallic images were unearthed in the vicinity of the ante-chamber.

The late Neolithic marked the end of the "pre-pottery" phase at Jericho, and the Chalcolithic saw not only the use of clay pottery, but also that of copper. The early Bronze Age (c. 3100-2000 B.C.) brought to Jericho the influence of contemporary Babylonian civilization. Elaborately painted pottery was in wide vogue, and agricultural life flourished. The city was extended, and renovations to existing city walls were made. The increasing use of bronze for weapons and implements made the decline of flint manufacture inevitable, though certain types of flint implements were in use as late as the Iron Age.

The Middle Bronze Age (1900-1550 B.C.) witnessed the development of Jericho as a fortification controlled by the Hyksos. These people were probably of Asiatic origin, though they included a sizeable amount of Semitic stock, and they brought fresh developments of culture to the southern reaches of Canaan. The Hyksos perfected a great defensive rampart around Jericho, which was now approximately eight acres in area, and the water-supply for the city was secured against attack. It had fallen to the Hyksos to introduce the horse-drawn chariot as a military weapon, and with it they made havoc of Egyptian suzerainty, using Jericho as an advanced base. Their control of Egyptian territory ended with the close of the Middle Bronze Age, and Garstang saw in the burnt houses and palace store-rooms clear evidence of the destruction of Jericho by the Egyptians during the final retreat of the Hyksos.

The late Bronze Age, beginning about 1550 B.C., was a time when some degree of rebuilding took place in Jericho, and Garstang found indications that a much smaller city than that of earlier days was the result of these labours. The defences of this city, he maintained, consisted of a double wall of mud-brick, the inner one following the

rough direction of the wall which had been built during the early Bronze Age. The Hyksos fortification was neglected, but a new gate-tower was built, the height of which was estimated at ninety feet. Faulty materials marred the construction of the defences, however, since kiln-dried bricks were not employed, and the coursing of the bricks was uneven, due to the irregular nature of the foundations. Egyptian control of the city was indicated by the large number of scarabs and Egyptian bronzes which were unearthed during the course of the excavations.

This was the "fourth city", which Garstang believed to be the one overthrown by the forces of Joshua. He found that the outer wall had been almost entirely demolished, and that the inner wall had suffered a similar fate. Garstang was of the opinion that seismic disturbance was the cause of the fall of the fortifications. Ashes, charred timbers, burnt bricks and vegetable material testified to the existence of a conflagration of considerable proportions, indicating that the city had probably been sacked. The fact that there were no scarabs unearthed which dated from a period after the reign of Amenhotep III (1413-1377 B.C.), led Garstang to place the fall of Jericho in that period, which in turn gave an early date for the Exodus. However, the archaeological evidence from cities such as Lachish indicated that the Hebrew conquest of Canaan had occurred in the latter part of the thirteenth century, which presented considerable difficulty for Biblical and archaeological chronologies alike.

A new attempt to probe into the secrets of the mound was made in 1951, when British and American scholars, under the direction of Miss Kathleen Kenyon, co-operated in further excavation. Whilst they were naturally concerned to try to establish the date when the city fell to Joshua, they were also desirous of obtaining information about the way in which the nomadic hunters passed over into Neolithic cultural patterns, and began to establish a walled community. To attempt more than the briefest comments on the results to date would be beyond the scope of a short paper. Nevertheless, it is possible to take some notice of progress in the work of excavation most recently undertaken at Jericho.

It would appear that, with some variations, the labours of Garstang and his colleagues have been amply substantiated. The type of building which he discovered has again been in evidence, and the discovery in 1952 of the foundations of what must have been a large stone wall lent weight to other indications of an advanced stage of community giving at what seems to have been a comparatively early period.

This first wall, whose remains are about five feet in height according to recent reports, was constructed of uncut stones, and erected against a mud barrier or embankment. It formed the foundation for a second wall of similar construction. Whilst other peoples were only at the beginning of life in unprotected village-communities, the Neolithic inhabitants of Jericho were enjoying life in a walled city of about eight acres in area.

Miss Kenyon is of the opinion that efficient use must have been made of agricultural knowledge and irrigation if a city of that size was to

flourish at that time, as it appears to have done. If irrigation was used, which seems most probable, it implies certain levels of social organization, and perhaps a rudimentary knowledge of engineering principles. Flint knives, sickles, arrow-heads, stone vessels and other artefacts have been unearthed at this level of excavation. In 1953, seven Neolithic skulls were discovered, which were of even greater interest than usual, owing to their peculiar ornamentation. Finely-textured clay had been laid upon the bones of the skull, and from this had been shaped the characteristic human features. Paint had been added to the eyes and eye-brows for effect, ante-dating considerably analogous practices in Mesopotamia and Egypt. The archaeologists have to the present been unable to determine the cultural or religious significance of these artefacts.

The excavations planned for the winter of 1955-6 at Jericho were awaited with considerable expectation by the world of scholarship, partly because of what might be discovered, and also because the prohibitive costs of such an undertaking indicated that it might well be the last of its kind for some years. For a time it was feared that the project might have to be abandoned altogether, owing to the tense military situation which arose from the Arab-Israeli dispute. Finally, however, the task of excavation began, and the lateness of the start impelled the archaeologists to work with considerable expedition. The initial obstacles were compensated for after some weeks of careful digging by a discovery which is undoubtedly one of the most notable of the entire five seasons of excavation at the site.

As a result of extending an earlier section-trench and sinking it from top to bottom of the mound, the archaeologists discovered the existence of a huge defensive ditch which was estimated to be some 8,000 years old. This ditch lay outside the walls of the city to a distance of some thirty feet, thus presenting a formidable barrier to anyone approaching the site. What is important about this defencework, however, is the fact that it was excavated some eight feet into the bed rock by people who could have used only the most primitive of tools such as flint implements and crude stone hammers.

Whilst these early inhabitants of Jericho belonged to the Neolithic period, they exhibited significant cultural differences from other Neolithic peoples. At this period man is supposed to have abandoned a nomadic existence and settled down to community life, domesticating animals in the process and producing implements, rough textiles and pottery. But this level of the Jericho mound provided all the evidences of Neolithic life except traces of ceramic-ware. This was evidently the Mesolithic stage which had first been described by Garstang, but which is now presumed to have been an earlier aspect of Neolithic culture, and accordingly has been designated "pre-pottery Neolithic".

This level probably dates from early in the sixth millennium B.C., and furnishes evidence of highly organized community life in a walled city some 2,000 years before anything comparable appeared on the cultural scene. The pre-pottery Neolithic inhabitants of Jericho lived in small brick houses whose floors and walls had been plastered and smoothed off by being rubbed with stones. Flint implements, sickles and grinding stones which were excavated were characteristic of the

Neolithic period, and the presence of obsidian flints at this level indicated a degree of trade with the world outside, since most obsidian artefacts in Palestine are generally found to have originated elsewhere.

An advanced level of community organization must have been necessary for the immense task of excavating the defensive ditch from bed rock, particularly in view of the crude equipment with which the people had to work. When it was completed, the ditch was surmounted by a wall of about eighteen feet in height, making the city virtually impregnable. Adjacent to the wall was discovered a huge circular rock tower complete with staircase, which had probably served as a lookout station. The presence of such formidable defences naturally raises questions as to the nature of opposing forces, if the pre-pottery inhabitants of Jericho were as highly developed culturally as has been alleged. Perhaps there were other equally advanced communities located nearby in small centres who posed a threat to the security of Jericho, or it may be that the site presented an obvious target for marauding barbaric hordes.

Subsequent digging has indicated that more than one group of pre-pottery Neolithic people may have lived at the site in antiquity, and this development makes matters even more complex in view of what we already know about the pre-pottery Neolithic period. Archaeologists discovered that a layer of earth fill had covered the defence works up to a depth of five feet in places. When it was removed, another level of culture was uncovered, which, whilst it belonged to the same area, appeared to antedate by the nature of its artefacts the previous pre-pottery Neolithic level. This earlier culture has been designated PP1 in order to distinguish it from the later pre-pottery group, known now as PPT. It seems likely at present that the PP1 culture was responsible for building the defence wall and the tower, and after a lapse of time the site fell into disuse until the PPT group appeared. The remains of a small *wadi* or stream which was found in the layer of fill covering the defensive wall might indicate that the interval between the occupation of the site by the PP1 and PPT groups lasted for some considerable time. Whilst much careful analysis of the situation will be needed before a satisfactory answer can be given to some of the problems which are presented by the pre-pottery Neolithic phase, it is evident immediately that the site is considerably older than has been imagined hitherto.

Later Neolithic levels recently yielded evidences of weaving, though no woven articles had actually survived. Excavators discovered the imprint in mud of a reed mat, with the woof fibres being twisted around the warp, rather than being passed under and over, as in later times. This is the earliest evidence of weaving yet to be found in the world.

Whilst other discoveries have done much to illumine the conditions of life during the successive periods of the Bronze Age, the Bible student is quite naturally concerned to know whether any decisions have been reached from the archaeological evidence regarding the conflicting views on the actual period of the fall of Jericho. It is not uncommon for excavations to present more problems than they solve on occasions, and the present situation seems to be no exception in this respect. As a matter of fact, the main issues appear to be more

obscure in certain areas than they were when Garstang and Vincent made their observations on the matter.

Part of the difficulty lies in the fact that only the barest indications of the Joshua period remain in the mound. The *tell* is thought to have been about seventy-five feet in height when the Israelites invaded the city, and the devastation wrought by man and by Nature has apparently been such that, in a trench sunk through the western defence-works, no traces of late Bronze Age walls have been discovered, nor have any remains been found of contemporary pottery.

This is rather curious, to say the least, as Garstang described carefully and pictured what he understood to be late Bronze Age fortifications. It is possible that early Bronze Age walls have been eroded, taking with them other later structures, but in that event it would be expected that at least some traces would remain, either of bricks or of contemporary ceramics. There is some reason for thinking that the walls which Garstang described as belonging to the "fourth city" were actually from the early Bronze period. This, however, does not remove the confusion regarding the site of the late Bronze Age fortifications.

It ought to be remarked at this point that there is much of the present mound which has not been explored as yet. Further soundings, especially if they are made to the north and east of the *tell*, may reveal traces of middle Bronze Age walls, and indicate the nature of any subsequent structures. If no such evidence is forthcoming, it becomes more difficult than before to account for the widespread denuding of the location. What effect, if any, was exerted on the situation by seismic activity is very hard to assess, in spite of the fact that we are well aware that the whole region has been subject to earth-movements and tremors for many centuries. At present, therefore, we can only say that the description which Garstang provided of the Jericho which was overthrown by invading Israelite forces has to be modified considerably. This is so much the case that from the standpoint of recent archaeological investigation we can say virtually nothing about the date when Jericho fell to Joshua and his forces. Nor have we any reliable information as to the nature and extent of the city of the rift-valley at that time.

However, these facts in themselves need not be particularly disturbing. Further light may be thrown on the situation by the work which will be done on the site during the winter of 1956-7, and it is to be hoped that the result of these labours will help, at least in part, to dispel some of the mystery which has accumulated from earlier excavations. Sites of such antiquity are notoriously difficult to evaluate, and we may be quite sure that it will be many years before the last word on Jericho is spoken. We are fortunate in having highly competent authorities at work in the field, and we may rely with confidence on their judgment in what has proved to be a most complicated and problematical archaeological undertaking. It is to the future, therefore, that we must look, in the sincere hope that such difficulties as are outstanding at the moment will be readily resolved by the skill and patience of the archaeological expedition.