

least) only used in the *harim*, perhaps as a veil. The handkerchiefs of St. Paul were laid on the sick (Acts xix, 12), but this was in Greece. St. Paul had adopted the customary articles of clothing of the country wherein he journeyed. No doubt in the days of the Roman and Byzantine Emperors, clothing was modified, in the towns at all events, by the influence of officials coming with their national costumes, either from Rome or from Byzantium. The legions also had some effect on the fashions of garrison towns in particular, but this influence would vanish with the withdrawal of the soldiers.

(*To be continued.*)

THE JEWS AS BUILDERS.¹

By Prof. ARCHIBALD C. DICKIE, M.A., F.S.A.

It appears to be true that, although some early Hebrew buildings may have been of a nature justifying the title of Architecture, exploration has revealed evidence of little more than mere crude building as a general characteristic. At the same time, fragments of early works show a degree of skill in mason-craft, which forces one to consider present evidence as inconclusive.

In Palestine, the work of the excavator has been confined to the sites west of the Jordan and out of the many cities enumerated in the Old Testament, only about twelve have been excavated. These are Jerusalem, Gezer, Beth Shemesh, Lachish, Tell Sandahannah, Tell es-Safi, and Tell Zakariah, by the Palestine Exploration Fund, and Samaria, Megiddo, Jericho, and Taanach by German and American Exploration Societies. In these sites complete investigation was impossible for various reasons. Plans of the boundary fortifications have, however, been recovered and it is now possible to judge of their modest proportions. An area of anything from six to twenty-five acres would appear to have been commonly considered sufficient to contain an important city. Leaving out of

¹ A paper read at a meeting of the Manchester Egyptian and Oriental Society, on March 11th, 1914. Reprinted from the Journal of the Society, 1913-1914, with the kind permission of the Editor and Publisher.

the question, for the moment, the extended Jerusalem of Solomon and his successors, it is within these closely packed areas that we must search. At the outset, they stand self-convicted of a condition precluding the development of building, and this conclusion is strengthened by an examination within the walls.

For some years, I have tried to gather together available evidence in the hope of finding some continuation of a type such as one may reasonably assume was expressed by the buildings of Solomon, our understanding of which is based upon descriptions. Up to the present, however, only negative results are on record.

It is necessary to commence our examination with the earliest evidence of occupation by the races preceding the Hebrew invasion, for the reason that housing conditions then established appear to have continued with only slight alterations, up to Hellenistic times. Prof. Macalister's work at Gezer,¹ shows that the Neolithic races of Palestine had established themselves in extensive cave communities of considerable strength, as early as 3000 B.C. These races chose sites on rocky hills or spurs of hills wherein they burrowed through the soft limestone. In some cases, their abodes were extended in the manner of rabbit burrows having many compartments connected by passages and provided with various entrances and exits. Entrances were usually in the form of manholes cut through the roofs, with two or three rudely cut steps, rising from the floor of each cave so entered. Some regard for internal convenience is shown in the various niches recessed in the walls, used, in all probability, as cupboards or wardrobes. Small triangular lamp niches, much smoked and set about 3 or 4 feet high, explain the system of artificial lighting. Except in those compartments having manholes, the caves were altogether dark. Evidence of an attempt at something akin to the "Grand Manner" in Cave Architecture is seen in one of the systems explored at Beit Jibrin,² Here is a large rectangular hall measuring 47 feet by 18 feet having recessed chambers from its sides and approached by a regular rock-cut staircase; included in the system are several rounded chambers. The only evidence of decoration to be found in these caves are the graffiti scratched on the walls, but as it is impossible to tell when these were cut, too much importance need not be put upon them. Special caves were set aside for burial purposes.

¹ *The Excavation of Gezer.* R. A. S. Macalister.

² *Excavations in Palestine.* Bliss and Macalister.

The geographical distribution of Palestine is such that limited tribal boundaries became inevitable,¹ and the first real building effort is displayed in the earth ramparts, cased in stone, by which the cave cities were protected against neighbouring enemies. (See *Q.S.*, 1903, pp. 113-116.) Semitic invaders drove out the Troglodytes and established themselves on the vacated sites *c.* 2500 B.C. Although the caves appear to have remained in use, they were overlaid by buildings and the low fortifications were replaced by high stone walls. One may therefore assume that the site then yielded accommodation both above and below the surface. The remains of buildings of this and later periods, show them to have been of the rudest possible character, laid out without system and packed together haphazard, having regard to nothing indicating a knowledge of even the most primitive town-planning. The huts themselves were small and irregular in shape, showing no geometrical knowledge. Narrow approach-alleys, unpaved and bounded by plain mud-plastered walls, meandered through the maze to the various entrances; in fact, plans of that period are so confused and fragmentary that the existence of alleys can only be assumed. Fortifications appear to have occupied the chief attention of the new tenants and they, in conjunction with the more important water engineering works, provide the strongest evidence of engineering ability. These cities then, such as they were, became the scenes of the triumphs of the invading Hebrews and the spies who told of high and strong walls "fenced up to heaven," were reporting on 6 to 25 acre forts, within which the refugees from the outer villages joined their chief for protection. The rivalry and jealousy of the marauding clans of Canaan, to which the high walls bear ample testimony, were the Hebrews' strongest allies in their piecemeal conquests.

The Semitic races (which for simplicity's sake may be grouped under one name "Canaanite") now established, made little or no progress in the arts of building and, except in the way of adding towers and otherwise strengthening the fortifications, they appear to have had little opportunity to improve.

After the occupation of Palestine by the Hebrews, the conditions of cities varied only slightly. Fortifications were, from time to time, strengthened. Successive layers of superimposed foundations found in every mound excavated, and frequently accompanied by

¹ *Historical Geography.* G. A. Smith.

regular layers of ashes, quantities of charred grain, etc., tell of demolition and hurried rebuilding in confirmation of written history. Some little improvement is seen in house-planning. The single hut, which had previously more often been extended by the addition of rooms to its sides, gradually disappears and more methodical plans appear, consisting of outer open court, living chamber entering off the court and inner chambers, covered by flat roofs with protecting parapets (according to the Law). Walls were built of mud bricks or stone; in the case of the latter, the stones were usually rough blocks laid in mud; squared stones appear rarely and as if from the hand of imported workmen. Internally, the walls were plastered, and small fragments of painted plaster discovered show some attempts at colour decoration. Roofs were formed of rough joists covered with brushwood and mud. Unusually wide spans were carried on beams with intermediate supports of wooden posts in stone base sockets introduced to prevent the post sinking into the clay floor.

An interesting if gruesome custom practised by the Canaanites, and continued apparently for some time by the Hebrews, was that of human sacrifice (see *Q.S.*, 1904, p. 17; 1908, p. 206) in the foundation dedication rites of their buildings, to which there is allusion in the Old Testament. Bodies buried diagonally, under the return angle of the foundations have been found, indicating an importance put upon stability, scarcely borne out by the insufficiency of the building itself. It was, however, just that want of constructional skill which made it possible for the winter rains, penetrating the heart of loosely built and badly founded walls, to effect a complete collapse. In this connexion, reference may be made to a custom in vogue to-day, among native builders, viz., that of building the walls of a house and leaving them uncovered for a winter, in order to put them to the water test. The parallel is made more complete by an examination of the present system of building in Palestine, which is equally loose but rendered slightly more homogeneous by the substitution of lime mortar for the mud invariably used by the ancient builders. A position also reserved for dedication rites was underneath the threshold, and in later Hebrew times the rite was observed by the more humane burial of a lamp between two bowls as symbolic of sacrifice. In these and in many other references, there is evidence of a demand for durability, akin to what has been ever present in all great national building achievements.

The decorated granite of Egypt was a consummation of the same ideal, but the Jew never reached the stage of even making the most of his own soft limestone. Distraigned and distressed, in his building infancy, he sought refuge in sacrifice from calamity to which his experience lent many parallels. "What man is there that hath built a new house and hath not dedicated it? Let him return lest he die in battle" (Deut. xx, 5).

Solomon's imported work at Jerusalem 400 or 500 years after the Conquest, was a great advance. In spite of much promise, however, it appears to have had little after-effect, and there are little or no signs of improvement in the buildings of other cities with which his reign is credited. At Lachish, Prof. Flinders Petrie discovered a few fragments of the Solomonic period, showing the Egyptian lintel cavetto and bead mouldings used over doorways in conjunction with jamb slab decoration in the form of low relief pilasters with rudely carved volutes. The latter discovery is one of particular interest illustrating, as it does, the stonecutters' primitive attempt to imitate a feature in which the volute occurs as early as c. 1000 B.C. The scantiness of such fragments, however, point to chance importation. The lintel was undoubtedly borrowed from Egypt, and the volute may possibly be traced to some remote Ionic prototype.

The main features considered in the "lay out" of a normal Jewish city were: the Stronghold or inner fort, the High Place, the Broad Place by the Gate, and the Market Place. The Stronghold had the obvious and most important function of a last defence. The High Place was prominent in both Canaanite and Jewish cities and consisted of an open area in which a row of monoliths was placed, accompanied by an altar, laver and cave for refuse. (See *Q.S.*, 1903, p. 25.) All about the area and around the bases of the standing stones at Gezer, bodies of sacrificed infants in earthenware jars were buried in Canaanite and early Jewish periods. It is the alignment of standing stones,¹ however, which is chiefly interesting in our present quest. These sacred boulders express a condition of building barbarity which could not have existed contemporaneously with architecture as an expression of the higher building sense; they were borrowed and remained, for the time being, as monuments of Jewish inability to erect a more fitting offering.

¹ There are eight stones standing in a line of about 100 feet, the largest stone being 10 feet 6 inches high.

Hellenistic influence brought with it the first real improvement in building and planning. The toleration of Alexander the Great marks a new period of semi-national building, and a greater development is shown in the 200 or 300 years following his conquest, than during the whole preceding period of over 1000 years. Although this term of comparative prosperity was broken by the viciousness of Antiochus Epiphanes and the consequent revolt of the Jews, it was renewed in even greater degree, during their independence under the princely family of the Maccabees. Fashions in Greek manners and architecture became popular. Regard for formality and order in the lay-out of city-plans is seen, streets became wider, and buildings show the temper of fitness to their sites and purpose. (See *Q.S.*, 1900, p. 326.) The main features of Greek architecture were borrowed and incorporated with such strong local feeling that there seemed hopes of a national type as the eventual result of Greek tutoring. Before this could be accomplished, however, Rome stepped in with overpowering influence.

The painted Tombs of Marissa,¹ discovered by Drs. Peters and Thiersch, show a type of architecture of this Graeco-Syrian character in which the parapet is incorporated in the façade, over triangular-headed openings flanked by quasi-Greek details of a peculiarly local character. The remains of the Temple of Onias at Leontopolis, excavated by Dr. Flinders Petrie, appear to show the same illogical use of classic entablature in conjunction with parapets of the same wavy outline as those illustrated at Marissa. The stern Greek treatment of the eaves was not observed. The parapet, which was legally demanded (Deut. xxii, 8), maintained its place as the crowning feature and below it the cornice appears only as an intermediate horizontal band. If it were possible, it would be interesting to discuss the battle between the architecture of the local flat roof and parapet here illustrated, and that of the sloping roof and cornice of alien Greece. In spite of the architectural impetus of the latter, everything points to the retention of the parapet as an all-important detail which, in the natural course of development, must have quickly ousted the classic eave and gable and so have established a definite constructional form, arising out of the flat roof, to which beauty could be partnered.

Such a paper as this would not be complete without further reference to the Temples of Jerusalem. The descriptions of Solomon's

¹ *The Painted Tombs at Marissa.* Peters and Thiersch.

Temple and Courts are so full that many restorations have been attempted. As, however, no single portion of the remains of any of the Temples has been yet identified, it will be well, in the light of recent discoveries of contemporary buildings elsewhere, to confine oneself only to generalities. The temple proper was comparatively small, covering an area of about 90 by 30 feet, and having a height to the ceiling of 45 feet, the roof presumably being flat. Externally, the building seems to have been plain, and it would appear that the "Coping" indicates merely the existence of a parapet as a crowning feature, enclosing a flat roof. Masonry was smooth-dressed and close-jointed, and in this respect it differs from most of the masonry of the period elsewhere. Stones occurring in the walls of Jerusalem which may, with some certainty, be assigned to this period, show similar advanced masoncraft. The two external columns had richly decorated "chapiters." Internally, cedar boarding was largely used as wall covering and "there was no stone seen," woodwork was in parts, richly carved, and gilding was freely applied in the decoration. Undoubtedly, the Temple of Solomon, with its surrounding courts, cloisters and gates, platforms and steps, was by far the greatest building of the Jews. Its character was Phoenician since it was the work of Phoenicians, but there speculation ends. The enthusiasm shown at the completion of such an offering to God can well be imagined. The Jews themselves knew no building but their own rude huts and fortifications, so that Solomon was forced to borrow Hiram's skilled craftsmen. That the group of buildings was laid out with considerable architectural skill is evident, although it must also be borne in mind that, by comparison, it loomed large and rich in the eyes of the Jews who saw in it the centre of national aspirations under divine favour. After the Captivity, the Temple and Courts which had been destroyed by Nebuchadnezzar, were re-built by Zerubbabel, *c.* 520 B.C. The work was not up to the standard of the original buildings (Hag. ii, 3), and this is not surprising when we compare the social and political conditions of the Jews.

A great portion of Herod's extended Temple area walls still remains. It is the power and dignity of these fortifications with their huge internal vaulted substructure transforming the irregular hill into a great level platform, which tell something of the story. Such a setting warranted a fitting jewel and it is unlikely that here the finest period of Imperial Rome should have failed. This great effort

was of course entirely alien and dominating, generously applied to Jewish service but only lent for an imperial purpose. In no other light can it be considered in Jewish History.

Comparison is here strongly marked. Great building is begotten of great expansion, but the greatness of the Jews lay in their heroic but unsuccessful struggles for the preservation of national integrity. They had forsaken their tents for the unlovely walled shelters of the Canaanites, and within these they strove against internal sedition and external enemies. No better instance of this can be quoted than that of Simon and John, who, having common cause against Titus, found opportunity, in the breathing spaces of Roman attacks, to wage war against each other; this at a time when the sufferings of a protracted siege, in defence of their most sacred possession, had all but reached their limit.

The references to building greatness in the Old Testament, indicate a pride out of all scale with actuality. Ideals were not lacking, "Behold, I will lay thy stones with fair colours and thy foundations with sapphires . . . and I will make thy windows with agates and thy gates of carbuncles and thy borders of pleasant stones." So wrote Isaiah with the true imagination of a great builder. The desire to build in strength and beauty is abundantly evident. Had history been different, Solomon's great example might have laid the foundation of a national style of architecture; the disruption which followed his death, however, left his reign the only period in which development on these lines was possible. The arts of peace died in the seed and the greatest works of the Jews are to be found in their water-supplies and fortifications. These show engineering power of no mean standard, forced out of them by the sheer necessity for self-preservation.

NOTES ON DAMASCUS.

By F. G. NEWTON.

1. *Roman Arch, North of North Gate, in Temple Enclosure Wall.*

THIS arch was recently noticed by the Rev. J. E. Hanauer, and its position is shown on the plan (G) in *Q.S.*, Jan., 1912, p. 40. It had been previously noticed by Porter, and is described as follows in *Five Years in Damascus*, p. 52: "Proceeding eastward from hence, along a narrow street lined with good houses, we reach Bab el-Faradis