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The reign of King Solomon in the light of archaeology.

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THE REIGN OF KING SOLOMON
IN THE LIGHT OF ARCHAEOLOGY

by

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1953
Approved
by

First Reader
Professor of Old Testament

Second Reader
Professor of Old Testament

PhD
1953

\[\text{list of names}\]
DEDICATION

This dissertation is dedicated to: (1) those who have stood in front of me and (2) those standing behind me.

First of all Dr. Herbert G. May stood in front of me in the Old Testament classes at the Oberlin Graduate School of Theology and led me into the historical approach to the study of the Scriptures. My interest in Biblical Archaeology was aroused as he told of his first-hand experiences excavating with the Oriental Institute of the University of Chicago at Megiddo. His scholarly teaching and wealth of learning led me to want to drink more deeply at the fountain of truth.

Dr. Elmer Leslie, Professor of Old Testament at Boston University School of Theology poured new meaning and inspiration into my study of the Torah, the Prophets, and the Writings. Many experiences in the classroom, working together on papers, and in contacts outside of the school have but deepened my esteem of Dr. Leslie as the embodiment of the great truths which he so masterfully passes on to each succeeding group of seminary students.

Dr. Robert Pfeiffer, Professor of Old Testament at Harvard University and Boston University has height-
ened my appreciation of the biblical books in their historical and topographical settings. His humor and unsurpassed scholarship have been my admiration as he has usually sat before me as teacher.

Behind me have stood my devoted wife, Martha Jane, and my daughter, Marthanne. Sometimes prodding, sometimes encouraging, but always loyal in their devotion through the many years "of securing an education," this study has been made possible.

And thus nobly led by those who have stood in front of me and faithfully supported by those who have stood behind me, I humbly acknowledge my deep indebtedness and dedicate this study.

Paul Uhlinger
PREFACE

Great strides forward have been taken in two fields in the past fifty years: (1) the tremendous development and growth of understanding of the background and meaning of Biblical Literature through the historico-scientific approach to its study; (2) the development of the science of archaeology by careful gathering of every scrap of evidence and the skilled interpretation of the findings. Partly from the intense desire to capture the exact setting of each portion of Scripture came the urgency to go to the sites where our faith and Bible was born and dig into buried cities and villages and unlock their long hidden secrets. Those primarily interested in archaeology as a science have found great quantities of information concerning the media from whence sprang the three great monotheistic faiths, Judaism, Christianity, and Islam.

While it must be admitted that some archaeological work has been undertaken "to prove" the accuracy of the Bible and evidence has been interpreted loosely to accord with preconceived notions, in general the historico-scientific study of Biblical Literature and the major undertakings of archaeology have sought to be objective, accurate, and realistic. Both supplement each
other and we are indebted to the group of scholars who have pioneered with hard and diligent work in bringing to light factual information. Upon their basic work can now be built the interpretations as to the origins and development of the Judaeo-Christian faith.

Some of the very earliest literature now included in the canon of the Old Testament was written by a court recorder who well may have been in the employment of King Solomon during his reign in ca. 970-930 B.C. Though his original writing has been edited and changed, I Kings 1-11 and II Chronicles 1-9 does give detailed descriptions of buildings and movements within the Israelite kingdom during the tenth century B.C. While it does seem the recorder left out much material which would be of great interest and included some to flatter his sovereign and present him in his best light, yet with careful appreciation of motives, reading between the lines and from the wealth of information given by excavations in and about Palestine it is possible to reconstruct large portions of the geographical, economic, social, political, and religious picture of the period of the reign of King Solomon.

Because Solomon was a "builder-king," it only is to be expected that archaeological expeditions excavating in and about Palestine should uncover many remains
of his era. The discoveries have not been disappointing, but even more gratifying than expected. Buried under sand and soil for nearly three thousand years are the works of stone and brick ascribed to the famed Solomon of old. Three major sites have greatly increased our information about the tenth century ruler, a score of other excavations have yielded facts bearing upon the period, and fascinating secrets still lay stored away for later revelation. This study was undertaken with two realizations in mind: (1) the great importance of the Solomonic period in the development of the Judeo-Christian faith and (2) the wealth of information that has been made available in the past fifty years by archaeological research bearing upon the age.

Three libraries and their staffs have been most generous in their making available the numerous and expensive books and periodicals which were searched for this study: Zion Research Library in Brookline; Andover-Harvard Theological Library in Cambridge; and the great Harvard University Library in Cambridge. Their help is acknowledged with deep gratitude.

It is hoped that the bringing together of the abundant archaeological evidence from the Solomonic
period will add to the understanding and interpretation of a portion of biblical literature. Knowledge becomes wisdom when it is applied to the current problems and opportunities. The proverbial "wisdom of Solomon" thus comes into its own as the factual materials are interpreted and made relevant.

April 17, 1953
Boston, Massachusetts
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The historical Solomon of tenth century B. C. Palestinian exists somewhere between the pictures painted by fantastic story and legend on the one hand and what little is left to him by his most critical biographer on the other. As one has noted, "In eastern story almost everything wonderful is attached to the Solomon of Scriptures."¹ No man has ever lived who has held such a great reputation for wisdom and wealth. Oriental fancy loved to play upon his glory, attributing to him wealth such as only jinns from their supernatural treasuries might supply. Yet there is always the danger of going to the opposite extreme in stripping away fantasy and the man and unique place in history be lost or obscured in the "debunking" process. Bricks and stones are among the less perishable earth-materials and from them comes through excavation of ancient sites the factual information which enables sane judgments and estimates to be made of men like Solomon. The past fifty years and numerous archaeolog-

ical discoveries have shed great light upon Solomonic times. The task of this dissertation is to bring into focus this light and to direct it toward a further understanding of a great king and an important period of the Hebrews.

The legends grouping themselves about Solomon are fascinating. In relation to the building of his temple, Solomon is pictured as assisted by angels and demons, the stones rising and settling into place of themselves — untouched by human hand. The opinion of the rabbis is that the stones of the Temple were hewed by the shimar, a worm whose touch split stones. The golden candlesticks which were a part of the furnishings of the Temple were made, according to legend, from one thousand talents of gold which was passed through the furnace one thousand times and was reduced thus to one talent of superfine metal. Trees of gold were planted in and about the Temple area, each bearing fruit at different seasons. When the heathen entered the sacred area and defiled it the trees withered away, but they will be restored and will give fruit again upon the advent of the Messiah.¹

In contrast to such incredulous tales are the volumes of descriptions of archaeological expeditions and

their excavations in and about Palestine. For reasons which will become evident in the development of this study, considerable quantities of this accumulative evidence relate to the time of Solomon. Combined with the biblical documents which describe the Solomonic era a fairly accurate picture can be drawn of the tenth century B.C. in Palestine.

Why choose the reign of King Solomon in ca. 970 to 930 B.C. for concentrated study through research? There are at least two reasons: (1) the strategic importance of the Solomonic period in the development of the Hebrew nation and religion; (2) the desirability of bringing together the wealth of archaeological information revolving about the figure of the "builder-king" of ancient Palestine.

Solomon occupied the throne of the United Kingdom of Israel in a period of great transition and change. The geographical boundaries of the country reached their greatest expanse under Solomon. Militarily the nation turned from conquest and offense to consolidation and defense. Politically the royal line and succession of father to son replaced the popular choosing of a king as was the case in placing in power Saul and David. This was accompanied by a more autocratic attit-
ude on the part of the ruler. Architecture radically changed as Phoenician artisans designed and built the public structures which contrasted with the domestic buildings. One of the greatest changes came in the economical field as the nation became less agricultural and more mercantile. Society found a great transition taking place as agrarianism diminished and a new cosmopolitanism arose. Even religion found itself in flux as the nomadic faith of the desert tribes emerged from its struggle and coalescence with the Canaanite cultic practices only to meet head on the foreign religions of the Near East imported by the wives of Solomon. The picture is of a nation in transition and at the same time assuming some semblence of the shape it was to take in the centuries which followed.

More specifically the geographical changes took place in the days of Saul and David with the consolidation of control over the newly established borders being the task of Solomon. Prior to the choosing of Saul as the first king there was no government as such in operation in Palestine under the Israelites, but only a loose federation of tribes and clans. The first two kings established a governing organization and pushed out the borders to include most of the area occupied
by the twelve tribes. Saul's area of control was very irregular with deep indentations and islands of resistance. David rounded out the borders and eliminated strongholds within his boundaries as at Jerusalem.¹

By his conquest of the Edomites and Moabites² not only were the tribal areas now his, but the Arabah region with its mines and outlet to the Red Sea and the east coast of Africa. The boundaries of David's territory remained somewhat fluid, though, and his son, Absalom, ruled as a virtual "king" a few miles north of Genezaret for three years and later conspired at leisure at Hebron, only twenty miles from Jerusalem.³

Roughly speaking the claimed borders were the Arabian Desert on the East, beyond Damascus and to the border of Phoenicia on the north, the Mediterranean Sea on the west with the exception of the coastal plain and its cities Ekron, Gath, Askelon, and Gaza. The southern boundary terminated in the wilderness of Paran and included the territory of the Edomites with the seaport of Ezion-geber or Elath. To Solomon fell the task of administering the large area and consolidating the conquests of his father. A chain of forts to protect

1. II Samuel 5:6-12.
2. II Samuel 8:1-18.
and keep in line the outlying areas, administrative districts for the purpose of taxation, drafting of manpower, and administering the laws within the country, and the enlarging of the royal quarters were the expedi-ents resulting from the large territory Solomon found himself in possession of. Territorial expansion led to many of the changes of political outlook, economic possibilities and social readjustments in the young kingdom.

The problems of governing as over against conquest presented Solomon with a different situation than his father, David. From the accounts of II Samuel it seems apparent David had his army in a central place in and about Jerusalem or Davidburg. From headquarters he sallied forth to meet the army of the enemy, - north, south, east or west. From his experience while in exile he came to depend on mobility and surprise. Solomon's change in military matters was to establish new fortress cities at strategic points where the borders could be defended against foreign invaders and the great trade routes be kept open and free of bandits. Thus the fortress cities with strong walls, barracks for the men and stables for the horses, and governors' headquarters. Though Solomon's name, both in etymology and in associa-
tion in history has to do with peace, but his military preparations and fortifications were revolutionary in their conception and their remains furnish much of the information from archaeological excavations related to his period.

King Solomon's coming to the throne of Israel marked a definite transition in the politics of the young nation. Saul, the first king of Israel was nominated by the prophet-priest-judge, Samuel and was chosen by popular acclaim. Again, David, the second king of the young nation was chosen popularly because of his valor of arms and his admiration nationally. In the Semitic world the law of primogeniture was generally in force, but the Hebrews began, from all appearances, their monarchal form of government retaining the right of election of their leader. Thus somewhat answerable to those who gave the authority for governing, the king would tend to be less autocratic. Solomon came into power through court intrigue as Bathsheba, the favorite wife and surprisingly, Nathan the Prophet, prevailed upon aging David to "arrange" the succession to the throne. This represented an intermediate step toward the tradition of primogeniture and became an issue upon Solomon's death. The southern part of the

1. I Samuel 11 and 12.
kingdom accepted Rehoboam, the son of Solomon even though he promised to be more autocratic than his father. ¹ The northern portion of the nation broke away in rebellion over the issue and by popular acclaim elevated Jeroboam, the son of a servant of Solomon, to the new throne.²

But it was not only in the method of choosing the national leader transition took place in government and political policy. The very magnitude of Solomon's program of public building, establishment of strong military and police powers, expansion of commerce and trade both foreign and domestic, and the development of industry were to revolutionize the whole administrative structure of the kingdom. Supervision of public works projects, the raising of huge taxes, the drafting of manpower, the control of the armed forces, and the growing foreign relations department were to make the relatively simple government of Saul and David change so completely that little vestige of similarity remained. It is probable there was a struggle between the ones desiring a strong ruling power and the more democratic elements reminiscent of the conflict in the youth of the United States of America between the

"Jeffersonian democrats" championing states' rights and the "Hamiltonian" advocates of strong central government. Solomon's forty years on the throne were of great consequence in the emerging national government.

The people who were to become known as the Hebrews were of nomadic stock with little concern in the field of architecture beyond tent making and pitching. The one-and-a-half or two centuries of acclimation to the agricultural life of Canaan and wresting a living from the thin, stony soil of the hillsides of Palestine left little time for interest in building beyond home construction and thin village walls. The buildings and homes previous to the time of David and Solomon were either Canaanite or were crude, rough and "native." Weapons and household articles were made domestically and were simple and elementary. It was during David's reign and especially while Solomon ruled that large numbers of Phoenician architects and builders were imported to execute the numerous public buildings, new cities, and royal structures. Accompanying this trend in building was the veritable flood of foreign articles imported from neighboring nations and far away places. As shall be shown, it is probable that Solomon actively promoted a mercantilism in the villages and cities of
his kingdom in the interest of expanding markets and increased revenue through his governmental monopoly. The domestic and public complexion of the nation changed greatly through importation of foreign artisans and articles.

One of the most interesting changes in the process of taking place in the reign of King Solomon was the basic economy of the nation. The Hebrews began as all nations do as a nearly pure agricultural people. With growing population and limited land area new outlets for employables had to be found. Begun under David, a great public building program was accelerated under Solomon with accompanying movements to large centers of population and a more urban society. This in turn hastened the growth of a middle class of merchants, artisans, supervisors, and public officials. It probably would be too far reaching to suggest the rapid change of economic subsistence of the Hebrew people during the ninth century B. C. was to be the turning point as regards the securing of a livelihood. But previous to the time of Solomon the Jewish people were essentially agriculturists and ever since have been distinguished as cosmopolites, merchants, tradesmen and well-represented in the fields of medicine, education, law, and
government. In the present century a phenomenon has taken place as the Jew has returned to tilling the soil in Palestine. The rapid increase in population of the new Israeli country presages a short continuance of the farming life of the Jew followed by a conversion to industry and manufacturing to support the great numbers. The point to be made is the great transition from an agricultural economy to an urban industrial and mercantile base of subsistence during Solomon's forty years on the throne.

As has been suggested, such a radical change in the economic structure of the young nation would reflect itself in the society and social life of its people. Not only would the shift from a purely agrarian life to a more urban atmosphere accompany the movement of the sons and daughters from the small fields unable to support large families as they sought employment in the cities, but other effects also would be expected. Money in the form of coins probably was not in common use in the days of Solomon. But the increasing complexity of commerce and barter would lead to the need of "specialists" or merchants expediting the transfer of goods. Marketplaces increased in size and number. New wares from abroad encouraged greater buying and enlarg-
ed markets. Cities and villages throughout Palestine grew in size and some archaeological evidence indicates the settlement of the South West Hill or Zion in Jerusalem in the days of Solomon, as will be pointed out. New homes of young people in urban areas are not usually as substantial as those built by the prosperous few — thus the possible dirth of evidence from the excavations in Palestine of the growth of homes with deep foundations remaining through the three millennia. The age-old problems accompanying the sudden increase of city population as experienced in England and America during the industrial revolution probably plagued Solomon's government. There is one certainty — the ninth century B. C. saw profound social changes.

The transition in the religious field in Solomon's day has been treated at length by numerous scholars. Comment here can be restricted to noting the crisis which arose in the Solomonic period affecting the entire development of the Hebrew religion. Dr. Elmer Leslie¹ has developed in a most convincing argument the conflict and coalescence between and among the nomadic, ascetic desert tribes of the Hebrew people and the fertility cultic practices of the agrarian Canaanites with their long possession of the land and a religion deeply rooted

in the soil. The integration of the two elements was most fully realized in the days of David, the father of Solomon. The religious situation confronting the emerging Hebrew religion in the days of the son was quite different. Suddenly the native, national religion was to be exposed to religious ideas, practices, and gods of neighboring and far away lands. Through his marriages Solomon was to introduce the religious concepts of his wives - Phoenician, Egyptian, Edomite, Moabite, and perhaps that of the Queen of Sheba from her unknown native land. Solomon set the stage for the great drama which was to take place. He built a temple to Yahweh, the traditional God of the Hebrews. It was destined to become the center of all Yahweh worship. At the same time he exposed the religion of his fathers to many foreign influences and pressures. The prophets of the Eighth Century were to "clarify," as Dr. Leslie describes it, the issue. The Captivity was to define the resultant faith and the Restoration presented a developed Judaism. It is impossible to state that Solomon played an intentional or even providential part in exposure of the emerging Hebrew religion. But certainly its meeting head on the external religions of the

day was most significant and thus merits careful re-
search into all the facts leading to a fuller understand-
ing of the issue.

Coupled with the evident importance of the Solomon-
ic period from so many standpoints is the wealth of in-
formation made available by (1) the biblical documents
relating directly or indirectly to the time of Solomon;
(2) the reports of archaeological expeditions excavat-
ing within the last fifty years in and about Palestine.
I Kings I - II, II Chronicles 1 - 9, references to Jer-
usalem and the Temple in the writings of the prophets
Isaiah and Jeremiah, the reconstruction of the Temple as
proposed by the prophet Ezekiel in chapters Forty through
Forty-three, and Nehemiah's description of the course
of the Jerusalem wall in his book, 3:1-32 are the prin-
cipal biblical sources. Excavations at three sites -
Megiddo, Ezion-geber, and Jerusalem - are of major im-
portance to this study with at least a score of other
sites in the Near East contribute some information to
the knowledge of the tenth century B. C. in Palestine.

The Oriental Institute of the University of Chicago
carried out at Megiddo or Armageddon one of the most
ambitious expeditions of excavation in all of Near East-
ern history. With plans for the complete study of the
thirteen acre "tell" in northern Palestine and a program calling for twenty-five years of work, the expedition began digging in 1925. Minor portions of the hill had been sampled by Gottlieb Schumacher and Immanuel Benzinger for the Deutsche Orientgesellschaft in 1903-1905, with results negligible for this study. But the Oriental Institute moved in with the latest scientific equipment, the possession of the developed techniques of interpretation of findings, the proven method of dating strata by the study of potsherds and pottery fragments, and the determination to use every precaution to secure a favorable report to pass on to posterity. Stratum IV was dated ca. 1,000 to 800 B.C. and was identified as belonging to the Solomonic period and the years that immediately followed. The nature of the foundations and walls which remained indicated the general pattern of one of Solomon's fortress cities\(^1\) with its strong walls, three-doored city gate, governor's palace, large stable compounds, a possible temple or chapel and small wares and figurines scattered about. From the wealth of material remains an almost complete reconstruction of the strategic fortress guarding the Mount Carmel pass and Valley of Esdraelon can be made. The Megiddo expedition thus contributed a fine composite

\(^1\) I Kings 9:15-19.
picture of a section of the total system of government and administration of Solomon.

Only a shade less sensational were the findings of the American Schools of Oriental Research at Ezion-geber or ancient Elath on the Gulf of 'Aqabah in the deep south of Palestine. Identified as the site of the copper and iron refineries of Solomon with some manufacturing facilities, the discovery became but the more intelligible as it followed the thorough exploration of the Wadi Arabah by Dr. Nelson Glueck with his detection of the mound Khirbet Hamr Idfan as a guarding fortress, numerous mines and crude smelters, and prison camps. The total impression resulting from the disclosures of Dr. Glueck in the south country is one of importance—a huge industrial operation from the mining of the ore through the manufacturing of household items and weapons of war exported from the seaport on the Gulf of 'Aqabah to be traded for luxury items from the faraway land of Ophir.¹ The new comprehension of the economic venture of Solomon in this area made possible by ingenuity and ambition of the king provides another great insight into the total picture of the significant era.

While the bits of information gleaned from various sites throughout Palestine are not in themselves comparable to the collective pictures presented by Megiddo and the Arabah and Ezion-geber sites, nevertheless taken together the miscellaneous contributions from the time of Solomon help to round out the grasp of the era of transition. The city gates of Tell en-Nasbeh (identified by many as ancient Mizpah) and Migdal-Shechem were similar to those of Megiddo and as excavated help to round out information and descriptions of the important structure as it related to the daily life of the Hebrew people.

Tell Jezer or Tell el-Jezereh was excavated by R. A. S. Macalister in 1902 to 1909 and proved to be the ancient Gezer reported to have been the dowry given by Pharaoh upon the marriage of his daughter to Solomon. While Macalister's work preceded the development of better techniques for dating strata according to pottery fragments and thus his reports are not trustworthy, yet walls, homes, and contents of tombs are worthy of note.

Sir Flinders Petrie, noted particularly for his excavation work in Egypt, choose to sample many of the mounds on the border between Palestine and Egypt. At Tell Jemmeh (perhaps biblical Gerar), Tell el-Far'ah, Tell el-

1. I Kings 9:16.
"Ajjul, and Tell Abu Selimeh Sir Petrie was searching for proof of his theory that the influence of Egypt was traceable throughout ancient times in southern Palestine. The relationship of Egypt and Solomon is of great importance to this study.

One of the most fruitful of all Palestinian archaeological expeditions is the one conducted by J. L. Starkey, Lankester Harding, and H. Dunscomb Colt at Tell ed-Duweir, the biblical Lachish. While the great discoveries of the Lachish Letters, three Late Bronze Age temples, inscriptions, and fortifications do not directly relate to this study, yet instruments and weapons appeared which must be dated as coming from the Middle Iron Age, thus making their contribution to the understanding of the ninth century B.C.

The temples unearthed at Beth-shan (now called Tell el-Husn) display striking similarities to the Temple of Solomon as described in the biblical documents. The thin walls of Tell Beit Mirsim or Debir tell of the independent spirit of the ancient Hebrew before the time of Solomon's corvees. The mountain fortress of Gibeah, headquarters of Saul, the first king of Israel was excavated by the American Schools of Oriental Research. Now known as Tell el-Ful, the small citadel serves to show
by contrast with Megiddo and Jerusalem the trends within the Israelite nation during the tenth century B.C. The accumulated data relating itself to the time of Solomon is considerable and adds immeasurably to the understanding of the era.

Because of the many contacts of Israel with its neighboring nations in the tenth century B.C. archaeological contributions cannot be limited to Palestine itself. The close link between Israel and Phoenicia as noted by the Bible in the time of David and Solomon was forged by mutual treaties, reciprocal trade agreements, and the importation of architects, artisans, and ship builders. The principal archaeological discoveries in the area of Phoenicia are dated in a period earlier than the time of Solomon. The Hittite tablets unearthed at Boghaz-keui in Central Asia Minor integrate themselves with the Tell el-Amarna Letters of Egypt, telling of the treaty between the Hittites and Rameses II, ca. 1275 B.C. The Code of the Hittite Law with striking parallels to the ancient Hebrew laws is to be dated ca. 1350 B.C. It was discovered by Hugo Winckler in 1906 to 1910 at Boghaz-keui. The decodification and translation of the texts expanded enormously the understanding of Near East history with special

1. I Kings 5:12. 2. I Kings 5:10, 11. 3. I Kings 7:13,14.
light being shed on the political, economical, and religious forces profoundly influencing Israel to the south.

Of even more immediate bearing were the Ras Shamra texts, dating from ca. 1470 to 1366 B.C.¹ and discovered at ancient Ugarit in Northern Syria. While the relationship to the study of the Solomonic age by the famous texts is more general, their influence upon Hebrew history and the understanding of Israelite life is best summarized by G. L. Robinson in the L. P. Stone Lectures at Princeton Theological Seminary:

"(1) . . . the customs and laws of the ancient peoples of Asia Minor and North Syria, which must have been well-known to the Hebrews in Canaan, were of much more helpful character in the development of Israel's life and religion than was formerly supposed . . .

"(2) We are now prepared to affirm more emphatically than ever that the earlier period of Israel's history was far less crude, and on the other hand, far more advanced and intellectual, than was formerly supposed.

"(3) And we now know that the art of writing and a Semitic alphabet were used much earlier than we supposed, and that it probably helped much in creating Hebrew literature . . ."²

In the case of Egypt to the south of Palestine the information stemming from archaeological research does not throw light on any particular phase of Solomon's reign. As will be noted, there is some reason for doubt-


ing the alliance between Egypt and Israel through marriage\(^1\), but if such doubt is not justified, the Pharaoh who became the father-in-law of Solomon is to be identified with Sheshonk I, a Libyan usurper who founded the XXII dynasty.\(^2\) The main contribution of Egyptian archaeology is the confirmation in a general manner of the validity of biblical material previous to and immediately following the reign of King Solomon. The Tell el-Amarna Letters which were discovered in 1887 and are dated in the fourteenth century B.C. give the assurance that the invasion and settlement of Palestine by the Hebrew tribes took place very much like the more historical account in Judges Five relates. The Shishak inscription at the great temple at Karnak is closely related to I Kings 14:25-28 with a description of the Egyptian ruler taking advantage of the schism following Solomon's death and his attempts to win back the territory lost during the days of the weak XXI dynasty.

The brief review of the strategic position Solomon occupied in Israelite history but underlines the importance of a study and research into the period. At the same time it has been pointed out that a wealth of information reported by archaeological expeditions

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in and about Palestine shed abundant light upon the period of such great significance. This study is devoted to bringing together the rather scattered data. The desirability of such a task is hinted at by several writers:

"Under Solomon the influence of court and city flourished. Indeed, the fame of his days is to be understood largely in terms of the development of urban life. His immense building program laid the ground for a huge class of temple and palace officials and servants. Not less indicative of the changes taking place were his commercial ventures; royal monopolies they were, but still indicative of what was to continue in some form through the following centuries. The king's mining and smelting activity in Edom was likewise adapted to alter deeply the outlook and structure of his kingdom, a result we dimly discern through the biblical historian's enthusiastic account of the wealth of the age. With this there went political changes. . . "

"The age of Solomon was certainly one of the most flourishing periods of material civilization in the history of Palestine. Archaeology, after a long silence, has finally corroborated biblical tradition in no uncertain way."  

Thus with a sense of the vast importance of the transitions taking place in Solomonic times and with the abundant material published by the archaeological expeditions in the Near East and related to the tenth century B. C., the task that is needed to be done is

undertaken with one more comment:

"... archaeological discoveries... have neither 'proved' nor 'disapproved' the Old Testament record, but have placed it in an altogether new light,"¹

What is true of the Old Testament record in general is also true concerning a specific period within that record, - that of the reign of King Solomon.

CHAPTER II
MEGIDDO AND SOLOMON'S MILITARY FORCES

The foremost archaeological discovery relating to the period of King Solomon is that unearthed at the ancient fortress city of Megiddo. Called Armageddon in the book of the Revelation of John,¹ and reputed to be the scene of the last great battle on earth, Tell el-Mutesellim as it is called currently has been the site of the largest and most systematic archaeological excavation in all of Palestine. Because the city as reconstructed by Solomon was built to a master plan with certain additions, Stratum IV which is to be dated ca. 1000-800 B. C. proved to furnish a complete picture of the defense project of the tenth century king.

The site which is replete with historical significance lies at the north end of a pass leading into the plain of Esdraelon from the Mediterranean coast south of Mount Carmel. Its thirteen acre summit, high above the main trade route between Egypt and Mesopotamia was covered with waving grain until 1925 of our era. Its surface lay almost undisturbed from the time of the Romans when troops were garrisoned on the lower ground near the Arab village of Lajjun (Legio). As has been

¹. The Revelation of John 16:16.
mentioned, the Deutsche Orient-Gesellschaft had conducted an expedition led by Schumacher between 1903 and 1905.\footnote{G. Schumacher, *Tell el-Mutesellim I,* (Leipzig: 1908).} Using the trench and pit method with concentration on a limited area, the results became valuable only after further interpretation when the mound as a whole was excavated by the Oriental Institute.

It is not the purpose of this study to review the entire work of excavation at Megiddo. But the data which is related to the Solomonic period becomes more meaningful when seen in its true context - that of the huge task of thoroughly working over the entire mound. The first digging was under the direction of Dr. Clarence S. Fisher. Staff houses had to be built, work rooms arranged for the sorting of sherds and pottery figures. Dr. P. L. O. Guy took over when Dr. Fisher was forced to resign because of ill health. Dr. Gordon Loud carried the task along. Robert W. Lamon and Geoffrey M. Shipton worked on the project and wrote up the section which is particularly related to this study. A number of other staff members participated in the excavation including Dr. Herbert G. May. Dr. May, now Professor of Old Testament History and Literature at Oberlin Graduate School of Theology, first introduced the writer of this research to the field of archaeology, giving illustrated lectures.

\footnote{Carl Watzinger, *Tell el-Mutesellim II,* (Leipzig: 1929).}
with pictures taken at the site of Megiddo. Dr. May and Dr. Robert M. Engberg wrote the report, *Material Remains of the Megiddo Cult*, of great significance to this study.

The actual excavation was undertaken with the utmost care and scientific accuracy. The expedition was furnished with the best of equipment including a small captive balloon with an attached camera for aerial photography. The first step was to strip a section of land to the bedrock to serve as a dumping ground for the debris which would be peeled off the top of the mound. The area used for dumping proved to be valuable in its own right, for a number of rock-cut tombs were uncovered and examined, providing a good index of what was to be expected as work progressed on the "tell." The surface was carefully surveyed and then the top surface was removed. Contrary to expectations the exposed area was not entirely Stratum I. The top of the mound, it was discovered, had not been always occupied to the rim of hill and portions of Stratum V and even VI came into view near the surface about the edge of the "tell." The immensity and near impossibility of the task of taking down the mound layer by layer became apparent and the decision was made to lay out the area in a ser-
ies of grids twenty-five meters square with concentration in designated areas. All buildings, fragments, and figurines were charted according to the square in which they were found. The balloon proved its worth in revealing surface patterns which were not discernible on the ground. 1 While the total mound was not excavated to bed rock as was hoped and planned, twenty strata were exposed and identified, ranging in date from the fourth millennium B. C. to the fourth century after Christ. Remembering that the strata were numbered from the top, Stratum IV dated ca. 1000 to 800 B. C. was the fourth to the latest city with three on top, sixteen buried below.

City VI at Megiddo appeared to come to a sudden and complete destruction, probably due to a natural catastrophe.

"... it is fairly certain that Stratum VI came to a sudden end - most probably due to an earthquake followed by a fierce conflagration." 2

The great watershaft which a wonder of ancient engineering 3 was blocked by falling rock and the hill appears to have been deserted for a time.

The city uncovered and titled Stratum V seemed to have spread over most of the hill. While the settlement must have been of some size no city walls or public buildings could be identified as belonging to the period. The walls of the houses were thin and constructed with poorly laid rubble or light-colored, unbaked brick. The floors were earthen. One building contained two rows of crude monolithic uprights, similar to the sacred pillars of rough stone called "mazzeboth." A number of cultic objects were found nearby.

"Pottery shrines, horned altars, Astarte figurines, and other objects of the mother-goddess cult were closely associated with the buildings 1A and 10."1

The excavators found it difficult to determine whether the buildings were essentially holy places or whether the figurines and sacred objects indicated, by their general distribution, the intense religious feeling of the inhabitants. Perhaps each house had its shrine. Jars of charred grain were found in some of the buildings, confirming the destruction, in part, by fire. The archaeologists concluded the town was only passably prosperous, the buildings indicated little taste or talent in design and construction, the lack of fortifications speak of peaceful times and the presence of

Cypriote imports among the rather meager findings hint trade as well as agricultural pursuits contributed to the basic economy of the 1060 to 1000 B.C. city.

Stratum IV, the city of Solomonic times, was found to be radically in contrast to the one which immediately preceded it. The unfortified village suddenly became a great stronghold - a chariot city as mentioned in I Kings 4:26. The interval between the two strata appeared to be quite short.

"When the IV structures were commenced the walls of the earlier (Stratum V) structures were still standing to a considerable height. On the building sites these walls were not torn down completely to level off the area, but only the loose fallen material in the path of the new foundations was cleared away and the older walls, which were left standing sometimes to a height of as much as a meter and-a-half, were merely incorporated into the foundations wherever they happened to cross. The floor levels, then, were often artificially raised by earth fillings so as to clear the tops of older walls."¹

As the mound was turned into a fortress, larger buildings requiring deeper foundations were constructed. These foundations went down into Stratum VI in places. A royal palace, two other buildings of considerable size, a strong city gate, a restored water system, and two large compounds for the stabling of chariot horses were found by the Oriental Institute expedition. Nearly the entire hilltop was given over to public buildings. The total installation brings to mind the military installations of today, especially the newer airfields placed at

strategic defensive points. The whole area in and around the airfield may be given over to runways, hangars, administration buildings, and barracks. The huge base at Limestone, Maine is designed to defend the northern and eastern approach to the United States. Megiddo was chosen as the site for a similar installation, horses and chariots being the new lethal military equipment of the tenth Century B.C. The broad plains at the foot of the mound were ideal for chariot warfare and the chariots in turn were at their best on such terrain.

The fortress buildings were probably begun by David.

"It would seem that the IV B buildings were never really completed and occupied before they were taken over and remodeled at the beginning of the main (latter) building phase of Stratum IV. The small but strongly built outpost (IV B) may have been begun by David, who realized possibly the importance of Megiddo's strategic position but before it was completed, perhaps because of troubles in the south during the latter part of his reign, abandoned the project. This suggestion for the assignment of IV B is made with reservations, for there is little actual evidence to support it other than the fact that IV B immediately predates the main Stratum IV structures, which, with some certainty, are attributed to the Solomonic period."  

There is little doubt but the main portion of Stratum IV was essentially Solomonic in origin. The buildings were good examples of what came from the Phoenicians,

for it is doubtful any native architects were trained or equipped to undertake the designing and construction of such a project. As Solomon had to depend on skilled foremen and architects to plan and rear the temple in Jerusalem and other public buildings in the royal compound, it is not surprising to find definite signs of Phoenician influence and similarity to the buildings of the northern neighbor.

"They (the buildings of Megiddo and Jerusalem) are among the best examples of a style of building which came from Phoenicia; the earliest appearance of it known to me is in the 'Proto-Phoenician' stratum at Ras Shamra; masonry in the same style has been found in the harbour at Tyre, at Beisan and in the Ahab buildings at Samaria."

The difficulty of dating material from this period is outlined by Dr. W. F. Albright:

"Since we have so much more data for the chronology of Strata IV - I it might reasonably be supposed that our task would become much easier in dealing with them. To a certain extent the reverse is true, for the following reasons: (1) the demarcation of strata is more difficult because much more stone was used in construction and reuse of buildings, with the walls often destroyed to below the original floor-levels; (2) the excavation of the strata in question was under such heterogeneous direction (Schumacher, Fisher, Guy, and Loud) and its pottery was studied by so many different men, with different working hypotheses and degrees of knowledge, that there has been exceptionally little continuity or consistency

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1. I Kings 9:11.
in dealing with it; (3) our knowledge of the detailed chronology of Iron II (Middle Iron) pottery was very defective indeed at the time work started in 1925 and it was not until less than a decade ago (written in 1940) that there was any adequately published material at all from this period.  

It is always well to have the cautious warnings of the critic to check too sweeping statements and too positive affirmations.

But one remarkable discovery points to the probability the fortress-city as constructed by Solomon was one great project undertaken as a unit with certain later additions. If true, the dating of the Stratum is greatly simplified. Wherever three tiers of stone work or more remained at Megiddo during this period, black ashes and a burned surface on the upper portion of the third tier appeared when excavated. A large piece of wood charcoal found in the corner of courtyard 338, when analyzed, proved to be made from cedar wood. The use of cut stone and cedar as a type of construction is mentioned in the description of Solomon's Temple in Jerusalem.

"The great court had three courses of hewn stone round about, and a course of cedar beams; so had the inner court of the house of the LORD, and the vestibule of the house."  

Not only would the alternation of stone and wooden

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2. I Kings 7:12.
beams have a pleasing appearance, but may have been an engineering device to resist the shock of earthquake as has been suggested by several archaeologists. Similarities of masonry, pottery remains, and the manner in which the discoveries fit into the unified pattern of the master designer serve to confirm the statement Stratum IV is valid evidence that the great public building projects attributed to Solomon by the biblical document is essentially correct.

The palace at Megiddo stood in a walled enclosure on the south side of the hill. Schumacher partially excavated it during his excavation in 1903 to 1905. The wall about the compound of the palace was fifty-seven meters square and was built of mud brick on a footing of rubble with interspersing ashlar stone pillars or piers. The entrance was on the north side and foundations of what would appear to be towers were found guarding the door. There is a definite similarity between the finely cut and well laid masonry of the building and the walls of buildings uncovered in Samaria, but dating themselves a hundred years later. Three of the eight stones in the tower had identification marks placed by the masons. The floor of the court was of lime plaster. Two large proto-Ionic capitals
were found close to the position of the towers. The palace was in the southern half of the court and its size made necessary the sinking of the foundations into Stratum VI. The structure must have been imposing and was the residence of the governor in his work of administrating the district.

The city wall was slightly over a mile long and extended around the entire perimeter of the flat upper surface of the mound. Though it had disappeared in many places, wherever the inner and outer face was intact a relatively uniform width of three and six-tenths meters prevailed. There was no indication that the walls tapered toward the top. Though varying considerably from one section to another in composition and masonry, the excavators noted the resemblance of the method of laying up the stone to the usual mud-brick construction. The speculation is that foreign artisans designing and building the walls knew brick work better and used the construction they knew and were at home with. An example of the disagreement of the excavators appears concerning the possible use of brick on the walls of the city. P. L. O. Guy wrote soon after the work began at Megiddo:

"Its lower part was of stone, with dressing and bonding similar in places to examples found at Gez-
er and exactly like what has been discovered elsewhere in our Stratum IV; and its upper part was no doubt of mud brick.  

A mark of identification of the typical wall at Megiddo was the use of ashlar blocks on the corners and at frequent and regular intervals along the straight courses. At the places the large, well-cut blocks were used they were extended or offset a few inches. This type of construction gave a more pleasing effect to an otherwise plain wall and served to give it strength and squareness. This may indicate the fortress walls and buildings went beyond mere utilitarianism and some sense of balance and design were planned by the architects.

The thickness of the city walls is less than some walls uncovered in Palestine, but:

"... at Megiddo greater strength was hardly necessary, for it crowned the steep and high slope of the tell itself. The distance which attackers would have had to climb from the plain to the base of ... the wall ... is well over thirty meters, and a wall of this thickness would have constituted a formidable obstacle to the reduced numbers who could survive such a climb under fire from the summit,"

P. L. O. Guy believed there was also an outer wall at


3. Ibid., 24.
the foot of the mound. When ground was being cleared for the dumping site at the beginning of the excavation, portions of such a wall were found. Guy suggested the tenth century B.C. for the dating of the wall and speculated then it might be a portion of an encircling fortification.\(^1\) The excavations were discontinued before confirmation could take place.

One of the finest examples of a city gate to be discovered in Palestine is the one unearthed in the latter part of the 1935-36 season at Megiddo. While the Stratum IV gate described by Guy\(^2\) was later dated and placed in Stratum III,\(^3\) the true Stratum IV gate was positively identified. Departing from the more traditional two- and three-door gateways of Palestine the Megiddo gate had four doorways.\(^4\) The gateway set back a short distance from the main city wall and its doors opened into a fortified and walled court on the exterior. The court in turn had a small gate of its own on the outer entrance. The person coming to Megiddo walked up a paved road from the foot of the mound and entered through the outer gate into the steeply inclined court-

2. Ibid., 24-27.
yard. A direct right turn was then made to pass through the four doors of the main gate set in the city wall. Towers flanked the entrance with advantages of defense from their height and commanding view of all who approached the city. Six guard rooms, three on either side of the gate structure flanked the entrance. The rooms were nearly three meters wide and five meters deep. They were probably designed to shelter the guards on duty, strengthen the means of defending the gate, and provide recesses for the doors of the gate when they were open. Only one door socket was found in place. The gate may have had only one door, though designed for four. The door was cleverly pivoted on the inner corners of the jambs so the great panels would fold into the side chambers out of the way.

The structure was massive and the stone-work excellent. Characteristically, the corner blocks were carefully squared and were of ashlar rock. No mortar was used and the joints were so expertly executed a knife blade could not be inserted between the stones. Mysterious gapes were discerned between the second and third foundation courses and were similar to those discovered by Crowfoot at Samaria and at other sites where wall foundations were dated in this period.¹

¹ G. Loud and Altman, Khorsabad II, (Oriental Institute Publication XL, 1938), plates 11, 12 and 81, 82.
"These may once have contained decorative inserts of brick, wood, or other perishable material or wooden inserts for the attachment of wooden paneling or structures such as stairs, shelves, and platforms; but such an explanation could not apply to a gap in masonry intended to serve merely as foundations below ground level."¹

The one explanation which was not advanced is the offset used in the building of the wall itself to support staging or scaffolding.

Masons' lines made by snapping a taunt cord coated with red powder could be traced clearly in protected spots below the surface of the soil on the foundations. While the outer surface of the wall was finished with squared rock, the gap between the faces of the wall of the gate structure was filled with chips, waste cuttings, and rubble.

One of the very puzzling discoveries of the excavators was the foundations were dressed off level indicating the superstructure must have been of a different material. If it were of mud brick some deposit of deteriorated brick would remain. If squared stone had been used on the stone gate, some remaining blocks would surely be about. Evidently someone systematically tore down and removed the gate structure, leaving the attempt to reconstruct the upper portion a mystery.

There were indications that the entire project of construction was not undertaken at the same time. The gate structure was not bonded into the city wall and the courtyard wall butted against the main city wall, but was not bonded into it, either. This would constitute a structural weakness which could have been corrected if the total scheme of wall, gate and courtyard had been conceived and designed in advance.

The gate of the outer court had a double doorway and the first portal as one entered from the paved roadway had doors which could be closed at night and in case of emergency. A Stratum III doorsocket was found immediately inside the northeast pier, indicating the structure continued in use for several centuries. A series of rooms ran along the western outer wall suggesting either merchants' stalls or some kind of shelters for the guards. Because the rooms commanded a view of the approaching roadway, they may have served as sentry posts and shelters. Since the walled city of Megiddo on top of the mound was given over to public buildings and residences of the governor and general with his officers, the usual public assembly, court of justice, and public market would not be held at the gate as at Tell en-Nasbeh or Mizpah. II Samuel 18:5 and many
references in the historical books and the writings of the prophets mention the importance of the city gate as the center of meeting for the community. The pavement of the Megiddo courtyard was of lime plaster as was the floor of the gate itself. Since no provision for drainage was made the water had to run through the doorway and down the roadway, indicating again the scheme of courtyard and wall was designed for defensive purposes and not for public use.

A curious stairway led up the mound from its base to the wall of the courtyard. Cut into the bedrock, it may have been covered at one time and served as a secret passageway by which water could be secured in time of siege, though the watershaft within the city itself would have been more practical. It is not probable that the trouble would be taken to carve the stairway as a shortcut to the foot of the hill, though it would be well suited for such use, since the barracks for the soldiers, charioteers, and attendants were at the base of the hill and the paved roadway would be round-about.

The gate scheme at Megiddo was very similar to the one to be disclosed at Elath; Ezion-geber deep in the south at the Gulf of 'Aqabah. Since both were, from all evidence, designed by the same architect, it is
probable that the man or men were Phoenician and may well have been the same as drew up the plans for the royal buildings in Jerusalem.

The structures covering the largest areas of the land within the city walls were the stable compounds. Two groups were found, each in a different area of excavation. Lamon cleared the first one soon after taking leadership of the the field work on the hill. A large courtyard was uncovered of eighty-five by sixty-four meters. Originally the ground occupied by the courtyard fell away on the northwest. But the corner had been levelled by filling of chips and stones, probably dumped from the clearing of the watershaft of Stratum VI. The wall about the court had the characteristic ashlar piers at regular intervals, adding strength to the walls which were rubble and rough stone between. The surface of the court was lime plaster and was executed in such a manner that it drained well. In the center of the compound was a large cistern for watering the horses. Since the tank held about 2,775 gallons of water, estimated as sufficient to take care of one hundred and fifty horses for a week, it is probable that it was not filled regularly, but was a precaution in case of siege. As a part of the exercise of the horses they would be taken down the hill daily for
their watering in normal times. Though the tank would be kept full at all times, the tedious task of carrying water to it would be reserved for times of emergency. The west wall of the compound was completely destroyed, but the excavators felt certain a gate on that side led to the entrance of the nearby watershaft by means of which water could be brought to the stabled horses. Two long rooms or spaces on the east side of the compound may have served as sheds for the chariots or trappings of the horses, though no trace of the vehicles, leather harnesses, or accessories were found in any portion of the excavation.

Five rows of stables were lined along the south side of the enclosure, each unit being almost identical. Each row had a central aisle with a lime plaster floor and fifteen stalls on either side. Each stall had its stone manger. Stone pillars served to divide the stalls, were used as tethering posts, and supported the roof. The floor of the stables was of rubble. Walls separated each unit and there was no evidence of communicating doors. The entire arrangement posed several problems to the excavators, the principal one being the method of taking out individual horses. Because the quarters were close and room was not left for the animals to be taken behind the others, the only explanation remained
that the end horse left first with the other horses following. This led the authors of the reports on the excavation to stress the essential military character of the arrangement. The horses were taken in and out as squadrons and individual horses were not assigned to particular soldiers.

The second compound of stables cleared by Guy in the north-east quarter of the city had three rows of stables. The workmanship of the first compound was somewhat superior to the three-unit one which came to the attention of the latter excavator. In attempting to account for the difference of construction the excavators speculated:

"It might even be suggested that the southern compound housed a permanent detachment of chariotry, while the other was used as temporary quarters for the more mobile units, or for the housing of animals in transit. Then again, the southern group may have housed chariots and chariot horses while the northern stables were for cavalry horses." 1

If an explanation is required beyond the fact that one compound was constructed some years after the other with the consequent change of workmen, the most valid would be that one was used to quarter the horses imported by Solomon from Cilicia (Qeweh) for sale in Egypt, as correctly translated and interpreted in the Revised

Standard Version of the Bible in I Kings 10:28.¹

The upper structure of the stables can be imagined by conjecture alone. A thick deposit of light buff mud covered sections of the stable pavements, making almost certain that the roof was of this material. Some means of ventilation for the unit with its thirty horses must have been provided. In the one section of the stable compound where the walls had remained standing to the height of two-and-a-half meters there was no evidence of windows. Either the aisles were left unroofed or had a clerestory shelter with open areas between the lower roof over the horses and stalls, and the higher roof over the aisle. There was a bit of evidence in the northern compound for the latter arrangement in the discovery of a concave patch of lime plaster indicating a roof drain directly under the suggested eaves of the clerestory.² Six stones of peculiar shape came to light and since they were to be associated with the stables, may have been caps for the door posts and supports for the wooden lintels.³ These in turn give added evidence of the clerestory design and construction.

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¹ Brought to my attention by Dr. Robert Pfeiffer of Cambridge, Mass., second reader of this dissertation.
³ Ibid., 35.
The manner in which the units were arranged and the evidence of the number of horses which could be stabled raised the question of how many horses were used with each chariot and how many chariot units were stationed at Megiddo.

"Though Egyptian reliefs show two horses,¹ those from the north sometimes depict three horses to a chariot.² Since in the north the going is rough and often heavy, it is conceivable that a third horse was often necessary, while in Egypt - south of the Delta at least - two horses were undoubtedly ample. The biblical data are not so conclusive as might be desired but nevertheless appear to indicate that during Solomon's time in Palestine three rather than two horses constituted a chariot team."³

The discovery of the extensive stable complex by the Oriental Institute in their excavation at Megiddo confirmed the mention of the city as constructed by Solomon as a chariot center in I Kings 9:15-19. But the probability is that the stables were not restricted to chariot and cavalry horses alone.

"In the history of Solomon, whether in Kings or in Chronicles, is frequent mention of chariot cities. It would seem therefore that Solomon did an extensive trade in chariots and horses between Egypt and the north which, aside from being undoubtedly remunerative, enabled him to modernize and strengthen his army. Megiddo, placed just where the road from Egypt to the land of 'the kings of the Hittites and the

1. Öskar Nuoffer, Der 'Rennwagen im Alterszeit, (Leipzig: 1904), Plates 1-4.

2. Ibid., Plates 5, 6.

kings of Syria' debouched from the pass through the Carmel Ridge onto the pastures of Esdraelon, could not but be a center for this trade."

The excavators, Robert Lamon and G. M. Shipton noted in their report the similarities between the Megiddo stables and those found at Tell el-Hasi\(^2\) and Tell Ta'annak.\(^3\) The latter excavations were made some years before the stables were discovered at Megiddo, but had been dated independently at the same time as Megiddo Stratum IV.

The building around which the excavators differed in opinion as to purpose and use was "building 338." Robert Lamon and G. M. Shipton described it as a large, imposing residence of an important personage.\(^4\) H. G. May wrote at length in his report, tentatively calling it a "temple."\(^5\) While Dr. May admits the questionability of the identification, he does develop his treatment of "the Megiddo Cult" on the assumption that the building is a temple of Stratum IV times, was built during the reign of Solomon, and served as a center of worship.

On the other hand no definite identification can take place until the entire mound, if ever, is cleared. For it may be assumed safely, because of the prevalence of figurines, the incense altar, censers, rings, stands, and other religious objects found in this stratum, religion played a very important part in the life of the community. Some sort of temple or chapel could be expected. The discovery of the foundations of a building manifestly given over to religious purposes would justify Lamon and Shipton's contention that building 338 was the private residence of, perhaps, the commander of the eastern sector of the city. Until a temple on another section of Megiddo is found, the tentative statements of Dr. May stand.

The identification of the building is further complicated by the fact Schumacher first excavated the area in 1903 with an incomplete knowledge of modern archaeological methods and the accurate interpretation of data made possible by later work on many other sites. He called the eastern sector "Tempelburg."¹ Fisher reopened the excavation of the area in 1926 and called the building a "temple."² Guy finished the task and came to

the conclusion that it was a large, imposing residence. Several facts tend to confirm the proposition that the building was used for religious purposes. Five proto-Ionic capitals were found in close proximity to building 338 and none of the excavators questioned their belonging to the structure. Pottery shrines and horned altars were laying about nearby, giving the impression they were thrown out of the "temple." Fisher found clear evidence that the building had been destroyed by fire. The altars which were found a bit later gave clear evidence of being shattered by heat and discolored by fire. The pottery shrines were of definitely Stratum IV characteristics. The fact the area had been sacred in other periods of time gives rise to the further possibility that it was considered a spot of sanctity in the days of Solomon. In modern times cemetery sites are protected and possess a certain mark of hallowedness. Many have been kept intact, though surrounded by tall buildings and busy streets in present-day cities.

Building 338 at Megiddo can be assumed to have been a


temple until definitely proven otherwise.

Dr. May pointed out that certain features of the "temple" resembled a fortress. It may have served as a look-out toward the east and as a refuge in a time of last resort, as the temples did in Old Testament days.

"Many parallels for such use might be mentioned; but perhaps Judges 9:46 is the best. It says that the citizens of the Tower of Shechem took refuge in the temple of El Berith ('the God of the Covenant') after the city had been taken. II Kings 11:4 ff. gives a clear picture of the Carian mercenaries who guarded the Jerusalem temple. They were sufficiently numerous so that with their aid Jehoiada was able to seize control of the government for the youthful Joash; and Jehoiada made his campaign from the temple, which was apparently used as an armory also."

This interrelatedness of "church and state" Dr. May sees as justified in the light of the ideals of the period.

A considerable wealth of religious objects were found and credited to Stratum IV. During the second millennium there had been introduced into Palestine a type of figurine moulded in the form of a female with accentuated features. They were probably kept as a symbol of productivity and as such constituted as emblems of polytheism and evil by the prophets and adherents of Yahweh. A number of the figurines were in use in this

period.

Mention should be made of the storehouse adjacent to the "temple" in the sacred area. A number of remains of grain and wine jars were found in and about the building, giving abundant evidence that food was stored in it. It was not possible to ascertain whether the food was stored in connection with cultic practices and temple worship or was a general storehouse for the city, kept in the safest place possible, near the sacred building. A building just beyond the storehouse defied identification, but contained several upright stones which were clearly masseboth or sacred pillars.

From the excellent work and reporting of the Oriental Institute on the excavations at Megiddo certain conclusions and observations can be drawn. The city itself on top of the mound was essentially a fortress - an outpost in a system of the national defenses of King Solomon. Strategically located on the summit of a steep hill guarding at once the northern portion of the Solomonic kingdom, the main trade route between Egypt and Mesopotamia, the grain fields of the Valley of Esdraelon, and the Mount Carmel pass, Megiddo stood as a witness to the wise planning of David the father and Solomon the son. The steep slope of the "tell" plus the strong encircling wall at the rim of the mound and a possible second wall
at the base rendered the chariot city almost impregnable. In the dumps left by the German archaeologists who dug in 1903-1905 the Oriental Institute expedition found a fragment of an Egyptian stela bearing the name of Shishak. The Egyptian pharaoh came up to Jerusalem in the fifth year of Rehoboam and stripped the temple and the palace in the royal city. Though the name of Jerusalem does not appear on the list of cities taken by Shishak and recorded on the temple at Karnak, the name of Megiddo does.

"... territory far to the north of Palestine was described in terms which by Shishak's time had long been obsolete and consequently cast considerable doubt on the verity of the Egyptian king's other claims. Historians first believed that he had expanded relatively minor operations by the simple process of copying campaign records of the great kings who had preceded him. While it is still doubtful that Shishak reached the territory of the Euphrates, as he claimed, it is certain from the fragment found at Megiddo that his successes included northern Palestine."^2

The fortress, though well-planned and built strongly, fell just five years after the death of Solomon, but was speedily repaired and continued to serve as a strong defensive unit.

The second use of the fortress was to provide police


protection to the numerous caravans making their way through the territory. The ever-ready chariots and swift cavalry horses would discourage banditry. Thus tribute from the caravans was not exploitation, but appreciation of the relative security by which the merchants could travel through the country.

The essential unity of the fortress city and the similarity of the structural details indicate a central, governmental planning. It is probable that the other chariot cities mentioned in I Kings 9, if identified and fully excavated, would show striking resemblances to Megiddo - the work of a master designer. At least the gate of Megiddo in the north and Ezion-geber in the deep south were almost identical in layout, though the former was probably of stone, the latter definitely of baked mud brick. Characteristic features running through the construction projects of Solomon are: (1) three courses of stone topped with cedar beams; (2) the use of large, squared ashlar blocks on the corners and at frequent intervals in the walls to give strength and design; and (3) the use of local material wherever possible except for the imported cedar beams and metal objects. There is no reason to question Megiddo was designed by a Phoenician architect who also assigned to
the project skilled stone cutters and masons of his own native country, secured under treaty with Solomon.\(^1\) The fact that the gate and courtyard walls were not bonded into the main city wall leads to the conjecture that alterations or additions were made.

The deviations from strict utilitarianism were slight. Regular offsets in the wall gave it an aesthetic value as well as strength. The combination of stone and cedar beams probably carried with it pleasing appearances. Covered with a buff mud, the buildings by their uniformity and design spoke of good planning. The carvings on the proto-Ionic were simple and strong and even the figurines, altars, and censers were simple and not ornate. There is not enough evidence to speculate as to the degree of "Spartanism" among the troops. Solomon's court in Jerusalem certainly did not indicate strictness and discipline. The proximity of the mound to the fertile valley at its foot and the nearby hills where the flocks pastured would assure "good living" for the soldiers and their commanders. Many hours were probably spent grooming and exercising the horses. An occasional race may have furnished entertainment.

Since soldiers tend to reflect the religion or the

\(^1\) I Kings 5:6-12.
lack of it in their own home and section of the country, there is the possibility the chapel-type of worship was associated with the little temple. David and Solomon were not particularly noted for their opposition to all except Yahwism. Each person or group may have used the building suggested as a "temple" for worship in his own way. There is no mention, at least, of Megiddo having a high place or temple of special sanctity such as Bethel, Mizpah, Shiloh, Ramah, Gibeon, or Ophel in Jerusalem.

The men stationed at Megiddo were not cut off from the outside world as the imported objects found about on the site of the excavations indicated. The caravans camped at the foot of the mound over-night would provide the means of securing both domestic and foreign objects. While coinage was not used until the days of Darius I, fresh vegetables from the gardens and creations at the hand of the soldiers with leisure time could be used in barter. The commander and officers would be kept abreast of the latest developments in international relations by talking with the members of the caravans. Since no barracks were uncovered on the top of the "tell" itself, the men probably lived in rather temporary buildings at the foot of the hill. There may have been accommodations for the families of the soldiers in the nearby village.
The Megiddo of Solomon's time was, then, the enlargement of the plan of David to construct a sentinel in the north of the kingdom to defend the nation, its trade routes and a part of its "bread-basket." Orderliness, restraint, and a sense of security and potent strength hung over the new, boldly conceived, and strategically situated chariot city. Stratum IV at Megiddo gives one of the most complete pictures of the life and time of the Hebrews at a given period. Even in relatively peaceful times Megiddo spoke of the need of military preparedness and alertness in lieu of true neighborliness of nations and righteousness within the nation.
CHAPTER III

THE INDUSTRIAL COMPLEX OF SOLOMON
IN THE WADI ARABAH AND AT EZION-GEBER

One of the most prodigious tasks of exploration, identification of sites of former occupation, and reading of surface signs of ancient civilization was undertaken by Dr. Nelson Glueck, Director of the American Schools of Oriental Research in Jerusalem. Over a period of seven years beginning in 1933 Dr. Glueck examined many hundreds of spots in the Transjordan and deep south section of Palestine. During the period he also directed important excavations at Tell el-Hammeh in the north, Khirbet et-Tannur in Edom, and Tell el-Kheleifeh (Ezion-geber) on the Gulf of 'Aqabah. Dr. Glueck did more than any other scholar in making to live again in history the land east and south of the Jordan River Valley.

The Wadi Arabah is a giant rift extending from the Dead Sea on the north to the Gulf of 'Aqabah on the south. The wadi is a part of a gigantic geological fault which begins in the north at the Beq'ah between the Lebanon and Anti-Lebanon mountains, becomes the historic Jordan River Valley, continues toward the south as the Wadi Arabah, and terminates as the arm of
the Red Sea known as the Gulf of 'Aqabah. Wadi Arabah serves as a border between southern Palestine on the west and southern Transjordan on the east.

Nelson Glueck and his party explored the Wadi as thoroughly as possible and their discoveries particularly relating to this study were the identification of numerous mines where copper and iron ores were dug out, crude smelters in which the raw metals were extracted as they were separated from the stone and dross in the ores, and as a climax, excavated the refineries and factories where the metals were fabricated. Much of the activity which took place in the Wadi was concentrated in the tenth century B.C. during the time of Solomon, though evidence pointed to some mining spread over hundreds of years.

Beginning just south of the Dead Sea, Dr. Glueck's party began to pick up the trail of Solomonic fortresses and mining camps. Situated on an isolated hill and commanding an unobstructed view of the entrance of the Wadi Arabah was Khirbet Hamr Ifdan. On the surface was an abundance of Iron Age sherds. Though read only from the surface, the size of the apparent fortifications of the hill was readily noticeable. The excavation of the site has not been undertaken, but there is every
surface indication that the mound was the seat of an important garrison, perhaps not unlike Megiddo which has already been examined. While the reason for such a military outpost in a desolate spot with no adequate water supply could not be determined at first, it became clearly evident as the history of the industrial activities of Solomon opened up under the explorations of the Glueck party. The Romans built a paved roadway through the entire length of the Wadi centuries later and its well-engineered course can be followed without too much difficulty, especially from aerial photographs.

But the caravans of the merchants used the giant rift in many periods of history with Solomon giving special impetus to commerce through the valley. As at Megiddo a unit of the army was probably stationed to keep order and security so the trade could flow uninterrupted. Arabia and possibly the east coast of Africa furnished markets and sources of trade in the south, Palestine, Syria, and Mesopotamia in the north.

But the intensive mining activities had to be protected and directed, also. Within the radius of a few miles were numerous copper and iron mines with their prison compounds. Raids by small bands after the precious metals and invasion by foreign armies had to be guarded against. Khirbet Hamr Ifdan may yet be ex-
cavated and identified as Tamar, mentioned in I Kings 9:18: "... and Tamar in the desert in the land of Judah."

Spread out within a few miles of the fortress Nelson Glueck found many evidences of mining operations, crude smelters, slag and refuse dumps, workers' compounds, and sherds aiding in dating the sites. One ruined site is still called Khirbet Nahas or "Copper Ruin."

"Khirbet Nahas was the center of a series of other mining and smelting sites in the civinity. We do not feel that we have discovered all of them. The terrain is difficult to traverse, the 'wudyan' twist about in the most unaccountable fashion, and we should have been compelled to spend perhaps weeks in this one area in order to discover all the mining camps which may exist there."\(^1\)

At least three main centers were noted in the course of the exploration down the Wadi Arabah. There were marks of similarity at each of the sites. (1) Mines were dug into the rock, the roofs usually supported by free columns of stone with traces of ore clearly to be seen in them. (2) Nearby were the crude smelters where the ores were "roaster" and a semi-pure metal extracted, to be transported to refineries. The smelters were made by standing up slabs of rock and were not built with any special care. (3) Slag dumps with


\(^2\) Ibid., 61.
chunks of crude metal and piles of slag were found near the smelters. The green of the oxidized copper would come into view when the pile was kicked or probed into. (4) An enclosing wall, usually in circular fashion, featured most of the sites. The walls spoke of no special care taken in their construction. The openings or entrances in the enclosure were flanked by large piles of stones, giving evidence of towers. Nelson Glueck came to the conclusion that the workmen were sheltered not only from raiding parties, but were slave laborers and had to be guarded.

"It is probable, as we shall see from similar sites, that the mines and smelting plants were manned with slave labor, both when the Israelites and Edomites in turn controlled the Wadi Arabah, and also in subsequent periods. Living conditions in the Wadi Arabah being what they were and are, the laborers who mined and smelted the copper were in all likelihood held to their tasks under compulsion whenever the mines were worked. It is interesting to note in this connection that in patristic literature there are numerous references to the copper mines at Feinan which were worked by slave labor, either of Christians or of criminals, condemned there for their convictions or their crimes."1

The biblical writers do not have much to say about slave labor in the time of Solomon and the source of manpower cannot be readily ascertained. The I Kings record does

clearly state that Solomon did conscript large forces of laborers to be used in the erecting of his royal buildings in Palestine proper, but it is doubtful he would send Israelites "to the mines" unless they were criminals under detention. The Edomites were subjected by David along with the Canaanites and some Philistines. Captive peoples may have been put to forced labor. At least working in the mines of Solomon in the Wadi Arabah must have been comparable to working in "the salt mines" of a later day.

Several problems were raised by the presence of the mining communities. With such a great operation and a large labor force, what was the source of water and fuel in the dry, bare territory? Glueck speculates that the mines

"... were worked only during the winter and early spring, that is, during the main rainy seasons. It is possible that in some instances water may have been imported from long distances. However, careless of human life as the masters of the mines may have been, there still remained the pressing necessity of supplying comparatively large quantities of water to the personnel and the slaves engaged in the various branches of the work ... Food, fuel, and even water supplies in part must have been brought to such places as Khirbet Nahas and Khirbet Jariyeh by trains of camels and donkeys which returned laden with the 'roasted' or partly smelted ores."

As regards fuel, two sources were available. Dry

shrubs and bushes may have been gathered in huge quantities and burned in the stone furnaces. The hot rock once heated would not require excessive amounts of fuel to keep it at a high temperature. Then charcoal, made in the highlands of Edom from the giant oak trees on the wooded plateau, would be transported by long lines of donkeys to the mining sites. Evidences of extensive forests in times past on the hills of Edom are abundant. The same trees may have provided the planks and beams for the fleet of ships constructed and sent out from Ezion-geber. The branches and unusable could have been converted into charcoal.¹

Feinan, six miles south-southeast of Khirbet Nahas, was found to be the site of another huge mining and smelting industry, enhanced by an abundant water supply. A cultivated area which is now under irrigation supports a small population and provides fresh fruit and vegetables along with a year-around supply of water.

"It seems fairly certain, in view of the proximity of Feinan to the other Iron Age mining and smelting sites... and in view of the similarity of its Iron Age pottery to that found at these places, that mining activities were carried on at Feinan during the Iron Age, and particularly during and after the 10th Century B.C."²

² Ibid., 69.
With such advantages it is most probable that Solomon used such a desirable site.

Nelson Glueck was intrigued by a place called Umm el-`Amad or Umm el-Awemid, "The Mother of Pillars." After much searching and the following of false leads, the party located a mine thirty-five meters deep in a hillside, nineteen meters wide at its maximum width, and two-and-a-half meters high. There were pick marks upon the walls, clear evidences of veins of ore yet remaining, and the typical huge stone pillars supporting the ceiling. The name of the mine may refer to the pillars used as supports, but may have been the reputed site of the origin of the metal from which giant pillars were moulded, including the famous Jachin and Boaz of Solomon's Temple in Jerusalem.

Jebel Mene'iyeh was the third of a series of mining centers active during the reign of King Solomon. In the midst of the mining camps scattered about in the area is Khirbet Mene'iyeh. Commanding a view of all the surrounding territory, it was the site of a great fortress, guarding the mining activities nearby and also protecting the southern approach to all the mines in the Wadi Arabah. Walled with sandstone around the entire top of the mound, the face of the hill rises a sheer forty
meters above the wadi below. The ruins of furnaces, watch-towers, buildings, barracks, heaps and pieces of slag, and large quantities of Iron Age sherds speak of a major mining operation in the days of Solomon. Another nearby hill had its summit surrounded by a stone wall and probably was used as a prison camp. The fortification and its camps about were comparable to Khirbet Hamr Ifdad to the north and the impression is of careful planning of the mining operation, the fortunate choice of sites for defensive purposes, and the magnitude of the entire undertaking.

Actual excavation and further exploration of the area would bring to light more material relating to the mining activities of Solomon in the Wadi Arabah. But enough has been discovered and reported by Nelson Glueck and the American Schools of Oriental Research to form a comprehensive picture of the defenses of the trade route and the mining operations, the digging of the ore and its crude smelting, and the fuel, water, and labor supply. The story of the activity in the area is not complete, though, for a sensational discovery was to come to light at the point where the Wadi terminates at the Gulf of 'Aqabah. Not that mining was restricted to the time of Solomon.

"Long before the advent of the Israelites, the pre-
sence of the mineral deposits in the Wadi Arabah was known and the mines exploited in all probability by the Kenites and Edomites, to whom they were related through the Kenizzites. It was the Kenites, who were native to the country and whose very name indicates, that they were smiths, and the related Kenizzites, many of whom also were smiths by profession, who probably first imparted to the Israelites and the Edomites information about the ore deposits in the Wadi Arabah; and who introduced the Israelites and the Edomites to the arts of mining and metallurgy. 2

David may have begun extensive operations in the Wadi after subjugating and enslaving the Edomites. 3 But from what evidence Glueck was able to accumulate, Solomon most fully developed the use of the mines.

"Indeed, it may be said that he (Solomon) was the first one who placed the mining industry in the Wadi Arabah upon a really national scale." 4

The excavations at Tell el-Kheleifeh, the Elath; Ezion-geber of the Old Testament was to complete the picture of Solomon's development of the area.

At the place where the Wadi Arabah and the Gulf of' Acabah meet is the traditional location of Ezion-geber, the seaport from which Solomon's ships set sail for the south, east, and west. 5 The site of Ezion-geber had been searched for for a long time, but never definit-

1. Genesis 15:10; 36:10, 11, 42.
ility identified. A German explorer, Fritz Frank, was the first to discover an insignificant mound about five hundred meters from the water of the Gulf of 'Aqabah. Pottery remains hinted that some ancient settlement had been on the spot. It was called Tell el-Kheleifeh. The mound is located about half-way between the native village of 'Aqabah on the east of the Gulf and Mrashrash on the west. The exploration expedition of the American Schools of Oriental Research under Nelson Glueck examined the mound closely, discovered pottery remains stamping it as having Iron Age remains, and confirmed Frank's opinion that the mound was to be identified as ancient Ezion-geber. In March of 1938 the Jerusalem School of Oriental Research began work excavating the low hill and after three periods of digging, reported results and conclusions which are little short of the importance of that discovered at Megiddo in the north.

While the primary interest in the small mound revolved around its possibility of being an ancient seaport with some remains of the shipping activities, the full significance of the city buried in the mound was to be found in its copper and iron refineries. Near the northwest end of the mound walls, flues, and finally the entire unit of well-designed, efficient refineries
was to be exposed to view. At first the expedition could not account for the peculiar location of the site of the city itself. A few miles to one side were much superior spots with good water supplies. A few hundred steps in the other direction took one out of a current of prevailing winds with accompanying sandstorms and discomfort. But several discoveries pointed to the fact that the city was deliberately placed in the wind stream for purposes of securing a good, natural draft for the furnaces. In the first place, the settlement which dated from the time of Solomon was built on virgin soil, ruling out any conclusion that the city occupied an older site. Evidently the engineers and architects surveyed the area about the shore of the Gulf of 'Aqabah and deliberately chose the spot for the establishment of their refineries. For in the second place, no means of artificial draft were found such as bellows or openings in the flues for the use of them. It was discovered that in later times when the buildings had fallen into disrepair and the flues had been filled with soot and sand, bellows were used. The original furnaces used the natural draft.

The buildings with their furnaces were found to serve two purposes: (1) the refining of the "roasted" ores as brought from the mining sites; (2) the manufact-
uring and fabrication of articles for export. The furnaces and their surrounds spoke of intense heat - much higher temperatures than were possible at the crude piles of rock on the mining sites. Pottery crucibles were found, baked tile-hard by the intense heat. The clay bricks lining the ovens were kiln-hardened, not before being placed in position, but from the refining of the metals. But as evidence that copper and iron ingots were not the only product of the industry, numerous copper dishes, spearheads, fishhooks, and nails were found scattered about in the debris.

The greatest portion of the acre-and-half settlement was given over to the refineries and a great quantity of metal must have flowed from its furnaces. The question arises in consideration of the production of household wares, war weapons, and other items: was there a further reason beyond the excellent natural drafts for the location of the refineries? If the copper and iron was to be used principally for domestic purposes within Palestine proper, the ingots of crude metal would be taken northward to be refined and fabricated near the markets and place of use. Pillars, temple objects, and household wares were conceivably fashioned at some center near the city of Jerusalem, or in the Jordan River Valley, but such has never been found.
There are many reasons for believing that ingots of copper and iron along with large amounts of manufactured items such as hardware, war weapons, and household wares were put directly upon the ships and exported to southern Arabia, "Ophir," and the east coast of Africa. As has been noted, coinage was not in use, but the barter system was highly developed. I Kings 9:28 mentions that the fleet of ships brought back four hundred and twenty talents of gold, - a great amount considering the value of the talent at approximately thirty thousand dollars. The twelve million, six hundred thousand dollars' worth of gold, if accepted as true, would require some commodity in great demand, yet compact enough to merit transporting by sea and non-perishable considering the long journey. Grain and oil would be the most likely exports, though bulky and semi-perishable. The products of the refineries and factories of Ezion-geber would not be worth "their weight in gold," but would come nearer than any other export. Iron was a relatively new, wonder metal and may have been restricted to use as war weapons. It would bring a favorable rate of exchange when transported to countries where there were no deposits, the metal was new and gave a particular nation an advantage in arms, and does not commend the developer of the trade in war materials.
One would expect to find a deep harbor nearby or extensive artificial piers to which the ships might be drawn up. No such harbor has been found. Huge deposits of sand have removed any traces of structures usually associated with the loading and unloading of large ships. At the same time, it must be remembered that the ships of this time were not large. G. Ernest Wright points out in an article on ancient boats\(^1\) of Phoenician design\(^2\) that they were not very big and may well have been similar to drawings found on the wall of Sennacherib's palace. Built to ply up and down the coast, they were not so large but what they could be rowed by slave labor when the wind was not favorable and were constructed with flat bottoms so they could be easily pulled up on the sandy beaches at night or for loading and unloading. Ophir, mentioned in I Kings 9:28, has never been placed, opinion varying between India, south Arabia, and the east coast of Africa. I Kings 10:22 is from a late addition to the document and speaks of the fleet of ships of Tarshish, a three-year journey, and gold, silver, ivory, apes, and peacocks or monkeys. The authenticity of the latter passage is questionable. The

\(^1\) G. Ernest Wright, "There Go the Ships," The Biblical Archaeologist, I (1938), 19, 20.

\(^2\) I Kings 9:27, 28.
journey may have consisted of the twelve-hundred mile trip to south Arabia where the return trip was time consuming as the small boats continually had to tack all the way against the winds and storms. But the only point to be made here is that the sandy beaches near Ezion-geber presented no problem, but were actually advantageous to the beaching of the coastal boats.

If we must look beyond the south of Arabia for the origin of the luxury items King Solomon imported, W. F. Albright's remarks are most apropos:

"There can be little doubt that Ophir corresponds roughly to the African coast between Port Sudan and Berebera in the Somoliland, e.g. Pwnt, which I have identified with Sumerian Meluga. (See JEA, VI, 90-92). (It is quite unnecessary to include the peninsula of Sinai under the term Megula, since malachite abounds in the Nubian desert, as I am informed by a mining engineer now working in that region. The gold of Ophir presumably came from the auriferous region between the latitude of Esneh and Abyssinia (Reissner, JEA, VI, 79)."

But beyond the importance of Ezion-geber as a center of manufacturing and foreign trade, it was heavily fortified. The extensive defenses included an encircling wall, towers, and a city gate. The latter was one of the confirming testimonies to the fact that a master draftsman drew the plans for much of Solomon's defensive system. Ezion-geber's gate was almost identical with the one excavated in Megiddo. While much of Megiddo was build with stone,

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it was noted in the discussion on Megiddo that the masonry gave the impression the workmen were more familiar with laying up bricks. Ezion-geber was a brick city. The sun was extremely hot overhead, the clay lay under foot, and stone would have had to be transported for some distance. The settlement was built on virgin soil by Solomon and thus it was an entirely new community. The writer is reminded of the new cities built in the present day near great factories of plants devoted to defense production. One of the discoveries of the third expedition working at the site was the brick-yard of the second stratum or city. At the southeast corner of the fortified area were long lines of brick which had been laid out to dry and bake. They had first been formed in wooden molds, then laid flat for a few days. The bricks were set next on their sides until thoroughly dry. The brick-layers showed great skill in the use of the blocks of dried mud, laying them alternately as headers and stretchers, bonding the walls firmly together. City II bricks by the hundreds were not used and lay just below the surface under a foot of sand, to be had for the digging when City III was built. But they remained for twenty-five hundred years to be unearthed by the Oriental Schools.
The bricks were well made and palm tree fibers were used as a binder with bits of charcoal and fragments of shells and bone mixed in. Nelson Glueck told of an incident in April, 1940 when a terrific rain and hail storm swept over the area. The nearby village of 'Aqabah was constructed of mud bricks and most of the modern houses were reduced to a pile of mud. The natives began immediately to mold the bricks again without binding. Their homes began to take shape out of the inferior, hastily fashioned mud. The excavating party went to the scene of their digging as soon as possible, expecting to find the bricks dissolved and the area a sea of mud. But the twenty-five hundred year old bricks were intact and no noticeable damage had been sustained. Such a story tends to confirm the saying that "they don't make things the way they used to."

The encircling wall was well built, was from two-and-a-half to three meters thick, extended below the surface about a meter, and gradually widened out in three successive steps of two rows of bricks each. Glueck estimates the walls were at least eight meters high originally.\(^1\) A prominent feature of the walls which definitely linked their construction to that of Megiddo

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was the regularly-spaced offsets, particularly on the corner towers.

The city gate proved to be an even greater connecting link with the construction of Megiddo. It was near the southwest corner of the main wall, was on the south side of the city facing the sea, and was similarly arranged as at Megiddo with a series of doorways.

"It had three separate gates, built at distances behind each other, the first two of which opened each into a set of guard-rooms, one on each side of the passage-way. The third gate opened into the main street of the town, which made a sharp right-angled turn to the east, and it also opened into what seems to have been the market place. Lack of time and funds brought the excavations to a close at the end of the gateway, in front of the highest and best preserved part of the mound."

Although there is no evidence gates actually barred all three narrow openings at Megiddo and Ezion-geber, such a strong defense would be expected and the inclusion of three doors must have been projected if not realized. The sharp right-turn again ties the arrangement to Megiddo. Defenders would certainly be at an advantage if the gates were forced, since they would still have the protection of the inner wall to cut down the intruders as they emerged through the entrance. Two other gates with similar plans have been discovered, the south gate at

Carchemish and the gateway at Lachish.

The large open square just inside of the gate probably used as a parade ground, space for caravans and workmen when the city was under attack, and a market place in times of peace. The entire city was only an acre-and-half and the walls were high and thick for such a small area. This leads to the observation that the refineries and the defensive system were primary, the caravans and the workmen using temporary housing outside of the walls in times of peace.

Ezion-geber of Solomon was destroyed by fire. There is no definite dating of the destruction. Repairs did take place soon after the first breaching of the defenses. Three cities were later constructed on the site with the latter using the original foundations and walls of buildings were possible. It is thought, as has been noted, that Megiddo was destroyed by the Egyptian pharaoh, Shishak (954-924 B.C.). Professor Albright notes that many of the cities listed on Shishak’s Asiatic roll of cities conquered included a large section of Edomite names. Solomon had a most prosperous industry in the Arabah and Ezion-geber provided him with

1. Woolley and Lawrence, Carchemish II, Plate 4b; 54.
a seaport which enabled his and other merchants to go
down the Wadi, ship by boat to Africa and South Arabia,
and thus bypass Egypt and the Nile River route. Such
wealth and favorable commerce would not go unnoticed.
It can be only a conjecture, though, that Shishak cap­
tured the fortress with its refineries and its command
of the beaches.

As the Oriental Institute of the University of
Chicago has given an excellent description and report
on Megiddo to the north of Palestine, so Nelson Glueck
and the American Schools of Oriental Research have
brought to light remarkable discoveries at the southern
industrial and commercial center. Each give a remark-
able insight into the reign of King Solomon.

"There was, so far as we know, only one man who
possessed the strength, wealth, and wisdom capable
of initiating and carrying out the construction of a
highly complex and specialized site, such as the
factory town of Ezion-geber in its first and great­
est period. This was King Solomon. He alone in his
day had the ability, the vision, and the power to
build an important industrial center and sea-port
so comparatively far from Jerusalem. With the build­
ing of a new Ezion-geber, Solomon was able to have
smelted and refined and worked up into finished pro­
ducts the ores extracted from his great copper and
iron mines in the 'Arabah, and was then able to ex­
port them directly by sea and by land in exchange
for the spices and ivory and gold and precious woods
of Arabia and Africa. The wise ruler of Israel was
a copper king, a shipping magnate, a merchant prince,
and a great builder. Through his manifold activities,
he became at once the blessing and the curse of his
country, because with increased power and wealth came
a centralization of authority, a ruthless dictatorship which ignored the democratic traditions of his own people, and the counter-development of the forces of reaction and revolt, which were immediately after Solomon's death to rend his kingdom asunder. During his lifetime, however, Solomon reigned supreme. His far-flung net of activities extended from Egypt to Phoenicia, and from Arabia to Syria. The new town of Ezion-geber which he built represents on of his greatest, if indeed hitherto his least known accomplishments.\footnote{Nelson Glueck, "The Second Campaign at Tell el-Kheleifeh," Bulletin of the American Schools of Oriental Research, Number 75, (October, 1939), 12.}
CHAPTER IV

SOCIAL AND DOMESTIC CONDITIONS
DURING SOLOMON'S REIGN

Three major sites of excavation contribute the bulk of the archaeological information to the understanding of the times of King Solomon, - Megiddo, Ezion-geber, and Jerusalem. Numerous other excavations have been undertaken in and about Palestine and while no distinctly Solomonic strata have been discovered as at the northern chariot city and the southern factory center, many bits of information, principally concerning daily life in the tenth century B.C. Few sites were privileged to have the financial support and the ability thus to excavate and report as fully as the expedition at Megiddo. And except for Saul's Gibeah (Tell el-Ful), few have the advantage of having their secrets concentrated in such a small area as Ezion-Geber (Tell el-Kheleifeh) with its four strata.

Tell Beit Mirsin, the biblical Debir or Kiriath-sepher was excavated in 1926, 1928, 1930, and 1932 under the joint direction of President Kyle and the Xenia Seminary of St. Louis and Dr. Albright and the American Schools of Oriental Research. Tell en-Nasbeh,
eight miles directly north of Jerusalem, was extensively excavated from 1926 to 1935 with Dr. F. W. Bede of the Pacific School of Religion directing, assisted by the American Schools of Oriental Research. Tell el-Ful, the small fortress headquarters of Saul was excavated by the American Schools in 1932 and 1933. Beth-shan excavations rank with the major undertakings in Palestine and was carried out by the University of Pennsylvania Museum in ten campaigns between 1921 and 1933. Shechem or Tell Balatah was excavated by Dr. Sellin in 1913-1914 and in five more campaigns from 1926 on. The biblical Shiloh or Seilun was uncovered by the Danish scholars, H. Kaer and Aage Schmidt in 1926 and 1929. Sir Flinders Petrie did considerable work in the border country in the south of Palestine between Egypt and its northern neighbor. Some of his work bears upon the Solomonic period. Gezer or Tell el-Jezereh was a "one-man" project of Dr. R. A. S. Macalister and, while the fortress city was important in the system of defense set up by Solomon, 1902 to 1908 was early in the development of the techniques of archaeology and Macalister was not prepared to make accurate estimates of what he found. Lachish or Tell ed-Duweir proved to be one of the most fruitful projects in all of Palestine and was directed by J. S. Starkey, Lankester Harding, and H. Dunscomb.
Colt from 1932 to 1938. It is readily seen that a considerable concentration of archaeological work took place in the 1920's and 1930's. Steady progress was made in method of dating strata and material remains. The comparisons and contrasts of findings brought insights into biblical history and a more accurate picture of the life of the ancient Hebrews than has been in existence since the time the Israelite nation came to an end.

The above-mentioned excavations and others of a minor nature contribute to the knowledge of Solomonic times along at least four lines: (1) further light on the fortifications and buildings of defense in the tenth century B. C.; (2) information concerning the store cities mentioned in I Kings 9:19 and II Chronicles 8:4 and 6; (3) considerable material on temples and religious practices in Palestine; and (4) life in the cities and villages. Many tombs scattered throughout the countryside have given up their implements, ornaments, and religious objects of the period, giving hints as to the cultural patterns of the time.

The contributions of the excavations at miscellaneous sites relating to fortifications fall into three categories: (1) the strongly fortified sites which show striking similarities to the strongholds at Megiddo and Ezion-geber; (2) the cities and villages with thin, poor-
ly-constructed encircling walls which were of "native" construction as over against Solomonic projects; and (3) "open" or undefendable villages.

Solomon received from his father David the beginning of a system of heavily-fortified cities. As has been noted, Megiddo had probably been started by David.¹ The hilltop fortress of Saul, Gibeath or Tell el-Fül, was captured by the Philistines upon the death of the first king of Israel. It was not completely destroyed² and because it commanded an unexcelled view of the northern approaches to Jerusalem, Solomon made minor repairs on it and used it as an outpost. This is in contrast to the royal residence of Saul where Solomon's father sang sweet songs to the demented king.³ Gezer and Ta'ansach were strongly fortified cities rebuilt by Solomon. At Gezer breeches were repaired and towers added as mentioned in I Kings 9:15-17. J. G. Duncan, upon examining again the site of Gezer and Mcalister's work, writes:

"On the towers 'thrust in,' the stones were dressed diagonally with a 5/8 inch chisel, the same dressing as I found at Megiddo and Ta'ansach. It is clear, therefore, that these are the repairs for which Solomon made the levy, as narrated in I Kings 9:15-17."⁴

² W. F. Albright, "Excavations and Results at Tell el-Fül," Annual of the American Schools of Oriental Research, IV (1922-1923), 8-17.
³ I Samuel 16:17-23.
The Gezer defenses consisted of two gate towers with wall towers spaced every ninety feet. The towers were forty-one by twenty-eight feet and had rooms in them. The fact that the towers were not bonded into the main wall proves they were added to the walls, probably by Solomon as he made his repairs.

Ta'anach was fortified strongly with walls and towers similar to Megiddo and Gezer, but because of its close proximity to Megiddo, was united under one governor, Baana, appointed, according to I Kings 6:12, by Solomon. As will be noted in more detail, the principal use of the tower defenses and perhaps most of the fortress area was for the storage of grain and other foods. A large rectangular fort with a tower of nine rooms displayed, upon its excavation, the typical offset construction of Megiddo and Ezion-geber. The total dimensions of the fort were seventy by sixty-two feet and the walls were four feet thick. From all appearances Solomon used a more ancient fortress for his store city and strengthened it by adding a tower.

As has been suggested, several of the cities did not have the thick, strong walls demanded of a link in the defensive system of Solomon. Tell Beit Mirsim or Debir and Tell en-Nasbeh both had two walls, but these were
were comparatively thin, the outer one being five feet thick, the inner one two-and-a-half feet thick. Between
the two were a series of casements designed to give
strength to the relatively weak walls and at the same

time divide the intervening space into sections or rooms.
Some of these sections were filled with broken pottery,
stones, and rubbish, but many more of them seem to have
served as magazines or storage spaces for the adjoining
houses. Commenting upon this type of city wall, W. F.
Albright wrote:

"Under the loose patriarchal form of Israelite soc-

iety there was no systematic coercion of the individ-

ual; 'every man did what was right in his own eyes.'
The corvée was unknown. It was, therefore, as a rule
manifestly impossible to induce the inhabitants of
an early Israelite town to submit to the prolonged
and difficult labour of constructing a massive city
wall. The Israelite wall of Jerusalem was not built
until the tenth century, when captives were available
for the corvée. Solomon introduced the corvée into
Israel, but even he was apparently very circumspect
in his use of free-born Israelites for forced labour." 1,2

Tell en-Nasbeh well illustrates the observation made by
Dr. Albright. The ancient walls of the city were laid
up for the most part with rubble and the casement con-
struction. But in the time of the divided kingdoms the
city suddenly became of great importance as a key in the
defenses of the contending powers. While it is not clear
whether Tell en-Nasbeh was Mizpah of old one point is

2. W. F. Albright, Unearthing a Biblical City, (New York:
Fleming H. Revell, 1932), 102.
certain\textsuperscript{1} that the massive walls which were the strongest uncovered until this time were constructed about 900 B.C. in an attempt to erect an ancient "stone curtain" between the warring Judah and Israel. Replacing the thin walls of the former fortification, the new walls may be those described in I Kings 15:16-22, built with stone taken from the ruined city of Ramah. More than thirteen feet thick, with deep foundations, they were coated with a thick layer of plaster to make them more difficult to scale. The materials were so irregular and the types of masonry so varied as to suggest several periods of construction. The early walls were built many, many years before Solomon, the later walls some thirty or forty years after the death of Solomon. But the change had been accentuated in the time of the tenth Century king as the central government became stronger and the rugged independence of the citizens weaker.

"... and all the store-cities that Solomon had\textsuperscript{2} have not been excavated fully. Some of the archaeological information forthcoming from Solomonic times concerns the granaries and storage bins within the fortified areas of the cities. Several different types have come

\textsuperscript{1} See discussion on identification of Tell en-Nasbeh, G. Ernest Wright, "Tell en-Nasbeh," The Biblical Archaeologist, X (1947), 73-77.

\textsuperscript{2} I Kings 9:19.
into view. At Tell Beit Mirsin the excavators found a cleft in the rock near the east gate, widened it in anticipation of a new discovery, and dug deep into the cave. Dr. Albright heard the Arabs who were assisting him speculate as they made their way into the cave that gold was to be found. They planned in their conversation to cut the throats of the "Khawajat" (gentlemen) and make the treasure their own. But the large cavern proved to be used for the storage of grain, straw, and oil. The Arabs were bitterly disappointed and as they crept out into the daylight were heard to say, "Poor people, they were peasants like us."

In the case of these caverns they had been Bronze Age tombs, but in the Iron Age had been reused as storage bins, hidden deep in the rock. Gezer had many ancient caves in the rock which were used in the Iron Age for storing grain.

Another type was that found at Ta'anach. As has been noted, the fortress was well built and gave evidence of solid construction. The West Fort was a rectangular tower seventy by sixty-two feet. There were nine rooms in the tower proper and a tenth in the south gate. The walls of the rooms were four feet thick, indicating they may have supported some sort of a platform used to hold heavy weapons. But the cells were plaster-

ed with a thick layer of lime-mud and were used for storage of grain. While the fortress structure itself was probably built for defensive purposes, a later generation, possibly during the time of Solomon, converted it for storage purposes. The grain and oil would be collected from the peasant-farmers as taxes, brought to such a central place and stored until taken to Jerusalem to feed the numerous members of the great court of the king. There is also the possibility that large quantities were kept in storage in case of famine or war. The strength of the fortification used for storage purposes speaks of the value of food supplies in an area where grain was not plentiful and raids by marauders frequent.

At Tell en-Nasbeh circular silos in a cone shape had been dug into the ground and lined with stones. Lime plaster over the stone made a smooth surface and enabled the storage bins to be used for either grain or water.

It is difficult to determine which buildings built above the surface were used for granaries, since in most cases, buildings from the Iron Age have only the foundation remaining. The use of such buildings is even more conjectural than the reconstruction of the super-structure. But one building at Megiddo beside the
"temple" was used for storage.¹ The presence of large numbers of jars used for the storage of oil and grain near surface buildings at many sites indicate they were used for a more temporary means of keeping the year's supply of provisions.

The one Hebrew temple erected by King Solomon was the royal chapel in Jerusalem. This will be dealt with in connection with the study of the royal city of Solomon. It is not probable Solomon built other temples or religious centers except those noted in a clearly Deuteronomic source in I Kings 11:5-8.

"For Solomon went after Ashtoreth the goddess of the Sidonians, and after Milcom the abomination of the Ammonites. So Solomon did what was evil in the sight of the Lord, and did not wholly follow the Lord, as David his father had done. Then Solomon built a high place for Chemosh the abomination of Moab, and for Molech the abomination of the Ammonites, on the mountains east of Jerusalem. And so he did for all his foreign wives, who burned incense and sacrificed to their gods."

While the Deuteronomist was through the example of Solomon preaching against the idolatry of his own seventh or sixth century day, the accusations probably had some basis of fact. The shrines mentioned were in and about Jerusalem itself and no archaeological evidence has been found of them.

But shrines and temples were in existence across

¹. See page 50.
the countryside. If places of worship were erected during Solomon's time, they would be in the form of chapels for the officers and officials at fortified centers. The controversial building at Megiddo may have been an example of such a project. As to the other centers of religious activity, they may be divided into at least four types: (1) Canaanite temples, (2) high places on hill tops or simulated heights, (3) private shrines in connection with homes, and (4) Israelite temples. Archaeological remains of all four kinds have been found.

The temples uncovered at Beth-shan are the most spectacular examples of Canaanite temples. While they may not have been "average" or "typical," they certainly do give a good indication of what the Hebrews met in their new homeland. They remained a constant attraction to the Israelites with their emphasis on fertility of soil, cattle, and race. Two temples stood side-by-side at Beth-shan, built by Rameses III of Egypt. While first impressions would lead one to think the temples were essentially Egyptian, Dr. C. C. McCown makes the observation:

"The temples throw a flood of light upon the religion of the Canaanites whom the Israelites supplanted and absorbed, for they were built during a period when Egypt was strongly under Syrian influence and, though erected by Egyptian officials, they exhibit
Canaanite worship under a thin veneer.  

The temples, designated the "Southern Temple" and the "Northern Temple" by Alan Rowe who directed the work, were built of adobe brick with stone foundations, usually composed of rubble rock. Basalt was used for cornices and column bases, limestone for door jambs. Stonework formed the door posts and basalt was used for the crudely made altar of Holocaust in the area to the north of the temples. The walls were covered with plaster and the original floors were of hard beaten clay. The roofs, while no trace was found, were thought to have been of wood and Dr. Rowe suggests a covering of clay to render them waterproof. Columns were used in addition to the walls to support the roof and the courtyard appears to have been covered. Slots in the roof as in temples in Egypt may have admitted light and what artificial light was necessary would be furnished by pottery lamps, a number of which were found at the site as well as throughout most of the excavations in Palestine. A corridor connected the two temples and their axes were west and east with entrances on the west.


The southern temple consisted of an oblong building divided into three main sections: (1) a long hall with two low walls and six columns. Double entrances were on the west end of the structure. The altar probably stood at the east end of the hall. (2) On the north end of the temple stood a series of storerooms. (3) The south section was also a series of storerooms, both of the latter sections probably being designed for the storage of temple offerings or temple treasures. The god Seth, a bearded deity with a conical cap, and a goddess, evidently Ashtoreth were depicted on the walls.

"It seems probable that the building is the 'temple of Dagon' mentioned in I Chronicles 10:10."¹

The northern temple was continued in use until the time of David when he expelled the Canaanites from the city. Figures of local deities were Antit, the warrior-goddess dressed as Ashtoreth and a goddess on a small shrine house and pottery figurine.

"Our evidence indicates that Antit-Ashtoreth was the chief deity worshipped in the temple during the Egyptian occupation. Under the time of the Philistines a form of Ashtoreth was still revered in it, for the building seems to be the 'house of Ashtaroth' of I Samuel 31:10. From the fact that the armour of Saul was placed in her temple, we may assume that Ashtoreth was, at this time as in the past, in the

¹ Alan Rowe, The Four Canaanite Temples of Beth-shan, (Philadelphia: University of Pennsylvania Press, 1940), 23.
form of Astarte, mainly regarded in Beth-shan as a war goddess.\(^1\)

The objects found on the temple floors suggest the Beth-shan goddess was a serpent goddess of fertility. Several incense stands, models of temples, and pottery boxes had serpents crawling over them. Female breasts on the underside of the serpents denote the fertility motif. Of special significance in connection with the reign of King Solomon is the reference in I Kings 1:9,

"Adonijah sacrificed sheep, oxen, and fatlings by the Serpent's Stone, which is beside En-rogel,"

This act brought to a head the plot of Adonijah to succeed his father David on the throne, only to be foiled by the prophet Nathan, the favorite wife Bathsheba, and her son Solomon. Hezekiah removed a bronze serpent from the Temple during his reform and broke it in pieces, according to II Kings 18:4. The story of Numbers 21 in which Moses made a bronze serpent at the command of Yahweh may have been told from some ancient tradition to give sanctity to the widespread veneration of the serpent. It may have been also an explanation of the origin of the serpent sect. Who placed the bronze serpent in the Temple is uncertain.

\(^{1}\) Alan Rowe, The Four Canaanite Temples of Beth-shan, (Philadelphia: University of Pennsylvania Press, 1940), 23.
A serpent stela was found at Tell Beit Mirsim, various objects with serpents crawling over them at 'Ain Shems and Jericho.

The excavation work at Beth-shan was sponsored by the University of Pennsylvania Museum under the direction of Alan Rowe. Three important conclusions come from the study of the Beth-shan temples which were either destroyed or fell into disrepair in the time of David. (1) The further confirmation of the fertility elements in the Canaanite religion, one of the very serious threats to the austere religion of the nomadic Israelite tribes. As the clans made the transition from purely pastoral existence to agricultural and finally to cosmopolitan living, the fertility of soil and man came to the serious attention of the Hebrews. (2) The Egyptian influence previous to, during, and immediately after King Solomon's reign, a fact attested in the rearing of two temples in the name of Rameses III of Egypt. Mention is made of the alliance between Solomon and the Egyptian nation through marriage, although some question will be

raised concerning this marriage later in the study. Shishak was to overrun Palestine and destroy many of the fortresses and take much of the treasure of Solomon five years after his death. (3) The tendency was to move the gods and goddesses indoors. As will be noted in the section concerning the high places, much of the worship in ancient times in Palestine had taken place in the open. But the gods must have their houses, even as humans. The same tendency motivated Solomon in erecting a house for Yahweh. Much of the universalism expressed in Solomon’s prayer of dedication was a redaction of later thinkers and editors.

Five or six temples from various strata occupied the approximate spot of the Canaanite temples of Beth-shan. Traditional sites had already become "holy ground," - centers of worship. Solomon chose the sacred high place on the North Hill, Ophel, as the altar with the Temple next to it. Many centuries of sanctity preceded its being used to worship Yahweh of the Hebrews and millennia were to see it kept as the most sacred spot of three great religions, - Judaism, Christianity, and Islam.

Concerning the "high places" of Canaanite religion, somewhat adopted by the Israelites, the most complete example was at Petra, the ancient capital of Edom. Though considerably removed from Palestine proper, the
the close connection between the Edomites and Israelites is apparent. The country of Edom was under the power of David and Solomon. Sometimes enemy, sometimes ally, the southern nation contributed the "S source" in the Book of Genesis,\footnote{Robert Pfeiffer, "A Non-Israelite Source of the Book of Genesis," Zeitschrift für die Alttestamentliche Wissenschaft, N.F. 7 (1930), 66-73.} probably the Book of Job in part,\footnote{Robert Pfeiffer, Introduction to the Old Testament, 2 ed. (New York: Harper Brothers, 1948), 670.} and the philosophy of the Book of Ecclesiastes.\footnote{Ibid., 35.} The inter-relationship of Edomites and Israelites has already been seen in the mining and manufacturing industry of Solomon.

The high place at Petra was in use until a few years before the Christian era and the fact that it was cut from solid rock made possible its preservation to the present time - a model in nearly eternal stone. Other high places abounded in Palestine, but were washed away, scraped off, or simply destroyed. But the original Petra high place, changed and improved through the ages as ancient churches are, was patterned after the typical Canaanite high place. Features of the Petra area were an oblong court; an altar reached by four steps and its dimensions nine feet long, six feet wide, and three feet high; and a raised platform to the side whose use is unknown. The most ancient altar may...
have been a small, round one just to the south of the main altar. Hollow cup marks speak of the ancient practice of blood sacrifice. Such marks have been found at or near almost every sacred spot excavated in Palestine, including Gezer, Megiddo, Beth-shan, and Ophel in Jerusalem. A reservoir had been cut in the rock nearby, probably for the storage of water. Its presence is a reminder of the incident when Elijah met the priests in a contest on Mount Carmel and water was poured on the altar at the "high place" on top of a mountain, far removed from a water supply. Water may have played some role in the ritual at the "high place" and thus its storage. Two pillars had been carved from the rock and stood a short distance from the court. Standing one hundred feet apart, there seems little doubt they had a religious significance and probably represent the ancient masseboth or twin pillars symbolizing male and female deities.

Such "high places" dotted the countryside of Palestine, though not constructed with the work and care of the "show place" at Petra. The frequency of the "high place" in contrast to the dirth of buildings clearly identified as temples is best summarized by Graham and May:

1. I Kings 18:20-46.
The remains of only a few temples dating from the Middle Iron or Hebrew period in Palestine have been recovered by the excavators. This is partly due to the need for further efforts at many sites and partly to the fact that there were relatively few centers populous and wealthy enough to support the more elaborate cultic activities which go with such an edifice. The smaller centers would doubtless be served, except on special occasions, by open-air sanctuaries of high places, some of which would, in this age, probably be equipped with an unpretentious building difficult to distinguish, even then, from neighboring structures.¹

Petra and its "high place" may not be typical in that it was carved from solid stone, but the altar, the courtyard, and the elevation of the general area would be common to the "high places" spread from Geba to Beersheba. The altar reveals the presence of a sacrificial system, created to placate and win favor with deity. The court speaks of an assembly and cooperate worship. The height of the sacred spot represents an attempt to ascend as near deity as possible.

The third class of religious center was the private chapel or shrine. Flinders Petrie called one of the buildings or a portion of the structure he found at ancient Gaza (Tell el-Ajjul), on the border between Palestine and Egypt, a shrine.² At the end of a lane or narrow street leading from one of the large houses was the small building. Petrie pictured the worshipper stepping up a riser he found, washing his feet on a bench of shells

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at the side, - the shells coming from the sea nearby. A pit adjacent Petrie suggested as a place where the water of washing could drain. Through a succession of raised platforms the worshipper stepped upon a clean shell floor, then a white stucco floor, and finally into the shrine, floored with plaster.

"The sides of the shrine were white plastered, without any paintings or ornament. None of the common pottery figures of gods were found, nor any place for a statue. It was as bare, simple, puritanical, as the most fervent Wahabyy could wish. Is this a primitive cult of North-West Arabia, which was adopted by Judaism and Islam? The ablutions before prayer were likewise provided at Serabit (Researches in Sinai, 105) before the Law at the Exodus."

The difficulty of identification and the danger in inference of facts is readily apparent, especially if the suggestion is made that the building may have been a bathhouse. Petrie did not use modern equipment and frequently was at great variance with other archaeologists. But due consideration must be given to the suggestions of so great an Egyptologist.

Melvin Kyle, who directed the work at Kirjath-sepher, found a small altar which he identified as a family article and described as follows:

"In the ruins of one of the homes of this first city of the Israelites we found that little family altar with four horns, entirely undecorated as all Israelite altars were required to be. And also a

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little ceremonial lamp on a tiny pedestal just high enough to serve before such a family altar. The idea of a central place of worship, as the only place where religious rites might be celebrated or an altar be placed, receives no confirmation here."

In contrast are the descriptions of Canaanite practices as found by Elihu Grant at Beth Shemesh:

"Inside the three-cornered room, snug against the threshold, was a stone, a meter-and-a-half in length and circumference, carefully chip-hewn. A third of a meter above it, on a southern corner of the room wall was a stone socket which fitted it. Several other baetyl, or sacred pillar stones, are near by, all prone, and seem to belong to one system, which includes the limestone offering-table. These cult objects were not notably abused, and may simply have been gradually outgrown and forgotten after the early Hebrew period, from Solomon to Ahab."2

Such a structure with its objects gathered into a corner may represent the attempt to preserve in semi-secretness ancient rituals by a people who were placed in the position of the American Indian as the Europeans "took over" his homeland. The stone symbols were in contrast to the austerity of most elements of the Hebrew religion.

While the material is meager at this point, there is enough to suggest that small, personal shrines such as described as belonging to Micah of Ephraim in the time of the Judges3 did exist. There is good reason to

2. Elihu Grant, Beth Shemesh, (Haverford, Penna.: Biblical and Kindred Studies, 1929), 51.
believe, as shall be shown, that the Temple of Solomon in Jerusalem was a semi-private royal chapel, at least in its inception.

The fourth type of religious building was the Israelite temple. Later sacred writings with the Deuteronomic School of Hebrew religious thought sought to champion the Jerusalem Temple as the only acceptable place of worship in Palestine. But Israelite temples were in existence at Mizpah, Bethel, Gilgal, Shiloh, and other places of great sanctity. Perhaps the best example of the Israelite Temple was that uncovered at Tell en-Nasbeh by W. F. Badé of the Pacific School of Religion. A large building came into view near cup marks on rock at the site - the cup marks being an almost certain indication of a sacred area. When Dr. Clarence S. Fisher, who was helping with the project, saw the development of the lines of the building, he suggested it might be a Hebrew temple. He drew plans of what the foundations of the building would be if it was a temple. When the area was cleared of debris, the building foundations corresponded exactly to Fisher's previously-drawn plan.

The place of sacrifice was the rock upon which the cup marks were found. A large room ran the full length
of the building, was eight by thirty feet, and faced
toward the place of sacrifice on the south. Three rooms
twenty-six feet long lay at right angles to the end
room, the center room the wider. A section of ancient
Canaanite wall lay under the center of the building and
its position straddle of the Bronze Age city wall helped
to date the building as definitely Israelite. A rounded
rock stood on the section of the city wall and was used
as a pedestal for a column, the burning of incense, or
some other purpose. Grain storerooms flanked the central
room or the "holy of holies." Grain bins were definitely
identified and two flint knives which may have been used
for circumcision lay in the area. No jars were found
within the structure itself, but several were found in
a cistern nearby. The curious thing about them was the
conical shape of the bases and the absence of handles,
making them impossible to be carried upon the heads of
the women. Bade suggests they must have had some sanct-
uary use. He conjectures that the Gibeonites were en-
slaved, only male servants were used in the temple area,
and carried the jars in their arms or on their hips.
Gibeon is within view of the excavation site.
The foundations were set on bedrock, indicating no
building except the intersecting city wall had stood on

1. W. F. Bade, Excavations at Tell en-Nasbeh, (Berkeley:
Palestine Institute Publications, No. 1, 1928), 36.
the site before. In one section the walls still stood to the height of seven feet. Nothing remained, though, to suggest where the entrances were, what columns may have been used, and what the roof was like. Sudden destruction came upon the site, either during Josiah's reform\(^1\) or Nebuchadrezzar's conquest.\(^2\) Badè chooses the former, though holding the subject open to debate.

The touching part of the story describing the excavation of Tell en-Nasbeh was related when the promise to restore the land to its former status was fulfilled. Professor Badè sent word out throughout Palestine that on Sunday, May 8, 1927, the Israelite temple would be covered over. A large crowd of many nationalities, backgrounds, tongues, and creeds came to a special service in which the historic and religious significance of the excavation was noted.

"Before long the temple area and the surrounding dump-heaps were covered with one of the most cosmopolitan audiences I have ever seen. The voices of pupils and teachers from the two Friends' Schools for Palestinian boys and girls led with contagious fervour in singing the old hymn, 'Oh, God, our help in ages past,' which could not have been more fitting to the occasion if it had been written for it. Dr. Magness, President of the Hebrew University at Jerusalem, read the 121st Psalm in Hebrew; Mr. Kel- sey read a part of Whittier's 'Worship'; Mr. A. Willard Jones, headmaster of the Friends' Boys'

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1. II Kings 23.

2. II Kings 24.
School, read in English a poem entitled 'Palestine First;' and he was followed by Dr. Khalil Totah, who read one under the same title in Arabic. I spoke on the historical significance of the sanctuary. The service closed with the Aaronic benediction. The next day long lines of basket carriers covered from sight the traces at once of our meeting and of the sanctuary.¹

Thus there disappeared for a few more years or centuries, perhaps, the Mizpah where Samuel made his headquarters and the army which was to make possible a new nation was to meet with him. It was at this sanctuary the people were to assemble "before Yahweh" and chose Saul their king, through the elders, according to I Samuel 10:17, 24. The city became the capital of the impoverished nation and the governor's residence after the fall of Jerusalem, according to II Kings 25:22-25. The special sanctity of the city is attested by its choice as a stronghold by Judas Maccabaeus, for "in Mizpah there was a place of prayer aforetime for Israel."²

Bethel, Shechem, Dan, and later Samaria were temple cities in the north, or more correctly, Israelite cities with temples. One conclusion drawn from the excavation of the temple at Tell en-Nasbeh is that these were not elaborate structures in the early period of the Hebrew nation. The absence of a large courtyard gives the im-

¹ W.F. Bade, Excavations at Tell en-Nasbeh, (Berkeley, Palestine Institute Publication No. 1, 1928), 39 to 41.
² I Maccabees 3:46.
pression the worshippers came individually or in small group. The bringing of the offerings and sacrifices to the temple took place at the convenience of the wor-
shipper with large assemblies limited to the festivals and seasonal observations. The Sabbath was a day of rest with no injunctions for regular attendance weekly at the centers of worship. The store rooms on either side of the "holy of Holies" supports the conjecture that the "side chambers" of Solomon's Temple were for the storage of offerings and treasure. The presence of a temple in Mizpah speaks of the goodly size, relative importance, and possible wealth of ancient Mizpah. Most religious sites in the Near East are connected with some religious event in the past and Mizpah with its temple was venerated because of an event now lost in antiquity.

The temples the Israelites used would not necessarily influence or be influenced by the Temple of Solomon. The Royal buildings of Solomon, including his temple were designed and constructed by Phoenician architects and foremen.1 When the nation divided upon the death of Solomon, Judah with its capital at Jerusalem was so small geographically that most worshippers could frequent it without too great hardship. Though

1. I Kings 5:18.
Jeremiah’s father was a priest at Anathoth\(^1\) almost within eyesight of Jerusalem, such centers of religious activity were ancient and it is probable no new structures would be encouraged or built in Judah. At the time of the Deuteronomistic reform (621 B.C.\(^2\)) such places were destroyed as Bade conjectured the sanctuary at Tell en-Nasbeh was. In Israel or the Northern Kingdom ancient sites such as Bethel and Dan were retained and the temple areas enlarged, new centers were built as at Samaria, but animosity with its southern neighbor would preclude patterning temples after the one erected by Solomon. The sanctuary at Tell Tainat in Syria excavated by the Oriental Institute of the University of Chicago\(^3\) becomes the "missing link" with traceable resemblances to the sanctuary of Solomon as over against Israelite and Canaanite sanctuaries. The Tell Tainat building was designed and erected by Phoenicians.

The next consideration is the homes, home industry, and everyday life as revealed by excavations in Palestine. Since Megiddo was given over almost entirely to fortifications and Ezion-geber to a factory site, oth-

\begin{itemize}
  \item 1. Jeremiah 1:1.
  \item 2. II Kings 23.
\end{itemize}
er sites must be examined for information concerning the more common life in the tenth century. It is probable the Hebrew houses were much like the Canaanite houses and in many cases, were acquired from the Canaanites. The houses were of different sizes and materials, depending on the part of the country where they were found and the degree of prosperity of the owner. The larger dwellings excavated were not too different from the public buildings with their central courts and rooms leading off. The smaller homes were usually composed of one room with walled-in front yards for such domestic animals as might be the good fortune of the peasants to have. Houses such as these were found at Beth shemesh, Ta'anach, and Jericho. The houses were usually built on foundations of rubble stone with mud-brick walls, these being rarely fire-baked. At Ta'anach the homes were of undressed stone with mud-mortar because of the absence of good clay for brick and the abundance of field stones. The floors were, for the most part, stamped earth, with occasional limestone chips or lime plaster. The plastered floors were found also at Ta'anach and Jericho. Painting of the walls or tinting of the plaster was not found and had not been discovered, evid-

1. Deuteronomy 6:11.
ently, but occasionally the walls were whitened. Roofs have not been found, but probably consisted of heavy wooden beams, some hewn, others rough logs, covered with straw or reeds and plastered with mud. An average stretch of beams was thirteen-and-a-half feet. The roofs were flat, since domed roofs did not come into vogue until the Hellenistic period.

Cooking was probably done in brick ovens and over open fires. Charcoal and dung braziers were used in the homes of the more fortunate. Furniture was very simple if it was used at all. The Hebrews probably sat upon the floor, threw down mats for beds, and lived on the whole relatively simple, hard-working lives. A bronze bedstead of the eight century was found by Flinders Petrie at Beth-pelet and was imported probably from Crete. Amos speaks of the ivory couches in Samaria in the eighth century. 1 An ancient terra-cotta model of a couch came from a large cave at Tell en-Nasbeh and was dated in the Middle Bronze Age (2000-1600 B.C.), so the Canaanites probably did bequeath the idea of couches to the Hebrews and the more fortunate ones who had no strong aversion to such luxuries may have possessed them.

A large number of vats were found at Tell Beit

Mirsim and W. F. Albright concluded the city was given over to the principal industry of weaving and dyeing of cloth. In fact, he felt there was reason for believing there were guilds of workers, although such assumptions could not be proven from archaeological evidence. Vats of much smaller number were found by Badè at Tell en-Nasbeh and a few at Beth-shemesh. The principal industry at the latter city was the olive oil and wine production. Large numbers of presses were found in Stratum II corresponding to the Solomonic period and the years immediately following. The presses usually consisted of a large, flat stone at one side of which was a "catch-basin" hollowed out of stone. One or two courses of stone were built up around the flat pressing surface and was plastered to keep in all the liquid. Several weights were found nearby which were used to press the grapes or olives. Holes in them were for the ropes binding them to beams of wood and these, in turn, served as levers to exert pressure. A blowpipe was found at the same site in 1929 and was probably used by a craftsman in forging and forming copper into tools.

Though much of the population lived in the stone

houses described, many more lived in more temporary structures, the perishable materials of which have disintegrated. As city populations increased during Solomon's reign and in the centuries which followed, many homes would have been erected. But in the period preceding the establishment of the monarch in Israel found the Hebrews living in Canaanite houses, squatters in crude dwellings, or still clinging to their tents as large numbers continued their pastoral pursuits.

The "housing project" at Ezion-geber and the rapid expansion of housing facilities at Jerusalem were the indications of a beginning of a "building boom." But it is probable that any dwellings built by Solomon under his public construction program consisted of royal houses and "palaces" for governors and overseers as found at Megiddo. There is no evidence of the tenth century ruler showing any concern for improving the lot of the common man by bettering housing facilities or constructing water conduits and other public improvements.

Much of daily living is learned from the dead. The numerous tombs which have been excavated in Palestine and especially those of Solomonic times supply much information. One of the typical tombs was excavated at
Tell en-Nasbeh. A door opened into the rock from a forecourt, to be sealed by a rock slab. The floor of the tomb was recessed eighteen inches to form a sort of pit. Lamp sockets were carved near the far corners. Benches of rock were left about the three walls and the skeleton remains indicated the bodies had been laid on the benches. Smoke marks revealed the lamps had been left burning after burials had taken place. Many jars in this and other tombs speak of food and offerings left by the bodies. In fact, many furnishings hint the tombs were considered to be "homes" for the dead as suggested in Job 17:13,

"If I look for Sheol as my house, 
   if I spread my couch in darkness..."

The darkness seemed a great concern, for in one tomb at Tell en-Nasbeh sixty-two lamps were found, fifteen in another, and though not deposited all at once, had accumulated over a period of time. The lamps were made of pottery, held oil, with wicks burning to give light.

No generalizations can be drawn from the tombs, since customs tended to vary from section to section and with the level of prosperity. Sir Flinders Petrie found mass burials at Beth-pelat, there being one hundred sixteen bodies in one hole. Jars and household wares included with the bodies preclude careless burial at the hands of
the enemy. Jar burials were found in Ta'anach, Megiddo, Jericho, Gezer, and Tell el-Hesi. For the most part this custom does not seem to have been prevalent in the tenth century. Petrie did find several cinerary urns at Tell Fara (Sharuhen) which he dated in the tenth century, containing in addition to ashes small lamps or pots. Such methods of disposal of the body seem to have been the exception and not the rule.

Under miscellaneous articles found in and about the excavations were, beside many jars and lamps, numerous beads and other ornaments. This prompted J. Garrow Duncan to write:

"Of the early Hebrew period, the reign of Solomon is unquestionably the richest in jewelry, just as in other respects it represents the acme of Hebrew power and prosperity. Here again there is a great affinity with the Egyptian forms, as in the previous periods."

At Gerar, Beth-pelat, and Gezer, all three of which were near the Egyptian border and sphere of influence, the jewelry remains dating from Solomon's time are abundant.

By far most of the implements such as knives, chisels, axes, and common weapons were made of bronze during this period. Bronze does not oxidize as iron and thus the items would survive the ravishes of time. But

the indications are that iron was the new, relatively rare, expensive metal reserved for use in military weapons and for export to trade for gold. The twentieth century A.D. still finds restrictions on certain "strategic" metals. War needs then took priority even as now.

Archaeology of various sites about Palestine indicates the Hebrews as a relatively young nation had been taking over the cities, villages, and homes of the Canaanites without developing any new contributions except several temples. Solomon made no particular improvement in the housing or public works except those relating to military establishments, store cities for grain and oil, and his industrial undertakings. The abundance of jewelry did indicate a degree of prosperity on the part of many citizens, made possible by foreign trade. Unrest and discontentment were to result in the severing of the nation upon Solomon's death, the northern section of the kingdom which contributed so much in tribute, taxes, and manpower and received so little in return, revolting and going its separate way.
CHAPTER V

SOLOMON'S ROYAL CITY OF JERUSALEM

The excavations at Megiddo reveal much concerning a typical fortress city in the time of Solomon and make possible the drawing of some conclusions concerning the military, economic, and architectural systems of the time. The evidence from Ezion-geber adds to the picture of the military situation and draws a graphic picture of the source of the economic prosperity of the young Hebrew nation, with its newly-acquired foreign trade, manufacturing industry, and the mining of copper and iron. The various cities and villages scattered about Palestine which have been excavated add their information concerning common life in the tenth century B.C. It is at Jerusalem, the royal city of Solomon, archaeological evidence is to be sought concerning court life and the religious developments.

It is not the purpose of this study to engage in a long and elaborate discussion of the illustrious history and influence of the "Golden City." A paper could be written on the names and adjectives associated with the city of Jerusalem - these stemming from both fact and fiction. This study is primarily interested in arch-
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A geological evidence. A few preliminary statements will suffice.

(1) Jerusalem as a site for archaeological excavation differs from any other situation in Palestine. For the most part, a large, modern city now stands on the hills and in the valleys where ancient Jerusalem was layed out. Many sites which are of particular interest to the biblical archaeologist are buried under large buildings or public streets. The most desired site, as far as the archaeologist is concerned, is occupied by the Haram-esh-Sherif with its "Dome of the Rock" mosque - an area revered by the Moslem second only to Mecca.

For the most part, excavation within the city must be restricted to observations made at the sites where foundation holes are being dug or in vacant spots which are very few in number. While not at all ideal, Captain Warren discovered much information relative to the ancient city walls of Jerusalem by sinking shafts and tunneling underground. The one exception to the difficulties of sites being presently occupied is the area on the "South East Hill" or Ophel. Just south of the giant city walls is an area of fields. As shall be shown, this open area proved to be the site of the ancient "City of David." But excavation there was not like that of the "tells" in other parts of Palestine,
for the top of the hill upon which David and Solomon had established their royal city had been scraped to the bed rock in subsequent times, the many objects and items of archaeological importance being dumped into the Tyropoean Valley. The debris in the valley has reached the depth of sixty to eighty feet and in places it is difficult to imagine a valley ever existed in the area. The bare rock reveals little and the deep deposit of debris presents problems in archaeology of unsurpassed difficulty. Digging through the accumulation about the "South East" Hill has taxed the patience and ingenuity of the most ardent archaeologist.

(2) Another distinctive element in the Jerusalem situation is the combination of literary data and archaeological evidence. One verse of the Bible mentions Megiddo as a chariot city and another notes Ezion-geber was the seaport of Solomon. On the other hand, II Samuel 5 tells of David's capture and improvement of Jerusalem. The parallel passages of I Kings 1-11 and II Chronicles 1-9 contain detailed descriptions of the royal buildings in Jerusalem, some of the walls and fortifications, and other hints. In Nehemiah 3:1-32 the course of the restored walls as they were repaired is given. Millar Burrows illustrates the attempt to combine the literary
and archaeological data in an article on the latter section as a source for the topography of ancient Jerusalem.\footnote{Millar Burrows, "A Source for the Topography of Ancient Jerusalem," Annual, American Schools of Oriental Research, XIV (1933-1934), 115-140.} Mentions are made of places and buildings in Jerusalem in the writings of Isaiah and Jeremiah. Ezekiel remembered the temple of his youth and the "eternal city" as he visualized the restored community in his writing in Chapters Forty to Forty-eight. Flavius Josephus, the great Jewish historian of the first century A. D. wrote "On the Jewish War," "The Jewish Antiquities," and "Contra Apionem" just before and during the catastrophic destruction of the city of Jerusalem in 70 A. D. Naturally he describes in great detail the city as it was when Titus destroyed it, yet his description of the defenses aids in the understanding of topography of the ancient city. The Tell el-Amarna letters from Egypt confirm the very early or Jebusite history of the city some four hundred, fifty years before the time of Solomon and the "Pilgrim Texts" which were written over several centuries during the Middle Ages give snatches of information. Thus the relative wealth of literary data on Jerusalem, to be confirmed, corrected, and supplemented by archaeological
evidence.

(3) The study of Jerusalem in Solomonic times has been greatly furthered by monumental studies released within the past five years. As to the city of Jerusalem itself, the most comprehensive combination of existing literary sources and archaeological evidence has been made available by the publication of the volume, "Jerusalem in the Old Testament" by J. Simons, released in 1952.¹ A large book of five hundred, seventeen pages with many illustrations, plates, maps, and charts, it includes the most significant findings of recent times and the theories of the most competent archaeologists interested in the site of Jerusalem. The biblical archaeologist will be indebted to Dr. Simons for a number of years - until the subject needs thorough reworking because of added information.

The second study is that of the Temple of Solomon. Dr. Paul Leslie Garber, Professor of Bible at Agnes Scott College, Decatur, Georgia, completed a four-and-one-half year study in 1950 of materials relating to the Temple of Solomon and was aided by a grant from the Carnegie Foundation. Professor Garber did residence study at the Oriental Institute of the University

of Chicago, the Semitic Museum of Harvard University, and the Semitic Seminary of Johns-Hopkins University. One of the features of the study was the construction of a scale model of the Temple from the specifications which were the result of the study. The model has been the subject for numerous photographic studies and has been illustrated in the magazine, *Archaeology*. While modifications and corrections will be suggested over a period of years, the study does bring together the wealth of material on the subject, "Solomon's temple in the light of other Oriental temples." Thus the most famous religious structure for Jew and Christian has been rescued from the fanciful, elaborate, legendary concepts and representations of days past. Dr. Garber had at his disposal the results of excavations at Tell Taināt in Syria and especially the temple designed and constructed by Phoenicians. Mention has already been made that the Syrian temple excavated by the Oriental Institute of the University of Chicago in 1937 is a "missing link" in the study of the Temple of Solomon from the standpoint of archaeology.

(4) A number of excavations in and about Jerusalem have particular relationship to this study:

(a) The reports of Baurath Schick, a German archi-

tect who lived in Jerusalem between the years 1846 and 1901, reporting regularly and faithfully discoveries of interest found at the sites where he was supervising the erection of buildings. His reports were contained in the Quarterly Statement of the Palestine Exploration Fund and the Zeitschrift des deutsche Palastina-Vereins. He is also known for his elaborate models of the three Jerusalem temples. His representation of Solomon's Temple is to be greatly admired, but discarded as entirely too imaginative.

(b) The surveys, mostly underground, of Sir Charles Wilson and Sir Charles Warren in the years between 1864 and 1970. These studies were so thorough that the cartographic material is still used as a basis of studies undertaken in the vicinity of Jerusalem. Sinking shafts and tunnelling as deep as eighty feet below the surface enabled Wilson and Warren to chart many of the ancient city walls.

(c) H. Guthe, under the Deutscher Verein zur Erforschung Palastinas, began work in 1881 on the "South East Hill" which was later to yield results so pertinent to this study. His method of sinking shafts and tunnelling below the surface was most unsatisfactory, but his work was to open a series of excavations which have made possible the identification of the "City of David" and the

(d) 1894 to 1897 found Fr. J. Bliss and A. C. Dickie working under the Palestine Exploration Fund on the south-west angle and the southern edge of the West Hill where two city walls were traced.¹ This expedition was one of the largest archaeological undertakings in Jerusalem. But ceramic materials were neglected in dating strata and the masonry is not a reliable index of the age of structures in which it is used.

(e) Captain Montague Parker did extensive work by the shaft and tunnel method between 1909 and 1911 on the South East Hill, his principal contribution being the uncovering and unravelling of information relative to the complicated and highly intriguing system of ancient canals around the Spring of Gihon on the Kedron side of the hill.² Pere Vincent, a leading authority on anything relating to Jerusalem, assisted as he did on many other projects about the city.

(f) Raymond Weill discarded the shaft and tunnel method of excavating and in 1913-1914 began to thoroughly work-over a small area on the southern part of the South

East Hill. Though his work was interrupted by World War I, the city walls he uncovered definitely settled the growing realization that the small hill was the most historic and at the same time most assessible for excavation on any in the area. Though controversies raged, it was becoming clearer that this was the site of the Jebusite stronghold which resisted the conquest of the Hebrews for some years and finally became the citadel of David and Solomon. Weill's reports were contained in his book, *La Cité de David*, (Paris: 1920), revised and brought up-to-date after further work in 1923-1924.

(g) R. A. S. Macalister and J. Garrow Duncan, under the Palestine Exploration Fund in 1923-1924, excavated in fields further to the north on the South East Hill and on the eastern side of the hill. More defensive works came into view and the system of walls encircling the top of the hill became more evident. ¹

(h) The British School of Archaeology in Jerusalem and the Palestine Exploration Fund combined their efforts in supporting an expedition under J. W. Crowfoot and G. M. Fitzgerald in investigating an area on the west side of the South East Hill. The Tyropoeon Valley

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has almost ceased to exist in its upper section due to its being filled to the depth of eighty feet in places with rubble and debris. The plan of Crowfoot and Fitzgerald was to begin at the crest of South East Hill, dig down to bed rock, and carry a trench across the Valley and up the other side on the West Hill. Such a project would have been of great value, but technical difficulties prevented the completion of the undertaking. The principal contributions of the very fruitful campaign were, though, the uncovering of a city gate, the proof of the enormous rise of the valley-bottom, the pinpointing of the rise after the time of the destruction of Jerusalem by Titus, and the further proof of the circumvallation of the ancient hill.¹

¹ One expedition which does not particularly relate itself to this study is one conducted by E. L. Sukenik and L. A. Mayer in 1925-1927 and in 1940 in the "Old City" at the north of the wall of Soliman. The results of their excavations were to prove the theory that the "Third Wall" had been extended in the area just before its destruction by Titus.²

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C. N. Johns excavated in and about the Citadel at the Jaffa Gate between 1934 and 1940 for the Department of Antiquities of Palestine and discovered a system of walls and towers dating from the pre-Christian era, but of no direct bearing on this investigation. While Solomon did find "the City of David" too cramped for his growing administrative branches of government and enlarged his court with its buildings, it is doubtful he tripled or quadrupled the length of the walls to include the West Hill as some scholars have theorized.

From this rather spotty, but abundant material and with the literary sources available, the most authentic picture of the Jerusalem of King Solomon's time can be drawn. Three principal topics summarize the investigation of the royal city of Solomon: (1) the "City of David;" (2) the extent to which Solomon's Jerusalem differed from that of his father; (3) the building of greatest interest to the three great monotheistic religions - Judaism, Christianity, and Islam - Solomon's Temple.

(1) "The City of David." Jerusalem was an ancient city before its capture by the second king of Israel, David. Earliest tradition has a mysterious Melchizdek, King of Salem, the founder. 1 Josephus gives the date of

his founding the stronghold ca. 2058 B.C., eleven centuries before the time of Solomon. Ezekiel, the prophet, knew of a tradition which held the original population of the city to be both Amorite and Hittite. The name of Jerusalem seems to have come from an ancient language and many of the names associated with the area still mystify scholars - Jebus, Zion, Hinnon, and Topheth. The Tell el-Amarna Letters, written about 1400 B.C. from Jerusalem to the protectorate of Egypt, pleading for help to withstand the enemy, typifies the long history of the city. Set among the hills of Judea - first possessed by one great power, then another, sometimes it was independent and usually it was bargaining for protection and hoping to be left alone. The Book of Judges, Chapter One, verse eight declares that the men of Judah captured and set fire to Jerusalem, but in the twenty-first verse of the same chapter it says:

"But the people of Benjamin did not drive out the Jebusites who dwelt in Jerusalem; so the Jebusites

1. Flavius Josephus, On the Jewish War, VI, 10:1.
2. Ezekiel 16:3, 45.
have dwelt with the people of Benjamin in Jerusalem to this day."

Since Joshua 15:63 states the same fact, the first reference must be considered as a later gloss. Not only the scriptural passages but archaeological evidence also points to the fact that the strongly-walled city resisted all efforts to capture it until the days of David.

II Samuel, chapters Five through Eight, relates the capture of Jerusalem by David. While it is not clear whether the ancient stronghold was captured before the Philistines were defeated as a whole, during the campaign, or after complete victory, the method of taking the city is set forth. The Jebusite city had great walls and was considered to be almost impregnable, as made evident by the taunting words:

"And the king (David) and his men went to Jerusalem against the Jebusites, the inhabitants of the land, who said to David, 'You will not come in here, but the blind and the lame will ward you off' - thinking, 'David cannot come in here.'"

According to the biblical account the city was taken by Joab, as I Chronicles 11:4-9 relates and II Samuel 5:8 mentions a "sinnor" by which the small storming party was able to gain access to the city and breach the walls, enabling the besieging army to completely occupy the fortification. The "sinnor" has been variously transl-
ed as "gutter" in the King James Version and "water shaft" in the Revised Standard Version of the Bible. Further mention will be made of it in connection with archaeological discoveries. The city did come into the possession of David, his headquarters were moved from Hebron, and the stronghold became the royal capital of the kingdom - chosen because of its strategic position and defensibility. Saul, it is recalled, made his headquarters at Gibeath or Tell el-Ful, another site with natural features making it easily defendable, but too small to allow for the rapid expansion of the government.

The conclusions concerning the ancient "City of David" are not as positive as the leaders of the early archaeological expeditions affirmed, but are illuminating. The three expeditions which are of particular interest to this study are: (1) Raymond Weill's work in 1913-1914 on the eastern slope of the South East Hill; (2) the campaign of Macalister and Duncan at the eastern defenses of the South East Hill in 1923-1925; (3) the excavation by Crowfoot and Fitzgerald in 1927 on the western side of the Hill.

Weill's excavation made clear the defensive works on the east side of the City of David were not confined to a wall along the edge of the plateau on the summit,
but included secondary walls also on the terraces of rock descending toward the Kidron Valley. These walls prevented a direct attack on the main wall surrounding the city. The southern section of his excavation disclosed that little remained of the eastern wall, due to extensive quarrying in the days of the Romans. But the northern part of his digging revealed several walls of different dates on the slope. In one place the top wall itself was actually two walls, one built against the other and accounted for by Vincent as being the restoration of the wall by Nehemiah, described in Nehemiah 3. Five or six other thin walls ran along the rock scarp, dating from pre-Israelite times, and confirming the picture of the strength of the fortress. The main wall ran along the highest rock scarp.

Burrows, after an exhaustive study of the literary document Nehemiah 3:1-32, concludes:

"The only portion of the walls with which we can operate at all confidently is the eastern wall. Here we have found that several points heretofore regarded as parts of the wall were probably merely points of reference. The implication that we have only one gate in the whole extent of the eastern wall is by no means impossible historically."

The picture from Weill's excavation and Burrow's examination.

3. Ibid., 140.
tion of literary sources is of a long, nearly straight, unbroken wall on the eastern side of the South East Hill, protected by walls on the rock scarps further down the slope.

The most elaborate and impressive excavation of the eastern defenses took place under Macalister and Duncan in 1923-1925. The results of the digging were compiled, giving a full description of the "Hebrew Stratum." Realizing the difficulties in dating masonry remains, it is not certain that correct identifications were made of all walls and the purposes for which they were used. Macalister and Duncan chose as their principal point of excavation the north-east corner of the City of David. They felt justified in affirming they had found a Davidic wall erected between two Jebusite ramparts, masking an ancient breach in the wall, but leaving the breach itself unrepaired. It is easier to build new as over against repairing the old, but it is difficult to account for the fact that David would build a weaker, thinner wall across the place where his army was able to enter the city from the North Hill following the havoc created by Joab first entering the citadel. The excavators conjectured that the city

terminated on the north at a point where a deep indentation of the Tyropoean Valley nearly met the downward slope of the Kidron Valley on the east. If there was a natural rift, it was deepened artificially by excavation to further strengthen the strong wall of the city across the narrow point. As shall be shown in considering the royal city of Solomon, this became a narrow bridge or entrance to the area where the royal buildings were built on the North Hill and may have been the site of "Millo," or "the filling."

Of great significance for the reconstruction of the western defenses of the City of David was the expedition of Crowfoot and Fitzgerald in 1927. A massive gateway on the western side and the supposition that a wall ran along that slope had been conjectured, but had not been found. As has been mentioned, the Tyropoean Valley now does not exist as a deep declivity. But the excavation proved that the filling of debris has reached nearly one hundred feet in places. On the newly-revealed western slope two wall sections flanking a giant gate passage were found. The walls were twenty-six feet thick and the opening of the gate twelve feet. Huge squared blocks were used on the wall and rough stones for the fill. The walls and the gate did not stand on the highest scarp of rock, but were on a gentle slope a short
distance from the summit. The gate did not give immediate access to the city, but a solid wall of rock paralleled the opening and made possible the dropping of rocks and the throwing of spears at any of the enemy who were able to force the gate. While it is impossible to specifically date the wall and gate, ceramic remains not being found, yet their presence does materially strengthen the theory the "early city" was restricted to the South East Hill, had a circumvallation, and used to advantage the combination of nearly perpendicular rock cliffs and strong walls in its defenses.

From the sites excavated the conclusions may be drawn that the Jerusalem of David was roughly a triangle with the point toward the south at the apex of the South East Hill. The eastern and western slopes were taken advantage of by strong main walls, protected by secondary walls. The hill widened out, mostly toward the west, then was nearly cut off from the North Hill by a deep indentation of the Tyropoean Valley. This constituted one of the weak points in the system of defence, for the North Hill which is now the Haram esh-Sharif was higher ground and rendered the circumvallation most vulnerable there. This may have been the point at which the wall was breached when David took the city. No buildings of Davidic times have been discovered,
since the area was scraped off to bare rock, probably at the time of Titus. The city was probably not a place of general residence, but was given over principally to royal buildings and residences of the court attaches. Families of soldiers and guards were probably quartered there as hinted by the story of David observing Bathsheba bathing on the roof of her house.\(^1\) The ark was brought into the city by David and was placed in some temporary building.\(^2\) The Jebusite residents may not have been totally driven out, but may have been retained as servants in and about the court. David's fortress was much larger than Saul's stronghold at Gibeah, but very small in comparison to the large oriental city Jerusalem was destined to become.

(2) The extent to which Solomon's city differed from that of his father's: Biblical archaeologists and scholars agree, for the most part, that the new royal buildings of Solomon, including his chapel or temple, occupied the present Haram esh-Sharif or holy area, just to the north of the South East Hill called Ophel. The consideration of the northern development will be reserved for the section on the royal buildings and the

1. II Samuel 11:2-5.
2. II Samuel 11:11.
royal temple. The other possible expansion may have taken place to the west. One of the unsolved questions of ancient Jerusalem is concerning the time when the South West Hill, now known as Zion, was included in the circumvallation. Flavius Josephus evidently thought David and Solomon included it in their enclosure, for he wrote concerning the "First Wall,"

"(142) Of the three walls, the earliest was nearly impregnable, owing to the (surrounding) ravines and the hill above them on which it stood, but besides possessing an advantageous position it was also strongly built, as David and Solomon and also the kings after them had taken pride in the work. It began, in the north, at the tower called Hippicus, and ran toward the Xystus, then joining the Council-house it terminated at the western portico of the temple. On the other side, on the west, it began at the same point and descended through the place called Bethso to the Gate of the Essenes. Then, on the south side, it turned above the spring of Siloam and thence inclined again, on the east side, towards the pool of Solomon, continued to a place called Ophlas and joined the eastern portico of the temple."¹

The city is given entirely too large a size for the Solomonic period, but certainly was not limited to the South East Hill and the North Hill with its temple in pre-exilic times. It is not possible, from present information, to judge how rapidly the city expanded and when the South West Hill was included in the fortifications. But it is safe to state Jerusalem did undergo steady change, even as the large American cities grew rapidly with the growth of the nation. Nebuchadrezzar

¹. Flavius Josephus, War - V, 142-145.
destroyed the city about four hundred years after David had chosen to use it as his royal city. Isaiah wrote in the eighth century:

"In that day you looked to the weapons of the house of the forest, and you saw that the breaches of the city of David were many, and you collected the waters of the lower pool, and you counted the house of Jerusalem, and you broke down the houses to fortify the wall. You made a reservoir between the two walls for the water of the old pool. But you did not look to him who did it, or have regard for him who planned it long ago."  

In two different places Isaiah distinguishes between "Mount Zion" and "Jerusalem." This would indicate that in the eighth century the city proper consisted of three sections, "Mount Zion" or the ancient South West section, "Jerusalem" or the South East Hill, and the Temple area. Micah clearly showed the distinction which was held in the eighth century by writing:

"Therefore because of you Zion shall be plowed as a field; Jerusalem shall become a heap of ruins, and the mountain of the house a wooded height."  

Jeremiah has the most detailed description, but unfortunately little is known about the places he mentions.

"Behold, the days are coming, says the Lord, when the city shall be rebuilt for the Lord from the tower of Hananel to the Corner Gate. And the measuring line shall go out farther, straight to the hill Gareb, and shall then turn to Goah. The whole valley

1. Isaiah 22:8b-11.
2. Isaiah 10:12 and 10:32.
of the dead bodies and the ashes, and all the fields as far as the brook Kidron, to the corner of the Horse Gate toward the east, shall be sacred to the Lord. It shall not be uprooted or overthrown any more for ever."1

The only comments are: (1) this is not so much an apocalyptic vision as a mental reconstruction of the destroyed city of Jerusalem; (2) such an area must have been substantially larger than the South East Hill.

The historical books do not shed much light on the time when the western expansion took place. The Chronicler does distinguish between the older area and the city of Jerusalem proper by saying:

"And Ahaz slept with his fathers, and they buried him in the city, in Jerusalem, for they did not bring him into the tombs of the kings of Israel."2

Presumably the kings were buried on the South East Hill, but Ahaz was not deemed worthy to be buried in the traditional royal necropolis. The insertion of the word, "in Jerusalem," seems to have been purposely included to add emphasis by contrast.

The tentative conclusion is that the South West Hill was included within the walls and became known as a part of the city proper some time before the eighth century. It is probable the king's residence and the royal court remained on the North Hill and the South

2. II Chronicles 28:27.
East Hill. But across the valley were the multiplying residences of the common people.

"While the patricians were installed on Sion and in the City of David, we have to look for the plebeians mainly in ... the West City." 1

Whether any considerable settlement was built across the Tyropoeon Valley and was walled in during Solomon's reign hinges on the interpretation of I Kings 9:15:

"And this is the account of the forced labor which King Solomon levied to build the house of the Lord and his own house and the Millo and the wall of Jerusalem. . . ."

Solomon did not build the wall about the City of David, for it was already in existence, was substantial, and needed at the most only to be strengthened and repaired where breaches had occurred. The wall could be taken to mean the new wall required to enclose the Temple Hill with its royal buildings or, noting the difference between the sections of the city, take Jerusalem with its new walls to be the South West Hill. Archaeological discoveries do not particularly help at this point and Simons, after reviewing in detail the excavations relating to the walls on the South West Hill, concludes:

"The least we must conclude from all that has been said about all wall-fragments and towers hitherto discovered on three sides of the S. W. Hill or, if Bliss's wall west of the reservoirs in Tyropoeon is included, on four sides, is, that archaeology has

not yet revealed the certain existence of a city-wall here, the age of which approximates to what biblical data made us anticipate. At most it can be said that some ceramic finds collected by Bliss and Johns, and also during a recent extension of Bishop Gobat's School, favour the suspicion that excavations not limited to the very edge of the hill might yet prove an early and considerable occupation of the S. W. Hill. Further, though all evidence as regards an early city-wall here is so far either negative or obscure, it would be an exaggeration to say that the exclusive post-exilic date of all relevant discoveries is an established fact."

From present information it appears Solomon's Jerusalem consisted of the old City of David, the new royal buildings on the North Hill, and a possible settlement of some size on the South West Hill, probably not included in the circumvallation.

(3) The major portion of Solomon's building was done on the North Hill. Few scholars question seriously the fact that the royal buildings of Solomon including his temple were somewhere in the general vicinity of the Haram esh-Sharif. Information concerning this very important section is restricted almost entirely to literary sources. Occupying the middle height of the Eastern ridge, the Haram esh-Sharif lies in the strategic position between the ancient site of the City of David and the newest section of the walled city - Bezetha. Except for the principal Mohammedan sanctuary of the

"Dome of the Rock" and the mosque of al-aqsa against the south wall there are no other important buildings on the thirty-five acre area. Underneath are the most desired treasure in all the world as far as the biblical archaeologist is concerned. But Islam has absolutely refused to grant permission to turn over one stone in the place it considers second only to Mecca and Medina as a sacred place. Excavations which have taken place were limited to the work of Wilson and Warren about seventy-five years ago. This was restricted to the outside of the walls of the spacious area. The results of the one "expedition" within the walls are unknown. In 1909 a Captain Parker representing an English syndicate came to Jerusalem, promising to reveal the site of the burial of the Temple treasure. It developed that a clairvoyant dilettante from Finland claimed to have discovered the secret from a mysterious passage in Ezekiel. With large sums of money at their disposal, elaborate, but erratic tunnelling was undertaken, as has been noted, on the South East Hill. Little of importance was brought to light by the group. But in 1911 Parker was able to acquire the keys to the gate guarding the "Dome of the Rock" and thus had access to the most sacred area. The keys were obtained through bribery and Parker had to slip into the building after 8:00 p.m. when it was des-
erted. Such treacherous arrangements were sure to fail and when discovered, resulted in a near massacre of the Christians in the city. Parker had to flee for his life on his private yacht, the officials he had bribed were arrested and imprisoned, and any future attempts to secure permission by reputable expeditions to investigate or excavate in the area were doomed. What Parker did see and find on his night visits is unknown.

Certain facts are known about the area. The Haram esh-Sherif is the result of a huge levelling operation. The north-west corner has been formed by the removal of large quantities of solid rock. The angle of the wall is in places solid rock with artificially-cut scarp. The west side slopes gradually to the south under the built-up area, the greatest depth of fill being eighteen feet. The south-east corner was originally the lowest and the difference between the present level on the inside of the wall and the original surface line is at least eighty feet. The new surface at the corner has been made possible by the construction of a huge vaulted structure, popularly known as the "Stables of Solomon." The whole structure consists of thirteen rows of vaults which are thirty feet high and consist of eighty-eight piers. It is not known whether the space below the floor of the "Stables" is vaulted or merely filled with
rock and sand. The one certainty is that the entire construction is too recent to have any direct connection with King Solomon, unless the structure is over or upon a traditional site of a chariot center. Such an establishment must have existed in the vicinity of the royal city, but whether the horses were kept in close proximity to the royal residences might be questioned by those who have been near stables. The area under the surface of the Haram is honey-combed by cisterns and reservoirs. It is estimated that ten million gallons of rain and spring water can be stored in the thirty-five or so storage pools.

Warren, amidst great difficulty, explored the foundations of the outer walls by means of tunnels. The diagram of one of his shafts and a portion of tunnel served as the frontispiece of the Palestine Exploration Fund Quarterly until very recent years. It was while working on the south-east corner of the wall that he discovered the "Ophel Wall." Butting against the present Haram foundation, the "Ophel Wall" was offset a foot-and-half beyond the Haram wall, extended four feet below the surface of the original ground level, and rose to a height of seventy-four feet. Made up of rather heterogeneous materials, the highest course consisted of beautifully-drafted stones three
feet, nine inches high. Under these were eighteen courses of undrafted rocks carefully dressed. Beneath were twenty feet of rough rubble, resting on red soil. Running toward the south, the wall stopped abruptly, having fallen victim probably to the search at some period for cheap building material. At least four towers were found along the course of the wall. There is little doubt that the wall was a part of the circumvallation of the Hill of Ophel or, as called elsewhere, the South East Hill. The date of the wall is difficult to determine. It does seem apparent that two widely separated periods saw its construction - the upper portion probably being built in the time of the empress Eudokia and the lower portion from either Jebusite times or from an early Israelite period.

"The 'Ophel Wall' lacks the convex outer surface which is characteristic of the great walls of Jericho, Beit Mirsim, and various other ancient cities of Palestine, and is in this respect more like the great, early-Israelite wall of Tell en-Nasbeh, likewise consisting of almost completely unworked stones ... Furthermore, while the clay-layer under the Second-Bronze walls serves as a regulation course over the uneven rock-foundation, in the case of the 'Ophel Wall' it has in various places a height of several metres, which means that the wall was not founded on bedrock. Instead of being necessarily classified with the impressive Canaanite walls of the Second-Bronze period, the 'Ophel Wall' of

Warren can with at least as much probability be considered a structure of Israelite times, built in connection with the addition of the temple-and-palace quarter under Solomon.¹

There were at least seven buildings within the northern enclosure, built by Solomon. Since the North Hill is higher than the South East Hill, the buildings were probably built on an ascending level, conforming to the natural upward slope. The first structure or construction is the "thing" called "the Millo." Opinion varies as to its identity, its purpose being conceived all the way from a leveling of a small intervening ravine to a large fortification with a gate opening into the "upper city." The Hittite meaning of the word means "filling" and J. G. Duncan took the word to denote a type of wall² - two well-constructed surfaces with rough stone and debris filling the space between. Duncan did considerable excavation in the approximate location where the Millo is supposed to have stood, between the City of David and the northern enclosure. He mentions that David built from the Millo inward and presupposes that the Millo was already in existence as some type of Jebusite fortification. But 1 Kings 9:15 states Solomon built the Millo and the wall

² Ibid., 71.
of Jerusalem. The author of II Samuel 5:9 wrote during the time of Solomon or soon afterwards and probably used the structure which was constructed after the time of David as a point of reference. In the present time, descriptions of ancient sites such as points of historical interest are given modern points of reference. This does not help in determining what Millo was, but from the excavations of Macalister and Duncan¹ at the northern end of the old South East Hill and the work of Warren² at the south wall of the Haram esh-Sharif, it is evident that the Tyropoeon Valley had a deep depression into the Eastern Ridge at this point. The narrow backbone of the ridge had a natural depression or had been ditched to form a fosse in an attempt to make up for the weakest point in the entire circumvallation. While the depth of this gape was an advantage in the defense of the South East Hill, it became a problem when the new or "upper city" was erected by Solomon. The writer is led to believe that some structure which was used to "fill" the gape served to bridge the approach to the royal section and at the same time

tended to isolate the new seat of government from the commonplace.

The Millo led up to the first of the ascending buildings. This was the "House of Lebanon," a building one hundred seventy feet long, eighty-six feet wide and perhaps fifty feet high. Though the details are too confusing to obtain a clear picture of the total structure, it seems evident that it had forty-five giant cedar logs serving as columns. The Massoretic Text says there were three rows of columns, the Septuagint or Greek lists four rows. This difference may come from the fact that two different texts varied in the treatment of the back wall. The Massoretic text does not mention its existence and its later addition as a wall, covering over the giant pillars, could account for the discrepancy. The great height of the building presupposes either upper stories or very tall tree trunks. The windows\(^1\) or openings would indicate the possibility of a clerestory construction. Three hundred targets or bucklers and three hundred shields were arranged along the walls, all of beaten gold and on display as trophies. The exact purpose of this structure is not readily apparent. Certainly it was intended for a more serious purpose than the imitation of a forest scene.

\(^1\) I Kings 7:4.
The height and the impressiveness of the columns may speak of a possible influence of the Egyptian buildings. The "House of Lebanon" may have been a memorial of some sort and a tribute to King David would be the logical one to remember by a public structure. There is no hint of such a dedication, though.

Beyond the "House of Lebanon" and presumably on a higher level was a "Hall of Pillars." This was eighty-five feet wide and fifty feet deep with no height given. This may not have been a separate building, but a massive porch or portico standing in front of the structure where the royal throne stood. The fact that details are not included in the record in I Kings 7:6 would indicate it was similar to the pillared building immediately below it, though the use of the word, "Pillars" may suggest stone pillars in contrast to giant logs. It was probably an integral part of the "Judgment Hall," but projected from the entrance as a portico.

The "Hall of the Throne" or "Hall of Judgment" was not described in detail except that the royal throne was embellished with ivory and gold.¹ Six steps led up to the throne and lions stood on either side on each step as well as beside the stays on the dais. The back was further ornamented with the significant emblem of

the bull's head, if the less reliable account in II Chronicles is to be accepted on face value. The building was constructed with carefully-cut stones and the characteristic layer of cedar beams above the third course as has been noted at Megiddo and elsewhere. This was typical of Minoan and Phoenician architecture and may have been used as a precaution against earthquake damage. The "House of Lebanon" and the "Judgment Hall" with its "House of Pillars" were probably accessible to the privileged people on court business and the court attendants. The Millo would be the point where the ones to be admitted were "screened."

The next three buildings were the most costly and luxurious of all. An enclosing wall separated the magnificent house of Solomon from the other royal buildings. Taking thirteen years to build as over against seven for the Temple, it probably included many rooms about a central court and housed the harem and the elaborate royal residence, so typical of the Oriental potentates. No description is given of the building for, as was called to the attention of the writer by Dr. Robert Pfeiffer of Harvard University, no man was ever allowed to enter.

The next house was the house for the Queen. It was
similar in design to Solomon's harem house, but separated from it and probably of much smaller dimensions. If there were any contrasts in appearance, they would be in "feminine" touches as over against the more massive royal buildings and at the same time some touch of design native to the country of her birth. Delicate pillars, flowing fountains, greenery, and expensive hangings would be a part of the luxurious interior. The separate building was a tribute to the dignity and honor in which she was held.

The building which crowned the ascending steps of royal structures was the Temple. It has proven to be one of the most controversial of any ancient building. This is not only because of many divergent ideas and interpretations of the text as received, but also because of the difficulty of translating many of the Hebrew words which are used. These are found in the passages connected with the Temple of Solomon and in no other context which would give a hint as to a more precise meaning. As has been pointed out, the study of Solomon's Temple is not wholly dependent upon the text as found in I Kings 5-9 and II Chronicles 3 and 4, but is supplemented by hints in Isaiah and Jeremiah and by the reflections of Ezekiel as he envisions the Temple re-

1. II Chronicles 8:11.
stored on the lines of the temple of his youth. It is not
the purpose of this study to do original research on the
Temple of Solomon, for this would constitute a major
undertaking in itself. But thorough studies have been
made of the Temple in the light of other oriental temples. ¹
But some report should be made of the most significant
summary to date. ²

Reading the article, "Solomon's Temple Resurrected" in the Biblical Archaeologist³ and at the same time
looking for an authentic reconstruction of the Solomon-
ic Temple to be displayed in his classroom, Professor
Paul Leslie Garber of Agnes Scott College, Decatur,
Georgia, began a four-and-half year study of the historic
building. From the careful examination of all mater-
ial written on the subject, the results of archaeological
discoveries relating to oriental temples, and the study
of the biblical documents, Dr. Garber was able to assemble
copious notes. These were taken to a Mr. E. G. Howland
of Troy, Ohio who is skilled in the making of scale mod-
els. From the notes Mr. Howland was able to construct

¹. Emanuel Schmidt, Solomon's Temple in the Light of
Other Oriental Temples, (Chicago: University of
Chicago Press, 1902).

². E. C. Howland and Paul L. Garber, Solomon's Temple,
(Troy, Ohio: 609 Michigan Avenue, 1950).

a three-eighth inch to a cubit scale model. Of great exactness and beauty, the scale model has made a great contribution to the understanding of what the "royal chapel" of Solomon really looked like.

The Temple was ninety feet long, thirty feet wide and thirty feet high. It was about half the size of the "House of Lebanon" and present-day churches are known as small when possessing the same dimensions. Since the architects and principal artisans were Phoenician, any proto-type of the structure would be expected to come from Syria. Such a "missing link" was found by the Oriental Institute of the University of Chicago at Tell Tainat. While the latter structure was only two-thirds the size of the Solomonic Temple, it showed many striking parallels. It was orientated toward the east, had the long, narrow form, consisted of two interior rooms corresponding to the hekal or "Holy Place" and the debir or "Holy of Holies," and a portico with twin pillars at the entrance. While the portico was an integral part of the main building, the pillar base which was in place did not give any evidence it served any struct-

1. II Chronicles 2:13-16.

ural purpose. Only one of the bases remained in place and one of the interesting features of it was the double-lion design. Note has already been taken of the mention of lions which stood on the steps of the throne of Solomon, according to the biblical document.¹ The further description of the Tell Tainat says:

"Three stone steps led up to the open porch, the solid side walls of which are continuations of the sides of the building proper. To the right (as one enters the building) an altar (?) and one column base were still in situ. (Fig. 6, 7). Their counterparts to the left had disappeared. A rabbeted doorway, approximately on the center line of the building, gave access to the main room, at the western end of which a large opening led into the sanctuary. In the middle of this opening was a square mud-brick table, with only the front and side faces preserved. Extending at right angles from the back wall of the sanctuary, and approximately lining up with either jam at the opening into the main room there were two rows of flat dressed stones. They had been set above the floor level and, with the interjacent space filled with mud brick, formed a platform level with the table mentioned above. This area had, however, been disturbed, and whether the two were originally connected is indeterminable."²

Generally Solomon's Temple conformed to the floor plans of the Syrian building. The use of mud-brick should be kept in mind with the statement from Megiddo that the artisans seemed to be more familiar with brick construction.

¹ II Chronicles 9:18 - 19.
There may have been only one entrance to the Temple enclosure when it was originally constructed. There are several reasons for believing the Solomonic Temple was a royal chapel, built for the use of the King and his court. The size of the structure was relatively small and thus seemed to be designed for local use in contrast to later buildings such as Herod's Temple which was specifically built to minister to the whole nation. Temples at Gibeon, Hebron, Bethel, Dan, Mizpah and elsewhere, along with the numerous high places meant facilities were adequate. The prayer of dedication is distinctly from the hand of a Deuteronomic author, intent in proving that the Jerusalem Temple was the original, only, and divinely ordained place of worship for Israel. But the structure probably won fame gradually as its beauty was told from village to village, as visitors became more frequent, and as the royal cult developed a fine liturgy. If a public gate existed from the first, it was probably on the east or front of the Temple enclosure.

According to I Kings 7:12, the outer and inner courts were surrounded by a wall three tiers high, built with hewn stone and topped by cedar beams. This type of construction that has been met so frequently is
mentioned also in Ezra:

"Concerning the house of God at Jerusalem, let the
house be rebuilt. . . with three courses of great
stones and one course of timber."

The court was built on large dimensions if Solomon con-
ceived of cooperate worship for the beginning, but if it
was simply a "royal chapel," the area would be small, en-
larged only when the building assumed more of a national
"cathedral" function.

The court came to possess a huge molten sea and ten
small wheeled lavers, all of bronze. The molten sea was
cast from the metal smelted and refined in the Wadi Arab-
sh by the industrial complex of Solomon. It was fifteen
feet in diameter, seven-and-a-half feet high, stood on
the backs of twelve oxen, was three inches thick, and
probably held about ten thousand gallons of water. The
weight of the sea must have been between twenty-five and
thirty tons.

I Kings does not mention an altar of burnt offerings,
but one is described in II Chronicles\(^2\) and outlined at
great length in Ezekiel 43. Many scholars believe the of-
ferings were first made at an ancient spot where the rock
cropped out of the ground. One of the most common features

1. Ezra 6:3 and 4.
2. II Chronicles 4:1.
of the ancient high place in Palestine was the choice of bare rock with cup marks carved in it as the place of sacrifice. Blood may have been the most usual offering, the carcass being eaten by the family bringing the sacrifice. Such a rock formation was to be found beside the court of the Temple. The description of the site is found in II Chronicles 3:1,

"Then Solomon began to build the house of the Lord in Jerusalem on Mount Moriah, where the Lord had appeared to David his father, at the place that David had appointed, on the threshing floor of Ornan the Jebusite."

The incident when David acquired the site is reported in I Chronicles 21:15-19. It is not known when the huge altar of bronze thirty-five feet square was placed in the court. But the original symbolism of the great molten sea on the left and the rocky mound on the right may have represented the basic land and sea masses of old, as Professor Albright has pointed out.¹

Huge underground quarries extend under the hills of Jerusalem and the Temple as well as the other royal buildings were probably built with the rock which was obtained locally. The stones were cut, trimmed, and prepared at or near the quarries so no noise was to be heard at the sacred spot.

¹ W. F. Albright, Archaeology and the Religion of Israel, (Baltimore: Johns-Hopkins Press, 1942), 149, 150.
"When the house was built, it was with stone prepared at the quarry; so that neither hammer nor axe nor any tool of iron was heard in the temple, while it was being built."¹

While this may have been planned as a mark of reverence, there is also the possibility that the nearby harem and royal residence would not appreciate the noise of construction and silence was enjoined. Since the Temple was built on the site of an ancient threshing floor, excavation and elaborately built-up foundations would not be necessary. Two types of limestone were available in the area: one called meleki or royal since it came from the extensive quarries known as the "Royal Caverns." This type is easily worked, but becomes hard upon exposure to the air. Most of the public buildings in modern Jerusalem use this kind of limestone in their construction. The other type is mizzi and is much harder. It is used for more specialized purposes. It is probable the walls on the exterior of the Temple were of meleki limestone, gleaming white in the oriental sun. The over-all appearance of the building was one of simplicity, dignity, and balance of design. The royal buildings drew from the Queen of Sheba the admiration of silence, since it is recorded "there was no spirit in her."² The stone blocks were probably from twelve to

1. I Kings 6:12.
2. I Kings 10:5.
fifteen feet in length and one-and-a-half feet high, judging from wall masonry thought to come from this period. The walls of the temple at Tell Tainat in Syria were four-and-a-half feet thick and it was a smaller building. Solomon's Temple was probably on the massive side in its construction.

As to the floor plan, there is little doubt the Temple was orientated toward the east as the megaron at Tell Tainat and most oriental places of worship. An open porch or vestibule called a ulam sheltered the single door. The ulam was thirty feet wide and fifteen feet deep. The two pillars, Jachin and Boaz, stood free at the edge of the portico. The door opening was fifteen feet wide and led into the "Holy Place" or hekal. The hekal was the largest of the rooms and was sixty feet long, thirty feet wide, and forty-five feet high. The "Holy of Holies" or debir lay just beyond with steps leading up to it as it probably stood on a higher level as at Tell Tainat. The debir was probably a cube, thirty feet in each direction. The purpose of the side chambers and their accessibility is questioned, but their existence on the two sides of the Temple is certain. If they were designed for structural strength they probably served as continuous buttresses against
the thrust of the ceiling, roof, and interior walls.

While the building at Tell Tainat did not have such side chambers, the Solomonic Temple was a third larger and posed structural problems of its own. The side chambers did not have windows and the means of gaining access to them is not clear. The meaning of the word, lulim has been somewhat unraveled by Professor Leroy Waterman in an attempt to discover how one was able to enter the series of rooms. He points out the three basic radicals in the word lead or conduct are waw, beth, and lamedh. Many times in Hebrew the yodh is confused with the waw in transmission and if such a correction is made, I Kings 6:8 then reads:

"The entrance to the lowest chamber was near the southeast corner of the house, and it led (one) to a stairway that reached to the second story and from the second to the third."

The entrance was probably from the interior of the Temple and the most logical use of the rooms beyond mere structural strength would be for the storage of treasure and supplies for the cultic practices. I Kings 7:51; 12:18; 14:14; 14:26; 15:18; 16:8; 18:15; 20:13 and 15; and 24:13 speak of the "treasures of the house of the Lord" in connection with the phrase, "the treasures of the King's

The two pillars in front of the Temple were typical of one of the most common features of Near Eastern temples, but it is not absolutely certain why they were placed before so many places of worship. In the case of the two pillars called Jachin and Boaz in the Temple of Solomon, the most plausible explanation is submitted by R. B. Y. Scott:

"There is sufficient evidence to justify the opinion that the pillar on the south side of the temple porch derived its name from the initial word of an inscription upon it in some such words as these: 'Yakn (Yahweh) kissē' Dāwīd, ūmāmlskē le'zārīṯ 'ad 'Olam'; 'He (Yahweh) will establish the throne of David, and his kingdom to his seed forever.' This would be an appropriate inscription for Solomon to have placed upon the pillar, and it would explain why later Davidic kings stood by the pillar in coronation and covenant ceremonies . . . . It is more difficult to decide just what was the wording on the northern pillar . . . . It may be that the inscription on the northern pillar resembled the language of Psalm 21:2a, (slightly adapted), bē'ozōz Yahweh yis-mah melek, 'in the strength of Yahweh shall the king rejoice,' or, alternatively, Psalm 74:13, bē'ozzkā Yahweh pōrarta-yam, shibbartā rā'ēshā thennīṯim 'al hammayim, 'by thy strength, O Yahweh, thou didst divide the sea, thou didst crush the heads of the dragons upon the waters.' A number of possible lines beginning with bē'oz or bē'ozzkā might be suggested from the language of Psalms with creation or enthronement motifs."

The general consensus of opinion of the majority

of scholars is the pillars were free-standing, were twenty-seven feet tall, four feet in diameter, had carved bases of stone. Elaborate carvings and painted decorations of lily-work and pomegranates adorned the top of the columns. The pomegranate design placed on the Garber-Howland model was copied from one found in bronze at Megiddo. Opinion seems equally divided between considering the five foot capitals of the pillars to be incense burners, receptacles for holding large quantities of oil which was burned at night, and simply plain tops with no use beyond the symbolic use of the pillars themselves. The most frequently suggested symbolism is that of the male and female fertility motif or the pillars of the east between which the sun arises each day and stands directly over during the vernal equinox.

The Temple doors were tall and narrow. From the size and arrangements of the rooms it appears that the doors were fifteen feet wide and thirty-three feet high. They were, according to I Kings 6:18, 32, and 35 carved with designs of cherubim, palm trees, and open flowers, as was the panelling in the Holy Place. Ezekiel 41:18-

1. H. G. May and R. M. Engberg, Material Remains of the Megiddo Cult, (Chicago: University of Chicago Press, 1935), 20, Figure 5.

supplements the I Kings account, though it must be held in mind that constant improvements and additions were made in and about the Temple, though most of them would be credited to Solomon. The closing of the doors in the daytime was a sign of impending doom, according to the story in II Chronicles 28:24 and 29:7. The doors probably turned on metal-tipped pivots set in stone sockets. The stone sockets found in Egypt and Mesopotamia revealed the custom of burying valuables, records, and mementos under them as such items are now placed in corner stones. Inscriptions of engraved exorcisms usually covered the exposed surfaces. The thresholds were thought in ancient times to be of spiritual significance and thus needed guarding against human and spirit enemies.

Through the doors lay the "Holy Place" or hekal. The inner rooms were ceiled and walled with cedar planks. While the outward appearance of the Temple was of glistening stone, the interior was one of "warmth" from the aromatic wood in its reddish-brown tones. Only the priest entered this section. A gold-plated incense altar, the table of shewbread, and ten seven-branched lampstands were the sparse furnishings, mostly brought from the Tabernacle. The room was dimly-lighted,
since the windows were probably designed to keep the earthly light out and retain the mysterious heavenly light coming from the sacred lampstands. Since no nails were driven on the site of the Temple, Professor Garber conjectured that the floor, walls, and ceiling in the hekal and debir must have been prefabricated in the form of pallets which were dropped into place, the weight of each holding the other in place. I Kings 10:12 states the pillars or supports of almug wood were used and served, according to Professor Garber, to give a sense of height and perspective.

The "Holy of Holies" or debir posed somewhat of a problem in the attempt to reconstruct it. The dimensions given to it are those of a thirty foot cube. This would necessitate the raising of the floor and the dropping of the ceiling. Beth-shan Temple had such a platform as did the temple at Tell Taanit. Garber accomplished the creation of a cubal area by putting a seven-and-one-half foot platform and an equal dropping of the ceiling. The partition between the hekal and debir may have been thin panelling as one might gather from I Kings 6:16 or may have been in reality of seven-and-half foot masonry as the other walls, panelled with wood. At Tell Taanit

2. Ibid., 18.
the separating wall was the same thickness as the other walls.

If a person were permitted to stand in the hekal his eyes would focus upon the ark, "high and lifted up" as Isaiah described in his vision. The ark itself was probably a miniature temple which had been carried about in nomadic days. I Kings 8:9 states the only contents were the two tablets of stone which Moses had put inside at Horeb. No idols were to be found in the debir, but two giant cherubim, hybrid creatures which were part lion, part bird, and part human as described by Graham and May, stood on guard, their wings forming a canopy over the old, rather crude box. The description in I Kings 6:23 states the cherubim were fifteen feet tall with wing-spread of seven-and-a-half feet. Carved from olive wood, they were either overlaid with gold or had gold insets.

One of the interesting observations concerning the Garber-Howland model of the Solomonic Temple is though

1. Isaiah 6:1.
the concern was to strive for accuracy of dimensions and details, the resulting model gives an over-all impression of great beauty, simplicity, and pleasant proportions. Though reconstructed nearly three thousand years later, the master craftsmanship and architectural excellence of the original building is readily apparent. Designed by Phoenicians, one of the smaller of the Near Eastern temples, yet its appearance spoke of good taste and it stood as a jewel.

Dr. Albright wrote of the Temple with its rich cosmic symbolism,

"Its existence is very important for correct understanding of the religion of Yahweh in the early monarchy. That Yahweh was a universal deity in the time of the Judges we have already seen in Chapter IV, though increasing particularistic tendencies might occasionally dim the cosmic significance of Israel's God. But in the time of David and especially of Solomon there was no longer room for any doubt as to the universal character of Yahweh's dominion. For a good sixty years Israel was a state with imperial pretensions. As we have seen above in this chapter, David and Solomon controlled virtually all Palestine and Syria except the kingdoms of Sidon and Hamath; all the deities of the conquered lands were therewith eliminated from serious competition with Yahweh.

In the Temple Yahweh was enthroned as the sole ruler of the entire cosmos; heaven, earth and underworld were all subject to him; all functions of all pagan deities were gathered into his hands. The Temple further symbolized the permanence of the Davidic dynasty, which was expected to stand as long as the two cosmic pillars Jachin and Boaz."

But the weakness that was to come was the infiltration of syncretism. Allowing foreign shrines to heathen deities to be built in and about Jerusalem and the influx

cultic practices which were to soil the purity of true Yahwism were to call forth the protests of the great Ninth and Eighth Century prophets, demanding an end of the divorce between ritualistic practice and individual integrity. The Deuteronomistic reform was to seek to bridge the gape which Temple-worship tended to widen by its emphasis on ritual correctness and legal injunctions. Jesus was to bring faith and works into line, not ruling out the Temple, but insisting that the life and the spirit is paramount. Temples, beautiful though they may be, are destructible, as Jesus pointed out, but the "inner temple" of the Spirit of God is after all the eternal.
CHAPTER VI

THE LIGHT OF ARCHAEOLOGY FOCUSED
ON SOLOMON

One of the age-old questions has revolved around whether the times have produced the man or a man has produced the times. Related to Solomon, the question becomes whether the great king of Israel was a product of the tenth century B.C. or whether he influenced his age even more than he was influenced. Granted that clear-cut distinctions cannot be drawn between unusual opportunity and native ability, still from the examination of the times of Solomon it seems safe to affirm, in the light of archaeology, the balance tips in favor of the strong hand and mind of a man greatly influencing his own and subsequent times. Solomon received from his father, David, a great kingdom which had been rather securely won. His mother used her favored esteem by David to place Solomon upon the throne. From his alliances, both by marriage and negotiation, he received the opportunity to develop the natural resources and place numerous products on the world market, enabling the new nation to take its place in the family of nations. Over and above inherited opportunities and
a kingdom there is the clear evidence that Solomon made unique contributions to the up-building of his nations which could be estimated as strokes of sheer genius. It is difficult to determine how much of the public policy of the reign was planned by the "elders" or "old men" who had stood before Solomon, as related in I Kings 12:6, and how much was inspired by the thought of Solomon himself. The "recorder" who wrote up the early account attributes all public works and development of resources to Solomon, a practice very common to all leaders in being given credit for the accomplishments of those under them. At the same time much of what has been revealed by archaeology concerning Solomon's reign bespeaks the thought of a genius.

The excavations at Megiddo speak of a great organizational ability in administrative affairs and military service. Solomon, receiving from his father a great domain, found his influence and control extending beyond Judah and Israel proper, territory in the extreme north, beyond Jordan, and into the south as far as the seaport of Ezion-geber on the Gulf of 'Aqabah being under his rule. Solomon's concern was not further conquest or even the necessity of welding together diverse independent tribes. These had been the tasks and geniuses
of David. To Solomon fell the responsibility of protecting and defending the kingdom. Without going into detail concerning the actual organization of the army which included three chosen officers called "the three", three "warriors" of proven loyalty and valour, the "thirty" constituting the officer corps, and the "heroes" who were household troops, the system was well developed. There appeared to be about six hundred or so professional troops called the "Cherethites and Pelethites."¹ The main body of the army was the "chosen men" drafted from the nation and consisting of about thirty thousand men under arms at any given time. But the great revolutionary development of military strategy introduced by Solomon was the use of the horse and chariot. Horses had been reared, banned, and even prohibited by the Israelites, since they were of little use in the desert or hill country where the nomadic tribes had been and went to. But now the broad coastal plain across which the forces of Egypt would have to pass was in the possession of the Hebrews. The northern plain of Esdraelon had to be traversed by northern invaders. Chariot cities were built, major installations of squadrons of defensive units were made, and a new branch of military service came into being.

"But the people of Israel Solomon made no slaves;

1. I Kings 1:38.
they were the soldiers, they were his officials, his commanders, his captains, his chariot commanders and his horsemen."

The introduction of the horse and chariot as a weapon of war was as revolutionary as the adoption of aircraft as military weapons by China or India. Solomon seized upon the new and unique, especially as it served to protect the north, south-east, and south-west approaches to his country.

Attention has already been called to the fact that Solomon did not limit his interest in the horse and chariot to the defense of his own nation. A very profitable trade was engaged in buying and selling horses and chariots. Thus the Twentieth Century A. D. is not the only age with its munitions magnates. Considerable revenue came in dealing in the latest of war implements.

The excavations of the Oriental Institute of the University of Chicago revealed a heavily-fortified city with its strong gate facing the north and the Carmel Pass. Containing large administrative buildings and one which may have been a chapel, the major use of the area was for the stables and chariot sheds. Designed to accommodate five hundred horses, the stables and fortifications give evidence of careful planning by a skilled 

1. I Kings 9:22.
2. See page 43.
architect, the best use of natural defensive features, and the design of a well-thought-through strategy by centralized planning. While it is not possible to say from present excavations in Palestine that Megiddo was typical of other chariot cities in the nation, it seems safe in conjecturing similar military establishments were to be found at Hazor, Gezer, Beth-heron, Tamar, and Bealath. One of the latter may well have been the Khirbet Hemr Iftdan noted by Nelson Glueck¹ commanding the passageway from Judah through the Wadi Arabah to the south.

Some judgement of values might be hazarded at this point concerning the over-all worth of present-day "defensive" air fields at strategic places both in this country and abroad. Archaeology and history tells that the defensive outposts of Solomon fell to the forces of Shishak five years after the death of their builder. The collapse came, not because of any inherent weakness in the physical properties of the defensive system, but by the internal disintegration within government by inordinate and intemperate living, excessive taxation, the conscription of labor with its resentments, and a general lack of concern for the social welfare of the common man.

¹ See page 57.
The Wadi Arabah and the seaport of Ezion-geber in the extreme south give an excellent insight into the economic life and background of Israel in the time of Solomon. The fabulous building program and the rapid expansion of governmental functions had to have the undergirding of a large, considerable, and adequate income. The economy of Palestine had been agricultural and pastoral. Yet no nation has ever become a great power without an accompanying industrialization. David was able to prosper on conquest and continual acquisition of new territory and the accompanying tribute from subdued peoples. Solomon's needs were greatly multiplied for revenue - food to feed the court, metal to be used in barter and trade, and manufactured items to ship abroad in return for gold. The question of which comes first - the chicken or the egg - is apropos here, for it is difficult to determine whether Solomon deliberately decided to go into mining, smelting, manufacturing, and foreign trade to finance his huge building program, or whether his natural interests and instinct led him into profitable fields which rewarded him so greatly that they made possible his expenditures. The safest conjecture would be that Solomon was an opportunist who sensed the possibilities in the Arabah as they had been probed
by David on a limited scale. Limited mining and smelting had been in progress for centuries, according to the surface explorations of Nelson Glueck. Solomon pressed into use large forces of subjected people, developed a master plan for the mining, smelting, refining, manufacturing, and shipping of items of copper and iron. The boldness, daring, and genius of the total operation speaks the mind of a great industrialist, if not the heart of a great humanitarian.

The development of the industrial complex brought about a bypass of trade around Egypt with its well-worn routes. Solomon's caravans went through the Arabah to the ships he built in cooperation with the Phoenicians who already controlled the shipping on the Mediterranean Sea. This bypass made a shorter land haul on the route to Africa and its gold, was relatively safe due to Solomon's protecting forts and chariots, and well may have brought on the campaign of Shishak who was determined to put an end to the neglect of Egypt as a trade route.

An interesting theory which is very tenuous arises at this point, somewhat supported by the fact that relationships between Israel and Egypt were not as close during Solomon's reign as the reputed marriage alliance
It is hardly credible that an Egyptian pharaoh, at the juncture when his monopoly of eastern trade was menaced by Solomon and Hiram at Elath, should have engaged his daughter in an alliance which did not imply the husband's subordination. Pharaoh was much more likely to wait watchfully aloof than to make ties of marriage or trade-treaty with the new competitor and kingdom. It is tempting to suppose that 'Pharaoh's daughter' was in fact a daughter of the Negeb Misrite 'Pir'u', and that Geshur, which was his to give, not Gezer, which belonged to neither, was the dowry. Further, since persistent legend makes Solomon marry the Queen of Sheba, and Sheba must be sought in North Arabia, it is permissible to conjecture that she and 'Pharaoh's daughter' may be one, the more as her Misrites had of old the repute which is attributed to her of shrewd subtlety and gnomic wisdom.1

Mistakes of identification of ancient places are not unknown in the Old Testament, some suggestions of Wells are intriguing, and a certain sense of plausibility hangs over the conjecture. But at the present time there is no information which would enable a serious question to be raised concerning the marriage alliance with Egypt. Such a theory would help explain the fact that Shishak overran Palestine five years after the death of Solomon — something hard to explain if the widow of Solomon were still living. John Garstang has raised a serious doubt as to the reliability of the documentary account of the reign of Solomon:

1. Benjamin W. Wells, "How Solomon was Wise," reprinted from The Sewanee Review, (October, 1921), 11.
"The precise stages in the subsequent development of the constitution are obscured in the narrative by disproportionately detailed accounts of these and other personal episodes, which are sometimes elaborated as object lessons from a religious and moral standpoint. This comment applies with peculiar force to the narrative of the reign of Solomon, which becomes so tendentious as to suggest that it was drafted originally by the court recorder with the special object of flattering the vanity of the king by adulation of his riches and attainments."

It is not possible to determine whether the marriage of Solomon and the daughter of the pharaoh of Egypt was a historical fact, a case of mistaken identity, or mere flattery. One fact is quite clear - Egypt did not like to see trade flowing past her, valuable metals from the north being traded for gold in the south.

The test of the experiment in industry in the south hinged on the social issue. Admittedly a stroke of genius and wise planning, there is no evidence the huge revenues and stores of gold were used to better the lot of the common man. The riches were used in and about Jerusalem to make the stronghold the showplace of the Near East. It is probably not in error to suppose that many did come from far and wide to see the beauty of the new "North Hill" development with its royal buildings. National pride in the new capital and the widely-known reputation of the king were more than offset by the terrible

price of forced labor under trying conditions in the hot Arabah, the state monopoly which confined the sharing of profits, and the dissatisfaction of the populace which was to bring about civil war and the division of the nation. The industrial experiment in the south as the military experiment in the north could have been of great benefit to the young nation if the social conscience of the leader and his government had been more tender and sensitive to human need. The exploitation of the industrial complex for limited gain and benefit of the few led to the early collapse of a nation which seemed to stand on the threshold of world recognition.

The general survey of Palestine from the standpoint of archaeology has shown but minor changes taking place during Solomon's reign, except in projects under his personal direction. Storehouse cities were built or reconditioned as found at Ta'anach, the area of Palestine was divided into twelve districts to assure the continual flow each month of the year of grain, oil, and meat to Jerusalem, and large numbers of sherds found with the inscription lemelekh, "for the king," speak of the channelling of agricultural products into governmental and court use. The limited use of iron in this period would indicate its conscription for war use.
There is little or nothing to indicate any great change took place in everyday life of the villagers and townspeople during Solomon's reign. For the most part, the same houses, small temples, thin city walls, and tombs of the Canaanite period were in use. At Megiddo a number of trinkets, jewelry, and other small items, mostly of foreign origin, were found indicating the soldiers were in a position to buy and trade. But from the excavations as a whole in Palestine there was no sign of a general prosperity such as was discovered at Samaria in the days of Omri and Ahab. The documents do not mention much of significance in relation to the common man.

"The essentially personal nature of the narrative, moreover, though truly reflecting Solomon's character and policy, almost excludes fresh light upon the social conditions and life of the people, towards whose welfare Solomon was, in fact, apathetic; so that on certain matters there is little or nothing to add to the sociological information... It is indeed to be inferred that during his reign social conditions were retrograde, and that the community as a whole had little chance of sharing in Solomon's personal prosperity or profiting from his various importations." 1

Jerusalem was at once the capital city of the kingdom and the site of the royal residence. Wrested from the Jebuistes by David and turned into a stronghold which was to defy many an army laying siege to it, Jer-

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Jerusalem stood for four hundred years until conquered and destroyed by Nebuchadrezzar in 587-586 B.C. From this city the fingers of government went out into the far-reaches of the dominion. David began the system of administration which was to bring together diverse tribes and clans of peoples. One of the features of David's reign was the taking of a census of the nation, probably to provide a basis for the conscription of an army large enough to defeat the Philistines and to maintain the peace. Merely numbering the people for the sake of figures would hardly account for the deep animosity stirred up and disguised as the wrath of God.¹ The counting of men fit for combat duty with the eventual drafting of sons, husbands, and fathers would. The Hebrews had a strong feeling and tradition of independence and conscription would be bitterly resented, even if proven necessary.

David organized provincial districts with their permanent seats for the resident officials, charged with supplying provisions for the court and its growing army of retainers. The new administrative districts of Solomon corresponded somewhat to the traditional allocations of land to each tribe. The text is too mutilated to determine with certainty the location of the districts,

1. II Samuel 24.
but Naphtali in the extreme north and Benjamin in the extreme south appear to retain their names and territory, Ephraim had lost Shechem, Asher had taken the place of Zebulun, Issachar was confined to the north-east of the Plain of Esdraelon, barred from the Valley of Jezreel, but extended to the Jordan. Manasseh's name had not been retained and its territory was divided into two districts, one on either side of the Jordan River. A new district, Naphath Dor, contained an outlet to the sea. Another new district to the south included a part of the Shephelah and the Plain of Ajalon, won through making peace with the troublesome Amorites. A new district was created in and about the Plain of Esdraelon. This richest of wheat and grain land may have been isolated as royal land, administered from the stronghold of Megiddo which overlooked it. Three districts were east of the Jordan and none retained their tribal names. The one curious fact is no mention is made of Judah. Some have speculated that the king did not tax his own kinsmen. It is more probable that the close proximity of Judah to the royal city caused the tribe and territory to be administered from Jerusalem and to have a status similar to the District of Columbia in the United States of America.
Twelve appointees of the king administered the territory through the twelve districts. The other officers were similar to those of David. Azarish, the priest, is mentioned first in I Kings 4:2-6. Two scribes who were probably charged with the sealing, storing, and registration of the tithes and tributes are noted. The state archivist was the recorder Jehoshephat, some of the biblical documents probably coming from his pen, though subjected to many revisions. Benaish was head of the army and Zadok and Abiathar were priests. Nathan, the prophet, had two sons high in governmental circles. Azarish was "over the officers" and Zabud was a confidential adviser. The officials' list ends with the name of a controller of the household and a director of the levy whose duty was to furnish large groups of men for forced labor. With the growth of organization and administrative duty came the accompanying growth of bureaucracy, reflected in the rapid expansion of royal buildings and family residences in Jerusalem. The royal city was the nerve center for the intricate administration of the nation, the brain from which came the plans for the huge building projects at Megiddo and Ezion-geber, and the direction of the governing agencies.

Even though Solomon in a "high-handed" manner
flaunted the covenantal or constitutional method of having the king chosen, the elders did take part in the installation of the ark in the Temple. It is recorded that Rehoboam rejected the advice of "the old men, who had stood before Solomon his father while he was yet alive."¹ But the democratic spirit and the independence of the Hebrew people had suffered greatly under the hand of Solomon. Assuming the role of an oriental potentate, the elaborate governmental organization seemed more intent in grinding out new public buildings than in channelling special benefits to the needy areas. Men, provisions, wood, and gold flowed into Jerusalem to build a splendid city. Archaeology gives very few hints that housing, agriculture, or home arts benefited by the enormously expanded governmental functions. A trite observation would be that a government is as good as it is a servant of the people and is as poor and oppressive as it becomes a mere master of the governed. The luxury of Jerusalem and the district headquarters stood in contrast to the lot of the average citizen in the country. The government of Solomon, as most dictatorships, must be admired for its efficiency. But the ends toward which the efficiency was used must be bemoaned.

¹ I Kings 12:6.
There are always two sides to any coin. While it is true that the reign of King Solomon in Israel lacked social conscience and receptivity to the needs of the common man, yet the period of rule was not detrimental totally. Solomon did strain the resources of his people to the breaking point. His policies loosened much of the welding David had accomplished by sheer heroism and respect won by valor. But the young nation of two generations in age was still taking its first tottering steps. Solomon's contributions were (1) giving prestige to the royal line which was to be a steadying hand in the following three centuries and beyond; (2) bestowing upon the royal city a new dignity; (3) and glorifying the royal cult from which was to stem the three great monotheistic religions of the world.

The respect for the royalty and the reliance in and on the kingly lineage has not been fully appreciated in the United States, but has been a source of sustaining power in a kingdom undergoing severe reverses, such as the British Empire. The kingdom of Judah was to know many periods of despair and the Jewish people as a whole were to suffer as no race has. The "lineage of David" of whom Solomon was the first in descent took on new significance and was to furnish the medium from which the hoped-for "Messiah" or "Saviour of the nation" would come.
Solomon gave a new dignity to the royal city of Jerusalem. In the early history of the United States of America the capital city of Washington, D. C. was to be known by foreign visitors as ugly-lanes of dust or mud, small, unimposing buildings, and uncultured residents. It was to develop over a period of time into a city whose name demanded respect throughout the world. One of Solomon's contributions was to begin the development of a city whose name was to be spoken with a sense of awe and reverence. He found it a small, heavily fortified stronghold whose chief attribute was its crude, thick walls and impregnable defensive system. He left it a wonder of the ancient world with its "House of Lebanon," its "Throne Hall," its beautiful royal residences, and the crowning jewel of the "Temple."

One of the great paradoxes of history is that in Solomon localizing a spiritual religion and building a "House for God," the religions stemming from its four walls were to be the most universal of all. A few temples and many high places for worship were found throughout Palestine. The temple Solomon had built adjacent to the royal residence was conceived as a royal chapel. Its use was restricted probably to the court and royal family. The sheer beauty in simplicity of the structure, the
impressiveness of the ritual developed by the "best" of the priesthood, and the sanction of royalty upon it were to lead to the eventual concept of the Jerusalem Temple built by Solomon as the most holy, the most revered, and the only "House of God." The Temple was to occupy a place of deep affection in the hearts of a people buffeted about by many storms of conquest and persecution. Whether it was the original building, the restorations, or in vision, The Temple was to be central - the hub of the wheel - of Judaism which gave birth to Christianity and Islam.

Man, even in the Twentieth Century A. D., is far from prepared to live on a purely "spiritual" plane, but needs earthly symbols and physical representations of the heavenly. Jesus taught in parables and referred most of his teachings to concrete illustrations. Thus when He wanted to emphasize the significance of his truth, He said:

"The queen of the South will arise at the judgment with the men of this generation and condemn them; for she came from the ends of the earth to hear the wisdom of Solomon and behold, something greater than Solomon is here."1

Solomon built in brick and stone. Abundant archaeological evidence has remained to be unearthed within the past fifty years. Jesus built in the hearts and lives of men.

and women, the evidence of His handiwork on the contemporary scene being the living experience of the Christian faith. Solomon built for time, Jesus built for eternity. But Jesus used terms to express his eternal truths understood by the common man - his principal concern. He talked about the "Kingdom of Heaven" and the "Kingdom of God." The title "kingdom" carried in the mind of the First Century A. D. Jew the impression of the nation in its "Golden Age," - that of Solomon. Matthew was to go to great length to "prove" that Jesus was of the lineage of David. John was to write of the "new Jerusalem" coming down upon earth - the new order where God's will is to be done perfectly. And Paul, sensing the new spiritual meaning Jesus had given to The Temple by comparing His body to it, was to write:

"Do you not know that you are God's temple and that God's Spirit dwells in you? If any one destroys God's temple, God will destroy him. For God's temple is holy, and that temple you are."\(^1\)

The temporal can lead to the eternal. The physical can illustrate the spiritual. Solomon's reign in his Tenth Century B. C. kingdom furnished some foundation through his establishment of the royal lineage, the respect for the royal city, and the glorification of the royal cult through his Temple for the "kingdom not of

\(^1\) I Corinthians 3:16, 17.
this world,"¹ a new lineage as "sons of God,"² a "new Jerusalem,"³ and a new concept of the human body being "God's temple."⁴

"Archaeology is the handmaid of history and interpretation." Its evidence has much to say about the reign of King Solomon in the Tenth Century B. C. History and interpretation, as made clearer by archaeology, unite in affirming Solomon was unwise in building for self-glorification and satisfaction with the accompanying insensitiveness to human need. The immediate results of his efforts were disastrous for his line, his people, and his temple. But the ultimate outcome may justify his being called "wise" as the prayer is answered, . . . "thy kingdom come, thy will be done, on earth as it is in heaven. . . ."

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THE REIGN OF KING SOLOMON IN THE
LIGHT OF ARCHAEOLOGY

Abstract of a Dissertation

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BOSTON UNIVERSITY GRADUATE SCHOOL

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I. THE STUDY

The Purpose of the Study. The dissertation, The Reign of King Solomon in the Light of Archaeology, was written to fulfill the task of bringing together the results of scholarly interpretations and observations on the period of Solomon's rule, as described by biblical documents on the one hand, and the integration of the abundant archaeological evidence which has come to light in the past fifty years, on the other hand. The subject of fantastic legend by many ancient writers and the victim of exacting criticism in more modern times, the true Solomon is allowed to emerge, as attested by results of excavations in and about Palestine.

The Importance of the Study. Solomon reigned in a period of strategic importance of the development of the young Hebrew nation of Israel. In a time of transition as regards geographical growth, military consolidation, architectural change, economical development, social flux, political organization, and religious syncretism, Solomon's rule stood astride the changing scene. Because the Tenth Century B.C. king was a "builder," more archaeological evidence has been buried by the ages and a greater amount of information has been brought to light than any other one period of Hebrew life in Palestine. The effect upon all the later history of the nation was to be considerable in that the kingdom was to be divided upon Solomon's death, due principally to policies initiated by the third king of Israel. Longer range effects were to be felt in the social, cultural, and religious fields as Solomon gave a new dignity to the royal lineage, city, and cult. The three great monotheistic religions — Judaism, Christianity, and Islam — were to find these three new dignities important in their origins and developments.

Resources Available for the Study. Archaeological excavations in Palestine were numerous from 1900 until the present time, with brief interruptions during the two World Wars and the recent fighting between Arabs and Jews. Another thirty-five years of excavation previous to the dawning of the Twentieth Century was centered in Jerusalem. The most elaborate expedition was that of the Oriental Institute of the University of Chicago at Megiddo, a chariot city of Solomon, begun in 1925 and continued for ten years. Stratum IV was identified as from Solomonic times and findings which were abundant were fully reported in publications of the Oriental Institute. Nelson Glueck under the American Schools of Oriental Research explored the Wadi Arabah and directed the excavation of Ezion-geber, the ancient seaport of Solomon on the Gulf of 'Aqabah. The full reports through the publications of the American Schools gave a wealth of information concerning the industrial complex and shipping activities of Solomon. Excavations at Tell Beit Mirsim, Tell en-Nasbeh, Tell el-Ful, Beth-shan, Gezer, Ta'anach, and other sites as reported by various excavators supplemented major sources of information directly bearing upon Solomon's period. At least ten expeditions in and about Jerusalem relate to Solomonic times and have been fully reported. A detailed study, Jerusalem in the Old Testament, by J. Simons, was printed in 1952 and proved to be an invaluable source book on Solomon's royal city. The results of a four-and-half year study of Solomon's Temple were released by Professor Paul Leslie Garber of Decatur, Georgia in 1950. The latter took into account the Jerusalem Temple in the light of other oriental temples. The volumes of archaeological reports supplemented and were supplemented by biblical documents relating directly to Solomon such as I Kings 1-11; II Chronicles 1-9; related material on Jerusalem and the Temple in Isaiah, Jeremiah, the proposed reconstruction of the Temple by Ezekiel, and the description of the restored walls in Nehemiah 3:1-32.
II. FINDINGS OF THE STUDY

Megiddo and Solomon’s Military Forces. Megiddo was an enlargement of a projected defense city of David, served in the northern section of the kingdom as a protection against foreign invasion from the north, guarded the Mount Carmel Pass, and was a sentinel over the rich grain fields of the Plain of Esdraelon. An important use over and above military preparedness was the policing of the vital trade routes flowing through the area. The excavations revealed a well-planned military installation including an encircling wall about the thirteen acre summit of the tell, a strong city gate, a large palace for the governor and commander, two stable compounds capable of stabling nearly five hundred horses, and a “building 338” which may have been a chapel or residence. The architecture, construction, and use spoke of masterful, centralized planning. Of revolutionary use were the horses and chariots as far as the Hebrews were concerned. The general impression of the installation is that it resembled military outposts of the present time, the new and lethal weapons then being horse-drawn chariots as over against current bombers and jet planes. Collapse came not because of military weakness, but internal disintegration of centralized government, excessive taxation, resentment of conscription, and lack of social concern.

The Industrial Complex of Solomon in the Wadi Arabab and at Ezion-geber. Nelson Glueck’s surface exploration of the giant rift from the Dead Sea to the Gulf of ‘Aqabah revealed a series of commanding fortresses such as Khirbet Hamr Ifdan; mining sites with shafts, roasting ovens, prison compounds, and accompanying slag dumps; and the climax of the industrial activities at Ezion-geber. Three periods of excavation beginning in 1938 at the latter site revealed large, well-planned furnaces for refining the crudely roasted metals from the mining centers; evidences of manufacturing of nails, household articles, some weapons, and other items; a strong wall of excellent city wall and gate similar to Megiddo, of baked brick; strategic placing of the city to take advantage of prevailing winds for natural drafts for the furnaces and at the same time in proximity to the sandy beaches where the ships for over-seas trade could be drawn up. Manufactured items and ingots of copper and iron were shipped to “Ophir” and perhaps to the East African coast to be traded for gold and such luxury items as might please the royal court. Solomon was thus revealed as a copper king, shipping magnate, a merchant prince, and a builder. Since no nation achieves greatness without a considerable, undergirding industrialization, Solomon’s economic strength came from his mining, manufacturing, and trading of basic metals.

Social and Domestic Conditions. The examination of the findings of a score or more of excavations in and about Palestine relating to Solomonic times were grouped about (1) fortifications; (2) places of worship; (3) everyday life and industry; and (4) tombs. The cities were found to be either thick-walled as built or strengthened by David and Solomon for inclusion in the defensive system or thin-walled when not included and reflecting the independent, home-centeredness of the Hebrew. Food was vital and thus the series of store cities such as Ta’anach where grain, olive oil, and meat stocks were collected and stored to supply the royal court. The Canaanite temples at Beth-shan, the Canaanite “high place” at Petra, several private chapels, and the Israelite temple at Tell en-Nasbeh gave a comprehensive view of “native” religious practices with the common element being cup marks in solid rock for blood and other liquid sacrifices and offerings. The total picture of life in the cities and villages
during Solomon's reign revealed an almost apathetic attitude toward social conditions on the part of the ruler. The community as a whole had little chance of sharing in the prosperity of the leader.

**Solomon's Royal City of Jerusalem.** The "City of David" which had occupied Ophel Hill or the South-east Hill of Jerusalem was enlarged by Solomon to include the new royal buildings of "Millo", a gate fortification between the old and new sections; the "House of Lebanon;" the "House of Pillars" and "Throne Hall;" the royal residences; and the Temple which was a royal chapel and probably not open to the public. The new part of Jerusalem was on the North Hill or at the site of the Haram esh-Sherif. Many residences may have been built on the South-west Hill or Zion, but probably were not included in the fortifications. Archaeological evidence is limited to portions of the wall, since the Tyropoean Valley was filled with debris from the South East Hill and the Haram esh-Sherif as the sacred area of the Moslem carefully guards its buried secrets. The northern portion of Jerusalem as built by Solomon revealed all the magnificence of the royal undertakings, the small, simple, but beautiful temple crowning the series of structures.

**The Light of Archaeology Focused on Solomon.** Solomon by his enterprises and building projects gave a new dignity to the royal city which was even to the present time to be a focal point for Judaism and Christianity; the royal lineage received new respect and from its line was to come the promised "Messiah" or saviour of the nation and world; the royal cult as dignified in the beautiful Temple. In the light of archaeology Solomon is to be judged as unwise in leading his nation to the brink of disaster through lack of social concern and the lot of the common man. At the same time his reign furnished the background for the new spiritual concepts which were to be introduced a thousand years later as "The new Jerusalem," the "Kingdom of God," and the human body as "the temple of the Holy Spirit."

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