DURING the past few weeks much has been said in honor and praise of William Penn on the occasion of the celebration of the 300th anniversary of his birth. Writers and orators have discussed his ideas, ideals and achievements. Some have stressed his work as leader and protector of the persecuted Quakers. Others have pointed to his work as colonizer and founder of a great province and state. Some have emphasized his vision and courage to advocate a union of the American colonies long before Benjamin Franklin. Still others have praised his plan for international government which went far beyond the ideas of his predecessors, Henry of Navarre and Sully. Men have sung praises to Penn the religionist, the theologian, the mystic, the idealist, the courtier, the poet, and the man of action.

The life of William Penn was largely one of toil, pain and sadness. He was born into a turbulent world. The Civil War was raging in England and the Thirty Years’ War was still in progress on the continent. The war in England brought an end to Charles I and raised Oliver Cromwell to power. In the period following that war, two fertile principles, which had their rise in the Reformation, struggled into recognized existence on English soil: the principles of toleration and free churches. The Puritan crusade aimed to set up a visible kingdom of God on earth rather than to concern itself with divorcing Church and State in order to promote these principles.

The Quakers, a new independent sect under the leadership of George Fox, although a part of the Puritan movement, grasped a wider view—that of spiritual democracy. The “inner light” was a guide to the understanding of the Bible, to be applied to the
affairs of daily life and even to government, laws and institutions. The effect of this doctrine was that the words and work of poor and illiterate Quakers might be as important as of those who were wealthy and well educated. Thus Quakerism tended to reduce all ranks of society to a spiritual level—a spiritual democracy. This was the key to Penn's life and work. In the background were those principles of Christian faith and action which Fox proclaimed. Penn took these and organized them as the basis of civil society. Of course, Penn was also a firm believer in the growing English ideal of freedom, representative institutions, guarantees of property, and jury trial.

The life of Penn contains many dramatic pages. Turning these rapidly, the eye might catch a glimpse of some of the most important. His conversion to the despised sect of Quakers; his imprisonment in the Tower of London where in desolation he wrote his important tract, No Cross, No Crown; the many persecutions he bore for righteousness sake; his reconciliation with his father just before the latter's death; his travels on the continent; the search for a haven for his persecuted brethren; the plans for his Holy Experiment; his first arrival in America; his peaceful policy with the Indians; his return to England; his friendship with James II; his arrest and trial after the change of English rulers; the loss and the restoration of his province; the problems that confronted him on his second and last visit to Pennsylvania; the financial difficulties of his later life; his physical and mental breakdown; and his last sad but peaceful years, are but a few of these. Penn left the life in which he had played so generous, so vigorous, and so optimistic a part on July 30, 1718 (O.S.), and was buried in the peace and quiet of the green countryside at Jordans in Buckinghamshire.

William Penn did not possess entire perfection of character. He was not unsurpassed in wisdom; he was not always unerring in judgment, or entirely without self-interest and self-love. He was not the perfect Quaker. But the world must pronounce him great and good. He was a man of convictions and of stature. He accomplished great things. In paying tribute to the founder of Pennsylvania we can do no better than recall the obituary recorded at Reading Meeting in England. While the Meeting admitted that "the management of his affairs was attended by some
deficiencies” and ascribed them to “a peculiar sublimity of mind,” the record reads:

He was a man of great abilities, of an excellent sweetness of disposition ... ready to forgive enemies, and the ungrateful were not excepted. . . .

In fine, he was learned without vanity; apt without forwardness; facetious in conversation, yet was weighty and serious—of an extraordinary greatness of mind, yet void of the stain of ambition; as free from rigid gravity as he was clear of unseemly levity; a man—a scholar—a friend; a minister surpassing in speculative endowments, whose memorial will be valued by the wise, and blessed with the just.

THE INTERDEPENDENCE OF ARCHAEOLOGY AND HISTORY ILLUSTRATED BY EXCAVATIONS AT FORT PITT AND FORT DUQUESNE

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The relationship between archaeology and history may seem vague or non-existent to those not actively engaged in historical or archaeological research. Yet there is often a close affinity of these social sciences. The fundamental difference between the historical and archaeological researcher lies in the sources from which each gathers information; the historian is interested primarily in written records, while the archaeologist gathers data from records deposited in the earth. Each may be interested in the work of the other to verify or supplement his own results.

The archaeologist may use early historical records as a basis for his work. If his excavations were to be made on Indian sites in Pennsylvania he would want to know the history of the “contact period.” What aboriginal peoples were living in the area and what type of culture did they have when first contacted by the white man? Who wrote the first historical accounts? If excavations were to be made in the “Biblical Lands,” a knowledge of Biblical history would be essential. As the archaeologist is interested in pre-history, he studies the early written history in
order to understand the state of development of a culture or civilization at the time when written records were first made.

The historian in turn may use archaeological findings, especially pre-history, as a basis for his work. In writing a history of Greece or Sicily, for example, there would be a period preceding any written records, a period whose history could be written by the archaeologist only after he had made excavations and a study of the deposits left in the ground. The book *Ancient Times*, used widely throughout the country as a text book in ancient history, was written not by an historian but by James Henry Breasted, an archaeologist. Much of our current writing of very early history has been by the archaeologist rather than by the historian. Thus it is possible to see some of the interdependence of these studies.

As already stated, the fundamental difference between history and archaeology is in the source from which each science gathers its information, the historian using the written records and the archaeologist those records deposited in the ground. The historian may not be able to write certain important chapters in history due to the records having been destroyed. The archaeologist may not be able to write a chapter in pre-history due to the destruction of another type of records. A library may burn destroying irreplaceable historical documents or a series of floods may wash away an archaeological site. As time passes, men write and leave their writings for the historian. As time passes, refuse, old walls, broken tools, ornaments, burials, clothing, etc., are deposited in the ground with more recent materials often being deposited above the older forms—thus records are left for the archaeologist.

The close relationship of history and archaeology is well illustrated in Pennsylvania by recent work in Pittsburgh. Excavations were undertaken on sites of Fort Pitt and Fort Duquesne by the Point Park Commission of Pittsburgh with important aid from the Department of City Planning for the purpose of determining the present condition of these forts in order to preserve their remains in a proposed historic park site.

This project early showed the dependency of history upon archaeology to establish a clear and more complete picture of an historical site. Although many historical chapters had been written about Fort Pitt and Fort Duquesne, there were some questions
which could not be answered by research in historical archives. Some of these questions were:

- What was the original location of the forts and how were they orientated in relation to modern Pittsburgh?
- What was the extent of the fortifications?
- What, if anything, remained of the forts?
- What kind of materials were used in their construction and what was the source of these materials?
- What was the relative position of Bouquet’s redoubt to Fort Pitt?
- How accurate were the plans of the early engineers?

The archaeological excavations answered these questions.

Messrs. Willard Buente, John Towns and Ralph McGiffin made a tentative location of Fort Pitt on the modern streets of Pittsburgh by using information from early deeds which described a well and a magazine lot. Mr. George Evans, member of the City Council of Pittsburgh, added a third point for orientation, as he remembered that part of the Fort Pitt wall was uncovered while excavating for a building basement a number of years ago. Thus three points were established and the Bernard Ratzer plan of Fort Pitt made in 1761 was superimposed upon a modern plan of the Point area. Even this careful work failed to locate the fort in its exact position. However, it made a good plan to use in starting the archaeological excavations.

Excavations first uncovered an angle on the Fort Pitt scarp wall between the plank and face walls of the Grenadier’s bastion and also a point on the scarp wall between the Grenadier and Flag bastions. It was now possible to make a reorientation of the fort which guided future excavations. Orientation became a problem in plane geometry, the first orientation having been made by three points: a well, a magazine, and a point on the fort wall; the second was made by an angle and a point. Each additional archaeological find on the fort increased the accuracy of the orientation. Surveyors ran lines and angles to city monuments, giving the exact location of the fort features discovered. Fort Pitt and Fort Duquesne covering over twenty-one acres were found to lie primarily between Duquesne Way and Short Street and between Water Street and Fancourt. Fort Duquesne, a small fort built directly at the Point, was found to be between the ramps on
Duquesne Way and Water Street leading up to the Point and Manchester bridges. Fortunately, the bridges and their approaches were built on fill in the old river channels so their construction did not destroy any part of the forts.

In twenty-eight test pits excavated for Fort Pitt, only three failed to produce remains of the fort. In two of these the fort structures had been removed by excavations for building foundations, while in the other test pit made near Duquesne Way, the Allegheny River had washed away the extreme end of the masonry wall. Part of the brickwork and almost all of the stone footing of the landward scarp wall have been preserved. The ditch, the scarp, and counter-scarp are largely intact. The barracks and all structures above the original ground level have been destroyed, except Bouquet’s redoubt. Only one log was found in the excavations for Fort Duquesne. The work was handicapped by overhead structures and seepage of river water as this fort was on a lower level than Fort Pitt. However, parts of Fort Duquesne should be intact and may be found in future excavations under more favorable conditions.

The materials used in constructing the forts were from nearby localities. Fort Duquesne was built of logs cut from the nearby forest. Fort Pitt was built of earthworks and masonry. The brick was manufactured near the fort. Contrary to some historical accounts, the bricks of Fort Pitt were not white but varied from pink to dark red. Lime for mortar was made from limestone from Duquesne Heights and Mount Washington across the Monongahela. It was burned in lime kilns at the foot of Duquesne Heights. Building stone was quarried from the strata near the foot of Duquesne Heights and another quarry was on the side of Grant’s Hill near the present Fourth Avenue Post Office. Coal was mined from the Pittsburgh coal measure just below the limestone quarries. Saw mills were erected to cut lumber.

Bouquet's redoubt, better known as Fort Pitt Blockhouse, was found to be outside of the original Fort Pitt proper, across the ditch and half way between the Ohio and Monongahela bastions. There has been an historical controversy for some time regarding the position of the redoubt, some even placing it within one of the bastions of Fort Pitt. The archaeological evidence has now put an end to this controversy.
Another interesting fact is that archaeological excavations showed that parts of the fort did not coincide with the plans of the engineers, Bernard Ratzer and Elias Meyer, made in 1761. Archaeology proved in this instance the unreliability of documentary evidence. It was necessary to make a new plan of Fort Pitt to coincide with the actual location of fort features exposed by the excavations. It is not surprising that the structure should vary from the original plans as conditions found during the construction may have dictated certain changes.

The archaeological research on Fort Pitt and Fort Duquesne was dependent upon historical documents and data. Historical archives furnished maps and plans, flood data, references to workmen, artisans, and residents of the Point area, and changes that occurred since the forts were abandoned. Without the aid of history the archaeological work would have been much more difficult and would have lost much of its significance. Thus history was an important factor in the archaeological research, while the latter proved or disproved some historical theories. Archaeology has made it possible to write a more accurate history of the two forts at the forks of the Ohio that played such an important part in early American history.