EXCAVATION OF THE ARKANSAS POST BRANCH OF THE BANK OF THE STATE OF ARKANSAS

ARKANSAS POST NATIONAL MEMORIAL

1971
EXCAVATION
OF THE
ARKANSAS POST BRANCH OF THE BANK OF THE STATE OF ARKANSAS
Arkansas Post National Memorial, Arkansas

by

John W. Walker

Southeast Archeological Center
Division of Archeology
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ADDENDUM

Several months after the submission of this report for publication, Edwin C. Bearss undertook further research on the history of Arkansas Post. This research was concerned primarily with two Arkansas Post structures, Montgomery's Tavern and the Johnson and Armstrong Store, the former of which was located on the same lot as the Arkansas Post branch of the Bank of the State of Arkansas.

His report on this research contains an abstract of a historical document that is of especial pertinence to this report in that it corroborates my conclusions regarding the destruction of the Bank. With his very kind permission, the abstract of this document (a newspaper article from the Arkansas Gazette of December 2, 1900) is quoted below:

Southeast of the eroded area on the point the correspondent saw the ruins of the Arkansas State Bank, which had "stood as late as 1863, several blocks north of the steamboat landing."

Here he found a few wheelbarrow loads of brick-bats. Local inhabitants told the newspaper man that in January, 1863, Union gunboats had shelled the village. As the bank was the most conspicuous landmark, the bluejackets had concentrated on it and knocked it "hither and yon!"

J.W.W.

July, 1971
ABSTRACT

Historical data pertaining to, and archeological evidence derived from, the structure built in 1840-1841 to house the Arkansas Post branch of the Bank of the State of Arkansas indicate that it was little used from the closing of the bank in 1843 until 1862-1863, when the Confederate Army, having built and manned a strong defensive earthworks a short distance from the building, utilized it as a military hospital. That this building was destroyed by Union artillery during the battle which occurred at the Post of Arkansas on January 11, 1863, is suggested by the available historical data and confirmed by the archeological evidence.
PREFACE

The following report is an attempt to reconstruct from available historical data and archeological evidence the history and architecture of the structure built in 1840-1841 to house the Arkansas Post Branch of the Bank of the State of Arkansas. It was prepared as an adjunct to Rex L. Wilson's report on "Archeological Explorations at Arkansas Post - 1966"; and, in combination with that report, it is intended to fulfill the requirements of Archeological Resource Proposal ARPO-A-1.

In common with other reports of this type, much of the information on which it is based was obtained from a cumulative body of knowledge resulting from the efforts of earlier researchers. Those whose investigations have contributed most to this report are:

Edwin C. Bearss, whose 1964 report on the "Structural History of Post of Arkansas, American Period - 1804-1863" is a thorough compilation of the historical data regarding the area now included in Arkansas Post National Memorial, and

Rex L. Wilson, whose test excavations at the Bank site resulted in the recovery of numerous artifacts and other archeological evidence which were discussed in his report on "Archeological Explorations at Arkansas Post - 1966".

There are, however, a number of other persons who contributed greatly to the excavation of the Bank site and to the preparation of this report. In particular, I would like to acknowledge the cooperation, assistance, and encouragement of the following:

John W. Griffin, Chief, Southeast Archeological Center, who gave much valuable advice and many helpful suggestions regarding both the excavation and the preparation of this report.

Frank Hastings, Management Assistant, Arkansas Post National Memorial, who assisted the excavation in numerous ways. Without his administrative support, his enthusiastic interest, and his constant willingness to help in any way possible, much less could have been accomplished.

Richard D. Faust, Chief, Archeological Research, Southeast Archeological Center, who studied and described the human bone recovered from the Bank site.
David H. Hannah, Assistant Curator, Southeast Archeological Center, who took, developed, and printed the photographs used to illustrate this report.

Richard P. Wheeler, Technical Editor, Division of Archeology, who edited the manuscript.

Mrs. Charles C. Mattmiller, Curator, Arkansas Post County Museum, Arkansas County, Arkansas, who gave me free access to all of the collections of the Museum and who searched for, and made available to me, historical sources containing references to the Bank.

Dale Furbman, Gillett, Arkansas, who called to my attention General William T. Sherman's description of one of the Confederate hospitals at Arkansas Post.

Charley Morphis, Gillett, Arkansas, who told me of stories he had heard concerning the Bank building from persons who remembered it.

The members of the excavation crew -- Gary P. Donehoo, Emmanuel Williams, Enoch De Shazer, and Willie Mixon -- who, despite hail storms, damaging winds, and 8.72 inches of rain, worked hard, steadily, and without complaint.

Mrs. Carolyn P. Hester, Clerk-Typist, Southeast Archeological Center, who typed the various drafts and the final copy of this manuscript.

The citizens of Arkansas County, and in particular those of the town of Gillett, whose hospitality, helpfulness, and genuine interest made the work at the Bank site most enjoyable.

J.W.W.

Southeast Archeological Center
National Park Service
October, 1970
Fig. 1. Map Showing the Location of Arkansas Post
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INTRODUCTION

Geographical Background

Arkansas Post National Memorial is located in southeastern Arkansas County, Arkansas, approximately 10 miles south-southeast of the town of Gillett. The park encompasses all of the lands included in Private Survey Number 2305 and those portions of the lands over 162 feet elevation above mean sea level included in Private Survey Numbers 2307, 2339, 2344, 2363, and 2432 and in the former "U.S. Reservation" on which the military Post of Arkansas was located during the earlier years of the Territorial period.

Together these lands form a peninsula which protrudes into, and is elevated from 10 to 25 feet above, the frequently flooded lowlands of the Arkansas River. This peninsula is the southeasternmost tip of Grand Prairie, a flat moderately dissected plain cut by erosion from a great alluvial fan formed some 5,000 years ago by the Mississippi River. Immediately to the east of Grand Prairie is a very similar, but much smaller, plain called Little Prairie. It, too, is a remnant of the ancient alluvial fan. Considered as a unit, the two cover an area which varies in width from four to twenty miles and extends in a southeastward direction from Little Rock to Nady, thus forming the divide between the Arkansas and White Rivers. Both of these plains are composed of dense impervious soils which are ideally suited, and now extensively utilized, for rice cultivation.

Following the formation of the alluvial fan from which these prairies were cut, the gradient of the Mississippi and its tributaries decreased, and meanders developed on all the major streams occupying the present floor of the lower Mississippi Valley. Gradually the meander progressions of the Mississippi, the Arkansas, and the White Rivers ate away the edges of the alluvial fan leaving the sharply defined bluffs which border the prairies. Although these bluffs are not high, they provide enough difference in elevation so that the prairies are never flooded.

Consideration of these changes in the physiography of the area is necessary in attempting to understand the history of the various Posts of Arkansas, for the most suitable location in the area for the establishment of trading posts, forts, and settlements — the first land not subject to flooding which was reached in ascending the Arkansas River — changed with the changes in the course of the stream. This point is well illustrated by evidence indicating that when Tonty established the original Poste de Arkansas in 1686 this location was the southern tip of Little Prairie, the location of the Menard Site, and that at a later time, certainly by 1751, it was the southernmost tip of Grand Prairie, where the present Arkansas Post National Memorial is located.
Historical Background

In order to place the story of the structure built in 1840-1841 to house the Arkansas Post Branch of the Bank of the State of Arkansas in historical context it is necessary to review the history of the several trading posts, forts, and settlements which were either termed "Arkansas Post" or were located within, or near, the present Arkansas Post National Memorial.

In 1686 the first Poste de Arkansas, the earliest European settlement in the lower Mississippi Valley, was established on the north bank of the Arkansas River at the Quapaw (or Arkansas) Indian village of Osotouy, which is believed to have been located at the Menard Site in Arkansas County, Arkansas, about 5½ miles southeast of Arkansas Post National Memorial (Ford 1961: 142). This post was founded by the French trader Henri de Tonty, lieutenant of Rene Robert Cavalier, Sieur de la Salle. Tonty garrisoned the post with six men under the command of Jean Couture, a Canadian coureur de bois. It appears likely that this post, which consisted of only one trading house, was occupied only intermittently, for in 1687 only one man other than Couture remained there, and Couture is known to have been in Illinois during part of 1688. Two years later Tonty visited "Assotoue (Osotouy) where my commercial house is," and he was in the area again in 1693 and in 1698-1699. However, if he visited the post on these later journeys, he made no mention of it.

During the mid-1690's, following France's issuance of very stringent regulations governing the Indian trade, a number of French traders deserted to the English. Most of them went to South Carolina, where a small (some 10%) but influential segment of the population was French Huguenot. Couture, who was among these traders, arrived in Charleston before 1696. There he encouraged the English to establish a trade with the Quapaw and other Indian tribes of the lower Mississippi Valley. The first recorded trading expedition from Charleston to the Quapaw at the mouth of the Arkansas was led by Colonel Thomas Welch in 1698. The second expedition, which is believed to have been guided by Couture, arrived at the mouth of the Arkansas in February, 1700. Members of this trading party apparently remained in the area for some time, for in May of that year the French explorer Pierre Charles Le Sueur, who was then on his way up the Mississippi, encountered one of the traders at a Quapaw village. This trader asserted England's claim to the Mississippi Valley and boasted that the English would soon monopolize the Indian trade of the area (Crane 1928: 42-46, 63-67, 154; Bolton and Marshall 1920: 101-102). Whether or not the English were successful in capturing the Quapaw trade is unknown, as there is little record of either English or French activity in the
immediate area during the period from 1700 to 1720. Some historians interpret this lack of information as indicating that the French did not occupy Arkansas Post during that time -- an interpretation suggesting that the known English success in monopolizing the trade with the Chickasaw, who lived just east of the Mississippi, may have influenced events on the western side of the river as well.

The next settlement known to have been located on the Arkansas River was the so-called "John Law Colony," a village of some 200 German immigrants, which was established in 1721 by the French Compagnie des Indies. This colony, which is thought to have been located on the north bank of the river near, or perhaps within, the present Arkansas Post National Memorial (Ford 1961: 142), quickly dwindled in population. By 1722 the population had dropped to 47, and one year later only 14 Frenchmen and 6 Negroes remained. However, by 1727, the year in which the colony was officially abandoned by the Compagnie, the population had increased to some 30 persons. In that year, following the murder of their priest by the Natchez, the residents of the community recognized Indian hostility as a serious problem. This hostility increased throughout the next two years, reaching its peak in 1729, when the Natchez captured Fort Rosalie, killing about 250 Frenchmen and taking the women and children residing there as captives. Although the Natchez were crushed by 1731, the Indians of the lower Valley, with the exception of the Quapaw, remained hostile to the French.

In 1731 the French established a new fort on the Arkansas and manned it with a garrison of 14 soldiers. Like the earlier French outposts, this fort also seems to have been on the north bank of the river; however, its exact location is not known. Indian hostility, particularly on the part of the Chickasaw (who were allied with the British) and the Osage, continued to be a serious threat to residents of the post throughout the 1730's and the 1740's; and, apparently for this reason, the number of soldiers stationed at the fort remained almost constant: in 1734 there was a garrison of 12 soldiers; in 1738, of 12 soldiers and 10 Negroes; in 1744, of 12 soldiers; and in 1748, of 12 soldiers. During this period the French, with Quapaw braves accompanying them, attacked the Chickasaw villages at least once. This occurred in 1738. And the Chickasaw are known to have attacked the settlement at the post in 1748 or 1749, killing six men and taking eight women and children prisoner. It was also during this period that Arkansas Post became important as a base for trading expeditions to the Southwest, some of which reached the Rio Grande.

A company of soldiers under the command of M. de la Houssaye was assigned in 1751 to erect a new military post on the Arkansas River. Both historical and archeological evidence indicate that this was a
rather large fort enclosed with a double stockade and that it was located within the present Arkansas Post National Memorial (Holder 1957a: 15-16, 24). This post had a garrison of 50 soldiers in 1754.

Available historical evidence seems to indicate that the post was moved downstream at some time during the French and Indian War, 1755-1763, but neither the date of the move nor the location of the new fort are known. It appears that the garrison remained relatively strong during the War, for there were 50 soldiers stationed there in 1755; 37, in 1758; 40, in 1759; and 31, in 1763. However, it does not seem that the fort or its garrison were directly involved in any major actions.

To prevent Louisiana from falling into British hands, France officially ceded the colony to Spain by the Treaty of Fontainebleau in 1762. It was some time, however, before Spain took over the administration of the colony — the French governor remained in office until 1765, and the first Spanish governor turned the administration over to a Frenchman, who served as acting governor until 1769. In that year the commandant of Arkansas Post, a Frenchman, required his soldiers, who were also French, and the other residents of the post to swear allegiance to Spain. And at about that time, perhaps with the arrival of the first permanent Spanish commander, Fernando de Leyba, at the post in 1771, the post was again moved downstream to a location near the mouth of the Arkansas. This move may have been due in part to the increased activity of English traders, who were then operating out of bases located just east of the Mississippi. These Englishmen were trading directly with Indians living west of the river and were trying, with some success, to alienate them from the Spanish. The problem gradually became more serious; and in 1775, the year in which the American Revolution began, the commandant of Arkansas Post reported that five English traders had established an eighteen-cabin settlement called Concordia on the east bank of the Mississippi opposite the Quapaw villages.

Although Spain did not officially enter the war until 1779, the Spanish in Louisiana were of considerable help to the American cause from the beginning of the Revolution, when the governor supplied considerable quantities of gun powder to the rebelling colonists. It was not, however, until 1778, when a party of Americans under the command of James Willing raided British settlements, including Concordia, along the Mississippi, that the war came to Louisiana. When the British sent naval vessels to the Mississippi and reinforced their posts in West Florida, the Spanish allowed these Americans to take refuge in New Orleans and aided them in returning north by way of Natchitoches and Arkansas Post.
In 1779 a new Arkansas post, officially called "Fort San Carlos III", was constructed on the north bank of the Arkansas River at a location which, on the basis of archeological evidence, appears to be within the present Arkansas Post National Memorial. By the end of that year all of the British forts on the lower Mississippi were forced to surrender, and during the following year Balthazar de Villiers, commandant of Fort San Carlos, took possession of the area east of the Mississippi and north of the jurisdiction of Natchez in the name of the King of Spain. However, a number of Englishmen, having fled to the Chickasaw who remained friendly to Great Britain, united under the leadership of James Colbert and began harassing Spanish commerce on the Mississippi. In April, 1783, Colbert, at the head of about 100 Englishmen and Chickasaw, attacked San Carlos, capturing the village, taking most of the residents captive, and unsuccessfully attacking the fort. With the end of the war in 1783 and the cession of the Floridas to Spain, the Spanish endeavored to establish control over the Mississippi. Their attempt to close the river to American commerce in 1786 led to considerable friction with the Americans, which continued despite the opening of the river in 1787. By 1789, Fort San Carlos, which had evidently already been rebuilt at least once, was in ruins and eroding into the Arkansas; and difficulties with the Americans together with continued Indian hostility, particularly on the part of the Osage, led to the rebuilding of the fort. Archeological evidence of a structure, which is believed to have been this fort, has been uncovered within the present Arkansas Post National Memorial. Contemporary accounts indicate that the fort was composed of three buildings surrounded by a stockade and that outside of the stockade was a village of some thirty houses.

Following the 1795 Treaty of San Lorenzo (Pinckney's Treaty), which recognized the boundary claims of the United States under the Treaty of 1783 -- the Mississippi on the West and the 31st parallel on the South -- and gave the Americans free navigation of the Mississippi and the right of deposit of their goods at New Orleans, the Spaniards found themselves still under pressure from American frontiersmen. In 1796, with Fort San Carlos again in a state of disrepair and in danger of being washed away, the Spanish moved the fort back from the river about one-half mile. This fort, which was named Fort San Esteven, apparently was also located within the present Arkansas Post National Memorial.

Although in 1800, by the secret Treaty of San Ildefonso, Spain agreed to cede Louisiana to France at a later date and officially ceded the territory in 1801 by the Treaty of Madrid, the administration of Louisiana remained wholly in the hands of the Spanish until November 30, 1803, when the cession was announced in New Orleans and a French
governor assumed office. It was later that year that the Louisiana Territory was purchased by the United States. Because of this rapid change in governmental control, most of the minor Spanish officials remained in office throughout the brief period of French administration; and it was the Spanish commandant at Fort Estevan de Arkansas, who, on March 23, 1804, officially turned the fort over to James B. Many, representative of the United States. It seems almost certain that it was this fort which, when garrisoned by the United States, was called the Post of Arkansas. Although the document transferring the fort to the United States did not mention the tract of land on which it was situated, historical evidence, including Spanish land grants (which were officially recognized by Act of Congress in 1805), very strongly suggests that this tract had been "King's Land" and that, with the transfer, it became "Public Land."

In 1805, a government-operated factory, or trading post, was established at Arkansas Post. Upon his arrival, the factor stored his goods in the military post, but he soon rented a building in the village to house the operation. This proved unsatisfactory, and in 1806 he began construction of several buildings which were located on "...Publick Ground...nearly adjoining to the Garrison, also on the Publick Grounds..." (Bearss 1964: Part I, 16). These buildings were ready for occupation in 1809; however, competition from the eight or nine traders located in the village proved too great, and the factory was closed down in 1810.

During the period from 1804 through 1819, the political boundaries within the Louisiana Purchase changed rapidly. Initially, the whole of the Purchase area north of the present State of Louisiana was termed the Louisiana District; however, in 1805, it became the Territory of Louisiana; and, in 1812, the Territory of Missouri. In 1813, the Missouri Territory was divided into two counties, and the area now included within the states of Arkansas and Oklahoma became the County of Arkansas. Still later, in 1819, this area became the Territory of Arkansas. From 1813 until 1819, the village of Arkansas was the location of the county court of Arkansas County; and, in 1819, it was chosen as the capital of the Territory of Arkansas. It appears, however, that the population of the village changed but little throughout the period, remaining at about sixty families.

When Thomas Nuttall, the British naturalist, visited the Post of Arkansas in February, 1819, he described it as an "...insignificant village which contains scarcely 40 houses..." (Bearss 1964: Part I, 6). But when he returned almost a year later, on January 15, 1820, he found a much changed settlement of which he wrote: "Interest, curiosity, and speculation has drawn the attention of men of education
and wealth toward this country, since its separation into a territory; we now see an additional number of lawyers, doctors, and mechanics. The retinue and friends of the governor, together with the offices of Justice, added also essential importance to the territory as well as the growing town." (Bearss 1964: Part I, 7). In that year the village contained some 30 to 40 houses, a number of taverns, several retail stores, a billiard parlor, a land office, a post office, a newspaper and printing office, a grist mill, and a cotton gin. Lands quickly changed hands; and rental properties were in great demand, for they were used to house the territorial offices, the territorial legislature, and the circuit and local courts as well as businesses and professional offices. However, the boom was short lived.

Despite general recognition of the fact that Arkansas Post would be of commercial importance as long as river traffic continued, it was felt that the town was not suitable for the territorial capital because it was not centrally located and its climate was considered unhealthy. For these reasons the territorial legislature voted in 1820 to move the capital to Little Rock. Although the move was not made until the following year, it appears that the territorial officials and other recent arrivals left rather quickly, for when John James Audubon visited Arkansas Post in December, 1820, he described it as follows: "...Now a poor, Nearly deserted Village ... -- at present, the decrpid Visages of the Worn out Indian Traders and a few American families are all that gives it Life... (However, we did see) there a Velocipede(.) Judge how fast the Arts & Sciences Improved in this Southwestern Country" (Peattie 1940: 147-148).

The village apparently changed little during the following decade. Father Edmond Saulnier, who arrived there in December, 1831, stated that it was composed of "...a number of houses scattered about... (over) a distance of seven miles, comprising all in all twenty-five houses..." (Bearss 1964: Part I, 21). And William E. Pope, who visited there in 1832, wrote of it: "The settlement...was scattered over a considerable area, extending back from the river to Grand Prairie. Many of the houses erected during... (the Spanish) administration were still standing... (but in) many instances the tall chimneys had fallen down, and trees... were growing out through the roofs... There were... a few modern buildings, situated near the bank of the river, among them two brickhouses..." (Bearss 1964: Part I, 9). One of these houses belonged to Frederick Notrebe, of whom G.W. Featherstonhaugh, who visited Arkansas Post in the late 1830's, wrote: "The great man of the place is Monsieur Notrebe, a French emigrant, who... accumulated a considerable fortune here.
His house, a comfortable one(,)...has a store attached to it, where the principal business of this part is transacted" (Bearss 1964: Part I, 10).

This pattern of decay and of building anew, with little change in population or of economic base, seems to have continued throughout the 1830's. There are, however, some indications of increased prosperity and suggestions of increased population around 1840. Among these are: the opening of a branch bank of the Bank of the State of Arkansas on December 24, 1838, and the building of an imposing structure to house this bank in 1840-1841; the organization of the Arkansas Post Jockey Club in early 1840 and the running of eight races in November, 1840, and of six races in June, 1841; and the opening of a Catholic school for girls, called St. Ambrose's Female Academy, in the fall of 1842. This apparent prosperity, which likely resulted, at least in part, from the rather grandiose plans adopted by Arkansas when she acquired statehood in 1836, seems to have been rather short lived. The Arkansas Legislature passed an act liquidating the Bank of the State of Arkansas in January, 1843, and in June of that year the receivers appointed by the legislature announced that they had received possession of all properties of the Arkansas Post branch bank; and in 1845 the Sisters of Loretto abandoned St. Ambrose's Academy. It would appear, however, that Arkansas Post remained a relatively important local commercial center throughout the 1840's because of the continuing importance of river traffic and because it was, at least as late as 1845, the only village within Arkansas County.

During the early 1840's, the building of railroads began west of the Mississippi; and by the middle of that decade plans had been made for, and construction begun on, three railroad lines within the State of Arkansas. The proposed routes of two of these, the Memphis and Little Rock Railroad and the Arkansas Midland Railroad (Helena to Little Rock), ran through Clarendon, the county seat of Monroe County, which adjoins Arkansas County to the north. It may have been for this reason that in 1855 a new site was chosen for the county seat of Arkansas County. This site, which was named De Witt, was located some twenty miles north of Arkansas Post on the road leading to Clarendon. In October of the following year a visitor noted, "'The town at the Post of Arkansas has gone to decay but a few (persons) remaining...':" (Bearss 1964: Part I, 10).

One of the few remaining buildings was the Bank. It was apparently still in receivership -- financial matters connected with the Bank of the State of Arkansas not being resolved until after the Civil War -- and, according to a visitor of 1857, was "'...not being used for any purpose except holding elections and stabling horses!'" (Bearss 1964: Part II, 277).
On May 6, 1861, a state constitutional convention adopted the ordinance of secession; and, on May 16, Arkansas became one of the Confederate States of America. Shortly thereafter, the Confederacy, recognizing the great strategic importance of the Mississippi River, began building a number of earthwork fortifications along its banks. Although several of these were completed before the end of the year, they were not effective; and during the first half of the following year, all of them, with the exception of Vicksburg, the "Gibraltar of the Mississippi", had been put out of action by two fleets of Union gunboats — one descending and the other ascending the river. These fleets met just above Vicksburg on July 1, 1862.

Prior to the rendezvous, the gunboats descending the river had run up the White River into the heart of Arkansas. This action caused the Confederates to realize the need for defenses on the Arkansas River; and, shortly afterward, General Thomas J. Churchill of the Confederate Army began construction of a strong defensive earthworks at Arkansas Post. This fort, known as the "Post of Arkansas", or "Fort Hindman", was completed before the end of that year. It was, according to Admiral David D. Porter of the United States Navy, "...a strong work of 11 guns and in a commanding position..." (Bearss 1964: Part III, Sheet 23), which, according to Union General Ulysses S. Grant, was "...garrisoned by about five or six thousand men..." (Grant 1962: 155).

This fort fell on January 11, 1863, to a combined army and navy force under the command of General John A. McClernand of the United States Army. Its capture was considered "...very important..." by General Grant, because he felt that "...five thousand Confederate troops left in the rear might have caused us much trouble and loss of property while navigating the Mississippi" (Grant 1962: 155).

During the battle, some of the few remaining buildings at Arkansas Post were damaged or destroyed. Among those destroyed was a building which was then being used as a Confederate hospital. It would appear — on the basis of information presented in this report — that this structure was the one which had been built to house the Arkansas Post Branch of the Bank of the State of Arkansas.

In the years following the war, river traffic was almost totally replaced by railroad transportation; and Arkansas Post, with no rail connection, continued to decline. In fact, it appears that little, if any, rebuilding occurred on the portion of the site which had been most heavily occupied during the late 18th and early 19th centuries. There were, however, several families still living in and around the village of Arkansas Post, then slightly north of its
earlier location, when a 62-acre portion of the site was set aside as Arkansas Post State Park in 1930. Even as late as 1957, there were a few houses still standing, but most of these were deserted.

Arkansas Post National Memorial was authorized by Act of Congress on July 6, 1960, and established as a unit of the National Park System on March 26, 1965.

Earlier Archeological Research Concerned with Arkansas Post

Determination of the sites at which Arkansas Post was located during its 250-year history is a problem which has long interested archeologists, and a number of archeological research projects have been undertaken in an attempt to solve this problem. Two such projects have been conducted within the boundaries of the present Arkansas Post National Memorial.

The first of these, which consisted of extensive test excavations on the point of the peninsula of high land nearest the Arkansas River, was conducted in 1956-1957 by Preston Holder under contract to the National Park Service. The purpose of these excavations was to locate sites at which Arkansas Post had been situated during the French and Spanish occupations, 1686-1804. Holder succeeded in locating archeological evidence for three major structures built during this period. Based on the artifacts recovered and on the similarity of these structures to those described in the available historical documentation (Mattison 1957), they are believed to have been:

(1) The French military post which was constructed about 1751 and abandoned during the early part of the French and Indian War, 1755-1763, when the fort was moved downstream.

(2) The first and second Fort San Carlos III; a Spanish fort which was originally built in 1779 and then rebuilt on the same site at some time before 1787, when it was moved a short distance.

(3) The third Fort San Carlos III, which was built in 1787 and moved about one-half mile back from the river in 1796.

Holder also recovered evidence for two relatively small brick structures which are believed to date from the early part of the major American period of occupation, 1804-1863.
Among the ceramics recovered from Holder's excavation, those of most interest were:

(1) A sherd of tin-glazed English delft-ware tentatively dated at around 1700. This sherd may possibly be evidence of the English trade known to have occurred at that time.

(2) One blue decorated sherd of Grenzhauser Rhenish origin which could not have been imported from Germany much later than 1740. This sherd may possibly have come from a vessel brought to the area by the "John Law Colony".

(3) Over 150 sherds of French faience manufactured during the latter half of the 18th century. Among these were fragments of a tureen dating about 1750, thus suggesting that it may have been associated with the earliest French military post for which structural evidence has been found.

(4) Five majolica ware sherds from Puebla, Mexico, which are believed to date from the second half of the 18th century. These apparently evidence Spanish occupation of the site during the period of Fort San Carlos III.

The second project, which consisted of fairly widespread archeological testing in the area of the peninsula adjoining that tested by Holder, was conducted by Rex L. Wilson, National Park Service archeologist, in 1966. The major objective of this project was the location of building sites from the main period of American occupation, 1804-1863. Four structures of this period were located. On the basis of historical data (Bearss 1964), Wilson tentatively identified them as follows:

(1) Frederic Notrebe's Cotton Gin, a brick structure which was built in 1826-1827 and destroyed by fire at an unknown date.

(2) Frederic Notrebe's Residence and Store, a building with masonry foundations, which was occupied by Notrebe in the 1830's.

(3) Frederic Notrebe's Warehouse, a brick building that was part of Notrebe's merchandising complex in the 1830's, which was destroyed by fire.

(4) The Arkansas Post branch of the Bank of the State of Arkansas, a brick building erected about 1840 and destroyed by fire at some time after 1857.
Almost all, if not all, of the artifacts recovered from these excavations date from the 19th century — the majority of them, from 1830 to 1860.

There have also been at least three other archeological research projects concerned in large part with the location of the original Poste de Arkansas, which was established by Henri de Tonty in 1686. All of these involved investigation of the Menard Site in Arkansas County, Arkansas.

The first of these projects, a survey of the site, was conducted by Philip Phillips in 1940. Materials obtained from this survey, together with artifacts recovered from earlier archeological investigations at the site, were used the following year as the basis for a brief report on the site's archeological significance (Phillips 1941). This report, which was prepared by Phillips for the National Park Service, was concerned largely with the indigenous archeological aspects of the site. However, he later used these materials, others obtained from limited test excavations conducted at the site during the latter part of 1941, and historical documentation concerning the original Arkansas Post as evidence on which to base a lengthy discussion of the probable location of Osotouy, the Quapaw village at which the post was located (Phillips 1941: 399-421). Although he concluded that Osotouy was probably the Wallace Site, it should be noted that this site is near enough to the Menard Site to be "...considered part of the same village" (Ford 1961: 181).

The second project, excavation of some 9,000 square feet of randomly spaced test pits and trenches at the Menard Site and other sites in the immediate area, was conducted by Preston Holder in 1956-1957 as an adjunct to his excavations within the present Arkansas Post National Memorial. No 17th century European artifacts were recovered from these excavations; however, Holder concluded from the aboriginal pottery, which was recovered in quantity, that the Menard Site was a historic Quapaw village and the most likely location of the 1686 post established by Tonty (Holder 1957b: 32).

The third project, conducted by James A. Ford in 1958 under contract to the National Park Service, was confined wholly to the Menard Site. Although Ford found very little artifactual material which might be of 17th century European origin, he concluded on the basis of aboriginal pottery (which he identified as historic Quapaw), historical documentation, and physiography that the Menard Site was most probably the location of the Tonty post.
As part of their researches, Phillips, Holder, and Ford studied artifacts which Clarence B. Moore obtained from excavations at the Menard Site in 1908, and Phillips and Ford studied those obtained by Edward Palmer in the early 1880's. Although neither Palmer nor Moore was directly concerned with the problem of the location of the original Arkansas Post, both reported the finding of European-made objects which may well have been related to it.

The most interesting object reported by Palmer was a metal cross. This cross, which he described as having been some six to eight inches long, was obtained from a depth of four to eight feet below the summit of the largest mound at some time prior to his excavations at the site. Unfortunately, this artifact was never properly described and has since disappeared (Ford 1961: 160-161).

The only European artifacts recovered from Moore's excavations at the Menard Site were glass trade beads. Although they are not very meaningful in themselves, it appears that Moore recovered similar, if not identical, beads from nearby sites, and that these beads were in direct association with brass or copper beads and with historic Quapaw pottery (Ford 1961: 167-168). This association cannot, of course, be considered as definitely indicating that Tonty's post was located at the Menard Site; however, it does indicate that the Quapaw were occupying the site at about the time that the post was established and that they were obtaining European trade goods from some source.

Excavation Procedures

Since a grid system for the Bank area had already been established, permanently marked, and used for archeological testing of the site (Wilson 1966b: 7), it was decided to reestablish this grid and to use it in excavating the whole of the site.

When the system was originally set up, a permanent datum point was established just west of the site at a point roughly bisecting its north-south axis. Then 10-foot squares, which were oriented with magnetic north (the declination of magnetic north from true north not being known by the excavator at that time), were laid out and marked at the corners with wooden stakes. So as to be able to differentiate between them, each of these stakes bore two designations -- the first reflecting its distance north or south of the datum point and the second its distance east of that point. The datum point itself was designated "0-0"; and all of the stakes directly east of the datum were designated "0- ". The first part of the designations of the stakes north of the "0-" line were,
from south to north, "N1-", "N2-", "N3-", "N4-", "N5-", and "N6-"; and those of the stakes south of the "O-" line were, from north to south, "S1-", "S2-", "S3-", "S4-", "S5-", and "S6-". The second part of the designations of the stakes directly north and south of the datum was "-O"; and those of the stakes directly east of the "-O" line were, from west to east, "-R1", "-R2", "-R3", "-R4", "-R5", "-R6", "-R7", "-R8", "-R9", and "-R10". (Thus, the stake located 10 feet due east of the datum point was designated "0-R1"; and the stake located 20 feet north of the "O-" line and 20 feet east of the "-O" line was designated "N2-R2".) The designation for the southeast stake of each square was used as the designation for that square.

After reestablishing the grid system with a transit, the sod was stripped from the site, and the earlier test trenches were relocated. In order to better understand the situation that would be encountered in further excavation, the earlier trenches were reopened at the points where they intersected foundation trenches of the building.

In examining the profiles of these test trenches three strata were clearly visible. These were, in order of depth: a 1- to 15-inch thick layer of apparently sterile red and yellow clay; a 6- to 16-inch thick layer of humus and ash, which contained innumerable brick fragments, other rubble, and artifacts, and which was from 30 to 42 inches thick in the wall trenches; and an underlying layer of apparently sterile dense brown clay, the depth of which was not determined. As expected, the situation which was exposed seemed to fit quite well with the inferences presented in the report on the exploratory excavations — that is, it appeared that the structure had been built of brick; that it had been destroyed by fire; that almost all of the usable brick had been salvaged; and that the remaining rubble had been purposely covered over with a thick mantle of clay, which is believed to have been added when the area was made a state park in order to hide the mound of rubble and to provide a smooth bed for seeding grass (Wilson 1966b: 8). However, in reopening, and probably slightly deepening the test trenches, a feature not mentioned in the original report (and presumably not encountered in the earlier excavations) was uncovered. This discovery occurred when part of the north-south trench, running from the north side of square S3-R7 to the south side of square S5-R7, was reopened in order to relocate the southwestern exterior wall trench; and it was discovered that the southeastern exterior wall trench — evidence for which had been located in square 0-R8 — extended south-southwestward into square S4-R7. Thus, it immediately became apparent that the building was larger than was originally believed and that the location of the southwestern exterior wall trench had not been found.
In order to locate this wall trench, a 30-inch wide test trench was cut from the north side of square S3-R6 south to the south side of square S4-R6. Initially this trench was cut through the two upper strata — the clay mantle and the rubble layer — and to a depth of 6 inches in the underlying clay.

By the time excavation of this trench reached the S3- line of stakes, it was obvious that the two clay strata were, as they had appeared to cursory examination, completely sterile; so excavation into the lower stratum was abandoned. Artifacts from this trench were bagged by square, by stratum, and by depth within the stratum. However, it became apparent before the trench was completed that this procedure was useless because all of the artifacts found were from one stratum and were thoroughly mixed throughout that stratum, presumably as the result of salvage of the brick from the ruins of the structure and of the leveling of the remaining rubble prior to the addition of the clay mantle. Therefore, this procedure was abandoned, and at the time of analysis these artifacts and all others recovered from the site were considered as a unit.

Following the completion of this trench, which resulted in exposure of the southwestern exterior wall trench and the southeastern corner of the building, the other three exterior corners of the structure were located by hand excavation. Then, because of the absence of true stratigraphy, the large amount of sterile overburden, and the impossibility of completely excavating the site by hand within the limitations imposed by time and budget, it was decided to employ mechanical equipment in order to recover further evidence regarding the architecture of the building. A small bulldozer was used for this purpose.

As the work progressed, a careful watch was kept for any artifacts that might be uncovered; and, insofar as possible, all artifacts, with the exception of small brick fragments, were recovered. When this process was completed, all of the clay mantle and part of the rubble had been removed. Most of the remaining rubble was then excavated by hand; however, it was not possible to remove all rubble from the wall trenches because of the height of the water table during the latter period of the excavation, when over seven inches of rain fell within eight days.

For the purpose of recording, the grid system, which had been partially destroyed by the bulldozer, was reestablished, and attempts were made to properly trowel the then exposed surface of the underlying clay. This proved impossible, but it did result in
exposing architectural features which protruded into the clay. These features were recorded by use of a transit and by triangulation.

Most of the artifacts were processed in the field, and preliminary analysis was begun there. As stated earlier, in the final laboratory analysis all of the materials recovered from the site were considered as a unit.
Establishment of the Bank of the State of Arkansas

In 1833, three years before Arkansas became a state, a bill to establish a territorial bank to be known as the "Bank of Arkansas" was discussed in the Territorial Council, but no official action was taken. Two years later a "...bill to establish the 'Union Bank of Arkansas' passed the Legislative Council by an almost unanimous vote". This bill specified that the "...proposed bank would have been capitalized at $2,000,000" (Worley 1964: 65). Although this bank had not been established when Arkansas applied for statehood in 1836, the State Constitution provided the foundation for state banking by specifying that:

The General Assembly may incorporate one State Bank, with such amount of capital as may be deemed necessary, and such number of branches as may be required for public convenience, which shall become the repository of the funds belonging to or under control of the State; and shall be required to loan them out throughout the State, and in each county, in proportion to representation. And they shall further have power to incorporate one other banking institution, calculated to aid and promote the great agricultural interests of the country; and the faith and credit of the State may be pledged to raise the funds necessary to carry into operation the two banks herein specified.... (Worley 1964: 65-66).

Charters for the two banks, the Real Estate Bank of the State of Arkansas and the Bank of the State of Arkansas, were soon drawn up. That for the latter provided for the establishment of the central bank at Little Rock and for branch banks at Fayetteville, Batesville, and Arkansas Post. It further specified that each bank was required to have at least $50,000 in legal coin before beginning operation. "The coin was to be derived from the distribution of...federal surplus revenue to the states, under an act of Congress, and from the sale of state bonds" (Worley 1964: 67).

The central bank at Little Rock opened August 15, 1837; the Fayetteville and Batesville branch banks, in January, 1838; and the Arkansas Post branch, on December 24, 1838. "Subsequently a fourth branch was established at Washington..." (Worley 1964: 67).
Opening of the Arkansas Post Branch of the Bank of the State of Arkansas

On January 19, 1838, the directors of the Arkansas Post branch of the State Bank, who had been appointed by the State legislature, met at Arkansas Post "...for the purpose of electing a cashier. Mr. Eugene Notrebe was elected to that post" (Bearss 1964: Part II, 272).

It was not, however, until December 24, 1838, that the Bank of the State of Arkansas announced that, as a branch of the Bank had been opened at Arkansas Post, "...all persons residing in that Bank District (which was composed of Arkansas, Chicot, Jefferson, Mississippi, Monroe, Phillips, and Union Counties), who are indebted to this institution...are hereby required to pay up two-thirds of the amount of their notes as they become due!" (Bearss 1964: Part II, 272).

Evidently the branch had assets of at least $75,000 when it opened, for according to the Arkansas Gazette of December 5, 1838, "...Jefferson, Monroe, Union, and Mississippi...(Counties were) each eligible to borrow $7,500, and Arkansas, Phillips, and Chicot, each eligible to borrow $15,000. Each county was to claim its share within thirty days" (Worley 1964: 68-69).

Although loans to individuals were limited to $10,000, the branch loaned some $60,000 on its opening day; and before it had been open for a month a total of $91,200 had been loaned.

Where the Post branch bank was housed at that time is not known.

Construction of the Arkansas Post Branch of the State Bank

On June 19, 1839, almost six months after the opening, the officials of the branch placed a notice in the Arkansas Gazette inviting proposals "...for building and finishing a Banking House of the following dimensions: -- 30 feet 8 inches wide, 60 feet 8 inches long including the projection of pilasters -- whole height of the walls 29 feet". Other than a statement that the "...material for the building, and the workmanship and finish of said Bank to be of the first order..." no building specifications were given; however, the notice did state that a "...plan of the building, with specifications for finishing the same, can be seen by application to the State Bank at Little Rock" (Bearss 1964: Part II, 272).

On April 4, 1840, Frederic and Felicite Notrebe sold an 80-foot wide lot to the State Bank as a site for the Arkansas Post branch bank.
Construction apparently began shortly thereafter, because on April 30, the branch’s cashier reported that the contractor had been advanced $1,697.01 for the material furnished (Bearss 1964: Part II, 273-274).

Although the date of completion is not known, it evidently was prior to February 1, 1841, for on that date the cashier’s report carried the notation, "To real estate (banking house) $15,761.29". As this figure was repeated on April 28, 1842, as "Real Estate for cost of Banking House, &c..." (Bearss 1964: Part II, 274), it evidently represents the total cost of the structure.

No photographs, sketches, or plans which are identified as being of the "Banking House" have been located to date; hence it cannot be described in any detail on the basis of historical documentation alone. There is, however, adequate historical evidence to indicate that it was a large two-story rectangular brick structure.

Since the buildings constructed to house the Fayetteville and Batesville branches of the State Bank are also known to have been large two-story brick structures (Worley 1964: 69, 71), which were probably also built from plans provided by the State Bank, it seems logical to assume that all of the branch banks were somewhat similar in appearance and construction. Thus, the following description of the branch bank at Fayetteville, which is taken from the Arkansas Gazette of June 19, 1839, may give some idea as to the appearance of the branch bank at Arkansas Post:

It is a superb building, both the outside and the interior... The banking room is large and splendidly furnished, and the semicircular counter is one of the best specimens of painting we have ever seen. It is done in a style to represent the grain of several kinds of wood, with a base of imitation marble. The wall has a heavy cornice of moulding, in plaster, with a beautiful ornament in the center of the ceiling. The doors are of handsomely finished wrought iron, with locks which would baffle the most expert burglar; and the vaults are massive and substantial, a sure defense against fire or robbery (Worley 1964: 69-70).

Closing of the Arkansas Post Bank

The Arkansas Legislature passed "...an act to place the Bank of the State of Arkansas in liquidation..." on January 31, 1843; and on June 15, the receivers named by the legislature announced that they had "...received possession of the property, assets, and effects of the Branch of the Bank of the State of Arkansas at (the Post of) Arkansas..." (Bearss 1964: Part II, 277).
Use of the Bank Building, 1843-1862

The only known documented reference to the bank building during the period from 1843 until 1863 is contained in an account of a visit to the Post in 1857. The author described the building as "'being of brick and not at that time being used for any purpose except holding elections and stabling horses'" (Bearss 1964: Part II, 277).

Further evidence suggesting that the bank building was little used during this period was obtained from an interview with Mr. Charley Morphis, a 68-year-old Arkansas County resident, who lived at Arkansas Post from 1915 until 1920. At that time there were still a few very old people residing in the area who had lived at Arkansas Post prior to the Civil War and who remembered the "old bank building" while it was still standing. These persons, who pointed to the brick and other rubble then on the site as the ruins of the building, never mentioned any other use for the structure.

A possible explanation for the lack of use of the building and for continued reference to it as a bank is that it may have remained in receivership for some 20 years following its closing. This possibility is suggested by the fact that financial matters connected with the Bank of the State of Arkansas were still unresolved in 1859, when they were investigated by a committee of the State legislature, and that they were, in fact, not resolved "...for another generation" (Worley 1964: 73).

Use of the Bank Building as a Confederate Hospital, 1862-1863

After 1857, no known historical documents contain references to the bank building by name. However, the historical and archeological information available strongly suggests that the structure was used as a hospital by the Confederates in 1862-1863 and that it was destroyed by Union artillery during the battle at the Post of Arkansas.

The Post of Arkansas (or Fort Hindman), described by Admiral David D. Porter of the United States Navy as "...a strong work of 11 guns and in a commanding position..." (Bearss 1964: Part III, Sheet 23), was built by the Confederate Army in 1862 to protect central and southern Arkansas. According to General Ulysses S. Grant, the fort was "...garrisoned by about five or six thousand men...", and about "...5,000 prisoners were captured" (Grant 1962: 155) when it fell on January 11, 1863, to Union forces under the command of General John A. McClellan and Admiral Porter. At first Grant regarded capture of the fort "...as an unnecessary side movement having no especial bearing upon the work before us (gaining complete control of the Mississippi River for the Union)..."; however, he later stated, "...when
the result was understood I regarded it as very important...(,for) five thousand Confederate troops left in the rear might have caused us much trouble and loss of property while navigating the Mississippi" (Grant 1962: 155).

According to the historians of the Forty-Second Ohio Infantry, the fort was "...built upon the site of an old Government trading post" (Bearss 1964: Part III, Sheet 24). The available historical evidence strongly suggests that this was true.

In 1805, when the government factory was established, there was already an army post at Arkansas Post. Without doubt this post was the former Fort Estevan de Arkansas, the fort built by the Spanish in 1796 and officially transferred to the United States in 1804.

Upon his arrival at Arkansas Post, the factor stored his goods at the "Garrison"; however, he soon leased a privately owned building to house the operation. This proved unsatisfactory, and in 1806 he began construction of a factory complex on the "...Publick Ground... nearly adjoining the Garrison, also on Publick Grounds.... (This he described as) a lot containing about fifty acres belonging to the United States. Two-thirds of which is a Bowling Green, and the remainder covered with a fine growth of Forest Trees!" (Bearss 1964: Part I, 16, 18).

Although the document transferring Fort Estevan to the United States did not mention the tract of land on which it was situated, it seems reasonable to assume that it had been "King's Land" and that, with the transfer, it became "Public Land". This assumption is strengthened by the fact that the tract of land labeled "Post of Arkansas" on W. Russell's 1820 land survey is identical to the tract designated "U.S. Government Reservation" on M. Maxwell's 1900 and 1907 surveys. It should be noted, however, that in actuality the "Reservation" was never as large as indicated on these surveys, for within the southern half of this tract a number of small plots had been granted to individuals by Spanish officials during the late 1790's.

Official military maps drawn in 1863 show the location of Fort Hindman (Post of Arkansas) as being quite near, if not within, the northern half of the tract designated "Post of Arkansas" or "U.S. Government Reservation" on the land surveys. This area, according to all available historical documentation, had not been developed and, for this reason, would have been a likely location for the construction of a fort. Thus, it seems almost certain that the historians of the Forty-Second Ohio were correct in connecting the trading post of 1805-1810 and the Confederate fort of 1862-1863.
That the fort was probably constructed on what had been Federally owned land may possibly be explained by the fact that the seceding states passed ordinances laying claim to United States property located within their boundaries, and that they, in turn, "...allowed the Confederate government whatever lands and property were necessary for military purposes" (Rogers 1934: 267-268). The Arkansas ordinance legalizing seizure of Federal lands was passed on May 6, 1861. Later that year "...the lands...and property at Fort Smith, the arsenal at Little Rock, and the hospital at Napoleon..." were transferred to the Confederacy (Rogers 1934: 268). It is not known, however, if a transfer of the Federal lands at Arkansas Post was ever made.

The Arkansas County land records indicate that the bank lot was located in the southern half of the tract labeled "Post of Arkansas" on Russell's land survey. However, since it is known to have been privately owned long before that time, it is assumed to have been one of the small plots granted by the Spanish officials during the late 1790's. Thus, the bank building, the largest and best constructed building at Arkansas Post, was very near to the actual "Federal Reservation" on which it is believed that the Confederate fort was located. Since the structure was little used at that time, it seems reasonable to assume that it would have been utilized by the Confederate Army. In fact, if the building were still in State ownership, the Arkansas legislature may well have transferred it to the Confederacy for military use.

Union Captain Julius Pitzman's map shows four buildings near, and to the west of, the fort, but does not describe them or note their use. Frank H. Mason, historian of the Forty-Second Ohio, mentions "...the large buildings at the rear (of the fort -- that is, away from the river, or to the west), which had been used as (Confederate) hospitals!" (Bearss 1964: Part III, Sheet 31). Captain Henry Fitton's map shows a "Brick Hospital" and two houses to the west of the fort. And Major General William T. Sherman's memoirs state, "Just outside the rebel parapet was a house which had been used as a hospital" (Sherman 1957: 302).

Other references to buildings used as Confederate hospitals are found in the accounts of the battle written by Confederate Colonel James Deshler and William Heartsill of the Texas Rangers and on the maps prepared by Lt. Col. A. Schwartz, Chief of Staff of the 13th Army Corps and Captain Sidney S. Lyon, Topographic Engineer of the 13th Army Corps.

Fitton's map, which is in part pictorial, contains sketches of eight buildings. Seven of these, three of which are located within the fort, bear the label "HOUSE". The eighth, shown as a two-story rectangular
structure which is considerably larger than the other buildings, is labeled "BRICK HOSPITAL FORMERLY STATE CAPITOL". That Fitton drew the "BRICK HOSPITAL" as being larger than the houses and made the error of labeling the building as having been "FORMERLY (the) STATE CAPITOL" seems to indicate that it was a large, rather imposing structure obviously built for public use rather than as a residence, store, or warehouse. Since the village of Arkansas Post was never the State Capital, and neither a Territorial Capital nor even a County Courthouse was constructed there, it seems almost certain that Fitton was referring to the bank building. The Bank was the only structure in the village which a person, who knew that Arkansas Post was once the Capital of Arkansas (Territory), might have believed to have been a capitol.

During the attack on Fort Hindman, January 11, 1863, the Confederate hospitals were shelled by Union gunboats. Mason of the Forty-Second Ohio stated, "By the unfortunate chance these buildings stood in direct range of the gunboats' shells which over-shot the Fort (the gunboats were on the Arkansas River east of the fort and the hospitals were to the west of the fort); they had been riddled and many of the wounded unintentionally killed" (Bearss 1964: Part III, Sheet 31). Deshler and Heartsill of the Texas Rangers also reported the shelling.

Heartsill's account tells of the destruction of one of the hospitals:

During the hottest part of the engagement, Boswell comes to where the horses are, from the Hospital, and reports that Doctor Burton has ordered all who are able to walk to make for a place of safety, as the Federals are NOT respecting our Hospital flag, and have fired three shots into the Hospital where Boswell was, killing two of our surgeons and a wounded man, who the surgeons were operating upon. A few moments and a tremendous volume of black smoke is seen boiling up; a moment of painful anxiety confirms our apprehensions; one of our Hospitals is on fire, by the bursting of a shell under it.... (Bearss 1964: Part III, Sheet 31).

That the bank building was the hospital destroyed by the shelling is suggested by Mr. Charley Morphis' statement that he had "always been told (by persons who lived at the Post during the Civil War) that the bank was destroyed during the battle" (Appendix III). General Sherman's account of spending the night following the battle in "...a house which had been used for a hospital" (Sherman 1957: 302) further suggests that the bank building had been destroyed; for it appears unlikely that he would have used the word "house" to indicate the Bank.
The most conclusive evidence, however, comes from the archeological excavation of the site. This evidence, a discussion of which follows, indicates that the bank building was used as a hospital, was shelled, and was destroyed by fire. Thus, there seems to be little question but that the bank building was the Confederate hospital destroyed during the attack on the Post of Arkansas.
Identification of the Site as the Location of the Bank

Prior to excavation, a small square stone column bearing the inscription "SITE OF THE STATE BANK AT ARKANSAS POST (,) ORGANIZED DEC. 16, 1837" stood near the center of the site. According to local informants, placement of this marker was based on oral tradition and on physical evidence, which consisted of a considerable amount of brick and other rubble that had remained on the site from the time of the building's destruction until after the establishment of Arkansas Post State Park in 1929. Following the park's establishment the usable brick was salvaged for use in the Arkansas Territorial Capital Restoration in Little Rock, the site was leveled and sodded, and the marker erected.

Further indications that this identification was correct were obtained from a study of the deeds recorded in the Arkansas County Courthouse (Bearss 1962), which suggested that the marker was situated on the lot purchased by the State Bank as a site for the Arkansas Post branch bank, and from the earlier test excavations at the site (Wilson 1966b: 7-9, Maps 4, 5), which showed that the width of the structure, 30'8", was the width specified in the June 19, 1839, invitation for bids.

Complete excavation of the structure uncovered wall trenches showing that the exterior dimensions of the structure were 30'8" by 60'8", precisely the measurements specified in the invitation for bids. These trenches were filled almost wholly with brick rubble, apparently indicating that the structure had been built of brick and that the usable brick had been salvaged.

The fact that this structure, like the Bank, was built of brick, the fact that it had the same dimensions as those specified for construction of the Bank, and the fact that oral tradition and written records identify the site as the location of the Bank very strongly suggest that the structure was the one built to house the Arkansas Post branch of the State Bank of Arkansas. Still further indications of the correctness of this identification are provided by the construction materials and building hardware recovered from the site, for all the materials in these categories were in common use at the time the Bank was built.
The construction materials recovered — common red brick, blue-gray glazed brick, cut stone, lime plaster, sawn timber, galvanized iron shingles, and copper flashing — were all in use prior to 1840, and, thus, might very likely have been used in a structure erected in 1840-1841. Most of these materials, however, are of little use for dating, as they, or very similar materials, are still in use today. Of them only two, galvanized iron shingles and common red brick of the modified English statute type, seem to be of any value in ascertaining the date of construction.

The date of the introduction of galvanized iron shingles is not known; however, it seems likely that they were commonly used by the late 1830's, for they were recovered from excavation of the Wheat Store at Fort Vancouver, Washington, a structure built in 1839 (Caywood 1955: 41). Thus, it is possible to state that the shingles from the Bank site could well date from the time of construction; and, based upon the historical evidence — which indicates that little, if any, change was made in the building at any time — it could be argued that the shingles likely date from that time. It should be noted, however, that galvanized iron shingles are of little value in establishing a cut-off date, for they were still in common usage at least as recently as 1931, as is evidenced by a discussion on their manufacture and application in the edition of The Building Estimator's Reference Book published that year (Walker, F., 1931: 1152-1154).

Common red brick of the modified English statute type (as defined in this paper) was apparently being made at least as early as the 1820's, for it was one of the types made by Jose Noriega, a Pensacola, Florida, brick manufacturer, whose firm was in operation from 1810 until 1830 (Lazarus 1965: 77). Manufacture of this brick type seems to have ended around 1880 with the increasing popularity of the standard common brick, the type most commonly used today. Thus, the modified English statute brick can probably be dated ca. 1820-1880. These dates, together with those for galvanized iron shingles, suggest that the building in question was erected at some time between the late 1830's and 1880.

Although the beginning date of this period barely precedes the dates indicated by historical sources for construction of the Bank, the 40-year-long period certainly cannot be said to effectively date its construction. A more meaningful dating is available, however, from the building hardware used in the construction.

The building hardware consists of: square cut nails, glass window panes, cast iron window weights, sash pulleys, strike-plates, butt hinges, H-hinges, flathead screws, studs, and spikes. All of these,
with the exception of the studs and spikes, were mass-produced factory products, which usually are of little value for archaeological dating, as many of them, or almost identical products, are still being made today.

This is certainly true of the cast iron window weights, the sash pulleys, and the H-hinges recovered from the site, since beginning dates for the use of these items cannot be ascertained, and they are still commonly used. It also applies to butt hinges, flathead screws, and strike-plates as far as end dates are concerned; however, for all three there is evidence concerning the beginning dates of their use. Butt hinges were definitely in use prior to 1840, as they were found at the Posey site, Oklahoma, which dates ca. 1823-1840 (Wyckoff and Barr 1968: 20); and it is possible they were in use during the earlier part of the Posey site occupation, for they were also recovered from Fort Lookout II, South Dakota, ca. 1831-1851 (Miller 1960: 77). Flathead or wood screws were not produced by machinery in the United States until 1834 (Cotter 1968: 75); hence it seems reasonable to assume that those recovered from the Bank site date from the latter half of the 1830's or later. Also likely dating from the late 1830's is one of the strike-plates from the site. It bears a patent date of June 10, 1837.

Although square cut nails and glass window pane fragments are normally considered to be about the most useless of all artifacts for dating purposes, those recovered from the Bank site apparently can be dated with a fair degree of accuracy.

The square cut nails were probably made during the period 1830-1855. The beginning date is based on the fact that all of the nails found had been cut and headed by machines that produced uniform heads, a process not perfected until ca. 1830 (Fontana and Greenleaf 1962: 54); and the ending date, on the fact that no wire nails, which were rather widely used in the United States by 1855 (Fontana and Greenleaf 1962: 54, 55), were found.

The fragments of glass window pane recovered from the site, all of which measure 3/64" or more in thickness, seem to indicate that the structure was probably built after 1840 and before 1845. This conclusion is based on a study of reports on a number of other historic sites where window glass was recovered. These reports indicate that 2/64"-thick glass window pane fragments are found only at sites occupied prior to 1840; 3/64"-thick fragments are found only at sites occupied before 1845; and no fragments thinner than 4/64" are found on sites dating after 1845.
Thus, the building hardware recovered from the site very strongly suggests that the structure was erected after 1837 and prior to 1845, a period very closely bracketing the known dates of the Bank’s construction, 1840-1841.

These dates, together with the other available evidence, leave no doubt but that the structural remains investigated were those of the Arkansas Post branch of the State Bank of Arkansas.

Archeological Evidence Pertaining to the Use of the Building as a Bank, 1841-1843

Other than the identification of the building as the one constructed to house the Arkansas Post Branch of the State Bank of Arkansas, there is no archeological evidence which would definitely indicate that it served as a bank. It should be noted, however, that the floor plan of the first story (discussed in a later section on archeological evidence pertaining to the architecture of the building) would have been well suited for a banking house. The first story apparently contained: a large room, approximately 27' 6" by 27', suitable for conducting public transactions; a small room, about 6' by 6' 2", with thick walls, which likely served as a vault; and two other rooms, one of which was probably an office and the other, a hallway.

Archeological Evidence of the Use of the Building during the Period, 1843-1862

As stated earlier, the only known reference to use of the building between 1843 and 1863 is contained in an account of a visit to Arkansas Post in 1857. The author of this account described the Bank building as "being of brick and not at that time being used for any purpose except holding elections and stabling horses!" (Bearss 1964: Part II, 277). The latter use is probably evidenced by the recovery of two harness rings and one harness buckle from the site.

Archeological Evidence of the Use of the Bank Building as a Confederate Hospital in 1862-1863

The discussion of the history of the structure built to house the Arkansas Post branch of the State Bank of Arkansas very strongly suggests that it served as a Confederate hospital during the period that the Confederate fort known as Arkansas Post, or Fort Hindman, was in existence. Archeological evidence corroborates this use.

The recovery of fragments from a cast iron cooking pot or frying pan, a cast iron tea kettle, a wooden water bucket, a wash basin, a water pitcher, 4 pressed glass vessels, at least 65 china ware vessels (Table 7), and 10 or more stone ware vessels, as well as a number
of bones representing food refuse, from the site gives adequate indication that the building served as a place where people lived, or at least ate, at some time during its existence. That this place was not a home or a restaurant is indicated by the fact that at least 49 different types (based on differences in wares and designs) of china ware are represented by the 65 china ware vessels (Table 6). Dating of this use as after 1850, and very likely after 1855, is also indicated by these materials, for among them were: numerous fragments of pressed glass, ironstone, and decalcomania decorated wares, none of which were widely used in the United States until after 1850; one vessel manufactured by an English firm that was established in 1853; and several fragments of a polychrome transfer printed vessel decorated with four colors, one of which was not used until 1852.

Other archeological materials from the site which confirm the post-1850 use of the structure are: an 1857 dime (Wilson 1966b: Fig. 26B); a terra cotta tobacco pipe representing Franklin Pierce, the fourteenth President of the United States, 1853-1857 (Wilson 1966b: Fig. 25B); and a large number of fragments from glass bottles, only a few of which have pontil marks, suggesting that they were made ca. 1860, the date after which pontil marks rarely occur. The dime and the Pierce effigy pipe may possibly be explained by the known use of the building as a stable and polling place in 1857. But the china ware, the crockery, the pressed glass, the food refuse, and the glass bottles cannot.

That adult males were living in the building is indicated by the recovery of a number of items which would have been used largely, if not wholly, by men -- items such as: shaving cream containers, tobacco pipes, suspender buckles, a scabbard tip, a rifle guard, a rod for cleaning guns, wine (and possibly liquor) bottles, dice (Wilson 1966b: Fig. 28B), and a marble (games in which marbles were used were then played primarily by young men). Taking into consideration the fact that no artifacts representing items which would have been used exclusively by women or children were recovered, it seems logical to infer that men were the only occupants of the structure.

The recovery of evidence for at least 60 medicine bottles of various types, the upper portion of a man's left femur, and the frame of a satchel of the type formerly used as a doctor's bag seem to indicate that the major post-1855 use of the building was connected with medical treatment. This, together with the evidence for food preparation and consumption, strongly suggests that the structure was used as a hospital; and the evidence indicating that the occupants were male further suggests that it was probably a military hospital.
This assumption is strengthened by the earlier presented historical evidence indicating that the structure was a Confederate hospital during, and probably before, the Union attack on the Post of Arkansas, or Fort Hindman. Further, and stronger, indications of the correctness of this identification come from the historical and archeological evidence of the building's destruction.

Archeological Evidence Regarding the Destruction of the Bank Building While It Served as a Confederate Hospital

The most detailed historical account of the destruction of one of the Confederate hospitals during the bombardment of the Post of Arkansas on January 11, 1863, is that written by William Heartsill of the Texas Rangers. Heartsill stated that: "During the hottest part of the engagement, ... the Federals ... fired three shots into the Hospital ... killing two ... surgeons and a wounded man. ... A few moments (after this was reported) ... a tremendous volume of black smoke (was) ... seen boiling up; ... one of our Hospitals (was) ... on fire, by the bursting of a shell under it" (Bearss 1964: Part III, Sheet 31).

Archeological evidence proves that the Bank building was destroyed in this manner:

(1) The large amount of ash, the few fragments of charred timber, the fragments of warped or melted glass and metal, and the discoloration of many of the china ware fragments due to heat definitely indicate that the structure burned and that the artifacts recovered from the site were in the building at the time that it burned.

(2) The discovery that some china ware sherds which were completely discolored by fire were from the same vessels as sherds that had sustained little or no damage, and that some badly warped fragments of glass were from the same bottles as relatively undamaged fragments strongly suggests that these items had been broken and scattered by considerable force during, or immediately before, the burning of the building.

(3) The finding of the upper portion of a man's left femur suggests either that a recently amputated leg had not been discarded at the time of the fire or that a man was killed during the fire or just prior to it.

(4) The recovery of three fragments from exploded artillery shells leaves little doubt as to the reason for the fire.
Because of the strength of the historical and archeological evidence indicating that the Bank building served as a military hospital, the archeological evidence indicating that it was destroyed by artillery fire, and the lack of historical evidence indicating that any other hospitals were destroyed by the Union bombardment, it seems almost certain that Heartsill's account of the destruction of a Confederate hospital deals with the destruction of the Bank building.
Fig. 2. Detail from Captain Henry Fitton's Map of Arkansas Post (pp. 20-23, 33-35, 39-42).
HISTORICAL INFORMATION REGARDING
THE ARCHITECTURE OF THE ARKANSAS POST BRANCH OF
THE BANK OF THE STATE OF ARKANSAS

Documentation

The historical documentation concerned with the architecture of the Bank building is limited to: the invitation for bids carried in the Arkansas Gazette on June 19, 1839; the brief account of an anonymous author who visited Arkansas Post in 1857; Captain Henry Fitton's pictorial map, entitled "Plan of the Battle of Arkansas Post Fought Sunday, January 11, 1863"; and the 1968 interview with Mr. Charley Morphis, which was concerned with oral tradition regarding the structure.

Exterior Appearance of the Bank Building

The invitation for bids specified that the "Banking House" would have the following dimensions: width, 30 feet 8 inches; length, 60 feet 8 inches, including the projection of pilasters; and height, 29 feet. It did not contain any reference to the materials to be used in the construction of the building, except the statement that the "'...material for the building, and the workmanship and finish ...(are) to be of the first order...'") (Bearss 1964: Part II, 272). However, the mention of projecting pilasters suggests that the detailed plans for the building may have specified that they would be of a material different from that used for the exterior walls. Mention of the pilasters also suggests that the structure may have been built in the Greek Revival style, which was by far the most popular architectural style in the South at the time of the building's construction.

The account of the anonymous author, who visited Arkansas Post in 1857, described the building as "'...being of brick...'") (Bearss 1964: Part II, 277). However, it provided no further information concerning the architecture of the building.

Because the sketch of the Bank building on Captain Fitton's map was rather crudely drawn, its accuracy is, at best, questionable. Nevertheless, since it is the only known pictorial representation of the building, the information that can be derived from it is of considerable importance.

In the Fitton sketch, the building is shown as a two-story rectangular structure with a gable roof and as being of a much larger size than any of the others in the village. Although it is drawn as a
very plain structure without pilasters or other ornamentation, its
appearance must have been such that it was recognizable as a public
building of the period, for it was labeled as "BRICK HOSPITAL
FORMERLY STATE CAPITOL".

Two sides of the building are shown in the drawing. One of these
has a gable; the other, a horizontal eave line. The side with the
horizontal eave is almost twice the length of the gable side -- it
measures approximately 30/64", whereas the gable measures only
16/64". The height of the walls to the horizontal eave line is
15/16". Based on the cardinal points given on the map, it appears
that the longer side of the building faced in a northwesterly
direction, and the shorter, in a northeasterly direction.

The side facing in a northwesterly direction is drawn as having nine
windows and a door. Six of these windows, which appear to be more
or less equally spaced along the wall, are on the second story of
the building; and the other three and the door are on the first
story. Each of the latter appears to be directly under one of the
former, with the most northerly of the first floor windows being
directly under the most northerly of the second floor windows, the
door being under the third window from the north, and the third and
fourth windows being respectively under the fourth and sixth windows.

The northeastern, or gable, side of the structure is drawn as having
six windows and a large door. One of the windows and the door are
on the first story; four, which appear to be equally spaced along
the wall, are on the second story; and one is in the gable, or attic.
The latter window appears to be centered in the gable above the
space between the two center windows on the second floor; and the
large door on the first floor appears to be directly beneath these
windows. The first floor window is directly beneath the northern­
most of the second floor windows.

With the exception of Fitton's incorrect assumption that the build­
ing had been used as a capitol, the comparable information contained
in the above documents is in agreement. The invitation for bids and
the Fitton sketch indicate that: the Bank was a large two-story
rectangular structure; two sides of the building were almost twice
as long as the other two; and the height of the structure from the
ground to the horizontal eave line was almost equal to the width of
the shorter sides.

Although the invitation for bids did not specify the construction
materials to be used, both the 1857 description and the label for the
building on the Fitton map indicate that it was built of brick. This
is further corroborated by Mr. Charley Morphis' statement that the
"...old people said...it was a big brick building..." and by the archeological evidence obtained from excavation of the site.

None of the above documents, with the exception of the invitation for bids, refer to the use of pilasters; and none of them, including the invitation, contain any reference to the material used for the pilasters and other ornamentation. Archeological evidence indicates that cut stone trim was used on the building, but it does not indicate how it was used.

The archeological evidence also indicates that the Fitton map was correct in showing the directional orientation of the building and that the placement of windows and doors in his sketch of the structure would not be in disagreement with the floor plan of the first story.
EAST-WEST PROFILE
OO LINE
ARKANSAS POST BRANCH
OF THE
BANK OF THE STATE OF
ARKANSAS
Fig. 5. Conjectural Drawing of the Northwest Elevation of the Bank Building (pp. 33-42).
ARCHEOLOGICAL EVIDENCE REGARDING
THE ARCHITECTURE OF THE ARKANSAS POST BRANCH
OF THE BANK OF THE STATE OF ARKANSAS

Dimensions, Orientation, and Exterior Appearance of the Bank Building

Although the salvage of usable construction materials from the ruins of the Bank had been so thorough that only three bricks which had been used in the foundations of the walls were found in situ, it was obvious that the structure had been built primarily of brick, for most of the foot or more of rubble covering the site and of the two to three feet of rubble filling the foundation trenches were made up of brick fragments. Because the foundation trenches were filled with broken brick and other rubble, they were readily discernible from the dense clay into which they had been dug. Thus, simply by clearing the rubble from the trenches and plotting their outlines, the directional orientation of the building, its dimensions, and the basic floor plan of the first story could be easily determined.

The outline of the trenches showed that the building was a large rectangular structure of precisely the same exterior dimensions, 30' 8" by 60' 8", as those specified in the invitation for bids. As mentioned earlier, these dimensions are proportionally very similar to those of the two sides of the building as shown in Fitton's sketch.

The outline also indicates that the building was placed in such a way that the two longer walls were oriented roughly northwest-southeast, and the shorter walls, northeast-southwest. This orientation is in agreement with that shown on the Fitton map.

The above-mentioned evidence indicating that the structure was built primarily of brick corroborates the statements on construction material contained in the account of the 1857 visit, the Fitton map, and the Morphis interview. As almost all of the brick fragments on the site were common red kiln fired brick, it seems almost certain that the exterior walls of the structure were built of common red brick. Thus, it seems likely that the few fragments of blue-gray glazed brick found on the site were from bricks which had been used for trim of some sort, perhaps as facing for the fireplaces.

Recovery of a number of fragmentary pieces of cut stone strongly suggests that stone was also used for trim, as the sills, lintels, and copings of brick buildings of the period were frequently of stone. It also suggests the possibility that the pilasters mentioned in the invitation for bids may have been of stone.
That the roof was of galvanized iron shingles seems to be definitely indicated by the large number of whole shingles and shingle fragments recovered from the site; and the number of fragments of copper sheeting found there is believed to indicate that this material was used for flashing and counter flashing.

Thus, based on historic and archeological evidence, the Bank can be described as having been a large two-story rectangular structure which was built of common red brick, trimmed with cut stone, and covered with a galvanized iron shingle roof. Further, and more detailed, information regarding the construction materials and building hardware used in the building is contained in Appendix I.

Floor Plan of the First Story

Interior foundation trenches divided the approximately 56' 8" by 27' space enclosed by the interior walls of the exterior foundation trenches into four parts. Since it seems probable that the foundations once supported walls, it is likely that, at least for the first story, each of the divisions represented a walled compartment or room. The dimensions of these rooms (measured from the interior faces of the foundation trenches) were: 27' 6" by 27'; 6' 2" by 6'; 17' 6" by 27', less an area of 9' 6" by 9' 3"; and 7' 10" by 27'. All of these rooms, with the exception of the smallest, extended the full width of the structure.

The largest of the rooms, 27' 6" by 27', took up almost all of the northeastern half of the first story. It, thus, had one interior wall, the southwestern wall, and three exterior walls, the northwestern, the northeastern, and the southeastern walls. If Fitton's sketch of the building is correct in regard to the placement of windows and doors, the northeastern wall of this room contained one window and one door. The latter was likely a double door, as it appears twice the width of the door in the northwestern wall. There is, of course, no way to determine the number of windows and/or doors in the southeastern exterior wall or the number of doors in the southwestern, or interior, wall. It is assumed, however, that there was at least one door and, quite possibly, two or more doors in the southwestern wall, as two rooms adjoined this room on the southwest and, thus, shared this wall. This door, or these doors, had to be placed near one, or both, of the ends of the wall, because a fireplace, some 7' 6" to 8' in width, took up the central portion of the wall. Due to the size of this room and the large double door in the northeastern exterior wall, it seems logical to assume that this was the room used for conducting the public business of the Bank. Because of this, it seems logical to assume that the double door was the main entrance to the structure and that the northeastern side of the building was considered the front.
Except for some idea of the floor plan and for evidence from which it may be inferred that the banking room was plastered, probably had wooden doors, and had a fireplace which may have been faced with blue-gray glazed brick, nothing is known of its appearance. However, the Arkansas Gazette description of the banking room in the Fayetteville branch of the State Bank (which is quoted on page 19) gives at least an indication of the appearance of a closely related structure.

The two rooms adjoining the banking room on the southwest measure 6' 2" by 6' and 17' 6" by 27', less an area of 9' 6" by 9' 3" (this area contains the smaller room). Because of the size of the smaller room and the thickness of the foundation trenches (and presumably of the walls) surrounding it, it seems probable that it served as the Bank vault. If this assumption is correct, it is likely that the room had one door and no windows. The door could well have been located in any of the three interior walls of the room, as it shares two walls with the larger room and one wall with the banking room. If, as tradition indicates, the large metal door now in the possession of the Arkansas Post County Museum, Arkansas County, Arkansas, is from the Bank, it probably once served as the door of the vault.

The larger room was probably an office. Based on the Fitton drawing, it had one window in the northwestern wall. It may also have had a window or a door in the southeastern exterior wall; however, there is no evidence to indicate whether it did or did not. Although there is also no evidence pertaining to the number of doors in the interior walls, it is believed that there must have been two or more doors in this room, because it adjoined the banking room on the northeast and another room on the southwest. No reasonable conjecture can be made concerning the location of the door or doors in the southwestern wall. However, it can reasonably be assumed that the door to the banking room was located at the northern end of the northeastern wall, for other than in that location the office and the banking room were separated by the vault and by a 7' 6" wide fireplace. This fireplace and that in the banking room were back-to-back and presumably shared the same chimney.

The room to the southwest of the presumed office was rather long, 27', and narrow, 7' 10". Because of its size and shape, it is believed to have been a hallway. Adjacent to the outer wall of the exterior foundation trench bounding the southeast side of this room were found two short (1' 8") foundations -- one-brick wide (lengthwise) and two-bricks high -- placed approximately 3' 10" apart. These appear to indicate that there was an exterior door in that location. The Fitton sketch shows a window in the opposite, or northwest, wall;
and it is assumed that there were also windows and, perhaps, a door or doors in the southwestern wall, although there is no evidence to suggest this other than the finding in this area of several large fragments of cut stone trim, such as might have been used for sills and/or lintels. Since the Bank is known to have been a two-story structure, it is assumed that the stairway was located in this hallway. There is, however, no evidence that would indicate its approximate location within the hallway.

Floor Plan of the Second Story

Except for the Fitton sketch, which shows ten windows on the second story of the building (six of which were along the northwestern wall and four of which were along the northeastern wall), there is no historical or archeological evidence pertaining to the architecture of the second story. However, based upon a limited knowledge of other public buildings of the period, it seems likely that most, if not all, of the walls of the second story would have been located directly above the walls of the first story.
The Arkansas Post Branch of the Bank of the State of Arkansas opened on December 24, 1838. Although it has not been possible to determine where it was housed at that time, presumably it was located within the village of Arkansas Post.

Almost six months after the opening, officials of the bank placed a notice in the Arkansas Gazette inviting proposals for the building of a Banking House. It was not, however, until April 4, 1840, that a lot was purchased as a site for the structure. Construction apparently began shortly thereafter, and the building was evidently completed prior to February 1, 1841.

Based on the available historical and archeological evidence, it may be definitely stated that the Banking House was a large two-story rectangular brick structure which was trimmed with cut stone and roofed with galvanized iron shingles. On the basis of this evidence, it is also possible to make a number of inferences concerning the appearance and the floor plan of the building.

The Bank of the State of Arkansas was placed in liquidation by an act of the Arkansas Legislature, passed on January 31, 1843; and on June 15 of that year the receivers named by the Legislature announced that they had received possession of the property, assets, and effects of the Arkansas Post Branch of the Bank. It appears likely that the building remained in receivership from that time until after the beginning of the Civil War, for the financial problems resulting from the mismanagement of the State Bank remained unresolved until well after the end of the War. That the only reference to the Bank building during that period, an account written in 1857 indicating that it was then used only for holding elections and stabling horses, adds credence to this inference.

No known historical documents written after 1857 contain references to the Bank building by that name. However, on the basis of historical and archeological evidence, it seems almost certain that the structure was used as a hospital by the Confederate Army in 1862-1863, and that it was destroyed by Union artillery during the battle which occurred at the Post of Arkansas on January 11, 1863.
APPENDIX I

ARTIFACTS RECOVERED FROM EXCAVATION OF THE BANK SITE

Following are descriptions of the artifacts recovered from excava­
tion of the site of the building which served as the Arkansas Post
branch of the Bank of Arkansas from 1841 to 1843 and is believed to
have been used as a Confederate hospital during the Union attack on
the Post of Arkansas in 1863. These descriptions have been grouped
according to presumed use rather than according to the materials
from which they were made in the belief that such a breakdown more
clearly reflects the history and use of the building.

Insofar as possible, the discussion of each artifact, or class of
artifacts, includes: identification, description, number of frag­
ments found and number of specimens represented, material from which
each is made, shape and design, size or dimensions, decoration and
marks, notes on comparable specimens, and approximate date of manu­
facture. This has been done in the hope that these descriptions
will not only be useful in preparing exhibits relating to the site
but will also be helpful to archeologists investigating historical
sites built or occupied during the mid-19th century.
Fig. 6. Brick Recovered from Excavation of the Bank.
Top and center: common red brick (pp. 47-52, 54).
Bottom: glazed brick (pp. 52-53, 55).
CONSTRUCTION MATERIALS

BRICK

Common Red Brick, Kiln-Fired

Number of Specimens: 45 complete specimens and numerous fragments.

Description: Soft, red-orange, kiln-fired brick of two sizes:
(1) Standard common brick, 8" long x 2 1/4" thick x 3 3/4" wide.
(2) Modified English statute brick, 8 1/2" long x 2 1/4" thick x 4" wide.

Taking into account a possible variation of 1/4" in any dimension, adopted to allow for differences resulting from uneven firing, 20 of the 45 bricks are standard common; 16 are modified English statute; 8 are classifiable as either type as they fall in the overlap created by allowances in variation; and 1 does not fit either classification.

Discussion: In the excavation of the Arkansas Post branch of the Bank of Arkansas, two sizes of common red brick were found. These are the present-day "standard common brick", defined by the Common Brick Manufacturers Association as being 8" x 2 1/4" x 3 3/4", and the "modified English statute brick", established for purposes of this study and defined as being 8 1/2" x 2 1/4" x 3 3/4". The latter type has been so named because it apparently is a modification of the "...eighteenth century English statute brick... (which measured) 8 1/2 by 4 by 2 1/2 inches..." (South 1964: 69).

As late as 1931, builders were told that the dimensions of a standard common brick would "...vary from 1/8" to 3/16"... depending upon the burning" (Walker, F., 1931: 480). Thus, at that time, a standard common brick might have varied from 7 13/16" x 2 1/16" x 3 9/16" to 8 3/16" x 2 7/16" x 3 15/16" in size; and "...not all manufacturers...(had) changed their molds to this size" (Walker, F., 1931: 481). Since firing techniques are known to have been greatly improved during the 1840-1931 period, an allowable variance of 1/4" in all dimensions (1/16" above the 1931 allowable variance) has been adopted for classification of the bricks from the bank site. (All brick falling between 7 3/4" x 2" x 3 1/2" and 8 1/4" x 2 1/4"
x 4" are classified as standard common; and all between
8 1/4" x 2" x 3 3/4" and 8 3/4" x 2 1/2" x 4 1/4", as modified
English statute.)

Of the 45 common red bricks recovered from the bank site,
20 are definitely of the standard common brick variety.
Nine of these are 8" x 2 1/4" x 3 3/4", exactly the dimen­sions specified for the type; and the 11 others, which
average 7 31/32" x 2 5/16" x 3 13/16", are within the
allowable 1/4" variation.

Sixteen of the bricks from the bank site are definitely of
the modified English statute type. Six of these measure 8 1/2"
 x 2 1/4" x 4" and thus precisely meet the type definition;
the other 11, which average 8 1/4" x 2 11/32" x 3 31/32", are
within the allowable 1/4" variation from the ideal. (Two
of these bricks, incidentally, are precisely the dimensions
of the 18th century English statute brick, 8 1/4" x 2 3/8" x 4").

Eight bricks, averaging 8 1/4" x 2 3/8" x 3 7/8", could be
classified as either standard common or modified English
statute bricks, as they fall within the overlapping varia­tions of the two types. It may be that they represent a
third type, and it is, of course, possible that all 45 bricks
may be of the same type and that the differences in size re­sult from the firing techniques used. Both seem unlikely,
however, because 80% of the bricks definitely fall within
one or the other of the two types -- 44% within the standard
common and 36% within the modified English statute -- and
98% of the bricks within the size limits of the two combined.
Although the decision is an arbitrary one, it seems most
reasonable to classify these 8 bricks as modified English
statute -- all of them and 2 of the bricks already classed as
modified English statute are 8 1/4" in length, whereas none
of the bricks definitely falling in the standard common
category are over 8" in length.

One brick, which measures 8" x 2 3/4" x 4", cannot be placed
in either category, but is more similar to the standard common
and probably should be classified as such.

Comparison: Three common red kiln-fired bricks recovered from
excavation of another Arkansas Post structure, which is
believed to have belonged to Colonel Frederic Notrebe and to
have been built between 1825 and 1835 (Wilson 1966b: 3),
are identical to bricks from the Bank site in size, composition, and color. Two of the Warehouse site bricks measure 8 3/16" x 2 1/16" x 3 3/4" and 8" x 2" x 3 3/4" and thus definitely fall within the standard common type. The third, which measures 8 1/4" x 2" x 3 13/16", falls within the overlap of standard common and modified English statute bricks.

The identical nature of the bricks from the Bank and the gin suggests that they were likely made by the same manufacturer. That these structures are believed to have been built some 14 years apart further suggests that the brick was probably made locally, a suggestion made more credible by a legend on Father Edmond Saulnier's 1832 map of the Post of Arkansas, indicating that a brick maker and a brick yard ("faiseur de brique et de briqueterie") were then located in the village (Bearss 1964: Illustration). It is, of course, possible that the bricks were manufactured elsewhere in the then United States or that they may have been imported, as were the English-made bricks in the bottom courses of Old Christ Church, Pensacola, Florida, which was constructed during 1830-1832 (Lazarus 1965: 75, 78). It should be noted, however, that the bricks from the church do not fall within either of the brick types found at Arkansas Post.

During the period from 1807 until 1878, several Pensacola, Florida, manufacturers produced bricks that would fall within the standard common or modified English statute categories. Jose Noriega, whose firm operated from 1810 until 1830, manufactured bricks which measured 8 1/4" x 2 1/8" x 4 1/4" and thus would be classified as modified English statute. One of the three sizes of brick produced by James Gonzalez, 1838-1877, measured 8 3/4" x 2 3/8" x 4 1/4", also falling into this category. Marianna Bonifay, 1807-1860, made bricks of two sizes, one of which had dimensions of 8 1/8" x 2 1/4" x 4 1/4", thus falling into the standard common category. Also of the standard common type were the 7 3/4" x 2 3/8" x 4" bricks recovered from a walk laid in 1878. American manufactured brick from the upper courses of Old Christ Church, which was built in 1832, measure 8 1/4" x 2 1/4" x 4" and thus fit within the overlap of standard common and modified English statute bricks (Lazarus 1965: 75, 77, 78).

Common red bricks, measuring from 8 1/4" x 2" x 3 3/4" to 8 3/8" x 2 1/4" x 4 1/8", were found at the site of Fort Pierre II, South Dakota (Smith 1960a: 131); and common, red, yellow, and gray bricks, measuring from 8" x 2 1/4" x 3 3/4"
to 8 1/4" x 2 1/4" x 4", were recovered from the site of Fort Stevenson, North Dakota (Smith 1960b: 215). These bricks would fall into the Arkansas Post types, but they date considerably later, probably from the 1860's. Some of them are definitely known to have been manufactured by a St. Louis firm established in 1857 (Smith 1960b: 215).

**Dating:** No basic changes in the proportions of bricks have occurred since they were first made in the Indus Valley some 4,300 years ago. The 1:2:4 (thickness:width:length) modular concept used at Mohenjo-daro is still in use today. Because modern masonry walls contain more mortar between individual bricks, there has been a slight modification of the relationship between width and length to allow for this; and the length of modern brick is usually close to the sum of two widths plus one-half inch for mortar (Lazarus 1965: 69-73). The modern American standard common brick, which measures 8" x 2 1/4" x 3 3/4" (8" = 3 3/4" + 3 3/4" + 1/8"), is an excellent example.

Surprisingly enough, the standard common brick of today is not drastically removed in size from one of the two sizes used at Mohenjo-daro, 9 3/16" x 2 3/16" x 4 1/8". Even more similar are some American-made bricks from the 17th century (Jamestown, 9" x 2 1/4" x 4 3/8"), the 18th century (Williamsburg, 9" x 2 1/4" x 4 1/4"; Fort George, 9 1/4" x 2 1/4" x 4 1/4"), and the first half of the 19th century (M. Bonifay-Pensacola, 9" x 2 1/2" x 4 1/4"; Fort Pickins, 9 1/4" x 2 1/2" x 4"; J. Gonzalez-Pensacola, 9 1/8" x 2 3/8" x 4 1/4") (South, 1964: 73; Lazarus 1965: 75). In fact, all of these bricks, with the exception of the standard common, would fall into a hypothetical brick type measuring 9" x 2 1/4" x 4 1/4", provided an allowable variation of 1/4" was adopted to compensate for differences in firing.

Complicating still further the problem of dating bricks are the following:

1. The various nations of the world produced bricks of different sizes or types -- Spanish brick, for example, was not as thick as British brick of the same period. This problem is ignored in this study because the American brick-making tradition appears to have developed primarily from the British tradition.
(2) Apparently at no time or place was only one size or type of brick in use. For example, the brick from 18th century Brunswick Town came in two sizes, 9" x 2 5/8" x 4 1/8" and 7 1/2" x 1 3/8" x 3 1/8", neither of which was the 18th century English statute brick, 8 1/2" x 2 1/2" x 4" (South 1964: 69, 73).

(3) Individual bricks of the same type or size from the same kiln vary somewhat in dimensions because of differences in firing.

Because of these complicating factors, historic sites archeologists consider the size of brick to be "...generally an invalid tool for dating" (South 1964: 73). There seems to be no reason to question this conclusion; but there apparently is, at least, some general information on dating to be gained from the study of bricks.

The "small" brick from 17th century Jamestown measured 8 1/2" x 1 7/8" x 4 1/8" (South 1964: 73); and thus in length and width, although not in thickness, would fit into the modified English statute category of bricks. However, none of the bricks reported from definitely dated 18th century sites fall within either this category or the standard common category. All 18th century brick, with the exception of the Brunswick Town small (7 1/2" x 1 3/8" x 3 1/8") brick, measure 9" or more in length (Lazarus 1965: 75; South 1964: 73).

Not until the early 19th century, with brick manufacturers such as M. Bonifay (1807-1860) and J. Noriega (1810-1830), do modified English statute and standard common bricks appear; and it is not until 1832 that they appear in a definitely dated structure, Old Christ Church, Pensacola. Bricks of these types had apparently become quite common by the mid-19th century; and, as mentioned earlier, the standard common type is the most widely used type today. It should be noted, however, that the larger, longer bricks so common in the 18th century continued to be made at least until the 1860's, as is evidenced by the 9" x 2 1/2" x 4 1/4" bricks used in the construction of Fort Jefferson, 1857-1860.

Based on the foregoing information and a limited number of historic sites archeology reports that deal with brick, the following appears to be a generalized picture of the sequential changes in the size of American-made brick:
The manufacture of brick measuring from 9" to 9 1/4" in length, 2 3/8" to 2 5/8" in thickness, and 4" to 4 1/2" in width began in America during the 17th century and continued until the 1860's.

The manufacture of two smaller sizes of brick -- the modified English statute (8 1/2" x 2 1/4" x 3 3/4") and the standard common (8" x 2 1/4" x 3 3/4") -- began in the early 1800's, became widespread by mid-century, and replaced the earlier brick tradition by the 1860's.

Gradually the standard common became more popular, and apparently it had replaced the modified English statute brick by the 1880's.

Although various sizes of brick remained in use, the Common Brick Manufacturers Association adopted the standard common brick as the standard size for American brick prior to the 1930's.

On the basis of this sequence, the bricks from Arkansas Post would be dated as being from a time period beginning in the early 1800's and extending to about 1880. Such dating is, of course, not necessary because the bricks are from structures which historic evidence indicates were built in 1826 and 1840; but it does offer some corroboration of the historic sources.

Glazed Brick, Kiln-Fired

Number of Specimens: 36 fragments, 10 of which are measurable in one or more dimensions.

Description: Hard, red-brown, kiln-fired brick with a shiny blue-gray glaze. They are apparently of one size, measuring about 8 1/4" x 2 1/4" x 3 7/8". It should be noted, however, that the length is based on the normal relationship of width to length (the sum of two widths, 7 3/4" + 3 7/8" + 3 7/8", plus 1/2" allowance for mortar equaling the length, 8 1/4") and that only two fragments were large enough for the width to be measured.

Discussion: The size of these bricks apparently falls within the overlap of standard common and modified English statute brick.
Comparison: One fragment of glazed brick recovered from excavation of the site of Notrebe's Cotton Gin (Wilson 1966b: 3) is identical to the glazed bricks from the bank site in composition and color. However, it apparently varied in size, for it was only 1 15/16" in thickness, 5/16" thinner than the average of the glazed brick from the Bank.

References to similar bricks have not been found in reports on historic sites archeology.

Dating: As historic evidence indicates that construction of the Bank began in 1840, it seems almost certain that the brick dates from very near that time.
TABLE 1: BRICKS

COMMON RED BRICKS: 45 Complete Bricks of Two Types

20 Standard Common Bricks (8" x 2 1/4" x 3 3/4")
9 are the exact dimensions of the type.
11 are within 1/4" of the type dimensions. They measure:

<table>
<thead>
<tr>
<th>No.</th>
<th>Length</th>
<th>Thickness</th>
<th>Width</th>
<th>No.</th>
<th>Length</th>
<th>Thickness</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>8</td>
<td>2</td>
<td>3 3/4</td>
<td>7.</td>
<td>8</td>
<td>2 1/4</td>
<td>3 3/4</td>
</tr>
<tr>
<td>2.</td>
<td>8</td>
<td>2 1/4</td>
<td>3 3/4</td>
<td>8.</td>
<td>8</td>
<td>2</td>
<td>3 3/4</td>
</tr>
<tr>
<td>3.</td>
<td>8</td>
<td>2 1/4</td>
<td>4</td>
<td>9.</td>
<td>8</td>
<td>2 1/4</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>7 3/4</td>
<td>2 1/4</td>
<td>3 3/4</td>
<td>10.</td>
<td>8</td>
<td>2 1/4</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>8</td>
<td>3 3/4</td>
<td></td>
<td>11.</td>
<td>8</td>
<td>2 1/4</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>8</td>
<td>2 1/4</td>
<td>3 3/4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average: 7 31/32" 2 5/16" 3 13/16"

16 Modified English Statute Bricks (8 1/2" x 2 1/4" x 4")
5 are the exact dimensions of the type.
11 are within 1/4" of the type dimensions. They measure:

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<tr>
<th>No.</th>
<th>Length</th>
<th>Thickness</th>
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<th>No.</th>
<th>Length</th>
<th>Thickness</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>8 1/2</td>
<td>2 1/4</td>
<td>3 3/4</td>
<td>7.</td>
<td>8 1/2</td>
<td>2 1/4</td>
<td>3 3/4</td>
</tr>
<tr>
<td>2.</td>
<td>8 3/4</td>
<td>2 1/4</td>
<td>3 3/4</td>
<td>8.</td>
<td>8 1/2</td>
<td>2 1/4</td>
<td>4 1/4</td>
</tr>
<tr>
<td>3.</td>
<td>8 1/2</td>
<td>2 1/4</td>
<td>4</td>
<td>9.</td>
<td>8 1/4</td>
<td>2 1/4</td>
<td>4 1/4</td>
</tr>
<tr>
<td>4.</td>
<td>8 1/2</td>
<td>2 1/4</td>
<td>4</td>
<td>10.</td>
<td>8 3/4</td>
<td>2 3/8</td>
<td>4 1/8</td>
</tr>
<tr>
<td>5.</td>
<td>8 1/2</td>
<td>2 3/8</td>
<td>4</td>
<td>11.</td>
<td>8 1/4</td>
<td>2 5/16</td>
<td>4 1/4</td>
</tr>
<tr>
<td>6.</td>
<td>8 1/2</td>
<td>2 1/4</td>
<td>3 3/4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average: 8 1/2" 2 11/32" 3 31/32"

9 Others
8 fall into either type because of the overlap between them.*
They measure:

<table>
<thead>
<tr>
<th>No.</th>
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<th>Width</th>
<th>No.</th>
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<td>8 1/4</td>
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<td>3 3/4</td>
<td>6.</td>
<td>8 1/4</td>
<td>2 1/4</td>
<td>3 3/4</td>
</tr>
<tr>
<td>2.</td>
<td>8 1/4</td>
<td>2 1/4</td>
<td>4</td>
<td>7.</td>
<td>8 1/4</td>
<td>2 1/4</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
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<td>2 1/4</td>
<td>4</td>
<td>8.</td>
<td>8 1/4</td>
<td>2 1/4</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>8 1/4</td>
<td>2 1/4</td>
<td>3 3/4</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>8 1/4</td>
<td>2 1/4</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average: 8 1/4" 2 3/8" 3 7/8"
1 does not fall into either type.** It measures 8" x 2 3/4" x 4".

*These 8 bricks should probably be classified as modified English statute.
**This brick should probably be classified as standard common.
(TABLE 1, Continued)

BLUE-GRAY GLAZED BRICK

10 Measurable Fragments (measuring about 8 1/4" x 2 1/4" x 3 7/8")*

The individual fragments measure:

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<th>No.</th>
<th>Length</th>
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<th>No.</th>
<th>Length</th>
<th>Thickness</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>--</td>
<td>2 1/4</td>
<td>3 7/8</td>
<td>7.</td>
<td>--</td>
<td>2 1/4</td>
<td>--</td>
</tr>
<tr>
<td>2.</td>
<td>--</td>
<td>2 3/16</td>
<td>3 7/8</td>
<td>8.</td>
<td>--</td>
<td>2 1/4</td>
<td>--</td>
</tr>
<tr>
<td>3.</td>
<td>--</td>
<td>2 1/4</td>
<td>--</td>
<td>9.</td>
<td>--</td>
<td>2 3/16</td>
<td>--</td>
</tr>
<tr>
<td>4.</td>
<td>--</td>
<td>2 1/4</td>
<td>--</td>
<td>10.</td>
<td>--</td>
<td>2 6/16</td>
<td>--</td>
</tr>
<tr>
<td>5.</td>
<td>--</td>
<td>2 3/16</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>--</td>
<td>2 1/4</td>
<td>--</td>
<td></td>
<td></td>
<td>Average: 2 1/4&quot;</td>
<td>3 7/8&quot;</td>
</tr>
</tbody>
</table>

*Length based on normal relationship of width to length (the sum of two widths plus 1/2" allowance for mortar equaling the length -- 3 7/8" + 3 7/8" + 1/2" = 8 1/4").
Galvanized Iron Shingles

Number of Specimens: 9 complete, or almost complete, specimens and innumerable fragments.

Description: Interlocking shingles averaging 9" x 12 5/8" made from 10" x 14" sheets of 1/16"-thick "tin" (galvanized iron).

Discussion: Nine relatively complete metal shingles were recovered from the excavation of the bank site. These were in two strips; one of which was made up of six shingles, the other, of three.

The shingles were made from 10" x 14" sheets of 1/16" thick "tin" (galvanized iron) roofing, the edges of which had been turned back. On each sheet two adjoining edges (one 10" and one 14") were turned down, and the other two, up. The two 10" edges were turned back an average of 8/16" each, and the two 14" edges, an average of 11/16" each. Thus, the average size of the shingles was 9" x 12 10/16".

The 12 10/16" edges of the shingles were interlocked, so that each shingle overlapped the shingle on the right (as you face the building) and was overlapped by the shingle on the left. Each shingle was overlapped for an average of 10/16", making the average exposed width of the shingle 8 6/16".

After the strip had been assembled, it was applied horizontally with the down-turned edge of the shingles being the lower edge of the strip and the up-turned edge, the upper edge. The strip was fastened to the roof sheathing by metal cleats. These short (average 2 6/16"), narrow (average 1 5/16"), rectangular pieces of "tin" were turned down (average 6/16") on one end, and this end locked into the up-turned edge of the shingles. The flat end of each cleat was fastened to the roof sheathing with one nail. Two of these nails were found still in place. They are square cut nails 1 5/16" long.

Following this, another strip of shingles was assembled. This strip was placed just above and barely overlapping the first, and the down-turned edge was interlocked with the
Fig. 7. Galvanized Iron Shingles from the Bank Site.
Right: six shingles and three cleats (two in position) for fastening them to the roof sheathing (pp. 56-60).
Left: three shingles.
Method of Laying Flat Seam Metal Roofing.
up-turned edge of the first strip. This gave an average overlap of 12/16" and an average exposed length of 11 14/16".

Although the exposed areas of the shingles varied in width from 8 4/16" to 8 8/16" and in length from 11 12/16" to 12", they were remarkably uniform considering that the shingles were handmade from the 10" x 14" sheets and that the sheets were probably cut from 14" wide rolls of metal. Since no two of the seven cleats found were of the same dimensions and few were of the same proportions (their widths ranged from 1 2/16" to 1 9/16", and their lengths from 2 4/16" to 2 12/16"), it seems likely that they were cut from scrap and suggests that the sheets were cut from rolls.

The shingles were painted with a dark red-brown paint, only traces of which remain. (Being able to tell which side of the shingles faced upward allowed determination of the overlapping pattern of the shingles.)

The "tin" shingles from the Bank are similar, although not identical, to those recovered from excavation of the Wheat Store at Fort Vancouver, Washington (Caywood 1955: 41) and of the County Jail and the County Court House at Appomattox Court House, Virginia (Larrabee 1961: 111-112, 130; Walker, J., 1963: 59, 62).

Cleats similar to those from the Bank were recovered from the Court House. These were described as being made "of shingle metal from 1½ in. to 2½ in. across. A number... were found with nails (one per cleat) still in them, or with a single hole in the center" (Larrabee 1961: 112).

Dating: The Wheat Store (1839-1860), the Jail (ca. 1846-ca. 1870), the Court House (ca. 1846-1892), and the Bank (1841-1863) were all built within a seven-year period, 1839-1846. Since it is known that the advertisements for bids for constructing the Jail and Court House specified that the roofs be "covered with tin" and there is no historical evidence to suggest that the roofs of any of the structures were ever replaced, it is logical to assume that all the structures were roofed with "tin" shingles when they were built. Further corroboration in regard to the roofing of the Bank is the fact that the building was little used from 1843, when the Bank closed, until shortly before its destruction in 1863.
It is interesting to note, however, that "tin" shingles identical to those from the Bank were still being used in 1931 (Walker, F., 1931: 1152-1153).

METAL SHEETING

Copper Flashing and Counter Flashing

Number of Specimens: 43 fragments; no complete specimens.

Description: The length and width of the copper sheeting used for flashing is unknown, as none of the fragments have more than one straight (cut) edge. The thickness is $\frac{1}{32}$".

The largest fragment, which is $7\frac{1}{2}$" x $16\frac{1}{4}$", had been attached to the roof sheathing by two rows of nails. The outer row, $1/4$" from the straight edge, is evidenced by nail holes which are $3\frac{1}{8}$" to $3\frac{3}{8}$" apart. The inner row, $2\frac{1}{2}$" from the straight edge, had nails spaced $1\frac{3}{4}$" to $2$" apart. One fragment has a nail still in place. It is a square cut nail $1\frac{5}{16}$" long.

Several small irregularly shaped fragments have mortar adhering to them.

Discussion: To prevent leaking flashing is used where a roof comes in contact with a wall or chimney. "The flashing usually extends 6" to 12" up the...wall and projects under the roofing for the same distance. A counter flashing is then placed over the flashing. The upper edge of the counter flashing is inserted in a raggle or slot formed in the brick...wall. After the counter flashing has been placed, it is caulked with cement or mortar to prevent water from getting back of the flashing and running under the roof" (Walker, F., 1931: 1295).

It seems probable that the fragments with nail holes were portions of the flashing, and that the fragments with mortar adhering to them were counter flashing.

Similar materials have not been reported in available publications on historic sites archeology.

Dating: It seems logical to assume that the flashing and counter flashing used on the Bank would date from the same period as
Fig. 9. Cut Stone and Copper Flashing and Counter Flashing.  
Right and upper left: flashing (pp. 60-63).  
Left center and bottom: cut sandstone (pp. 63-64).
Fig. 10. Plaster and Molten Metal Containing Evidence of Lumber (pp. 64-67).
the "tin" shingle roof. As the roof seems to date from the time of construction (1841), it is believed that the flashing and counter flashing also date from that time.

CUT STONE

Cut Sandstone Trim

Number of Specimens: 31 specimens, none of which is complete.

Description: Of the thirty-one fragments of cut sandstone trim which were recovered from the Bank site, only seven are complete enough to allow measurement of their widths and/or thicknesses, and none is complete enough to allow determination of their original length.

The five fragments for which both width and thickness can be determined measure exactly, or very nearly, 6½" in width and 4" in thickness. As the only unbroken surfaces of the other two fragments measure 6½" across, it is possible that all seven fragments were from identical cut stones which were 4" thick, 6½" wide, and over 23 3/4" long (the maximum length of the longest fragment).

Based on available information on standard sizes of cut stone, it seems most likely that these fragments were from plain window sills; for their dimensions come closer to those of the standard cut stone window sill, 4" x 7" x 48", than to those of other standard cut stone forms (Walker, F., 1931: 640).

Discussion: Three other cut stone fragments were uncovered during the earlier test excavations at the Bank site (Wilson 1966b: 8, Map 5, Fig. 8). These were apparently of the type discussed above. There are, however, two cut stones of other sizes which are attributed to the Bank. One of these, a rather large slab measuring 23 3/4" in width, 7½" in thickness, and over 57" in height, was erected as a monument during the existence of Arkansas Post State Park. It is engraved as follows: "THIS STONE WAS TAKEN FROM RUINS OF OLD BANK BUILT AT ARKANSAS POST, 1839..." The other stone, which was also used as a monument, was erected at the Bank site. It measures 7 1/8" in width, 6 5/8" in thickness, and over 22" in height and bears the inscription, "SITE OF THE STATE BANK AT ARKANSAS POST, ORGANIZED DEC. 16, 1837".

The origin of the stone used in the Bank is unknown. It is interesting to note, however, that cut stone of excellent
quality was already being quarried at Batesville, Arkansas, when the Bank was built and that a branch of the State Bank was opened in Batesville eleven months before the opening of the Arkansas Post branch.

Dating: The cut stone trim is assumed to have been an integral part of the construction of the Bank. Thus, it is believed to date from the time of its building, 1840-1841.

LUMBER

Lathing, Flooring, Framing, Sheathing, etc.

Number of Specimens: No actual specimens remain; but the finding of 13 impressions of lumber in plaster and molten metal, numerous small fragments of charcoal, and over 1,200 nails presents more than ample evidence for its use.

Description: It is impossible to state what sizes, types, or kinds of lumber were used in the construction of the Bank, since the only concrete evidence that it did occur in the structure are 13 impressions of unplaned plank, which were preserved in plaster and molten metal. However, this and other archeological evidence do suggest some of the ways in which it was used.

The impressions in the plaster and molten metal are too small to allow determination of the lengths or thicknesses of the pieces of lumber which they represent. The width of one of them could be measured, however. It was 1 3/8" wide, a width that suggests that this impression, and possibly some of the others, may represent lathing, for the modern "...standard wooden lath is 1½" wide..." (Walker, F., 1931: 913). That 26% of the nails recovered from the Bank site were twopenny and threepenny nails seems to further corroborate this inference, as one of the major uses of these nail sizes is in securing lathing to furring strips.

Based on modern usage, the other sizes of nails from the site suggest the use of a number of other types of lumber. For example, sixpenny nails, which made up 6% of those recovered from the Bank site are used for light framing, clapboarding, bevel siding, and roof sheathing; eightpenny nails, 6% of the sample, for flooring, furring strips, wood grounds, and interior fittings; ninepenny nails, 37%, for boarding, flooring, and interior fittings; sixteenpenny nails, 6%, for studding,
rafters, and heavy framing; and twentypenny, 3%, for very heavy framing.

The recovery of other types of building hardware, such as wood screws, window panes, window weights, sash pulleys, strike-plates, butt-hinges, and H-hinges, suggests the use of lumber for window frames and sashes, door frames and jambs, and doors, since no metal counterparts of these items were recovered.

All of the above suggested uses of lumber are in keeping with knowledge of the architecture of the period.

Discussion: By the middle of the 19th century, mass-produced and generally standardized construction materials and building hardware were generally available and in general use, even in remote areas, due to the greatly improved means of transportation. This usage resulted in great changes in building methods and the incorporation of what were then considered radical new design elements. Perhaps the most significant of these was the use of balloon framing, which was based on the standardization of lumber and the ready availability of the machine-cut and machine-headed nail (Smith 1968: 27).

Evidence of the use of standardized sizes of sawn lumber has been recovered from numerous mid-19th century sites, and evidence of the use of mill work has been recovered from some.

Dating: The lumber used in the Bank building can almost definitely be said to date from its construction in 1840-1841, as there is no evidence to indicate that it was ever altered.

PLASTER

Lime Plaster

Number of Specimens: Innumerable fragments of various sizes imbedded in masses of molten metal.

Description: The only plaster fragments recovered from the site are imbedded in 10 amorphous masses of molten metal. Most of the fragments are quite small, so small, in fact, that they would not be recognizable were they not in direct
association with a few larger fragments. The three largest fragments are over $1\frac{3}{8}$" square, with the largest of these measuring approximately $2\frac{11}{64}$" by $1\frac{57}{64}$". Although not one of the three are complete enough to allow measurement of the thickness of the plaster, four of the smaller fragments are. They range in thickness from $34/64$" to $36/64$", a variance of only $1/32$".

The plaster is made up of two layers, which differ from one another in thickness, color, and texture. The first layer, or base coat, which ranges from $25/64$" to $28/64$" in thickness, is yellowish in color and appears to be made up of a mixture of sand and lime. This mixture is sometimes termed "coarse stuff" by builders. The second layer, or "floated" coat, which is $8/64$" to $9/64$" in thickness, is a pure white color and seems to be made wholly of lime, or "fine stuff". It has a very smooth outer surface and presumably was the finish coat. This surface may very well have been painted or papered; but, if it were, no evidence remains.

Five of the plaster fragments bear impressions of unplaned lumber with a grainy texture. The only one of these impressions showing the total width of a piece of lumber is approximately 1 3/8" wide, suggesting that it, and possibly the other impressions, may represent lathing, as the modern "...standard wooden lath is 1 1/2" wide..." (Walker, F., 1931: 913).

Discussion: Plaster as a finish for interior walls was in use in the present United States at least as early as the 1640's (Noel Hume 1963: 139-141). By the middle of the 19th century it was very commonly used throughout the country in structures as varied as the detached log kitchen of the McLean house at Appomattox Court House, Virginia (Walker, J., 1963: 39), and the brick and stone Commanding Officer's quarters at Fort Stevenson, North Dakota (Smith 1960b: 215-216).

Dating: Because plaster was widely used at the time that the Bank was constructed and because the building was little used after 1843, when the Bank closed, until shortly before its destruction in 1863, it seems likely that the plaster was applied at the time of construction, 1840-1841.
UNIDENTIFIED METAL

Amorphous Masses of Molten Metal

Number of Specimens: 10 specimens.

Description: All ten of the amorphous masses of molten metal contain plaster fragments, and several bear impressions of unplaned lumber. The masses vary considerably in size — the maximum measurements of the smallest mass being approximately 2\" in width, 2 5/8\" in length, and 3/4\" in thickness, and the maximum measurements of the largest being about 7\" in width, 7 1/8\" in length, and 3 1/4\" in thickness.

It appears that these masses resulted from the melting and fusing of rather thin sheets of metal, as there are a few unmelted portions of metal sheeting protruding from the molten masses. This sheeting measures 1/16\" in thickness.

Discussion: As the thickness of the metal sheeting included in the molten masses is the same as that of the galvanized iron shingles which were used to cover the Bank building, it seems likely that the masses resulted from melting of the shingles. That this melting occurred because of extremely intense heat and that this heat was very quickly reached is suggested by the impressions of lumber in the molten metal. The destruction of the building by fire resulting from shelling of the Post of Arkansas by Union artillery would seem a reasonable explanation for the intensity of the heat involved.

Dating: It is assumed that these molten masses are made up of metal used in construction of the Bank, 1840-1841, and that their present form resulted from destruction of the building by Union artillery in 1863.
BUILDING HARDWARE

NAILS

Square Cut Nails

Number of Specimens: 974 complete specimens and 243 unidentifiable fragments.

Description: All of the nails are of the square cut type — that is, they were cut from sheets of iron plate of uniform thicknesses and, thus, in cross section they are rectangular or square. Two sides of the shafts, opposite one another, are uniform in thickness from the top to the tip, whereas the other two sides are tapered to a point. They differ, however, in type of head and in size; and, without doubt, they also differed in use.

Three types of heads are represented:

1. Stamped heads (Fontana and Greenleaf 1962: 46; Larrabee 1961: 117). 701 specimens have relatively flat stamped heads (1/16" to 2/16" in thickness), which are nearly rectangular in shape (the sides are slightly convex) and which project beyond the shaft on all four sides.

2. "T"-shaped heads. 272 have rather thick heads (3/16" in thickness), which are rectangular in shape and project beyond the shaft only on two opposite sides.

3. "L"-shaped head (Larrabee 1961: 117). Only one nail of this type was recovered. It has a thin head (1/32"), which projects from the shaft on only one side.

The nails vary in overall length (from the tip of the point to the top of the head) from 1 1/16" to 4 3/16"; and the lengths of the shafts — the standard measurement for determining nail size (pennyweight) in use today (Fontana and Greenleaf 1962: 55) — vary from 1" to 4 1/16".

When initially used to express nail size, pennyweight denoted the weight of the nail — the pennyweight assigned a particular size of nail was supposed to equal the number of pounds per 1000 nails (for example, 1000 tenpenny 10 d.7 nails should have weighed 10 pounds). Gradually, however, pennyweight evolved into a term used to signify a relatively standard nail length.
Apparently this standardization occurred between 1876 and 1897, as is illustrated by the following table of nail lengths given in S.D. Kimbark’s Illustrated Catalogue of 1876 (Fontana 1965: 90), the 1897 Sears Roebuck Catalogue (Israel 1968: 38), and the 1931 edition of the Building Estimator’s Reference Book (Walker, F., 1931: 686):

<table>
<thead>
<tr>
<th>Sizes</th>
<th>1876</th>
<th>1897</th>
<th>1931</th>
<th>Sizes</th>
<th>1876</th>
<th>1897</th>
<th>1931</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td></td>
<td></td>
<td></td>
<td>d</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>15/16&quot;</td>
<td>1&quot;</td>
<td>1&quot;</td>
<td>10 d.</td>
<td>11/16&quot;</td>
<td>3&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>3</td>
<td>1 1/8&quot;</td>
<td>1 1/4&quot;</td>
<td>1 1/4&quot;</td>
<td>12 d.</td>
<td>15/16&quot;</td>
<td>3 1/4&quot;</td>
<td>3 1/4&quot;</td>
</tr>
<tr>
<td>4</td>
<td>1 3/8&quot;</td>
<td>1 3/4&quot;</td>
<td>1 3/4&quot;</td>
<td>16 d.</td>
<td>7/16&quot;</td>
<td>3 1/2&quot;</td>
<td>3 1/2&quot;</td>
</tr>
<tr>
<td>5</td>
<td>1 9/16&quot;</td>
<td>1 3/4&quot;</td>
<td>1 3/4&quot;</td>
<td>20 d.</td>
<td>3 3/4&quot;</td>
<td>4&quot;</td>
<td>4&quot;</td>
</tr>
<tr>
<td>6</td>
<td>1 13/16&quot;</td>
<td>2&quot;</td>
<td>2&quot;</td>
<td>30 d.</td>
<td>3 3/16&quot;</td>
<td>4&quot;</td>
<td>4&quot;</td>
</tr>
<tr>
<td>7</td>
<td>2 1/16&quot;</td>
<td>2 1/4&quot;</td>
<td>2 1/4&quot;</td>
<td>40 d.</td>
<td>5/8&quot;</td>
<td>5&quot;</td>
<td>5&quot;</td>
</tr>
<tr>
<td>8</td>
<td>2 5/16&quot;</td>
<td>2 3/4&quot;</td>
<td>2 3/4&quot;</td>
<td>50 d.</td>
<td>1 1/4&quot;</td>
<td>5&quot;</td>
<td>5&quot;</td>
</tr>
<tr>
<td>9</td>
<td>2 9/16&quot;</td>
<td>2 3/4&quot;</td>
<td>2 3/4&quot;</td>
<td>60 d.</td>
<td>9/16&quot;</td>
<td>6&quot;</td>
<td>6&quot;</td>
</tr>
</tbody>
</table>

It is customary for historic sites archeologists to describe the nails they recover as being of certain pennyweights even when the sites involved date prior to the standardization of nail size -- for example, Larrabee (1961: 117) described the nails from the Court House, ca. 1846-1892, at Appomattox Court House in Virginia as being 2 d., 3 d., 4 d., 5 d., 6 d., 7 d., 8 d., 9 d., 10 d., 12 d., 16 d., and 20 d.; and Fontana and Greenleaf (1962: 63), the nails from Johnny Ward’s Ranch, Arizona, ca. 1859-1903, as being 6 d., 7 d., 8 d., 9 d., 10 d., 12 d., 16 d., 20 d., and 40 d. These pennyweights, which presumably reflect modern standard nail sizes, may accurately describe the sizes of nails recovered from these sites. This seems somewhat unlikely, however, for as late as 1876, some 17 to 30 years after the construction of these buildings, modern standards had not been adopted, or, at least, were not universally followed.

Twenty-nine different nail lengths are represented in the specimens recovered from the Bank site. As mentioned earlier, these were from three types of nails.
### TABLE 3: NAILS

#### Stamped Head

<table>
<thead>
<tr>
<th>Number Recovered</th>
<th>Shaft Length</th>
<th>Overall Length</th>
<th>Pennyweight 1876</th>
<th>Pennyweight 1931</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1&quot;</td>
<td>1 1/16&quot;</td>
<td></td>
<td>2 d.</td>
</tr>
<tr>
<td>101</td>
<td>1 1/16&quot;</td>
<td>1 2/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>1 2/16&quot;</td>
<td>1 3/16&quot;</td>
<td>3 d.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1 3/16&quot;</td>
<td>1 4/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>1 4/16&quot;</td>
<td>1 5/16&quot;</td>
<td>3 d.</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>1 5/16&quot;</td>
<td>1 6/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>1 6/16&quot;</td>
<td>1 7/16&quot;</td>
<td>4 d.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1 7/16&quot;</td>
<td>1 8/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>1 8/16&quot;</td>
<td>1 9/16&quot;</td>
<td>4 d.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1 12/16&quot;</td>
<td>1 13/16&quot;</td>
<td>5 d.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2&quot;</td>
<td>2 1/16&quot;</td>
<td>6 d.</td>
<td></td>
</tr>
<tr>
<td>108</td>
<td>2 2/16&quot;</td>
<td>2 4/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2 3/16&quot;</td>
<td>2 5/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>2 6/16&quot;</td>
<td>2 8/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2 7/16&quot;</td>
<td>2 9/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>2 10/16&quot;</td>
<td>2 12/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2 11/16&quot;</td>
<td>2 13/16&quot;</td>
<td>10 d.</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>2 12/16&quot;</td>
<td>2 14/16&quot;</td>
<td>9 d.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>2 14/16&quot;</td>
<td>3&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>3&quot;</td>
<td>3 2/16&quot;</td>
<td>10 d.</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>3 6/16&quot;</td>
<td>3 8/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>3 7/16&quot;</td>
<td>3 9/16&quot;</td>
<td>16 d.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3 8/16&quot;</td>
<td>3 10/16&quot;</td>
<td>16 d.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>3 9/16&quot;</td>
<td>3 11/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>3 11/16&quot;</td>
<td>3 13/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>3 12/16&quot;</td>
<td>3 14/16&quot;</td>
<td>20 d.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>3 14/16&quot;</td>
<td>4&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3 15/16&quot;</td>
<td>4 1/16&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>4 1/16&quot;</td>
<td>4 3/16&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### "T"-Shaped Head

| 272              | 2 11/16"     | 2 14/16"       | 10 d.            |                  |

#### "L"-Shaped Head

| 1                | 1 12/32"     | 1 13/32"       | 4 d.             |                  |
Since even with today's mass-produced wire nails the lengths of a number of nails of the same pennyweight may vary slightly, it seems almost certain that the lengths of mid-19th century cut nails would have varied even more. Thus, it would seem reasonable to assume that nails varying 1/16", from an unknown standard size probably should be included in that size. The difficulty is that standard sizes for the period in question are not known. The 1" and 1 1/16" nails are a good illustration of this point. Based on modern standard nail sizes, the 1" nails definitely belong in the 2d. category, and it would appear logical to consider the nails 1 1/16" in length as a variation of this size resulting from a slight error in cutting; however, based on the numbers of specimens recovered, it would seem more reasonable to consider the 10 1 1/16" nails as a standard size and the 10 1" nails as a variation of this size.

In only one instance can any uses of a nail size be stated with certainty. Two of the 41 1 5/16" nails were still in place in the galvanized iron cleats used to fasten the galvanized iron shingles to the roof sheathing, and one was still in place in the copper sheeting used as flashing. The probable uses of other nail sizes will be discussed later.

Discussion: Square cut nails have been reported from almost all 19th century historic sites where archeological investigations have been undertaken. However, few of the reports treat these finds in any detail.

Among the more detailed reports on sites roughly contemporaneous with the Bank are those on: the Posey site, Oklahoma, ca. 1823-1840 (Wyckoff and Barr 1968: 19); the Court House, Appomattox Court House, Virginia, ca. 1846-1892 (Larrabee 1961: 117); and Johnny Ward's Ranch, Arizona (Fontana and Greenleaf 1962: 63). All these reports describe nail size by pennyweight; hence, for comparative purposes the sizes of the nails from the Bank site have been assigned pennyweight categories, all nails falling between two pennyweights being assigned to the one to which they are nearer in length.

The following table, which compares percentages of various nail sizes recovered from the above sites, indicates that the nails from the Bank were more similar to those from the Court House than to those from the other sites. This would be expected, for like the Bank, the Court House was a two-story tin-roofed brick building constructed for public use,
whereas the building at Johnny Ward's ranch was an adobe ranch house and the buildings at the Posey site were probably built of log and served as a residential, metal working, and trade complex.

**TABLE 4: PERCENTAGES OF NAIL SIZES**

<table>
<thead>
<tr>
<th>Size</th>
<th>Posey Site</th>
<th>Bank Site</th>
<th>Court House</th>
<th>Ward’s Ranch</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 d. (1&quot;)</td>
<td>2</td>
<td>14</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3 d. (1 1/4&quot;)</td>
<td>6</td>
<td>12</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>4 d. (1 1/2&quot;)</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5 d. (1 3/4&quot;)</td>
<td>5</td>
<td>0</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>6 d. (2&quot;)</td>
<td>23</td>
<td>6</td>
<td>6</td>
<td>34</td>
</tr>
<tr>
<td>7 d. (2 1/4&quot;)</td>
<td>20</td>
<td>9</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>8 d. (2 1/2&quot;)</td>
<td>16</td>
<td>6</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>9 d. (2 3/4&quot;)</td>
<td>12</td>
<td>37</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>10 d. (3&quot;)</td>
<td>7</td>
<td>1</td>
<td>14</td>
<td>27</td>
</tr>
<tr>
<td>12 d. (3 1/4&quot;)</td>
<td>3</td>
<td>1</td>
<td>28</td>
<td>5</td>
</tr>
<tr>
<td>16 d. (3 1/2&quot;)</td>
<td>0</td>
<td>6</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>20 d. (4&quot;)</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>40 d. (5&quot;)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

No. in Sample | 240 | 972 | Unknown | 335

It is known that 1 5/16" (approximately 3 d.) nails were used at the Bank for fastening the metal roofing and flashing to the roof sheathing and that 3 d. nails are used today for nailing lath (for plaster) to furring strips and for fastening wooden shingles to roof sheathing (Walker, F., 1931: 710). It seems probable that 2 d. nails may have also been used for these purposes. That 2 d. and 3 d. nails account for 26% of the nails from the Bank seems reasonable, as the structure had a metal roof and was plastered. It also seems reasonable that 8% of the nails of these sizes were recovered from the Posey site, where the buildings probably had wooden shingle roofs, and that no nails of these sizes were recovered from the Ward Ranch house. However, it does seem rather strange that nails of these sizes account for only 8% of those recovered from the Court House, which, like the Bank, was plastered and roofed with metal shingles.

That 5% of the nails from the Posey site were 4 d. further suggests that the roofs were of wooden shingles, as 4 d. nails
are used for nailing them today (Walker, F., 1931: 710). The 4\% of 4 d. from the Bank and the 1\% from the Court House were probably used for cabinet work, moulding, and other interior finish.

Fivepenny nails are said to be used primarily for moulding, finished work, and ornamentation (Larrabee 1961: 117). This may well be true of the Court House, for 10\% of the nails recovered were of this size. It evidently was not true of the Bank, however, for only two 5 d. nails were recovered; and it seems unlikely that the structures at the Posey site, where 5\% of the nails were 5 d., contained much ornamentation.

Nails of 6 d. size are used for light framing, clapboarding (Fontana and Greenleaf 1962: 57), bevel siding, and wood grounds (Walker, F., 1931: 686). It is interesting to note that 6\% of the nails from the Court House and 6\% from the Bank were of this size, whereas 23\% of the nails from the Posey site and 34\% of those from the Ward Ranch were of this size.

Generally 8 d. nails are used for flooring, furring strips, wood grounds (Walker, F., 1931: 686), and interior fittings (Larrabee 1961: 117). Sixteen percent of the nails from the Posey site and the Ward Ranch house were of this size; 10\%, from the Court House; and 6\% from the Bank site.

Ninepenny nails, the most common (37\%) size recovered from the Bank, are usually used for boarding, flooring, and interior fittings. Fourteen percent of the nails from the Court House, 12\%, from the Posey site, and 8\% from the Ward Ranch are of this size. It is almost certain that most of the 9 d. nails from the Bank were used for a specific purpose, as 272 of the 360 nails of this size were the type with "T"-shaped heads, and this type of head was represented only by this size of nail. The most likely use would seem to be for flooring, for a considerable amount would have been required in a two-story 30' by 60' building.

The most common uses for 10 d. nails are for furring strips, flooring, boarding, and interior fittings. This size nail was rather common at the Ward Ranch (27\%), the Court House (14\%), and the Posey site (7\%); but it was very rare at the Bank site, where it comprised only 1\% of the total.
Twelvepenny nails, which are used primarily for wooden studding, comprised 28% of the nails recovered from the Court House, 5% of those from the Ward Ranch, 3% of those from the Posey site, and only 1% of those from the Bank.

Sixteenpenny nails are also usually used for wooden studding rafters, and heavy framing. Seven percent of the nails from the Court House were of this size; 6% of those from the Bank, 3% of those from the Ward Ranch, and none from the Posey site.

Twentypenny and larger nails are used for very heavy framing. One percent of the nails from the Ward Ranch, the Posey site, and the Court House were this size; however, 3% of the nails from the Bank were 20 d. This suggests that more heavy framing was used in the Bank than in the other buildings.

Dating: It seems likely that all of the nails recovered from the Bank site were manufactured after 1830 and before 1855, and, thus, that they were probably used in the construction of the building, 1840-1841.

This assumption is based on the following:

(1) All of the nails recovered are square cut nails, which had been cut and headed by machines producing heads that are relatively uniform and comparatively square. Machines that cut and headed nails automatically were not in use until ca. 1825, and these were not improved to the point where heads became uniform until ca. 1830 (Fontana and Greenleaf 1962: 54).

(2) No wire nails were recovered. Wire nails, which were invented in France about 1830, were first manufactured in the United States around 1855 (Fontana and Greenleaf 1962: 54, 55). Although square cut nails continued to outnumber wire nails until 1879 (Fontana 1965: 89), it seems likely that some wire nails would have been used had the Bank building been altered after their introduction.

WINDOW HARDWARE

Glass Window Panes

Number of Specimens: Total of 384 fragments, 182 of which are partially melted or warped by heat.
Fig. 11. Square Cut Nails (pp. 68-74).
Fig. 12. Cast Iron Window Weight and Sash Pulleys.
Right: window weight (pp. 78-79).
Left: sash pulleys (pp. 79-80).
Description: All fragments are from flat sheet glass which ranges from clear to light blue-green in color and from 3/64" to 6/64" in thickness. The majority of the fragments are light blue-green in color, and all fragments are patinated.

Nineteen fragments, also ranging in thickness from 3/64" to 6/64", were recovered from the 1966 test excavations at the Bank site. When these are combined with those from the later excavation, the breakdown, according to thickness, is as follows:

<table>
<thead>
<tr>
<th>Thickness</th>
<th>No. unaffected</th>
<th>No. affected</th>
<th>No. found</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) 3/64&quot;</td>
<td>75</td>
<td>45</td>
<td>1</td>
</tr>
<tr>
<td>(2) 4/64&quot;</td>
<td>70</td>
<td>115</td>
<td>10</td>
</tr>
<tr>
<td>(3) 5/64&quot;</td>
<td>31</td>
<td>22</td>
<td>2</td>
</tr>
<tr>
<td>(4) 6/64&quot;</td>
<td>7</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

TOTALS 183 182 19 384

Discussion: The thicknesses of the sheet glass from the Bank, 3/64" - 6/64", falls within the range of thicknesses found at other 19th century historic sites: the first Fort Smith, Arkansas, "0.8 mm. to 2.6 mm.", or 2/64" - 6.5/64" (Dollar 1966: 12); Kipp's Post, North Dakota, 1/32" to 1/8" or 2/64" - 8/64" (Woolworth and Wood 1960: 270); Fort Lookout II, South Dakota, "1 mm. to 3 mm." or 2.5/64" - 3.75/64" (Miller 1960: 67); Appomattox Court House, Virginia, 1/16" to 1/8" or 4/64" - 8/64" (Larrabee 1961: 113); Gila Bend Stage Station, Arizona, "2 mm. to 6 mm." or 5/64" - 15/64" (Berge 1968: 204); Anderson's Mill, Texas, "0.15 cm. to 0.3 cm." or 3.78/64" to 7.5/64" (Durrenberger 1965: 46); Fort Pierre II, South Dakota, 1/16" or 4/64" (Smith 1960a: 132); Fort Stevenson, North Dakota, 1/16" or 4/64" (Smith 1960b: 216); The Alamo, Texas, 1/16" to 9/32" or 6/64" - 8/64" (Greer 1967: 50).

From the above it would appear that the 13 fragments of 6/64" glass are too thick to have been used as window glass during the 19th century. The small number found, less than 4% of the total, also suggests some special use. One possibility, suggested to explain the thicker glass found at Appomattox
Court House, is that it was used in doors with glass panels (Larrabee 1961: 113).

It is interesting to note, however, that this glass is thinner than the thinnest sheet glass made today. According to the Binswanger Glass Company of Austin, Texas, "the most common thicknesses produced today are 1/8 inch (8/64"'), 3/16 inch (12/64"'), 1/4 inch (16/64"), which is) plate glass..., and 7/32 inch (14/64")" (Greer 1967: 51).

**Dating:** A comparison of the thicknesses of glass from the above sites (which are listed in chronological order) shows an increase through time in the thickness of the thinnest glass used:

1. Glass of 2/64" thickness occurs only at sites occupied by 1820 and no longer occupied by 1840: the first Fort Smith (ca. 1817-1824) and the Posey site (ca. 1823-1840).

2. Glass of 3/64" thickness occurs only on sites built, or occupied, prior to 1845: the sites mentioned above, Fort Lookout II (ca. 1831-1851), and the Bank (ca. 1841-1863).

3. With the exception of Anderson’s Mill (mid-1800’s -- ca. 1914) where some glass .15 cm. (3.8/64") in thickness is found, no glass thinner than 4/64" in thickness is found on sites dating after 1845: the Court House (1846-1892); the Gila Bend Stage Station (ca. 1850-1860); Fort Pierre II (ca. 1859-1863); Fort Stevenson (ca. 1867-1897); and the Alamo (ca. 1870-1910).

Based on the above pattern, the window glass from the Bank site apparently dates prior to 1845. Such a date fits the construction period for the building.

**Cast Iron Window Weights**

**Number of Specimens:** 16 complete; 5 fragments.

**Description:** Cylindrical cast iron window weights, approximately 22½" in length and 1½" in diameter, weighing about 9 pounds each. The upper 1 5/8" to 1 3/4" of each weight is tapered so that at the top it is only about 13/32" thick. Through
this portion of the weight is a hole for hanging; these range from 10/32" to 17/32" in diameter. There are no identifying marks on the weights.

Discussion: Two window weights were recovered from an earlier test excavation of the bank site (Wilson 1966a: 3). Weights are not, however, mentioned in available historic sites archeology publications.

Dating: Although comparative data is lacking, it seems logical to assume that the weights date from the time of construction (1841), as the building was apparently used only sporadically after the Bank closed in 1843, and there is no reason to believe that it was altered after completion.

Sash Pulleys

Number of Specimens: 8 complete or almost complete; 1 pulley wheel.

Description: (1) The complete sash pulleys are identical. All consist of a grooved pulley wheel (2" in diameter and 15/32" wide) which is enclosed in a one-piece housing. The housing is composed of: a semicircular shell (1 27/32" high, 13/16" wide at the base, and 3" long), which encases most of the pulley wheel and to which the wheel is attached by a spindle 3/16" in diameter; and a flat mounting plate (1 1/16" wide and 4\(\frac{1}{8}\)" long). The plate which extends 1/8" beyond the shell on either side and 3/4" at either end, has two 3/16" holes, one at each end, for mounting. The pulley wheel protrudes 1/4" through a ½" x 2" opening in the center of the plate.

(2) The pulley wheel is 1 3/4" in diameter and 17/32" wide.

Discussion: Previous test excavations of the bank site uncovered three sash pulleys. Two are identical to those described above, but the third is quite different in construction and appearance (Wilson 1966b: Figure 27, E). It contains a smaller grooved pulley wheel (1 3/4" in diameter and 17/32" wide), which is enclosed in a four-piece housing. The housing consists of: a mounting plate 1" x 4\(\frac{1}{8}\)" with two ½" x \(\frac{1}{8}\)" x 1/4" projections; two plates (measuring
1 9/16" high by 2 1/16" wide at the top and 2 3/4" at the base), encasing the pulley wheel and to which it is attached by a spindle 1/4" in diameter, are fastened to the mounting plate projections; a small wheel (1/2" long and 3/8" in diameter) which acts as a brace for the plates encasing the sides of the pulley wheel and as a guard for the rope on the pulley wheel.

As the wheel of this sash pulley is identical in size and construction to the one found without its housing, it is assumed that the latter came from a similar, if not identical, sash pulley.

The two sizes of pulley wheels suggest the possibility that two sizes of windows may have been involved; however, the identical size and weight of all of the weights found would seem to contradict this. It seems more likely that the two pulleys having smaller wheels were replacement items (two being necessary because of the different sizes of wheels).

Dating: Despite the lack of comparative data, it seems likely that all the sash pulleys date from the use of the building as a bank, 1841-1843, as it seems doubtful that any major alteration occurred after that period. The fact that only two of the pulleys having smaller wheels were found and that ten pulleys with larger wheels were recovered suggests that those with larger wheels date from initial construction, 1841, and that those with smaller wheels were used as replacements during the period 1841-1843.

DOOR HARDWARE

Strike-Plates

Number of Specimens: 2 complete strike-plates (or striker-plates), parts of 2 locks.

Description: Although both are apparently from rim locks, the strike-plates differ considerably in appearance and construction.

(1) One is a single piece cast from iron. Basically rectangular in shape, it, when placed as it would have been for mounting, measures approximately 4 1/2" high, 13/16" wide; and 11/16" deep. The face has a slightly raised rim around the three edges away from the lock (this rim extends slightly over the sides), it has two holes for screws, one at the top
and one at the bottom; and along the side next to the lock, between the screw holes, it has a 3 3/8" long (at the base) ridge, which is triangular in cross-section and projects outward about 1/8". A badly corroded screw still remains in one hole. On the flat surface of the plate, between the screw holes, it bears the wording: "PAT JUNE 10 1837."

(2) The other is also rectangular in shape; however, it was made from two pieces of metal. One of these was a flat sheet of steel which was cut and bent to give the rectangular shape. As it would have been mounted, it measures 3 3/4" high, 1 1/16" wide, and 15/16" deep. The face, which has two screw holes 2 13/16" apart, is plain except for a ridge of brass running along the edge next to the lock. This ridge, which in cross-section has two flat sides (at right angles to one another) and a rounded surface, projects outward about 1/4". It is attached to the rectangular steel portion by bradding. No identification or other marks occur on this specimen.

Discussion: Although different, machine-made strike-plates of similar dimension were found at Fort Pierre II, South Dakota (Smith 1960a: 132, Plate 24); Fort Stevenson, North Dakota (Smith 1960b: 217); and the Court House at Appomattox Court House, Virginia (Larrabee 1961: 117).

Rim locks with similar strike-plates are still manufactured today, but are rarely used in modern construction.

Dating: Apparently rim locks were in rather wide use during the mid-19th century, as evidenced by the Bank (ca. 1841-1863), the Court House (ca. 1846-1892), Fort Pierre II (ca. 1859-1863), and Fort Stevenson (ca. 1867-1897); and, as mentioned above, they are still manufactured today. Thus, were it not for the patent date on the one specimen, one could only postulate that the strike-plates were installed in initial construction, because there is no historical evidence for alteration to the building.

The patent date of 1837 does not, of course, prove that the strike-plate bearing it was installed in 1841, but it does prove that it could have been. Since there is no way to date the other strike-plate, one could argue either that it was a replacement or that perhaps one was for an interior door and the other for an exterior door.
Butt Hinges

Number of Specimens: 2 complete (1 broken), 1 badly corroded.

Description: Two sizes of wrought steel butt hinges are represented.

(1) The larger, which is complete but broken, measures 4 1/2" in length and approximately 4 1/2" in width, when open, and is 3/8" thick. Each flap (or leaf) has four screw holes; two of these are 3/16" from the outer edge, and two are 5/16". There are three barely discernible markings on this specimen; they are "A K &".

(2) The smaller, of which there are two specimens (one of which is badly corroded), measure 4" in length, 4" in width, when open, and 3/8" in thickness. Each flap has four screw holes, two of which are 1/8" from the outer edge, and two, 5/8". The outer face of the well-preserved specimen bears the word "Baldwin" on one flap and the word "Patent" on the other. On the inner face, one flap is marked "4 x 4". No markings are discernible on the other.

Discussion: A butt hinge, identical to the larger one described above, was recovered in the 1966 test excavations at the bank site (Wilson 1966b: Figure 27, B). It bears the name "A K & Sons". (Only the lower portions of the letters "S" and "0" remain, as the upper portions were destroyed by cutting the screw holes.)

Hinges of this general type have also been recovered from numerous other 19th century sites, such as: the Posey site, Oklahoma (Wyckoff and Barr 1968: 20); Fort Lookout II, South Dakota (Miller 1960: 77); Appomattox Court House, Virginia (Larrabee 1961: 117); the Marine Hospital, Fort Saint Marks, Florida (Shenkel and Westbury 1965: 22); Fort Pierre II, South Dakota (Smith 1960a: 131); and Fort Stevenson, North Dakota (Smith 1960b: 218). However, as far as can be determined, none bear the trademarks "A K & Sons" or "Baldwin".

The difference in size of the hinges from the bank site suggests that they may have been used on doors which, because of size and/or thickness, were of different weights.

Dating: Miller states that butt hinges are "much later in time" than the Fort Lookout II occupations, 1831-1851. However,
Fig. 13. Strike Plates, Butt Hinges, and H-Hinges.
Top row: butt hinges (pp. 82-85).
Middle row: strike-plates (pp. 80-81).
Bottom row: H-Hinges (pp. 85-86).
Fig. 14. Stud, Spike, and Flathead Screws
Right: flathead, or wood, screws (pp. 86-87).
Center: spike (pp. 88-90).
Left: ornamental stud (pp. 87-88).
the fact that they were in wide use during the mid-19th century is strongly suggested by their occurrence at: the Posey site, ca. 1823-1840; Fort Lookout II, ca. 1831-1851; the Bank, ca. 1841-1863; Appomattox Court House, ca. 1846-1892; the Marine Hospital, ca. 1858-1882; Fort Pierre II, ca. 1859-1863; and Fort Stevenson, ca. 1867-1897.

Since available evidence seems to indicate that butt hinges were widely available by the 1840's and since there is no historical evidence of the Bank having been altered, it seems likely that the hinges from the Bank date from the time of construction, 1841.

**H-Hinges**

**Number of Specimens:** 2 flaps (or leaves), probably from 1 specimen.

**Description:** One flap is much more corroded than the other, apparently accounting in the slight difference in size between the two. Placed together as one complete H-hinge, they measure about 3½" in length at the outer edge (2 5/16" in length at the center), 5 11/16" in width, and 9/32" in thickness. The longer portion of each leaf is 1" wide and contains 3 screw holes, the center one being ½" from the outer edge and the other two, 1/4".

The back of the better preserved flap bears the trademark "T. CLARK". The outer face of the other is marked with three numerals, but only two, "05", can be discerned.

**Discussion:** Two flaps from H-hinges, which are identical in size and screw hole placement, were recovered from the Bank site during the 1966 test excavations (Wilson 1966b: Figure 27, A). They are also marked with three numerals. On one they are difficult to read, only "20_" being discernible; but on the other they are quite clear and read "205 A".

Without question, the three flaps bearing numerals are from identical hinges of type "205 A"; and it seems likely that they, like the flap which bears no type designation, were manufactured by "T. CLARK".

A portion of one H-hinge was recovered from Fort Pierre, South Dakota (Smith 1960a: 131). It also had three holes in each flap, but was smaller.
The H-hinges from the Bank are smaller than either of the two sizes of butt hinges recovered there. The size of the H-hinges and the finding of two "gate" latches in earlier excavation of the site (Wilson 1966b: Figure 27, F) suggests that the main room of the Bank, like those of today, may have been partitioned by a low wall which was entered through a gate. Some special use of H-hinges is also suggested by their relative rarity in materials recovered from historic sites.

Dating: The very limited amount of information available suggests that H-hinges may have been in use during the mid-19th century. As there is no historical evidence indicating that the Bank was altered, it seems most probable that the H-hinges were installed when the building was constructed.

WINDOW AND/OR DOOR HARDWARE

Flathead or Wood Screws

Number of Specimens: 32 specimens, 20 of which are complete or almost complete.

Description: The 32 specimens recovered from the excavation are similar in that all have slotted flat heads which taper inward to a cylindrical shaft, the lower portion of which is threaded and the end of which is pointed. They differ, however, in size.

At least seven sizes are represented:

<table>
<thead>
<tr>
<th>Number Recovered</th>
<th>Overall Length</th>
<th>Diameter of Head</th>
<th>Length of Threaded Portion</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1 60/64&quot;</td>
<td>37/64&quot;</td>
<td>1 12/64&quot;</td>
<td>Tip missing</td>
</tr>
<tr>
<td>2</td>
<td>1 37/64&quot;</td>
<td>30/64&quot;</td>
<td>56/64&quot;</td>
<td>Tip missing</td>
</tr>
<tr>
<td>1</td>
<td>1 36/64&quot;</td>
<td>23/64&quot;</td>
<td>60/64&quot;</td>
<td>Complete</td>
</tr>
<tr>
<td>1</td>
<td>1 35/64&quot;+</td>
<td>22/64&quot;</td>
<td>1 1/64&quot;+</td>
<td>Broken</td>
</tr>
<tr>
<td>10</td>
<td>1 33/64&quot;</td>
<td>28/64&quot;</td>
<td>1&quot;</td>
<td>Tip missing</td>
</tr>
<tr>
<td>1</td>
<td>1 30/64&quot;</td>
<td>26/64&quot;</td>
<td>59/64&quot;</td>
<td>Complete</td>
</tr>
<tr>
<td>2</td>
<td>1 1/64&quot;+</td>
<td>27/64&quot;</td>
<td>45/64&quot;+</td>
<td>Broken</td>
</tr>
<tr>
<td>4</td>
<td>1&quot;</td>
<td>24/64&quot;</td>
<td>39/64&quot;</td>
<td>Complete</td>
</tr>
<tr>
<td>9</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>Badly corroded</td>
</tr>
</tbody>
</table>
Ten of the screws were still associated with the building hardware with which they had been originally used. Five, which are so badly corroded they cannot be measured, were in butt hinges; three, which are 1 33/64" long, were in H-hinges; one, which is not measurable, was in a strike-plate; and one, which was probably 1" in length, was in a sash pulley.

Discussion: Apparently screws were little used during the mid-19th century, for they have been reported from relatively few historic sites of the period. Among those where screws were found are: the Posey site, Oklahoma (Wyckoff 1968: 19-20); Anderson’s Mill, Texas (Durrenberger 1965: 60); Johnny Ward’s Ranch, Arizona (Fontana and Greenleaf 1962: 83); Fort Pierre II, South Dakota (Smith 1960a: 131); and Fort Stevenson, North Dakota (Smith 1960b: 217).

Even on these sites screws seem to have been rare. One was found at Anderson’s Mill; three, at Johnny Ward’s Ranch; eight, at the Posey Site; nine, at Fort Pierre II; and twenty-four, at Fort Stevenson.

Dating: Near the end of the 18th century screw-cutting lathes were made in France by Senot, in England by Maudslay, and in the United States by Wilkinson (Gilbert 1958: 429). It was not, however, until 1834 that wood screws were produced by machinery in the United States (Cotter 1968: 75); and it was not until 1841 that standardization of screws was proposed (Gilbert 1958: 433).

When the above is considered, the absence of screws on most sites dating prior to 1840 is understandable. In fact, it is rather surprising that 8 were found at the Posey site, ca. 1823-1840, and that 32 were recovered from the Bank, ca. 1841-1863. There is little doubt, however, that the screws from the Bank site can be dated as ca. 1841, because some of them were found in direct association with material used in initial construction of the building.

ORNAMENTAL HARDWARE

Studs

Number of Specimens: 2 specimens, 1 of which is complete and the other, almost complete.
Description: The two specimens are identical cast iron studs which appear to have been made primarily for ornamental purposes.

The heads are semispheroid in shape, being 1 50/64" in diameter and 56/64" thick at the thickest point. Beginning at the base, which is flat, the top curves inward in an arc to a groove about 26/64" above the base; and from the groove it again curves inward in an arc to the center, which is 30/64" above the groove.

The shafts are four-sided. Two of the sides, which are opposite to one another, are the same thickness (15/64") from the top to the tip, while the other two sides taper from the top (19/64") to the tip (4/64"). Exact length of the shafts cannot be determined, as one was broken and the other, badly bent; but the approximate length is 2 60/64".

The use of these studs is unknown. They were evidently made for driving into wood of considerable thickness and, thus, may have been used as ornaments on a heavy door.

Discussion: Similar specimens are not discussed in the reports on historic sites archeology used for comparative purposes.

Dating: Although the studs cannot be dated by comparison with similar specimens, it seems logical to assume that ornamental hardware would date from the construction of the building.

SPIKES

Hand-wrought Iron Spikes

Number of Specimens: 1 complete.

Description: The spike is 4 3/4" long from the top of the head to the tip of the point. The head is a flat oval, measuring 18/32" by 17/32". In cross section the upper part of the shaft is octagonal. It measures 15/32" in thickness just below the head, and the eight sides are alternately 1/4" and 1/8" wide. The shaft tapers from the head to the point; and, at approximately 1" from the tip, the four narrower (1/8") sides end; however, the wider (1/4") sides remain the same width, making the shaft square in cross section. The sides continue to become narrower as the shaft tapers toward the point. At ½" from the point two of the sides, which are
opposite one another, remain 1/4" wide, whereas the other two have decreased to 3/16" in width, making the shaft rectangular in cross-section. At the point the sides measure alternately 3/16" and 2/16" wide.

The use of this spike is unknown; however, its length and thickness suggest that its purpose was to support a relatively thin object which was quite heavy in itself or bore a heavy weight. It also seems likely that it had some rather specialized use, for only one spike was recovered from the site, as opposed to over 1,200 more fragile nails.

Discussion: Based on the number of specimens recovered from historic sites, hand-wrought iron spikes were little used during the 19th century. None were found in the excavations of the First Missouri State Capitol, Missouri (Bray 1968); Fort Smith, Arkansas (Moore, J., 1963); the Posey Site, Oklahoma (Wyckoff and Barr 1968); Washington-on-the-Brazos, Texas (Davis and Corbin 1967); Anderson's Mill, Texas (Durrenberger 1965); or the Gila Bend Stage Station, Arizona (Berge 1968). They were present at Fort Saint Marks, Florida (Olds 1962: 234); Kipp's Post, North Dakota (Woolworth and Wood 1960: 270); Fort Pierre II, South Dakota (Smith 1960a: 131); Johnny Ward's Ranch, Arizona (Fontana and Greenleaf 1962: 84); and Fort Stevenson, North Dakota (Smith 1960b: 217). However, they did not occur in large quantities. Only two were found at Kipp's Post, and the largest number recovered from any of these sites (Johnny Ward's Ranch) was 13.

Five types of spikes -- Cut, Wrought Boat, Street Railway, Strap Rail, and Small Hook Head for T-Rails -- were advertised for sale in the illustrated catalogue issued by S. D. Kimbark in 1876 (Fontana 1965: 96). It should be noted, however, that, with the possible exception of the Cut Spike, all seem to have been intended for specific purposes (one for boat construction and three for construction of various types of railways) and, thus, would not likely have been widely used. That the Cut Spike may have also had a specific purpose, or that it may have been replaced by large cut nails, is suggested by the fact that the 1897 Sears Roebuck Catalogue (Israel 1968) carries no advertisements for spikes of any type.

Dating: As mentioned above, hand-wrought iron spikes have been recovered from: Fort Saint Marks, ca. 1821-1892; Kipp's Post, ca. 1825-1829; the Bank, ca. 1841-1863; Fort Pierre II,
ca. 1859-1863; Johnny Ward's Ranch, ca. 1859-1903; and Fort Stevenson, ca. 1867-1897. This occupation dates of these sites, together with Kimbark's advertisement for Wrought Boat Spikes, indicates that hand-wrought iron spikes were in use from at least as early as 1829 until at least as late as 1876, a bracketing of little value in attempting to date materials from a site occupied ca. 1841-1863.

There are, however, two factors which have not been taken into consideration: (1) all of the sites, with the exception of Kipp's Post, were occupied for at least part of the period beginning about 1860 and ending about 1880; (2) the spikes from Kipp's Post were round in cross section, whereas those from the other sites and in Kimbark's catalogue were square. This suggests the possibility that square hand-wrought iron spikes may date ca. 1860-1880, and that the one recovered from the Bank site may have been connected with the building's use as a Confederate hospital, ca. 1862-1863.
DOMESTIC FURNISHINGS

CABINET (OR CHEST) HARDWARE

Brass Hinges

Number of Specimens: 2 specimens; 1 complete hinge and 1 flap of another.

Description: The two specimens, one of which is complete, are from two identical small brass butt hinges, which were probably used on cabinets or chests. The complete specimen measures 2" in length and, when open, 1 3/64" in width. It is 1/16" thick.

Each flap has three screw holes which are 1/8" in from the outer edges. Two of these holes are 1/8" in from the ends, and the third is centered. A ½" long screw remains in the single flap. It, too, is made of brass.

Neither hinge bears any identifying marks.

Discussion: Brass was apparently rather widely used for making cabinet and chest hardware during the 19th century, as brass locks, latches, drawer pulls, hinges, and keyhole escutcheons have been recovered from several historic sites occupied during that period. Among these are: the first Missouri State Capitol, Missouri (Bray 1968: 74); Fort Vancouver, Washington (Caywood 1955: 49); Fort Pierre II, South Dakota (Smith 1960a: 133), and Fort Stevenson, North Dakota (1960b: 219). The reports on the archeological investigations of these sites do not, however, contain illustrations or descriptions of hinges similar to those recovered from the Bank site.

Dating: Brass hardware for cabinets and chests has been recovered from 19th century historic sites which were occupied from as early as 1821 until as late as 1897. There is, however, no way to meaningfully compare the brass hinges from the Bank site with the brass cabinet hardware reported from these sites because the items are so dissimilar.

To suggest a date for the hinges based on their presumed use is also impossible, for both the bank (ca. 1841-1843) and the hospital (ca. 1862-1863) probably contained chests and/or cabinets.
Iron Lock Plate

Number of Specimens: 1 plate.

Description: The plate is a flat rectangular sheet of iron 2 54/64" long, 46/64" wide, and 3/64" thick. It contains two screw holes for mounting and a rectangular opening for the lock bolt. The screw holes are 11/64" from the ends and 11/64" from one side and 17/64" from the other. The opening, which measures 13/64" in width and 50/64" in length, is located 1 1/64" from one end and 1 2/64" from the other, and is 12/64" from one side and 21/64" from the other.

It bears no identifying marks.

Discussion: Both brass and iron cabinet hardware have been recovered from a number of 19th century historic sites. However, neither descriptions nor illustrations of similar lock plates could be found in the reports on these sites.

Dating: The lock plate could well date from either the 1841-1843 use of the building as a bank or the 1862-1863 use as a hospital.

STOVES

Cast Iron Heating Stoves

Number of Specimens: 331 fragments, probably from 1 or 2 stoves.

Description: Of the 331 fragments, 320 are of sheet iron, 7 are stove bolts, and 4 are nuts.

The 320 fragments of sheet iron fall into two categories:

(1) Flat sheet iron with no decoration. Apparently 319 of the fragments are from flat sheets of cast iron. They are 7/32" thick and range in measurement from 29/32" by 27/32" to 3 14/32" by 2 19/32".

(2) Curved sheet iron with raised line. There is only one small fragment of this type. It measures 7/32" in thickness and is approximately 3 10/32" long and 2" high; however, accurate measurements cannot be obtained because of the curvature of the object.
Fig. 15. Hinges and Lock Plate for Chests or Cabinets.
Right: iron lock plate (p. 92).
Left: brass hinges (p. 91).
Fig. 16. Cast Iron Stove Fragments (pp. 92-98).
Right: curved basal (?) fragment.
Center: flat sheet iron fragments.
Left: stove bolt and nut.
The fragment is irregularly shaped, all of the edges being broken with the exception of one, which is smoothly finished. This edge is flat, but is slightly curved. Assuming that this fragment was originally placed so that the flat edge was at the top and was absolutely level and that the curvature of the wall was inward toward the center of the stove, the fragment may be described as follows: below the finished edge the wall slopes inward for a distance of 1 10/32", forming a "neck" that is decorated with a raised line, which is 6/32" wide and 1/32" high. Below the neck the wall flares outward to a broken edge of the fragment, a distance of about 28/32".

The 7 fragments of stove bolts are all broken and badly corroded. The diameter of the threaded portion of the shaft is 29/64", and the diameter of the hemispherical head is 61/64". The longest fragment is 1 9/64"; however, the original length, which was probably several inches, cannot be determined.

The 4 nuts are 59/64" square and 24/64" thick. All still contain bolt fragments.

All the above materials were recovered from a very limited area adjacent to the base of one of the chimneys. At first it was believed they might represent the remains of a bank vault. However, the identification of these fragments as stove remains seemed the most likely explanation after considering their location, the recovery of a definitely identifiable stove fragment from earlier excavation, and the following description of stove remains from the courthouse at Appomattox Court House, Virginia:

The most spectacular find was a heating stove (with a)...cast iron top... When the top was lifted a mass of very fragmentary thin sheet iron was found under it. ...The top...is 36 in. long, and probably was originally about 20 in. across the middle. ...The iron is 1-1/2 in. thick at the edge. There are no removable plates, and it seems clear that the stove was for heating purposes. Originally thin metal rods about 20 in. long ran down through each corner of the stove top. They were threaded at each end, and had nuts. ...Presumably this
stove had sheet metal sides (,)...perhaps several sheets thick (,)...which followed the slight curves of the top. ...A similar plate may have been at the bottom. If so it was lost...
No pieces were found of a front door, although there must have been a cast iron frame for this.

Discussion: Previous test excavation of the Bank uncovered one stove fragment. This fragment, which measures approximately 8 56/64" by 2 32/64", is also curved. It has two finished edges, one of which is 11/64" thick and one, 17/64". The thinner is flat except for a 2" wide tab which extends 1/2" beyond its surface. This tab contains a fragment of a flat-headed bolt, the shaft diameter of which is 22/64", and the head diameter of which is 38/64". Assuming the 11/64" wide edge was originally the top of the fragment and that it was absolutely level, the wall extends vertically downward 40/64" to a point where it projects outward at a right angle 8/64". It then continues downward, sloping outward slightly, for about 32/64". There it flares outward for about 32/64" and then slopes inward to the lower edge. As this fragment differs from the others found at the site in thickness, bolt type, and bolt diameter, it seems likely that it came from another stove.

Cast iron heating and cooking stoves have been recovered from a number of other 19th century historic sites, such as: the Posey site, Oklahoma (Wyckoff and Barr 1968: 39); Fort Vancouver, Washington (Caywood 1955: 41); Washington-on-the-Brazos, Texas (Davis and Corbin 1967: 46-47); the Court House, Appomattox Court House, Virginia (Larabee 1961: 65, 120-122); Anderson's Mill, Texas (Durrenberger 1965: 58); Gila Bend Stage Station, Arizona (Berge 1968: 227); Fort Pierre II, South Dakota (Smith 1960a: 133); Fort Stevenson, North Dakota (Smith 1960b: 218-219); and the Medicine Creek site, South Dakota (Smith 1968: 96-97).

Dating: Although cast iron stoves were made in China before 200 A.D., there is no record of their use in Europe until 1475, when they were being manufactured in Alsace. Shortly after this they were also being made in Germany.

Most common of the early cast iron stoves in Germany and widely used in the Scandinavian countries was a type made of five rectangular flat pieces called plates, which were grooved to fit together to form a box with one side missing. This
stove was placed in one room and the open side inserted 
into a fireplace which opened into an adjoining room. It 
was fueled from the adjoining room, and the smoke escaped 
directly into the fireplace. The stove was known as the 
"wall-jamb" or "five-plate stove".

At about the same time cast iron stoves made of six plates 
were common in the Netherlands and widely used in Scandinavia. These stoves, which were known as "six-plate", 
"Holland", or "draft" stoves, differed in principle from 
the five-plate stove. They stood away from the wall, the 
front plate had a fuel door and a draft hole, and the top 
plate was perforated for a smoke pipe.

Stoves of both types were brought to America by colonists 
from northern Europe, and it is believed that six-plate 
stoves may have been manufactured in Massachusetts by the 
mid-17th century. At any rate both five-plate and six-
plate cast iron stoves were being manufactured in the American colonies by 1730 (some 30 years before cast iron stoves 
of any sort were made in the British Isles); and both types 
remained in general use until Revolutionary War times, when 
they were superseded by the "English", or ten-plate, stove, 
an improvement of the free standing six-plate type (Bridg-

"For heating purposes, these stoves marked such an advance 
over the fireplace, both in terms of efficiency of conver-
sion and in efficiency of heat distribution, that they soon 
outstripped it" (Fitch 1966: 18). By 1800 they were very 
popular. Although they were made more accurately so that 
the plates fitted much better and tie rods (which connected 
the top and bottom plates at each corner) were used to hold 
the sides in place, their appearance had changed little; 
and they were generally known as "box" stoves.

Such stoves were installed in the Capitol of the United 
States in 1817, and by the early 1840's, when Charles Dickens 
visited the United States, "...common to all American 
interiors...(was) the eternal, accursed, suffocating, red-hot 
demon of a stove whose breath would blight the purest air 
under heaven!" (Fitch 1966: 117).

For cooking purposes the stove had even more pronounced 
advantages; however, it was not until the coal-burning range 
with removable lids came into general use after the Civil 
War that the fireplace was finally supplanted as the chief 
cooking agency.
The widespread use of the stove during the 19th century is borne out by the historic sites where stove remains were recovered: the Posey site, ca. 1823-1840; Fort Vancouver, ca. 1828-1860; Washington-on-the-Brazos, ca. 1835-present; the Bank, ca. 1841-1863; the Court House, ca. 1846-1892; Anderson's Mill, ca. 1850-1914; Gila Bend Stage Station, ca. 1850-1860; Fort Pierre II, ca. 1859-1863; Fort Stevenson, ca. 1867-1897; and the Medicine Creek site, ca. 1880-1920. Of these sites, the only ones from which definitely identifiable cooking stoves were recovered were occupied, at least in part, after 1860.

Although there seems to be no way in which the stove fragments recovered from the Bank site can be dated, it seems, perhaps, most logical to assume that they were installed when the building was completed, ca. 1841.
DOMESTIC UTENSILS

COOKING UTENSILS

Cast Iron Cooking Pot or Frying Pan

Number of Specimens: 2 fragments from the same vessel.

Description: These fragments, which are from the base, or bottom, of a cast iron cooking pot or pan, are flat on the upper, or interior, surface and have ridges, or raised lines, on the lower, or exterior, surface. The larger fragment, which has maximum measurements of 10 16/32" by 8 12/32", varies in thickness from 4/64" to 7/64" due to corrosion. It bears a raised circular line that is 8 28/32" in diameter, 4/64" wide, and 6/64" high. This circle encloses a straight raised line that is about 3 16/32" long and 5/64" wide. The smaller fragment, which measures about 2 6/32" by 1", bears a portion of the raised circular line. The maximum distance from this line to the outer edge of the fragment is 30/32", indicating that the base of the pot was originally at least 10 7/8" in diameter.

Discussion: Although cast iron pots and pans are known to have been in general use throughout the 19th century, evidence for them seems to have been recovered from very few historic sites of the period. In fact, they are mentioned in only one of the twelve reports on 19th century historic sites archaeology consulted in regard to them. That report was on excavations at Washington-on-the-Brazos, Texas, a site occupied ca. 1835-1967 (Davis and Corbin 1967: 43-44).

The sites from which no cast iron pots or pans were recovered are: the first Missouri State Capitol, Missouri, occupied ca. 1819-1961 (Bray 1968); Fort Saint Marks (American Period), Florida, ca. 1821-1892 (Olde 1962); the Posey site, Oklahoma, ca. 1823-1840 (Wyckoff and Barr 1968); Kipp's Post, North Dakota, ca. 1825-1835 (Woolworth and Wood 1960); Fort Vancouver, Washington, ca. 1828-1860 (Caywood 1955); Fort Lookout II, South Dakota, ca. 1831-1851 (Miller 1960); Gila Bend Stage Station, Arizona, ca. 1850-1860 (Berge 1968); Anderson's Mill, Texas, ca. 1850-1914 (Durrenberger 1965); Fort Pierre II, South Dakota, ca. 1859-1863 (Smith 1960a); Johnny Ward's Ranch, Arizona, ca. 1859-1903 (Fontana and Greenleaf 1962); and Fort Stevenson, North Dakota, ca. 1867-1897 (Smith 1960b).
Dating: The paucity of similar materials from other sites makes dating by comparative methods impossible. It would seem, however, that a cast iron pot or pan would more likely have been used during the period, ca. 1862-1863, when the building served as a hospital than during the period, ca. 1841-1843, when it was used as a bank.

Cast Iron Tea Kettle

Number of Specimens: 7 fragments (6 of which fit together), from one vessel.

Description: These 7 fragments appear to be from the side of a spheroidal vessel, which was probably a tea kettle.

The 6 specimens that fit together form a fragment with maximum measurements of 6" by 4 5/16". There are no finished edges on this fragment; thus, it cannot be oriented with certainty. However, accepting the assumed identification as correct, the fragment can be described as follows: a 8/64" wide projecting ledge separated the wall into two parts, with the upper portion curving inward toward the top and the lower portion being almost vertical. The upper part of the wall is rather thin, about 6/64"; the central portion, just below the ledge, is thick, about 16/64"; and the lower portion is about 9/64" thick. Although the ledge is quite prominent on the exterior, there is no evidence for it on the interior, which is smooth and gently curved from top to bottom.

The other fragment, which measures approximately 6 7/8" by 4 1/8" (disregarding curvature), is from the same vessel. It is part of the lower, almost vertical section of the wall. Judging from the horizontal curvature of this fragment, the basal diameter of the vessel must have been about 11 1/2".

Discussion: Cast iron tea kettles were first made in the American colonies in the 1760's (Cotter 1968: 74). By the early 1800's they were commonly used, and they continued to be widely used at least through the 1890's, as is evidenced by several sizes being offered for sale in the 1897 Sears Roebuck Catalogue (Israel 1968: 129). However, evidence for them, like that for cast iron pots and pans, has been recovered from few 19th century historic sites.
Fig. 17. Cast Iron Pot and Kettle Fragments.
Bottom, and upper right: pot or frying pan (pp. 99-100).
Upper left: kettle fragment (pp. 100-103).
Fig. 18. Water Basin and Pitcher (pp. 104-106).
Kettle fragments were recovered from: Fort Vancouver, Washington, occupied ca. 1828-1860 (Caywood 1955: 49); Fort Lookout II, South Dakota, ca. 1831-1851 (Miller 1960: 78); Fort Pierre II, South Dakota, ca. 1859-1863 (Smith 1960a: 134); and Fort Stevenson, North Dakota, ca. 1867-1897 (Smith 1960b: 221). But they were not found at: the First Missouri State Capitol, Missouri, ca. 1819-1961 (Bray 1968); Fort Saint Marks, Florida, ca. 1821-1892 (Olds 1962); the Posey site, Oklahoma, ca. 1823-1840 (Wyckoff and Barr 1968) Kipp's Post, North Dakota, ca. 1825-1835 (Woolworth and Wood 1960); Washington-on-the-Brazos, Texas, ca. 1835-1967 (Davis and Corbin 1967); Gila Bend Stage Station, Arizona, ca. 1850-1860 (Berge 1968); Anderson's Mill, Texas, ca. 1850-1914 (Durrenberger 1965); or Johnny Ward's Ranch, Arizona, ca. 1859-1903 (Fontana and Greenleaf 1962).

Dating: The fact that cast iron kettles have been recovered from historic sites dating as early as 1828 and as late as 1897 does little more than suggest that they were in use during the period of the Bank building, ca. 1841-1863. However, the general uses of kettles would seem to indicate that the fragments recovered from the Bank site likely date from the latter part of that period, ca. 1862-1863, when the building was being used as a hospital.

WOODEN WATER CONTAINER

Wooden Water Bucket or Water Can

Number of Specimens: 2 specimens, 1 staple and 1 fragment of iron rod, or wire, from the handle of a wooden water bucket or can.

Description: The two specimens remaining from the handle, or bail, of a wooden water container are:

(1) A fragment of badly corroded iron rod, or wire, about 13/64" in diameter and 3½" long (disregarding curvature) is all that remains of the bail itself. One end of the rod is bent into a loop.

(2) A staple, which is about 1 1/8" long and 9/16" across and has prongs that are approximately 13/64" in diameter, was placed through the loop in order to fasten the bail to the wooden walls of the bucket.

Corrosion has cemented the bail and staple together.
Discussion: Evidence of the wide use of wooden water containers throughout the whole of the 19th century has been found on a number of historic sites, usually in the form of metal bails or hoops. Other indications of common use during that period include Samuel Woodward's well-known poem, "The Old Oaken Bucket", which was written in 1817, and the advertisements for cedar water pails and water cans or sugar buckets, "standard ware" pine pails, and oak stable pails, which are contained in the 1897 Sears Roebuck Catalogue (Israel 1968: 138-139).

Dating: Wooden water containers were probably used in both the bank and the hospital. It would not seem likely, however, that evidence of their use in the bank would remain, for had a bucket been broken during that time it would probably have been discarded.

CHINA WARE WATER CONTAINERS

Undecorated White Ware Water Basin (made of ironstone)

Number of Specimens: 54 fragments (51 of which fit together), all apparently from one specimen.

Description: The fragments are from an undecorated white ironstone wash basin, which was approximately 4 1/2" high and had a basal diameter of 6 13/16" and a rim diameter of about 12 9/16".

A trade mark is impressed in the base. Although difficult to read, it is, without doubt, ELSMORE & FORSTER (. ) TUNSTALL. Elsmore and Forster, one of the Staffordshire potteries, operated in Tunstall, England, from 1853 until 1871 (Godden 1964: 235). In 1872 the company became Elsmore and Son, and its products were marked ELSMORE & SON (. ) ENGLAND.

The vessel was burned to varying degrees -- some sherds are jet black in color; some, gray to pink; and some remain white. This burning evidently occurred almost immediately after breakage, for all the fragments were found in an area less than 3 feet in diameter.

Discussion: A plain white ware wash basin, similar in shape and identical in height although larger in rim diameter (14 3/4"), was recovered from excavations at Fort Stevenson, North Dakota (Smith 1960b: 222, Plate 52a). This specimen was manufactured by an American firm, Burgess and Campbell of Trenton, New Jersey, which was established in 1879.
Another plain white ware wash basin, quite similar in shape to the specimen from the Bank and like it made of ironstone, was retrieved during salvage of the Union gunboat Cairo, which sank in the Yazoo River on December 12, 1862 (Bearss 1966: 82).

A small ironstone sherd bearing the letters "ELSMOR..." ("ELSMORE AND FORSTER") was recovered from the Whitmore-McIntyre Dugout, Pipe Spring, Arizona (Bradley 1961: 77). Artifacts found in this structure are believed to date ca. 1863-1871.

Dating: As mentioned earlier, the wash basin from the Bank site was made by the firm of Elsmore and Forster, in operation from 1853 until 1871. These dates, together with the differential burning of the specimen (which seems to indicate that breakage occurred just before, or during, the burning of the building), very strongly suggest that the basin was used in the Confederate hospital, 1862-1863.

Undecorated White Ware Water Pitcher (made of cream ware)

Number of Specimens: 118 fragments (103 of which fit together), all from 1 vessel.

Description: The vessel is an eight-sided cream (or Queen's) ware water pitcher, which is 11 3/4" high at the highest point and has a maximum diameter of about 6 1/4". The base, which has a 6" diameter, is also octagonal, with each of the eight sections measuring about 2 2/3" across. The vessel constricts to a diameter of 5 1/8" immediately above the foot and then expands to its maximum diameter (6 1/4") at the lower part of the body, where each of the eight panels are about 2 5/8" wide. The body of the vessel then slopes inward to the point about 8" above the base, where it joins the neck. At that point the vessel is 3 3/4" in diameter, and the panels are about 1 5/8" wide. Above this constriction the neck flares outward. At the top the vessel measures 5" from the outer edge of the rim on one side to the outer edge of the rim on the other. The rim constricts to 4" at the point the spout begins and then tapers to a point, thus forming the spout. The back part (away from the spout) of the neck is missing, as is the handle which was probably attached to the body at a point 4 5/8" above the base. Other than the shape and possibly the missing handle, the vessel has no decoration except for a low, convex band about 3/8" wide which encircles it where the body and neck come together.
Discussion: Most reports on historic sites archeology deal primarily with the ceramic wares found and treat vessel form as a matter of secondary importance, if discussed at all. (This is, of course, understandable as many sherds, which are identifiable as to ware, are not identifiable as to form.) Hence, it is not surprising that pitchers are mentioned in only five of the nineteen reports on 19th century historic sites used for comparative data on ceramics. What does seem surprising is that pitchers were not mentioned in four site reports that discuss the vessel forms found.

The sites at which pitchers were found are: the First Missouri State Capitol, Missouri (Bray 1968: 86); the Posey site, Oklahoma (Wyckoff and Barr 1968: 36); Brigham Young's cooling shaft, Nauvoo, Illinois (Dollar 1967: 78); the Union gunboat Cairo (Bearss 1966: 82-83); and Fort Stevenson, North Dakota (Smith 1960b: 222). The sites where they definitely did not occur are: Kipp's Post, North Dakota (Woolworth and Wood 1960: 271); Gila Bend Stage Station, Arizona (Berge 1968: 206); Anderson's Mill, Texas (Durrenberger 1965: 13-18); and Johnny Ward's Ranch, Arizona (Fontana and Greenleaf 1962: 91).

Dating: China ware pitchers, at least some of which were white ware, were apparently in use throughout the whole of the 19th century. This is reflected by the occupation dates of the sites on which they were found — the First Missouri State Capitol, ca. 1819-1961; the Posey site, ca. 1823-1840; the Bank, ca. 1841-1863; Brigham Young's cooling shaft, ca. 1841-1900; the Cairo, sunk December 12, 1862; and Fort Stevenson, ca. 1867-1897 — and by the advertisements for them in the 1897 Sears Roebuck Catalogue (Israel 1968: 678-683).

Cream (or Queen's) ware was also in use throughout the whole of the century; hence, the water pitcher from the Bank cannot be dated on the basis of form or ware. It seems likely, however, that it, perhaps in conjunction with the ironstone water basin described earlier, was used in the Confederate hospital, 1862-1863.

CHINA WARE CONTAINERS FOR FOOD AND DRINK

Feather (or Shell) Edged Plates and/or Saucers

Number of Specimens: 7 fragments (4 edged in blue; 3, in green), from 7 vessels.
Description: The seven fragments are from seven vessels, all of which appear to have been plates and/or saucers. All of the rims are scalloped; and all are decorated with painted borders of the type generally termed "feather edged" (so called because the design somewhat resembles half of a feather with the mid-rib, or shaft, at the rim of the vessel and the barbs projecting inward from the rim toward the center). Four of the fragments are edged in blue, and three, in green. On six of the specimens the background is white; on the seventh, a green edged fragment, it is a very pale green. With one exception, a blue edged fragment, all of the painted borders contain short impressed lines which project inward from the rims. These impressions are darker in color than the remainder of the border, suggesting that the borders were rubbed after painting, thus removing part of the paint from the ridges between the impressions. The use of this technique, together with the irregular painting of the interior edge of the border (which occurs on five of the fragments), adds to the impression of feathers.

The four fragments edged in blue are from four vessels which differ in the width of the band. On the three specimens with impressed lines they also differ in the length, depth, and spacing of the impressions. The fourth specimen does not have impressed lines; but it has much the same appearance as the others, because it is irregularly painted with darker lines extending from the rim toward the center. This latter type is sometimes termed "false feather edge".

The three fragments edged in green are from three vessels which vary in width and color of the edging. Although the green are more regular in interior outline than the blue, they, too, have impressed lines of a darker tone. One of these sherds differs from the others, and from the blue, in that the glaze is somewhat granular, calling "...to mind 'wet beach sand' when viewed in oblique light..." (Moore, J., 1963: 21). It also differs from the others in that the background, instead of being white, is a very pale green.

Discussion: Feather edged wares in green and/or blue have been found on numerous historic sites dating from the late 1700's to the middle 1800's. Examples are: Williamsburg, Virginia (Noel Hume 1963: 299); Brunswick Town, North Carolina (South 1962: Plate VIII); Fort Smith, Arkansas (Moore, J., 1963: 31, Plates 29, 33); the First Missouri State Capitol, Missouri
Feather edged wares in yellow (Fairbanks 1962: 13), red (Noel Hume 1963: 299), pink (Schuetz 1969: 16), and green and brown polychrome (Olds 1962: 198) were also produced but have not been reported as being found on any of the above sites with the exception of Fort Saint Marks, where one sherd in green and brown polychrome was recovered, and San Juan Capistrano, where six pink sherds were found.

Dating: "...Wedgwood illustrated a blue shell-edged (feather edged) ware in his pattern book of 1774... (however, it has never yet been found in Virginia in contexts prior to about 1785..." (Noel Hume 1963: 299). Most authorities are agreed that the type was most popular in the United States between 1790 and 1830 or 1840 (Fairbanks 1962: 13; Moore, J., 1963: 21; Noel Hume 1963: 299; Olds 1962: 196-197). This is borne out by the sites from which it has been reported: Williamsburg, ca. 1785-1825; Brunswick Town, ca. 1800-1830; Fort Smith, ca. 1817-1824; the First Missouri State Capitol, ca. 1819-1861; Fort Saint Marks (American Period), 1821-1892; the Posey site, ca. 1823-1840; New Echota, ca. 1825-1835: Kipp's Post, ca. 1825-1829; Washington-on-the-Brazos, ca. 1835-present; Mission San Juan Capistrano, ca. 1836-present; the Bank, ca. 1841-1863; Brigham Young's cooling shaft, ca. 1841-1900; Fort George, ca. 1842-1885; the Shaw residence, ca. 1843-1856; the McLean kitchen, ca. 1847-1915; the Marine Hospital, ca. 1858-1882; and Fort Pierre II, ca. 1859-1863. Only in the instance of the last two sites would the material have to have been used after the 1840's, and that would not
be difficult to explain as ceramic wares rather frequently last for 20 or more years before being broken. That this may be the explanation is suggested by the fact that no feather edged wares are reported from the Gila Bend Stage Station, ca. 1850-1860 (Berge 1968: 204-211); Anderson's Mill, Texas, ca. 1850-1914 (Durrenberger 1965: 9-22); Johnny Ward's Ranch, Arizona, ca. 1859-1903 (Fontana and Greenleaf 1962: 90-95); or Fort Stevenson, North Dakota, ca. 1867-1897 (Smith 1960b: 222-223). It should be noted, however, that in Oklahoma the "...few complete specimens (of blue feather edged wares) with identification marks are of English manufacturers...who operated from around 1790 to 1880..." (Wyckoff and Barr 1968: 31); and, thus, these wares may have been produced after the 1840's.

It is possible that all of the fragments of feather edged wares found at the Bank site date prior to the construction of the building, ca. 1841, since: one fragment, that with the granular, or "dappled", glaze dates prior to 1820 (Hughes and Hughes 196$: 151) or 1829 (Moore, J., 1963: 21); the greatest popularity of feather edged wares was before that time; and a few other artifacts (such as a trigger guard, a gun flint, and two kaolin pipe stems) recovered from the site probably date from before construction. However, as the feather edged wares were found in conjunction with some ceramic wares known to date after 1850, it seems reasonable to assume that they were used during 1862-1863, when the Bank served as a Confederate hospital. The apparent discrepancy in age between these wares may possibly be explained by suggesting that the feather edged fragments were from old plates and/or saucers donated by citizens of Arkansas Post for use in the hospital.

Repoussé edged Plates or Saucers

Number of Specimens: 1 fragment.

Description: This sherd is from a very light green plate or saucer with a scalloped edge, which is decorated with a repoussé band, the outer portion of which is painted a darker green. The repoussé band, which is about 21/32" wide, has two motifs: the outer one, which extends from the edge of the rim inward about 7/32", is a vine and leaf motif; and the inner one is composed of five rows of arcs, looking somewhat like fish scales. It appears that the outer 7/32"
of the rim was first painted a dark green and then wiped, as the green is much lighter on the raised portions of the design.

Discussion: Illustrations of closely related wares do not appear in any of the reports on historic sites which are being used for comparative purposes; however, four patterns of somewhat similar repoussé edged wares were found at Mission San Juan Capistrano, Texas (Schuetz 1969: 16, Plate 13), and one, of still another pattern, at Washington-on-the-Brazos, Texas (Davis and Corbin 1967: 25). All seem to have more of the characteristics of feather edged wares than of any other wares. In discussing those found at San Juan, Schuetz suggests that they "...must have been designed shortly after the feather edged pattern(s) appeared" (Schuetz 1969: 16).

Dating: Repoussé decorations, some of which are very elaborate, were used on white saltglaze wares as early as 1740 (Noel Hume: 1963: 296). They have been used on plain white cream wares, pearl wares, and ironstone and on these wares in conjunction with painted, transfer printed, and decalcomania decoration; and they are still used on some china today. As the sites, other than the Bank, from which repoussé has been reported were occupied from about 1835 until the present, this form of decoration, in itself, is not datable. Neither is the ware from the Bank, except that the glaze apparently dates after 1820-1830.

As the sherd was found in conjunction with materials which were probably associated with the Confederate hospital, it seems likely that the plate from which it came was also used there.

Monochromatic Transfer Printed Plates, Saucers, and Bowls

Number of Specimens: 28 fragments (15 blue-on-white, 7 purple, 4 magenta, 1 black, 1 green, and 1 purple and black), from at least 16 vessels.

Description: With the exception of one fragment which is printed in purple on one side and in black on the other, all of the fragments are printed in one color on a white background and are glazed with a very even glaze. Five colors and one bi-color are represented, as follows:
Fig. 19. Feather and Repousse Edged Wares.
Top: repousse edged ware (pp. 109-110).
Middle and bottom: feather edged wares (pp. 106-109).
Fig. 20. Monochromatic Transfer, Polychrome Transfer, and Polychrome Decalcomania Decorated Wares.
Top row: polychrome decalcomania in yellow and green (pp. 119-122).
Second row: polychrome transfer — middle and end sherds in blue and black, others in pink and green (pp. 118-119).
Third row and bottom: monochromatic transfer in blue, purple, magenta, black, and green (pp. 110-118).
(1) Blue: 15 fragments. Nine of these are medium to dark blue leaf and/or floral patterns of the type of transfer sometimes termed "flow". These represent at least three different vessels. The other six fragments, which are from at least five vessels, are light blue and bear floral, wiggly line, and geometric designs. One of the latter is printed from a stipple engraved plate.

(2) Purple: 6 fragments. Two of these are from two bowls bearing small floral designs in a spray or rope pattern. The other four fragments (two of which fit together) are from one vessel, probably a plate, bearing a scenic design which is bordered by a band containing stylized individual flowers and a line of circles. All six fragments are from vessels printed from stipple engraved plates.

(3) Magenta: 4 fragments. Three of these fragments, which fit together to form part of the flaring rim of an oblong bowl, are decorated on the interior rim by a band composed of stylized floral elements, ribbon-like bands, panels, and a lace-like edging. The exterior bears a similar design around the constriction where the body meets the rim. The other fragment has a stylized floral design on a stippled background. All the fragments were printed from stipple engraved plates.

(4) Black: 1 fragment. This fragment, which is evidently from a bowl, is decorated by wiggly black lines on a stippled background.

(5) Green: 1 fragment. This fragment, which is apparently from a saucer, is decorated with a bluish-green leaf design.

(6) Purple and black: 1 fragment. This small fragment, which is flat, bears on one side a scenic design (buildings) in purple and on the other a floral design in black. It was printed from stipple engraved plates.

Discussion: Transfer printing, a process for transferring a monochromatic design to a ceramic vessel, was invented about 1753 (Hughes and Hughes 1968: 148). The steps of this process were: etching the design on a copper plate; inking the plate with a pigment in a suspension of oil; pressing the plate on
a piece of linen paper; placing the paper on the ware to be decorated; and transferring the design by rubbing the back with a flannel cloth. Once the design was transferred the paper was removed, and the vessel was heated to drive off the oil base of the pigment. Then it was refired (Durrenberger 1965: 9).

The earliest form of transfer printing -- simple designs in black, brick red, dark purple, and brown -- was applied over the glaze and then "...fired in a low-temperature, hardening-on kiln" (Hughes and Hughes 1968: 150). However, by 1756, blue, black and sepia designs, most of which were adapted from Chinese porcelain, were being transferred to the biscuit (or once-fired vessel), fired, and then glazed.

Because of the frequent use of cross-hatching in the engraving, the rubbing process, and the removal of the paper, the transfer printed designs on these earlier wares were usually somewhat smudged. After 1800 the engraved lines were thinner making possible not only sharper printing but also "...a variation in tone, thus introducing dark shades and highlights. From 1810 finer tone variations were secured by combining line and stipple engraving on a single copper plate" (Hughes and Hughes 1968: 150).

Blue was by far the most popular color for transfer printing until 1828, when "...It was found that by mixing finely powdered green, yellow, red and black enamel with barbadoes tar it was possible to apply transferred designs in various shades of these colours without distortion" (Hughes and Hughes 1968: 151). With numerous colors available, potters began producing wares with two or more colors on each vessel. However, as only one color could be applied at one time (thus requiring very careful alignment and a separate firing for each color), the process was costly and time consuming, and only very limited amounts of these wares were produced. For this reason these wares are seldom found on archeological sites.

Monochromatic transfer printed wares, on the other hand, were very common and have been recovered in quantity from the sites of numerous historic buildings which were constructed between the 1780's and the 1860's and some of which were occupied well into the 1900's. Among these are: Williamsburg, Virginia (Noel Hume 1963: 299); Brunswick Town, North Carolina (South 1962: Plate VII); the first Fort Smith, Arkansas (Moore, J., 1963: 21, 23); the First Missouri State
Capitol, Missouri (Bray 1968: Fig. 33H); Fort Saint Marks (American Period), Florida (Olds 1962: 193-196); the Posey site, Oklahoma (Wyckoff and Barr 1968: 31-36); New Echota, Georgia (Fairbanks 1962: Plate III); Kipp's Post, North Dakota (Woolworth and Wood 1960: 299-300); Fort Vancouver, Washington (Caywood 1955: 53); Washington-on-the-Brazos, Texas (Davis and Corbin 1967: 15-23); Mission San Juan Capistrano, Texas (Schuetz 1969: 14-16); Brigham Young's cooling shaft, Nauvoo, Illinois (Dollar 1967: 78-79); Fort George, South Dakota (Smith 1960a: 135); Fort Pierre II, South Dakota (Smith 1960b: 222). Wares with a blue design on a white background are reported from all these sites with the exception of Fort Stevenson. Brown-on-white wares are reported from Fort Smith, Fort Saint Marks, the Posey site, New Echota, Washington-on-the-Brazos, Mission San Juan Capistrano, the Shaw residence, the McLean kitchen, Anderson's Mill, Fort Pierre II, and Fort Stevenson. Black-on-white is reported from Williamsburg, Fort Saint Marks, the Posey site, New Echota, Fort Vancouver, Washington-on-the-Brazos, San Juan Capistrano, the Shaw residence, the McLean kitchen, and Fort Pierre II. Reported from fewer sites are: green-on-white wares, from Fort Saint Marks, New Echota, the Posey site, Mission San Juan Capistrano, and Anderson's Mill; purple-on-white, from the Posey site, Fort Vancouver, Washington-on-the-Brazos, Mission San Juan Capistrano, and the McLean kitchen; pink-on-white, from Fort Saint Marks, New Echota, Fort Vancouver, and Washington-on-the-Brazos; red-on-white, from Fort Vancouver, Mission San Juan Capistrano, and Fort Pierre II; and magenta-on-white, from Fort Saint Marks, New Echota, and Washington-on-the-Brazos.

It should be noted that a number of patterns or designs were made in each of the above colors. For example, of the 42 identifiable patterns of transfer printed ware recovered from the excavations at Fort Vancouver, 35 were blue-on-white; 2, purple ("mauve"); 2, gray; 1, pink; and 1, red ("puce") (Caywood 1955: 53, 55).
Dating: Transfer printed wares were being made in England by the early 1750's (Clow and Clow 1958: 354; Cotter 1968: 13, 29; Fairbanks 1962: 12). These wares, which bore monochromatic designs in black, red, and purple, were printed over-glaze; however, "...by 1756 there was an important printed ware works at Liverpool...(and) under-glaze blue..." was being produced (Clow and Clow 1958: 354). The popularity of this ware must have been immediate, for it was being made by a number of potters, including Wedgwood, by 1760 (Clow and Clow 1958: 354; Cotter 1968: 29). Also produced at that time were black and sepia transfer printed wares. The popular Blue Willow pattern, which is still produced today, was introduced by Thomas Turner in 1780 (Caywood 1955: 55-56; Cotter 1968: 13) and was soon copied by other potters, including Josiah Spode, who introduced a willow pattern about 1784 (Cotter 1968: 13).

Transfer printed wares were definitely being imported into the United States by the mid-1780's, for a black-on-white ware found at Williamsburg can be dated at, or shortly after, 1783 (Noel Hume 1963: 299). Blue-on-white wares, which are of about the same period, have also been found at Williamsburg. Authorities agree that transfer printed wares, the majority of which were produced in England, reached the height of their popularity in the United States between 1790 and 1850 (Cotter 1968: 13; Fairbanks 1962: 12; Olds 1962: 193). The popularity of these wares during that period is borne out by the historic sites on which they have been found: Brunswick Town, North Carolina, ca. 1800-1830; the first Fort Smith, Arkansas, ca. 1817-1824; the First Missouri State Capitol, ca. 1819-1961; Fort Saint Marks, Florida, ca. 1821-1892; the Posey site, Oklahoma, ca. 1823-1840; New Echota, Georgia, ca. 1825-1835; Kipp's Post, North Dakota, ca. 1825-1829; Fort Vancouver, Washington, ca. 1828-1860; Washington-on-the-Brazos, Texas, ca. 1835-present; Mission San Juan Capistrano, Texas, ca. 1836-present; the Bank site, Arkansas, ca. 1841-1863; Brigham Young's cooling shaft, ca. 1841-1900; Fort George, South Dakota, ca. 1842-1885; the Shaw residence, Florida, ca. 1843-1856; McLean kitchen, Virginia, ca. 1847-1915; Anderson's Mill, Texas, ca. 1850-1914; Fort Pierre II, South Dakota, 1859-1863; the Marine Hospital, Florida, ca. 1858-1882; and Fort Stevenson, North Dakota, 1867-1897. The great popularity of blue-on-white throughout this period is also borne out for, as mentioned earlier, designs in these colors are reported from all the above sites except Fort Stevenson.
Unless fragments of definitely identifiable patterns are found, it is very difficult to date the blue-on-white wares, although, in general: "Light blue printing was characteristic in 1790 (the time that these wares were first imported in quantity) and was followed by deep blue printing, 1800-1825. Thereafter light blue was fashionable again until printing in colors (polychrome transfer printed and decalcomania) took over in the mid-1800's" (Cotter 1968: 13).

Changes in paste and in glaze are also important for dating purposes. According to Jackson W. Moore, the "...most significant index for...'dressy' earthenwares is the technological improvement in the glaze which was developed in 1829. Most wares manufactured before this date manifest a (somewhat granular) surface which calls to mind 'wet beach sand' when viewed in an opaque light... After 1829 the glaze is very even..." (Moore, J., 1963: 21). To illustrate this, he mentions that most of the blue-on-white and brown-on-white transfer printed wares from the first Fort Smith, ca. 1817-1824, have the earlier glaze. It should be noted, however, that Bernard and Therle Hughes disagree with Moore as to the ending date of "dappled" glazes. They state that dappling "...is seldom visible on ware dating from 1800 and never after 1820" (Hughes and Hughes 1968: 151).

All of the transfer printed sherds recovered from the Bank site have a very even glaze and, thus, probably date from after the 1820's. This would still allow them to date prior to the construction of the Bank in 1841, as some few artifacts likely do. However, it seems more probable that they were used during the use of the building as a Confederate hospital, for they were found in association with polychrome transfer printed wares dating after 1852 and ironstone, which was first imported in quantity after 1851.

Monochromatic Transfer Printed Cups

Number of Specimens: 7 fragments, apparently from 1 vessel.

Description: The seven fragments are apparently from a single white Queen's ware cup, 2 7/16" high and approximately 2 5/8" in diameter, which is decorated with a green transfer floral design, a black band around the rim, and a black line on the handle. The wall of the cup is vertical from rim to base, and the bottom is recessed, suggesting that it was not intended for use with a saucer.
The portion of the recessed bottom that was recovered bears in green transfer print the last two letters of the manufacturer's mark. These are "...RT."

It is, of course, impossible to definitely identify the manufacturer from these letters; however, for the following reasons it is not unreasonable to suggest that it may have been produced by W. Davenport & Co., Longport, England:

(1) During the first half of the 19th century English-made ceramic wares had nearly driven American wares off the market; thus, the cup in question was probably made in England.

(2) Of the 4516 marks given in the Encyclopaedia of British Pottery and Porcelain Marks (Godden 1964), only 14 contain words ending in the letters "RT".

(3) Of the 14 marks containing words ending in "RT", only one could be broken in the way that the cup was broken and leave only those two letters. That mark is "DAVENPORT", which, together with a wide variety of pattern names, was used by W. Davenport & Co. (1793-1887) on transfer wares during the period from 1820 until 1860 (Godden 1964: 190).

Discussion: References to similar cups have not been found.

Dating: Although no other fragments of this particular transfer printed ware pattern were recovered from the site, it is rather similar to some of the other monochromatic transfer printed wares found there, and in all likelihood dates from the same period of use. The possibility that it may have been manufactured by W. Davenport & Co. between 1820 and 1860 does not conflict with this supposition.

Polychrome Transfer Printed Bowl or Saucer

Number of Specimens: 5 fragments, probably from 1 vessel.

Description: These five sherds (and three of the same pattern which were recovered from the earlier test excavations) are printed with two designs, one interior and one exterior, each of which are in two colors. The exterior design is printed in pink and green; the interior, in blue and black.

The background of the interior design is composed of closely spaced light blue wavy lines, which from a distance give the appearance of a solid color. Bordering the rim on the
interior is a band of rather closely spaced black lines which are overlaid with curvilinear black lines that look as if they may represent a lace edging. Spaced along this band, areas of black printing are omitted leaving stylized flowers and leaves in light blue. Just below the band is a row of small circles also printed in black; and below this row is a floral pattern composed of flowers printed in black outline and in gray, leaves in gray and black, and gray and black stems. Evidently below these is a curvilinear design in white and very light blue which is outlined in light blue (the background of this one sherd has light blue wavy lines identical to the others and an exterior design that seems identical to that on the others). The exterior design is composed of flowers, leaves, and stems which are printed in light pink and in medium and dark green. All the leaves and stems are in green; and the petals of some of the flowers are in light green with pink centers outlined in dark green. Other flowers are evidently in pink as some of the sherds have pink areas with scalloped edges; however, none of the sherds bear complete pink flowers.

As mentioned in the discussion of monochromatic transfer printed wares, a limited quantity of polychrome printed wares in green, yellow, red, and black were produced after 1828. However, as only one color could be applied at one time these wares were expensive and are rarely found on archeological sites.

In 1848 a process was invented by which three colors — blue, red and yellow — could be printed from a single transfer, thus requiring only one firing. With further improvement in 1852, two more colors, brown and green, were added. "The process continued in use until the 1860's" (Hughes and Hughes 1968: 151-152). It was apparently gradually replaced by decalcomania.

Dating: As the polychrome transfer printed ware from the bank site is in four colors — pink, green, blue, and black — its date of manufacture can be placed as falling between 1852 and the 1860's. Thus, it would seem likely that it was used in the Bank during the period of its use as a Confederate hospital, 1862-1863.

Polychrome Decalcomania Decorated Plates, Saucers, Cups and/or Bowls

Number of Specimens: 4 fragments, from at least 2 vessels.
Description: All four fragments are from vessels with white backgrounds which are decorated with designs that are printed in two colors.

The colors represented are as follows:

(1) Green and yellow: 2 fragments. These sherds are evidently from a plate which has a scalloped rim and is decorated on the interior in yellow and two shades of green. One sherd, from the base of the plate, has a design composed of hundreds of small dark green dots which surround a dark green flower with a yellow center and light yellow-green leaves. Around this design, evidently near the edge of the flat inner portion of the plate, is a band in a curvilinear geometric design which is composed of curved lines and circles. The other sherd, which is a portion of the rim, bears a related design composed of small dark green circles surrounding dark green and light yellow-green leaves that are connected by a yellow-green stem.

(2) Red and blue: 2 fragments. These fragments, which are probably from the same vessel as the colors and method of decoration are identical, are likely from a cup or small bowl. One fragment, a rim sherd, is decorated on the exterior by a red band just below the rim and an unidentifiable patch of blue below the band. The other sherd, which appears to be from near the base, is decorated on the exterior with curvilinear bands of blue and thin lines of red that are used close together in some instances as shading and separately in others as curvilinear lines. It seems probable that part of a large floral design is represented.

Discussion: Decalcomania is a process for transferring a polychromatic lithographed design to a ceramic vessel. Although lithography was invented in Germany about 1796 by Aloys Senefelder, a Czech, and was widely used in England after Senefelder's book, A Complete Course of Lithography, was translated into English in 1819, the process of decalcomania dates from 1839 when light blue designs were introduced. "From 1845 lithography was carried out in multi-colour, pink, (blue, green, purple, grey and black all being used in a single design" (Hughes and Hughes 1968: 152).

In this process a polychromatic design is lithographed "...on a layer of thin tissue paper which is backed with heavier paper. The tissue paper is then coated with an adhesive..."
(, the) unit dampened, and the decal slid off onto the surface of the glazed vessel (that is to be decorated). With the decalcomania technique many colors can be used and there is no chance (as with transfer printing) of smearing the lines" (Durrenberger 1965: 10).

Decalcomania decorated vessels have been found on a number of historic sites, most of which are known to have been occupied during the latter half of the 19th century. Examples are: Fort Saint Marks, Florida (Olds 1962: 193-196); New Echota, Georgia (Fairbanks 1962: 12); Fort Vancouver, Washington (Caywood 1955: 53); Mission San Juan Capistrano, Texas (Schuetz 1969: 15); the McLean summer kitchen, Appomattox Court House, Virginia (Walker, J., 1963: 40); and Anderson's Mill, Texas (Durrenberger 1965: 14).

Numerous color combinations are reported for the decalcomania wares from the above sites; among them are: black and blue; green, blue, and pink; green, blue, pink, and brown; gray and green; and green, red, yellow, pink, and black. However, none of these wares seem to be the same as those recovered from the Bank site.

Dating: The manufacture of polychrome decalcomania decorated ceramic wares began in England in 1845. Although not directly stated, this is possibly the reason that 43 patterns of monochromatic and polychromatic printed wares found at Fort Vancouver, Washington, were separated into two periods of manufacture: "between the years 1833 to 1847, (and)... from 1847 to 1867" (Caywood 1955: 52).

The date that decalcomania decorated wares were first imported into the United States is unknown; however, they are said to have been considered very fashionable by "...the mid-1800's" (Cotter 1968: 13). Taking into account the date of the beginning of manufacture, the occurrence of these wares at Fort Vancouver, ca. 1828-1860, and at the Bank, ca. 1841-1863, seems to bear this out. The occupation dates of Fort Saint Marks (American Period), ca. 1821-1892; Mission San Juan Capistrano, ca. 1836-present; the McLean kitchen, ca. 1847-1915; and Anderson's Mill, ca. 1850-1914, do not confirm the statement but do not conflict with it. Although the finding of rare sherds with "...polychrome effects..." (Fairbanks 1962: 12) at New Echota, ca. 1825-1835, directly conflicts with the statement, they must be explained as being from later occupations of the site, for the ware had not been invented when New Echota served as the Cherokee capital.
As the decalcomania decorated wares from the Bank site definitely date after 1845 and probably date after 1850, it seems very likely that they are from the Confederate use of the structure as a military hospital, ca. 1862-1863.

**Undecorated White Ware Plates (made of ironstone)**

**Number of Specimens:** 3 fragments, from at least 2 specimens.

**Description:** All three sherds are apparently from undecorated ironstone plates which are thick (15/64" — 18/64") and heavy. Two are rim sherds; the third is from a base.

The two rim sherds are 16/64" and 18/64" in thickness. Both have plain, rounded rim edges; but they differ in that the edge of the thicker one is slightly thickened, whereas the edge of the other is slightly thinned.

The basal sherd is 15/64" in thickness. It has a raised foot inside of which the base is flat.

None of these fragments bear any identifying marks.

**Discussion:** From the 1730's until today various types of decorated white glazed wares have been widely used as general purpose tablewares. Among these the most important have been: salt glaze ware, cream (or Queen's) ware, pearl ware, and ironstone (or "white granite china") ware.

All of these except salt glaze ware, the use of which was confined primarily to the 18th century, were very popular during the 19th century, as is illustrated by the large number of historic sites at which one or more of these wares were recovered: Brunswick Town, North Carolina (South 1962: Chart I); Fort Smith, Arkansas (Moore, J., 1963: 20-21); Fort Saint Marks, Florida (Olds 1962: 199-202); the Posey site, Oklahoma (Wyckoff and Barr 1968: 36); New Echota, Georgia (Fairbanks 1962: 15); Kipp's Post, North Dakota (Woolworth and Wood 1960: 299-300); Fort Vancouver, Washington (Caywood 1955: 55); Mission San Juan Capistrano, Texas (Schuetz 1969: 18-19); Brigham Young's cooling shaft, Nauvoo, Illinois (Dollar 1967: 78); the W. H. Shaw residence, DeSoto National Memorial, Florida (Pierson 1965: 130); the McLean summer kitchen, Appomattox Court House, Virginia (Walker, J., 1963: 40); the Gila Bend Stage Station, Arizona (Berge 1968: 206-209); Anderson's Mill, Texas (Durrenberger 1965: 16); Johnny
Ward's Ranch, Arizona (Fontana and Greenleaf 1962: 91-95); the Marine Hospital, Fort Saint Marks, Florida (Shenkel and Westbury 1965: 22); Fort Pierre II, South Dakota (Smith 1960a: 135); and Fort Stevenson, North Dakota (Smith 1960b: 222).

A meaningful comparison of all of the white wares from the Bank site with those from the above sites is very difficult to make, for many of the wares are described in such general terms as: "whiteware", "white earthenware", "white semi-porcelain", or "white vessels". However, ironstone is usually separated out from the above categories of white wares. It has been reported from twelve sites -- Fort Saint Marks, New Echota (where it was found on the surface but not in the excavations), Mission San Juan Capistrano, Brigham Young's cooling shaft, the W. H. Shaw residence, the McLean summer kitchen, Gila Bend Stage Station, Anderson's Mill, Johnny Ward's Ranch, the Marine Hospital, Fort Pierre II, and Fort Stevenson -- all of which were occupied during, into, or throughout the second half of the 19th century.

Dating: The majority of the undecorated white wares found on 19th century historic sites in the United States were manufactured in England; and the relatively small percentage of American wares found were mostly copied from the English wares. Thus, to date the white wares found in this country, it is necessary to trace the developmental sequence of white wares in England. This sequence follows:

(1) Dipped White Stoneware, or Crouch Ware, a slipped ware being produced by ca. 1710 and exported in small quantity until the late 1720's.

(2) Salt Glaze Ware, in production by 1725 (some authorities say 1710) and exported in quantity by the 1730's.

(3) Cream (or Queen's) Ware, being manufactured about 1760 (some authorities separate the two wares into: Cream Ware, 1750; Queen's Ware, 1760) and exported in quantity by 1770.

(4) Pearl Ware, first produced about 1780 and exported shortly thereafter.

(5) Ironstone Ware, or White Granite China, developed and patented in 1813 but not exported in large quantity until after 1851.
From the above, it would seem probable that the ironstone recovered from the Bank site would date sometime after 1851. This is further corroborated by the sites from which this ware has been recovered in excavation, for the occupation dates of these sites fall, at least in part, after 1851: Fort Saint Marks (American Period), ca. 1821-1892; Mission San Juan Capistrano, ca. 1836-present; the Bank, ca. 1841-1863; Brigham Young's cooling shaft, ca. 1841-1900; the W. H. Shaw residence, ca. 1843-1856; the McLean summer kitchen, ca. 1847-1915; Gila Bend Stage Station, ca. 1850-1860; Anderson's Mill, ca. 1850-1914; Johnny Ward's Ranch, ca. 1859-1903; the Marine Hospital, ca. 1858-1882; Fort Pierre II, ca. 1859-1863; and Fort Stevenson, ca. 1867-1897. The finding of ironstone on the three forts probably represents its use "...by the United States Army... (for it was) carried throughout the West as military posts were established" (Fontana and Greenleaf 1962: 92). This suggests the possibility of official use of the ware by the Confederate States Army, which would fit the use of the Bank building as a Confederate hospital.

Whether officially used or not, the post-1850 dating of ironstone strongly suggests that the plates (and the small bowl and the wash basin which are described elsewhere) were connected with the Confederate hospital, for, except for the hospital, the Bank building was all but unused after the closing of the Bank in 1843.

Undecorated White Ware Saucers (made of cream ware, pearl ware, and ironstone)

Number of Specimens: 12 fragments, some of which fit together, from at least 5 vessels.

Description: Of the twelve fragments, nine are cream, or Queen's, ware, two are pearl ware, and one is ironstone. All appear to be from saucers or small plates; however, one may be from a small, very shallow bowl.

Six of the nine cream ware sherds are from the bases of saucers or small plates. Two which fit together are from a vessel with a flat bottom that appears rather wide for a saucer; a slightly rising border (or rim); and a rounded foot surrounding a flat base. The other basal sherds seem quite similar but have slightly different feet. The other three sherds are rim fragments. They are gently curved upward from toward the center of the vessel to the rim, which is rounded at the edge but is otherwise plain.
One of the pearl ware fragments extends from about \(\frac{1}{2}\)" inside the foot to the outer edge; the other is a small basal sherd. The feet on both sherds are flat on the bottom and encircle flat bases; however, they differ slightly in height and width. The depressed bottoms of the interiors of both are flat, and the rims curve gently upward from the foot. The one remaining rim flares slightly outward near the edge, which is rounded. The outer \(\frac{1}{4}\) of the rim is thinned somewhat, giving the appearance of a depressed line.

The one ironstone sherd extends from about 1" inside the foot to outer edge. The foot is flat on the bottom and encircles a recessed flat base. The bottom of the interior is also flat. The rim curves upward more sharply than the other specimens, suggesting that the fragment may possibly be from a very low bowl. The rim, which is rounded, is plain.

Discussion: Cream (or Queen's) ware, has been reported from the excavations at Fort Smith, Arkansas (Moore, J., 1963: 20-21); Kipp's Post, North Dakota (Woolworth and Wood 1960: 299-300); Fort Vancouver, Washington (Caywood 1955: 55); Washington-on-the-Brazos (Davis and Corbin 1967: 27); and Brigham Young's cooling shaft, Nauvoo, Illinois (Dollar 1967: 78). Pearl ware has been reported from Williamsburg, Virginia (Noel Hume 1963: 299) and Brigham Young's cooling shaft, Illinois (Dollar 1967: 78); and ironstone has been reported from excavations at twelve historic sites (see the section entitled "Undecorated White Ware Plates").

Dating: Cream (or Queen's) ware, which was first manufactured about 1760 and is still being produced today, has been recovered from six 19th century historic sites: the first Fort Smith, ca. 1817-1824; Kipp's Post, ca. 1825-1829; Fort Vancouver, ca. 1826-1860; Washington-on-the-Brazos, ca. 1835-present; the Bank site, ca. 1841-1863; and Brigham Young's cooling shaft, ca. 1841-1900. Based on the occupation periods of these sites, it would appear that the greatest popularity of cream wares was probably prior to 1845. This may be correct; however, since cream wares are still made today, it seems more probable that the problem is one of identification and that at least a part of the "white earthenware", "white semiporcelain", and "white wares" reported from later sites are cream wares. At any rate, the sherds from the Bank site are apparently post-1830, for none of them have the "wet beach sand" glaze which is found on most wares manufactured before 1829 (Moore, J., 1963: 21).
In 1779 (Godden 1966: XXI) Wedgwood refined the glaze used on cream ware creating an almost white ware that he called "Pearl". Despite Ivor Noel Hume's statement that pearl ware was manufactured "...by most of the Staffordshire potters from about 1785 through the first quarter of the nineteenth century..." (Noel Hume 1963: 299), it seems certain that it was still in use at least as late as the 1860's. Not only was it found at the Bank site, ca. 1841-1863, and in the fill of Brigham Young's cooling shaft, ca. 1841-1900; but, according to Godden, from about 1840 the name "Pearl" was impressed into the vessels and the letter "P" from about 1868 (Godden 1968: XXI).

As the cream ware and pearl ware were found in association with ironstone, polychrome transfer printed wares, and decalcomania decorated ware, all of which date after 1850, it seems likely that all these wares were used in the 1862-1863 Confederate hospital.

Undecorated Small White Ware Cups and Bowls (made of pearl ware, ironstone, and porcelain)

Number of Specimens: 12 fragments, from at least 5 specimens.

Description: All twelve sherds are from undecorated white ware vessels, which probably were cups, although it is possible that small bowls and saucers are also represented. Two of the vessels (3 sherds) are pearl ware; two (8 sherds) are ironstone; and one (1 sherd) is porcelain.

Two of the three pearl ware sherds, which may be "...recognized by the way the glaze appears blue in corners and around the feet of the vessels..." (Noel Hume 1963: 299), are from the bases of small, round, footed cups (or possibly from small bowls). Both have a circular foot (or basal rim), and the bases, which are flat, are depressed. In both instances the vessel is sharply constricted just above the foot; however, on one vessel the constriction is quite narrow with the wall flaring out immediately above the foot, and on the other the constriction is between the base and the flare of wall is about 1/4" wide. The third fragment is a small rim sherd, which is apparently from one of the cups.

Five of the fragments are ironstone rim sherds which are apparently from two, or more, small plain white round cups or bowls; however, they may possibly be from saucers. The
walls of four of these — two of which have been blackened by fire and, thus, cannot be identified as undecorated ware with certainty — curve in gently toward the top. The walls of the other also curve gently inward, but the rim flares slightly outward.

The other three ironstone sherds are fragments of a molded white bowl. The rim is slightly thickened, and below it is another slightly thickened band. Below these bands the vessel has flat vertical panels which meet at an obtuse angle and end at the top in an arc.

The fragment of porcelain, a rim sherd, is evidently from a small bowl with a slightly flaring rim. The ware is thin (5/64"), translucent, and has a slight bluish tinge.

None of the fragments bears a maker's mark or other identification.

Discussion: As mentioned earlier, white wares of various types have been found on numerous 19th century historic sites.

Ironstone is reported as having been recovered from excavations at twelve historic sites (see the section entitled "Undecorated White Ware Plates"), and it seems likely that pearl ware has been recovered from several. However, the latter ware has been reported, by name, from only two sites occupied in the 19th century — Williamsburg, Virginia (Noel Hume 1963: 299) and Brigham Young's cooling shaft, Nauvoo, Illinois (Dollar 1967: 78).

Undecorated white porcelain has been reported from several 19th century historic sites: Fort Smith, Arkansas (Moore, J., 1963: 20); Fort Saint Marks, Florida (Olds 1962: 199); New Echota, Georgia (Fairbanks 1962: 13); Washington-on-the-Brazos, Texas (Davis and Corbin 1967: 30); Brigham Young's cooling shaft, Nauvoo, Illinois (Dollar 1967: 78); the McLean summer kitchen, Virginia (Walker, J., 1963: 40); Anderson's Mill, Texas (Durrenberger 1965: 16); and Johnny Ward's Ranch, Arizona (Fontana and Greenleaf 1962: 92). However, it is characterized as "rare" or "sparse" on all these sites.

Dating: As stated earlier (in the section on "Undecorated Small White Ware Cups and Bowls"), pearl ware was manufactured from about 1785 through the 1860's.

The dating of ironstone as being after 1850 and its probable connection with the hospital has been discussed earlier (in the section on "Undecorated White Ware Plates").
The beginning dates for the occupation of the sites on which porcelain occurs range from ca. 1817 to ca. 1859 and the abandonment dates from ca. 1824 to the present: the first Fort Smith, ca. 1817-1824; Fort Saint Marks (American Period), ca. 1821-1892; New Echota, ca. 1825-1835; the Bank, ca. 1841-1863; Brigham Young's cooling shaft, ca. 1841-1900; McLean kitchen, ca. 1847-1915; Anderson's Mill, ca. 1850-1914; and Johnny Ward's Ranch, ca. 1859-1903. Hence it would appear that porcelain was probably used throughout the whole of the 19th century and was definitely in use from ca. 1820 until ca. 1860.

Since the pearl ware, ironstone, and porcelain were found in association, it would seem most likely that all were used in the Confederate hospital.

Covered White Ware Bowls with Molded Handles (made of pearl ware)

Number of Specimens: 4 fragments (2 of which fit together), from 2 vessels.

Description: Three fragments, two of which fit together, are from the rim and upper body of a covered pearl ware bowl. Although too little remains to allow description of the bowl with any real certainty, it appears to have probably been octagonal in cross-section and to have had vertical walls, with those at the sides and ends being longer than those at the corners. At the neck, the bowl is sharply constricted, and above this the rim flares out. On the interior, a small ledge, which is just above the constriction, projects inward to support a lid (which was not recovered). The molded handle is attached to the vessel from about ½" down the vertical wall upward almost to the point of greatest constriction, then it juts outward and upward, curving down near the end. The lower portion of the attached part of the handle is divided into two rather flat triangular prongs with a molded leaf design; these apparently taper to points at the bottom. The projecting portion of the handle is also rather flat, but reaches from the outer edge of one prong across the space between the two and to the outer edge of the other prong. The outer end of the projecting part of the handle is divided into three arcs, the center one of which is longer than the others.

The other fragment is part of a pearl ware handle, which is apparently rather similar to the one described above. It is rather flat and wide and curves down at the end, with the central portion projecting further than the sides.
Discussion: Molded handles of various types and wares are specifically mentioned in only a few reports on 19th century historic sites: Fort Smith, Arkansas (Moore, J., 1963: 22); Fort Saint Marks, Florida (Olds 1962: 200); the Posey site, Oklahoma (Wyckoff and Barr 1968: 36); the McLean kitchen, Appomattox Court House, Virginia (previously unreported); and Fort Pierre II, South Dakota (Smith 1960a: 135). None of these, however, was said to have been of pearl ware.

Dating: The sites from which molded white ware handles have been reported date as early as 1817 and as late as 1915: the first Fort Smith, ca. 1817-1824; Fort Saint Marks (American Period), ca. 1821-1892; the Posey site, ca. 1823-1840; the Bank, ca. 1841-1863; the McLean summer kitchen, ca. 1847-1915; and Fort Pierre II, ca. 1859-1863.

That all these sites were occupied during the period from 1820 until 1860 suggests the possibility that molded handles may have been more popular during these years. It should be noted, however, that, with the exception of the Bank, none of these handles were specifically identified as being pearl ware.

As mentioned earlier, pearl ware has been reported from only three sites: Williamsburg, Virginia, ca. 1785-1825; the Bank, ca. 1841-1863; and Brigham Young's cooling shaft, Nauvoc, Illinois, ca. 1841-1900. Combining the very limited information on molded handles and pearl ware suggests that molded handles of pearl ware may have been manufactured between 1820 and 1840. However, it seems likely that the pearl ware handles from the Bank site were from vessels used in the 1862-1863 Confederate hospital, as they were found in association with ironstone and other materials that likely date after 1850.

Hand Painted Bowls, Pitchers or Tea Pots, and Unidentifiable Vessels

Number of Specimens: 6 fragments, apparently from 2 or more vessels.

Description: All six sherds are white glazed wares which are decorated with small hand painted green leaves. Three of these also have one or more small blue dots representing fruit (possibly berries or plums) or flowers; two, short red lines which are part of the fruit designs; and one, part of
a red dot. Three of the sherds are from vessels which were decorated on the exterior, and two, from vessels decorated on the interior. The other sherd is too small to determine whether the decoration is on the exterior or the interior.

Descriptions of the individual sherds follow:

(1) The largest sherd is a part of a lid for a medium size bowl (?). The lid has a rim which fitted down over the exterior of the vessel and covered about 3/4" of the vessel's wall. The hand painted design, which is composed of a black stem, a blue dot, and three green leaves, is on the exterior of the rim.

(2) This sherd is from the wall of a smaller container, perhaps a bowl, pitcher, or tea pot. It appears that the wall was almost vertical but was sharply constricted either at the base or near the rim. It is decorated on the exterior with black and green stems, green leaves, and four blue dots which are separated by two short red lines that cross one another to form an "x". The fragment differs from the others in that it has a matte finish and does not appear to have been glazed; however, this probably reflects fire damage rather than the original finish.

(3) This sherd is too small for vessel identification. It is decorated on the exterior with green leaves, a blue dot, and a short red line that curves around one side of the dot.

(4) This sherd is decorated on the interior with green leaves.

(5) This sherd has an interior decoration in green and red, evidently green leaves and a red fruit or flower.

(6) This very small sherd bears a part of a green leaf.

Discussion: Hand painted earthenware, cottage ware, direct painted semi-porcelain, Staffordshire hand painted ware, Delftware, and hand decorated whiteware are all terms used to describe 19th century ceramic wares with hand painted decorations in monochrome (generally blue) or polychrome. These wares have been found on numerous historic sites of the 1800's, such as: Brunswick Town, North Carolina (South 1962: Chart I); Fort Smith, Arkansas (Moore, J., 1963: 22);
Fort Saint Marks, Florida (Olds 1962: 198); Kipp's Post, North Dakota (Woolworth and Wood, 1960: 300); the Posey site, Oklahoma (Wyckoff and Barr 1968: 34-35); New Echota, Georgia (Fairbanks 1962: 12); Mission San Juan Capistrano, Texas (Schuetz 1969: 11-12); Brigham Young's cooling shaft, Nauvoo, Illinois (Dollar 1967: 78); Fort George, South Dakota (Smith 1968: 84); the W. H. Shaw residence, DeSoto National Memorial, Florida (Pierson: 1965: 130); the McLean summer kitchen, Appomattox Court House, Virginia (previously unreported); the Marine Hospital, Fort Saint Marks, Florida (Shenkel and Westbury 1965: 22); Fort Pierre II, South Dakota (Smith 1960a: 136); and 39 HU 301 (Cedar Island), South Dakota (Smith 1968: 108).

The hand painted ware from the Bank is apparently identical in pattern and color to that recovered from the W. H. Shaw residence (Pierson 1965: 130, Plate A 11). It also seems to be rather similar to the wares found at Mission San Juan Capistrano (Schuetz 1969: Plate 12B), Fort George (Smith 1968: Plate 11a), and 39 HU 301 (Smith 1968: Plate 23a); and similarity to that recovered from Fort Pierre II is suggested by the description of that ware as "...a floral design in red, green, and blue" (Smith 1960a: 136). However, it is quite dissimilar to the wares found at Brunswick Town (South 1962: Plate II) and New Echota (Fairbanks 1962: Plate I).

Dating: The "...first painted English pottery...", a true delft, was being produced by the end of the 17th century (Clow and Clow 1958: 336). Although delftware was still being made at the end of the colonial period, its popularity had dropped with the introduction of salt glaze ware, ca. 1725, and dropped still further with the introduction of cream (or Queen's) ware, ca. 1760, and of pearl ware, ca. 1785 (Noel Hume 1963: 295). Hand painted decorations continued to be used on the later wares, and, despite the introduction of transfer printing in the 1750's, remained rather popular throughout most of the 19th century.

This popularity is illustrated by the 19th century historic sites from which they have been recovered: Brunswick Town, ca. 1800-1830; the first Fort Smith, ca. 1817-1824; Fort Saint Marks (American Period), ca. 1821-1892; Kipp's Post, 1825-1829; the Posey site, ca. 1823-1840; New Echota, ca. 1825-1835; Mission San Juan Capistrano, ca. 1836-present; the Bank, ca. 1841-1863; Brigham Young's cooling shaft,
ca. 1841-1900; the W. H. Shaw residence, ca. 1843-1856; Fort George, 1842-1885; the McLean summer kitchen, ca. 1847-1915; the Marine Hospital, ca. 1858-1882; Fort Pierre II, ca. 1859-1863; and 39 HU 301, late 19th century. It should be noted, however, that these wares were much more common at Brunswick Town, Fort Smith, and Fort Saint Marks than on any of the later sites and that all the sherds from Fort Smith are believed to date prior to 1829 (Moore, J., 1963: 22).

As mentioned earlier, the design motifs on the sherds from the Bank site are unlike those from Fort Smith and New Echota but are identical to those from the Shaw residence and are rather similar to those from Mission San Juan Capistrano, Fort George, Fort Pierre II, and 39 HU 301. This would suggest that they probably date after 1840 and before 1880 and that they likely date between 1850 and 1870, as Mission San Juan Capistrano, Fort George, the Bank, the Shaw residence, Fort Pierre II, and 39 HU 301 were all occupied during that period. These dates would fit very well the use of the Bank building as a Confederate hospital.

**Banded Ware Bowls**

**Number of Specimens:** 2 fragments from 2 vessels.

**Description:** Both fragments are decorated with monochromatic bands on a white background. The bands on one specimen are blue, and, on the other, dark brown.

The fragment decorated with blue bands is from a small, round, footed bowl. The exterior walls of the upper part of the bowl are apparently (the rim is missing) almost vertical, while the interior gently curves inward to a rounded bottom. The lower portion of the exterior wall is sharply constricted, and the base flares somewhat. The exterior of the bottom of the vessel is concave. Decoration, which is confined to the upper portion of the wall, consists of two bands of medium blue, one of which is 14/64" wide and the other over 5 1/64" wide. Between them is a band of white 5/64" wide.

The fragment decorated with dark brown bands is too small to allow identification of the vessel’s shape or use. The decoration is composed of two dark brown bands, each of which is 9/64" wide, separated by a white band 6/64" wide.
Discussion: Banded wares, which were decorated by "...pouring various colored slips from a sectional funnel to make bands around the vessel..." made throughout the 19th century" (Olds 1962: 199). These wares varied considerably in decoration; some bore bands in monochrome; some, in polychrome; and others, painted floral designs on the wider bands and/or impressed circles, lattice, or rosette designs around the rim (Moore, J., 1963: 21; Fairbanks 1962: 12; Olds 1962: 199).

The popularity of these wares is shown by the number and geographic spread of the 19th century historic sites on which they occur: Brunswick Town, North Carolina (South 1962: Chart I); Fort Smith, Arkansas (Moore, J., 1963: 21, Figs. 34, 35); Fort Saint Marks, Florida (Olds 1962: 199); the Posey site, Oklahoma (Wyckoff and Barr 1968: 35); New Echota, Georgia (Fairbanks 1962: 12); Washington-on-the-Brazos, Texas (Davis and Corbin 1967: 25); Mission San Juan Capistrano, Texas (Schuetz 1969: 16-18); Brigham Young's cooling shaft, Nauvoo, Illinois (Dollar 1967: 78); the W. H. Shaw residence, DeSoto National Memorial, Florida (Pierson 1965: 130); the McLean summer kitchen, Appomattox Court House, Virginia (not previously reported); the Marine Hospital, Fort Saint Marks, Florida (Shenkel and Westbury 1965: 22); and Fort Pierre II, South Dakota (Smith 1960a: 134-135).

Dating: Banded wares, which were first produced in 1787, are known to have been in use throughout the 19th century; however, the "...main popularity of these wares as a utilitarian ware seems to have been from 1800 to 1850" (Schuetz 1969: 25). This period of popularity seems confirmed in large degree by the dates of the historic sites on which these wares have been found: Brunswick Town, ca. 1800-1830; the first and second Fort Smiths, ca. 1817-1824 and ca. 1838-1871; Fort Saint Marks, ca. 1821-1892; the Posey site, ca. 1823-1840; New Echota, ca. 1825-1835; Washington-on-the-Brazos, ca. 1835-present; Mission San Juan Capistrano, ca. 1836-present; the Bank site, ca. 1841-1863; Brigham Young's cooling shaft, ca. 1841-1900; the W. H. Shaw residence, ca. 1843-1856; the McLean summer kitchen, ca. 1847-1915; the Marine Hospital, ca. 1858-1882; and Fort Pierre II, ca. 1859-1863. Although the occupation dates of these sites range from 1800 to the present, it appears that these wares may have been more popular between ca. 1830 and 1870, since all the sites were occupied during that period.
The fragments found at the Bank site may, thus, date prior to construction of the building, from its use as a bank, during the period of abandonment, or from the use of the building as a Confederate hospital. That they would date from the hospital period seems most probable.

**Spatter Ware Cups and/or Small Bowls**

Number of Specimens: 2 fragments, probably from 2 vessels.

Description: The background glaze of these two specimens is white; and the design, which was evidently applied by spattering paint on the vessels, is in blue. The white background and the blue design on the fragments vary slightly, suggesting they are probably from two vessels.

Discussion: Spatterware, with the design either in monochrome or polychrome and the background either in white or a solid color, has been found on numerous historic sites, most of which date from the first half of the 19th century. Examples are: Brunswick Town, North Carolina (South 1962: Plate IX E); the first Fort Smith, Arkansas (Moore, J., 1963: 22-23, Fig. 32); Fort Saint Marks, Florida (Olds 1962: 199); the Posey site, Oklahoma (Wyckoff and Barr 1968: 35); New Echota, Georgia (Fairbanks 1962: 13); Mission San Juan Capistrano, Texas (Schuetz 1969: 10-11); and the Marine Hospital, Fort Saint Marks, Florida (Shenkel and Westbury 1965: 22). It is, however, always found in very small quantities.

Jackson W. Moore states that "...Dutch Spatterware...() produced in Staffordshire...from 1800-1840... (was derived) from the earlier Dutch Gaudy, which was made for the Pennsylvania Dutch trade from 1778..." and adds that "...Dutch Spatterware can probably be regarded as an early form of the spatterware which was later exported everywhere in ironstone" (Moore, J., 1963: 22-23).

Dating: The dates of the sites where spatterware has been found -- Brunswick Town, ca. 1800-1830; the first Fort Smith, ca. 1817-1824; the First Missouri State Capitol, ca. 1819-1961; Fort Saint Marks (American Period), ca. 1821-1892; the Posey site, ca. 1823-1840; New Echota, ca. 1825-1835; Mission San Juan Capistrano, ca. 1836-present; the Bank, ca. 1841-1863; and the Marine Hospital, ca. 1858-1882 -- seem to indicate that the dates, 1800-1840, given by Moore for the manufacture of this ware should perhaps be extended to 1860. It is, of course, possible that the fragments found at the Bank and Marine Hospital sites are from vessels which were broken before the buildings were constructed.
Fig. 21. Hand Painted, Spatter, and Banded Wares.
Top row: hand painted in blue, green, and red (pp. 129-132).
Middle row: spatter in blue (pp. 134-137).
Bottom row: banded in blue and dark brown (pp. 132-134).
Fig. 22. Stoneware Jug (pp. 137-140).
Cups, Saucers, and Bowls Made From Unidentifiable Wares

Number of Specimens: 3 fragments, from 3 vessels.

Description: The three fragments, apparently from a cup, a saucer, and a flat-bottomed container (possibly a bowl), are so badly charred that identification of the ware(s) from which they are made is not possible.

The cup fragment is a basal sherd with a flat, slightly raised foot and a flaring wall.

The sherd from the saucer is a basal fragment which is rather similar in appearance to the saucers of pearl ware described earlier. The foot varies, however; instead of being flat, it is rounded.

The third sherd is from the base of a flat bottomed round container, possibly a bowl, which apparently had a basal diameter of about 3¾".

Although the ware, or wares, represented cannot be positively identified, the fragments appear to be similar to the cream (or Queen's) and pearl wares found at the site.

Discussion: Although there is nothing about these sherds that would not seem to fit within the range of types found on mid-19th century historic sites, they cannot be compared with wares reported from other sites because of the impossibility of identifying the ware(s) from which they were made.

Dating: As these sherds were found in association with materials which seem to date from Confederate use of the Bank building as a hospital, it seems probable that they date from that period.

STONEWARE CONTAINERS FOR FOOD AND DRINK

Stoneware Jugs and Jars

Number of Specimens: 117 fragments, from at least 10 specimens.

Description: Represented in this collection of 117 sherds are at least ten stoneware vessels, which are (or have been) glazed on both interior and exterior surfaces. Of the ten,
three are identifiable as jugs (two are small and one is quite large), and one, as a jar (or "crock"); the other six vessels cannot be identified because the fragments are too small, or are not diagnostic enough, to allow positive identification. Descriptions of the ten follow:

(1) Sixty-five sherds, of which 49 fit together, are definitely from one specimen, a large jug; and it appears that 39 other sherds, which have been broken longitudinally, are probably from this jug. Originally the jug was a yellow-brown color on the exterior and a dark rich brown on the interior; however, the coloration of many of the sherds has been altered by fire, and they now appear gray-brown on the exterior and a dull dark brown on the interior. The paste is gray.

The jug is 15 7/8" high. It has a slightly concave base (the bottom of which is not glazed) that is about 9 1/4" in diameter. The walls, which average about 5/16" in thickness are almost vertical from the base to the shoulder (about 10" above the base), where the vessel curves inward to the base of a bulbous rim (1 1/16" high and 11/16" thick at the thickest point). Attached to this rim and to a point on the lower part of the shoulder (about 10 1/4" above the base) was a handle, almost all of which is missing. The interior diameter of the mouth is about 1 1/4".

(2) Two neck and rim sherds that fit together are from a small jug (or a bottle with a handle) which has a gray-brown glaze on the exterior, an orange-brown glaze on the interior, and a gray paste. The walls are about 1/4" thick. The mouth, which has an interior diameter of about 1", is surrounded by a rim that is about 7/16" high and about 7/16" wide at the thickest point. A projection, evidently a portion of a handle, extends about 1 1/8" down from the top of the rim.

(3) Two small sherds, a fragment of a rim and a fragment of a wall, are apparently from the same jug or bottle, which had a gray-brown glaze on the exterior, a dark brown glaze on the interior, and a gray paste. The rim was about 11/16" high and about 11/32" wide at the thickest point. The wall is about 3/16" thick.
(4) One sherd, which has a yellow-brown glaze on the exterior but none on the interior (apparently due to longitudinal fracturing), and a gray paste, is evidently from a rather small vessel with vertical walls and almost horizontal shoulders. It seems likely that the vessel was a jug or bottle.

(5) One longitudinally fractured sherd, which has a light gray glaze on the exterior and a gray paste, is gently curved as if from the shoulder of a jug or bottle.

(6) One fragment of a bulbous rim, apparently somewhat like the one from the large jug described earlier, has a gray paste which is glazed on the exterior and the interior with a yellow-gray glaze. It probably is from a very large jug but might possibly be from a small, thick-walled jar.

(7) One large sherd, which has a gray glaze on the exterior, a reddish-brown glaze on the interior, and a reddish paste, is from a vessel that must have been quite large, judging from the thickness of the wall (3/4" at the thickest point). Comparison of the thickness of this wall with that of the large jug described earlier suggests that the sherd is likely from a jar.

(8) Two sherds, which have a gray paste that is glazed on the exterior with a yellow-gray glaze and on the interior with brown, are evidently from a large jar or crock (8 sherds of which were recovered in the 1966 test excavations). It appears that the vessel had walls (about 3/8" thick) that were near vertical, but did slope outward slightly. The rim, which is flat and projects outward, is about 1 1/16" wide and about 1/8" high.

(9) Two fragments are from an unidentifiable vessel with walls that are about 5/8" thick. The paste is a light gray and both the interior and exterior surfaces are glazed with an off-white or light gray glaze.

(10) One small unidentifiable sherd, which has a tan paste and a bluish-green glaze on the exterior, is evidently from a very small vessel with vertical walls of considerable thickness. Even though none of the interior glaze remains, the fragment is 9/16" thick.
Discussion: Stone ware has been recovered from most historic sites occupied during the 19th century. Examples are: Fort Smith, Arkansas (Moore, J., 1963: 23); the First Missouri State Capitol, Saint Charles, Missouri (Bray 1968: 85); Fort Saint Marks, Florida (Olds 1962: 204-206); the Posey site, Oklahoma (Wyckoff and Barr 1968: 30); New Echota, Georgia (Fairbanks 1962: 14); Fort Vancouver, Washington (Caywood 1955: 51); Washington-on-the-Brazos, Texas (Davis and Corbin 1967: 28-29); Mission San Juan Capistrano (Schuetz 1969: 23-26); Fort Lookout II, South Dakota (Miller 1960: 66); Brigham Young’s cooling shaft, Nauvoo, Illinois (Dollar 1967: 78); the McLean summer kitchen, Appomattox Court House, Virginia (Walker, J., 1963: 40); Gila Bend Stage Station, Arizona (Berge 1968: 212); Anderson’s Mill, Texas (Durrenberger 1965: 11-13); Johnny Ward’s Ranch, Arizona (Fontana and Greenleaf 1962: 91); the Marine Hospital, Fort Saint Marks, Florida (Shenkel and Westbury 1965: 22); Fort Pierre II, South Dakota (Smith 1960a: 134); Fort Stevenson, North Dakota (Smith 1960b: 223); and 39 HU 301 (Cedar Island), South Dakota (Smith 1968: 108).

On these sites it occurs usually as jugs, bottles, and jars or crocks. These are generally glazed in gray, brown, or olive, in shades ranging from light to dark; however, white and cream glazed sherds are also found.

Dating: Collectively, the occupation dates of the sites mentioned above cover the period from 1817 until the present. Throughout this time there seems to have been little change in the manufacture of stone wares.

Except for the addition of a few forms, such as "ginger beer" bottles, the shapes of the vessels seem to have changed little; and evidently even the colors of the glazes remained much the same with the possible exception of white and cream glazes, which are not reported from any sites earlier than the Bank (ca. 1841-1863). Thus, the dating of most stone ware is all but impossible.

As there apparently would be no reason for ten stone ware vessels to be connected with any known use of the Bank building prior to its use as a Confederate hospital, it seems most logical to assume they were used in the hospital.
### TABLE 7: NUMBER OF TYPES (WARES AND DESIGNS) OF CHINA WARE RECOVERED FROM THE BANK SITE

<table>
<thead>
<tr>
<th>Ware Description</th>
<th>1966 Excavation</th>
<th>1968 Excavation</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Feather Edged ware</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Green Feather Edged ware</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Blue Transfer Printed ware</td>
<td>3</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Purple Transfer Printed ware</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Magenta Transfer Printed ware</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Black Transfer Printed ware</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Green Transfer Printed ware</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Purple and Black Transfer Printed ware</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Pink, Green, Blue and Black Transfer Printed ware</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Green and Yellow Decalcomania Decorated ware</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Red and Blue Decalcomania Decorated ware</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Banded ware</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Spatter ware</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Hand Painted ware</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Pearl ware</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cream ware</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ironstone</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Porcelain</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>12</strong></td>
<td><strong>37</strong></td>
<td><strong>49</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>49</strong></td>
</tr>
<tr>
<td>China Ware Vessels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feather Edged plates and/or saucers</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transfer Printed plates, saucers, bowls, and cups</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decalcomania Decorated plates, saucers, cups and/or bowls</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ironstone plates</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearlware, Ironstone, and Porcelain cups and bowls</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banded Ware bowls</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand Painted bowls, pitchers, or tea pots</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spatter Ware cups or bowls</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearl Ware bowls with molded handles</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cream Ware, Pearl Ware, and Ironstone saucers</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repousse Edged plate or saucer</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ironstone water basin</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cream Ware water pitcher</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unidentifiable Ware cups, saucers, and bowls</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other vessels recovered from 1966 excavations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>65</strong></td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stone Ware Vessels</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stone Ware jugs</td>
<td>3</td>
</tr>
<tr>
<td>Stone Ware jar or crock</td>
<td>1</td>
</tr>
<tr>
<td>Unidentifiable Stone Ware vessels</td>
<td>6</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

**Total Number of Ceramic Vessels** 75
GLASS CONTAINERS FOR FOOD AND DRINK

Pressed Glass Pitcher or Bowl (?)

Number of Specimens: 1 fragment.

Description: One small fragment of pressed clear glass (maximum length, 2 6/64"; maximum width, 31/64"; maximum thickness 14/64") with a raised design composed of parts of two naturalistic maple-like leaves and a stylized band of lanceolate-shaped leaves. The fragment has two flat planes meeting at an obtuse angle, suggesting that it came from a vessel with a number of panels.

Discussion: No pressed glass was found in the 1966 test excavations at the Bank site. It does, however, occur on numerous 19th century historic sites, such as: the Posey site, Oklahoma (Wyckoff and Barr 1968: 30); Fort Vancouver, Washington (Caywood 1955: 64, Plate XX); Washington-on-the-Brazos, Texas (Davis and Corbin 1967: 38-40); the Alamo, Texas (Greer 1967: 52); the McLean kitchen, Appomattox Court House, Virginia (Walker, J., 1963: 41); the Gila Bend Stage Station, Arizona (Berge 1968: 202); Anderson's Mill, Texas (Durrenberger 1965: 38-46); and Fort Stevenson, North Dakota (Smith 1960b: 223).

Although the specimen recovered from excavation of the Bank is different from any illustrated in reports on the above sites, it is apparently somewhat similar to some of the pressed glass from Anderson's Mill. Neither the size nor shape of the vessel from which the fragment came can be determined. However, the thickness of the specimen suggests that it was a fairly large vessel, such as a pitcher or a bowl.

Dating: As the first machine for manufacturing pressed glass was made by Deming Jarves of Boston around 1827 (Bridgwater and Kurtz 1963: 833), and pressed glass drinking vessels were first made in 1837 (Cotter 1968: 72), it is not surprising to find that it occurs in limited quantity on sites which were occupied before 1860 and that large quantities occur at sites occupied after that time. (Very few specimens were recovered from the Posey site, ca. 1823-1840; Fort Vancouver, ca. 1828-1860; Washington-on-the-Brazos, ca. 1835-present; the Alamo, from a feature dating ca. 1836; the Bank, ca. 1841-1863; and the Gila Bend Stage Station, ca. 1850-1860; however, rather large quantities were recovered from the McLean kitchen, ca. 1847-1915; Anderson's Mill, ca. 1850-1914; and Fort Stevenson, ca. 1867-1897.)
Although there is no way of dating the fragment recovered from the Bank site, it seems most probable that the vessel from which it came was used during the use of the building as a Confederate hospital.

**Pressed Glass Goblets, Tumblers, or Small Bowls**

*Number of Specimens:* 3 fragments, 2 from the same specimen.

*Description:* These three small fragments are from the rims of two vessels made of clear pressed glass in a panel design. The panels, which are apparently rather narrow and evidently straight along the sides, end at the top (near the rim) in an arc. On one of the specimens the panels are slightly concave and are separated by slightly raised lines; on the other they are flat and meet at an obtuse angle. However, in both instances the rims and the interiors of the vessels are round, and the rims are plain.

The thickest portion of the sunken panel vessel is 9/64", and the thinnest, 6/64", whereas the thickest portion of the flat panel vessel is 13/64", and the thinnest, 8/64".

*Discussion:* As mentioned in the earlier discussion of pressed glass, it does occur at numerous 19th century historic sites. None of the examples illustrated in reports on the excavations of these sites are identical to the fragments from the Bank site; however, one fragment from Anderson's Mill, Texas, appears to be quite similar (Durrenberger 1965: Fig. 17E). Also similar are fragments recovered from the summer kitchen of the McLean House, Appomattox Court House, Virginia.

The specimen from Anderson's Mill is identified as being of the "Icicle" design (Durrenberger 1965: 42).

Although it is impossible to determine the size, shape, or use of the vessels from which the Bank specimens came, the thickness of the glass and the curvature of the rims suggest that they were probably goblets, tumblers or small bowls.

*Dating:* As mentioned earlier, pressed glass tumblers and other drinking vessels were not produced until 1837 (Cotter 1968: 72). Since pressed glass in any form is rare on sites occupied prior to 1860, it seems probable that the fragments from the Bank came from vessels used during Confederate use of the building as a hospital.
Pressed Glass Bowls

Number of Specimens: 1 fragment.

Description: This rather thick clear glass fragment is the complete base and part of the lower wall of a fluted vessel. There are 16 flutes (or concave panels) encircling the vessel: four of these are relatively wide, 50/64"; and twelve are rather narrow, 22/64". The four wider flutes are separated by groups of three narrower flutes (a wider flute, three narrower flutes, a wider flute, etc.).

The maximum diameter of the base is 2 23/64". In thickness it is 29/64" around the rim, which is about 34/64" wide; however, the center of the base is concave. The wall thickness at maximum (where the flutes join) is 16/64" and at minimum (at the center of the wider flutes), 10/64".

Discussion: Although pressed glass has been found on a number of 19th century historic sites, similar specimens have not been reported.

The use of the container from which the fragment came is unknown; but the size and heaviness of the fragment seems to suggest that it may have been a small bowl. It could, however, have been a vase or possibly a bottle.

Dating: It is assumed that the fluted bowl probably dates from use of the Bank as a Confederate hospital.

Wine (or Champagne) Bottles

Number of Specimens: 52 fragments (14 base or base and lower body fragments, 31 body fragments, and 7 neck or neck and shoulder fragments) from at least 14 bottles.

Description: The bottles are made from two colors of glass. Forty-four fragments are made of green glass, which ranges in color from a dark brown-green to almost black depending upon the thickness of the glass. The other 8 fragments are a very pale blue-green.

A hypothetical composite bottle, based upon the features of these fragments, would be circular in cross-section and would have a deeply concave base, vertical body walls, very gently sloping shoulders, a relatively long tapering neck,
and a narrow raised band (rectangular in cross-section) placed just below the mouth to facilitate wiring the cork. This type of neck finish is sometimes termed a "Champagne Neck Finish" (Berge 1968: Fig. 15g).

Of the six dark green basal fragments only two are complete enough for measurement. Both bases are 2 50/64" in diameter; but the height of the basal concavity differs, one being 1 32/64" and the other, 1 56/64". A third basal fragment is from a larger bottle. The basal diameter is not measurable, but it exceeds 3 20/64".

The diameter of the one measurable dark green body fragment is 2 58/64". Thickness of the body sherds varies from 3/64" on the upper part of the body to 16/64" near the base, with the average thickness ranging from about 6/64" to 9/64".

Six of the seven dark green neck, or neck and shoulder, fragments are undecorated. However, on one side of the neck of the seventh there are eight impressed vertical lines which run from the shoulder to the raised band just below the mouth; the other side is plain. Mouths are present on only two of the neck fragments. One of these is quite fragmentary, and the other is badly warped by heat; thus, the mouth diameter cannot be obtained for either. The raised band, however, is measurable on both specimens; on one it is 21/64" wide and is 18/64" below the mouth rim, and on the other it is 22/64" wide and is 17/64" below the rim.

The eight fragments of the pale blue-green bottles are all from bases with deep concavities. None of these fragments were large enough to allow measurement. Apparently neither the dark green nor the pale blue-green bottles bore identifying marks of any sort. At least there were none on any of the fragments recovered.

Discussion: No wine bottles of the type described above (that is, no bottles with a deeply concave base and a "Champagne" neck finish) were recovered from the earlier excavations at the Bank site.

They have been found, however, at a number of historic sites which were occupied during the same general time period as the Bank. Among these sites are: the Posey site, Oklahoma (Wyckoff and Barr 1968: 30, 32); Kipp's Post, North Dakota (Woolworth and Wood 1960: 272, 300); Fort Vancouver,
Washington (Caywood 1955: 63); Fort Lookout II, South Dakota (Miller 1960: 67); Washington-on-the-Brazos, Texas (Davis and Corbin 1967: 33-34); the Gila Bend Stage Station, Arizona (Berge 1968: 187, 188); the Marine Hospital, Fort Saint Marks, Florida (Shenkel and Westbury 1965: 23); Fort Pierre II, South Dakota (Smith 1960a: 136); Johnny Ward's Ranch, Arizona (Fontana and Greenleaf 1962: 100); and Fort Stevenson, North Dakota (Smith 1960b: 223).

Most of the wine bottles recovered from these sites are believed to have been imported from Europe. All of them that are described in detail are said to be "green", "dark green", "olive green", or "dark olive green" in color.

Dating: The wine bottle fragments recovered from the Bank site at Arkansas Post cannot be satisfactorily dated by comparative methods. The dates for the beginning of occupation at the above sites range from 1823 until 1867, and the dates for the ending of occupation, from 1829 until 1967, yet similar wine bottles were found on all of them. This appears to verify C. Malcolm Watkins' statement that one of the wine bottle fragments from Kipp's Post, ca. 1825-1829, is: "Probably (from the) first quarter of (the) 19th century, although hand-blown wine bottles with this rim treatment continued to be imported all through the century" (Woolworth and Wood 1960: 300).

Based upon the archeological associations of the wine bottle fragments from the Bank site, it seems logical to assume that they were in use during the time that the building served as a Confederate hospital.

Pickle (?) Bottle (or Jar)

Number of Specimens: 1 neck fragment.

Description: This specimen, a neck fragment from a relatively wide-mouthed bottle (or jar), is pale blue-green in color. It has a "Bead" type neck finish, the thickened area of which is about 19/64" high, projects about 10/64" from the wall at the thickest point, and is roughly semicircular in cross-section. The neck wall below this thickened area is about 6/64" thick.

The specimen is so fragmentary that no other measurements can be made. However, a fairly close approximation of the
diameter of the interior of the mouth was obtained by projection; it is about 1 56/64".

Discussion: Similar specimens, which are identified as pickle, or chutney, bottles (or jars) are reported as having been recovered from excavations at: the Gila Bend Stage Station, Arizona (Berge 1968: 187, 194-195); Anderson's Mill, Texas (Durrenberger 1965: 27-28); and Fort Pierre II, South Dakota (Smith 1960a: 136).

The Gila Bend Stage Station and the Anderson's Mill specimens for which measurements are available have interior mouth diameters of approximately 1 47/64" and 1 42/64" respectively and, thus, are probably slightly smaller than the specimen from the Bank. Like the Bank specimen, both have "Bead" neck finishes which are semicircular in cross-section.

Although Durrenberger (1965: 28) classified the Anderson's Mill specimens as bottles, he stated that they were "Probably wide mouth jars not adapted to take screw on lids". Smith (1960a: 136), who also classified the Fort Pierre II specimens as bottles, described them as "...condiment (pickle) jars".

Dating: Occupation dates for the four sites from which pickle bottles were recovered begin as early as 1841 and end as late as 1914 (the Bank, 1841-1863; the Gila Bend Stage Station, 1850-1860; Anderson's Mill, 1850-1914; and Fort Pierre II, 1859-1863). However, as all of them were occupied at sometime during the period 1850-1863 (and three of the four no later than 1863), it is reasonable to assume that pickle bottles were in use during that period. It also seems reasonable to assume that their use was gradually abandoned after John L. Mason's invention of the Mason Jar with its threaded cap in 1858 (Berge 1968: 180). These assumptions suggest that the pickle bottle from the Bank site date from the building's use as a Confederate hospital, 1862-1863.
Fig. 23. Wine and Pickle Bottles.
Right: necks and bases of wine or champagne bottles (pp. 145-147).
Left: neck of pickle bottle (pp. 147-148).
Fig. 24. Patent Medicine Bottles with Embossed Labels (pp. 151-154).
Top: GENUINE ESSENCE bottle.
Bottom: (M)EMPHIS TE(NN) bottle.
MEDICAL SUPPLIES

MEDICINE BOTTLES

Patent Medicine Bottles with Embossed Labels

Number of Specimens: 1 complete; 12 fragments, 2 of which are definitely from the same bottle and 4 of which may be from another.

Description: All of the bottles represented have the name of the medication and/or the name and location of the manufacturer molded on them. With the exception of two dark grayish-green fragments, all are light blue-green in color. Descriptions of individual items follow:

(1) The complete specimen is a small light blue-green bottle. It is 4\(\frac{1}{2}\)" high, 1 3/32" wide, and 5/8" deep, and is octagonal in cross-section, having two 3/4" wide plane surfaces (front and back), two 5/16" wide plane surfaces (at the ends), and four 7/32" wide incurvate surfaces (at the "corners"). The base has a pontil mark, and the neck is of the "Patent" type (Berge 1968: Figure 15). One of the 3/4" wide plane surfaces bears the label "GENUINE ESSENCE" in molded letters.

(2) The two fragments from the same bottle are from an octagonal light blue-green specimen of indeterminate size. The largest fragment, apparently from one side of the bottle, bears in a sunken panel the letters "...EMPHIS TE..." (without doubt, "MEMPHIS TENN" or "TENNESSEE"). One of the other fragments has portions of the letters "PA...", perhaps for "PAT" or "PATENTED". The other, which appears to be one of the ends of the sunken panel, has no markings.

(3) The four fragments which appear to be from the same bottle, or from very similar bottles, are light blue-green in color. All have sunken panels, two of which contain raised letters. One is an "A", and the other appears to be a part of a "W" or "V".

(4) Two fragments of light blue-green glass are apparently from bottles that are either circular or oval in cross-section. Each bears one complete letter and part of
another. The one has an "E" and a part of what is probably an "A" -- "EA". The other has most of an "N" and a portion of what may be a "Y" -- "NY".

(5) The basal fragment of a light blue-green bottle, which has the general appearance of a square or rectangle in cross-section but which is actually octagonal, bears on one side the raised letter "O".

(6) The two fragments of dark gray-green glass are from different bottles, both of which are likely square or rectangular in cross-section as the fragments are flat. Both bear raised letters; one having an "A", and the other, "ARO" and the upper portions of another line of letters, none of which can be made out.

Discussion: A fragment of a bottle, which was identical or very similar to the two fragments from the same bottle (2) discussed above, was found in the 1966 test excavations. It bears one complete letter, "E", and part of another -- either "L" or "D". Also found were three small patent medicine bottles (Wilson 1966: Figure 30). Although larger than the "Genuine Essence" bottle, two of these are similar to it in that they are blue-green in color, bear in molded letters the name of the product and/or manufacturer, and have pontil marks.

The front of one bottle reads "R R R ; ...A...WAY & CO; N...W YORK". One side of this bottle reads "...ACORD70"; the other "...ESS". The neck is of the "Patent" type, and in cross-section the bottle is rectangular in shape.

The front of the other blue-green bottle reads "J B WILDER & CO, LOUISVILLE". The neck has been broken off. In cross-section the bottle is octagonal.

The third bottle, which is made of clear glass, does not bear any lettering and does not have a pontil mark. Its shape is rectangular, and it has sunken panels on the front, back, and sides. It differs from the other bottles, however, in that the corners are rather elaborately decorated, whereas the corners of the others are plain.

Bottles of similar size and shape, bearing the name of the medicine and/or that of the manufacturer in molded letters have been found on numerous other 19th century sites.
Examples are: the Des Plaines River Potawatami site, Illinois (Quimby 1966: 143); the Grand River Ottawa site, Michigan (Quimby 1966: 146-147); the Madeline Island Chippewa site, Wisconsin (Quimby 1966: 156); the First Missouri State Capitol, Missouri (Bray 1968: 90-93); the Posey site, Oklahoma (Wyckoff and Barr 1968: 30); Mission San Juan Capistrano, Texas (Schuetz 1969: 32-33, Plate 16H); Fort George, South Dakota (Smith 1968: Plate 17); the Gila Bend Stage Station, Arizona (Berge 1968: 181-183); Johnny Ward's Ranch, Arizona (Fontana and Greenleaf 1962: 100); Fort Stevenson, North Dakota (Smith 1960b: 213); and the Red Cloud Agency III, South Dakota (Smith 1968: 44, Plate 19).

The contents of the "GENUINE ESSENCE" and "MEMPHIS" bottles cannot be identified with certainty. That the "ESSENCE" was probably either Essence of Jamaica Ginger or Essence of Peppermint is suggested by the finding of "Essence of Peppermint" bottles at the Des Plaines River Potawatami site, the Grand River Ottawa site, and the Madeline Island Chippewa site and of "Essence of Jamaica Ginger" bottles at the Gila Bend Stage Station and the Red Cloud Agency III. Study of the 1897 Sears Roebuck Catalogue seems to further corroborate this identification, as these two "well known household remedies" are the only medicinals termed "essence" (Israel 1968: 26, 27). Since the catalogue does not use the word "genuine" in reference to essence of peppermint but does state that "many preparations...represented as containing ginger...owe their hot taste to pepper alone" and exhorts the customer to "Buy our genuine essence (underlined for emphasis) and get the full benefit of its valuable properties" (Israel 1968: n.p., between 32 and 33), it seems more likely that the bottle contained the "GENUINE ESSENCE" of Jamaica Ginger.

Dating: Comparative data from the First Missouri State Capitol, ca. 1819-1961; the Posey site, ca. 1823-1840; Mission San Juan Capistrano, ca. 1836-present; Fort George, ca. 1842-1855; Gila Bend Stage Station, ca. 1850-1860; Johnny Ward's Ranch, ca. 1859-1903; Fort Stevenson, ca. 1867-1897; and the Red Cloud Agency III, ca. 1877-1878, seem to indicate patent medicine bottles similar to those from the Bank site were widely used from about 1840 until about 1903. Although Quimby's placement of the Des Plaines River Potawatami site, the Grand River Ottawa site, and the Madeline Island Chippewa site in the "Late Historic period", 1760-1820, suggests that the bottles from these sites may date considerably earlier, it should be noted that the Potawatami
were still in the Des Plaines River area in 1839 (Temple 1966: 152-155); that the "lower Grand River Valley was occupied by Ottawa...in the latter half of the Late Historic...(and by) a later mixed settlement of Ottawa and Pottawatomi...from 1830 to the 1850's" (Quimby 1966: 149); and that "...some (Chippewa)...are still living in the (Madeline Island) area today" (Quimby 1966: 155).

The archeological evidence for the widespread use of patent medicines during the period from 1840 until 1903 is in general agreement with Berge's statement: "From the 1850's to 1906 there were on the market a tremendous variety of medicinal bottles used for liniments, bitters, tonics, and syrups..." (Berge 1968: 181). Some of these were advertised as "good for man or beast", and in 1897, Sears Roebuck, while warning customers to "beware of quack doctors", advertised cures for: the "liquor habit"; "syphilis in its primary, secondary or tertiary forms"; "consumption"; "all forms of female weakness"; "ague", "worms", and "gonorrhea or gleet". However, "...the Pure Food and Drug Act of 1906 put an abrupt end to many of the fraudulent (claims and) practices of the dishonest 'doctors'" (Berge 1968: 181).

Thus, if identified only as patent medicine bottles, the specimens from the Bank could only be dated as having probably been manufactured between 1850 and 1906. However, the occurrence of pontil marks on three of the four relatively complete bottles allows closer dating, for pontil marks "...do not generally occur after about 1860" (Wilson 1961: 5).

The approximate date of 1850-1860 for these medicine bottles strongly suggests that they were associated with the Confederate hospital which was in operation in the Bank building, ca. 1862-1863.

**Bitters Bottles**

**Number of Specimens:** 62 fragments (5 fragments of base or base and lower body; 6 neck fragments, and 51 body fragments), from at least 5 bottles.

**Description:** The bottles are made from dark gray-green to brown-green glass, the thicker portions of which appear almost black. They are circular in cross-section and have a relatively flat base, vertical body walls, rounded shoulders, a rather long neck, and an "Oil" type neck finish (Berge 1968: Fig. 15i) with a wire rim (Durrenberger 1965: 26).
Of the five basal fragments only two are complete enough to allow meaningful description. One of these is approximately 2 48/64" in diameter. It has a flat outer rim 32/64" wide, inside of which is a slightly sunken area 1 46/64" in diameter. Within this area are two slightly raised molded concentric circles, and inside of these, three raised molded dots arranged in a straight line. One of these dots is centered.

The other base has been so badly warped by heat that it is impossible to determine the diameter; however, it appears to have been the same, or nearly the same, as the previously described specimen (actual measurements, at right angles to one another, are 2 32/64" and 3 5/64"). It has a flat outer rim 13/64" wide, inside of which is a slightly sunken band 19/64" wide, bearing the identification "W. McCULLY & Co PITTSBURG"; and inside this sunken band is a raised molded line 4/64" wide -- the three units together forming a band 36/64" wide. Inside this band are two slightly raised concentric circles and within these, two raised molded dots, one of which is centered.

The outer three basal fragments appear to be of the first type.

The bottle necks are apparently as nearly identical as they could be expected to be, the necks being hand finished. Overall length, from shoulder to mouth, of the two complete necks is 4 2/64"; the diameter at the base of both the necks is 1 4/64". One other measurable fragment measures 1 4/64" just below the wire rim, and another, 1 1/64". Other measurements are as follows: length of neck finish (from the mouth to the base), 54/64", 52/64", 48/64", and 35/64"; from the mouth to the base of the wire rim, 1 5/64", 1 3/64", 1 3/64", and 54/64"; exterior diameter of top of neck finish (mouth), 1 4/64", 1 1/64", and 1"; exterior diameter at base of the neck finish, 1 19/64", 1 19/64", 1 18/64", and 1 8/64"; and interior diameter of the mouth, 46/64" and 50/64".

The diameter of the only body sherd large enough to allow such measurement is 2 49/64".

One neck fragment has the wire which held the cork in place still attached. It is a single strand of wire about 2.5/64" in diameter. The middle portion of the wire forms a loop.
which ran over the top of the cork. Just below the loop the wire is twisted and then separated with one end running around each side the neck in the space between the neck finish and wire rim. These ends meet opposite the point where the wire is twisted, and there the ends are crossed, run through the loop, and fastened together by twisting.

Discussion: A number of closely related bottles were found in the 1966 test excavations at the Bank site (Wilson 1966b: 9, Fig. 24).

Five bottles complete enough for measurement, 3 bases, 3 necks, and numerous fragments are of the type which bears no identification but has "three raised dots, in line, enclosed within two molded concentric circles" (Wilson 1966b: Fig. 24). In overall length these measured from 10 40/64" to 10 52/64"; in maximum diameter, from 2 59/64" to 3 4/64"; and in diameter of the base, from 2 48/64" to 2 51/64".

Other measurements are: body length, from base to base of neck, 6 14/64" to 6 15/64"; width of flat outer rim on base, 32/64" to 35/64"; diameter of basal sunken area containing dots and circles, 1 42/64" to 1 48/64"; overall length of neck, 3 50/64" to 4"; diameter of neck at base, 1 24/64" to 1 28/64"; diameter of neck just below wire rim, 1 2/64" to 1 6/64"; length of neck finish (mouth to base), 50/64" to 54/64"; length from mouth to base of wire rim, 1 2/64" to 1 5/64"; exterior diameter of top of neck finish, (mouth), 60/64" to 1 2/64"; exterior diameter at base of neck finish, 1 17/64" to 1 20/64"; and interior diameter of mouth, 4 6/64" to 50/64". With few exceptions, and those explainable by expected variations in the neck finishes which were applied by hand, these measurements and those of the bottle fragments from the later excavation overlap, proving without doubt that the bottles were the same.

Also found in the 1966 excavations was a slightly larger bottle with the same overall shape and neck finish. This is marked on the base with three raised dots, in line, enclosed within concentric circles and bears the identification "W McCULLY & Co PITTSBURG PA". Thus, it seems obviously related to both of the basal fragments found in the later excavation.

Its measurements are: overall length, 11 6/64"; maximum diameter 2 63/64"; basal diameter, 2 54/64"; body length, 7 8/64"; overall length of neck, 4 17/64"; diameter of neck at base, 1 33/64"; diameter of neck just below the wire rim,
length of neck finish, 60/64"; length from mouth to base of wire rim, 1 12/64"; exterior diameter at top of neck finish, 1 3/64"; exterior diameter at base of neck finish, 1 13/64"; and interior diameter of mouth, 49/64".

The base varies from those of the other bottles in that there is no flat outer rim; instead the outer edge is rounded and then begins sloping upward toward the center of the bottle. The outer plain edge, which is 14/64" wide, encircles the band, 18/64" wide, bearing the manufacturer's mark; and this, in turn, encircles a raised molded line 4/64" wide -- the three units together forming a band 36/64" wide, which is the same width as the three-unit band on the McCully bottle base from the later excavation, and seems to be related to the 32/64" - 35/64" flat outer rim on the other bottles. Inside this band are two slightly raised concentric circles, and within these are three raised molded dots, in a straight line. One of the dots is centered. The concentric circles and the dots occur on all the bottles.

Another unique feature of this bottle is the occurrence of slightly raised molded letters on the upper part of the body. These are "PAT NT", undoubtedly "PATENT" or "PATENTED". Despite these differences, it seems probable that all of them were manufactured by the same glassmaker since all are alike in general conformation (shape, neck finish, and color), are of about the same size, and bear almost identical base markings (three dots within two concentric circles). It also seems very likely that they were used for the same purpose.

The glass making firm of William McCully and Company, Pittsburg, Pennsylvania, is known to have been in operation "at least as early as 1832", and glass bearing the McCully mark has been excavated at Fort Stevenson, North Dakota; Fort Laramie, Wyoming; and Fort Ridgely, Minnesota (Smith 1960b: 232). Descriptions of these specimens are not available with the exception of the one from Fort Stevenson, "a fragment of the base of...(a) clear glass quart whiskey flask...(which) bears in molded letters in a depression on the base, 'W. McC & ( )'" (Smith 1960b: 232).

The use ascribed the Arkansas Post McCully bottles by Rex L. Wilson is as bitters bottles, which he notes "...were at the peak of their popularity around the middle of the 19th century" (Wilson 1966b: 9). Since Wilson has considerable knowledge of 19th century bottles, having excavated several
sites on which they were found (among them Fort Union, New Mexico, and Fort Laramie, Wyoming) and written several papers concerning them (including a monograph which is now in press) the correctness of this identification is not questioned.

Certainly bitters was a very popular medication which was in use as such for a long period of time. Its wide usage is illustrated by the recovery of definitely identifiable bitters bottles from a number of historic sites, such as the Gila Bend Stage Station in Arizona (Berge 1968: 193), Fort Stevenson in North Dakota (Smith 1960b: 213, 223), the Red Cloud Agency III in South Dakota (Smith 1968: 100-101), and the 9 HU 301 (Cedar Island) site in South Dakota (Smith 1968: 108-109), and by advertisements for "Orange Wine Stomach Bitters" and "Peptonic Stomach Bitters" in the Sears Roebuck catalog for 1897 (Israel 1968: 26).

Most of the bottles were of the patent medicine type, that is, of a rectangular shape with sunken panels on all four sides; however, some were circular and hexagonal in cross-section.

Dating: The sites from which definitely identifiable bitters bottles have been recovered all date from the second half of the 19th century: the Gila Bend Stage Station, ca. 1850-1860; Fort Stevenson, ca. 1867-1897; the Red Cloud Agency III, ca. 1877-1878; and the 9 HU 301 site, late 19th century.

The number of bitters bottles -- five complete, or almost complete, and fragments of at least eight others -- which were recovered from the Bank site strongly suggests they were used during the time that the building served as a Confederate hospital. This seems further corroborated by the fact that none of these relatively flat based bottles had pontil marks, and, thus, date after about 1860, and by the dates of the historic sites from which definitely identifiable bitters bottles have been recovered.

Fiddle-Shaped Patent Medicine (?) Bottles

Number of Specimens: 14 fragments (7 fragments of base and lower body; 5 neck fragments, and 2 body fragments), from at least 6 bottles.

Description: The fragments are from identical small light blue-green fiddle-shaped bottles. In cross-section they are hexagonal, having fiddle-shaped plane surfaces outlined by
Fig. 25. Bitters Bottles (pp. 154-158).
Fig. 26. Small Medicine Bottles.
Top: narcotic (?) bottle (pp. 163-165).
Lower right: fiddle-shaped patent medicine (?) bottles (pp. 158-163).
Lower left: small medicine bottle (pp. 165-166).
two raised lines on the front and back and having on each side two surfaces which meet at an acute angle. The bases have pontil marks, and the flat, thin lips are of the "Bead" type (Berge 1968: Figure 15). None of the fragments bear any identifying marks.

The maximum width of the bottles is approximately 2"; the maximum depth is 28/32"; and the height is unknown (no specimen being complete), but is apparently over 3½" and under 4".

Discussion: In the available reports on historic sites archeology bottles with a fiddle (or violin) shape are mentioned in regard to only four sites. These are: Fort Pierre II, South Dakota, where "...whiskey flasks...(which were) violin-shaped...(and bore) scroll decorations in relief" (Smith 1960a: 136) were recovered; the Grand River Ottawa Site, Michigan, where "...a small fiddle-shaped (patent medicine) bottle that had once contained 'Turlington's Balsam /sic/ of Life!'" (Quimby 1966: 147) was found; the well of the George Wythe House, Williamsburg, Virginia, where a Turlington's Balsam of Life bottle was found (Noel Hume 1963: 272-273); and the first Missouri State Capitol, St. Charles, Missouri, where a "Perfume...?...bottle...of deep blue...color" (Bray 1968: 91) was found. Very likely one was also recovered from the excavation of Fort Vancouver, Washington, for the finding of a bottle bearing the mark "ROBT. WRISINGTON...LONDON, BY THE KINGS ROYAL PATENT, Jan. 26, 1754" is reported (Caywood 1955: 63). It would seem that this was probably a Turlington Balsam of Life bottle; for the labels on those bottles -- on one side, "LONDON JANUY 26 1754 BY THE KINGS ROYAL PATENT GRANTED TO", and on the other, "ROBT. TURLINGTON (broken down line by line as follows: ROBT./TURLI/NGTON) FOR HIS INVENTED BALSAM OF LIFE" -- were often very difficult to decipher (Noel Hume 1963: 272-273).

Neither the Grand River Ottawa nor the Fort Vancouver bottles are described in detail. In fact, other than noting that it is "small", "fiddle-shaped", and bore the Turlington label in raised letters, no description of the Grand River specimen is given; and the wording from the label quoted above is the only description of the Fort Vancouver specimen. However, two of these bottles, one made in England during the "third quarter of the 18th century" and the other, an American copy, made during the "early 19th century" are illustrated in
Here Lies Virginia (Noel Hume 1963: Fig. 110). The sizes of these bottles are not given; but they appear to be relatively similar in general shape and in neck finish to the specimens from the Bank.

More similar in appearance, however, is the bottle from the first Missouri State Capitol. Although it differs in color, it has "...a flat lip...,(,) flat surfaces...embossed with lines and conventionalized floral patterns...,(, and) an open pontil mark..." (Bray 1968: 91). Thus, it is apparently rather similar to the Arkansas Post specimens in appearance (Bray 1968: Figure 34B) and is only slightly larger in size (2.16" wide at the base and 4.33" high). Neither of these bottles bear any identifying marks; and, although use of the Missouri State Capitol bottle as a perfume container is suggested, the author indicates that such identification is highly tentative.

That the Grand River, Fort Vancouver, and Williamsburg bottles are definitely known to have contained patent medicine (whereas the contents of the Arkansas Post and Missouri State Capitol bottles are unknown) suggests the possibility that all the reported specimens may have been patent medicine containers. A little more creditability is given this suggestion by Quimby's statement that "small patent medicine bottles...(some of which are) fiddle-shaped...(and bear) raised letters indicating their contents..." are one of the items which are "...diagnostic of the Late Historic period" (Quimby 1966: 74); for this would seem to indicate that such bottles have been found in some number.

Although the fiddle-shaped bottles from the Bank site cannot be identified with any certainty, a tentative identification as patent medicine bottles would fit the use of the building as a hospital.

Dating: No meaningful estimate as to the period of use of small fiddle-shaped bottles can be made solely on the basis of occupation dates of the sites on which they were found, as the Wythe well was filled in the 19th century; and the Grand Ottawa Site is dated from ca. 1790 until ca. 1820; the first Missouri State Capitol, from ca. 1819 until ca. 1961; Fort Vancouver, from ca. 1828-1860; and the Bank site, from ca. 1841 until ca. 1863. However, with the exception of the Williamsburg specimens, a guess-date of 1840-1860 for use of these bottles does not seem unreasonable if other available
information is considered: (1) the Grand River Ottawa Site was probably occupied "from 1830 to the 1850's" (Quimby 1966: 149); and, thus, the Grand River, Missouri State Capitol, and the Bank sites, during the 1840's and 1850's; (2) the bottle from the Missouri State Capitol, as well as those from the Bank site, was probably manufactured before 1860, as all these specimens have pontil marks, and pontil marks "do not generally occur after about 1860" (Wilson 1961: 5); (3) the only other fiddle-shaped bottle mentioned in available reports on historic sites archeology is from Fort Pierre II, which was occupied ca. 1859-1863.

Narcotic (?) Bottles

Number of Specimens: 2 fragments (1 complete base with portion of body and 1 complete neck with portion of body), probably from the same bottle.

Description: The fragments are from the same small light blue-green bottle (or from identical bottles). It is round in cross-section, having a diameter of 46/64"; and the walls are extremely thin, being between 1/64" and 1/32" in thickness. The height is unknown, as the fragments do not fit together; however, it is definitely over 2" high and probably is not over 3".

The base has a pontil mark, and the lips, which are of the "Bead" type, are flat and thin. There are no identifying marks on either of the fragments.

Discussion: A basal fragment of a very similar bottle was found in the 1966 test excavations at the Bank site. It, too, is light blue-green in color, has a pontil mark, and has very thin walls (almost 1/32" thick); however, it is slightly larger in diameter, about 52/64" (exact diameter cannot be determined as the bottle was warped by heat when the building burned).

Two bottles, which are very similar to the specimens from the Bank in shape and neck finish, were recovered from the excavations of the first Missouri State Capitol at St. Charles, Missouri (Bray 1968: Fig. 34a). One, which measures "120 mm. (4 46/64") high and has a 25 mm. (63/64") base" (Bray 1968: 90), is slightly larger in diameter than the larger of the specimens (52/64") found at the Bank. The other, which is "87 mm. (3 27/64") high and 18 mm. (39/64")
in diameter" (Bray 1968: 91), is slightly smaller than the smaller (46/64"). Both, like the Bank specimens have open pontil marks and wide, flat lips. They are identified as medicine bottles.

Bottles which appear to be rather similar are discussed and illustrated in the reports on Fort Stevenson, North Dakota (Smith 1960b: 213, Plate 50n) and the Gila Bend Stage Station, Arizona (Berge 1968: 185, Figure 10a,b). A somewhat similar unreported specimen was recovered from excavation of the summer kitchen of the McLean house at Appomattox Court House, Virginia.

The Fort Stevenson specimens are described as very small, "clear-glass, small-mouth bottles, apparently for narcotic drugs... (They) ...are only 7/8 inch (56/64") in diameter, and range from 2 to 4 inches in height" (Smith 1960b: 213). Although only slightly larger in diameter (Fort Stevenson, 28/32"; Bank, 23/32" and 26/32"), and probably of about the same height, the illustrated Fort Stevenson specimen looks as if its walls are considerably thicker (Smith 1960b: Plate 50n).

The Gila Bend Stage Station specimen is described as "a small medicine container...(that) was probably used for liquid medicine since pills would have been hard to get through the small aperture" (Berge 1968: 185). Also found at the Station were two small bottles of the type referred to as "Chinese Medicine" or "opium bottles". As illustrated (Berge 1968: Figure 10a,b), the "opium" bottle is closer than the "small medicine container" to the general shape of the Bank bottles; however, the lip treatment is different, and the "bottle sides are as thick as the open inner space..." (Berge 1968: 185).

The specimen recovered from the McLean kitchen is fragmentary, only the base and a portion of the body remaining. It is round in cross-section, has a diameter of 53/64" (the bottle found at the Bank in 1966 is 52/64" in diameter), has a pontil mark, and is light blue-green in color. It is, however, darker than the bottles from the Bank site, as its walls are thicker (kitchen, 5/64"; Bank, 1/64-2/64"); and it is also different in that it bears raised lettering in three vertical rows running down the sides of the bottle. The letters, by line, are (1) "...WORM", (2) "...IC", and (3) "...R", suggesting that the bottle contained some form of "WORM TONIC" manufactured in, or by, "...R".
Both the Fort Stevenson and Gila Stage Station reports state that the small size of the bottles suggests a "potent content", probably "narcotic drugs", and perhaps opium. This suggestion seems reasonable, for narcotics were apparently in rather wide use during the latter half of the 19th century. The 1897 Sears Roebuck Catalogue, for example, advertises "Laudanum" (tincture of opium), "Peruvian Wine of Coca" (tincture of cocaine), and a "Cure for the Opium and Morphia Habit" (Israel 1968: 27; n.p., between 32 and 33). However, worm medications were also common, as is witnessed by the Rockefeller Foundation's worm eradication program shortly after the turn of the century and by Sears' 1897 advertisements for "Reliable Worm Syrup" and "Reliable Worm Cakes" (Israel 1968: 27).

Use of the bottles as medicine containers, possibly for either narcotics or worm medications, would fit the use of the Bank building as a hospital.

Dating: The dates of occupation of the first Missouri State Capitol, ca. 1819-1961; the McLean kitchen, ca. 1847-1915; the Gila Bend Stage Station, ca. 1850-1860; and Fort Stevenson, ca. 1867-1897, suggest that very small medicine bottles were in use during the time that the Bank was used as a Confederate hospital, ca. 1862-1863. The pontil marks on the bottles from the Capitol, the McLean kitchen, and the Bank also seem to fit the dates of the hospital rather well, as they "...do not generally occur after about 1860" (Wilson 1961: 5).

Small Medicine Bottles

Number of Specimens: 2 fragments, possibly from the same bottle.

Description: These fragments are from the same light blue-green bottle or from very small bottles of the same thickness (2/64''). Both have been badly warped by heat.

The larger fragment is composed of the neck and upper portion of a bottle which was round in cross-section. The neck, which has been flattened, was quite short (about 16/64'') and small, probably not more than 20/64'' in diameter; and the body, in comparison, was rather large -- flattened, it measures 1 38/64'' across. The neck finish is the Bead type. Height cannot be determined, but is definitely more than 1 1/2''.
The smaller fragment is probably from the lower part of the bottle wall, for it curves in very abruptly along one edge.

Discussion: The bottle is similar to the narcotics (?) bottles found at the Bank in thickness and color of glass but differs considerably in shape.

Like the narcotics bottles it is somewhat similar to bottles reported from Fort Stevenson, North Dakota (Smith 1960b: 213, Plate 50n) and the Gila Bend Stage Station, Arizona (Berge 1968: 185, Figure 10a,b).

Dating: The dates of occupation of the Gila Bend Stage Station, ca. 1850-1860, and Fort Stevenson, ca. 1867-1897, suggest that the small medicine bottle recovered from the Bank site may date from the period that the structure was used as a Confederate hospital.

Pharmaceutical (?) Bottle Stoppers

Number of Specimens: 2 complete; 1 broken.

Description: The three glass bottle stoppers are of different types:

(1) The best preserved specimen, a clear glass stopper with a flat round grip, is complete and has not been damaged by fire. Its overall height is 2 1/32": the cylindrical portion being 1" high and the grip being 1 1/32" in diameter. The portion of the stopper fitting into the bottle is 37/64" in diameter at the base and 41/64" in diameter at the top. The grip is 19/64" thick.

(2) The only specimen of colored glass, this stopper is such a dark gray-green that it appears black. Although it has been broken and was badly damaged by heat, it appears to have been much like the above in overall shape with the exception that it seems to have had an oval grip. The height of the cylindrical portion is 1 15/64"; and the diameter of the base, about 49/64". Because of warping the diameter of the upper part of the cylinder cannot be determined.

(3) Differing greatly in shape from the two described above, this clear glass specimen, which was badly heat-damaged, has a flaring cylinder topped by a flat, circular top.
The diameter of the base of the cylindrical portion is approximately 32/64", and of the upper part, about 1 3/64". The diameter of the cap portion is about 1 40/64", and the thickness, about 19/64".

Discussion: Glass bottle stoppers have been reported from a number of historic sites which date from the mid-1800's until the early 1900's. Examples of sites from which they have been recovered are: the McLean kitchen, Appomattox Court House, Virginia (previously unreported); the Gila Bend Stage Station, Arizona (Berge 1968: 185, 203); Fort Pierre II, South Dakota (Smith 1960a: 136), and Fort Stevenson, North Dakota (Smith 1960b: 213).

No identification of the bottles with which the stoppers from the Bank site were used can be made with certainty; hence the stoppers cannot be identified. However, the two with grips appear very similar to those still used in pharmaceutical bottles. Such a use would fit the Confederate use of the Bank as a hospital.

Dating: No glass bottle stoppers were found in (or, at least, were not reported from) excavations at such early 19th century sites as: the first Fort Smith, Arkansas, which dated ca. 1817-1824 (Dollar 1966; Moore, J., 1963); the First Missouri State Capitol, Missouri, ca. 1819-1824 (Bray 1968); the Posey site, Oklahoma, ca. 1823-1840 (Wyckoff and Barr 1968); Fort Vancouver, Washington, ca. 1828-1860 (Caywood 1955); and Fort Lookout II, South Dakota, ca. 1831-1851 (Miller 1960). However, as mentioned earlier, they have been found at a number of later historic sites: the Bank, ca. 1841-1863; the McLean kitchen, ca. 1847-1915; the Gila Bend Stage Station, ca. 1850-1860; Fort Pierre II, ca. 1859-1863; and Fort Stevenson, ca. 1867-1897.

On the surface this would seem to suggest that glass bottle stoppers were not in use before the mid-1800's; however, they are known to date much earlier than the 19th century. What may be indicated is that glass stoppers were not widely used until that time.

This would seem to fit the history of bottle manufacturing, for the use of glass stoppers would not have been practical for wide usage until the necks of the bottles were hand-blown. Although molds were introduced around 1820, the necks and mouths still had to be hand finished; and, despite
gradual improvements in manufacture, the mouths of bottles were not mechanically finished until 1881 (Durrenberger 1965: 48-49). When the process became advanced enough to make glass bottle stoppers practical is unknown; however, one major forward step was the introduction of the snap case between 1850 and 1860.

Such a date, and the suggestion that the stoppers from the Bank may have been for pharmaceutical bottles would fit the use of the structure as a Confederate hospital.

Castor Oil or Whiskey (?) Bottles

Number of Specimens: 5 fragments (1 basal fragment and 4 neck and shoulder fragments), from at least 4 bottles.

Description: All four bottles are a pale greenish-blue in color, are circular in cross-section, and have a rather long neck and an "Oil" type neck finish (Berge 1968: Fig. 151).

Three of the bottles are alike in that they apparently have nearly vertical body walls, rounded shoulders, and a slightly depressed base. They differ, however, in size.

The two smaller bottles are represented by 2 neck and shoulder fragments and 1 basal fragment. The necks are as much alike as would be expected for identical bottles, since they were hand finished. Overall length of the necks, from shoulder to mouth, is 2 24/64" on one specimen and 2 44/64" on the other. Other measurements are as follows: diameters at the base of the neck, 56/64" on both; lengths of neck finish (from the mouth to the base), 30/64" and 31/64"; exterior diameters at top of neck finish (or mouth), 58/64" and 57/64"; exterior diameters at the base of the neck finish, 1 1/16" on both; and the interior diameters of the mouth, 38/64" on both. The basal fragment is too small to allow meaningful measurement.

The larger bottle of this type is represented by a neck and shoulder fragment. Measurements of this fragment are: overall length of the neck from the shoulder to the mouth, 3 38/64"; diameter at the base of the neck, 1 9/64"; length of the neck finish, 43/64"; exterior diameter at the top of the neck finish, 62/64"; exterior diameter at the base of the neck finish, 1 10/64"; and the interior diameter of the mouth, 43/64".

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The neck and shoulder fragment from the fourth bottle differs from the others in that the shoulders slope very gently outward, rather than being rounded. However, it was probably about the same size as the larger bottle described above. Measurements are: overall length of neck from shoulder to mouth, about 3 16/64"; diameter at the base of the neck, about 1 17/64"; length of the neck finish, 42/64"; exterior diameter at the top of the neck finish, about 60/64"; and interior diameter of the mouth, about 40/64".

Discussion: A large number of fragments from at least five bottles, which apparently were very similar to the larger round-shouldered specimen described above, were recovered from the 1966 test excavations at the Bank site. From these fragments, one bottle could be reconstructed.

Measurements of this bottle are as follows: total height of bottle, 10 44/64"; maximum diameter of body, 2 58/64"; diameter of base, 2 49/64"; length of body (from base to base of neck), 7 4/64"; length of neck from shoulder to mouth, 3 40/64" (this measurement on the similar specimen from the 1968 excavations is 3 38/64"); diameter of the neck at the base, 1 9/64" (1968, 1 9/64"); exterior diameter at top of neck finish (mouth), 62/64" (1968, 62/64"); exterior diameter at the base of the neck finish, 1 10/64" (1968, 1 10/64""); and interior of the mouth, 44/64" (1968, 43/64"").

Because the measurements of the necks of this bottle and the larger round-shouldered specimen from the 1968 excavations are so very similar, it is assumed that the two bottles were identical (that is, they were as near to being identical as the methodology used in the manufacture of glass bottles during the mid-19th century would have allowed them to be). It is also assumed that the fragments of the four other large round-shouldered bottles recovered in 1966 were from identical bottles, and that all six of these bottles, and probably the two smaller bottles of this type, were manufactured by the same glass company and used for the same purpose.

Bottles with an "Oil" neck finish are reported as having been recovered from five other mid-19th century historic sites: Washington-on-the-Brazos, Texas (Davis and Corbin 1967: 32, Plate 5E); the Alamo, Texas (Schuetz 1969: Figures 18g, 19d, 19e); the McLean summer kitchen, Virginia (previously unreported); the Gila Beni Stage Station, Arizona (Berge 1968: 185, 196-197); and Anderson's Mill, Texas (Durrenberger 1965: 25-26).
Most of the specimens from these sites were quite fragmentary, only four (all of which were from the Gila Bend Stage Station) being complete enough to allow identification of their original use. One of these bottles had contained castor oil; two, beer; and the other, "Shoo Fly" (Berge 1968: 198). Bottles with this type of neck finish are also known to have been used as containers for olive oil and whiskey (Berge 1968: 185, 198).

Three bottles with an "Oil" neck finish are illustrated in the 1897 Sears Roebuck Catalogue. Two of these are very similar in appearance to the round-shouldered specimens from the Bank site and are apparently about the same size as the smaller bottles. Both contained castor oil. The third bottle, which has very gently sloping shoulders, is apparently somewhat similar to one of the larger specimens recovered from the Bank site. It contained a patent medicine called "Peruvian Wine of Coca". This seems to have been some form of cocaine, for the description of it reads:

If you wish to accomplish double the amount of work or have to undergo an unusual amount of hardship, always keep a bottle of our Peruvian Wine of Coca. Its sustaining powers are wonderful (Israel 1968: between 32-33).

Based upon the above known uses for bottles with "Oil" neck finishes (castor oil, whiskey, olive oil, beer, "Shoo Fly", and "Peruvian Wine of Coca"), it is impossible to make an intelligent guess as to the contents of the Bank site specimens. It does seem rather likely, however, that these bottles may have been used in the Confederate hospital; for the three pharmaceutical products most commonly used by Confederate doctors were "...whiskey, alcohol, and castor oil..." (Franke 1953a: 184), and all of the products known to have been bottled in glass bottles with "Oil" neck finishes (with the probable exception of beer) might very well have been used in a hospital during the last half of the 19th century.

Dating: No bottles with an "Oil" neck finish are reported from the first Fort Smith, Arkansas, which dates ca. 1817-1824. (Moore, J., 1963); the First Missouri State Capitol, Missouri, ca. 1819-1961 (Bray 1968); the Posey site, Oklahoma, ca. 1823-1840 (Wyckoff and Barr 1968); Kipp's Post, North Dakota, ca. 1825-1829 (Woolworth and Wood 1960); Fort Vancouver,
Washington, ca. 1828-1860 (Caywood 1955); or Fort Lookout II, South Dakota, ca. 1821-1851 (Miller 1960) — all of which were occupied, at least in large part, prior to 1850. They are reported, however, from: Washington-on-the-Brazos, Texas, ca. 1835-1967; the Alamo, Texas, ca. 1836-1910; the Bank site, Arkansas, ca. 1841-1863; the McLean summer kitchen, Virginia, ca. 1847-1915; the Gila Bend Stage Station, Arizona, ca. 1850-1860; and Anderson's Mill, Texas, ca. 1850-1914 — all of which were occupied, at least in large part, after 1850. This seems to suggest that this type of neck finish was not introduced until around 1850. That pontil marks do not occur on the bases of the bottles of this type which were recovered from the Bank site further strengthens this suggestion, for pontil marks do not generally occur after about 1860 (Wilson 1961: 5). When the "Oil" neck finish ceased to be used is not known. However, it was definitely still in use in 1897, as is shown by the Sears catalogue for that year.

The probable post-1850 date for "Oil" neck finish bottles, the artifacts associated with these bottles at the Bank site, and the known uses for this type of bottle suggest that they probably date from 1862-1863, when the Bank building served as a Confederate hospital.

Liquor or Bitters (?) Bottles

Number of Specimens: 8 fragments (1 fragment of neck and shoulder and 7 fragments of body and base, 6 of which fit together), likely from 1 bottle.

Description: The bottle, which is made from light green glass with a slight yellow tint, has vertical body walls, a flat base, and a short neck.

The body is actually octagonal in cross-section, but it could be described as square with beveled corners. Although quite fragmentary, it is obvious that the body originally had 4 plane surfaces 2 4/64" wide, which were separated at the "corners" by 4 plane surfaces 28/64" wide. The width of the body, from the exterior surface of one of the 2 4/64" walls to the exterior of the one opposite, is 2 48/64". The junctures of the walls and the base are beveled -- that is, a plane surface 16/64" wide separates the walls and the base. The base, which is also octagonal, is flat with a central circular concavity. From the outer edge of one side of the
flat basal surface to the outer edge of the opposite side measures 2 24/64". The central concavity measures 1 52/64" in diameter. It is rather shallow, being only about 20/64" deep at the center. There is no pontil mark.

The neck and shoulder fragment, which may possibly be from another bottle, has an "Oil" type neck finish, a very short neck, and a very strong, although slightly curved, shoulder. The overall height of the neck, from shoulder to the mouth, is 1 24/64". Of this, 50/64" is neck finish. Exterior diameters of the neck are: at the base, 1 12/64"; at the base of the neck finish, 1 14/64"; and at the top of the neck finish (mouth), 63/64". The interior diameter of the mouth is 49/64".

Because the specimen is so fragmentary, neither the height of the body nor the overall height of the bottle can be determined.

Discussion: The recovery of "square" bottles has been reported from Fort Vancouver, Washington (Caywood 1955: 63); Washington-on-the-Brazos, Texas (Davis and Corbin 1967: 36-38); the Gila Bend Stage Station, Arizona (Berge 1968: 187, 194-195); and Anderson's Mill, Texas (Durrenberger 1965: 25, 33). A number of these bottles were identifiable as to use — those from Fort Vancouver were "Square brandy bottles of...dark green glass..." (Caywood 1955: 63); one of those from Washington-on-the-Brazos was a snuff bottle (Davis and Corbin 1967: 37-38); and "All bottles with square bases (from the Gila Bend Stage Station) were of the gothic pickle (container) type" (Berge 1968: 194). However, the use to which a number of other "square" bottles from these sites had been put could not be determined.

It is relatively certain that the "square" bottle from the Bank site was not a snuff bottle or a pickle bottle, for both had very distinctive neck treatments which were quite different from that of the Bank specimen.

It may, however, very well have been a rum, or liquor, bottle, as similar specimens are frequently termed "Dutch gin bottles" by collectors. These bottles, which are described as "...tall, four-sided vessels with short necks... (, were usually) a pale yellowish-green or amber in color..." (Noel Hume 1963: 267-268). They were first made during the first half of the 17th century, when they were the only large glass bottle in common use. It should be noted, however,
that: they were manufactured throughout the 18th and 19th centuries; they were made in England and the United States as well as the Netherlands; and not all of these bottles contained gin.

Another point suggesting that the Bank specimen may have been a liquor bottle is the fact that "Oil" type neck finishes were quite commonly used on liquor bottles (Berge 1968: 198). Yet there are other possibilities. For example, the 1897 Sears Roebuck Catalogue pictures an 1½-pint bottle with a very similar body and shoulder treatment in an advertisement for "Orange Wine Stomach Bitters...made from wine distilled from the Seville Orange tree in combination with herbs well known for their tonic and healing effect..." (Israel 1968: between 32-33).

One might well expect to find both liquor and bitters bottles on the site of a mid-19th century hospital, for both were very commonly used as medications at that time. Strangely enough, the effect of the two may have been rather similar, because bitters normally had such a high alcohol content that it was looked upon by some as a cause of intemperance (Berge 1968: 193).

Dating: The periods of occupation of the sites from which "square" bottles similar to the specimen from the Bank site have been recovered all fall, at least in part, after 1850: Fort Vancouver, Washington, ca. 1828-1860; Washington-on-the-Brazos, Texas, ca. 1835-1967; the Gila Bend Stage Station, Arizona, ca. 1850-1860; and Anderson's Mill, Texas, ca. 1850-1914.

Based upon the suggested post-1850 date for "square" bottles similar to the Bank specimen, the fact that the Bank specimen does not have a pontil mark and, thus, was not made until ca. 1860, and the artifacts associated with the Bank specimen, it seems likely that it dates from the use of the Bank building as a Confederate hospital.

Small "Square" Patent Medicine (?) Bottles

Number of Specimens: 2 fragments (both base and body fragments), from 2 bottles.

Description: Neither of the two fragments is complete enough to allow adequate description of the bottles from which they came.
One of the fragments is from a light blue-green bottle, the body and base of which were octagonal in cross-section but which could be termed square with beveled corners. The wider faces of the body wall were approximately 1 8/64" across; and the narrower (or "corner"), 20/64". The base has been damaged by heat, but apparently the outer edges were flat and surrounded a central circular concavity. The base measures 1 42/64" from one side to the other, and the concave area measures about 1 34/64" in diameter. Although it is impossible to be certain due to heat damage, it is believed there is evidence for a pontil mark.

The second specimen, which seems to have been made from clear glass (although it is gray from fire damage), has been so badly warped by heat that its original measurements cannot be obtained. It was, however, much smaller than the bottle described above, its width having apparently been somewhere between 1" and 1 1/4".

Discussion: "Square" bottles of these sizes and colors are not reported in the reports on historic sites archeology used for comparative purposes. It appears, however, that they are more closely related to patent medicine bottles than to any other type discussed in this report.

Dating: The fire damage evident on both specimens almost definitely indicates that they were in the Bank building at the time of its destruction and, thus, suggests that they were used in the Confederate hospital. That they appear to be more like patent medicine bottles than any other type found at the Bank site is in agreement with this assumption.

Other Bottles Which May Have Contained Medicines

Number of Specimens: 27 fragments (10 neck or neck and shoulder fragments and 17 base or base and lower body fragments), from at least 16 bottles.

Description: These fragments represent 16, or more, bottles of at least four different types.

The 10 neck fragments are from at least four different types of bottles:

(1) There are three neck fragments from three bottles with "Patent" type neck finishes (Berge 1968: Figs. 15d, 16d-g). Two of these fragments are from medium blue-
green bottles, the third, from a clear glass bottle. All have been too warped by heat for meaningful measurements to be obtained.

(2) Two neck and shoulder fragments from two bottles with "Bead" type neck finishes (Berge 1968: Figs. 15c, 16a-c) were recovered. One, which was so badly damaged by heat that it is not measurable, is from a rather thick-walled, short-necked (approximately 7/8" long) clear glass bottle. The other, also heat damaged but to a lesser extent, is from a light blue-green bottle. Obtainable measurements are: length of neck (shoulder to mouth), 1 4/64"; interior diameter of neck, 34/64"; and thickness of neck wall, 8/64".

(3) Two neck and shoulder fragments are from short-necked bottles with "Oil" type neck finishes (Berge 1968: Figs. 15i, 17h-j). One is from a light blue-green bottle with wide, slightly curved shoulders. Measurements of this specimen are: height of neck (from shoulder to mouth), about 1 44/64"; height of neck finish, 27/64"; diameter of neck at base, about 1 31/64"; diameter of neck just below neck finish, 62/64"; diameter at lower edge of neck finish, 1 7/64"; exterior diameter of top of neck finish (mouth), 61/64"; and interior diameter of mouth, 29/64". The other fragment is from a dark brownish-green bottle with a short neck and strong, slightly curved shoulders. Obtainable measurements are: length of neck (from shoulder to mouth), 1 48/64", and length of neck finish, 59/64".

(4) Four neck or neck and shoulder fragments (two of which fit together) from three apparently identical dark brownish-green bottles with "Brandy" type neck finishes (Berge 1968: Figs. 15e, 16h-j), bulbous necks, and rounded shoulders were recovered. Measurements of the most complete specimen are: length of neck (from shoulder to mouth) 2 48/64"; length of neck finish, 25/64"; length from mouth to bottom of wire rim, 37/64"; diameter at base of neck, 1 15/64"; diameter of widest part of neck, 1 17/64"; diameter of neck just below wire rim, 58/64"; diameter of base of neck finish, 1 11/64"; diameter at top of neck finish (mouth), 1 4/64"; and interior diameter of mouth, 29/64".

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Three types of bases are represented:

(1) Four of the basal fragments are from four light blue-green and medium blue-green bottles that were circular in cross-section and had slightly concave bases with pontil marks. These range in diameter from about 1 20/64" to approximately 2 16/64".

(2) Three other basal fragments are rather similar to those above in that they are from two light blue-green and medium blue-green bottles which were circular in cross-section and had a flat outer rim surrounding a shallow circular concavity. However, they did not have pontil marks. The smallest base is about 2 16/64" in diameter, and the largest is 3 40/64".

(3) Ten of the basal fragments are from at least five thick-walled dark brownish-green (almost black) glass bottles, which were circular in cross-section and had rather deeply concave bases.

Five of the fragments (two of which fit together) appear to be from bases with no decoration. The other five are decorated. Three of these fragments fit together to form an almost complete base, which bears a raised molded dot in the center of the concavity. This is surrounded by eight raised lines which radiate out from it, and they, in turn, are enclosed by a raised circular line. Another fragment, which is from a much smaller bottle, has a raised dot in the center but bears no other decoration. The other fragment has a 8/64" wide circular flat area surrounding the central concavity.

Basal diameters of the measurable decorated specimens range from approximately 2 32/64" (the bottle with the raised dot) to 3 2/64" (the bottle with the raised dot, radiating lines, and circle). The diameter of the one measurable plain specimen is 3 8/64".

Discussion: It is, of course, impossible to describe the bottles from which these fragments came; and it would be more foolhardy to attempt to guess what the contents of these bottles may have been. It can be stated, however, that bottles with "Patent", "Bead", and "Oil" neck finishes frequently contained medicines. It is also known that large bottles with "...necks...which are slightly bulbous and
have...(a) brandy finish...are usually liquor bottles" (Berge 1968: 198), and that liquor was frequently used as a medication during the mid-19th century.

Dating: As has been mentioned earlier, bottles with an "Oil" type neck finish seem to date post-1850, and pontil marks do not usually occur on bottles manufactured after 1860. Since "Oil" neck finishes and bases both with and without pontil marks occur in this collection of bottle fragments, it seems reasonable to assume that the bottles were in use around 1860. This suggests they were used in the Confederate hospital, 1862-1863.

Unidentifiable Glass Bottle Fragments

Number of Specimens: 226 fragments.

Description: Of these 226 fragments, 147 were of light blue-green glass; 31, of light olive green glass; 18, of dark amber (or yellow-brown) glass; 14, of light gray-blue glass; 12, of dark brownish-green glass; and 4 of clear glass. Almost all have been so badly damaged by heat that no describable features remain.

Discussion: Because most of the identifiable fragments recovered from the Bank site seem to have been from bottles which originally contained some form of medication, it seems reasonable to assume that many, if not most, of these fragments are also from medicine bottles.

Dating: As the archeological materials with which these fragments were associated appear to date from the use of the Bank as a Confederate hospital, it is likely that they also date from that period. Further bolstering this suggestion is the fire damage, which shows that the bottles that these fragments represent were in the building at the time it burned.
Fig. 27. Pharmaceutical Bottle Stoppers and Castor Oil and Bitters Bottles

Right: liquor or bitters bottle (pp. 171-173).
Lower center: pharmaceutical bottle stoppers (pp. 166-168).
Left and upper center: castor oil or whiskey bottles (pp. 168-170).
Fig. 28. Shaving Cream Containers (pp. 182-183) and the Frame of a Doctor's (?) Bag (pp. 180-181).
PERSONAL POSSESSIONS

LUGGAGE

Satchel, or Doctor's Bag

Number of Specimens: 3 fragments, from the frame of one bag.

Description: The three fragments, which are made up of seven pieces (all of which either are attached to one another or can be fitted together), form roughly three-fourths of the metal frame that lined the opening, or mouth, of a small bag.

Three of these pieces are from flat strips, 47/64" wide and 4/64" thick, that apparently were cut from thin sheets of iron. The other pieces are: a narrower flat strip of iron, a pin, a brad, and a nail.

Two of the flat iron strip fragments, which individually could be described as "L"-shaped were it not for the fact that the "corners" are curved instead of being right angles, fit together to form an elongated "C"-shaped strip that is 15 26/64" across. Each of the ends of this strip has been cut and bent to form part of a simple hinge. The other fragment of flat iron strip is from an identical elongated "C"-shaped strip; however, only about one-third of this strip was recovered. The one remaining end of this strip was also cut and bent to form part of a hinge. This hinge part is still fastened to one of the others by means of an iron pin, which is 1 8/64" long and about 5/64" in diameter. Since the other ends of the elongated "C"-shaped strips were attached to one another in the same manner, the strips formed a frame, the sides of which fit flush when the bag was closed. When closed, the maximum exterior dimensions of the frame are 15 26/64" in length and 5 2/64" in height; when open, the maximum dimensions are 15 26/64" in length and 10" in width.

The fourth piece of flat iron strip is complete. It is 39/64" wide and 4/64" thick, has a maximum length of 50/64", and is roughly rectangular in shape (it has three straight edges that meet at right angles, but the fourth is slightly convex and has a short projection at the center). This strip is still attached to the exterior surface of one of the "C"-shaped strips by a brad, the heads of which are
approximately 11/64" in diameter. Likely this strip was originally one of several that were used to fasten the covering to the frame. The width of the strip would have prevented the covering (probably either leather or fabric) from tearing when pressure was exerted by the weight of the bag's contents.

That the frame was originally made of both metal and wood seems to be indicated by a small cut nail, or large tack, that is still in place in one of the "C"-shaped strip fragments and by a hole in one of the other strip fragments. The nail and the hole are about 4 1/4" apart, and each is approximately 2 1/8" from the center of the strip, suggesting that the wooden portion of the frame may have been centered and may possibly have been used for attaching a handle and a clasp, or lock. The head of the nail is on the interior of the metal portion of the frame, seemingly indicating that the wooden portion was attached to the exterior of the metal part. The nail is so bent and corroded that measurements cannot be made.

Discussion: No references to luggage of any type have been found in reports on excavations at 19th century historic sites. There is, however, evidence that bags with framework similar to that of the Bank specimen were in use during the mid-19th century. An example of this evidence is an 1861 Harper's Weekly illustration, which shows two valises with this type of handle (Pratt 1955: 15).

Bags with this type of frame, some of which are apparently about the same size as the Bank specimen, were advertised in the 1897 Sears Roebuck Catalogue. These small bags, or satchels, which were called either "Club Bag" or "Club Sac", had covers made of cloth, "pebble" leather, or goat skin (Israel 1968: 252). They came in various sizes, but all were actually rather small (most being available in 10, 11, 12, 13, 14, 15, and 16 inch lengths). In size and in overall appearance, they are somewhat similar to the "doctor's bag" still in use today.

Dating: Since bags with the type of frame recovered from the Bank are known to have been in use in the 1860's and the archeological materials with which the Bank specimen was associated date mainly from the middle of the 19th century, it seems likely that it was used in the Bank building during the time that it served as a Confederate hospital.
CHINAWARE COSMETIC JARS

Transfer Printed Shaving Cream Containers

Number of Specimens: 7 fragments, from at least 2 specimens.

Description: The seven fragments are from at least two shaving cream jars. These probably were identical.

One fragment is from a slightly domed white ceramic jar lid, which is approximately 2 15/16" in diameter and bears the label "Phalon's Ambrosial Shaving Cream" in purple transfer printing. This wording is backed by an elaborate fine-line curlicue design and encircled by three concentric rings made up of floral and geometric designs. The background and border are also in purple transfer.

Two fragments are from an earthenware jar lid identical to the Phalon's jar in size and construction; however, they have been so badly burned that none of the transfer design or the glaze remains, so the jar cannot be definitely identified.

Four other charred fragments of the same, or a very similar, jar were also found. Two fit together to form a part of the upper portion of the wall of the jar. It has a recessed lip which fits into the lid. The other two fragments form a part of the lower portion of the wall and a part of the base.

Discussion: In earlier excavation at the Bank site, the body of a badly charred cosmetic jar was found (Wilson 1966b: Figure 28A). It, too, has a recessed lip; but it is larger in diameter than the shaving cream jar lids, is not as high as the jars, and has a protruding rim around the base.

A fragment of what appears to be a very similar shaving cream jar lid was recovered from Fort Pierre II, South Dakota (Smith 1960a: 139, Plate 27w). This lid, which was approximately 3" in diameter, bore the following legend encircled with a floral border: "...Premium/Shaving Crea/m/...& Silver Medals award/ed.../...Institutes of New Yor/k/.../Phi/ladelphia & Boston /.../X. Bazin, 114 Chestnut St./Phi/ladelphia..." Both wording and border were in black transfer. A small fragment of the lid of a similar jar was also found. It bore a floral decoration in red transfer.
A shaving cream jar, differing in shape but bearing a label similar in design to those from the Arkansas Post Bank and Fort Pierre II, was found at Fort Vancouver, Washington (Caywood 1955: Plate XX). This jar, which was identified as a "Pomade jar", bore the label "Ambrosial Shaving Cream (.) Patronized by Prince Albert (.) Invented and Prepared only by John Cosnell & Co. Perfumers by Appointment to her Majesty (.) ... & 12, Three King Court Lombard Street". The color of the transfer design is not given.

Six sherds of "porcelain containers, perhaps cosmetic jars ...(with) transfer lettering...in blue and brown...on their exterior surfaces" were recovered from the Posey site in eastern Oklahoma. The lettering, which is "of a broad style...(,) is sometimes enclosed in flower-bordered crests or shields" (Wyckoff and Barr 1968: 38).

It is interesting to note that Sears, Roebuck and Company's 1897 catalogue advertised six kinds of shaving preparations but did not mention shaving cream of any type (Israel 1968: 19, 33, 328). This suggests it was not in use during that period.

Dating: The jar found at Fort Pierre II (ca. 1849-1863) is believed to have been manufactured between 1850 and 1856, the years that Bazin was located at the address printed on it. This, taken together with the dates of occupation for the Arkansas Post branch bank (ca. 1841-1863) and Fort Vancouver (ca. 1828-1860) and the probable dates of occupation for the Posey site (1823-1849), suggests that "Ambrosial Shaving Cream" packaged in transfer printed ceramic jars was in use between 1823 and 1863, most likely during the period from 1840 to 1860. That the specimens from the Bank may date from the latter part of this period is suggested by the statement of Hughes and Hughes that the majority of "pot-lids" for bear's grease, pomade, etc., were manufactured between 1846 and 1880 and that until "...1849 lids were flat-topped...(and) uneven of surface... (, but after that date) they were slightly domed...(and) smooth of surface..." (Hughes and Hughes 1968: 126).

This dating and the use of shaving cream in a bank building seems to fit the 1862-1863 use of the structure as a Confederate hospital.
ARTICLES USED IN GAMES

Marbles

Number of Specimens: 1 complete.

Description: This specimen is made of an off-white stone, probably marble. It is 11/16" in diameter and is decorated by three bands, each of which is composed of four parallel lines. These bands intersect one another at right angles, dividing the sphere into eight triangles of equal size. The stripes making up one of the bands are red; the stripes of the second are green; and those of the third, black.

Discussion: During the 19th century, marbles were used in a number of games, which, collectively, were usually termed "marbles". This term was also frequently used for any one of these games; however, there was a specific name for each. Among these were "Nine Holes" and "Hit and Span", both of which were played in a standing position, and "Ring Taw", the form most commonly played today. All of these games were then played primarily by young men rather than by children (Moore 1963: n.p.).

Judging from the large number of historic sites from which marbles have been recovered, it is apparent that the various marble games were very popular. The use of marbles of the type found at the Bank site does not seem to have been very widespread, however, for specimens very similar to the Bank specimen are reported from only two other sites, the first Missouri State Capitol, Missouri (Bray 1968: 79-80), and Fort Pierre II, South Dakota (Smith 1960a: 139).

None were recovered from the earlier test excavations at the Bank site, but two dice, evidence of another very popular 19th century game, were (Wilson 1966: Fig. 28B). These are identical. They are made of a translucent green material (probably glass), and they are 23/64" square.

Dating: The occupations of the Bank, ca. 1841-1863; Fort Pierre II, ca. 1859-1863; and the first Missouri State Capitol, ca. 1819-1961, overlap only for a short period, 1859-1863. This suggests that stone marbles painted with parallel lines were likely in use during that period. Such a date, and the artifact itself, would seem to fit the 1862-1863 use of the Bank as a Confederate hospital.
CLOTHING

Suspender (?) Buckles

Number of Specimens: 2 specimens, from 2 buckles.

Description: One of the buckles (or fasteners) is made of brass; the other is apparently made of iron. The brass specimen is complete but is only a part of the fastener; the iron specimen is fragmentary.

The brass specimen, which is 49/64" long, 47/64" wide, and 2/64" thick, was evidently cut from a thin sheet of metal. It is roughly rectangular in shape, one end and both sides being straight; but one end is convex and has a semicircular projection which has been bent under to form a hook about 10/64" long. At the end opposite to the hook a slit 35/64" long and 5/64" wide has been cut parallel to, and 5/64" from, the edge. This slit was probably for insertion of a strap. The specimen bears no decoration.

The other specimen, which is made from molded metal (probably iron) is the rim section of a buckle. The center portion of the rim -- the part against which the strap and buckle tongue rested -- is relatively straight. It is 11/64" wide, 5/64" thick, and about 56/64" long. Along the outer edge is a narrow decorative band of short parallel lines. The sides, or "arms", of the rim are curved, flaring outward from the center part of the rim, then curving inward rather sharply, and finally straightening out so that they are parallel to one another and at right angles to the center part of the rim. They are circular in cross-section and have a diameter of approximately 6/64".

Discussion: Suspender buckles were not recovered from the excavations at Fort Smith I, Arkansas (Moore, J., 1963); the First Missouri State Capitol, Missouri (Bray 1968); Kipp's Post, North Dakota (Woolworth and Wood 1960); or Fort Lookout II, South Dakota (Miller 1960). However, they have been recovered from numerous mid-19th century sites, including: the Posey site, Oklahoma (Wyckoff and Barr 1968: 42); Fort Vancouver, Washington (Caywood 1955: 47); Washington-on-the-Brazos, Texas (Davis and Corbin 1967: 45); the Gila Bend Stage Station, Arizona (Berge 1968: 222); Anderson's Mill, Texas (Durrenberger 1965: 58); Fort Pierre II, South Dakota (Smith 1960a: 139); Johnny Ward's Ranch, Arizona (Fontana and Greenleaf 1962: 85, 87); and Fort Stevenson, North Dakota (Smith 1960b: 225).
Most of the buckles recovered from the above sites were made of brass; but a few were made of iron, and one was made of "white metal". Several were die-stamped with floral decorations, and three bore patent dates. These were: "1855" (the Posey site); "March 7, 1871" (Fort Stevenson); and "Dec. 4, 1900" (also Fort Stevenson).

**Dating:** The sites from which suspender buckles were not recovered all date, at least in part, prior to 1850: Fort Smith I, Arkansas, ca. 1817-1824; the first Missouri State Capitol, Missouri, ca. 1819-1961; Kipp's Post, North Dakota, ca. 1825-1829; and Fort Lookout II, South Dakota, ca. 1831-1851. Whereas, with one exception, the sites from which they were recovered -- the Posey site, Oklahoma, ca. 1823-1840; Fort Vancouver, Washington, ca. 1828-1860; Washington-on-the-Brazos, Texas, ca. 1835-1860; the Gila Bend Stage Station, Arizona, ca. 1850-1860; Anderson's Mill, Texas, ca. 1850-1914; Fort Pierre II, South Dakota, ca. 1859-1863; Johnny Ward's Ranch, Arizona, ca. 1859-1903; and Fort Stevenson, North Dakota, ca. 1867-1897 -- all date, at least in part, after 1850. The exception is the Posey site; but the one suspender buckle found there was deposited after the major occupation of the site ended, for it bore a patent date of 1855.

The above information strongly suggests that suspender buckles were not used prior to the 1850's. This may be correct; however, it should be noted that "braces", which are described as "...broad tapes passing over the shoulders and buttoned to the trousers at back and front" (Kohler 1963: 409), were worn as early as 1800. At any rate, no matter what the beginning date for suspender buckles may have been, it seems likely that the specimens from the Bank dated from the use of the building as a Confederate hospital, because of the dating of the materials with which they were associated.
Fig. 29. Marble, Die, and Suspender Buckles. 
Upper and lower right: suspender (?) buckles (pp. 185-186). 
Upper left: die (Wilson 1966b: Fig. 28b). 
Lower left: marble (p. 184).
Fig. 30. Logging Chain and Harness Ring, Buckle and Snap.  
Upper right: hook and link of logging chain (pp. 191-192).  
Lower right: harness snap (p. 191).  
Upper left: harness buckle (pp. 190-191).  
Lower left: harness ring (pp. 189-190).
HARNESS AND OTHER EQUINE EQUIPMENT

HARNESS

Harness (?) Rings

Number of Specimens: 2 complete rings, one of which is broken.

Description: Both the rings are circular metal bands, the bands themselves being circular in cross-section. Both bands are smooth and are uniform in diameter, indicating that they were machine made rather than hand forged. The rings differ, however, in size and in the material from which they were made.

One is an iron ring. It has a diameter of 2 1/64" and a thickness of 18/64".

The other, which is made of brass, has been broken and bent; hence an accurate measurement of the diameter of the ring cannot be obtained. The maximum and minimum measurements, 2 16/64" and 1 50/64", suggest, however, that it was originally about 2". The thickness measures 14/64".

Neither specimen was attached to anything when recovered, and neither shows any wear or other evidence of having been attached, suggesting that both were either used for only a relatively short period or that they were attached to some relatively soft material, such as leather.

Discussion: Circular metal rings have been recovered from a number of mid-19th century historic sites. Among them are: the Posey site, Oklahoma (Wyckoff and Barr 1968: 26); Kipp's Post, North Dakota (Woolworth and Wood 1960: 275); the Alamo, Texas (Greer 1967: 77); Anderson's Mill, Texas (Durrenberger 1965: 60); Fort Pierre II, South Dakota (Smith 1960a: 132); Johnny Ward's Ranch, Arizona (Fontana and Greenleaf 1962: 85); and Fort Stevenson, North Dakota (Smith 1960b: 224).

Most of these are believed to have been harness rings; and those that are illustrated appear to be very much like the "Breeching and Halter rings (of) japanned iron..." that are illustrated in the 1897 Sears Roebuck Catalogue (Israel 1968: 765). The rings in the Sears' advertisement were ½", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 1/2", 1 3/4", 2", 2 1/4", 2 1/2", and 3" in diameter. Measurements are given for only four of
the rings found on the above sites. Three of these are of, or very near to, diameters advertised by Sears. This is also true of the specimens from the Bank.

Although the above information strongly suggests that the metal rings from the Bank site were harness rings, it should be noted that they could very readily have been used for any purpose that required the use of leather or fabric straps, ropes, or chains.

**Dating:** That these rings were likely harness parts suggests they may have been deposited ca. 1857, when the building was "'...used for...holding elections and stabling horses'" (Bearss 1964: Part II, 277). However, they could very well have served some unknown purpose during the use of the structure as a hospital in 1862-1863.

**Harness (?) Buckle**

**Number of Specimens:** 1 complete specimen.

**Description:** The buckle is of the "roller" type -- that is, it has a metal cylinder around the side of the rim against which the loose end of the tongue rests when the buckle is fastened. The buckle, which is made of iron, has a rectangular shape with rounded corners. The rim, which is 12/64" in diameter, has exterior dimensions of 1 37/64" by 1 11/64". The "roller", or cylinder, is 1 13/64" long and 18/64" in diameter.

**Discussion:** Harness buckles were recovered from the excavations at the Posey site, Oklahoma (Wyckoff and Barr 1968: 26); the Gila Bend Stage Station, Arizona (Berge 1968: 228); Fort Pierre II, South Dakota (Smith 1960a: 133); Johnny Ward’s Ranch, Arizona (Fontana and Greenleaf 1962: 85); and Fort Stevenson, North Dakota (Smith 1960b: 224). However, the only "roller" type buckles specifically mentioned in the reports on these excavations were from Johnny Ward’s Ranch.

Under the category of "Harness Buckles", the 1897 Sears Roebuck Catalogue lists "Japanned (black) Iron Barrel Roller Buckles" and "X C Plated (white) Iron Barrel Roller Buckles", both of which could be bought to fit ½", 5/8", 3/4", 7/8", 1", 1 1/4", 1 ½", 1 3/4", and 2" wide straps (Israel 1968: 765). The Bank specimen, which has an interior height measurement of 1 13/64", would not fit either the 1" or 1 1/4" wide strap; but it would fit a 1 1/8" (1 8/64") wide strap very nicely.
Based on the above information, it seems that the buckle from the Bank site was likely from a harness. There are, however, many other possible uses. Since the Bank is known to have served as a hospital it should be noted that similar buckles were used on leather straps on trunks and wooden medicinal chests.

**Dating:** It seems probable that the buckle dates from ca. 1857 when the Bank building was used for stabling horses.

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**Harness Snap**

**Number of Specimens:** 1 incomplete specimen.

**Description:** This hook snap, which is made of iron and is very badly corroded, is complete except for the major portion of the flexible tongue. Maximum measurements are 3 1/64" in length and 1 31/64" in width, the widest portion being a rectangular eye to which a strap was attached. The hook portion is about 40/64" wide where it is attached to the eye but narrows to about 14/64" near the hook itself. Most of the flexible tongue is missing. The portion that remains is attached to the wider portion of the hook; there it is 16/64" wide.

**Discussion:** Harness snaps are not mentioned in any of the historic sites archeology reports used for comparative purposes. However, several very similar types of snaps are advertised in the 1897 Sears Roebuck Catalogue (Israel 1968: 764).

**Dating:** That the finding of harness hooks has not been reported from other mid-19th century historic sites suggests that the item may have been intrusive. If it is, it probably was lost when the brick from the building was salvaged.

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**Chains**

**Logging or Towing Chain**

**Number of Specimens:** 1 incomplete specimen.

**Description:** This specimen is made up of one link and one hook, which are probably from a logging or towing chain. Both are made of iron and are rather badly corroded.
The link is ovate in shape and has maximum dimensions of 3 6/64" in length and 1 50/64" in width. It is 22/64" thick.

The hook, which appears to be hand-wrought, is basically a "U" shape; however, the upward projections vary in length. The shorter one is the hook proper, and the longer one is bent into a circle at the top, thus forming the eye for attaching it to a chain. The one link recovered from the site is still attached in this manner. The thickness of the hook varies, in that it is thinner near the tip of the hook proper and much thinner at the base of the eye. Maximum thickness is 50/64"; minimum, 19/64".

Discussion: Chain fragments have been recovered from a number of mid-19th century historic sites, including: the Posey site, Oklahoma (Wyckoff and Barr 1968: 22); the Alamo, Texas (Greer 1967: 76); Fort George, South Dakota (Smith 1968: 80-81); Anderson's Mill, Texas (Durrenberger 1965: 60); Fort Pierre II, South Dakota (Smith 1960a: 132); and Johnny Ward's Ranch, Arizona (Fontana and Greenleaf 1962: 85). However, the chains from only two of these sites, Fort George and Fort Pierre II, are believed to have been logging chains. Both specimens have large hooks rather similar to the one recovered from the Bank.

Chains of this size were no doubt used not only in logging, but for pulling any sort of heavy equipment as well. They also would have proved useful as a means of suspending pots for fireplace cooking, which was very common until after the Civil War, when the coal-burning range with removable lids came into general use.

Dating: The logging chain from the Bank site may well have been deposited ca. 1857 when part of the building was used as a horse stable. It could, however, have very well been used in connection with fireplace cooking during the time, 1862-1863, that the building served as a Confederate hospital.
ORDNANCE AND RELATED EQUIPMENT

BAYONETS

Brass Bayonet Scabbard Tip

Number of Specimens: 2 fragments from the same scabbard tip.

Description: The two fragments, which are made of brass, fit together to form almost the complete metal tip of a scabbard. Considering the two parts as a whole, the tip is 3 14/64" long. It is conical in shape; however, a 2/64" wide depression encircles it near the end, thus dividing the hollow upper portion, which is 2 38/64" long and has walls which are 2/64" thick, from the ovate solid brass tip, which is 38/64" long and has a diameter of 24/64". (The diameter of the upper part of the conical opening cannot be obtained because the specimen has been flattened.) Two small brads, which remain in place, are located 14/64" below the top of the hollow upper portion of the tip. These evidently were used to fasten the tip to the scabbard.

From a cursory study of arms catalogues it would appear that the tip is from a bayonet scabbard.

Discussion: Rather similar scabbard tips were recovered from excavations at Fort Pierre II, South Dakota (Smith 1960a: 137, plate 27a), and Fort Stevenson, North Dakota (Smith 1960b: 213, plate 50j).

Dating: The dates of Fort Pierre II, ca. 1867-1897, suggest that the specimen recovered from the Bank site may well date from the Civil War. This date and the identification of the object suggest that it likely belonged to a Confederate soldier who was a patient of, or who worked in, the hospital then housed in the Bank building.

GUN CLEANING EQUIPMENT

Rifle (?) Ramrod

Number of Specimens: 1 fragment.

Description: This fragment, which is 4 14/64" long and approximately 17/64" in diameter, is from a rather badly corroded
iron ramrod. One end of this rod has an oval eye (the opening of which is 16/64" by 21/64"), which apparently held a cleaning patch.

Discussion: The recovery of rifle ramrods is mentioned in two of the site reports used for comparative purposes -- the report on excavations at the Gila Bend Stage Station, Arizona (Berge 1968: 221, Fig. 27a), and that on the excavations at Fort Stevenson, North Dakota (Smith 1960b: 213).

The ramrod from the Stage Station, described as "...the head section of a (rifle) ramrod with bristle wire and screw connection" (Berge 1968: 221), is obviously quite different from the one recovered from the Bank site. However, one of those from Fort Stevenson seems to have been rather similar to the Bank specimen, for it is described as having "...the regularly designed end with an eye to hold a cleaning patch... (This ramrod, said to have been) ...16 1/4 inches in length... (, was used) with model 1864 or 1866 rifle" (Smith 1960b: 213).

Dating: The use of a ramrod and the dates of the Gila Bend Stage Station (ca. 1850-1860) and Fort Stevenson (ca. 1867-1897) suggest that the specimen from the Bank site was likely connected with the 1862-1863 use of the building as a Confederate hospital.

GUN PARTS

Rifle Trigger Guard

Number of Specimens: 1 fragment.

Description: This fragment, which is from the portion of a trigger guard which fitted flush against the stock of a rifle, is approximately 6 4/64" long and 56/64" wide (at the widest point). It is made from sheet iron 7/64" thick. The sides have been cut in a series of gentle curves (those along one side matching those on the other), and the sheet has been shaped so that there is a very gentle curve from one end to the other and so that it is concave when viewed in cross-section. The curve and concavity allowed it to fit the wooden stock of the rifle to which it was attached, probably by screws. The one screw hole in the fragment, which is 16/64" in diameter, is located 1 16/64" from the end.

The specimen bears no engraving or marking of any sort.

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Discussion: Rifle parts have been recovered from excavations at many 19th century historic sites; however, none of the site reports used for comparative purposes discuss trigger guards similar to the Bank specimen.

Dating: The recovery of a rifle part from the Bank site suggests that the rifle was in use during the time that the Bank served as a Confederate hospital.

ARTILLERY

Artillery Shells

Number of Specimens: 3 fragments, possibly from 1 specimen.

Description: These three fragments are from cylindrical cast iron artillery shells. Two of them are very badly corroded; but the third, the largest of the three, is well-preserved. Maximum measurements of this fragment are 2 9/64" (width) by 3 39/64" (length), and the thickness of the wall is 35/64". The original diameter of the shell, as determined by projection, was approximately 3". The original length cannot be determined.

Discussion: During the Civil War use was made of five kinds of artillery with 3" bore diameters -- the 10-pdr. Parrott, the 3-inch Ordnance or Rodman, the 10-pdr. Wiard, the 3-inch Armstrong, and the 3-inch Armstrong breechloader. Of these, the favorites were the Parrott and the Rodman.

All five were rifled field artillery which fired cylindro-conoidal projectiles. Some of these projectiles were equipped with time fuzes; the others, with contact fuzes that exploded upon impact or after penetration. All these projectiles had relatively thick walls and weighed between 9.5 and 12.0 pounds (Peterson 1959: n.p.).

Dating: Without doubt, the shell fragments date from the Union shelling of Fort Hindman, January 11, 1863.
Fig. 31. Scabbard Tip, Ramrod, Trigger Guard, and Artillery Shells.
Top: bayonet scabbard tip (p. 193).
Second from top: rifle ramrod (pp. 193-194).
Third from top: rifle trigger guard (pp. 194-195).
Bottom: artillery shell fragments (p. 195).
Fig. 32. Human and Animal Remains.
Top: human femur (pp. 199-200).
Lower left: cow femur (p. 198).
Lower center: oyster shell and dog femur (p. 198).
Lower right: pig tooth and duck (?) bone (p. 198).
ANIMAL REMAINS

Bone and Shell

Number of Specimens: 62 specimens consisting of 1 shell, 4 teeth, and 57 bone fragments.

Description: Most of the specimens consist of small fragments and, thus, are not readily identifiable. However, definite identification can be made of the following:

(1) Domestic pig, *Sus scrofa* (4 teeth)
(2) Domestic cow, *Bos taurus* (portion of left femur)
(3) Fowl, probably duck (2 right and 1 left humeri)
(4) Oyster, probably *Ostrea virginica* (1 valve)
(5) Domestic dog, *Canis familiaris* (portion of right femur)

Discussion: With the probable exception of the dog bone, the identifiable animal remains from the Bank are almost definitely food refuse. The dog was likely a pet.

Dating: The amount of food refuse bone and the earlier discussed evidence for cooking and eating utensils strongly suggest a connection with the Confederate use of the building as a hospital.
HUMAN REMAINS

Bone

Number of Specimens: 1 fragment.

Description: The specimen was studied by Richard D. Faust of the National Park Service's Southeast Archeological Center, who described it as follows:

The specimen is the proximal portion of the left femur of an adult human male.

The shaft has been broken, apparently post mortem. The fracture is relatively clean and is approximately equal transversely; however, the posterior shaft portion is slightly longer than the anterior portion.

The head and greater trochanter have also suffered post mortem damage.

The femur is robust. It has a well-developed lesser trochanter, gluteal tuberosity, and fovea capitis. Muscular attachments are generally well developed.

Apparently the hypotrochanteric fossa is absent, for the shaft portion which should exhibit the fossa is present.

Measurements

Length

app. 14.5 cm.

Maximum head diameter

43 mm.

Neck

Transverse

30 mm.

Anterior-posterior

23 mm.

Femoral diameter

Fe D1

22 mm.

Fe D2

32 mm.

Indices

Index of platymeria

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The femur represents a moderately well-muscled adult male. It shows no marked pathology or advancing age changes.
Discussion: Little can be said regarding the femur except that it was from a relatively young, apparently healthy, adult male. Too little of the specimen remains for the stature, the race, or a more exact age of the individual to be determined.

Dating: There is no way to determine when the man represented by the femur died. However, the fact that he was apparently a healthy young adult and the fact that his femur, at least, was not buried seems to fit well with the use of the Bank as a Confederate hospital and with the death of at least three men in the building's destruction by Union shelling.
APPENDIX II

LIST OF ARCHEOLOGICALLY INVESTIGATED HISTORIC SITES, THE ARTIFACTS FROM WHICH HAVE BEEN USED FOR COMPARATIVE PURPOSES

<table>
<thead>
<tr>
<th>Name of Historic Site</th>
<th>Approximate Dates of Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Des Plaines River Potawatami Site, Illinois</td>
<td>1760-1839</td>
</tr>
<tr>
<td>Madeline Island Chippewa Site, Wisconsin</td>
<td>1760-1966</td>
</tr>
<tr>
<td>Williamsburg, Virginia</td>
<td>1785-1825*</td>
</tr>
<tr>
<td>Brunswick Town, North Carolina</td>
<td>1800-1830*</td>
</tr>
<tr>
<td>Fort Smith I, Arkansas</td>
<td>1817-1824</td>
</tr>
<tr>
<td>First Missouri State Capitol, Missouri</td>
<td>1819-1961</td>
</tr>
<tr>
<td>Fort Saint Marks, Florida</td>
<td>1821-1892*</td>
</tr>
<tr>
<td>Posey Site, Oklahoma</td>
<td>1823-1840</td>
</tr>
<tr>
<td>Kipp's Post, North Dakota</td>
<td>1825-1829</td>
</tr>
<tr>
<td>New Echota, Georgia</td>
<td>1825-1835</td>
</tr>
<tr>
<td>Fort Vancouver, Washington</td>
<td>1828-1860</td>
</tr>
<tr>
<td>Grand River Ottawa Site, Michigan</td>
<td>1830-1850*</td>
</tr>
<tr>
<td>Fort Lookout II, South Dakota</td>
<td>1831-1851</td>
</tr>
<tr>
<td>Washington-on-the-Brazos, Texas</td>
<td>1835-1967</td>
</tr>
<tr>
<td>Mission San Juan Capistrano, Texas</td>
<td>1836-1969*</td>
</tr>
<tr>
<td>The Alamo, Texas</td>
<td>1836-1910*</td>
</tr>
<tr>
<td>Brigham Young's Cooling Shaft, Illinois</td>
<td>1841-1900</td>
</tr>
<tr>
<td>Fort George, South Dakota</td>
<td>1842-1885</td>
</tr>
<tr>
<td>W. H. Shaw Residence, Florida</td>
<td>1843-1856</td>
</tr>
<tr>
<td>Appomattox County Court House, Virginia</td>
<td>1846-1892</td>
</tr>
<tr>
<td>McLean Summer Kitchen, Virginia</td>
<td>1847-1915</td>
</tr>
<tr>
<td>Gila Bend Stage Station, Arizona</td>
<td>1850-1860</td>
</tr>
<tr>
<td>Anderson's Mill, Texas</td>
<td>1850-1914</td>
</tr>
<tr>
<td>Marine Hospital at Fort Saint Marks, Florida</td>
<td>1858-1882</td>
</tr>
<tr>
<td>Fort Pierre II, South Dakota</td>
<td>1859-1863</td>
</tr>
<tr>
<td>Johnny Ward's Ranch, Arizona</td>
<td>1859-1903</td>
</tr>
<tr>
<td>Whitmore-McIntyre Dugout, Arizona</td>
<td>1863-1871</td>
</tr>
<tr>
<td>Fort Stevenson, North Dakota</td>
<td>1867-1897</td>
</tr>
<tr>
<td>Medicine Creek Site, South Dakota</td>
<td>1880-1920</td>
</tr>
<tr>
<td>39HU301 (Cedar Island), South Dakota</td>
<td>Late 19th Century</td>
</tr>
</tbody>
</table>

*Period of occupation from which artifacts have been considered.
APPENDIX III

INTERVIEW WITH MR. CHARLEY MORPHIS CONCERNING THE BANK SITE

Mr. Charley Morphis, whose address is Gillett, Arkansas, was 68 years old when interviewed at the Bank site on May 7, 1968. Born near the village of Arkansas Post on February 4, 1900, Mr. Morphis moved to the Post in 1915. He lived there for five years. During that period he purchased two acres of land, which he later sold to the State of Arkansas for inclusion in the Arkansas Post state park. After leaving the Post, he continued to reside in Arkansas County and became a successful rice farmer.

According to Mr. Morphis, there were a number of elderly people living in the village of Arkansas Post during the period (1915-1920) that he lived there. Among them were "...two real old people..."

"Old Lady Mary Bass, who would show the people how to do the 'pas de la', a French dance (possibly "pas de la" is a corruption of "pas de trois", a dance or figure for three performers). 'Aunt' Mary had been a slave. She died when she was 105."

"Lula Curtenaugh (spelling questionable) was the other old lady."

"Then, too, there were Old Mrs. Connine and her husband; they were here in slavery times."

These people talked with Mr. Morphis about the village of Arkansas Post that they remembered from their youth.

Concerning the Bank building, Mr. Morphis said, "The old people said that it was built in slavery times. They said it was a big brick building; and it must have been. When I first came here -- man, you talk about a pile of bricks. Whoee, there was really a big pile there (at the site of the building)!" He added, "I was always told that the Bank was destroyed during the battle."

Mr. Morphis said that he had never heard anyone describe the battle, suggesting that the civilian population was evacuated (or fled) before, or during, the battle.
APPENDIX IVa

Preparation of the

PROVISIONAL PLAN OF THE VILLAGE OF ARKANSAS POST,

1819 - 1840

Arkansas Post National Memorial, Arkansas

The "Provisional Plan of the Village of Arkansas Post, 1819-1840", which follows, was prepared primarily as a tool for use in conjunction with the Archeological Base Map in checking on the tentative identifications of known archeological features and in determining what areas of the park hold the most promise for future archeological research.

For the most part, the Plan is based on data regarding land transactions — in particular, the sizes of lots and their spatial relationships to streets, buildings, and other lots — which are contained in Edwin C. Bearss' "Structural History of Post of Arkansas, American Period -- 1804-1863" (1964). Other major sources, used largely for interpretation of the above data, were:

1. the sketch map of the Post of Arkansas drawn by Father Saulnier in 1832 (also from Bearss' report), which was of considerable help in checking the locations of streets, lots, and structures in relationship to one another;
2. the plat of the "Surveys in 1816 1817 1818 1819 & 1820 by William Russell w Nicholas Rightor D Surveyor", used primarily for determining the course of the Arkansas River circa 1820; and
3. the Archeological Base Map prepared for this report. The latter map, which includes topographical information obtained from land plats prepared by Thomas J. Strode, County Surveyor, Arkansas County, and archeological information obtained from Preston Holder's "Archeological Field Research on the Problem of the Locations of Arkansas Post, Arkansas, 1686-1804" (1957a) and Rex L. Wilson's "Archeological Explorations at Arkansas Post -- 1966" (1966b), was particularly helpful in the preparation of the Plan.

As it locates known archeological features in relationship to present topographic features, it allowed some of the buildings and lots described in Bearss' report to be placed on the ground with some degree of accuracy.

A source which is not yet available but which will be of considerable importance to further historical and archeological research concerning Arkansas Post is the Historical Base Map of "the Post of Arkansas for the period 1818-1832", originally prepared by Edwin C. Bearss in 1964. Unfortunately, the final copy of this map was lost shortly after its submission. However, a rough draft did survive, and "at the present time personnel at the Eastern Service Center are preparing
final drafts of the mock-ups" (Bearss, personal communication, 1970). Although it seems certain that this map and the Provisional Plan will differ somewhat in interpretation of the available data, it is assumed that the two will not differ to a great degree; for, after reviewing a copy of the Plan (sent to him together with a copy of the Archeological Base Map), Bearss stated, "I was delighted to see that we had separately reached similar conclusions as to lot lines and street locations in the Post of Arkansas."

It should be stressed, however, that neither the Historical Base Map nor the Provisional Plan should be considered to be complete or accurate maps of the village of Arkansas Post, because, despite the thoroughness of the abstracts which Bearss prepared on the American period land transactions, many questions concerning the village plan remain unanswered due to the lack of precise information regarding a number of properties. For this reason, both the Map and the Plan should be considered as documents that reflect current knowledge, but which must be modified as further historical and archeological researches produce further information.
Fig. 33. Provisional Plan of the Village of Arkansas Post, 1819-1840 (pp. 203-226).
PROVISIONAL PLAN OF THE VILLAGE OF ARKANSAS POST
1819-1840
ARKANSAS POST NATIONAL MEMORIAL

FOR

LEGEND

SEE APPENDIX IV OF "EXCAVATION OF THE ARKANSAS POST BRANCH OF THE BANK OF THE STATE OF ARKANSAS"

SCALE

PLAN PREPARED AND DRAWN BY
JOHN W. WALKER
1970
APPENDIX IVb

Legend for
PROVISIONAL PLAN OF THE VILLAGE OF ARKANSAS POST,
1819 - 1840
Arkansas Post National Memorial, Arkansas

LOT 1
Size: Unknown
Ownership:

? Unknown to Francis Vaugine.
1819 Francis Vaugine to James Scull.
1823 James and Mary Scull to Hewes Scull.
1833? Estate of Hewes Scull to unknown.

Other Information:
1819 This house and lot had formerly been occupied by Madame Valliere.
1819-1822 Office space was rented from James Scull by the Territorial Secretary, Robert Crittenden.
1820 A cotton gin, a grist mill, and a "dwelling house adjoining, now finishing," were located on this lot.
1821 Lot 2 was added to this property.
1823 James Scull agreed to remove his cotton gin, press, and grist mill by 1828.
1826-1827 Hewes Scull erected a brick store and a cotton gin on his property.
1833 On the property which had belonged to Hewes Scull were: "a frame dwelling house; a brick smoke house; an excellent well...enclosed with meat cellar adjoining; a brick store...; a warehouse; a large two-story frame gin and press house".

(Above information from Bearss 1964: Part II, 247-249)

1832 On this property were the "Magasin, Maison, et moulin a cotton, a Mr. Hewes Scull" — store, house, and cotton mill (gin) of Mr. Hewes Scull.

(Above quotation from #2 in the legend on the Map of Post of Arkansas drawn by Father Saulnier, Jan. 13, 1832.)

LOT 2
Size: Unknown
Ownership:

? Unknown to A. C. Dunn.
1821 Sheriff to James Scull.
1823 James and Felicite Scull to Hewes Scull.
1833? Estate of Hewes Scull to unknown.
Other Information:
1821 This lot adjoined Lot 3, which had also been owned by Dunn.
1823 This lot adjoined Lot 1.
(Above, Bearss 1964: Part II, 250)
1826-1833 The structures built by Hewes Scull during this period were probably located on both Lots 1 and 2.
(Above, Bearss 1964: Part II, 247-249)
1832 Saulnier's map shows Scull's property as bordered by a street (Front Street), the property of Mr. "Louis" (Lewis) and the Arkansas River -- both Lots 1 and 2. The map shows three buildings on this property.
(Above, #2, Saulnier's Map)

LOT 3
Size:
Unknown
Ownership:
? Unknown to A.C. Dunn
1821 Sheriff to James Scull.
1822 James and Minnite Scull to Eli Lewis.
1830 Eli Lewis to Abraham Lewis.
Other Information:
1820 This lot adjoined Lot 2.
1830 This lot was bounded on the northeast by Lot E (4) and on the southwest by the property of Hewes Scull (2).
(Above, Bearss 1964: Part II, 250)
1832 According to Saulnier's map, the property of Mr. "Louis" (Lewis) adjoined that of Mr. Scull. Two buildings are shown on Mr. Lewis' property, and it appears that one was on Lot 3 and the other on Lot 4. These are labelled as "Maison De Mr. Louis Et Magasin Que Je Dois Renter" -- House Of Mr. Lewis And Store Which One Must Rent.
(Above, #3, Saulnier's Map)

LOT 4
Size:
Unknown
Ownership:
? Unknown to James Scull & Co.
1818 James Scull & Co. to Eli Lewis.
1830 Eli Lewis to Abraham Lewis.
Other Information:
1830 This lot "commenced on the Arkansas River and extended inland to Front Street".
1830 It was "the lot on which Lewis' store was situated."
(Above, Bearss 1964: Part II, 254-256)
1832 On this lot and Lot 3 were Mr. Lewis' house and the store which Saulnier rented.
(Above, #3, Saulnier's Map)

LOT 5 (A, B)
Size:
157' x unknown (5A, 100' x unknown; 5B, 57' x unknown)
Ownership:
1817 Francois and Mary LaRose to Daniel Baldwin.
1817 Daniel Baldwin to Richmond Peeler.
1818 Madame Hyacinthe Serano (her interest) to Richmond Peeler.
1820 Richmond Peeler 5B to Joseph Cook.
1824 Sheriff 5B to Samuel Rutherford.
1829 William Rutherford 5B to Frederic Notrebe.
1832 Frederic Notrebe 5B to William, Frederick, and James Peeler.

Other Information:
1817 The lot fronted on (Front) street and extended back to the Arkansas River.
1817 It had "A house thereon".
1819-1820 William Woodruff's printing office (The Arkansas Gazette) was located in a log house (later described as "a small French built house, of two rooms, the largest of which was probably 18 or 20 feet square") on this lot (5A).
(Above, Bearss 1964: Part II, 257-260)

LOT 6 (A, B, C)
Size:
Unknown
Ownership:
1817 Alexis and Ellen Jordelas to Nathaniel Pryor, Samuel Richards, and George Sampson.
1821 By court order, Samuel Richards' 1/3 (6A) to Harold Stillwell.
1821 Sheriff's sale of George Sampson's 1/3 (6B) to unknown.
1821  Sheriff's sale of Nathaniel Pryor's 1/3 (6C) to Frederic Notrebe.
1826  Harold Stillwell (6A) to Hewes Scull.
1833? Estate of Hewes Scull (6A) to unknown.

Other Information:
1818  A blacksmith shop was located on 6A.
1820  David T. Maddox opened a law office on 6B.
1826  There were "Buildings, Improvements, and Roadways" on 6A.
(Above, Bearss 1964: Part II, 251-253)
1818  This lot, occupied by Pryor, Richards, & Co., was south of Lot 7.
1818  It was "originally a plat of survey & tract of land confirmed to Mary Jordelas."
(Above, Bearss 1964: Part II, 255)

LOT 7
Size:
95' x 193' x 106' x 211'
Ownership:
? Unknown to James Scull & Co.
1818  James Scull & Co. to Eli Lewis.
1830  Eli Lewis to Abraham Lewis.

Other Information:
1809  Daniel Mooney agreed to build for James Scull & Co. a four-room frame house, 50' long, 32' wide, and 12' high, with a 10' wide gallery on each side.
1818  This lot includes "the dwelling and store house".
1818  This lot was north of the lot occupied by Pryor, Richards, & Co. (6).
1819  The Lewis & Thomas store was located on Front Street.
1830  This lot fronted on Front Street and was bounded on one side by the lot purchased by Lewis from Francis Vaugine in 1824 (10).
(Above, Bearss 1964: Part II, 254-256)
1817  Lot 5 was opposite "the house of Eli Lewis whereon he now keeps his store".
(Above, Bearss 1964: Part II, 257)
1832  According to Saulnier's map the building on the northwest corner lot at the intersection of Main and Front Streets was "Maison De Mr. Lucas Et Docteur" -- House of Mr. Lucas and (the) Doctor.
(Above, #4, Saulnier's Map)

LOT 8
Size:
Unknown

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Ownership:

? Unknown to Joseph Dardene.
? Joseph Dardene to Joseph Gravier.
1818 Joseph Gravier to Daniel Baldwin.
1818 Daniel and Hannah Baldwin to Samuel Richards.
? Samuel Richards 1/2 to Nathaniel Pryor.
? Unknown to Oliver Thomas.
1819 Oliver Thomas to Eli Lewis.
1820 Eli Lewis to William Drope.
1820 William Drope to Benjamin Babcock.
1825 Benjamin Babcock to Frederic Notrebe.

Other Information:

1818 A house, 30' x 20', with galleries all around, "built in the French style" was on the lot. The house had been "occupied by Joseph Gravier as a store house".

1819 This lot was bounded on the northeast by a lot belonging to Hewes Scull (9), on the southeast by the lot on which Eli Lewis had his store (7), on the southwest by Main Street, and on the northwest by a cross street.

1820 The house, occupied by Dr. Robert McKay, had a cellar.

1820 The General Assembly met in October in two rooms rented from Dr. McKay.

1820 Elijah Morton announced that he was opening a "new store, at the house lately occupied by the General Assembly".

(Above, Bearss 1964: Part II, 265-267)

1825 The house had been occupied by Colonel Daniel Brearly.

(Above, Bearss 1964: Part II, 271)

1832 According to the map drawn by Father Saulnier this lot contained "Petite Maison De Forgeron" — Little House Of (The) Blacksmith.

(Above, #24, Saulnier's Map)

LOT 9

Size:

90' x 275'

Ownership:

? Unknown to Charbonneau.
? Charbonneau to John Dortolum.
1820 Samuel Roane (for J. Dortolum estate) to Hewes Scull.
1833 Hewes Scull to James Maxwell.
Other Information:

1820  The lot fronted on (?) Street (a cross street) and was bounded on one side by the lot occupied by Dr. Robert McKay (8) and on the other by the burying ground (12).

1833  The lot was bounded on the southeast by the lot owned by Richmond Peeler (10) and on the northwest by a cross street which separated it from a lot owned by Frederic Notrebe "on which his new brick store house is situated" (21).

1846  Drs. William Price and George Williams opened an office on this lot.

(Above, Bearss 1964: Part II, 268-269)

LOT 10
Size: 101' x 162'
Ownership:

? Unknown to Etienne Vasseur.
1818  Etienne Vasseur to Francis Vaugine.
1824  Francis Vaugine to Eli Lewis.
1830  Eli Lewis to William, Frederick, and James Peeler.
1860  Richmond Peeler to David Black.

Other Information:

1818  The lot was bounded on the south by one of Eli Lewis' lots (7); on the east by (Front) Street; on the north by a "lot late the property of Pierre LaVergue" (ll), and on the west by a lot owned by Hewes Scull (9).

1860  Two buildings, "the old store house known as the Peeler house" and "one other house containing a screw press and its appendages", were located on the lot.

(Above, Bearss 1964: Part II, 261-262)

1817, 1820  Francis Vaugine's Billiard Parlor was located on this lot.

(Above, Bearss 1964: Part II, 257, 259)

LOT 11
Size: 100' x ? ("about one-half acre")
Ownership:

? Unknown to Pierre and Angelique Levergue.
1819  Pierre and Angelique Levergue to George Sampson.
? Sheriff to Pierre Vaugine.
By 1827  Pierre Vaugine to Richmond Peeler.
1829  Sheriff to Eli Lewis.
By 1830  Unknown to Pierre Vaugine.
Other Information:
1819 This lot was bounded on the south by Front Street, on the northeast by the "burying ground lot", on the southwest by a lot owned by Francis Vaugine, and on the northwest by a lot owned by Hewes Scull.

By 1827 Richmond Peeler had purchased James Scull's grist mill and moved it to Pierre Vaugine's lot.

1830 Richmond Peeler "occupys a house & mill on this lot".
By 1845 Richmond Peeler had established "an oil factory" for the production of "lard-oil".

(Above, Bearss 1964: Part II, 263-264)

1832 Noted in this location on the Saulnier map is a "Moulin A Mais" -- Corn Mill (Grist Mill).

(Above, #21, Saulnier's Map)

LOT 12
Size: Unknown
Ownership: Unknown

Other Information:
1819 This lot, which bounded Lot 11 on the northeast, was the "Burying Ground Lot".

(Above, Bearss 1964: Part II, 263)
1820 The "Burying Ground" adjoined Lot 9.
1833 The "Old Burying Ground" bounded the northeast side of Lot 9.

(Above, Bearss 1964: Part II, 268)
1818 The cemetery bounded the south side of the lot which J. B. Grebert sold to F. Notrebe (19).

(Above, Bearss 1964: Part II, 281)
1832 The legend on the Saulnier map is "Le Vieux Cimetiere Mine Por Une Coulee" -- Old Cemetery Undermined by a Gully.

(Above, #13, Saulnier's Map)

LOT 13
Size: Unknown
Ownership: Unknown

Unknown to Francis Vaugine.
Francis Vaugine to Robert Algeo.
Robert Algeo To Frederic Notrebe.
Frederic and Felicite Notrebe to Thomas P. Blocker.
Other Information:
1838 This lot, with buildings and improvements, was between two gullies. It fronted on the Arkansas River and was bounded on the northwest by Notrebe's garden and orchard.

1848 This lot, described as two lots of ground with one dwelling and outbuildings, was located between two gullies. It was joined on the southwest and northwest by Notrebe's property.

(Above, Bearss 1964: Part II, 287)

LOT 14
Size: 150' x 150'
Ownership:
? Unknown to Catherine Fagot.
1829 Catherine Fagot to Frederic Notrebe.

Other Information:
1829 The lot was bounded on the south and west by the premises and garden of F. Notrebe, on the north by a coulee, and on the east by the Arkansas River.

(Above, Bearss 1964: Part II, 286)

LOT 15
Size: Unknown
Ownership:
By 1823 Unknown to Daniel Mooney.
1824 Sheriff to Eli Lewis.
1824 Eli Lewis to Frederic Notrebe.

Other Information:
1824 This lot was bounded on the west by Frederic Notrebe's house and lot, and on the northeast by the lot where Madame Fagot resided (14).
1834 Erosion had separated this lot from the lot which F. Notrebe sold to W. Sims (16).

(Above, Bearss 1964: Part II, 289)

LOT 16
Size: Unknown
Ownership:
? Unknown to Sylvanus Phillips.
1811 Sylvanus Phillips to Patrick Cassidy.
By 1823 Unknown to Daniel Mooney.
1824 Sheriff to Eli Lewis.
1824 Eli Lewis to Frederic Notrebe.
1834 Frederic Notrebe to William Sims.
Other Information:
1824 This lot adjoined the property of Joseph Imbeau (29).
1834 Erosion had separated the lot on which W. Sims resided from the rest of the tract purchased from E. Lewis by F. Notrebe (15).

LOT 17
Size:
108' x 264'
Ownership:
? Unknown to A. and M. Racine.
1822 A. and M. Racine to Frederic Notrebe.
Other Information:
1822 The lot was bordered by streets on the north and east and by Notrebe's house and lot on the west.
(Above, Bearss 1964: Part II, 282)

LOT 18
Size:
Unknown
Ownership:
? Unknown to Frederic Notrebe?
Other Information:
None

LOT 19
Size:
Unknown
Ownership:
By 1818 Unknown to John Taylor, Sr.
Other Information:
1818 This lot was bounded on the south by the lot which F. Notrebe had purchased from W. Mabbitt (21).
(Above, Bearss 1964: Part II, 280)
1832 This lot is labelled "Maison De Mr. Tailor American Charpenier" -- House of Mr. Taylor, American Carpenter -- on Father Saulnier's map.
(Above, #8, Saulnier's map)

LOT 20
Size:
65' x 165'
Ownership:
? Unknown to John Baptiste and Maria Grebert.
1818 John Baptiste and Maria Grebert to Frederic Notrebe.
Other Information:
1818 This lot was bounded on the west by the house and lot on which Notrebe lived (21), on the south by the cemetery (12), and on the north by the property of John Taylor, Sr. (19).

(Above, Bearss 1964: Part II, 281)
1811 This lot was bounded on the west by the lot which F. Grebert sold to W. Mabbitt (21).
1820 This lot was bounded on the west by the lot which W. Mabbitt had sold to F. Notrebe (21).

(Above, Bearss 1964: Part II, 280)

LOT 21
Size: 
90' x 380'
Ownership:
? Unknown to Francois and Suzanne Grebert
1811 Francois and Suzanne Grebert to William Mabbitt.
By 1820 William Mabbitt to Frederic Notrebe.
Other Information:
1811 The lot was bounded on one side by the lot Mabbitt had purchased from Z. Diana (22), on the other by the lot owned by John Baptiste Grebert (20), and on the back by the lot of Charles Refeld (28).
1820 The lot was bordered on the west by the property of Frederic Notrebe (22), on the east by two small lots belonging to John Taylor (19) and Frederic Notrebe (20), on the south and north by cross streets.

(Above, Bearss 1964: Part II, 280)
1818 The lot was bounded on the west by the house and lot on which Notrebe lived (22).

(Above, Bearss 1964: Part II, 281)
1833 Lot 9 was bounded on the northwest by a cross street which separated it from a lot owned by Frederic Notrebe "on which his new brick store house is situated" (21).
1838 Frederic and Charles Notrebe dissolved partnership. Later that year, William B. Wait and Charles Notrebe formed the firm of Notrebe and Wait and continued to carry on business "at the old stand of F. Notrebe & Son..."

By 1846 Charles Notrebe acquired a new partner, Refeld.

(Above, Bearss 1964: Part II, 268-269)
1832 On Saulnier's map the block made up of lots 21 and 22 had two buildings on it. The block is labelled "Magasin De Mr. Frederick Notrebe" -- Store of Mr. Frederic Notrebe.

(Above, #1, Saulnier's Map)
LOT 22
Size: 90' x 380'
Ownership:
? Unknown to Zerish Diana.
1811 Zerish Diana to William Mabbitt.
By 1820 William Mabbitt to Frederic Notrebe.
Other Information:
1811; 1820 A house was located on this lot.
(Above, Bearss 1964: Part II, 279)
1832 Saulnier's map shows two buildings on the block composed of Lots 21 and 22. One of these was Frederic Notrebe's store (21); the other is unidentified.
(Above, #1, Saulnier's map)

LOT 23
Size: Unknown
Ownership: Unknown
Other Information: None

LOT 24
Size: Unknown
Ownership:
By 1827 Unknown to Frederic Notrebe.
Other Information:
1827 F. Notrebe's Gin in operation.
1828 F. Notrebe's Gin recently improved.
(Above, Bearss 1964: Part II, 284-285)
1835 Lot 26 bounded F. Notrebe's Gin lot on the west.
(Above, Bearss 1964: Part II, 232)
1832 On Saulnier's map the block southwest of the block composed of Lot 27 A and B is shown as containing four buildings. Three of these are along Main Street; the other is on the cross street running along the southeast side of the block. Apparently, the latter and one of the former were on this lot. The block is labelled "Maisons Et Moulin A Cotton De Mr. Notrebe" — Houses And Cotton Mill (cotton gin) Of Mr. Notrebe.
(Above #5, Saulnier's Map)
LOT 25

Size: 60' x 264'

Ownership:

? Joseph Dardene (Land Grant 2432) to William Russell.
1819 William and Elouisa Drope to Samuel Rutherford and Dr. Robert McKay.
1820 Dr. Robert McKay 1/2 to Richmond Peeler.
1821 Richmond Peeler 1/2 to Frederic Notrebe.
1822 Samuel Rutherford 1/2 to Frederic Notrebe.

Other Information:

1820 Lot fronted on Main Street.
1820 A large two-story frame house was built on the lot by Richmond Peeler.
1820-1821 The house was occupied by James Hamilton & Co. store.
(Above, Bearss 1964: Part II, 229-231)
1835 This lot and 24 were included in Frederic Notrebe's cotton gin lot.
(Above, Bearss 1964: Part II, 232)
1832 On Saulnier's map three buildings are shown along Main Street in the block composed of Lots 24, 25 and 26. The center one, which presumably was on Lot 25, is labelled, but illegible except for "Maison Ou ..." — House Where. The whole block is labelled as houses and cotton gin of Mr. Notrebe.
(Above, #5, #25, Saulnier's Map)

LOT 26

Size: 90' x 1500'? (to Post Bayou)

Ownership:

? Joseph Dardene (Land Grant 2432) to William Russell.
1820 William and Elouisa Drope to Francis and Catherine Mitchell.
1824 Francis and Catherine Mitchell to Frederic Notrebe.
1835 Frederic Notrebe to Jean Bellette.

Other Information:

1819 A house was built on this lot by William Drope.
1820 The lot fronted on Main Street.
1820 It was bounded on the west by a cross street.
1835 It was bounded on the east by F. Notrebe's "gin lot".
(Above, Bearss 1964: Part II, 232)
1832 Saulnier's map shows a building which apparently was on this lot. The block (Lots 24, 25, and 26) is labelled houses and cotton mill of Mr. Notrebe.
(Above, #5, Saulnier's Map)
LOT 27 (A & B)

Size:
Unknown (about one acre); 27B, 80½' x 173½'.

Ownership:
? Unknown to Louis Jordelas.
? Louis Jordelas to Jacob Bright & Co.
1809 James Scull (for J. Bright estate) to Samuel Moseley.
1819 Samuel and Mary Moseley to William Drope.
1820 William Drope to Benjamin Babcock.
1825 Benjamin Babcock to Frederic Notrebe.
1840 Frederic and Felicite Notrebe 27B to the Bank of the State of Arkansas.

Other Information:
1809 This lot fronted the lots of Charles Refeld (28) and Mrs. Dean (29, A & B) and extended back to the next street opposite the lots of Joseph Dardene (39) and John Baptiste Dardene (35F and other property).
1809 On this lot was a house which had belonged to Louis Jordelas.
1819 The lot was sold with "all the houses, buildings and improvements".
1820 The lot was occupied by William Montgomery.
1820 The General Assembly met in February in rooms rented from William Montgomery.
1820 A "fat beef" was sold on Wednesday mornings near Montgomery's tavern.
1820 The 4th Regiment Arkansas Militia mustered at Montgomery's.
1821 A local election was held at Montgomery's.
1821 William Montgomery and Smith Brown announced they were moving from the Post of Arkansas.
1825 On this lot were a "house built and formerly occupied as a store by James Hamilton (?), being the same...occupied by Montgomery as a tavern, together with all the buildings thereon".
1840 The Arkansas Post branch of the Bank of the State of Arkansas was built on 27B.
1843 The bank was closed.
1857 The bank building was used for no purpose except "holding elections and stabling horses".

(Above, Bearss 1964: Part II, 270-277)
1817 C. Refeld's lot (28) was bounded on the west by S. Moseley's store-house lot (27, A & B).

(Above, Bearss 1964: Part II, 283)
1805 The Indian trade was engaged in "by nine or ten persons resident here". "The capital employed is nearly fifty thousand dollars, almost half of which is engaged by the house of Bright and Co."

(Above, Bearss 1964: Part I, 14-15)

1832 Two buildings are shown on the cross street running along the southeast side of the block made up of Lot 27, A & B. The building on the southeast corner of this block is labelled "Boutique De Charpentier A Mr. Notrebe" -- Carpenter Shop (or shop of carpenter) Belonging To Mr. Notrebe. The remainder of the block is labelled "Maisons Et Cours Pour Les Chevaux" -- Stables And Corrals For The Horses.

(Above, #6, #22, Saulnier's Map)

LOT 28
Size: 120' x ?
Ownership: Unknown to Charles Refeld.

1817 Charles Refeld to John Taylor.
1822 John Taylor to Frederic Notrebe.

Other Information:
1817 The lot was bounded on the north by the dwelling lot of F. Notrebe, on the east by the lot where J. Bellette usually resided, on the west by S. Moseley's storehouse lot (27, A & B). It extended back 120' from the northern boundary.

(Above, Bearss 1964: Part II, 283)
1809 This lot adjoined Lot 27.

LOT 29 (A & B)
Size: 80' x 120'; 29A, 80' x 80'
Ownership:
Post 1809 (?) Unknown (probably Mrs. Dean) to John Baptiste Dardene.

? John Baptiste Dardene to Manuel Rodriguez.
1819 Manuel and Clotine Rodriguez to William Drope.
1826 William Drope 29A to John Maxwell.

Other Information:
1826 Lot 29A was opposite the jail lot. It fronted on the street passing in front of Frederic Notrebe's
store and extended back to Madame Imbeau's property (30).

(Above, Bearss 1964: Part II, 278)
1809 The lot of Mrs. Dean (29 A & B?) fronted Samuel Moseley's lot (27 A & B).

(Above, Bearss 1964: Part II, 270)
1826 A street separated Lot 32 from the lot sold by Drope to Maxwell (29A).

(Above, Bearss 1964: Part II, 245)

LOT 30
Size: One acre
Ownership:
? Unknown to Joseph Imbeau.
1839 Francis, Elizabeth, and Catherine Imbeau 1/2 interest to Frederic Notrebe.
1839 Colin and Mary Vassier and Helen Jordelas, their interest as Imbeau heirs, to Frederic Notrebe.
1840 Pelagie Imbeau (by court order) to Frederic Notrebe.

Other Information:
1840 The lot, on which a house was located, was bounded on the northwest by Dr. William Price's lot "with blacksmith shop thereon" (31), on the northeast by a lot belonging to F. Notrebe, and on the southeast and southwest by streets.

(Above, Bearss 1964: Part II, 288)
1805 The lot was owned by Joseph Imbeau.

(Above, Bearss 1964: Part II, 244)

LOT 31
Size: Unknown (possibly 80' x 110')
Ownership:
? Unknown to William Drope.
? Unknown to Dr. William Price.

Other Information:
1820 This lot adjoined the western side of the lot occupied by Joseph Imbeau (30).

(Above, Bearss 1964: Part II, 244-246)
1840 The lot, which belonged to the late J. Imbeau (30), was bounded on the northwest by Dr. William Price's lot "with blacksmith shop thereon".

(Above, Bearss 1964: Part II, 288)
1832 On Saulnier's map this lot is labelled "Maison Et Boutique Du Forgeron" — House And Shop Of (The) Blacksmith.

(Above, #12, Saulnier's map)

LOT 32
Size: Unknown (possibly 80' x 110')
Ownership:
? Unknown to William Drope.
Other Information:
1820 This lot adjoined 33.
1826 A street separated this lot from the lot sold by William Drope to J. Maxwell (28A).

(Above, Bearss 1964: Part II, 244-246)

LOT 33
Size: Unknown
Ownership:
? Unknown to William Drope.
Other Information:
1820 This lot was located "northwardly in the rear of, and adjoining," 31.
1820 This lot also adjoined 32.

(Above, Bearss 1964: Part II, 244-246)

LOT 34
Size: 80' x 110'
Ownership:
1818(?) Unknown (probably John Baptiste Dardene) to William Drope.
Other Information:
1820 This lot and a fractional lot lay directly north of the westernmost of the five lots extending west from the jail (that is, north of 35A).

(Above, Bearss 1964: Part II, 244-246)
LOT 35 (A, B, C, D, E, and F)
Size: 480' (?) x 110' (?), six adjoining lots, each 80' x 110'
Ownership:
Other Information:
1818 The jail (on what became 35F) was included in the two lots sold to Drope by John Baptiste Dardene.
1820 The county jail was located on 35F, the easternmost of the lots.
1820 Five lots -- 35E, 35D, 35C, 35B, and 35A -- extended in a straight line "westwardly" from the jail lot.
(Above, Bearss 1964: Part II, 244-246)
1820 All six of these lots fronted north on the south side of the street passing on the south side of Frederic Notrebe's store.
(Above, Bearss 1964: Part II, 244-246)
1813-1835 The building on Lot 35F was used as a jail.
(Above, Bearss 1964: Part I, 30)

LOT 36 (A, B, and C)
Size: 240' (?) x 110' (?), three adjoining lots, each 80' x 110'
Ownership:
? Unknown (probably William Russell) to William Drope.
Other Information:
1820 These three lots -- 36A, 36B, and 36C -- lay directly south of the three most westwardly of the five lots to the west of the jail lot (35A, 35B, and 35C).
1820 They fronted south on the north side of Main Street ("a street...passing north of the house formerly occupied by Joseph Dardene...").
(Above, Bearss 1964: Part II, 244-246)

LOT 37
Size: 80' x 110'
Ownership:
? Unknown (likely William Russell) to William Drope.
1820 William and Elouisa Drope to Robert Johnston.
Other Information:
1820 This was the third lot fronting Main Street in the block in which Reuben Lewis owned two lots (38, A and B).
(Above, Bearss 1964: Part II, 243)

LOT 38 (A and B)
Size:
160' x 110', two adjoining lots, each 80' x 110'
Ownership:
? Unknown (likely William Russell) to William Drope.
1820 William and Elouisa Drope to Reuben Lewis.
1824 Sheriff to Henry Armstrong.
Other Information:
1820 38B was opposite "Johnston and Armstrong, Merchants" (39).
1820 These lots extended back from Main Street 110 feet "or half the width of said block".
(Above, Bearss 1964: Part II, 242)

LOT 39
Size:
80' x 1,480' (?) (to Post Bayou)
Ownership:
? Joseph Dardene (Land Grant 2432) to William Russell.
1820 William and Elouisa Drope to Francis and Catherine Mitchell.
1825 Francis and Catherine Mitchell to Frederic Notrebe.
1835 Frederic Notrebe to Jean Bellette.
Other Information:
? A two-story house, which had been occupied by Joseph Dardene "for a number of years" before 1820, was on this lot.
1819-1821 The house was occupied by Johnston and Armstrong's store.
1820 The lot fronted on Main Street.
1820 The lot was bounded on the east by a cross street.
1820-1821 Quarters were rented from Armstrong by Territorial Secretary Crittenden.
1821-? The house was occupied by the James Hamilton and Co. store.
1835 The lot joined Creed Taylor's lot (40) on the west.
(Above, Bearss 1964: Part II, 233-234)
LOT 40

Size:

80' x 220'

Ownership:

? Joseph Dardene (Land Grant 2432) to William Russell.


1820 William and Elouisa Drope to Creed Taylor.

1839 Creed Taylor to Luther Chase.

Other Information:

1820 The lot fronted on Main Street.

1820 The lot was the middle one (of three) in the block.

No. 2 on the plat of lots laid off by William Drope.

(Above, Bearss 1964: Part II, 235)

LOT 41 (A and B)

Size:

80' x 220'

Ownership:

? Joseph Dardene (Land Grant 2432) to William Russell.


1820 William and Elouisa Drope to John Taylor, Sr.

1841 John Taylor to D. W. G. Leavitt.

1846 D. W. G. and Irene Leavitt to Luther Chase.

? Luther Chase to C. C. Young.

1852 Charles and Julia Young 41B to Methodist Church.

Other Information:

1820 The lot fronted on Main Street.

1820 It was bounded on southeast by Creek Taylor's lot (40) and on northwest by a cross street.

1840 The house on the lot was previously occupied by John Taylor.

1841 The lot was "the northwest lot in block No. 2".

1852 Part of lot (41B) was sold to the Methodist Church; it measured 40' by the "width of the building".

(Above, Bearss 1964: Part II, 236-237)

LOT 42

Size:

80' x 200'

Ownership:

? Joseph Dardene (Land Grant 2432) to William Russell.


1820 William and Elouisa Drope to A. Y. Daniel.

1820 A. Y. Daniel to Richmond Peeler.

1824 Sheriff to Samuel Rutherford.

1829 William Rutherford to Frederic Notrebe.
1829 Frederic Notrebe to Eli Lewis.
1830 Eli Lewis to John Taylor.
1841 John Taylor to D. G. W. Leavitt.

Other Information:
1820 The lot fronted on Main Street.
1820 It was the "lower or east corner of block No. 3".
1820 The lot was separated from John Taylor's lot (41) by a cross street.
1821 It was the location of Solomon Judd's carpenter shop.

(Above, Bearss 1964: Part II, 238-240)

LOT 43
Size: 160' x 200'
Ownership:
1821 William and Elouisa Drope to Eli Lewis.
1830 Eli Lewis to Charles Robun.

(Above, Bearss 1964: Part II, 238-240)

Other Information:
1832 This lot is labelled "Maison De Mr. Robin" -- House Of Mr. Robin -- on the Saulnier map.

(Above, #9, Saulnier's map)

LOT 44
Size: Unknown
Ownership: Unknown
Other Information:
1832 On Saulnier's map this lot is labelled "Maison Du Faiseur De Brique Et De Briqueterie" -- House Of The Brick Maker and The Brickyard. It is shown as being separated from Robun's lot (43) by a cross street.

(Above, #10, Saulnier's map)

LOT 45
Size: Unknown
Ownership: Unknown
Other Information:
1832 This lot is labelled "Tavern" on the Saulnier map.

(Above: # 11, Saulnier's map)
APPENDIX Va

Preparation of the
ARCHEOLOGICAL BASE MAP, 1969
Arkansas Post National Memorial, Arkansas

The "Archeological Base Map, 1969", which follows, was prepared for two purposes: (1) to bring together in one document basic information on all of the archeological research conducted at the park to date; and (2) to serve as a tool in conjunction with the "Provisional Plan of the Village of Arkansas Post" in determining what areas of the park hold the greatest promise for future archeological research.

Topographical information contained on this map was obtained from two land plats which were prepared by Thomas J. Strode, County Surveyor of Arkansas County. The first of these, which is rather detailed and appears to be quite accurate, was evidently prepared as a base map for recording Preston Holder's excavations (Holder 1957a: Map 4), and, thus, covers only a small area of the park. The second, a manuscript map entitled "Map No. 2, Arkansas Post National Memorial", was surveyed and platted in 1965. This map includes the whole of the park and shows the park roads, the lake, the Spanish Land Grant corners and boundaries, and the "Line of Top of Rock Revetment", which borders three sides of the peninsular area of the park. Thus, on cursory examination, it would appear to be an excellent map on which to plot known archeological features. It was found not to be, however, for it contains a number of errors (for instance, the boundary line connecting the Land Grant corners indicated by numbers 3 and 4 is labeled as being 656 feet long, but, according to the scale given in the legend, it is approximately 870 feet in length; and the line between the corners numbered 5 and 6 is labeled as being 1188 feet long, whereas, according to the scale, it is only about 1050 feet long). Yet, since this was the only available map of the park and since the locations of the archeological features were recorded in relationship to Land Grant corners, it was necessary to use it. Attempts were made to correct the map (for example, the line between Land Grant corners 3 and 4 was drawn to scale as being 656 feet long in accordance with the label on the Strode and earlier land plats); but the results are, at the very best, highly questionable. Needless to say, when a better map of the park is available, the Archeological Base Map should be redrawn.

The information used in plotting the locations and sizes of the archeological features labeled "A"-"K" was obtained from three excavation reports: Preston Holder's "Archeological Field Research on the Problem of the Locations of Arkansas Post, Arkansas, 1686-1804"
(1957a), Rex L. Wilson's "Archeological Explorations at Arkansas Post - 1966" (1966b), and the sections of this report dealing with the excavation of the Arkansas Post branch of the Bank of the State of Arkansas. Considerably more detailed information regarding these remains is, of course, available in these reports.

The other features plotted on the Base Map are: "L", the approximate location where a circa 1816 French line cavalry sword and possible evidence for a log structure were found; and "M", the approximate location of an obvious building site which has not been excavated and, thus, has not been identified.

Information contained in the Base Map legend was taken from: the above mentioned archeological reports by Holder (1957a) and Wilson (1966b), the excavation sections of this report, the "Provisional Plan of the Village of Arkansas Post", and the historical reports by Mattison (1957) and Bearss (1964).
Fig. 35. Archeological Base Map 1969 (pp. 227-236, 239-247).

MATCH LINES

PLAY OF
KNOWN ARCHEOLOGICAL FEATURES
ARKANSAS POST
NATIONAL MEMORIAL

PROBABLE IDENTIFICATIONS OF FEATURES

A 1752 POSTE DE ARKANSAS (BUILT BY DE LA HOUSAYE)
B 1779-1789 1ST & 2ND FORT SAN CARLOS III
C 1789-1796 3RD FORT SAN CARLOS III
D 1836 H 875'S BRICK STORE ?
E 19TH CENTURY BRICK PAVING (H 875)
F 19TH CENTURY BRICK BUILDING (F 875) ?
G 1833 F NOTREBE'S BRICK STORE ?
H 19TH CENTURY BRICK BUILDING (F NOTREBE ?)
I NO FEATURES ENCOUNTERED
J 1840-1863 BRANCH OF BANK OF THE STATE OF ARKANSAS
K UNEXCAVATED "MOUND" (POWDER MAGAZINE ?)
L UNEXCAVATED STRUCTURE (SWORD SITE)
M UNEXCAVATED STRUCTURE (MONTGOMERY'S TAVERN)

EXCAVATORS

P HOLDER
P HOLDER
P HOLDER
P HOLDER
P HOLDER
P HOLDER
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J WALKER

SCALE

DATA COLLECTED AND DRAWN MADE
BY JOHN W. WALKER
1969

MAPLE LINES
SITE A
Identification by Excavator:
Holder tentatively identified this structure as "...the French fort built in 1752 by de la Houssaye...".

Other Information from Excavator's Report:
Compound II, as Holder designated this structure, "...had double enclosing walls...(which had been) built as a unit". According to de la Houssaye's description, "'The enclosure of the fort had been made of two rows of well joined stakes.'"

(Above information from Holder 1957a: 16, 20-21, 24)
Other Pertinent Information:
None.

SITE B
Identification by Excavator:
This structure (or these structures) was assumed to be a Spanish (or possibly French) fort.

Other Information from Excavator's Report:
It appeared likely that the "double trenches" outlining the feature (which Holder designated Compound I) indicated "...a single trench which has been rebuilt in close proximity to its original course..." and that "...further exploration...in this area would... be rewarded perhaps with the details of two compounds sequentially rebuilt." Based on less historical data than are available today, Holder concluded that this feature or Compound III was probably the Spanish Fort San Carlos III.

(Above, Holder 1957a: 18-20, 24-25)
Other Pertinent Information:
The first Fort San Carlos III was erected in 1779. By 1789, the fort, which had evidently already been rebuilt at least once, was in ruins and eroding into the Arkansas; and another fort had to be constructed. The archeological evidence, which seems to indicate that Compound I was actually two compounds sequentially rebuilt, strongly suggests that these features were Fort San Carlos III, or, rather, the two Spanish forts bearing this name, which were erected between 1779 and 1789.
SITE C
Identification by Excavator:
This structure was assumed to be an 18th century Spanish (or possibly French) fort.

Other Information from Excavator's Report:
Compound III, as Holder designated this feature, "...seems to have had only a single enclosing wall...".  
(Above, Holder 1957a: 21-22, 24-25)

Other Pertinent Information:
A third Fort San Carlos III was apparently built in 1789. Available data indicate that it was rebuilt, but not in the same location (in 1796, with the fort again in a state of disrepair and in danger of being washed away, the Spanish moved the fort back from the river about one-half mile and changed its name to Fort San Estevan).

The evidence that much of Compound III had only a single enclosing wall and that much of the compound had been eroded away (also true of Compounds I and II) suggests that it may have been the third Fort San Carlos III.

SITE D
Identification by Excavator:
This feature was "...taken to be the foundation for a small brick house dating probably from the 19th Century".

Other Information from Excavator's Report:
This foundation "...had been built over and interrupted the course of the two compound enclosing trenches". The excavated portion of this feature was 25 feet wide and of unknown depth.  
(Above, Holder 1957a: 19)

Other Pertinent Information:
Based on the "Provisional Plan", it appears that this structure was on Lot 2, which was acquired by Hewes Scull in 1823. On Scull's property (Lots 1 and 2) in 1833 there were a brick store (built 1826-1827) and a brick smoke house, as well as a number of frame buildings. Because of its size, it seems likely that this feature was the store.  
(Above, Bearss 1964: Part II, 247-250)

SITE E
Identification by Excavator:
This feature was described as "...a brick paving..." representing "...a 19th century structure...".

Other Information from Excavator's Report:
One of the trenches of Compound II (A) "...had been overlaid by a brick paving...". "The orientation of this structure
(was) the same as that of (D) No. 92". Little of this feature was excavated, but it appears to have been approximately 16 or 17 feet wide.

(Above, Holder 1957a: 8, 20)

Other Pertinent Information:
Based on the "Provisional Plan", it appears that this feature was located on Lot 1, which, like Lot 2, was acquired by Hewes Scull in 1823. Its identification is uncertain, but it likely represents the floor of one of Scull's buildings.

(Above, Bearss 1964: Part II, 247-249)

SITE F

Identification by Excavator:
This structure is identified as "Frederic Notrebe's Residence and Store" by Wilson (1966b: 12). However, he qualifies this by stating that "Bearss has identified this site with a lot owned by Notrebe, and concludes that the Frenchman's home and store are represented".

Other Information from Excavator's Report:
Map 7 in Wilson's report shows the size of the structure indicated by the wall foundation trenches to have been approximately 10' x 15'. Two unidentifiable brick features were uncovered. One of these, which "...may be the remains of a fireplace...", was aligned with the foundation trenches; the other, "...built of red bricks carefully laid in mortar...", was not.

(Above, Wilson 1966b: 12)

Other Pertinent Information:
This feature is located on Lot 17 of the "Provisional Plan", a lot acquired by Notrebe from A. and M. Racine in 1822. Thus, at one time it may have been the site of Notrebe's house and store; however, it seems unlikely that a 10' x 15' structure was either one. Certainly it was not Notrebe's store of the late 1830's (as Wilson stated), for it was located on Lot 21.

(Above, Bearss 1964: Part II, 268, 280, 282)

SITE G

Identification by Excavator:
"The building may...represent a brick warehouse associated with Notrebe's store."

Other Information from Excavator's Report:
Map 6 shows the size of this structure as being about 27½' x 39½'.

(Above, Wilson 1966b: 10)

Other Pertinent Information:
This structure was located on Lot 21, the site of Notrebe's "...new brick store..." in 1833 (Bearss 1964: 268). Based on
the size of the structure, its construction, and its location, it seems almost certain that this building was Notrebe's store of the late 1830's.
(Above, Bearss 1964: Part II, 268, 280)

SITE H
Identification by Excavator:
This site is identified as "Notrebe's Cotton Gin" by Wilson. He qualified this identification, however, by stating that "Research Historian Edwin C. Bearss has identified it as being a part of (,) or a building associated with (,) Colonel Frederic Notrebe's Cotton Gin, which was built in late 1826 and early 1827".

Other Information from Excavator's Report:
A fallen single-coursed brick wall, a brick fireplace, a square brick pilaster, and an unidentified brick feature were uncovered at this site; however, no foundation trenches or other evidence indicating the size of the structure were found.
(Above, Wilson 1966b: 3-6)

Other Pertinent Information:
This structure was located on Lot 22 of the "Provisional Plan". Lot 22 was acquired by Notrebe prior to 1820, so it seems logical to assume that this structure belonged to him. However, it was definitely not his Cotton Gin, which was on Lots 24 and 25.
(Above, Bearss 1964: Part II, 232, 279, 284-285)

SITE I
Identification by Excavator:
Wilson states that these test trenches were dug in "...a portion of the housing district along the south side of Front Street as shown on the 1829 map of the settlement".

Other Information from Excavator's Report:
"No clear evidence of houses was found along Front Street".
(Above, Wilson 1966b: 13)

Other Pertinent Information:
The "Historical Base Map (1829)" included in Wilson's report is, for all intents and purposes, a copy of a map entitled "Post of Arkansas, Territory of Arkansas, 1829", which was "Compiled and Drawn by F. M. Quertermous, Civil Engineer and County Surveyor...(of) Arkansas County..." circa 1930. Based on this map, Wilson did indeed conduct archeological tests in the Front Street area. Unfortunately, however, the map bears absolutely no resemblance to the 1829 village of Arkansas Post; and the tests were, on the basis of the "Provisional Plan", located on Lots 6C and 23 about 60 feet southwest of Main Street and from 520 to 740 feet west of Front Street. No detailed historical data are available for either of these lots.
SITE J

Identification by Excavator:
Wilson, who tested the site in 1966, and J. Walker, who completely excavated it in 1968, agree that this was the site of the Arkansas Post branch of the Bank of the State of Arkansas.

Other Information from Excavator's Report:
Wilson determined that the building was a brick structure covered by metal roofing and that it had been destroyed by fire; however, he incorrectly assumed that its dimensions were 30'8" x 52'6". Walker's excavation showed that the overall dimensions were actually 30'8" x 60'8". He also recovered archeological evidence which, when combined with available historical data, strongly suggests that the building was used as a Confederate hospital and was destroyed by Union artillery during the battle which occurred at the Post of Arkansas on January 11, 1863.
(Above, Wilson 1966b: 7-9, and this report)

Other Pertinent Evidence:
None.

SITE K

Identification:
Holder's "Map No. 4" shows a small elongated elevation (about 15 feet long, 10 feet wide, and 6 feet high) which is labeled "MOUND".

Other Information from Report:
From "Map No. 4", it is evident that this feature was located within Compound II (which is believed to be the 1752 French fort).
(Above, Holder 1957a: Map No. 4)

Other Pertinent Information:
A somewhat similar (although slightly larger) feature at Fort St. Marks in Florida, which was tentatively identified as an Indian mound by Gordon R. Willey in 1940, has been found to have been a Confederate powder magazine. The location of this "mound" within a fort suggests that it, too, may prove to be a magazine.

SITE L

Identification:
This is the site at which National Park Service historian Paul Hout found a sword. The sword has been identified as a French line cavalry sword, which was probably made in 1816.

Other Information:
A test trench begun in this area was almost immediately halted by rain, but not before an organic stain (perhaps indicative of the basal log of a log structure) was uncovered. Excavation
could not be continued because of standing water in the area, so the pit was refilled (with sand) and marked with iron stakes.

This site is located on Lot 25 of the "Provisional Plan", Notrebe's Cotton Gin lot.

SITE M
Identification:
A slight rise in elevation and a very definite difference in vegetation indicated that this was the site of a building; however, there has been no excavation here.

Other Information:
This site is located on Lot 27A of the "Provisional Plan", a lot with a history of considerable interest.
APPENDIX VI

RECOMMENDATIONS FOR FURTHER RESEARCH
Arkansas Post National Memorial, Arkansas

Introduction

Since the major purpose of further research concerning Arkansas Post National Memorial is to obtain additional information for interpretative purposes, this research, like the interpretation of the park, should pertain primarily to the history of the several trading posts, forts, and settlements which were termed "Arkansas Post" and/or were located within the boundaries of the park.

Previous historical and archeological research projects have produced historical, structural, and artifactual evidence of four 18th century and six 19th century structures which were located on park lands. These projects have also produced historical and artifactual evidence suggesting possible earlier occupations of the site.

It should be kept in mind, however, that the limited amount of concrete evidence which is currently available reflects the scope of previous research projects rather than the resources available. In order to obtain as much historical information as possible from these resources, it is recommended that the research projects discussed below be undertaken.

Historical Research

To date, there have been two National Park Service historical research projects concerned with Arkansas Post. The first of these was conducted by Ray H. Mattison; the second, by Edwin C. Bearss.

Mattison's research, which resulted in the preparation of four reports ("Arkansas Post Investigations, Translations from French and Spanish", "Preliminary Report on the Various Locations of Arkansas Post, 1686-1791", "Historical Investigations on Arkansas Post -- Spanish and American Periods", and "Report on Historical Investigations of Arkansas Post"), was a pioneering effort in which he attempted to bring together all the data he could find concerning the history of the area. As such, the work was excellent. It should be kept in mind, however, that this research was of a rather general nature and that the reports based on it were not historic structures reports.
Bearss' research, which was limited to the American period, resulted in the preparation of a very thorough report on the "Structural History of Post of Arkansas, American Period -- 1804-1863".

To compliment these studies, the following historical research projects are recommended:

(1) A structural history of Arkansas Post during the French period.

On the basis of present knowledge, it appears that this study should stress the post-1750 forts and other buildings; however, it should not be limited wholly to those structures because further research may very well produce evidence for earlier occupations. This study should, if possible, follow the study of changes in the course of the Arkansas River, and it should definitely precede further archeological research in the area of the 18th century forts.

(2) A structural history of Arkansas Post during the Spanish period.

This study should cover the whole of the Spanish period in detail, as it seems almost definite that the Spanish forts and settlement were located within the present park boundaries. It is also probable that some of the information obtained from this research will have as much pertinence to the American period as to the Spanish because a number of structures standing during the American period, including the fort, were constructed during the Spanish period, and several of the smaller properties for which there is little, if any, information in the American land records were Spanish land grants.

This study should precede all further archeological research since it will almost certainly contain information pertinent to both the Spanish and American occupations of the site.

(3) General studies of the military, economic, and social history of the French, Spanish, and American periods.

These studies, which are badly needed for interpretative purposes, should place considerable emphasis on such topics as: the Indian trade (including the Carolinian traders on the Arkansas River), military and exploratory expeditions, agriculture, local industries, transportation, the roles of the various Posts in national and international political affairs, land speculation, population (numbers of people, their races or nationalities, and their means of livelihood), hardships caused
by flooding, biographical sketches, and architecture. Insofar as possible, they should be written in terms of individuals so as to add "life" to interpretation of the park.

Archeological Research

Three archeological research projects have been conducted at Arkansas Post National Memorial. Two of these consisted of test excavations, which were carried out under the direction of Preston Holder in 1956-1957 and of Rex L. Wilson in 1966; the third, of the excavation of a single building by John W. Walker in 1968. These projects resulted in the finding of structural and artifactual evidence for four forts dating from the latter half of the 18th century and for six smaller buildings dating from the first half of the 19th century. Artifactual evidence suggesting the possibility of occupations during the first half of the 18th century was also found.

Although only one of the ten structures discovered during the test excavations has been completely excavated, it is definitely known that considerably more information concerning the other nine can be recovered by further investigation; and it seems certain that structural evidence for several other structures, which are known from historic evidence, can also be located. Too, there is the possibility of finding archeological evidence for earlier occupations of the site.

The following recommendations for future archeological research are based largely on information obtained from Bearss' historical report, Holder's and Wilson's archeological reports, the archeological base map, and the provisional plan of the village. The alphabetical site designations used in these recommendations are those used on the base map; and the numerical lot designations, those used on the "provisional plan".

(1) Further excavation of the four 18th century forts.

Based on limited archeological testing and incomplete historical documentation, the forts are believed to have been:

(a) A French military post built about 1752 and abandoned during the early part of the French and Indian War, 1755-1763. (Site "A")

(b) The first Fort San Carlos III, built by the Spanish in 1779. (Site "B")

(c) The second Fort San Carlos III, built on the same site as the first at some time prior to 1787. (Site "B")
Considerably more evidence concerning the interior structure of these forts is known to exist. Recovery of this evidence, together with careful recording and thorough study of the artifacts recovered, will likely allow positive identification of the forts, particularly if more detailed historical information concerning them can be obtained. (The "mound", Site "K", is regarded as part of this project.)

The archeological evidence for these forts (Sites "A", "B", and "C") was recovered from Lots 1, 2, 3, 4, 5A, 6A, and 6B. Although archeological evidence for two 19th century brick structures ("D" and "E") has been found in this area and historical data indicate the existence of a number of other 19th century buildings of considerable interest on these lots, it is recommended that, with the possible exception of the two-room log house which stood on Lot 5A and in which the Arkansas Gazette was located in 1818-1819, the greatest emphasis be placed on the excavation of the forts so that their outlines may be permanently marked for use as field exhibits. The reasoning behind this recommendation is simple: evidence for 19th century buildings of equal interest will probably be found elsewhere on the park; but it is very unlikely that other forts will be. (This is not to say, however, that any less care should be exercised in excavating and recording the 19th century structures than is used in excavating the forts which they overlie.)

(2) Excavation of at least one French period and at least one Spanish period house site.

To date, there are no house sites of either period definitely known. It is hoped, however, that further historical research may result in sufficient data to allow such sites to be located. If it does not, there is a possibility that one or the other may be accidentally discovered in excavating later structures. Should this occur, excavation of the older structure should be given priority unless the latter is considered of greater interpretative importance and substitution of a similar structure (in age, construction, and/or use) cannot be made.

(3) Excavation of the sites of several 19th century structures which were of different constructions, sizes, ages, and uses.

The following sites of 19th century American period structures are arranged in order of their importance as illustrations of life at Arkansas Post during the American period. The decision as to the number of these sites to be excavated should be based
on the interpretative needs of the park. (The exact locations of only five of these sites are known; however, it seems certain that the locations of most of the others can be found through use of the "provisional plan" and/or the historical base map. Should excavation reveal that some of the latter sites have been destroyed, substitution of related sites can be made.)

(a) Test excavations to locate streets and fence lines in the Post of Arkansas, the Town of Arkansas, and the Town of Rome.

The primary purpose of these tests would be to locate streets and property boundaries so as to check and, if necessary, correct the historical base map. It is essential that this map be as accurate as possible, since it will be the main tool for locating the sites of most of the American period structures.

(b) Excavation of the first U. S. military post at Arkansas Post.

It appears that the first U. S. military post at Post of Arkansas was the last fort (Fort San Estevan) constructed by the Spanish. If the site has not been destroyed, its excavation would add greatly to interpretation of both the Spanish and American periods of occupation.

Although the exact location of the fort is unknown, the presently available historical and geomorphological information strongly suggests that the site was destroyed during the latter part of the 19th century. Hopefully, more definite information concerning it will result from further research on the structural history of the Spanish period.

(c) Excavation of the government-operated factory at Arkansas Post.

Since trade with the Indians was the reason for establishment of the first Poste de Arkansas and remained a very important part of the area's history until the 1830's, its interpretation is of great importance.

During its short history, 1805-1810, the government factory was located at two sites. The first of these was probably
on Lots 1 and 2 in the "Town of Rome". Although it appears likely that this site has been destroyed, a careful survey (using the corrected Spanish Land Grant boundaries as shown on the historical base map) should be made to determine the exact location of these lots.

The second factory was located on the "U. S. Reservation". It is believed to have been on the same site as the Confederate Post of Arkansas, which very likely has been destroyed by erosion. However, since there is a chance that the factory was located elsewhere, the possibility of locating it should not be dismissed from consideration in future historical and archeological research.

(d) Excavation of a privately owned, early American period trading post.

Excavation of such a site should produce both structural evidence, which would allow the outline to be permanently marked for field exhibit, and artifactual evidence, which would be useful for museum display.

It appears that the most promising site for such an excavation would be that occupied by Jacob Bright and Company, a trading firm with a capital of some $25,000. In 1805 Bright's store was probably located on Lot 27 (if not, on Land Grant 2305). On this lot was a house which had been occupied by Louis Jordelas before Bright purchased it (thus, it may well have been built in the Spanish period). The lot was later: in 1820-1821, the site of the tavern (likely using the same building) in which the General Assembly met (February, 1820); in 1832, the site of a carpenter shop belonging to Frederic Notrebe; and, in 1840-1863, the site of the Bank (this occupied only a small portion of the lot). Site "M", known only from surface observation, may be the location of the trading post and/or the tavern.

Should test excavations fail to locate evidence for the trading post on Lot 27 or Land Grant 2305, substitution of one of the structures discussed under "e" in this list is suggested.

(e) Excavation of one, or more, of the early American period houses.
This excavation should produce structural evidence for use in a field exhibit, artifacts for display purposes, and (together with other excavations and the structural history of the Spanish period) information with which to correct the historical base map for the American period.

There are several sites which might be chosen for this purpose. Perhaps the best would be the site of the two-story house which was occupied by Joseph Dardene "for a number of years" prior to 1820, by Johnson and Armstrong, merchants, from 1819 until 1821, and by the James Hamilton and Company store in 1821. Territorial Secretary Crittenden's quarters were here in 1820-1821. The site is on Lot 39.

Another possibility would be the site on Lot 8 of a 30' x 20' house with galleries all around "built in the French style". This house, which was occupied by Joseph Gravier prior to 1818, was later occupied by a doctor (1820), served as a meeting place of the General Assembly (October, 1820), used as a store (1820), and was a residence (1825-1832). Part of Lot 8 has been destroyed by erosion, but the building site likely remains.

Still another possibility would be the site of the dwelling and store house (a four-room frame house, 50' long and 32' wide, with gallery on each side) on Lot 7. This house, which was built for James Scull and Company in 1809, is probably better described than any other house in the village.

(f) Excavation of the jail site.

As the only public building ever constructed at Arkansas Post, and as an early 19th century jail (1813-1835), the jail site should be an interesting feature for interpretation.

This structure was located on Lot 35F.

(g) Excavation of the site where the early 19th century French sword was found.

The circa 1816 French line cavalry sword found at this site is one of the more interesting artifacts recovered from the park and will be an important exhibit item. Thus more information concerning its history is needed.

The site of the find (Site "L") is known, and a very limited test pit dug there suggests that further excavation would
likely uncover evidence of a structure. The site is located on Lot 24, Notrebe's Cotton Gin lot.

(h) Excavation of the site of Notrebe's cotton gin.

Excavation of this site should produce structural and artifactual evidence of considerable use in interpreting early 19th century industry at the Post.

Notrebe's cotton gin, which was built by 1827, was located on Lots 24 and 25. Also on Lot 25 was a large two-story frame house, which was built in 1820 and occupied in 1820-1821 by the James Hamilton and Company store.

(i) Excavation of the site of Notrebe's store.

This large brick structure should serve as an illustration of the relative prosperity of Arkansas during the 1830's and 1840's.

The site of the store, which was built about 1833 and was still in operation in 1846, was located on Lot 21. This site was tested (although incorrectly identified) by Wilson in 1966 (1966b:10-11). However, considerably more information concerning it and its relationship to other nearby structures should be obtained by tests covering a larger area than previously excavated.

(j) Excavation of a blacksmith shop.

Because of the importance of the horse and horsedrawn vehicles and machinery in the 19th century, a blacksmith shop is of considerable importance to the interpretation of a 19th century village.

The approximate locations of two blacksmith shops are known. One of these, a shop owned by Dr. William Price in 1840, was on Lot 31 (about 3/4 of this lot has apparently been destroyed by erosion and road construction, but the shop site may not have been damaged).

The other, which was in operation in 1818, was located on Lot 6A and so may well overlie part of the third Fort San Carlos III (Site "Cn").

(k) Excavation of a carpenter's shop.
The excavation of a carpenter shop would also be helpful in illustrating the life of the period.

Two locations of carpenter shops are known. One, a shop operated by Solomon Judd in 1821, was on Lot 42.

The other, which was owned by Frederic Notrebe, was on Lot 27 (the same lot as "a" in this listing).

(1) Further excavation of known archeological remains which have not been identified.

Two structures for which evidence was obtained in Wilson's 1966 test excavations were apparently not correctly identified. Thus, their value in interpreting the site cannot be assessed.

Archeological evidence indicated that one of these structures was a small (10' x 15') building. Wilson identified the structure as Frederic Notrebe's residence and store of the late 1830's. It definitely was not; this structure was located on Lot 20, and Notrebe's 1833-1846 store was on Lot 21. However, it was likely a building belonging to Notrebe, as he acquired the lot in 1818.

Evidence for the other indicated a large brick building of unknown dimensions. Wilson identified it as Notrebe's cotton gin. It could not have been, however, for this structure was on Lot 22, and the cotton gin was on Lots 24 and 25. Nevertheless, it was likely a building belonging to Notrebe, because he purchased the lot at some time prior to 1820.

(m) Excavation of the brickyard.

Excavation of the brickyard site (in conjunction with further historical research concerning it) should provide information helpful in dating the brick structures in the village. It could also provide an interpretative exhibit concerned with early 19th century industry.

The site of the "House of the Brick Maker and the Brickyard" is shown on Saulnier's 1832 map, and it would appear that the large quantity of broken brick on the surface of Lot 44 may be evidence for it.
Other possibilities for excavation include the following:

(i) A building which housed a billiard parlor, 1817-1820, was located on Lot 10. Part of this lot has been destroyed by erosion, but the building site probably remains.

(ii) A house, which was built on Lot 26 in 1819, was still occupied in 1835.

(iii) A pre-1809 house was probably located on Lot 28.

(iv) A pre-1809 house was probably located on Lot 29.

(v) A house was located on Lot 30 in 1840. Likely, it, or an earlier house, was located there by 1805 as the property seems to have belonged to the same family throughout that period.

(vi) A house was located on Lot 41, A and B, in 1840. It, or another structure, was used as a Methodist church in 1852.

It will be noted that the above list deals almost wholly with sites located in the town of Post of Arkansas. Thus, it should be revised whenever Bearss' historical base map and a detailed topographic map of the park are available for use in determining where evidence for historically important sites can likely be found in the Town of Rome and the Town of Arkansas.

Other Research

(1) A geomorphological study of the changes in the channel of the Arkansas River through time.

This study would provide information basic to an understanding of data on site locations which has been derived from previous research projects and which will be derived from further historical research. Since the river is known to have constantly changed course throughout the almost 200-year history of the various Arkansas Posts, this type of information is absolutely necessary if historic descriptions of geographic features are to be correlated with present geographic locations.

Such a study would also be of considerable benefit to interpretation, for exhibits on the changing course of the river could
be used to explain why the post was frequently moved from one location to another, and would allow the visitor to orient himself in regard to the changes in the landscape.

It seems likely that the Corps of Engineers made some studies concerned with the geomorphology of the lower Arkansas River in connection with the Arkansas River Navigation Project and that these studies contain part, and possibly all, of the information needed for this project.

(2) Preparation of a detailed topographic map of the park.

Such a map is a prerequisite to future archeological research and to the correlation of historic data to present geographic features. Once it is completed, both the historical and the archeological base maps should be redrawn.

(3) An ethnohistory of the Quapaw Indians.

From 1686 until 1833, the history of the Quapaw (or Arkansas) and that of the various Arkansas Posts were so closely related that they cannot be considered separately. For this reason, a detailed study of these Indians is basic to understanding and interpreting the history of the area. (This study should be undertaken by an anthropologist experienced in ethnohistoric research. It should probably be made either in conjunction with, or following the completion of, the historic studies in order to insure that all pertinent primary sources are taken into account.)
Angus-Butterworth, L. M.

Bearss, Edwin C.

Berge, Dale L.

Bolton, Herbert E., and Thomas M. Marshall

Bradley, Zorro A.

Bray, Robert T.

Bridgwater, William, and Seymour Kurtz, eds.

Caywood, Louis R.
1954b Excavations at Two Fort Okanogan Sites, 1952. MS, National Park Service, San Francisco.
<table>
<thead>
<tr>
<th>Year</th>
<th>Author(s)</th>
<th>Title</th>
</tr>
</thead>
</table>
Fontana, Bernard L.

Fontana, Bernard L., and J. Cameron Greenleaf

Ford, James A.

Franke, Norman H.


Gilbert, K. R.

Godden, Geoffrey A.


Grant, Ulysses S.

Greer, John W.
Holder, Preston

Hughes, Bernard, and Therle Hughes

Israel, Fred L.

Jameson, Ireen

Kohler, Carl

Larrabee, Edward McM.
1961 Archeological Exploration of the Court House Building and Square, Appomattox Court House National Historical Park, Appomattox, Virginia, from July through September, 1960. MS, National Park Service, Richmond.

Lazarus, William C

Mattison, Ray H.
1957 Historical Investigations of Arkansas Post, Spanish and American Periods. MS, National Park Service, Omaha.

Miller, Carl F.
Moore, Clarence B.

Moore, Jackson W., Jr.

Noel Hume, Ivor

Olds, Dorris LaVanture

Peattie, Donald Culrose

Peirce, Josephine H.

Peterson, Harold L.

Phillips, Philip
1941 The Menard Site on the Lower Arkansas River. MS, National Park Service, Richmond.

Phillips, Philip, James A. Ford, and James B. Griffin

Pierson, Lloyd M.

Pratt, Fletcher
Quimby, George I.

Rogers, W. McDowell

Schuetz, Mardith K.

Shenkel, J. Richard, and William Westbury

Sherman, William T.

Smith, G. Hubert


1968 Big Bend Historic Sites. Smithsonian Institution River Basin Surveys, Publications in Salvage Archeology, No. 9, Lincoln, Nebraska.

South, Stanley A.

Temple, Wayne C.

Thomas, Cyrus

Walker, Frank R.

Walker, John W.

Wilson, Rex L.


Woolworth, Alan R., and W. Raymond Wood

Worley, Ted R.

Wyckoff, Don G., and Thomas P. Barr