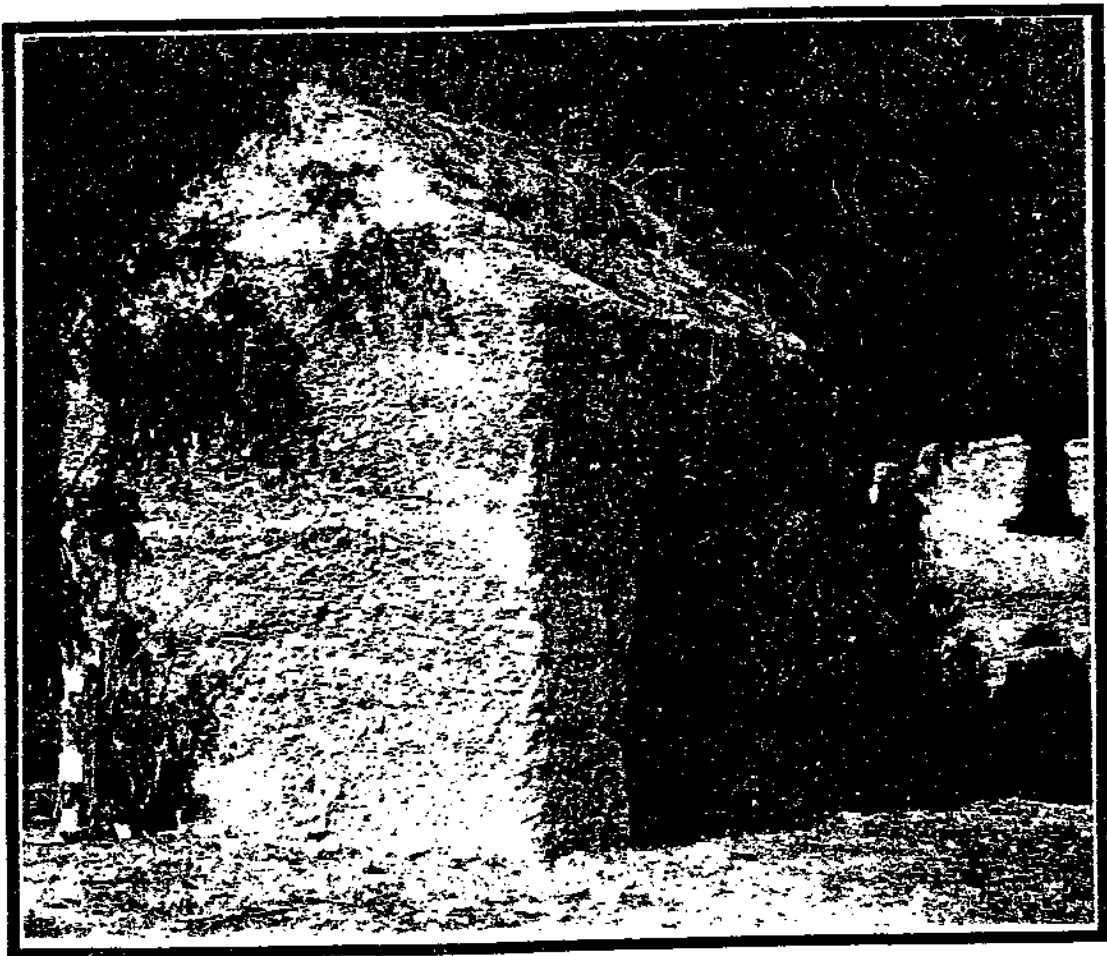


# THE HISTORICAL DEVELOPMENT OF DATAW ISLAND

Section 3 of 4

PREPARED FOR ALCOA SOUTH CAROLINA, INC.



BROCKINGTON AND ASSOCIATES, INC.

ATLANTA CHARLESTON

1993

# **The Historical Development of Dataw Island**

Note: The complete original document comprises nearly 600 pages of print. It is divided into the following four sections for manageability.

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**The is Section 3**

**THE HISTORICAL DEVELOPMENT OF  
DATAW ISLAND**

**ARCHITECTURAL AND ARCHAEOLOGICAL INVESTIGATIONS  
AT THE SAMS PLANTATION COMPLEX**

Prepared for

**ALCOA SOUTH CAROLINA, INC.  
Beaufort, South Carolina**

By



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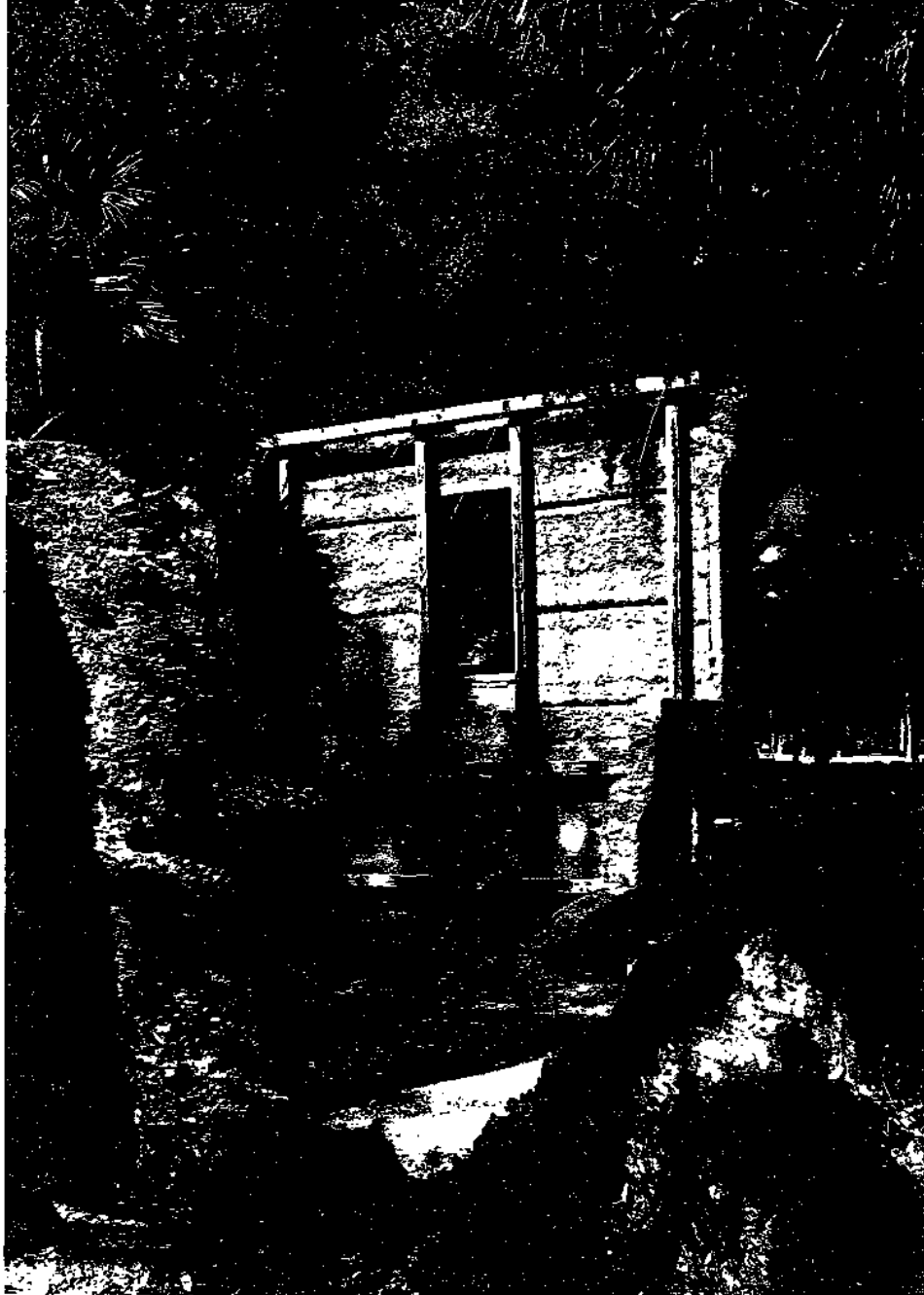
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August 1993

**ARCHITECTURAL  
INVESTIGATIONS**



## CHAPTER VII

### THE B.B. SAMS HOUSE AND DEPENDENCIES: INTRODUCTION

In April 1992, I was asked by Dr. Larry Lepionka to contribute an architectural analysis of tabby ruins located at Site 38BU581, the idea being that this would form part of his larger Final Report describing archaeological investigations and surveys conducted on Dataw Island, South Carolina 1983-1985. Lepionka's invitation was an attractive one. Having made measured drawings of the main Sams House and its associated outbuildings when they first underwent excavation (1983), I was well aware considerable uncertainty surrounded the building group's development, construction and antecedents. Following preliminary discussion a contract was therefore signed with Dataw Island's developers, ALCOA, South Carolina, Inc. who placed at my disposal every facility for study.

In September 1992, Lepionka withdrew from the larger scheme. His excavation records, excavated artifacts, publication and curatorial responsibilities subsequently devolved upon Brockington & Associates (Atlanta, Georgia). All parties concerned, including the South Carolina Department of Archives and History (SCDAH), agreed architectural analysis should continue, summaries of Lepionka's unedited Field Notes being incorporated, if possible, into the product.

Such an approach has obvious shortcomings. While based upon archaeological results, what follows, I must stress, is not an archaeological report. Rather, the chapters developed below represent an architectural historian's response to interpretive issues presented by Site 38BU581's ruins.

Tabby construction is a central theme. Upton and Vlack (1986:xvii) have observed:

The encounter with objects requires description. One cannot proceed to interpretation without specifying how the artifact at hand came to exist. Vernacular structures can be explained first at the level of their construction, as the scholar identifies the chronological, geographical, and formal qualities of artifactual technologies.

Here, it should be said that Site 38BU581's investigation was a pioneering effort. For the first time in South Carolina an extensive tabby building complex underwent excavation. Like many pioneering efforts, the project lacked sophistication. Record-keeping was often incomplete and unexpected features caused constant modification of the original research design. Fallen tabby proved an obstacle and I now suspect complex building alteration phases sometimes passed unrecognized. Nevertheless, significant data accrued, illustrating an historic building tradition which perhaps more than any other capitalized upon indigenous local resources.

Before excavation began, the reason why tabby was chosen as the prime construction material on late eighteenth/early nineteenth century Dataw Island was not understood. Neither was it clear when tabby first become popular throughout Beaufort County, South Carolina. Construction methods were also imperfectly known, historians, archaeologists and architects describing techniques seen in Florida or Georgia which seemed atypical at a local level. Moreover, most of South Carolina's tabby structures had received only superficial prior attention. Plans did not exist, photographs were rare and verbal descriptions (if existing) relied less upon original observation than second hand anecdote biased towards family history.

After 1983, this situation changed. Lepionka initiated excavation elsewhere (Spring Island, Callawassie Island and Daufuskie Island, South Carolina) exposing several unrecorded tabby structures. Independently, I made measured drawings of numerous related buildings including Beaufort County's larger tabby houses. Dr. Michael Trinkley (Chicora Foundation, Columbia, South Carolina) later published some of these plus others revealed by his own excavations and surveys. Although unpublished, Site 38BU581 always remained a benchmark, provoking discussion; providing architectural analogs or parallels and attesting processes which helped create the antebellum landscape. Consequent archival research established how few original late eighteenth or early nineteenth century Beaufort County building accounts survive and the unique position occupied by documents describing Dataw Island's pre-Civil War plantations.

Among relevant items, an undated typescript (University of South Carolina [USC] Caroliniana Library, Columbia; copy Beaufort County Library, Beaufort) entitled Dataw gives unrivalled information. The author, James Julius Sams (born January 14, 1826) recalls Dataw Island as it existed during his childhood. Written long after James Julius had left South Carolina, (c. 1890?) the document's intent was to record "a terrestrial paradise" confiscated (for non payment of taxes) "with the help of sword and cannon and foreign soldiery" (Sams n.d.:23) in 1863. As might be expected, the harsher realities of plantation life are glossed over, the "Memoir" (as I shall term it) giving a brief history of Dataw Island under Sams Family ownership and topographic accounts.

James Julius was preoccupied with anecdote, various childish pranks filling many pages. Along the way though, a sympathetic picture emerges of his father Dr. Berners Barnwell Sams (1787-1855), the latter's building activities being described. James Julius's mother, Elizabeth Hann Fripp Sams died young (16 March 1831). About his stepmother, Martha Edwards Fripp (daughter of James Edwards) who married Berners Barnwell Sams, 30 November 1831) nothing is said, a strange omission which leaves almost all domestic and household affairs unrecorded. Likewise, plantation management is ignored, workers when they do appear assuming incidental or comic roles painful to modern sensibilities. Yet, the child's view remains indispensable. Vignettes of Dataw Island at the height of its early nineteenth century prosperity appear, James Julius guiding us around various buildings, fields, woods, orchards, dams and waterways.

Topographic features are further documented by "The Sams Map" (Figure 5). Diagrammatic rather than realistic, the undated manuscript (copy, Beaufort County library, Beaufort) is attributed to Eugenia Sams (born 1845). Acreage figures indicate reliance

upon professional surveys now lost, an inexpert adaptation showing Dataw island's southern half foreshortened. Field systems, tracks and Site 38BU581's main house are indicated along with several (but not all) associated outbuildings.

Also attributed to Eugenia Sams and undated are three watercolors (Private Collection, Beaufort). One small (12 in by 9¾ in) example, termed for convenience below "the Sams Residence Painting" (Figure 39) shows elements James Julius Sams called the Middle, East and West Houses standing intact; two illustrate the Sams Family Chapel. Architectural findings suggest all three paintings are accurate in a general sense but whether they were drawn from direct observation or memory is unclear. A drawing (late eighteenth/early nineteenth century?, private collection, Beaufort) signed by Paul Brodie, (an artist I have not been able to trace in standard references) illustrates the Chapel's interior (see Figure 67). Similar pictorial records are unknown for any other Beaufort County plantation complex.

Taken together, the various sources listed provide an ample (if partial) view of Site 38BU581's development under Berners Barnwell Sams. Earlier historic periods are far less well documented. James Julius mentions his "grandmother's time" and several "old" buildings. The "Middle House," a mid or late eighteenth century dwelling enlarged under Sams Family ownership probably contains Dataw Island's oldest tabby re-fashioned over later rebuilding phases. The original structure can be reconstructed through archaeological and structural evidence, though not with absolute certainty.

Knowledge of a rectangular fenced yard (installed before 1829) and its associated outbuildings fronting the residential complex again depends upon archaeology. James Julius Sams neglects the layout when describing Dataw, an unfortunate oversight since yard planning provides us with links to notions of "improvement" expounded in late eighteenth/early nineteenth century agricultural publications.

Robinson (1983:26) notes that "an astonishing feature of eighteenth and early nineteenth century architectural writing...is the flood of books devoted to rural buildings, farms and cottages." I doubt if Berners Barnwell Sams or his father, William Sams ever read Edmund Burke's Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful (London, 1757) or Marc-Antoine Laugier's Essai sur l'architecture (Paris 1753; 1755). But, in its final form Site 38BU581 does reflect the less abstract ideas of notable agricultural reformers, (Nathaniel Kent; Robert Morris; J. C. Loudon for example) whose writings British landowners translated into model farms; quadrangular steadings and humane rural housing projects.

How related concepts were transmitted through the Low Country remains uncharted. It is certain that early nineteenth century agricultural experimentation changed plantation planning. Main residences set within defined rectangular "yards" became widespread while slave dwellings were often better built and somewhat larger than their late eighteenth century precursors. Where used, tabby played an important role, offering permanent, improved and inexpensive building, qualities recognized by contemporary European theoreticians who re-discovered and promoted analogous pise' construction after 1790.

I make brief apologies then for proceeding via detailed descriptions of construction methods the Main Sams House and attendant outbuildings typify. No ruins are stable, least of all perhaps tabby built ones which even under favorable conditions suffer relentless erosion. My object is the presentation of information concerning an under-documented local building tradition before evidence from Dataw Island disappears. Verbal material complements graphic representations including photographs and measured drawings.

Drawings were commenced in January 1983. At the time Site 38BU581 was overgrown; dense vegetation covered or obscured all ruins and necessitated clearance. Great care was exercised where tabby appeared friable; tree roots were left in place; vines cut back by hand; loose structural elements drawn and wall falls plotted. General measured surveys followed, using steel tapes and conventional orthographic methods. Preliminary plans, elevations, sections and details so produced underwent revision or addition as Lepionka's excavations proceeded until the end of 1983 when my contract ended. Later investigation (1984-1985?) passed unrecorded, no finished drawings being preserved of "the Cotton House"; lower levels of Structure VIII (a probable dairy) or West Wing basement after full excavation.

In preparing the present Report, original architectural field plottings were checked on site. Discrepancies were corrected, certain structural elements deemed critical for structural or temporal interpretation re-examined, old drawings corrected and fresh drawings made. Figure 40 displays a plan of the architectural features within the Sams Main House complex.

Two further sources require special consideration. First and most important is Lepionka's Report entitled Dataw Island, Beaufort County, South Carolina Cultural Resources Survey (1988; typescript on file ALCOA South Carolina, Inc, Beaufort) an indispensable text which presents the background to and results of island wide archaeological investigation. Second, with the author's kind permission, I have reviewed and quarried Lepionka's Field Notes made over to Brockington & Associates in January 1993. These comprise "Level Forms," maps showing the location of excavation units, plus (for the Main House Wings and so called "D complex" including Structures IV-VII; Structure X) brief hand written commentaries. While "Level forms" are very uneven, lack stratigraphic profiles and contain contradictions they provide data not otherwise accessible.

Information gathered is synthesized over three chapters. Chapter VIII describes the Main Sams House, its phases and antecedents. Analogous structures are introduced and the design process governing evolution of several similar local late eighteenth/early nineteenth century plantation residences explored.

Chapter IX contains three related sections. Part I examines the Fenced enclosure and related outbuildings (Structures I-VII). Following building description and attribution, certain late eighteenth/early nineteenth century agricultural publications are discussed, since I believe these contain important clues towards understanding the Dataw layout and its components. Comments rely in part upon information extracted from two standard books, John Martin Robinson's Georgian Model Farms (1983) and John Archer's The Literature Of British Architecture 1715- 1842 (1985).



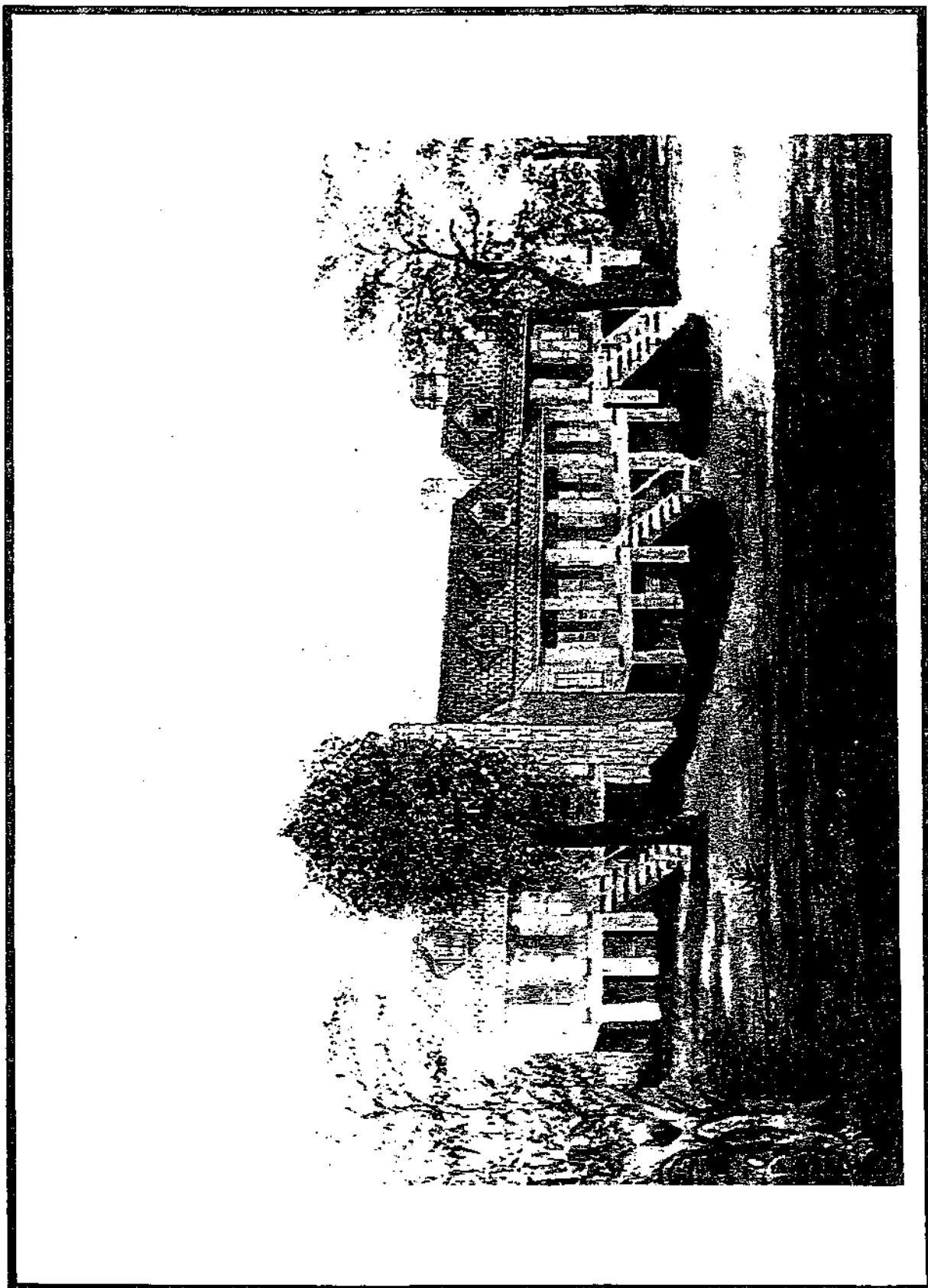


Figure 39. A Painting of The Sam's Residence Attributed to Eugenia Sam's (n.d.).

Outbuildings located north and northeast of the main residence (Structures VIII-X) are described and analyzed in Part II. Part III examines structures located to the west and northwest including the Sams Family Chapel, Burial Ground and a building Lepionka (1988: 115-116) calls "the Cotton House".

Chapter X places construction techniques exhibited by the Sams House complex within their regional context. A brief history of tabby's diffusion is presented and examples of local tabby building cited. Commentary is neither conclusive nor complete, rather it summarizes research in progress. Beyond listing key references (Bazzana, Glick, and Torres Balbas) I have resisted the temptation to pursue the material's Old World or Sixteenth Century New World origins but should mention that my ideas about tabby's structural potential, popularity, decline and diffusion across cultural frontiers have expanded through ground surveys of related building techniques (often executed on an enormous scale) found in southern Spain (Andalusia, Levantina), North Africa (Fez; Rabat; Marrakesh) and the early Spanish Caribbean colonies (Puerto Rico; Santa Domingo).

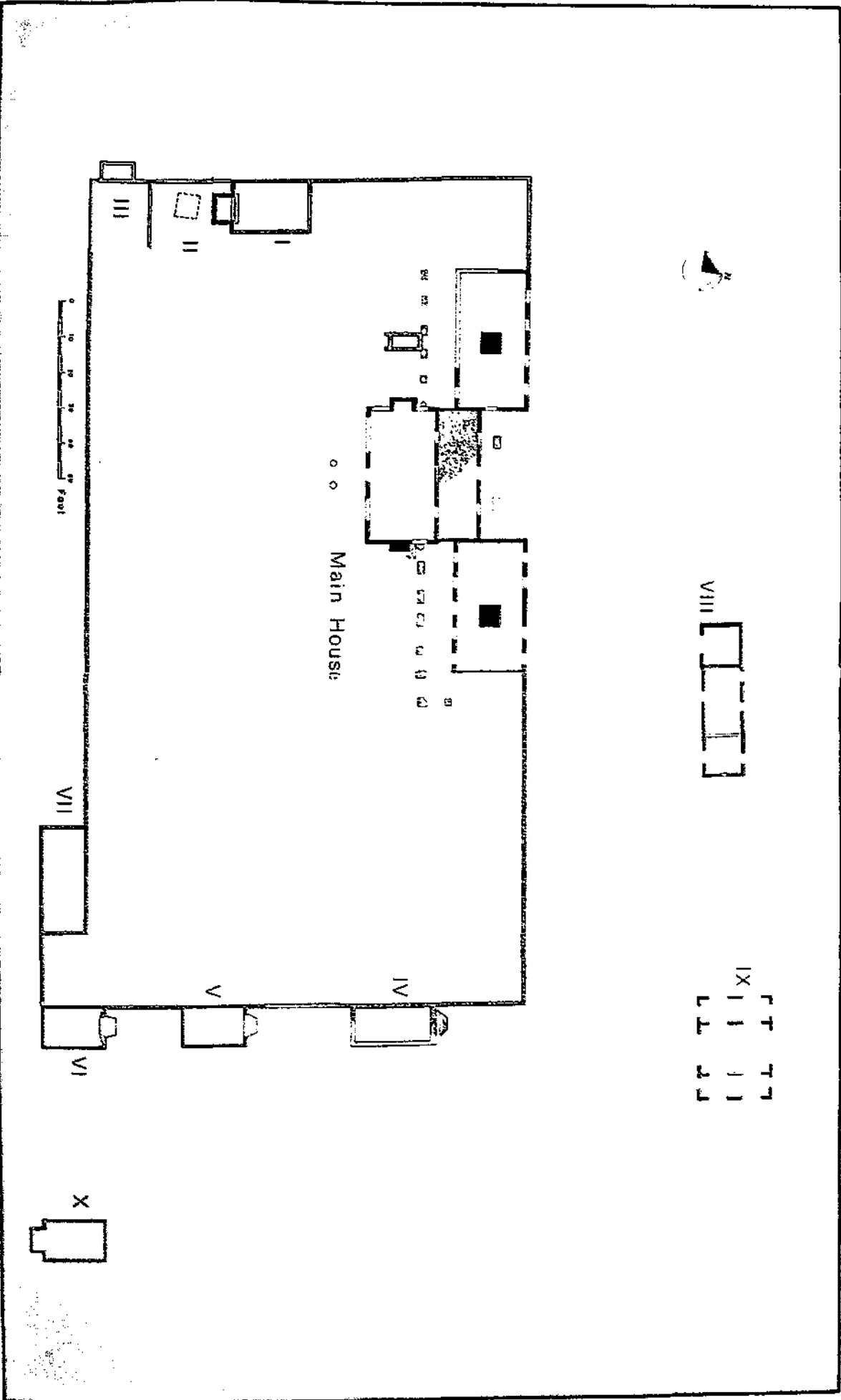
Ten years after Site 38BU581's investigation began, the list of individuals who must be acknowledged is long. ALCOA South Carolina, Inc. sponsored fieldwork and subsequent research, Mr. William F. Cochrane (President); Mr. Phil Le Roy (Engineer) and other ALCOA staff members providing every practical assistance. During the present Report's production, Lori Murdaugh (Controller) oversaw a difficult transition between Principal Investigators with great tact, patiently enduring several consequent delays besides on one memorable occasion checking field surveys. The principal investigator's themselves, first Dr. Larry Lepionka and later Brockington and Associates, Inc. made all efforts to answer my questions. I owe Dr. Eric Poplin (Brockington and Associates, Inc.), David Jones (Brockington and Associates, Inc.), and Ramona Grunden, whose knowledge of Dataw Island's history and archaeology is unrivalled, particular debts.

Mr. and Mrs. George Potter (Beaufort) underwrote searches at the National Archives, Washington, D.C. Mr. T. Reeve Sams facilitated access to historic Sams Family papers held in private collections and allowed old photographs to be copied. Jane Bruce Brooker and Jean Leidersdorf undertook site clearance, initial architectural surveys and preliminary measured drawing. Staff members of the Beaufort County Library, Beaufort; Georgia Historical Society, Savannah; The USC Caroliniana Library, Columbia; Charleston Museum, Charleston treated inquires with their usual courtesy.

Many South Carolina owners have allowed detailed examination of historic properties, including structures located on Spring and Daufuskie Islands; at White Hall Plantation near Ridgeland; Retreat Plantation, near Beaufort and in Beaufort itself.

Overseas research was part funded by a Post-Doctoral Fellowship from the National Endowment for the Humanities. Dr. Axel Knauf (Heidelberg University, Germany) navigated me to many remote Iberian tapia monuments. Mr. George Potter checked readings of foreign language texts. Dr. Michael Trinkley contributed important data through monographs published by Chicora Foundation, Columbia Additional information has come via Dr. Steven Wise (Director, Parris Island Museum); Dr. Lawrence Rowland (USC, Beaufort); Dr. Lewis Larson (Georgia State Archaeologist); Cindy Cole

Figure 40. Plan of the Architectural Features in the Sams Main House Complex.



Jenkins(Historic Beaufort Foundation, Beaufort), Anne Van Ingen (President, Goodhope Corporation, Jasper County, S.C); Mr. William Rettew (Rettew Engineering, Greer, South Carolina) and branch offices of the National Parks Service (Fort Frederica, Georgia; Castelo San Marcos, St. Augustine, Florida; El Morro, San Juan, P.R.).

At the South Carolina Department of Archives and History, Nancy Brock and Lee Tippet gave essential help. Finally, together with Dataw Island's dedicated archaeological field crews I wish to acknowledge David Murray and Rick Wightman who worked with me to stabilize fragile or endangered features of the Sams House and outbuildings in 1983.

## CHAPTER VIII

### THE MAIN SAMS HOUSE

#### INTRODUCTION

Situated overlooking Jenkins Creek on Dataw Island's south shore, the main Sams House incorporates three rectangular tabby building masses of almost equal area, aligned longitudinally about an east/west axis. At the composition's center, one block breaks forward in a southerly direction, the others constituting two symmetrical Wings connected by link spaces which front the central block's north elevation. Today, all components are ruined and it has become difficult to visualize how the building was organized since connecting elements such as porches and steps are missing or understood only from fragmented subsurface features. Fortunately, James Julius Sams (n.d.:4) describes the residence's final form remembered before his family abandoned their island holdings in 1861:

My recollections cling more about the house than anything else. It was not a common house. It was uncommon. It was not one house, but three, three distinct houses...built of tabby, a mixture of shells lime and sand.

The same account (Sams n.d.:4-5) mentions:

the three houses...had three distinct names. West, East and Middle. The middle [ie. central] house was the old and original home...my Father [Berners Barnwell Sams] added the two wings.

Dissimilar tabby fabrication techniques, construction breaks and plan organization demonstrate the Middle House constituted a nucleus about which Wing and Link erection evolved. What perhaps James Julius Sams did not know or recollect was that the original structure had changed over time, certain features (described below) indicating alteration by his father, Dr. Berners Barnwell Sams (1787-1855) and perhaps grandfather, William Sams (1741-1798).

Neither well preserved nor attributable in total to any single construction phase, the "Middle House" offers an obvious starting point for discussion. All evidence suggests this structure played pivotal roles in Site 38BU581's historic development, first as an independent entity and later as the central focus of a much enlarged settlement conceived after 1800.

The following chapter therefore begins by examining the Middle building's evolution over time. Questions concerning patronage and chronology are introduced, questions considered again in Part 2 where Wing and Link construction are analyzed.

## THE MIDDLE HOUSE

Before excavation in 1983, the Middle House was ill defined. Eroded tabby wall fragments marked the building's north and east sides but south and east, nothing survived above ground except tabby rubble. Representing fallen external walls, this oyster shell based material had lost structural coherence and constituted a major obstacle during investigation. Working with small crews, Lepionka opened numerous excavation units (Lepionka 1988) first removing dense underbrush and then clearing the decayed tabby. Beneath "an irregularly thick layer made up of wall fall sections...a stratum of burnt timber and ash" (Level B) was found, confirming anecdotal accounts of the main residence's "destruction by fire in the early postbellum years" (Lepionka 1988:113).

Clearance continued until there stood revealed a structure measuring 38 ft 4 in by 20 ft 3 in orientated almost due east/west along its short axis (Figure 41). Tabby external walls 1 ft 2 in wide defined the final plan which incorporated two exterior end chimneys. West the chimney was of fired brick, opening at first floor level into a hearth measuring 5 ft by 2 ft 3 in (Figure 42). East, chimney construction (opening into an upper level space), featured tabby brick, raised upon a high tabby base measuring 5 ft 11 in by 3 ft 4 in in plan (Figure 43).

Excavation produced no structural timbers of recognized size. Little therefore can be said about original floor joists, internal wall linings or roof members. UNITS CP 2; 3; 5; and 8 did indicate a porch extended along the south facade, two cruciform brick built piers (distanced 6 ft 8 in on center) located about the building's north/south axis showing this circulation element was about 9 ft 9 in wide. Associated radial brick scatters suggested second floor porch columns once existed matching those of south porches fronting West and East Wings (see below).

Inside no trace surfaced of any partition dividing the lower space into two rooms though James Julius Sams (n.d.:5) mentions the Middle House contained "two cellars". Burned timbers (dimension uncertain) encountered near the west fireplace (UNIT CH 5) appeared *ex situ*, Lepionka (personal communication, n.d.) assigning them to upper floor or roof construction. Likewise white marble slips (measuring 4.5 in by 2 ft 7 in when whole) discovered broken and scattered around the west chimney (UNIT CH 5) had, judging by their distribution, fallen from an upper level fireplace surround.

Architectural findings give ambiguous information about construction supporting the second floor. Sockets (internal face, north elevation) evidence 1 ft by 4-11.5 in by 3.5 in timber joists distanced 1 ft 10 in - 2 ft 1 in on center spanned north/south across the building's short dimension. This configuration cannot be original since joists so positioned would cut across original lower door and window openings of the north facade (now blocked, see below). Sockets show joist ends were angled rather than sawn square--a condition consistent with new floor members inserted into pre-existing walls.

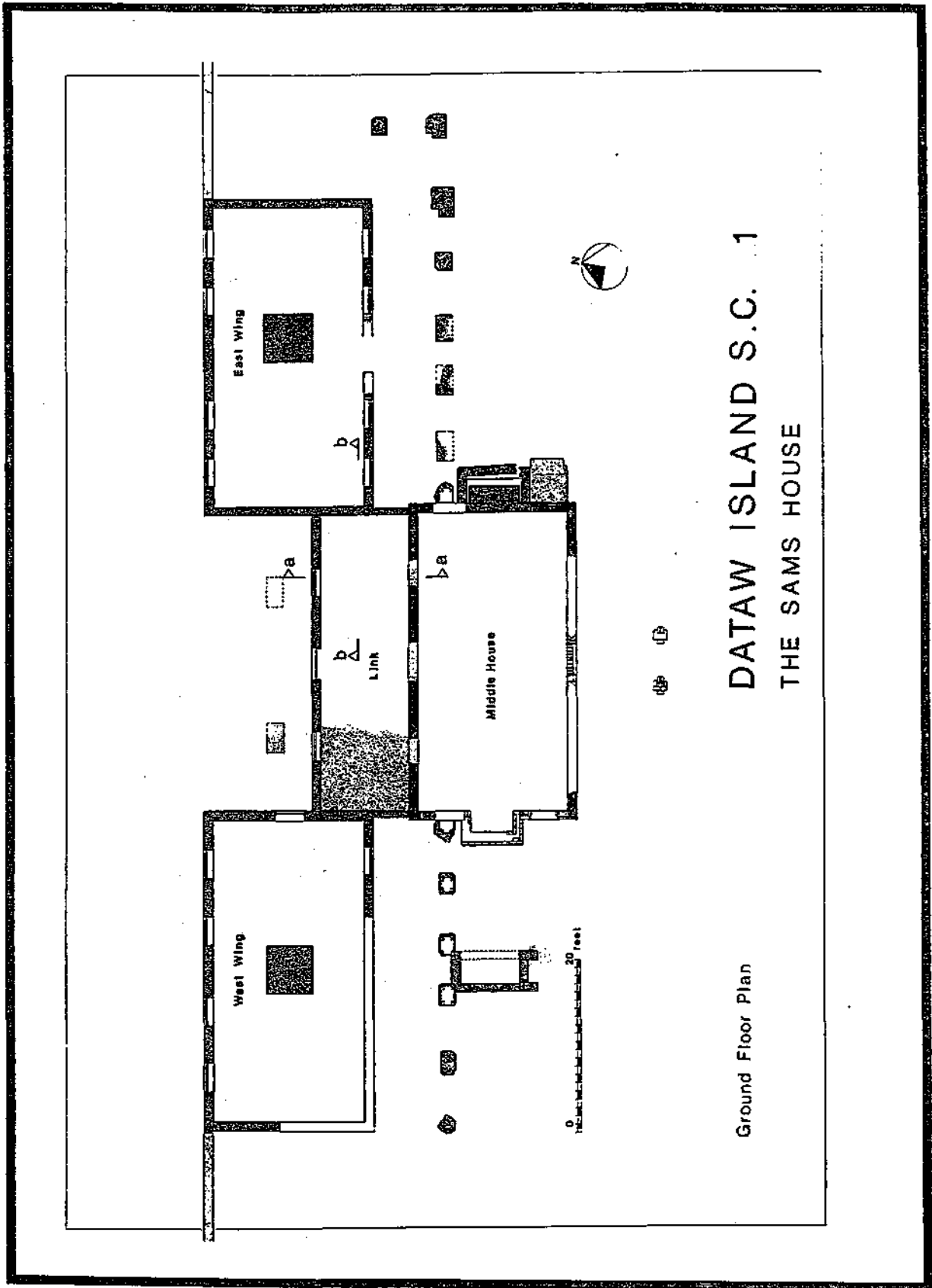


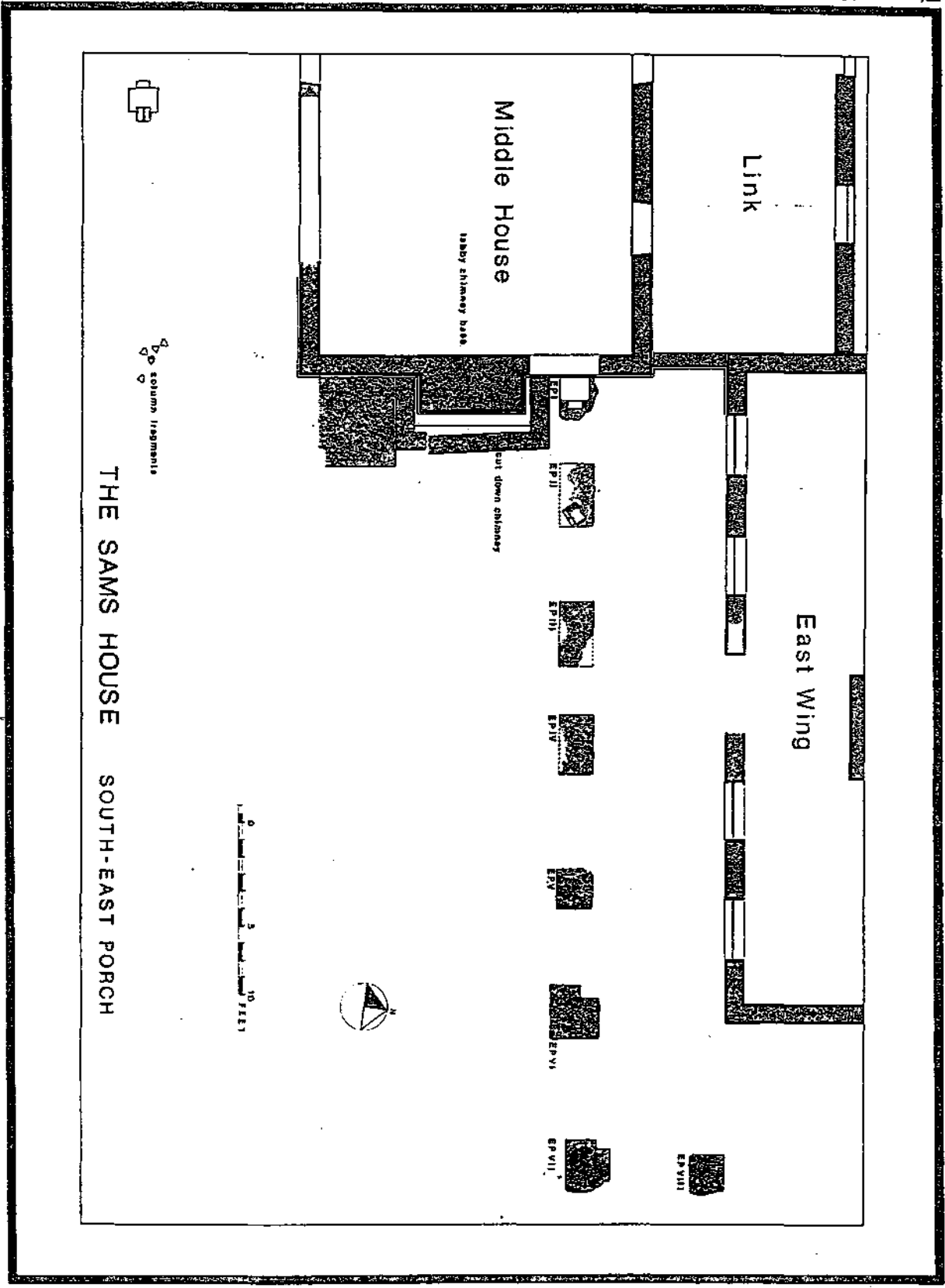
Figure 41. The Main Sams House First Floor Plan.



Figure 42. The Middle House showing Excavation of the Southwest Chimney Base (1983).



Figure 43. Plan of the Southeast Porch and Associated Construction of the Main Sams House.



The external east chimney is also anomalous, fractured 1 ft - 1 ft 1 in wide tabby foundations enclosing its base on three sides (Figure 41). Temporal association between the joist sockets mentioned and east chimney base is attested by respective top elevations, the solid tabby base having once carried a hearth (now little more than tabby brick rubble) at the inserted floor level. Cracks through the east facade where walls broaden into the chimney base are difficult to interpret. These irregular fissures may indicate differential structural settlement. More likely they indicate alteration, thick external stucco patches marking the junction of original external walls and a rebuilt chimney stack. If so it seems probable that tabby foundations surrounding the existing east chimney base are cut down remnants of an earlier hearth which served original lower spaces.

Again, the west chimney base (Figure 44) appears intrusive, its brick hearth being built about 1 ft 6 in below the north entrance door's threshold level. Following introduction of secondary floor joists, what had become a basement area was probably dug out to maintain adequate headroom, a new fire box constructed against the building's west facade replacing the old east fireplace no longer operative at the deeper floor level.

Elevational treatment presents further ambiguity. On the north facade blocked original lower openings indicate primary division into three bays, the composition incorporating two side windows and a central doorway. All openings now visible are splayed, the doorway measuring 4 ft 9 in in width on its internal face and 4 ft 6 in in width on the external face. Window openings were at least 4 ft 6 in high by 3 ft 9 in tapering to 3 ft 4 in wide on internal faces and like the central doorway, part infilled using tabby brick during a secondary construction episode.

The lower south facade is puzzling. Three bays are certain, but details differ as compared to the north elevation. West, tabby fragments indicate a splayed window opening. East, the corresponding window has parallel instead of angled sides. The central doorway's reveals are splayed to the west and parallel to the east, lime mortar applied over brickbats making an asymmetrical opening about 3 ft 7 in wide. End (i.e., east and west) elevations have almost disappeared. Eroded opening fragments suggest windows of undetermined dimension flanked each chimney right and left.

## DISCUSSION

Two sources describe the Middle House before its near total collapse, verbal accounts of James Julius Sams and an undated painting (Figure 39) family tradition attributes to Eugenia Sams (Private Collection, Beaufort, reproduced Graydon 1963 n.p.). James Julius (n.d.:5) states the dwelling:

consisted of two rooms, a narrow passage between, two attic rooms above and two cellars below.

Later, Sams (nd.:9) adds:

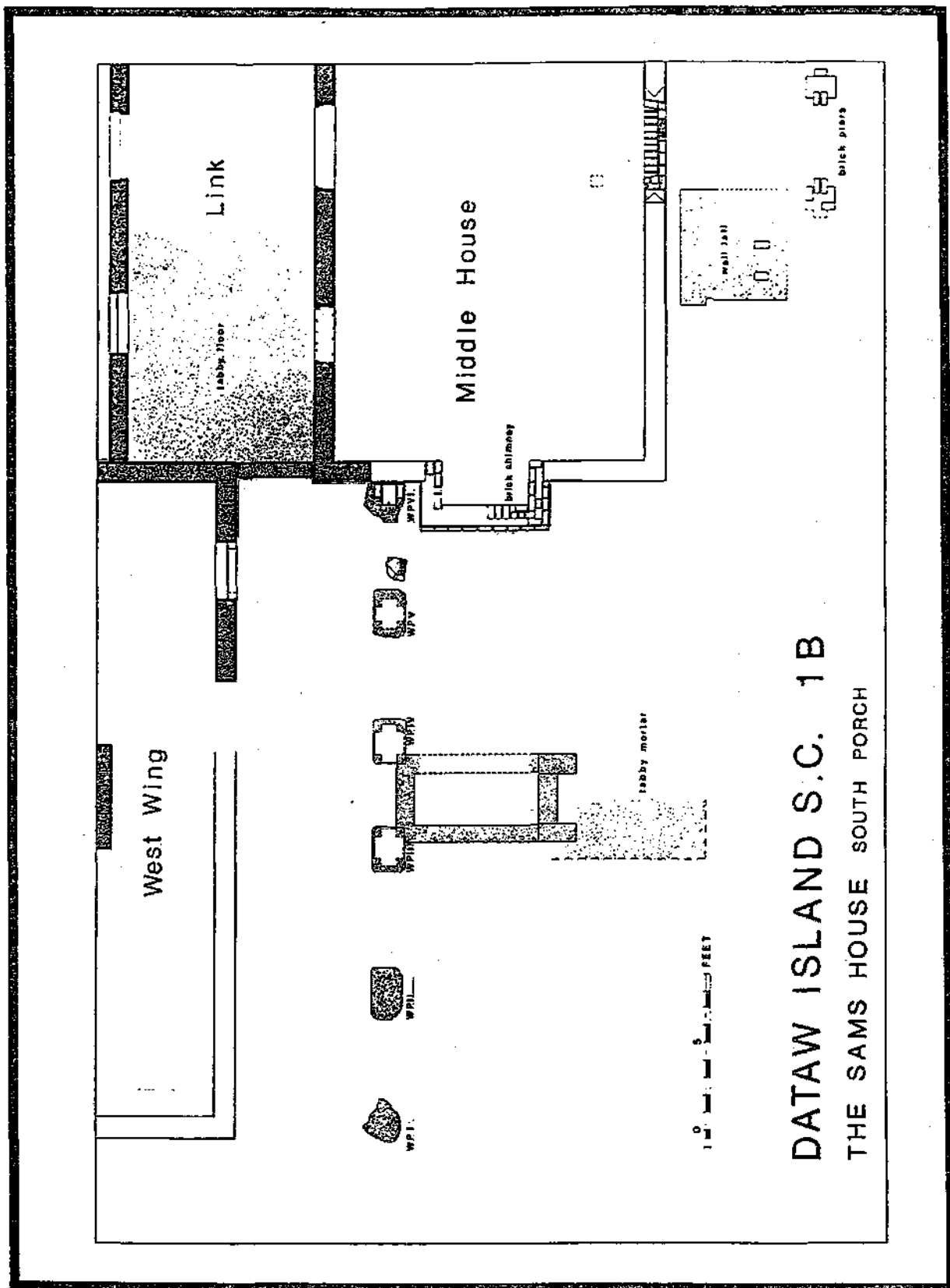


Figure 44. Plan of the Southwest Porch and Associated Construction of the Main Sams House.

The first room of the Middle house was called the girls' room. It was the scene of all the Christmas preparation...the room opposite was known as the big bed-room.

Elsewhere his account mentions "a narrow piece above the stair," (Sams n.d.:10) which probably indicates stairs rising out of the central "passage," gave access to a landing and attic spaces where Berners Barnwell Sams stored "corn saved for its seed" (Sams n.d.:10).

The Sams Residence Painting (Figure 39) correlates well, illustrating a rectangular gabled structure with external end chimneys, principal rooms located over an elevated basement and attic spaces lighted south by dormer windows. Across the main facade, a columned porch supported upon six rectangular piers is delineated, timber external steps leading towards upper floor levels. An axial main entrance implies some form of central hall (i.e., the Memoir's "narrow passage") bisected interior volumes.

Fenestration patterns are perhaps schematic. Known structural features and contradictions within the painting itself indicate the amateurish artist relied more upon memory than direct observation. Louvered basement windows positioned right and left on the south facade are plausible. Above, six much larger, double hung windows ordered about the main entrance define seven bays although porch columns establish a five bay system. The west elevation is shown blank, whereas windows are known to have pierced end walls at their lower level. Nevertheless, while certain details are suspect, the painting gives, insofar as can be judged, an accurate general record of building form, proportion and organization.

We have already seen that the plan, section or massing illustrated cannot represent an original configuration, floor joists inserted across earlier window openings, the east chimney's probable rebuild, structural adjustment around lower south windows and relationships between the west hearth and surrounding construction, pointing towards an early dwelling having undergone major renovation. In order to interpret the scope and purpose of secondary work the following section reconstructs the original Middle House, exploring consequent issues of architectural affinity, chronology and patronage.

## RECONSTRUCTION OF THE PHASE I DWELLING

Standing almost 12 ft above grade, the present building's northeast corner provides important information for reconstruction of the original (i.e., Phase I) Middle House. Now fragmented and eroded 1 ft 2 in wide tabby external walls here display two different fabrication techniques. Lower level tabby pours were cast into timber forms 1 ft 7 in - 1 ft 8 in high tied by round dowels. Resulting tabby approached pre-industrial concrete's texture and density, crushed valves showing lime mixes containing oyster (*Crassostrea virginica*), clam (*Mercenria*) plus occasional periwinkle, and conch shell aggregates were tamped or pounded into the formwork. About 8 ft 6 in above the north central doorway's threshold level, tabby becomes less well compacted. At the same level, impressions evidence rectangular formboard ties (measuring, like those of the Main building's Wings and Link block, 4 in by 2 in in cross-section) while formwork height shifts to a 2 ft high module.

So abrupt a change doubtless marks the junction of two distinct building episodes. This means (a) the early Middle House included only one full story plus perhaps an attic, alterations converting it into a two-and-a-half story dwelling or (b) lower tabby walls of the original house once supported timber framed second floor walls later reconstituted in tabby.

Many timber framed domestic buildings raised upon tabby basements are documented (Beaufort structures including the Hext House c. 1770; William Johnson House, c. 1795; Bythewood House c. 1790; and John Mark Verdier House c. 1810). But blocked lower north windows argue against the Phase I Middle House incorporating a basement, their original opening size (4 ft 6 in+ high by 3 ft 9 in wide) being more appropriate to living spaces than basement activities (cf. the c. 1780 Barnwell Gough House, Beaufort, where basement window openings are only 3 ft 9 in wide by 2 ft 8 in high, Figure 45). Assuming my first proposition is correct, then the following observations can be made or inferences drawn about Site 38BU581's earliest known dwelling:

i. The original Middle House was an unpretentious single story or one-and-a-half story tabby building.

ii. Main spaces (about 8 ft 6 in high) were entered at or just above ground level.

iii. Cruciform porch piers, excavated along the building's south facade belong to a reconstruction phase.

iv. Internal tabby wall faces show no joist sockets at the original first floor level making either compacted earth or tabby lower floor finishes possible (cf. oyster shell mortar lower floors of the Phase I, Edwards House, Spring Island, South Carolina; Habersham House, Beaufort; Marshlands, Beaufort; Wormslow Plantation, Chatham County, Georgia).

v. Tabby walls themselves were probably plastered on the interior, and stuccoed on exterior faces (cf. Kelso 1979:68-69).

vi. Non-load bearing internal partitions perhaps resembled the 1.25 in thick vertical tongued and grooved boards separating main spaces in the Chaplin House (c. 1790-1800), Beaufort (cf. the mid eighteenth century Guillebeau House, McCormick County, South Carolina and Cummings 1979:174-178).

vii. Division of north and south elevations into three bays is assured. The pattern presupposes either a through passage plan incorporating two unequal area first floor rooms or two equal area main rooms separated by a narrow passage. Perhaps the principal east room opened into an end chimney centered about the building's long central axis. Later the original base was probably cut down and then rebuilt slightly smaller.

viii. The original roof frame is conjectural. A simple, gable ended form would be appropriate, enclosing usable attic spaces reached via an enclosed

stair (cf. the Chaplin House, Beaufort a small timber framed dwelling retaining many features of mid-late eighteenth century type).

### **PHASE I BUILDING: ARCHITECTURAL AFFINITIES**

One story or one-and-a-half stories high, organized about a through-hall or passage plan incorporating an end chimney and with main facades divided into three bays, as reconstructed the Phase I Middle House finds few extant local parallels. Nevertheless, comparable buildings were once ubiquitous. Similar dwelling types are recorded from Williamsburg, Virginia before 1740 (when already commonplace, Whiffen 1972:44-47). In Georgia analogous timber framed structures predating the American Revolution are known (i.e., Christian Camphor Cottage, Savannah, c. 1760-67 [Lane 1990:24]) and tabby built examples (c. 1740) conjectured at Frederica (Kelso 1979:65; for St. Augustine, Florida 1764-88, Manucy 1978:48-54,60).

Retreat Plantation (also called the Jean de la Gaye House and Fuller Place) located near Battery Creek, Beaufort (Figure 46) is one of many variants on the same typological theme built c. 1740-1750 (see under Site 38BU1104, Historic Resources of the Low Country 1979:69). Slightly larger than the Dataw Island Middle House (measuring 36 ft 1 in by 28 ft 4 in excluding porch construction), Retreat has 1 ft 6 in wide tabby external walls, ground level living rooms and two brick internal chimneys centered on its gable ends. Modern south porch construction may or may not reproduce an early form. Dormer windows have also undergone reconstruction but usable attic spaces follow the original plan. Despite five bay principal elevations and variant chimneys, Retreat offers the closest analogy for theoretical restoration of the Middle House as a story-and-a-half dwelling. Beaufort County lacks other related tabby structures except the ruined Phase I Edwards House, Spring Island (dated before 1780). Similar in dimension (37 ft by 19 ft 9 in excluding end chimneys) and wall thickness (1 ft 2 in) this building probably included one-and-a-half stories raised over an elevated basement (Brooker 1990:131-133).

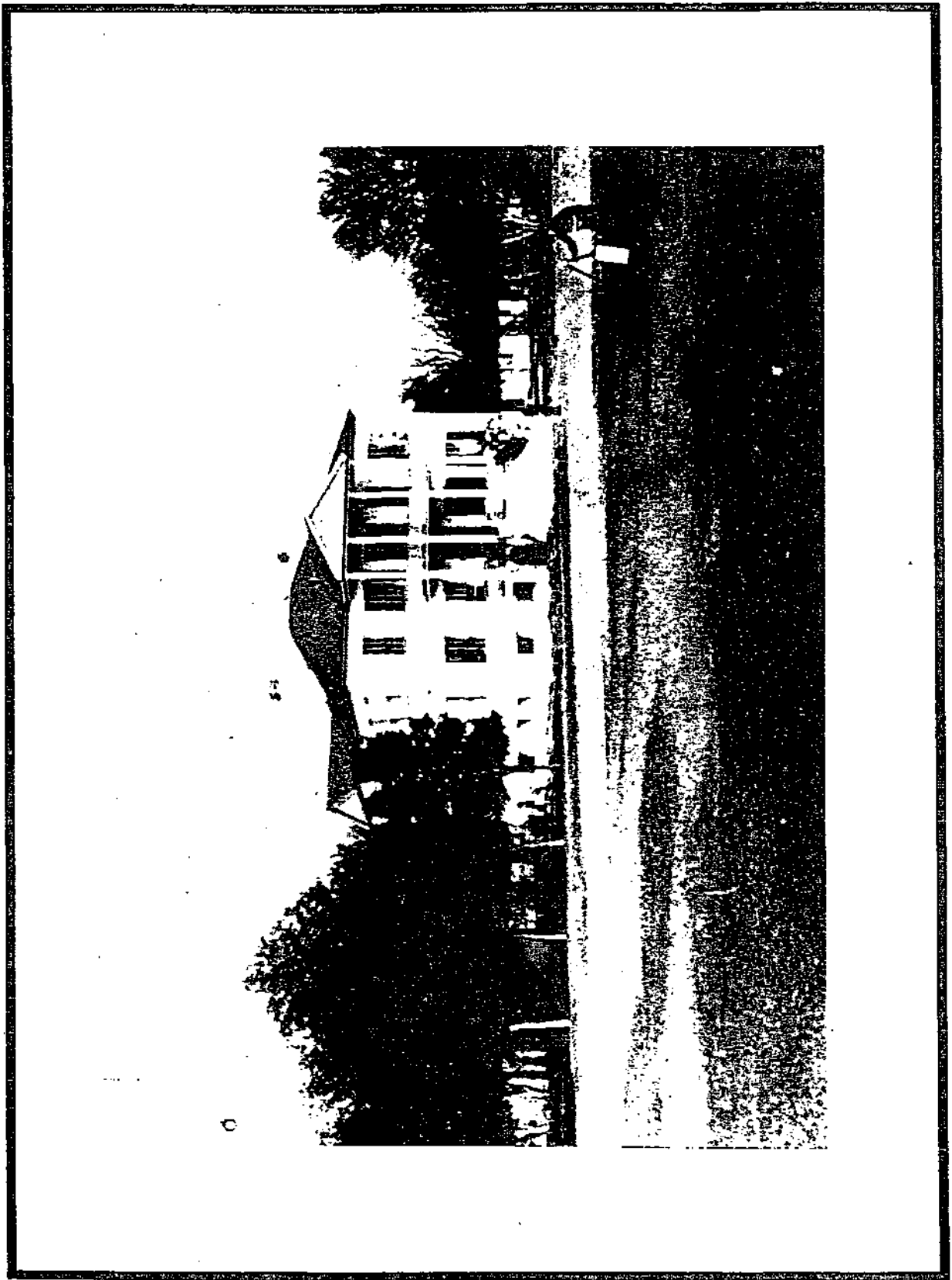


Figure 45. An 1864 Photograph Showing the Barnwell-Gough House (c. 1780), Beaufort, South Carolina.

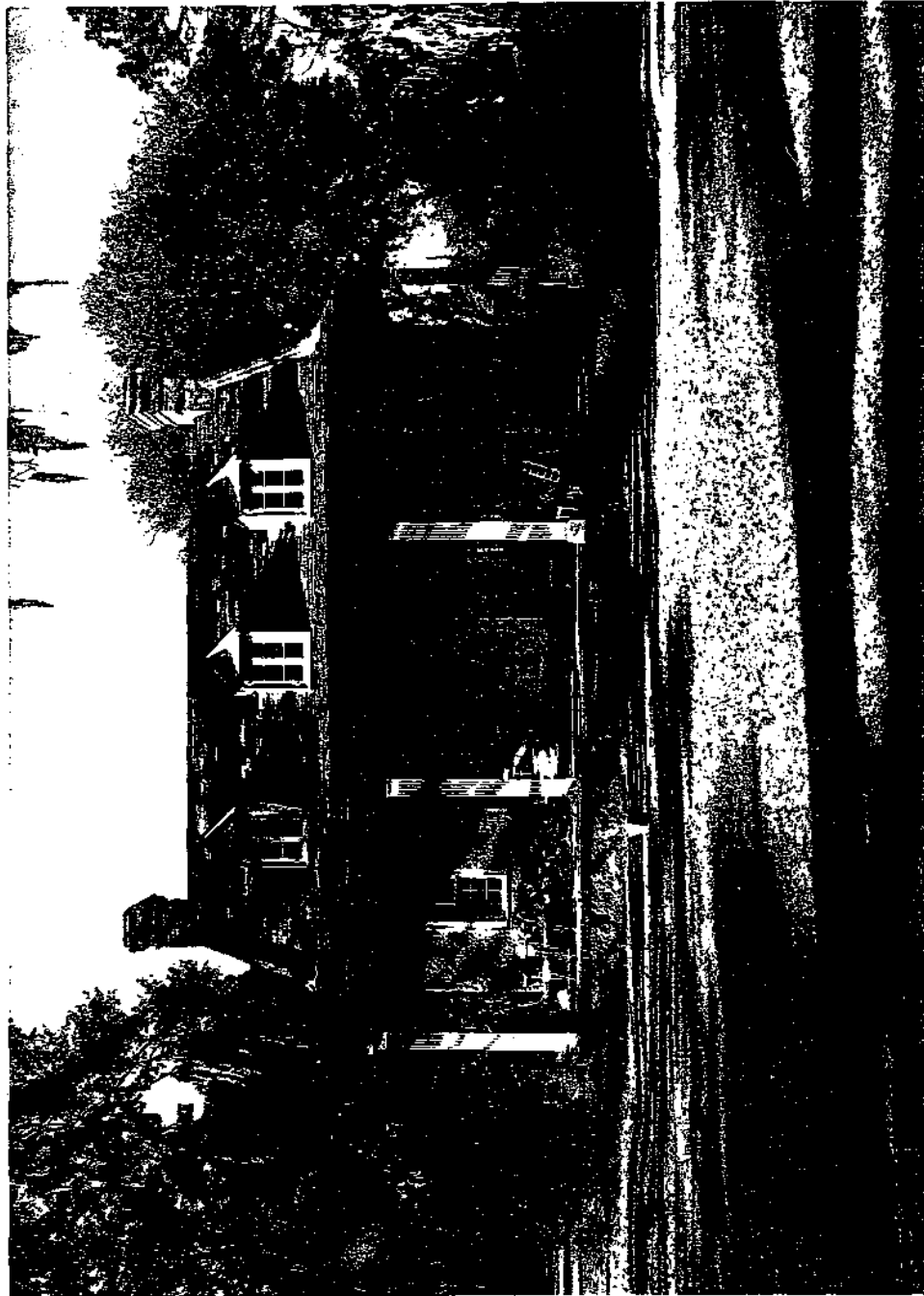


Figure 46. Retreat Plantation, Beaufort County, South Carolina.



## PHASE I. CHRONOLOGY

Regarding Phase I chronology, literary, archaeological and structural evidence conflicts. To summarize:

(1). James Julius Sams (nd.:5) records the Middle House, was old in his grandmother's time, a statement which if true and alluding to Elizabeth Hext Sams (1746-1813), would place erection during the second or third quarter of the eighteenth century. This era saw Dataw Island's ownership pass in 1755 from Charles and Thomas Boone to Anne Wigg who willed it to her son Lewis Reeve in 1770. Lepionka (1988:240) thinks Lewis Reeve (born 5 August 1739) was exploiting Dataw before he inherited the property making him a possible building candidate after say 1760. Or, construction was perhaps begun by Sarah and Robert Gibbes who came into possession of Dataw following Lewis Reeves's death in 1774, selling the island to William Sams (husband of Elizabeth Hext Sams) in 1783.

(2). If the original Middle House resembled Retreat Plantation, an initial date soon after 1760 is admissible. But the building type conjectured was very persistent and erection c. 1775-1783 cannot be excluded on stylistic or typological criteria. Construction technique suggests an earlier rather than later period, since tabby fabricated using circular formwork ties and well compacted shell mortars parallels mid eighteenth century tabby at Wormslow Plantation, Chatham County, Georgia (Kelso 1979:87) and Fort Frederick, Port Royal, South Carolina (1750).

(3). Under excavation, the building yielded very few ceramics dated before 1788 (see discussion, Chapter IV) suggesting William Sams initiated construction soon after his purchase of Dataw Island in 1783.

Does ceramic analysis show James Julius Sams mistaken when he stated the Middle House was "old" in his grandmother's time? I believe tabby construction details and the original building's extreme simplicity indicate Pre-Revolutionary work undertaken for Lewis Reeve or Sarah and Robert Gibbes. The lack of Colonial artifacts is perhaps explained by late eighteenth/early nineteenth century alterations. Heavy disturbance of the house site occurred since the work required (a) removal of the original first floor surface (b) excavating a basement several feet below original grade and (c) digging new pier foundations along the old dwelling's south front. Also, it should be noted in favor of an interpretation which reconciles architectural and anecdotal evidence, that the freestanding kitchen (see under Structure I below), a structure dependent upon main house activities, preserved stonewares and oriental porcelains attributable to mid or slightly later eighteenth century dates (see Chapter IV) preceding the period when William Sams occupied Site 38BU581.

## THE PHASE II MIDDLE HOUSE-DEVELOPMENT

The Middle dwelling's appearance after alteration has already been described. Construction was more substantial than before, even if a new south porch and six Tuscan columns did little to disguise the building's humble beginnings. And, while enclosed areas remained modest, the occupant's comfort increased. Main living spaces raised several feet above ground level and shaded by an open veranda ("piazza") better suited local climatic conditions (cf. the John Chaplin House, Beaufort c. 1790-1800; Pond Bluff Plantation, Berkeley County, South Carolina c.1820), a fact which ensured similar South-Eastern plan types retained popularity down until the early twentieth century.

Still, despite its simplicity the Phase II Middle House presents a paradox, having achieved an unexceptional final form through complex building operations. These included (a) stripping the original dwelling's roof; (b) raising all external tabby walls; (c) inserting floor members at a level several feet above grade; (d) constructing one or more chimney stacks; (e) fabricating new internal partitions; (f) installing second floor windows; (g) blocking lower windows on the north facade; (h) excavating the lower floor to create a basement area; (i) re-working (or replacing) roof members, (j) constructing stairs leading to attic spaces, and (k) introducing porch construction along the building's south facade.

That the old dwelling underwent reconstruction is not a unique phenomenon. Hampton Plantation, Georgetown County, South Carolina encapsulates a vernacular style timber framed house (built c 1730-50) within fashionable late eighteenth century construction. On Spring Island too, George Edwards conserved late eighteenth century tabby construction when enlarging his residence c. 1812 (see below). Beyond sentiment or nostalgia, such instances are probably explained by geographic isolation, coastal planters resorting to structural re-use in the face of scarce skilled labor, high material transport costs and uncertain incomes dependent upon distant markets over which they had little or no control.

Besides, tabby's demolition entailed wasteful effort. Far easier and less expensive was the course adopted at the Arsenal, Beaufort. Old tabby walls (fabricated by Col. Thomas Talbird c. 1792) were cut down and re-employed as foundations for new brick construction c. 1850, the original 10 ft high tabby magazine (see Chapter X) being overbuilt in brick as late as 1910. Again, ground level tabby visible along flanks of St Helena's Episcopal Church Beaufort, prove the building's present early nineteenth century north and south brick facades are founded upon older (late eighteenth century?) walls also perhaps cast by Col. Thomas Talbird.

Who re-worked original tabby of the first Dataw Island Middle House, is not recorded. Lepionka (1988:112) reasons "this part of the [main] building underwent substantial renovation at the time of the addition of wings by Berners Barnwell Sams." Structural features reinforce the hypothesis. Similar cruciform piers supporting brick columns of Middle, East and West porches seem to confirm that Berners Barwell Sams refashioned the old dwelling's south facade. Upper tabby pour levels of the old house match those of the two Wings and Link block in height, compaction and formwork tie detail, suggesting if not the same hand at least a near contemporary late eighteenth or early

nineteenth century time frame. However, differences in end chimney construction show Middle House alteration was an ongoing affair, while James Julius Sams's failure to mention his father organizing the old dwelling's rehabilitation may indicate another owner started the work.

Here we should remember William Sams probably occupied the "Old house" following his acquisition of Dataw in 1783 since he died on the island in 1798. William's household was large, including in 1783 his wife Elizabeth Hext Sams, four children and three orphans. In 1790, the First United States Census lists six male dependents (three over 16 years of age) and two females over 18. Even if the Sams family moved between Beaufort and Dataw holdings it is difficult to imagine how the original Middle House, assuming it existed in 1783 (as deemed probable above on the basis of architectural and structural evidence) accommodated more than five or six persons along with their servants unless new space was added. Did William Sams alter the Middle House to suit his particular familial needs? Reviewed in this context, what little information we have yields equivocal, conflicting or unverifiable answers.

Alterations now visible are not wholly consistent with provision of additional living accommodation. Rather, rehabilitation appears based upon providing lower level storage or service rooms instead of permanent habitation. New second floor spaces although higher, better ventilated and illuminated than the first floor ones they replaced, remained constant in area. Usable attics may have been introduced into a building which formerly had none, an alteration producing separate sleeping accommodation for adolescent males and females. It also appears the new semi-basement (i.e., lower floor) if used for storage, may reflect increased production on Dataw Island following its exploitation by William Sams. We might further observe the Middle House as altered seems more suitable to William's Post-Revolutionary status and social aspirations than a very modest, single story dwelling. But, the attractive hypothesis that William Sams, as the result of increasing wealth, transformed an old house, rather than building a new dwelling, over the course of his residence on Dataw Island cannot be verified. Moreover, structural findings already given furnish strong circumstantial evidence of major alteration (going perhaps beyond new south porch construction) undertaken by Berners Barnwell Sams c. 1816-19.

## WING AND LINK BLOCKS

### INTRODUCTION

Some time after 1800 (c. 1816-19 see discussion below), new double story wings added north-east and north-west of the Middle House produced a tripartite residence characterized by its linear emphasis and loose organization. Each building mass was conceived as an independent structural entity, linkage being achieved via open porches erected along south elevations of the two wings and enclosed passageways built so as to front the old dwelling's north facade. Reached via external steps, these various circulation elements interconnected at second floor level in a way which allowed family members, visitors or servants to pass from living areas of the Wings and Middle House without disturbing what ever activities might have been thought appropriate for ground level spaces (Second Floor Plan, Figure 47).

James Julius Sams (n.d.:5) describes the arrangement, his terminology reflecting how the three main building masses were considered distinct dwelling units even though they constituted parts of a single architectural composition:

The two wings were connected by a large passageway, running back of the Middle house, not only connecting the east and west house, but also connecting the middle house. The narrow passage, i.e., central hall, in the middle house opened into this large passage on its side. The two ends of this passage were entered from two doors respectively in the parlors, and piazzas of the East and West house. The three houses each had its own piazza.

Driven by the particular exigencies of tabby construction work started with the Wings. These were erected together, slight dimensional differences showing use of two separate formwork sets, a procedure which allowed construction crews to alternate between the two blocks, striking, re-erecting and filling forms in one location as tabby cured over the course of several days at the other. East and West Wings underway, operations commenced on the narrow enclosed area linking them, circulation spaces being defined by a new double height tabby wall erected parallel to the existing dwelling's north facade.

This was an infill task, junctions where external walls of the Wings and Link meet showing open joints. Less than satisfactory as a structural system, timber floor and room members tied the new Link's north external wall to the Middle House and offset inherent instability. Similar reliance upon the interaction of tabby and timber throughout the project ensured an economical result (see Chapter X). It also speeded structural disintegration after timbers were destroyed by fire (c.1900?). Tall, unrestrained tabby walls split, disassociated and separated along pour lines so that today, neither Wing stands intact.

Damage is heaviest along south fronts where exterior wall collapse brought down any porch elements surviving the conflagration. Fallen porch piers and columns were later robbed for their brick--always a scarce material on South Carolina's sea and riverine islands. The East Wing preserves end elevations almost whole and like the West Wing, lower

portions of its north facade. Link elements include north exterior wall fragments rising almost to original height. Besides a few carbonized remnants, structural timbers are missing, only sockets or tabby impressions giving evidence of floor joists, wall plates and internal room linings.

## **EAST AND WEST WINGS**

### **Scope of Excavation**

Lepionka excavated East and West Wings over the course of several campaigns. Six units are reported from the East Wing and four from the West. Excavation Field Notes (n.p; n.d), here transcribed verbatim, provide the following general stratigraphic information:

Throughout the house area and especially in the interior or immediately adjacent to exterior walls there is a deposit of tabby debris, ranging from large, relatively intact wall sections to small rubble. This level (Level A) generally accumulated subsequent to burning of the house, and has relatively sparse artefact content. It is a product of slow deterioration in some areas and catastrophic collapse in others...Level B is the burn layer, containing charcoal, ash, charred wood, minimal tabby, and fairly abundant artifacts. Thickness again varies dependent upon local factors of intensity of fire etc. Level C is typically a brown soil level constituting the living floor up to the time of burning. Level D is sterile yellow subsoil. Occasional features penetrate Level C, including areas interpreted as builders trenches and scaffolding postholes.

### **Inside the East Wing:**

Level A consisted of collapsed wall material and some later debris (ie. brick fragments) with relatively few artifacts. Level B in both cases was the burn layer, with black soot permeated earth and ash; this was less well marked in the north than the south, and not as clearly defined as elsewhere in the building. Large quantities of fired brick and shell, numerous nails. Level C upper zone is dark yellow mottled, going to sterile light yellow in lower zone...

Considerable time was spent excavating porch piers and related features along southern faces of East and West Wings (Figure 43 and 44). Except Level Forms, commentary by Lepionka is wanting on the results achieved. Therefore, descriptions of porch elements, now backfilled, are based upon my own field notes and drawings taken in 1983.

## Plans and Elevations

Each tabby built Wing comprises one principal floor raised over an elevated basement, the eastern example measuring at present ground level, 38 ft 9 in east/west by 20 ft 9 in north/south; the western example 38 ft 11 in east/west by 20 ft 8 in north/south. Fenestration suggests similar plans characterized the two blocks but other than massive central (or nearly central in the East Wing) tabby chimney bases described later, no interior spatial division is visible, all partitions probably having been timber framed and built independently of the tabby exterior walls.

At the lower level excavation failed to disclose floor surfaces, a lack of joist sockets suggesting either lime mortar or compacted earth floors. Above, in the West Wing paired windows grouped towards extremities of its north elevation show that there were two large second floor spaces probably separated by partitions ordered north/south about the central chimney stack. James Julius Sams states "the extreme west room was my Father's chamber, the room next that a parlor." He also implies analogous arrangements in the East "house" where, "the first room was called the drawing room."

Facade organization (Figure 48) reflects the hierarchy established by accommodation of main living areas on upper floors and what were probably service or storage functions below. North elevations each feature four small lower window openings grouped, as mentioned, in pairs. Spacing differs, the East Wing presenting a larger (10 ft 6 in compared with 6 ft 6 in) central blank wall surface than its western counterpart. Second floor openings insofar as known maintained the same rhythms but were much taller and somewhat wider (for dimensions see under Construction below).

South elevations are badly damaged. It can be observed that (i) the East Wing featured four small lower window openings ordered like those of the corresponding north elevation plus a central doorway of uncertain dimension; (ii) the West Wing's lower facade differed, traces of an off-center entrance being visible in place of a window; (iii) second floor windows of the West Wing matched those of the upper north front in size.

Access to upper living spaces displays originality. Taking the West Wing as typical, it might be assumed that external steps centered upon its south facade would lead directly towards an axial entrance door. Close inspection of the Sams Residence Painting shows this was not so. Instead the Wing's west room, i.e., Berners Barwell Sams' "chamber," was reached via an off-center doorway positioned somewhat left of the steps. A doorway communicating with the link block gave entry into the upper east room. Living spaces were presumably interconnected by an internal door positioned right or left of the chimney stack. Figure 47 partially reconstructs the arrangement which resulted. Upper south entrance doorways shown are notional in size, reconstruction being based upon the Sams Residence Painting.

The West Wing provides good evidence for end elevations (Figure 48). Here, the otherwise blank west facade is ordered about a central second floor window opening (Figure 49). Damaged wrought iron "butterfly" type shutter ties survive in situ, matching examples excavated on the building's south side (Figure 50, #4). Two openings pierce the East

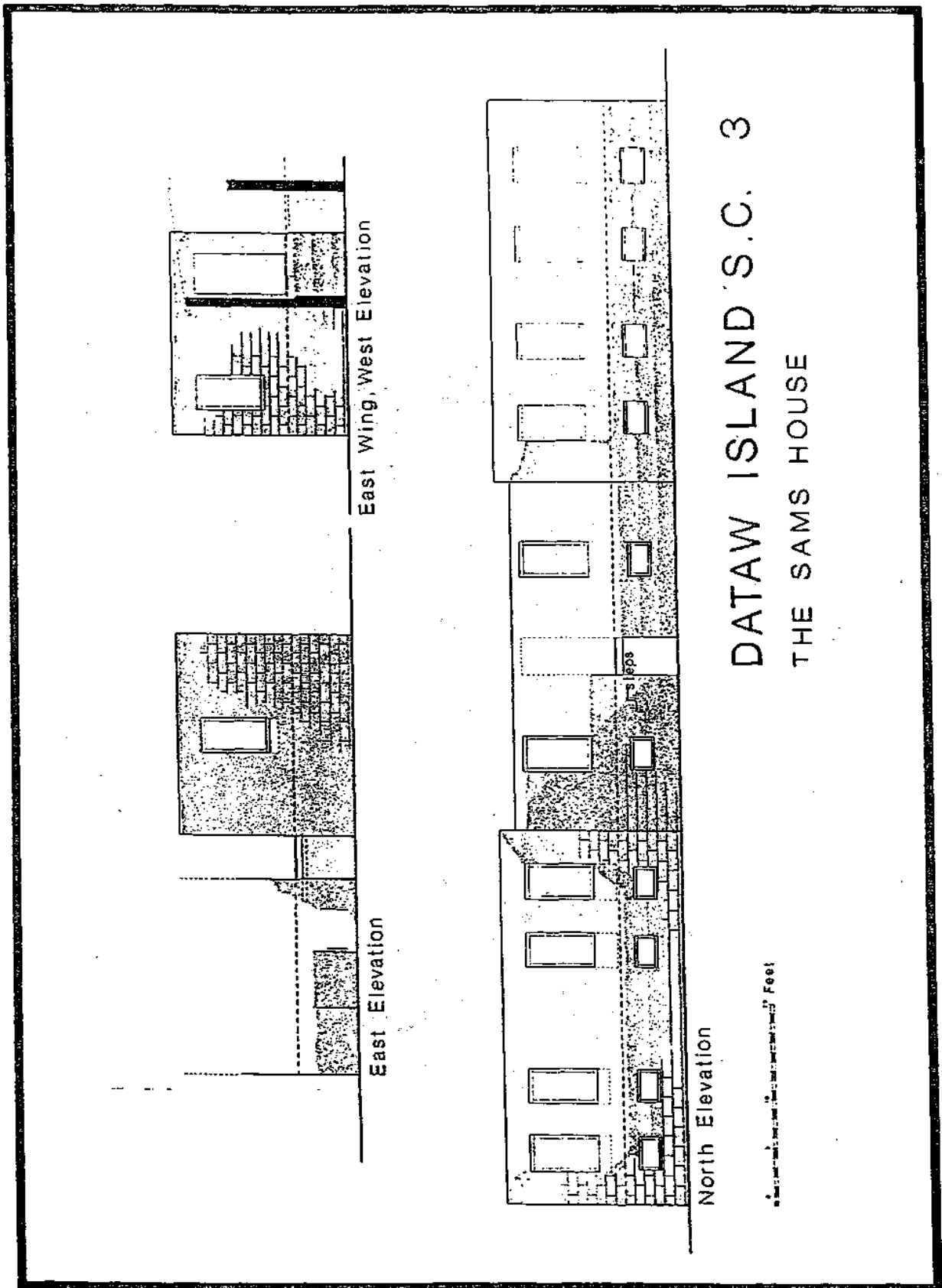


Figure 47. Restored Elevations of the Main Sams House, Existing Walls Stippled.

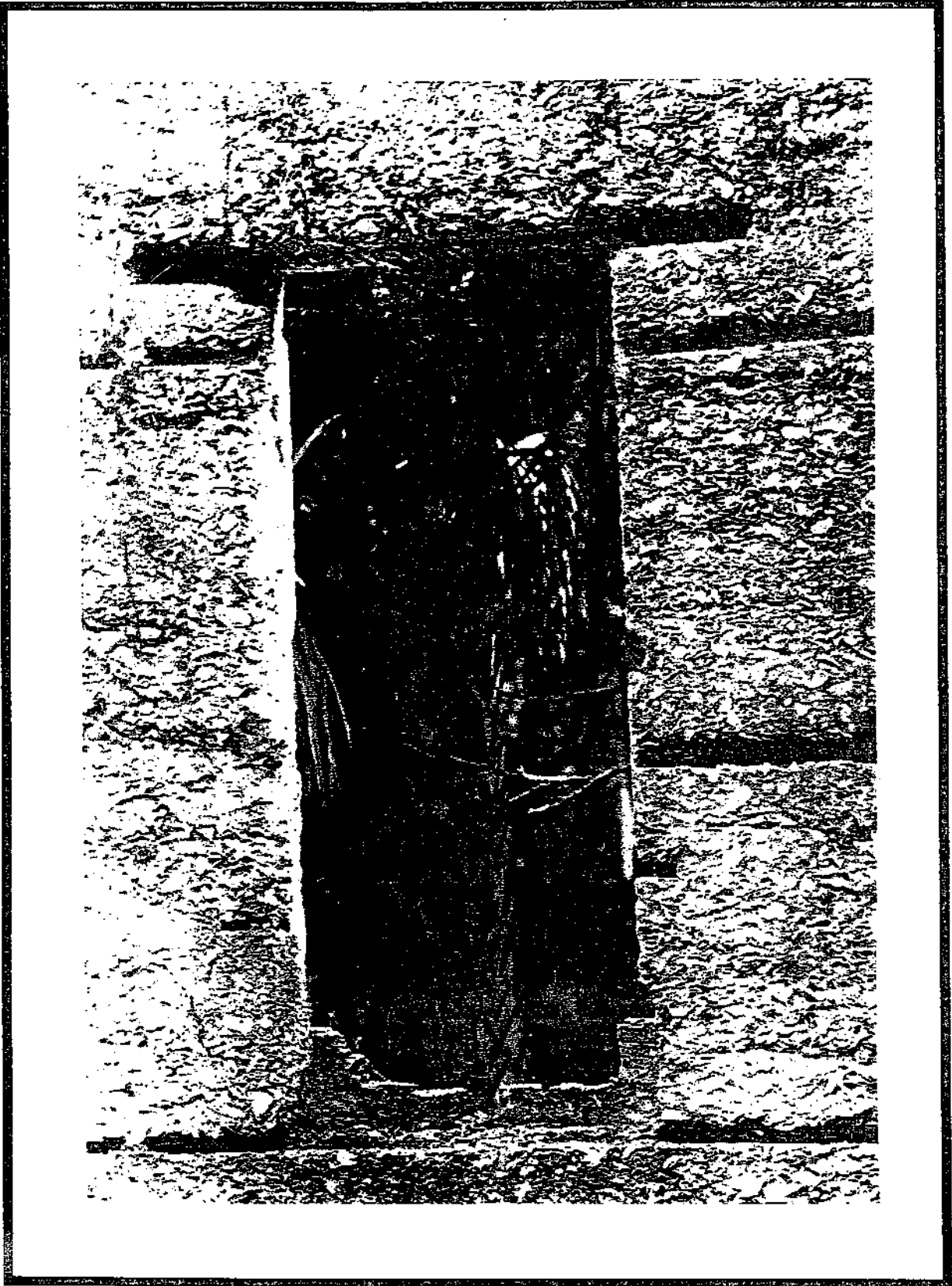


Figure 48. A 1983 Photograph Showing Detail of the Upper Window of the East Elevation of the Main Sams House, East Wing.



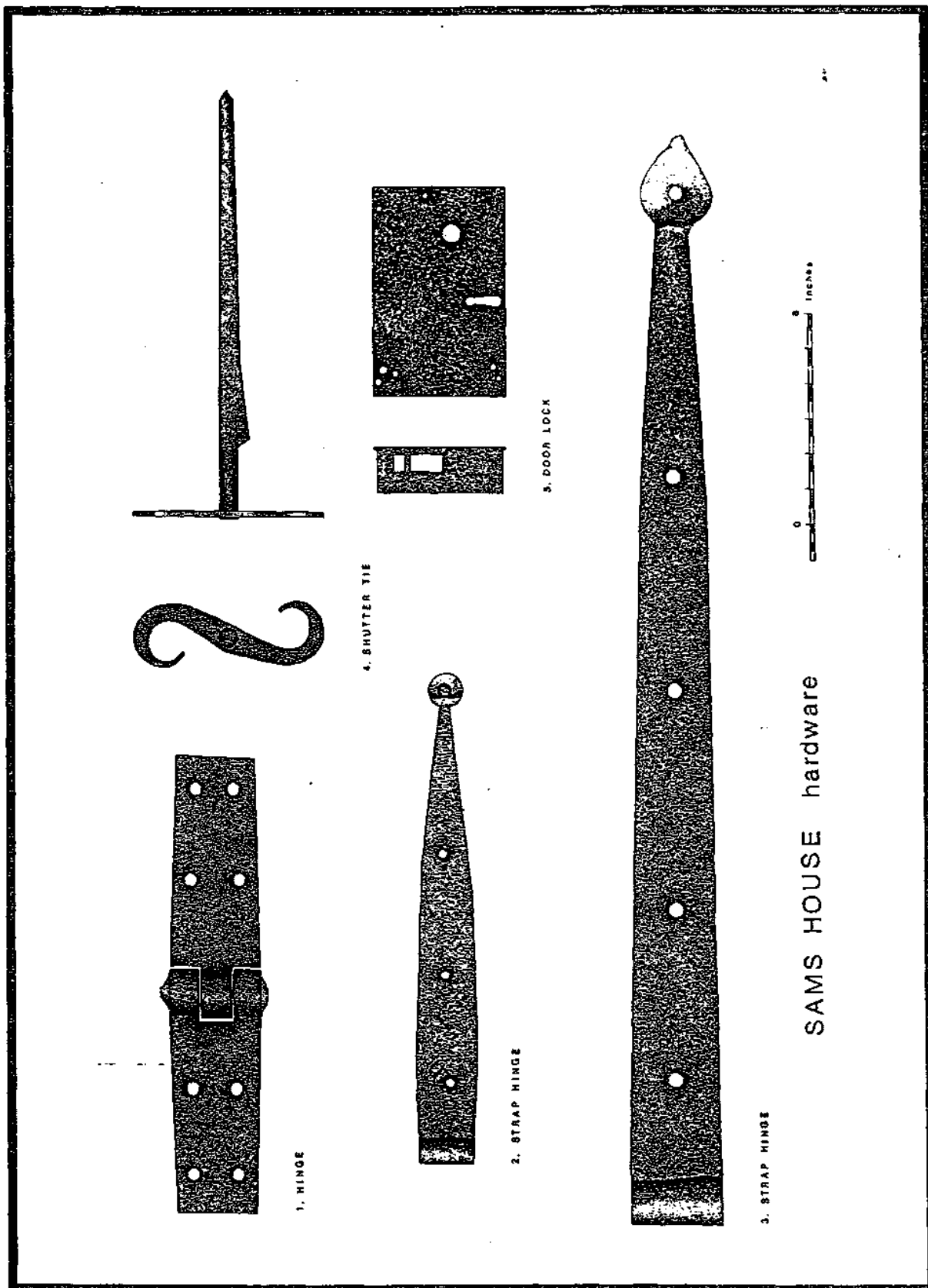


Figure 49. Hardware Excavated From East and West Wings.

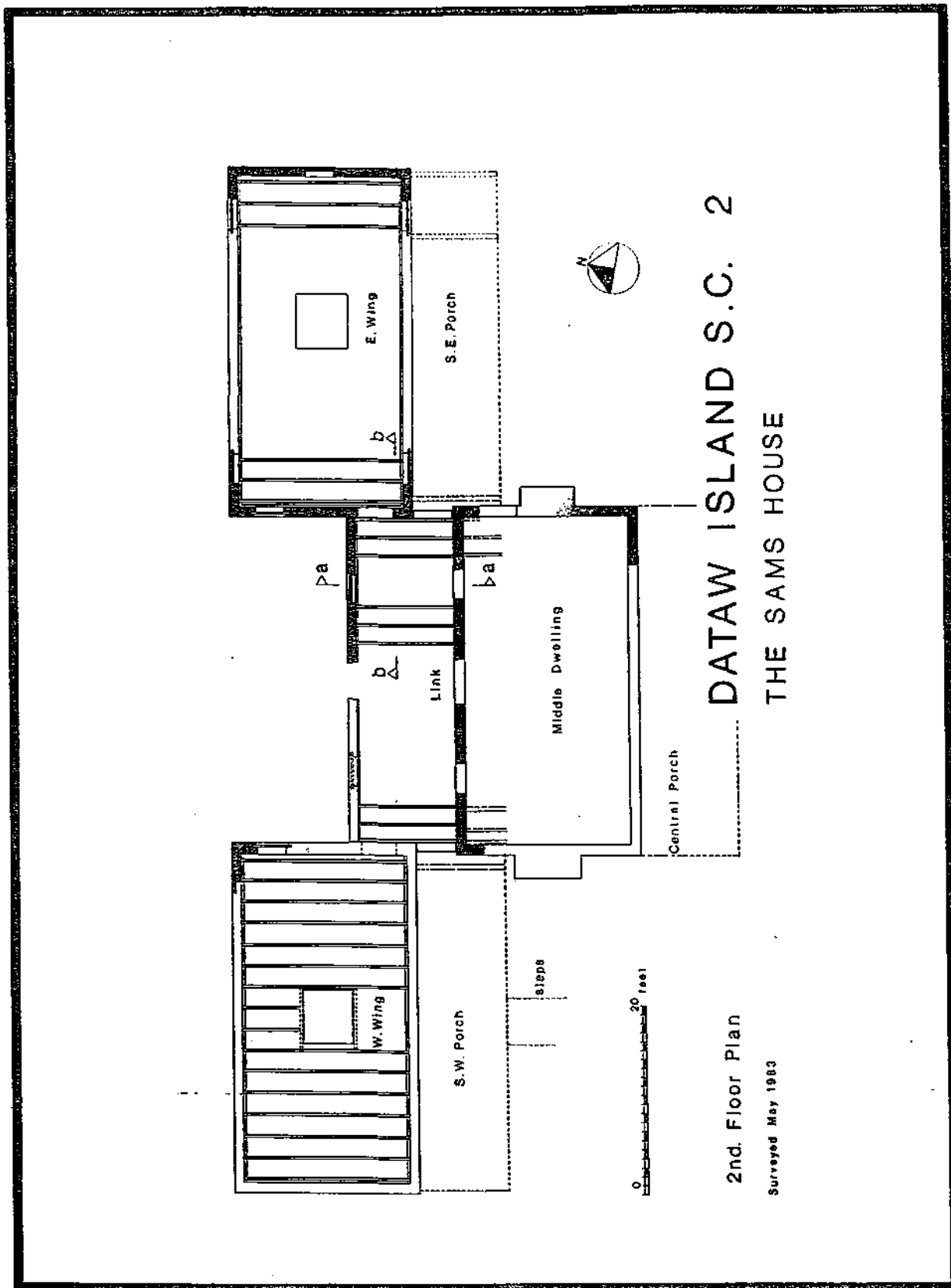


Figure 50. Second Floor Plan of the Sams Main House. Structural Timbers and Porch Lines Partially Restored Based on Archaeological Evidence.

Wing's west outer wall at second floor level, one (to the north) a window, the other (to the south) a door (3 ft 11 in wide by 9 ft high) which once communicated with link and porch areas (Figures 39 and 47).

### **South-West Porch**

Along the West Wing's south front, excavation (UNITS WP 1-4) revealed tabby point foundations belonging to six piers numbered (starting from the most west WP I- WP VI on Figure 44). Defining a porch, all foundations gave evidence of having been cast without formwork into more or less rectangular pits 5 in - 10 in deep in order to establish a porch width of about 9 ft 9 in. Sizes varied, WP II measuring 3 ft east/west by 1 ft 8 in north/south; WP III, 2 ft 9 in east/west by 1 ft 11 in north/south and WP IV 2 ft 6 in east/west by 1 ft 10 in north/south; WP V, 2 ft 8 in east/west by 1 ft 10 in north/south. Two other foundation elements discovered (WP I, WP II) proved badly eroded but the remainder retained on top surfaces either brick impressions or brick fragments. These show piers supporting upper porch construction were (except for WP VI) cruciform in plan.

Central piers (WP III; WP IV) appeared larger and less widely spaced than the rest, each measuring a maximum 2 ft 2 in east/west by 2 ft 6 in north/south, distanced (measuring from center lines) 6 ft apart. Between center lines of WP IV and WP V the interval increased to 7 ft 6 in, reducing to 7 ft 2 in between WP V and WP VI. Built against the Middle dwelling's west facade surviving elements of WP VI included an irregular tabby foundation and the lowest brick course of a "T" shaped pier measuring at maximum 1 ft 3 in east/west by 1 ft 8 in east/west.

South of the two central piers (WP III; WP IV) excavation (UNITS WP 6-9) uncovered eroded tabby foundations which the Sams Residence Painting shows supported steps giving access to the wing's principal (i.e., second) floor. Paired rectangular bases distanced 4 feet apart on center presumably carried two posts which received the strings. Lime mortar strip foundations linked post foundations with the two central porch piers, giving a rectangular shape measuring (overall) 5 ft 1 in east/west by 9 ft 2 in north/south. Little more than compacted areas of shell lime mortar one or two inches thick it is difficult to understand what purpose these features served, unless they supported lattice brick or timber framed infills beneath a timber stairway. Immediately south, shell lime mortar applied in thin slurries directly over top soil suggested an approach pathway.

### **South-East Porch**

South-East Porch foundation elements excavated (UNITS EP 1; 4-6) had suffered heavy damage. Nevertheless enough fabric emerged to attest six piers (designated EP I- EP VI) arranged (Figure 43) like those of the South-West Porch. Tabby bases, while retaining similar intervals between center lines, were larger than their south-western counterparts (EP II measuring approximately 3 ft east/west by 1 ft 8 in north/south; EP III, 3 ft 9 in east/west by 2 ft north/south; EP IV, 3 ft 5 in east/west by 2 ft north/south; EP V, 2 ft 2 in east/west by 2 ft north/south). Adjacent to the Middle House a "T" shaped brick pier built upon an

irregular tabby foundation (10 in deep) was found (EP I), the pier preserving its original stucco finish. At the porch's western extremity, EP VI had almost disappeared, an "L" shaped tabby foundation measuring about 3 ft 1 in east/west by 2 ft 9.5 in north/south representing the feature.

UNIT EP 8 produced no evidence of exterior steps centered on the West Wing's short (i.e., north/south) axis. Two additional tabby bases were discovered located beyond the building's south-eastern extremity (UNITS EP 7 & ?). To the north EP VIII measured approximately 2 ft 2 in east/west by 2 ft 2 in north/south. South, the second, "L" shaped base (EP VII) measured 2 ft 11 in east/west by 2 ft 7 in north/south. Neither feature gave any sign of associated construction. Therefore, although it seems certain each carried a brick pier or timber post, how lost elements related to the porch remains unclear. EP VII breaks the line established by adjacent piers (i.e., EP I-EP VI) which may mean that the porch terminated at its far end in an external staircase, EP VII and EP VIII having supported a landing. Yet, if such conjecture explains why central steps matching those of the Southeast Porch were not found, it contradicts the Sams Residence Painting's illustration of symmetrical "piazzas" fronting both Wings reached via identical staircases.

Two beam sockets (9¼ inches by 6¼ inches) evidence upper porch construction. These supported joists which in turn supported floor boards, Tuscan Doric columns receiving loads from (according to the Sams Residence Painting) the mono-pitched porch roof. Surviving fragments indicate columns were fabricated using radial bricks set in thick mortar, details being applied in stucco, a technique seen at the Barnwell Gough, House (c. 1780), Beaufort (Figure 45).

## Construction

Pour lines, formwork impressions and sockets left by lost timbers allow reconstruction of methods used in erection of East and West Wings. The building process demanded exact timing, integration of several different trades and constant supervision. Construction sequences appear as follows:

1. Trenches were first excavated to establish the final rectangular building shapes. Careful work using a compass or other instrument minimized any inaccuracy in "setting out".
2. Casting began, a continuous tabby strip foundations approximately 2 ft deep by 1 ft 6 in wide being poured either into the trenches or between timber boards lining them.
3. After sufficient interval, 2 ft high wall forms (made up from horizontal timbers distanced 1 ft 2 in apart by rectangular wooden "pins" spaced about 6 ft apart were placed on top of the tabby footing and casting resumed.
4. When the semi-liquid tabby mix had dried but before it had fully cured, formboards were struck, reassembled, repositioned and filled at the next higher level. Operations

continued until three building "rounds" had been completed. Prefabricated window frames (about 5 in wide), door surrounds cast in place to line flush against facades and timber lintels (2.5 in deep by 9 in wide above windows) positioned on internal building faces, carried imposed loads over openings (Figure 49).

5. Timber plates (measuring 6.5 in by 2.25 in) were next maneuvered along internal north and south building faces of the West Wing. These rested upon external walls, (1 ft 2 in wide and about 6 ft high at this stage) resulting from the third tabby round. In the East Wing, timber wall plates (measuring 5.25 in by 2.64 in) seem to have been introduced during the third "round" rather than as a separate operation.
6. Installation of floor joists (3 in - 3.5 in wide by 10.2 in or 1 ft 0.5 in deep if notched over wall plates) followed, timbers distanced 2 ft 3 in - 2 ft 5.64 in on center and spanning north/ south, bearing at their extremities upon the wall plates (Figures 47 and 51).
7. All external walls were now capped. Tabby strips, 1 ft wide by 1 ft high, cast along north and south elevations secured wall plates and joist ends.
8. Concurrently south porches and central chimney construction started. The latter constituted massive tabby bases, (the east feature measuring 6 ft by 6 ft; the western one 6 ft 1 in east/west by 5 ft north/south) cast solid to second floor level using simple box-like forms without horizontal ties. Above, flue construction continued upwards in fired brick.
9. Once second floor joists were set and porch elements (including brick piers, and timber beams) had reached the same height, work could commence on upper story construction. Reduced to 1 ft in width, upper wall "rounds" duplicated lower pours, the final (i.e., topmost) operation producing another 1 ft high tabby cap. Formwork was positioned so as to maintain flush outer building faces, the difference between upper and lower wall thickness resulting in internal ledges at second floor level.
10. On inner wall faces, three 1.75 in horizontal timber fixing strips were cast into position (presumably to receive finishes, Figure 49), installation of prefabricated window frames, external door surrounds and lintels taking place as necessary. Windows of the East Wing's west room required extra tall openings, extending about 9 ft 6 in above the second floor level. Surmounted (on internal wall faces) by 4.5 in deep pine lintels, these housed timber frames 7 ft high by 3 ft 7 in wide (set flush with facades) resting upon 2 ft 1 in - 2 ft 6 in high spandrel panels made of tabby brick laid in single wythes 4.5 in - 5 in wide. Elsewhere second floor fenestration treatment was similar except that while lintels kept constant levels, tabby openings were made less tall, standardized window frames, i.e., 7 ft high by 3 ft 7 in wide, resting upon tabby brick spandrels 10 in - 1 ft 2 in high.

For information concerning subsequent roofing operations we must return to the Sams Residence Painting (Figure 39). Enclosing each Wing, hipped roof frames and shingled finishes are illustrated. Nothing survives, but shapes and pitches portrayed are

logical and need not be doubted. The same artist gives East and West "houses" dormer windows matching those of the Middle building. These imply garret spaces over main living areas and access stairs rising out of a second floor space. As preserved, relevant joist sequences neither confirm nor deny the arrangement however, James Julius Sams makes no mention of attics here leaving open questions about the painting's reliability on this point. Simple shed roofs are illustrated enclosing south porches.

Most internal finishes have disappeared. James Julius Sams states the "drawing room" (i.e., upper west room of the East Wing) was "both in regard to painting and panelling ...more finished" than any other room, an observation perhaps explaining the special window treatment described. Nailing strips suggest the East Wing's adjoining east chamber if not fully panelled, possessed timber wainscoats and chair rails, the rails positioned about 3 ft 7 in above floor level.

The West Wing yielded fragments of grey and white marble fireplace surrounds. Several thin (1 in - 1.5 in thick) slips seem represented, measuring, as preserved (i) 4.33 in by 4 ft 2 in; (ii) 4.44 in by 1 ft 7 in (broken); (iii) 6.5 in by 1 ft 7 in (broken). Two possible marble hearth stone fragments measure (a) 1 ft 3 in wide by 1 ft 1 in long by 1.5 in - 1.8 in thick; b) 1 ft 1.2 in by 1 ft 2 in by 1.5 in - 1.8 in ft thick. Another marble fragment 4.5 in wide, 1 ft 6 in long, tapered .84 in - .48 in section is perhaps related.

Exterior wall faces still display their original stucco coatings. Two coat shell lime mortar scored (when damp) simulated stone blocks 1 ft high by 1 ft 11.5 in - 2 ft 1 in long (Figure 48). Higher construction levels must have required scaffolding. Lepionka (Field Notes, dated 22 May 1984) interprets "large postholes" found in West Wing UNITS 1; 2 and 6 as possible scaffold supports. West Wing UNIT I also yielded a large trefoil ended strap hinge (2 ft 6.75 in long, Figure 50, #3) perhaps derived from a second or first floor external door. Figure 50 illustrates another (1 ft 2 in long) strap hinge with a rounded end (#2) and iron door lock (#5) excavated from the same general area (exact Unit provenience not known).

## THE LINK

### Scope of Excavation

Lepionka divided the link block (his so called "Central Hall") into four units. West, two units (CH3 and CH4) exposed an eroded tabby floor. East, instability of adjacent tabby walls caused UNITS CH1 and CH2 to be left unexcavated. Nine further units are reported in an area designated "The Atrium," i.e., a forecourt fronting the Link block's north entrance. Excavation explored construction associated with what James Julius Sams calls "the north steps".

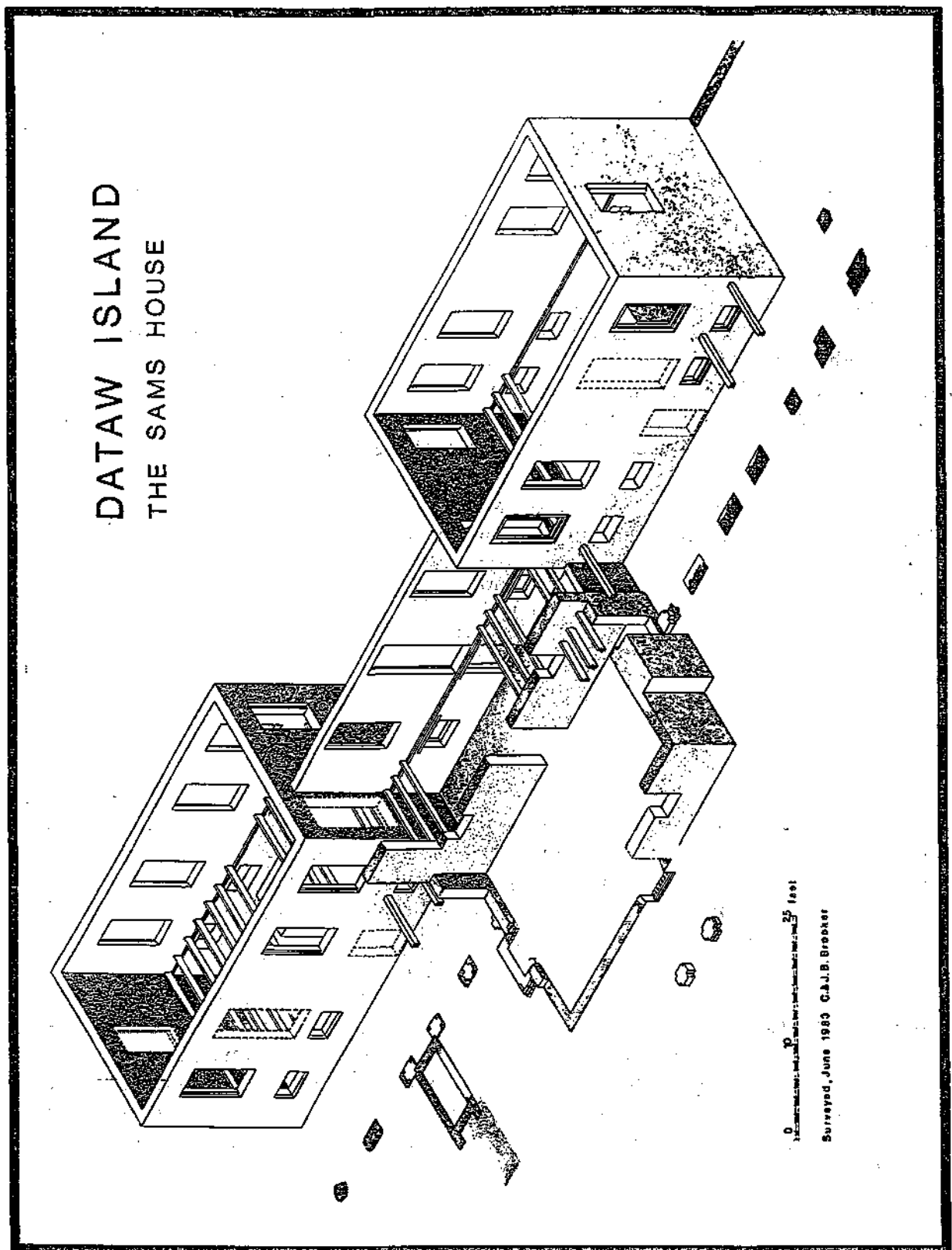


Figure 51. Isometric View of the Sams House From the South. Lost Framing Timbers and Wall Sections Partially Restored Based on Structural and Archaeological Evidence.

## General Description

Connecting East and West Wings, Link spaces are among the residence's most original components. Besides lending dignity to landward approaches, they facilitated circulation and masked awkward structural junctions. Seen from the north, enclosed areas created a two story screen-like block (about 17 ft 3 in high excluding roof construction) set back to produce an open entrance court (measuring 13 ft 3 in north/south by 35 ft 9.5 in east/west) between East and West "Houses".

Paired lateral staircases (described below) projected into the court, taking visitors to an upper doorway where the passage linking new and old buildings was entered. At ground level, another similar door (5 ft 6 in high by 3 ft 10.5 in wide at maximum) gave into a narrow space (35 ft 10 in long by 10 ft 8 in wide) lighted by two north facing window openings (each 2 ft 7.5 in high by 3 ft 4.5 in wide spanned by 4 in deep timber lintels with 9 in - 10 in end bearings) positioned either side of the central entrance.

Inside, beneath wall falls, Lepionka (UNITS CH 3 and CH4) exposed an eroded tabby floor (depth and full extent undetermined) which allows headroom of the lower area to be calculated at 6 ft or (if second floor joists were 8.5 in deep) 5 ft 9 in. Poorly ventilated the area can have served few functions other than storage. At second floor level, the three bay facade arrangement was repeated, upper window openings measuring 6 ft 8.5 in high by perhaps 3 ft wide (Figure 52, Section b-b).

## Construction

North facade construction followed conventions established during prior erection of the two Wings with respect to formwork height, wall width, plate level and second floor joist seating (Figure 52, Section b-b). Exterior doorways are unusual (though not unique, see details of the Edwards House, Spring Island described in Brooker 1990:136-37) both upper and lower entrances being accommodated within one tall rebated opening divided by an 8 in timber lintel exposed on the link's outer face.

South, link spaces were bounded by the Middle building's north elevation which underwent modification, new second floor joists (2.5 in - 3 in wide by 6.5 in or 9 in deep if housed over the north wall plate, spaced 2 ft - 2 ft 1 in on center) bearing onto crude sockets hacked into the old wall's external face (Figure 52, Section a-a where floor joists are restored as 6.5 in deep members). Tabby partitions (10 in wide) cast without formwork joining adjacent corners of the Wings and Middle House completed the lower Link area's enclosure.



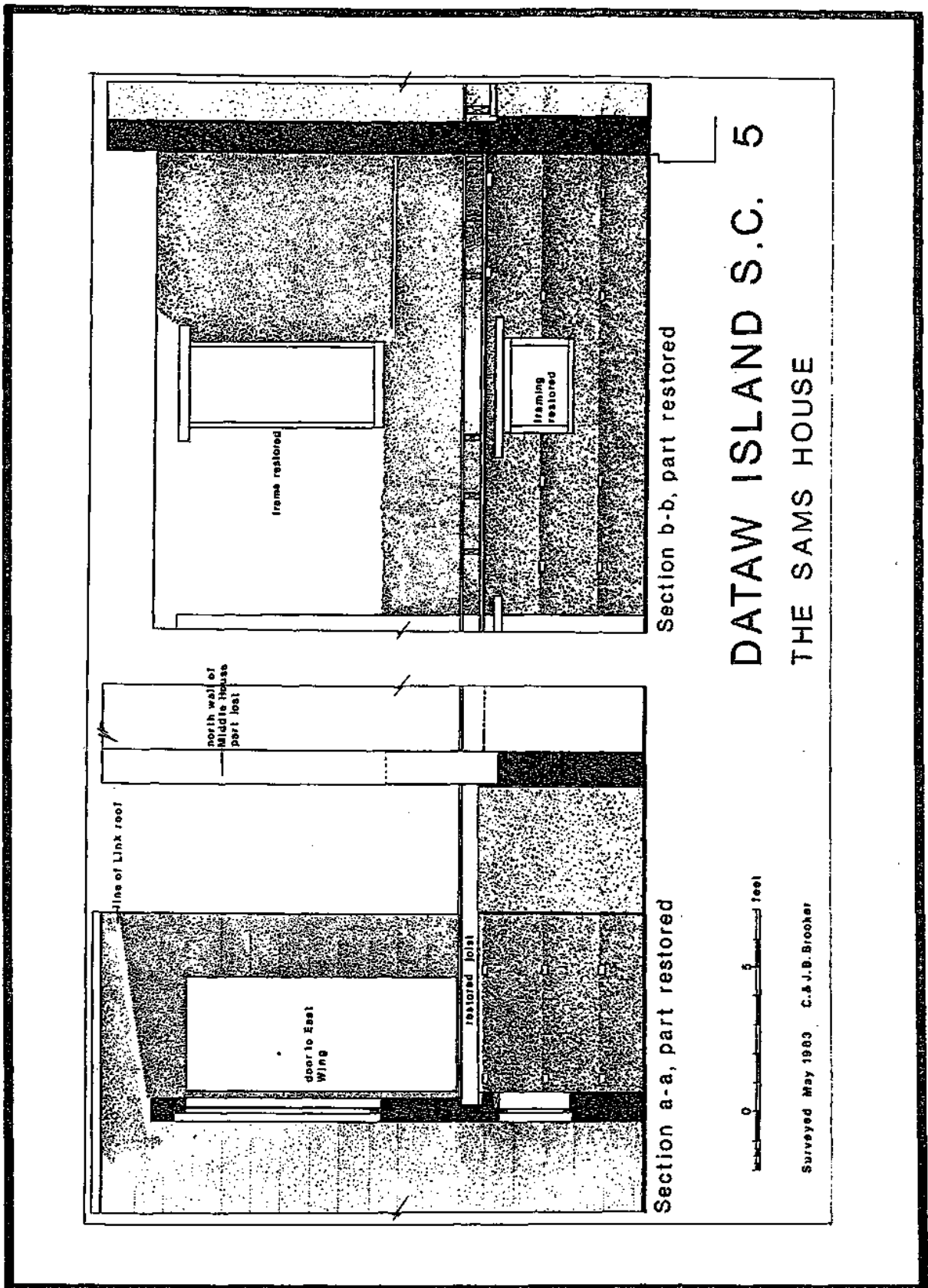


Figure 52. Section of the Main Sams House Through Link Block and Middle House.



Figure 53. Link Block of the Main Sams House Showing impression of Tabby Roof Construction.

Roof installation required additional adjustment of existing structural elements. Whether or not work included the Middle dwellings's extra story (see above) is uncertain. Impressions (Figure 53) show a shed roof, pitched near 10 degrees covered Link areas, rafters spanning between new and old building.

Scored stucco external wall finishes, followed simulated ashlar patterns established on East and West Wing facades. Interior wall surfaces were probably plastered, there being no visible evidence of wainscoats or panelling at either upper or lower floor levels.

### North Steps

Until recently, "ghost" lines attested steps rising out of the central courtyard against the Link block's north facade. Now almost effaced, in 1983 these indicated two lateral flights aligned east/west leading up to a central landing positioned above the lower, north entrance door (Figure 48). James Julius Sams (nd.:5) confirms that "the large [upper] passage opened to the north upon...brick steps" but offers no explanation for features excavated to the north-west where UNIT A 6-7, exposed a mortar pad foundation, measuring 1 ft 11.5 in north/south by 3 ft 8.5 in east/west and an almost intact 1 ft 2 in diameter Tuscan column base fabricated in stucco over a radial brick core (Figure 54).

Preserved features suggest double story porch construction fronted the link block, however, this interpretation cannot be sustained since potential bearing areas of the link's north facade show no evidence of joist or beam sockets. Moreover, other than fragmented brick and mortar, tests (UNIT A 10) towards the northeast failed to reveal an unambiguous second foundation pad matching NP1 assumed on the basis of symmetry. Therefore, while it seems certain that the north steps were somewhat monumental in appearance and probably featured brick piers or columns, their exact form remains conjectural.

## ARCHITECTURAL AFFINITIES AND TEMPORAL ATTRIBUTION

Given that the Sams House evolved over the course of at least two major construction phases, no precise architectural parallel for its final form can be expected. Nevertheless, two late eighteenth/early nineteenth century ruined plantation residences located overlooking tributaries of the Broad River: the Edwards House, Spring Island (Beaufort County) and White Hall near Grahamville (Jasper County) offer close similarities. Like the Dataw house both structures feature large scale tabby construction; both underwent extensive expansion, and, as the result of additions, both came to exhibit tripartite plans. Formal resemblances are so close they indicate a common model inspired the expanded Dataw, Spring Island and White Hall buildings, respective owners perhaps exchanging architectural ideas. The design process involved is best reconstructed by comparing the three houses in some detail.

Thus, at Spring Island, a late eighteenth century tabby-built, double or 2 1/2 story dwelling constituted the nucleus of the Edwards house (see description above). During the

early nineteenth century, George Edwards added two double height flanking wings; paired screen walls linking the old dwelling to new accommodation. Along the composition's river front, a "U" shaped porch was introduced, which enclosed three sides of an entrance court between lateral wing faces (Figure 55).

Wings were symmetrical, each measuring 22 ft 3 in by 25 ft 4 in, their facades organized about pairs of upper and lower windows, interrupted on one elevation by central entrances which gave onto the "U" shaped porch. Neither wing seems divided in plan nor to incorporate a staircase, single spaces (accommodating service functions below and heated living quarters above) being approached from the original house or new riverside entrance court via outside steps and open porch areas.

When exactly later building activity got under way on Spring Island is uncertain. I have proposed (Brooker 1990:139) enlargement began soon after George Edwards married Elizabeth Barksdale in 1801, Daniel Bythewood's manuscript "Chart of the Bars, Sounds of Port Royal and St. Helena" dated 1812 (National Archives RG 77, I-4, sheet 3 reproduced Trinkley 1990:33; figure ) perhaps illustrating the finished scheme. Archaeological evidence adds weight to the argument, Trinkley (1990:167) suggesting extension of the first Edwards House may have taken place "as early as 1810."

Located near Old House Creek, White Hall is distanced less than 10 miles from Spring Island. Circumstances surrounding construction of this unexcavated plantation's main residence are obscure. It appears the present structure (Figure 56) replaces Daniel Heyward's "Old House" destroyed by British forces raiding Port Royal Sound in 1779. Post-Revolutionary construction, attributable to Daniel's spendthrift son, Judge Thomas Heyward Jr. (who, as one of South Carolina's delegates to the Continental Congress signed the Declaration of Independence), saw erection of a brick dwelling with end chimneys (measuring 44 ft east/west by 35 ft 3 in north/south) two or perhaps even three stories high (Historic Resources of the Low Country, 1979:172-73). Subsequent building operations south-east and south-west added paired two story high tabby wings (each measuring 33 ft 9 in east/west by 26 7 in ft north/south), an open courtyard being created on the building's river (i.e., south) side. One corner of each wing touched a corresponding corner of the central brick house, an entrance porch designed to link new and old construction perhaps extending across the court.

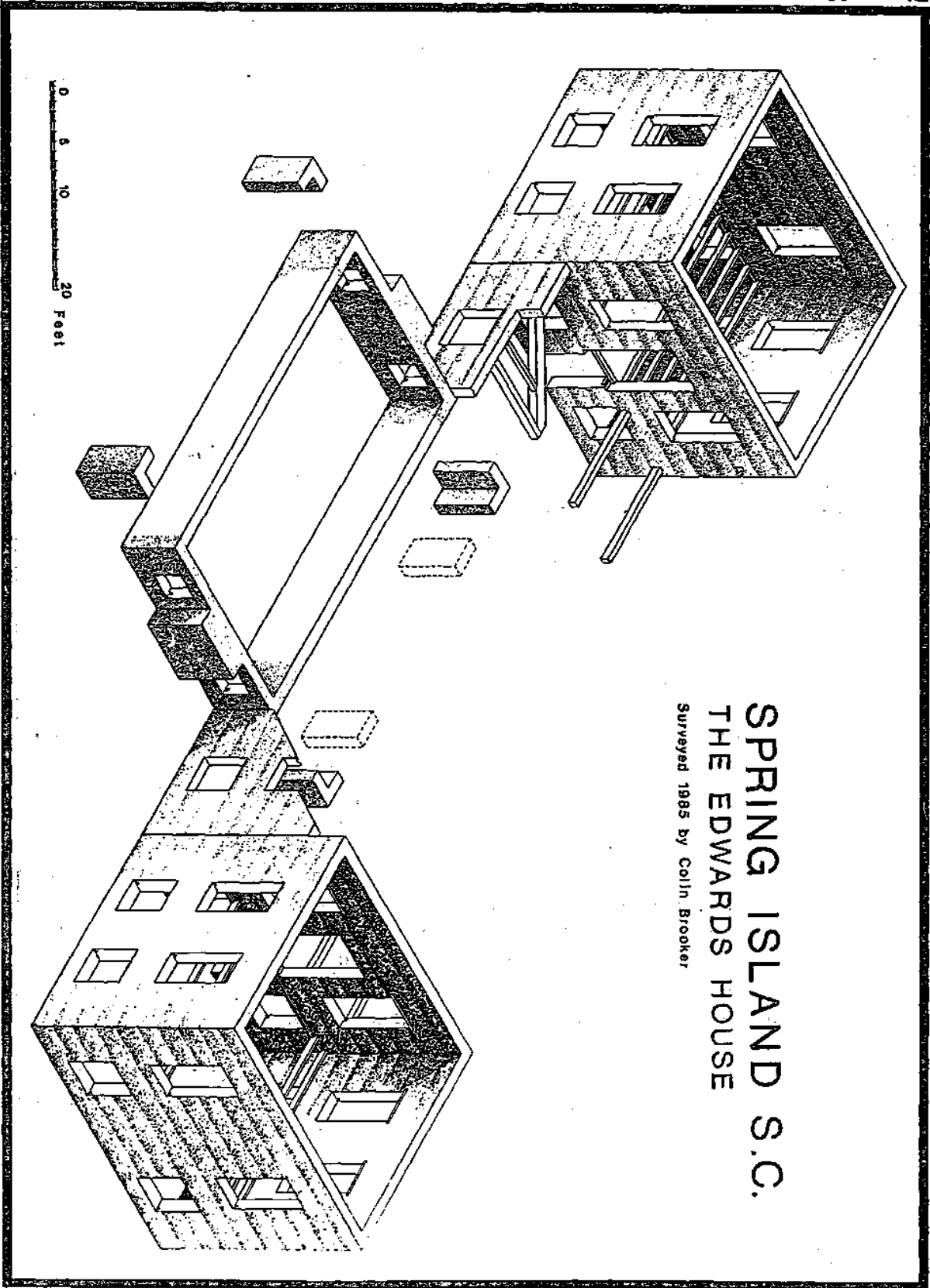
Nothing is known about the central block's elevational treatment. Wings preserve lower door and window openings. These show south facades were organized into three bays, two openings only punctuating lower north elevations. The West Wing's far end elevation can be reconstructed, old photographs (Pratt Memorial Library Collection, Ridgeland, South Carolina) and preserved wall fragments indicating a door (4 ft 8 in wide) and window (3 ft 10 in wide by an unknown height) at the lower level. Two large symmetrical windows lighted main spaces above.

Taken together, White Hall, the Edwards House, Spring Island and the Sams House on Dataw Island show how three different owners when extending an existing building, adopted very similar solutions. In part tabby construction dictated the various plans adopted.



Figure 54. A 1983 Photograph Showing the Column Base Excavated From the Main House North Entrance Area.

Figure 55. A Restored Isometric View of the Edwards House, Spring Island, S.C.



SPRING ISLAND S.C.  
THE EDWARDS HOUSE  
Surveyed 1985 by Colin Brooker

Structural continuity demanded external skins erected without vertical breaks, a condition which ensured the independence or near independence of new living and storage accommodation. Space divided into two main building units allowed floor, and more important, roof spans to be minimized thereby reducing the size of principal timber members (see discussion, Chapter X below). Two smaller wings rather than one large structure made erection of formwork less difficult besides easing the race against time imposed by tabby's short "set up" periods.

Aesthetic and climatic factors played complementary roles. As Stoney (1964:44-45) observes, after the American Revolution we find the emergence of definite regional "schools of planning" in the South Carolina and (I should add), Georgia Low Countries. Over the period 1780-1825 new architectural vocabularies developed among coastal plantations. Traditional planning formulae were modified, circulation areas expanded and internal spaces opened to surrounding landscapes. Eclectic at some levels and frankly practical at others, certain plantation houses with their exaggerated proportions, broken silhouettes, expansive porches or fragmented floor plans can seem eccentric, the anchor-shaped, Bellevue, Camden County, Georgia, being perhaps the most extreme case. Built upon surplus capital made in cotton, rice or mercantile enterprises these structures mark another revolution. Received concepts of architectural hierarchy, domestic comfort and space underwent revision. Settings changed too as ideas concerning rural "improvement" and the "picturesque" circulated among Low Country planters, better slave housing, standardized slave rows and informal landscape gardens (see Chapter X) becoming typical components of what Olmsted (1856:412) called "show place" plantations.

The Santee Delta; Combahee Basin; Broad River Estuary, and Sea Islands developed distinctive examples of non-traditional plantation houses after 1785, houses which occupied that territory Brunskill (1971:26-28) defines as the "threshold" between polite and vernacular architecture. Local materials were "used as a matter of course" (Brunskill 1971:26) timber framing along the Santee and Combahee Rivers; tabby on the southern islands; tabby and brick at White Hall.

We see a clear progression towards linear and tripartite forms. Rebuilt on an elongated, rectilinear single-pile plan before 1790, Hampton Plantation, Georgetown County represents one end of the spectrum, its remarkable barn-like weather boarded front enlivened only by an overscaled and well detailed Tuscan Doric porch.

Compared to double pile dwellings of the through or central hall variety, El Dorado on the Santee (1797) before its destruction, presented a more radical solution giving "better spaces for windows and the cross ventilation so necessary for comfort in the Low Country" (Stoney 1964:44-45). The formula adopted seems based upon Palladian models though no single pattern book or academic source furnishes an exact counterpart. Thomas Pinckney, the plantation's owner, combined familiar and original elements. Local Late Georgian architectural conventions were broken, his scheme substituting loose organization and vigorous articulation (Leiding 1921) for the flat facades and contained massing seen at say Drayton Hall, Charleston (built 1738-42).



Figure 56. Photograph of White Hall Plantation (c. 1935) Showing the Ruins of the Main House and West Flanker.



Such design processes are well known to art historians. Kubler (1978:78,404), borrowing Adolf Goldschmidt's term "form splitting" (Formenspaltungen) in his descriptions of related phenomena. Hubka (1986:430) describes the concept:

Folk designers solve design problems by relying on past precedent, but it is inaccurate to say that they merely copy...It is more accurate to say they generate design ideas by disassembling or decomposing existing forms and composing new forms out of the abstracted ideas of bits and pieces of existing [ones].

"Formsplitting" is a process of renovation whereby the successors of any given artistic inheritance unconsciously obey a rule of least effort as they "unwittingly salvage large parts of a tradition without having to discard everything or reinvent everything". The results can "seem irregular, puzzling and bewildering," the phenomenon being often seen, "in distant and peripheral setting where, the transmission of metropolitan fashions occurs with deformations and recombinations..." (Kubler 1985:408,78).

A reconstructed plan of El Dorado (Albert Simons Collection, South Carolina Historical Society, Charleston; reproduced Stoney, 1964:73) shows how the process translated. Three linked double height building masses are ordered about an open "U" shaped court. Rectangular flank blocks enclose unusual corridor areas which open into the building's central block and a porch fronting it on one side. Sketches (Ware 1902, plates 18 and 19) show the dwelling's mixed elements; the nearly correct Tuscan columns and entablature of the north entrance were based upon academic sources, the simple timber cladding and raised main floor conformed to local vernacular norms. Massing gave rich and varied expression, the north elevation projecting (Figure 57) as a series of superimposed planes; the south front (Figure 58) capturing a rectangle of space out of which rose an entrance stair. Chimney stacks added counterpoint, bringing vertical notes to the otherwise horizontal composition.

George Edwards probably saw this house soon after it was built. His first wife and cousin, Elizabeth Barksdale owned Ferry Plantation on the Santee, a circumstance which may well explain obvious conceptual similarities between El Dorado, the enlarged Edwards House on Spring Island and White Hall. If El Dorado, served as the model George Edwards through another process of plan disassociation, abstraction and re-assembly, took the design further. Internal corridors were replaced by open porches; the building masses separated and then linked by tabby screen walls (Figure 55).

The last detail re-interpreted favorite Palladian devices. Two small, square tabby flankers also recall Palladian prototypes, their function, beyond practical utility being to extend the composition along the Broad River. Associated landscape developments included a garden enclosure interposed between house and estuary (an arrangement repeated at White Hall). Consciously or unconsciously Palladio's precept was exemplified:

if one can build on a river it will be very convenient and beautiful because one can carry the produce at any time at small cost into the city...as well as bringing coolness in the summer and making a more beautiful view, and one

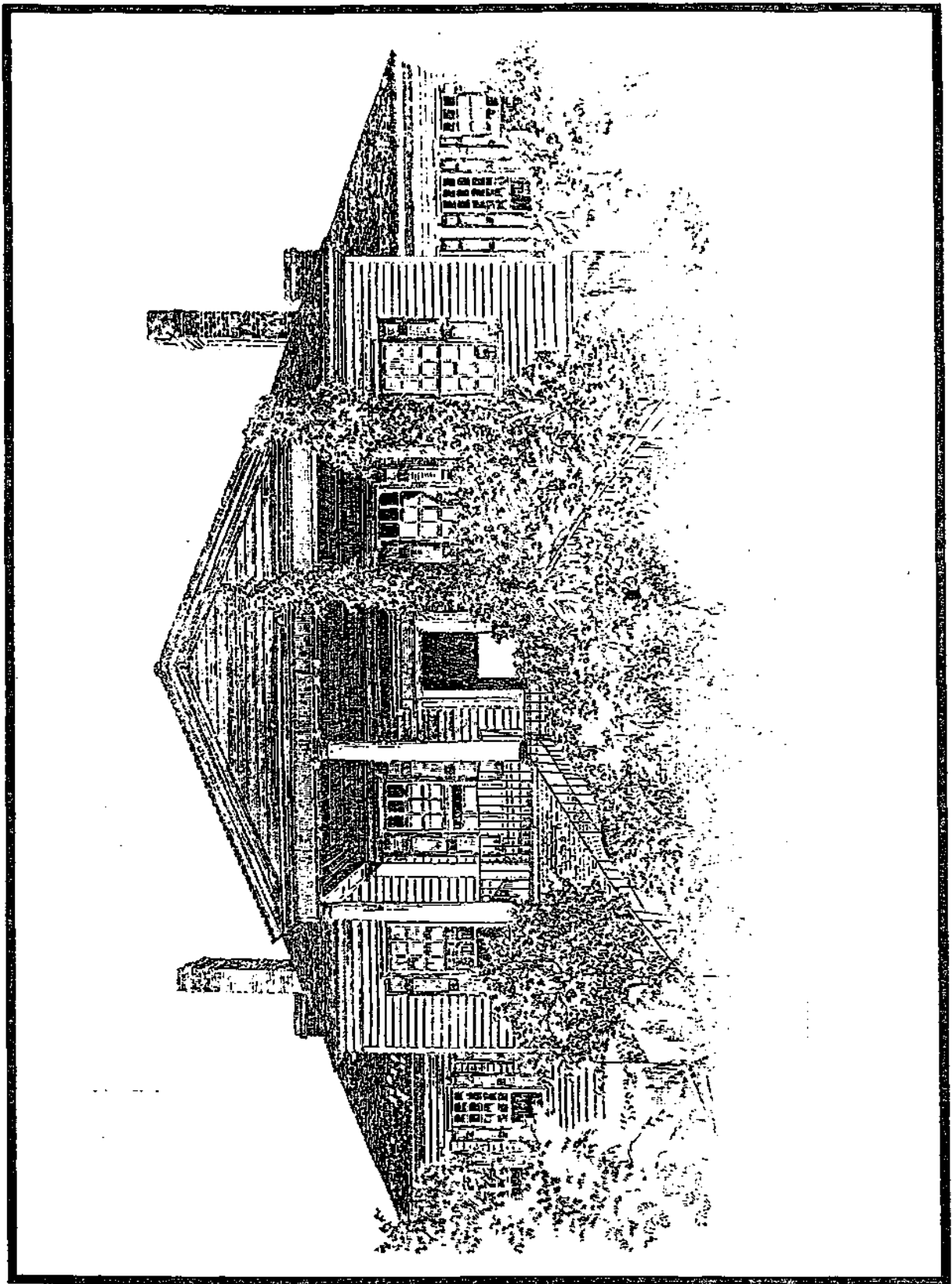


Figure 57. View of the North Front of El Dorado, South Santee River, South Carolina (c.1902).

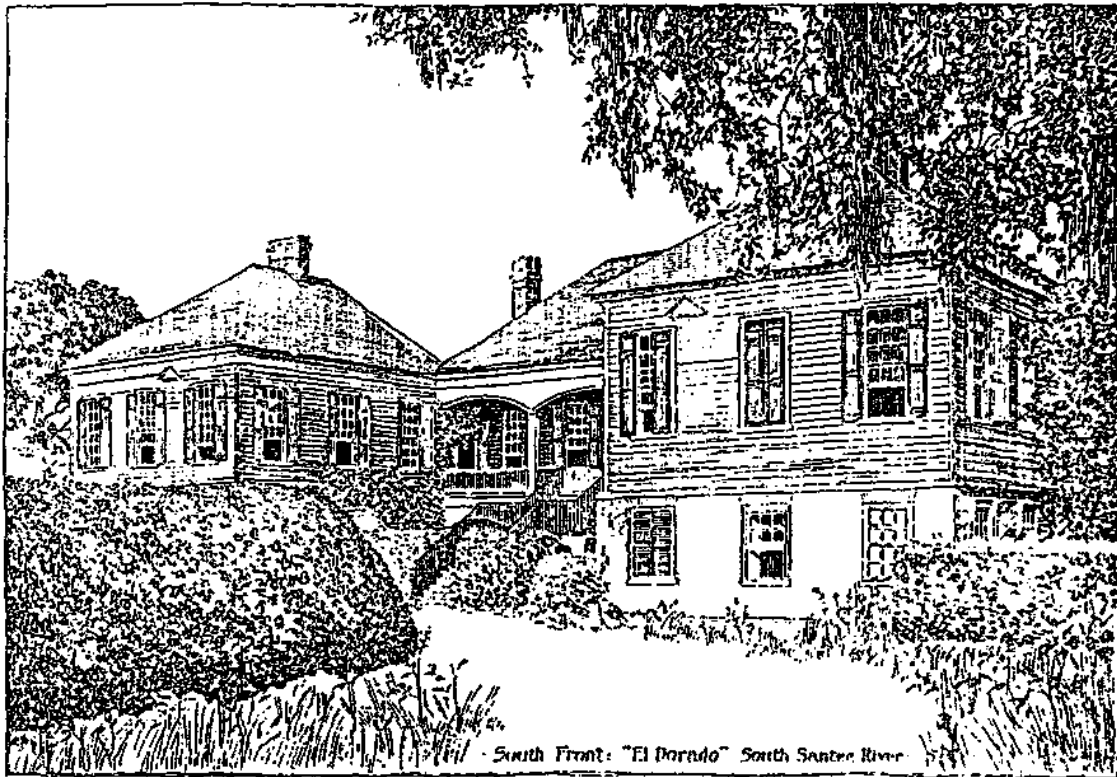


Figure 58. View of the South Front of the El Dorado, South Santee River, South Carolina (c.1902)

can irrigate the possessions and the gardens and the orchards which are the soul and recreation of the villa (Palladio, 1581, I Quattro Libri II:45).

At the Sams House, similar structural and landscape elements are re-assembled. Some have undergone simplification (the "Old" riverside garden described below); some have been transposed, an open entrance court appearing on the building's land instead of river front. Wing alignment and size is closer to the White Hall than Spring Island scheme, but the latter's external circulation system of porches surfaces again, now with an even more marked linear emphasis. Spring Island's tabby screen wall arrangement is repeated complete with through joints at structural junctions and windows suggesting habitable rooms instead of, in reality, narrow corridors behind the facade.

Minor construction differences argue against an identical work force moving from Spring to Dataw Island. However, related layouts, plans, external circulation routes and screen walls show alterations to the Sams and Edwards houses cannot be far distanced in time.

Lepionka (1988:112-113) believes additions to the Sams Middle house "fall between 1813 and 1830, with a date in the 1820's...probable". The hypothesis is founded upon twentieth century transcripts of lost or inaccessible original conveyances, relevant family wills and comments made by James Julius Sams. Despite the latter's selective testimony, his unequivocal statement that Berners Barnwell Sams undertook the work (Sams nd.:4) is difficult to dispute although one might question if James Julius saw construction in progress, the "Memoir" giving the sense that East and West Wings predated the author's birth in 1826.

Lepionka (1988:112-113) further observes Wing and Link construction "was not likely prior to 1813, when Berners Barnwell Sams obtained undisputed title to the property and was of sufficient age to have the necessary experience for such construction". Assuming the Edwards House was built before 1812, enlargement of the Sams House some time between 1813 and 1820 is probable on stylistic grounds.

Ceramic analysis tends to bear out the assumption, Brockington and Associates, Inc. obtaining a mean occupation date (using South's formula) of 1816.328 for the West Wing and 1820.340 for the East Wing. The difference between the two figures is surprising since structural and evidence leaves no doubt that both Wings were erected as part of the same program, neither structure being capable of functioning in isolation. But assuming different sample sizes have colored the results, a mean occupation date somewhere between 1816 and 1820 becomes reasonable.

One other related house should be mentioned which if contemporary might have influenced the Dataw Island scheme. This is Rosehill-on-the-Combahee, a lost tripartite plantation residence only documented by an undated early nineteenth century painting (Charleston Museum, Charleston). Probably built under Gibbes family ownership, the timber framed building appears a free and imaginative essay in emergent Federal style. Berners Barnwell Sams would have known it through his Gibbes and Heyward cousins (successive owners of the property), though perhaps not very well or not early enough to

emulate since no direct quotation occurs. Still, the chance survival of Rosehill-on-the-Combahee's image does show kinship played significant roles in diffusing innovative planning ideas across a specific region besides emphasizing how substantial building loss has distorted our knowledge of the same region's plantation architecture.

# CHAPTER IX

## OUTBUILDINGS

### INTRODUCTION

Bishir (1990:149) observes:

Whether on a coastal plantation or a Piedmont farmstead, the house was only one part of the complex of domestic and agricultural life. However large or small...the dwelling stood among a cluster of outbuildings. In contrast to European and English farmsteads that often collected many different functions under one roof, farmers and planters throughout the South erected numerous small buildings, each with its own specific purpose.

This pattern is well attested at Site 38BU581 where an association of pre-Civil War outbuildings clustered around the Sams residence has attracted attention since the early 1930s. But despite sketches, photographs and commentary produced by different observers (Graydon 1963; Dabbs c. 1983; Floyd mss. notes 1934; Georgia Historical Society Savannah, Lepionka 1988) no single modern account published or unpublished, adequately describes the full diversity of buildings represented. Late nineteenth century sources also contain deficiencies. The "Memoir" of James Julius Sams is inconsistent. Several structures are ignored. Others mentioned ("the caretakers house"; "dairy" and "blade house") cannot be matched conclusively against surviving ruins. Again, the undated Sams Map is perplexing. Fewer dependencies are shown than those visible today and no single example carries an identification.

Based upon preliminary archaeological reports, Excavation Field Notes (dated 1983-87); measured drawing and manuscript sources, Chapter IX therefore attempts a synthesis. All Site 39BU581's known outbuildings are considered or re-considered. Information about lost components is evaluated and landscape features (orchards, tracks, roadways, fences etc.) noted insofar as available evidence allows.

Lepionka's building designations as employed for field notes and preliminary reports can cause confusion. Several architectural elements are identified by their supposed function, others according to location, i.e., "structure behind the kitchen;" the "D" building group, while one structure is called both "the blade house" and "the dairy". Rather than perpetuating what has become an unworkable and misleading system I have assigned all outbuildings new numerical references. Figure 40 locates the subjects discussed.

## **PART 1. THE PLANTATION YARD AND RELATED OUTBUILDINGS (STRUCTURES I-VII).**

### **INTRODUCTION**

During 1983 the archaeological team made an unexpected discovery. Extending eastwards, excavation disclosed a 1 ft wide tabby strip foundation built in line with the north facade of the East Wing. On further investigation this feature proved continuous, making right angled turns to define an expansive, south facing rectangular yard (measuring about 122 ft north/south by 233 ft east/west) surrounding the Main House on three sides (Figure 40). Along eastern and southern boundaries, foundations formed an irregular series of rectangular bays. Subsequent tests proved these supported four small, ancillary buildings (Lepionka 1988:114) here designated Structures IV-VI. West, trenches showed the foundation strip running north/south took off from an ill defined building (Structure III), located in the enclosure's southwest corner; intersected Structure I, continued northwards and then turned east to line with the West Wing's north facade.

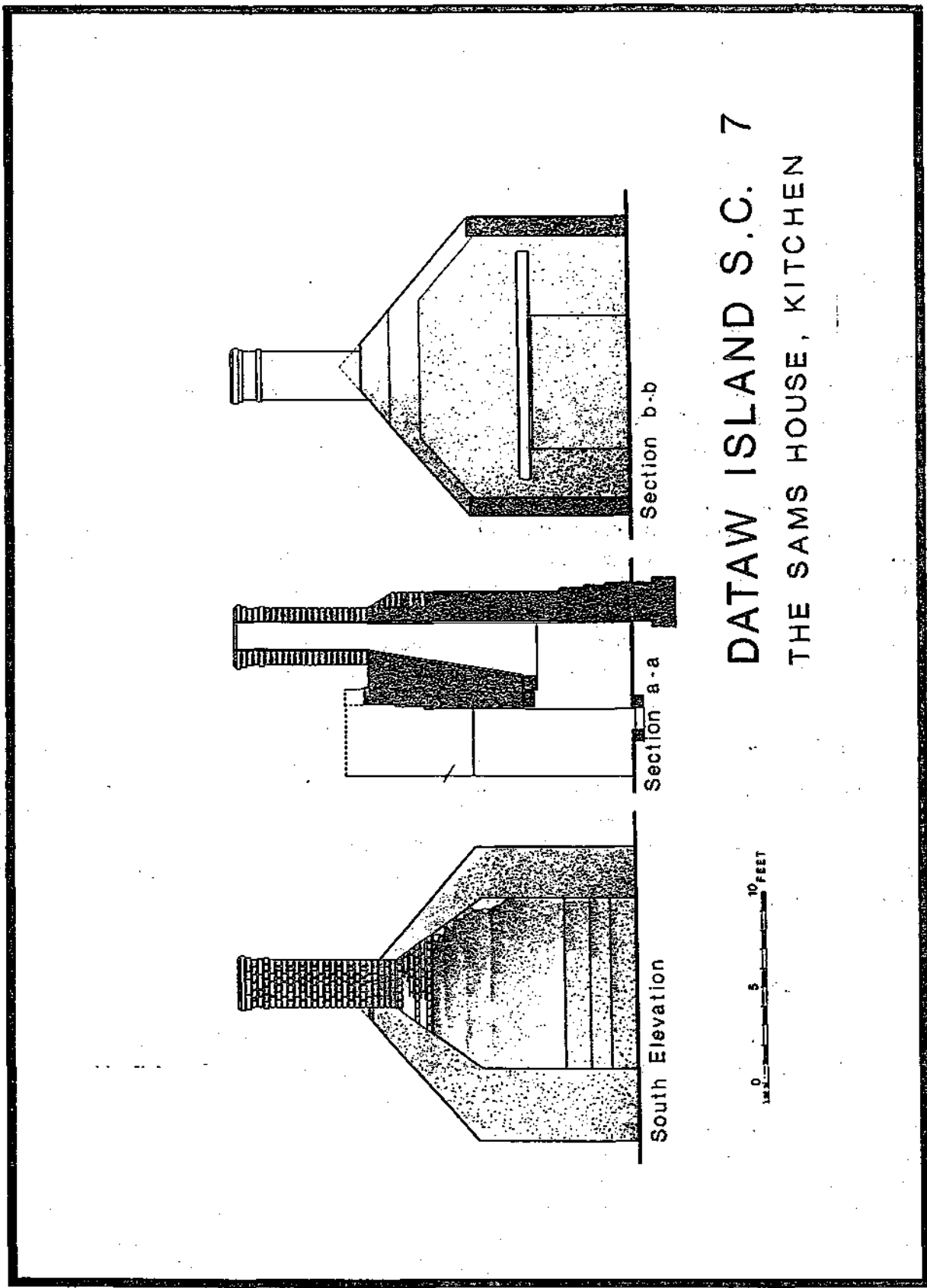
Except when interrupted by buildings, Lepionka (1988:114; personal communication, 1992) observed foundation strips were "pierced with postholes for fence uprights...spaced [at] approximate 10 ft intervals". He also noted "a 5 foot wide gap...opposite...the central house" perhaps marking the position of an entrance gate which opened towards an area identified by the Sams Map (Figure 5) as "Big Landing".

Linked or enclosed by the fence were at least seven structures. These are described below, description starting with the largest and best preserved, Structure I, then considering more fragmentary elements of the layout part backfilled after excavation.

### **STRUCTURE I**

Located south-west of the Main House on the Yard's western perimeter, Structure I is represented by standing elements preserved to their full original height and cut down tabby foundations. Although ruined, enough survives to demonstrate that the building was rectangular with its long axis aligned north/south; incorporated 1 ft wide tabby exterior walls and an external chimney positioned somewhat off center against the gabled south facade. Overall, excluding chimney construction, Structure I measured 15 ft 8 in east/west by 22 ft 6 in north/south.

Figure 59 shows the building's south end, still conspicuous since it stands almost intact thanks to massive chimney base construction. Projecting 5 ft 1 in - 5 ft 4 in, the chimney base measures 9 ft 1 in east/west at ground level, and is of a set-back, shouldered form, the tabby shoulders rising as stepped courses rendered smooth with lime mortar. Tabby brick facings form a zone of transition between the base and stack. Stack construction (rising 20 ft 6 in above present grade) utilises tabby brick (repaired, 1983) laid up in English (common) bond; a string course and corbelled cap flanché with shell lime mortar adding distinction to the silhouette. Operational arrangements are more easily seen



DATAW ISLAND S.C. 7  
 THE SAMS HOUSE, KITCHEN

Figure 59. Structure I, The Sams House Kitchen South Elevation and Sections.



than described. Figure 52, Section a-a depicts the 4 ft 10.5 in deep by 6 ft 7 in wide hearth recess; angled gather and 11 in by 1 ft 3.5 in throat.

Sockets preserve dimensions of two parallel timber lintels (reconstructed, 1983) supporting tabby construction over the large (6 ft 7 in wide by about 5 ft 8 in high) fireplace opening. The original outer member was approximately 11 ft 7 in long by 10 in wide by 6 in deep and exposed on one side (Figure 52, Section b-b). Bedded at both ends into surrounding tabby, the original 9 ft wide by 8 in deep inner lintel measured about 8 ft 3 in in length.

Fronting the fireplace, excavation (UNITS K1 A1; K3 W A & B; K3E A & B) exposed tabby strips (7 in wide by 6 in deep) constructed to make three sides of a rectangle measuring (overall) 8 ft 6 in east/west by 2 ft 3.5 in north/south. Another tabby strip (9 in wide by 6 in deep) cast across the firebox opening closed the form. These features perhaps contained an outer hearth fabricated using lime mortar or oyster shell plaster.

Excepting the south facade, little can be determined about elevational treatment. As mentioned, the surviving south external wall is gabled, and it follows the opposite (i.e., north) end was similar. Fractured stubs preserved against the south facade show east and west external tabby side walls maintained a constant 1 ft width up to eaves level but neither windows or doorways piercing these elevations are known. Roof members have disappeared, "ghost" impressions on the south facade's internal face suggesting a timber roof frame pitched near 35 degrees, incorporating 9 in or 10 in deep paired rafters tied perhaps by horizontal collars.

All internal finishes are lost. Inside the building Lepionka (Field Notes, UNIT K 1) reports a thick (1 ft 6 in deep) layer (his Level C) of ash or decayed tabby containing "glass, ceramics, a few nails and charcoal". In UNIT K2, Level C was represented by "alternating lenses of brown sand and ash". Neither note mentions flooring materials. Window glass was recovered from UNITS K1 and K22 suggesting glazed fenestration rather than openings closed by means of timber shutters.

## STRUCTURES II

Excavation Field Notes (dated 18-19 June 1984) record a small rectangular structure located immediately south of Structure I measuring "on the outside" 7 ft east/west by 6 ft north/south. Enclosed by tabby walls of unspecified width cast in two twelve inch high pours, Structure II's interior was found on initial excavation "filled with tabby rubble and fallen plaster in a circular pattern"...capped by sand". Continued excavation exposed an irregular tabby feature with "curved surfaces" and roughly oval form resembling a cistern or vat. "A thick lime layer" was discovered at the base level of the second tabby wall pour. Beneath the lime level, occurred tabby rubble which concealed a second lime layer. This overlay "fine sand with a finely ground charcoal layer beneath". A "prehistoric shell heap" was "found in the burn layer".

### STRUCTURE III

Little is understood about Structure III, situated at the fenced enclosure's south-west corner. Eroded and discontinuous tabby foundations evidence a rectangular plan measuring 17 ft north/south by perhaps 20 ft east/west. Some indications exist for an external chimney on the west elevation but excavation Field Notes (dated 26 October n.y.) provide no details. Mention is made of a tabby floor exposed along the building's south (interior?) face.

### STRUCTURES IV-VI (LEPIONKA'S STRUCTURES D1-D3)

Tabby foundations of the Yard's west side extend eastwards to enclose three rectangular structures arranged in a row (Figure 40). Buildings so outlined are now almost lost above grade. Lepionka (1983; 1987) determined each was aligned with its long axis orientated north/south and incorporated an end chimney of splayed plan form centered on the north facade. Of identical typology these buildings differed in overall area and chimney base dimension.

The group's northern component, Structure IV, measured 23 ft 8 in north/south by about 12 ft east/west excluding the chimney. Chimney foundations projected about 4 ft 2 in off the north facade and were approximately 9 ft wide on the opening (i.e., south) side.

Separated by an interval of approximately 29 ft, Structure V (which occupied an intermediate position between Structures IV and VI measured (again exclusive of the chimney base) 18 ft 2½ in north/south by 11 feet 11½ east/west. Here chimney foundations projected 2 ft 9 in off the north building face and had a maximum width of perhaps 7 ft.

Structure VI, the group's southernmost component (distanced from structure V by 20 ft 8 in), measured 18 ft 2 in north/south by 12 ft east/west. The chimney foundation projection was 2 ft 9 in and maximum chimney base width about 7 ft 6 in.

Knowledge of further architectural detail is slight. To summarise, all tabby wall foundations measured 8 - 9 in in width. All three structures had brick paved hearths at or near grade. Structure IV shows chimney construction was founded upon 6 inch wide tabby strips cast to give the splayed ground plan described. Excavation Field Notes (dated 25-26 October 1983) refer to a "shell floor" in Structure V. No photographs or drawings corroborate the statement which is contradicted elsewhere (Lepionka field notes undated, unpaginated post-excavation comments where he writes "there is no living floor as such"). Structure IV produced a carbonised timber member (4 in wide) bedded on the east side of its chimney base just above hearth level.

Regarding above-ground construction Lepionka (personal communication, 1992) considers excavation produced no evidence suggesting the foundations described supported either tabby or logs, an observation leading him to conclude Structures IV-VI were timber framed. Recent inspection (1992) challenges the view since Structure V still preserves 0.67-

9 in wide tabby external wall fragments rising about 2 ft above hearth level, a condition showing at least one (and most likely all) of the group's components was tabby walled.

Archaeological Field Notes (dated 25-26 October 1983, n.p.) state that artifacts recovered from Structure IV-VI probably represent a "secondary deposition of household garbage". It is impossible to check whether or not this interpretation is valid because excavation records contain minimal information about the stratigraphy encountered and lack appropriate site drawings.

#### **STRUCTURE VII (LEPIONKA'S STRUCTURE D-4)**

Along the Yard's south side near its southeastern corner (Figure 40) tabby strip foundations (approximately 10.5 in - 1 ft wide) turn outwards (i.e., towards Jenkin's Creek) and outline a rectangular structure now lost above ground level, measuring (overall) 30 ft 6 in east/west by 13 ft 5 in north/south. Excavation produced quantities of occupational debris from the structure's interior, but furnished no evidence for a chimney, internal division or any other architectural feature. Nails were scarce, Field Notes (dated 9 February 1987) stating "a considerable amount of oyster shell" and "some conch" found in UNIT 1, indicated "food refuse rather than building material".

One further feature deserves notice. On north and south sides foundations continue the line of the Yard. In plan, this arrangement produces an embayment between Structure VII and Structure VI open to the north and apparently fenced to the south. What purpose was served by extending the enclosure southwards here cannot be said unless the embayment marks the position of an otherwise unattested entrance gate.

#### **THE FENCED YARD. AUTHORSHIP, DEVELOPMENT AND AFFINITIES**

Who laid out the plantation Yard at Site 38BU581 is an uncomplicated question. While no source provides an exact date, fence foundations extending north elevation lines of East and West Wings show yard enclosure must have taken place at a time either coincident with or subsequent to enlargement of the Middle "House". Assuming Barnwell Sams built East and West Wings (see Chapter VIII above), then the same owner, who held half of Dataw Island down until Emancipation, must have conceived a related landscape scheme incorporating (as will be seen) slave dwellings. If trustworthy (Lepionka's excavation log raising serious doubts about artefact provenience) ceramic evidence narrows temporal issues, giving a mean occupation date of 1829.7 for Structures IV - VII, structures built on tabby foundation cast in one continuous operation with those of the enclosure.

~~Fenced enclosures designed to exclude livestock and separate the owner's personal domain often occur located about South-Eastern plantation residences.~~ An early nineteenth century painting (Charleston Museum Collection, Charleston) of Rosehill-on-the-Combahee, Colleton County (reproduced, Brooker 1990:140 figure ) illustrates a local ~~timber post-and-rail fenced~~ yard containing several small outbuildings centered upon the main dwelling's rear facade. Beshir (1990:149-151) cites Fairntosh Plantation, Durham County,

N.C. where surviving outbuildings "arranged in two neat rows around the house" were enclosed inside a wooden fence c.1814.

Emily P. Burke's "Reminiscences of Georgia [1840-41]" (Oberlin 1850:quoted Lane, 1975:134) allows reconstruction of activities which might be located within a plantation owner's personal ambit:

There was a paling enclosing all the buildings belonging to the family and all the house servants. In the center stood the principal house. In this the father and the family and all the females lived. The next house was occupied by the steward of the plantation and where all the white boys belonging to the family had their sleeping apartments. The next after this was a school house. Then a cook, the washer woman and the milkmaid had each their several houses. There was the kitchen, storehouse, corn house, stable, hen coop, the hound's kennel, the shed for the corn mill, all these were separate buildings within the same enclosure. The huts of the field servants formed another little cluster of dwellings at considerable distance from the master's residence.

~~Data's fenced enclosure, probably excluded domestic animals, chickens and horses being accommodated slightly north or northeast of the Main House~~ (see Part 2 below). Food preparation was another matter, since there can be no doubt Structure I's massive chimney and modest floor area indicate a freestanding kitchen, (opening on one side at least into the Yard) serving the Main Sams residence, an identification first proposed by Marmeduke Floyd in 1934 (Georgia Historical Society, Savannah, M.H. & D.B. Floyd Collection #1308, Folder 128; cf. Lepionka 1988:114).

Old Beaufort District preserves very few freestanding kitchens, the disappearance of this once familiar building type reflecting combustible building materials and changes in household management introduced soon after the Civil War. Among documented local examples two distinct plan forms are represented.

At White Hall, near Grahamville, S.C., kitchen and slave quarters (c. 1825?) were combined under a single roof in one of two double story tabby outbuildings flanking the main house. Cooking and food preparation organized about a central chimney occupied the lower floor. Residential spaces above were reached via external steps and porches. The formula was well tried, Lane (43) citing similar Palladian derived designs (i.e., the Kitchen) Tyron Palace, New Bern, North Carolina, disseminated through works of James Gibbs, i.e., Plate 63, Book of Architecture, London 1728, Robert Morris (Plate 11, Select Architecture, London 1757) or Isaac Ware (Plates 54,55 Complete Body of Architecture, London 1756). Innovations at White Hall included tabby construction, porches and an external staircase.

Owners of Rosehill-on-the-Combahee (another Heyward holding) disregarded published models. The single story detached kitchen, identifiable by its large end chimney in the Charleston Museum painting appears a simple, timber framed structure despite the residence's fashionable pretensions.

On Dataw Island, practicality and local precedent rather than any academic source likewise governed kitchen design even if the enlarged Sams House recalls Palladian massing and volumetric principals. Structure I comprised one undivided, ground level room. There is no evidence of a loft or second floor living space. Impressions (south facade, internal elevation, Figure 59) suggest roof timbers were installed without any ceiling, thus leaving the roof frame open to view. Neither stylish nor considered a key landscape element, Structure I promised permanence, tabby construction reducing chances of the building's loss by fire. Against this factor weighed several disadvantages. Solid walls retained and radiated warmth, Thomas Spalding (Sapelo Island, Georgia) finding tabby an ideal material for his sugar boiling shed where a hot, steam filled enclosed, atmosphere was required (Crook and O'Grady 1980). On Dataw, the formwork required in chimney erection was cumbersome and allowed little structural refinement. Tabby also calcined and spalled under intense, direct heat, a fact evidenced by heavy erosion on internal firebox faces. Still, cast materials achieved mass at almost half the cost of fired brick, cheap, home produced tabby brick allowing exactitude when building the stack.

While it seems most unlikely that Structure I's tabby wall construction was a unique departure, I cannot cite comparable single-story kitchens. The tabby chimney base is similar in size and form to that of Structure D, Haig Point, Daufuskie Island, South Carolina a timber framed communal kitchen or infirmary, dated c. 1826-33 (Brooker 1989:222,223). Adjacent tabby slave houses of the same period (Haig Point Structures E-G, Brooker 1989:215-220) preserve similar tabby brick chimney facings and stacks.

Site 38BU581's massive chimney base and wide, timber spanned hearth recall mid or late eighteenth century brick examples derived via European medieval and post-medieval prototypes (cf. Cummings 1979:118-125). A simple chimney cap indicates erection nearer the eighteenth century's end than beginning or an early nineteenth century date. Unfortunately, tabby construction provides no certain temporal indicator. Visible tabby is unique, lift heights being variable and tie impressions absent or unrecognizable.

Considering archaeological results, ceramic analysis (see Chapter IV) yields a mean occupation date of 1816. Transfer printed wares attest the Kitchen functioned down until Emancipation and possibly saw occasional use into the late nineteenth century. Cream wares are well represented and a surprising diversity of stonewares were found, suggesting Structure I may have been erected sometime during the third or fourth quarter of the eighteenth century.

Structure II and Structure III were perhaps related in function, but it is impossible to be sure about the nature of these two ill preserved buildings. Structure III's probable fireplace may indicate residential use in which case we may be dealing with a cook's house. Structure II suggests processing though of what kind I cannot say.

Along the Yard's opposite (east) side, poor structural preservation also hinders interpretation of Structures IV-VI. Lepionka (personal communication, 1992) speculates the group was destroyed for the sake of its materials before 1900. If it happened, late nineteenth century demolition cannot have been complete, Marmeduke Floyd who visited Site 38BU581, 18 November 1934 (ms. sketch plan, Georgia Historical Society, M.H.& D.B.

Floyd Collection #1308, Folder 128) mentioning "a service house" then visible southeast of the main Sams residence situated "like [the] Kitchen [to the] southwest". Floyd, whose observations are reliable, gives no additional information except an almost illegible note including the word "quarters," i.e., slave houses (Adams 1990:63).

Assuming his note about "quarters" refers to the buildings under discussion, Floyd's identification is confirmed by what little architectural evidence was recovered during excavation. Structures IV-VI exhibit distinctive typologies. Small buildings with end chimneys ordered in rows are among the most common local late eighteenth/early nineteenth century single family slave house forms. Far less typical is a row containing only three single structures of unequal area spaced at unequal intervals.

Proximity to the Main House, suggests this small association of dwellings distanced from known slave settlements at Site 38BU507 accommodated household servants or other individuals whose activities demanded close attendance upon the owner (cf. Vlach 1993:21-24) a "cook, washer woman and...milkmaid" all being candidates if the plantation Emily P. Burke described was typical. Excavated artifacts (assuming these are associated and not the result of indiscriminate dumping), corroborate the occupant's slave status, analysis yielding a high percentage (78 per cent) of South's "kitchen" category (see Chapter IV), ceramics characterising slave occupation elsewhere. Among total ceramics collected 40 per cent represent transfer printed white wares, a high count of relatively expensive items (cf. the South Slave Settlement Daufuskie Island, reported in Trinkley 1989: 162-167). This is probably one further indication the building group housing individuals who enjoyed privileged positions within the plantation's workforce, special skills or tasks performed in the "big house" giving access to goods discarded by the Sams Family.

James Julius Sams mentions neither the slave occupants concerned nor the activities they pursued. Indeed, he is silent about all three dwellings, his lack of comment reflecting a more general bias evident throughout the "Memoir" which masks slavery under silence, euphemism or childish anecdote. Pertinent references stress the owner's benevolence. "I do not think there was another body of negroes in the whole district more orderly or well cared for, physically and religiously," James Julius (Sams n.d.:4) remarks. Of daily slave routines he tells us almost nothing except "at [one] time...there were two settlements on the island" (Sams n.d.:2).

Structures IV-VI demonstrate the Memoir's dubious reliability when social topics are addressed. On Daufuskie Island, Haig Point's contemporary (c. 1827) tabby walled domestic slave houses were larger than Dataw examples, providing floor areas of 308 square feet as opposed to floor areas ranging between 172.25 square feet (Structures V-VI) and 258.6 square feet (Structure IV) at Site 38BU581. On Spring Island and at Thomas Heyward's White Hall Plantation (Figure 56) the concept of better than average domestic slave living conditions was taken further. Both sites preserve substantial, double story tabby tenement buildings divided into four single room slave apartments. Individual units had separate entrances and unlike most single family slave "cabins," were well lighted by glazed, double-hung windows. Spatial allocation was less generous, the Spring Island units (built before 1813?) each having a habitable floor area only slightly greater than Structure IV (262.5 sq ft as opposed to 258.6 sq ft).

Heyward domestics kept company among themselves and had little traffic with field hands (Genovese 1974:329). Perhaps the situation was different on Dataw, James Julius Sams (n.d.:3) recording "the negroes were continually passing from one [settlement] to the other after night fall," which may mean certain house slaves lived well beyond the owner's call. Remarks by Fogel and Engerman (n.d.:39) reinforce this view. They calculate about 7.4 per cent of a large plantation's slave population filled "semi-skilled and domestic or quasi-domestic jobs". Another 11.9 per cent followed skilled occupations. If the Sams plantation conformed to Fogel and Engerman's norms; a population of one hundred slaves is assumed and Structures IV-VI each accomodated five persons, then the building group was large enough for most domestic workers when East and West Wings stood complete (assuming adults and their children found employment in the "big house") although too small to accommodate all skilled craftsmen.

Of course, the conclusion is speculative since we can determine neither Dataw Island's slave numbers or occupations. Only aggregate population figures are known, the U.S. Census listing Berners Barnwell Sams owning 88 slaves in 1820; 124 slaves in 1830 and 140 slaves in 1840, a proportion of whom may have worked other plantations or his Beaufort property.

Occupational questions aside, two additional points should be made about Structures IV-VI. First, tabby strip foundations continuous with those supporting the enclosure's fence confirm all three buildings constitute part of a larger design executed during one construction epsisode. Different dwellings sizes are not therefore the product of shifting economic or social perceptions, but reflect conditions operating over (according to somewhat suspect ceramic evidence) the late 1820s.

Second, If these structures were organised about dual entrances centered about their long elevations (as usual, see tabby walled slave houses, Haig Point Plantation, Daufuskie Island already cited), then each opened west into the fenced Yard and east into an unenclosed area where the diagramatic Sams Sketch Map shows a road or track leading south towards "Little Landing". The arrangement could mean inhabitants pursued activities generated at "Little Landing" and activities generated in the "big house". Alternatively, the road perhaps gave domestic slaves access to garden plots, settlements and outbuildings located beyond the Yard. Either way the point worth making is that Structures IV-VI probably occupied an intermediate zone located neither wholly within nor entirely outside the owner's residential area. The same was perhaps true of Structure VII. Lacking further information concerning this building one can only speculate its proximity to Structures IV-VI or "Little Landing" may be significant, Structure VII, perhaps representing an unheated storage shed, commissarry or work area.

One structure remains wholly enigmatic. Sams (n.d.:21) mentions "the old brick oven...in the yard" which if a seperate feature and not contained within the Kitchen (Structure I) has left no trace.

## DEVELOPMENT

The Sams House Yard was organized around several related yet distinct activities. Food preparation took place near the West Wing and Middle House. Spaced along the opposite (i.e., the east side) small dwellings attest a specialized work force engaged in household duties and perhaps skilled tasks related to the plantation owner's domestic comfort. Southeast, one structure located inside the Yard's perimeter fence may have been connected with a boat landing, called "Little Landing" on the Sams Map (Figure 5), where offloading and loading of goods probably took place.

Less clear are historic and aesthetic determinants of the Yard's shape and character. Considering historic factors first. Unlike Rosehill-on-the-Combahee's analogous enclosure, the Sams Yard was not centered on the Main House (Figure 40). Instead, the relationship between residence and enclosure is asymmetric. Since Berners Sams controlled planning decisions over the period which witnessed the old Middle dwelling enlarged and new Yard installed, such an arrangement cannot be accidental. It seems the designer had something other than a balanced composition in mind, allowing symmetry to govern (or almost govern) his extended residence and less abstract considerations to determine the dependent enclosure's extent.

Several reasons for the dichotomy suggest themselves. First, Berners Barwell Sams, who his son John Julius reports (Sams n.d.:4) was "very practical," perhaps thought landscapes based upon strict formality inconsequential, old fashioned even, an interpretation given weight by the Sams Map which shows the Sams House lacked long, oak lined, axial approach avenues resembling those dominating Spring Island (Brooker 1990:147) and White Hall (Jasper County) layouts.

Or, we might suppose pre-existing structures, paths or roadways influenced the Yard's extent. Structure I (the Kitchen) is a possible early building incorporated into the new layout, although not a certain one. I believe architectural and archaeological evidence points towards, but does not prove, Structure I being either related to construction of the Old Middle House or rebuilt by Berners Barwell on (or near) the site of an earlier kitchen. In either case we can speculate the Yard's west side was pre-determined, Berners Barwell Sams using a fence to mark off an already established work area and bring it into association with his enlarged house.

A similar process perhaps governed Yard development to the east. The Sams Map (Figure 5) shows a road or track linking interior areas of Dataw Island bounded the enclosure's east side. How old, well used or important the route may have been when the yard was conceived is not known. It is clear Bernard Barwell Sams erected a small group of buildings around the route's southern terminus, loading or offloading activity at "Little Landing" demanding perhaps erection of barriers between the roadway and Main House.

Structure VII located near the enclosure's southeast corner is puzzling. Ceramic analysis yields a mean occupation date of 1813, suggesting it stood occupied nearly two decades before adjacent slave dwellings were erected, i.e., Structures IV-VI. However, I cannot detect any evidence indicating a structural break between this building, slave houses



or foundations defining the fenced enclosure. Therefore, if some possibility exists that an already extant Structure VII determined the enclosure's southern boundary, the possibility remains vague.

Although speculative, an interpretation which postulates Yard layout evolving from practical constraints imposed by Site 38BU581's prior occupational history explains the early nineteenth century enclosure's lack of symmetry and clustered outbuilding arrangements. But is the explanation complete, assigning as it does Yard design to processes dominated wholly by functional considerations and prior planning decisions? Or, to pose the question another way, should the layout be seen as lacking studied aesthetic or intellectual content?

Literature circulating after c. 1750, aimed first towards British farmers and landowners seeking better productivity, provides a contrary answer. Advocating "improvement," through land reform, new agricultural or construction methods, rationalised farm plans, an awakened appreciation of rustic virtues and sensitivity to worker's living conditions the genre has not often been considered in the context of southeastern farming practice and plantation management.

Nevertheless stray remarks of American planters, i.e., Thomas Spalding of Sapelo Island Georgia (1830:621) show the idea of "improvement" expounded by such influential late eighteenth century commentators as Nathaniel Kent, penetrated into the Georgia/South Carolina Low Country via individuals who had undertaken European travels or read European books and journals.

Kent's Hints to Gentlemen of Landed Property (London 1775,1776; expanded editions 1793,1799) for example recommended "skill and frugality" in construction of farm buildings, landowners being advised:

firstly not to build anything that was not really usefull; secondly to build upon a small compact scale as much as possible in squares or parallelograms; thirdly to build at all times substantially with good materials." (Robinson 1983:30-31)

Late eighteenth/early nineteenth century British layouts based upon these recommendations were not original, John Webb having produced unexecuted designs featuring a courtyard incorporating sheds, stables barns and an owners house c. 1650. From c. 1750 though, similar plans became a sure sign of the "improving" landowner, pattern books current on both sides of the Atlantic providing numerous models showing quadrangular steadings. Among other advantages, they allowed close supervision of agricultural or farmhouse related activities. Rectangular plantation yards adapted the same concepts, their wide distribution (cf. North Carolina, Georgia and South Carolina examples cited above) showing that passage of the form into vernacular currency was complete among southeastern planters before 1830.

In planning his long, narrow, fenced enclosure, Berners Barnwell Sams may have looked no further than properties belonging to his Gibbes and Heyward kinsman (i.e., Rosehill-on-the-Combahee), for inspiration. What distinguishes the Dataw scheme, and

brings us very near Nathaniel Kent's ideals, is the manner of its execution. Three factors merit attention.

First, the scale of buildings was kept small, functions being grouped in separate structures rather than large, symmetrical edifices. Second, tabby (a material James Julius Sams notes his father preferred), offered the advantage of substantial building at low cost, qualities which fostered experimentation with related 'pise' fabrics by numerous contemporary British landowners (Chapter X below). Third, utilitarian rather than bookish or academic models dictated the choice of outbuilding typology and style.

In this last respect Bernard Barnwell Sams shared attitudes articulated as late as 1850 by the American commentator Lewis F. Allen who re-iterated ideas which had guided many British landowners two or even three generations earlier. Allen's illustrated Rural Architecture (owned, according to a bookplate [author's collection Beaufort] by at least one South Carolina planter - Dr. John Gabriel Guignard of Edisto Island and Columbia) states:

We hold that that although many of the practical operations of the farm may be rough, tedious and untidy, yet they they are not, and need not be inconsistent with the knowledge and practice of neatness, order, and even elegance and refinement indoors; and that the due accommodation of the various things appertaining to farm stock, farm labor and farm life should have a tendency to elevate the social position, the associations, thoughts and entire condition of the farmer...The character of the farm should be carried out so as to express itself in everything it contains. All should bear a consistent relation with each other. The farmer himself is a plain man. His family are plain people, although none the less worthy, useful or exalted on that account. His structures of every kind, should be plain, also, yet substantial, where substance is required.

Neatness, plainness, substance, due order and a consistent relationship between buildings are all exemplified by the Sams Yard. Its layout seems no mere expedient. We can detect ~~Berners Barnwell Sams exercising frugality and skill in enlarging, re-ordering, and "improving" the property he inherited.~~ Distant memories of Palladian farm houses organized about finely detailed barchese became transmuted into a quadrangular steading ordered around clustered building groups, Berners Barnwell Sams consciously or otherwise following the rules of writers like Nathaniel Kent who recommended rectangular yard planning. What Robinson (1983:37) calls the Enlightenment's "characteristic pursuit of technical novelty" was expressed in structural forms predicated upon inexpensive tabby construction, Sams being one of the material's leading local promoters. "Plainness and perspecuity," concepts applied to agricultural structures in William Pain's Builders Pocket Treasure, 1763 (Archer 1985:78) and repeated by F. W. Allen in 1850 appear key ideas dictating the choice of simple vernacular building types.

Can we go further and say that the Yard's slave houses also manifest a plantation owner who, through observation or study had absorbed late eighteenth/early nineteenth century arguments linking agricultural reform and humane worker's living conditions? To

answer this question, archaeological and architectural findings must be evaluated against the arguments themselves.

After 1770, influential British commentators noted philanthropic or humanitarian attitudes brought the landowner tangible benefits. "The labourer is one of the most valuable members of society" said Nathaniel Kent; there being "no object more highly deserving of a country gentleman's attention than his labourer's welfare". After all, lands "were of no economic value without hands to work them" (Archer 1985:461). William Davis explained how inadequate rural housing brought "filth, disease, and, frequently, premature death," while others proposed decent habitations could help agricultural workers raise their families according to principles of morality, virtue and religion, principles we should note Berners Barnwell Sams (who employed Christian "missionaries" on his Dataw holdings) espoused.

American farming journals and an expanding abolitionist literature debated the same issues. Facing adverse criticism and high mortality rates, most southeastern plantation owners slowly ameliorated slave living conditions, settlement housing increasing in size and quality of construction over the nineteenth century's opening decades (Genovese 1974:525-526).

Not the largest or most substantial of early nineteenth century Beaufort District's slave houses, individual dwellings attached to the Sams House yard if tabby walled, were better than many local examples (cf. early photographs, Penn Center Collection, Beaufort; Johnson 1969). Writing about similar structures built on St. Simons Island, Georgia, the editor of the Southern Agriculturalist (a journal Berners Barnwell Sams probably read) stated:

We were much pleased with the construction...of the negro houses. The old houses are of wood, but all those recently erected, are of tabby, which adds much to the neatness of appearance, and comfort of the inhabitants. (Southern Agriculturalist, April 1830:167).

The "Memoir" gives us a glimpse of landscape elements surrounding Site 38BU581's domestic slave housing; elements which provide one more clue to understanding Berners Barwell Sams' intentions. James Julius does not mention the enclosed Yard. Instead he (Sams n.d.:5) talks about "the old garden" fronting the Main House on its river side "which stretched to a little pond". In front of the house were:

two sycamore [ie. *Platanus occidentalis*] trees...between the house and pond was a large grove of poplar trees...on the other side directly to the north, was the pear orchard. East of it the old plum orchard...north west of the house was the orange orchard. Southwest the fig orchard and beyond that, the apple orchard. There were pear, fig, apple, and orange trees everywhere.

Reconstructing the scene viewed across Jenkin's Creek and "Big Landing," a sylvan and idealised picture emerges even allowing James Julius's probable exaggerations. Rising above tidal marshes, we can imagine the Main residence's extended linear form framed by vegetation, trees extending right and left in both informal groups and ordered fashion. The

pond and poplar grove must have added romantic notes, balancing or concealing the Yard's lack of symmetry. The Yard it seems, was more of a garden than utilitarian work area, shaded in part by sycamore trees. On one side rose the Kitchen, opposite stood slave houses, other small structures (again grouped informally) intervened.

While layouts on Spring Island and White Hall incorporated related elements, site planning near the two main house (though not perhaps everywhere), differed. George Edwards c. 1812 stressed the axial qualities of his enlarged Spring Island house, erecting pavilion flankers, hedging the space between them and filling the space produced with a flower garden (Brooker 1990:148). Thomas Heyward too, fell back upon Anglo-Palladian prototypes. Double story service blocks were placed either side of the White Hall plantation house, a semicircular tabby wall linking them and defining another large garden on the group's south front.

At the Sams House, there were no matching flankers, varied architectural elements being grouped by function. The plan recalls an early nineteenth century description of William Washington's now vanished plantation located near the Combahee River Crossing, Colleton County.

On his way to Savannah in 1834, Abeil Abbott (1832:273) wrote:

[William Washington's] is one of the handsomest plantations I have seen. The mansion is large & ancient, fronted by a fine green square, in the center of which is a pond for fish & fowl...The different buildings round the green, & the negro huts give the whole the air of a village. An extensive garden is laid out tastefully with box & filed with flowers, shrubs & trees, among which are magnolias, live oaks, hickory and cedars some of which are prodigiously towering.

I have argued (Brooker 1990:147-150) this account and a similar one of William Smith's Plantation located a few miles south (Abbott 1832:275-6) attest local landscape designs laid out in "Picturesque" fashion. Before 1790, concepts of the "Picturesque" and "Improvement" had become inextricably mixed. As John Archer (1985:202-3) observes, Edmund Bartell's "Hints for Picturesque Improvement in Ornamental Cottages" (London 1804) reasoned "where nature has been lavish of her bounties it is the artist's business to improve, not to change, the genius of the place". Bartell castigated those landowners who tolerated buildings "injurious to the health and morals of the inhabitants," claiming that besides proving the landlord's humanity, "new cottages could improve the picturesque qualities of an estate" (Archer 1985:203).

William Washington's "green" and "huts" conveying the impression of a village clustered among trees and gardens, echo Bartell's precepts (even if Bartell would have been shocked by the context). Coincidentally, Abeil Abbott (1832:272-3) describes the owners' humanitarian actions; Washington supervised feeding of infant slaves himself finding "old men and women who were beyond labour" light tasks.

Analogy makes it possible to conclude the design Berners Barnwell Sams executed also represented a "picturesque" improvement. A natural pond (still visible today) southwest of the Main House and its grove of poplar trees which "on a moonlight night...looked liked so many ghosts" (Sams n.d.:5) expressed "the genius of the place". Assorted outbuildings, informally grouped, spoke of order rather than tyranny, the orchards beyond, of careful husbandry. Tidy slave houses "conducive to rural virtues would theoretically insure sobriety, goodness and perhaps greater productivity too" (Du Prey 1982:263).

Whether moral, aesthetic or practical concerns, engendered the scheme is an issue beyond our view. We can be reasonably certain though that well informed early nineteenth century travellers or humane local property owners would have recognised the layout's innovative, picturesque and improving qualities. Berners Barnwell Sams had brought together a complex web of ideas woven by the Enlightenment. But slavery's unacceptable face could not be disguised indefinitely no matter how idealised the landscape. Improvement and social reform went together. Once let loose in the Low Country, these dual ideas would dispossess an elite planter class and destroy, among a multitude of other slave built enterprises, all plantations belonging to the Sams Family.

## **PART 2. THE NORTHEAST BUILDING GROUP**

### **INTRODUCTION**

The undated (late nineteenth/early twentieth century?) Sams Map shows that just north of the Main House there passed a road which constituted Dataw Island's most prominent circulation route before 1865 (Figure 5). Starting at Mink Point, this artery received traffic moving between river landings, linked field systems bordered by Dataw's east or west shores, and after turning north slightly east of Site 38BU581 entered the property of Louis Reeve Sams. James Julius Sams mentions structures arranged linear fashion "behind" (i.e., north of) his father's house, an arrangement indicating these ancillary buildings faced onto the principal roadway known from our cartographic source. Unfortunately the map does not illustrate the plan configuration, depicting instead the Main House (in its tripartite form) looking north over a road towards two empty rectangular fields of equal area.

The "Memoir" contains much more detailed information. James Julius Sams mixes topography and childhood anecdote, describing through reminiscence numerous activities clustered about the residence's land approaches. We learn of a dairy, pigeon loft, "blade house"; stable; barn and hog pen all situated where they could be observed either by the owner or his overseer who occupied a dwelling located "in front of the stable".

Today, what may be called the North East Building Group is represented by only two ruined structures. In the following section these buildings (Structure VIII and Structure IX) are described and assessed against comments made by James Julius Sams. Structure X, situated due east of the Yard's south east corner is also included here since Lepionka has called it "the Overseer's House," an identification, which I argue, is probably mistaken.

## STRUCTURE VIII

Located north-east of the West Wing, Structure VIII incorporates two components, arranged on a linear plan to create one long, narrow range measuring 45 ft 1.5 in east/west by 12 ft 8 in north/south.

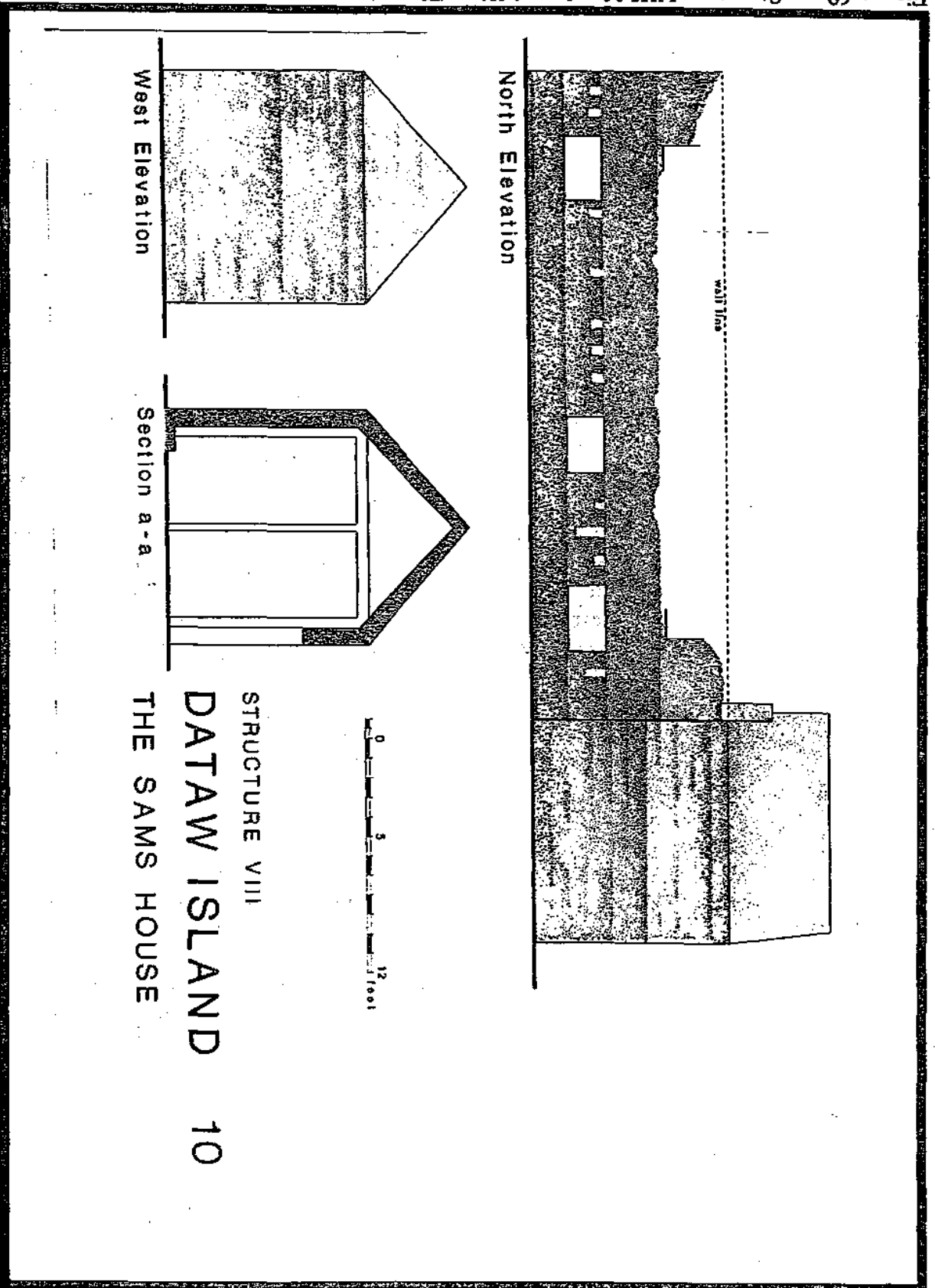
Defined by tabby walls rising 9 ft 8 in high above present ground level, the western component contains one undivided space (measuring approximately 10 ft 3 in square) entered through a single 4 ft 11 in wide by 6 ft 9 in high doorway centered on the building's south face. This space is remarkable for its complete lack of fenestration and cast tabby roof. Wall construction evidences 9 in - 10 in high lift or compaction levels but no formwork cross ties. The asymmetrical roof defies categorization, being gabled at its eastern end and slightly hipped to the west. Inside irregularity disappears. Roof construction is gabled, two tabby skins opposed north/south, pitched at an angle of about 45 degrees rising to the ridge. Figure 52, Section a-a reveals the roof diminishes in thickness with height (from a maximum of 11 in or 1 ft - 9 in at its apex). Interior wall surfaces display a series of 3 - 4 $\frac{3}{4}$  inch wide vertical grooves, of unknown significance. At ground level, channel-like features 1 ft 11.5 in wide, crudely fabricated in lime mortar surround the enclosed space north and west.

Structure VIII's eastern component is poorly preserved, partial collapse and heavy surface erosion making it almost impossible to elucidate a history involving alteration or perhaps reconstruction. Enclosed by tabby walls 1 ft 3 in thick at base level and 1 ft - 1 ft 1 in thick above ground, the present building envelope measures 12 ft 8 in north/south by approximately 32 ft 4 in east/west, its rebuilt west wall defining one side of the tabby roofed area already described (Figure 60). Openings attest two stories, the lower sunk 2 ft or more below grade. Lepionka excavated a 7 - 8 in wide tabby cross portion dividing the lower floor into two unequal spaces, his "long" and "short" rooms, here designated Rooms A and B (Figure 60). Room A (measuring approximately 20 ft 7 in by 10 ft 1 in) was entered from the south via an exterior doorway 3 ft 6 in wide. How the change between exterior grade and interior surface levels was achieved is not made clear by Excavation Notes. East, Room B measured approximately 10 ft 3 in by 10 ft 1 in, and was again entered via an exterior doorway (3 ft 9 in wide) from the south. Lepionka reports quantities of window glass, bottle glass and ceramics recovered from both rooms (see Chapter IV).

Nothing can be said about the upper story plan. Elevational treatment is also incompletely known. The east (i.e., end) facade seems gabled and featured a central window opening at upper and lower levels. Smaller than its upper counterpart, the 1 ft 6.5 in wide by 1 ft 10.5 in lower window was formed around a timber frame made up from 3.5 in - 4 in deep horizontal members, set in place before tabby casting operations began. Above, window construction was similar, although deeper section (4 - 5 in) horizontal framing members were employed, the opening measuring 2 ft 9 in high by 1 ft 9 in wide overall (Figure 62).

On the north facade, (rising to a maximum preserved height of 10 ft 3 in above present ground level) three first floor window openings are spaced with no regard to

Figure 60. Structure VIII North and West Elevations.



West Elevation

North Elevation

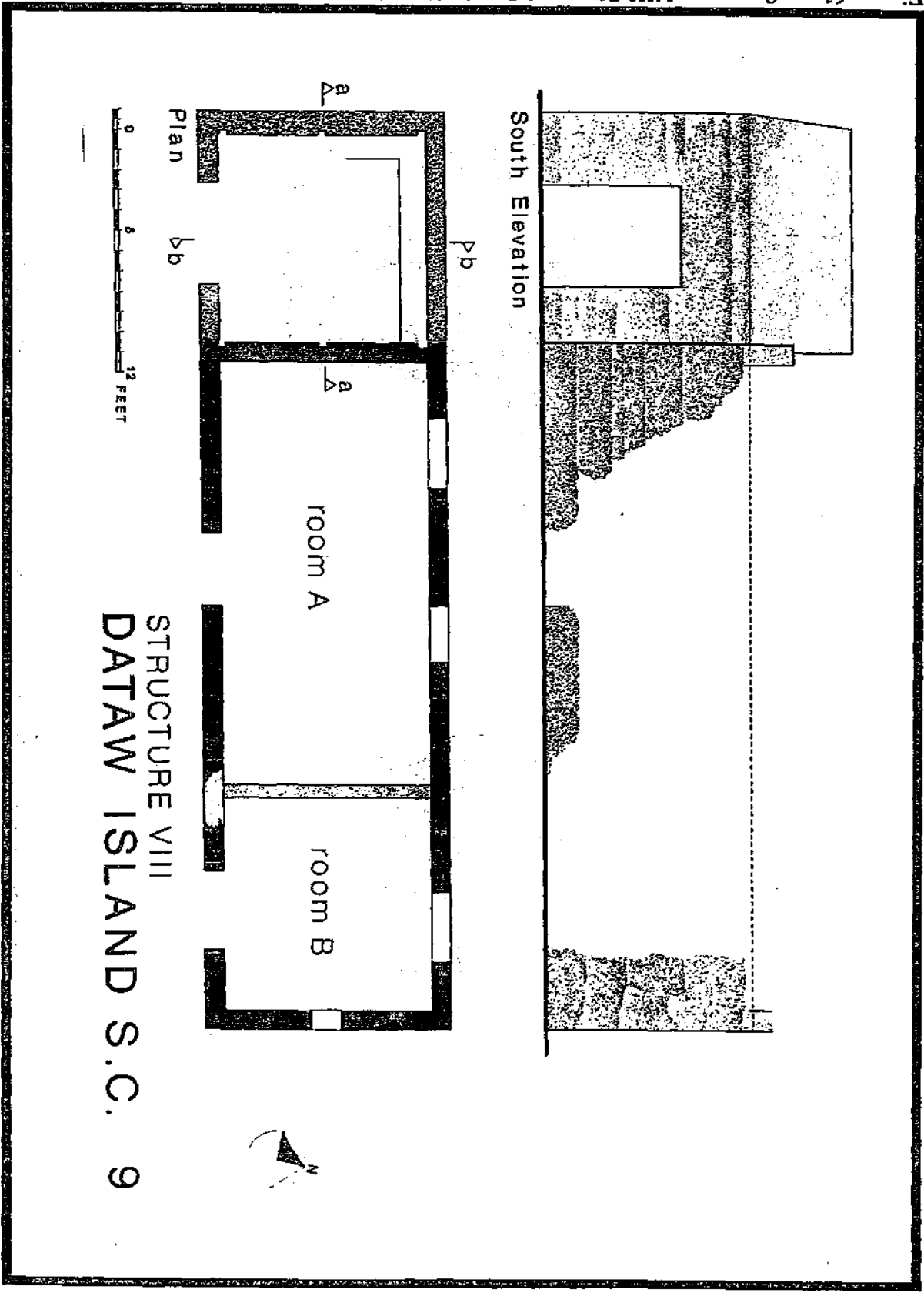
Section a-a

0 5 12 feet

STRUCTURE VIII  
DATAW ISLAND 10  
THE SAM'S HOUSE

Figure 61. Structure VIII Plan and South Elevation.

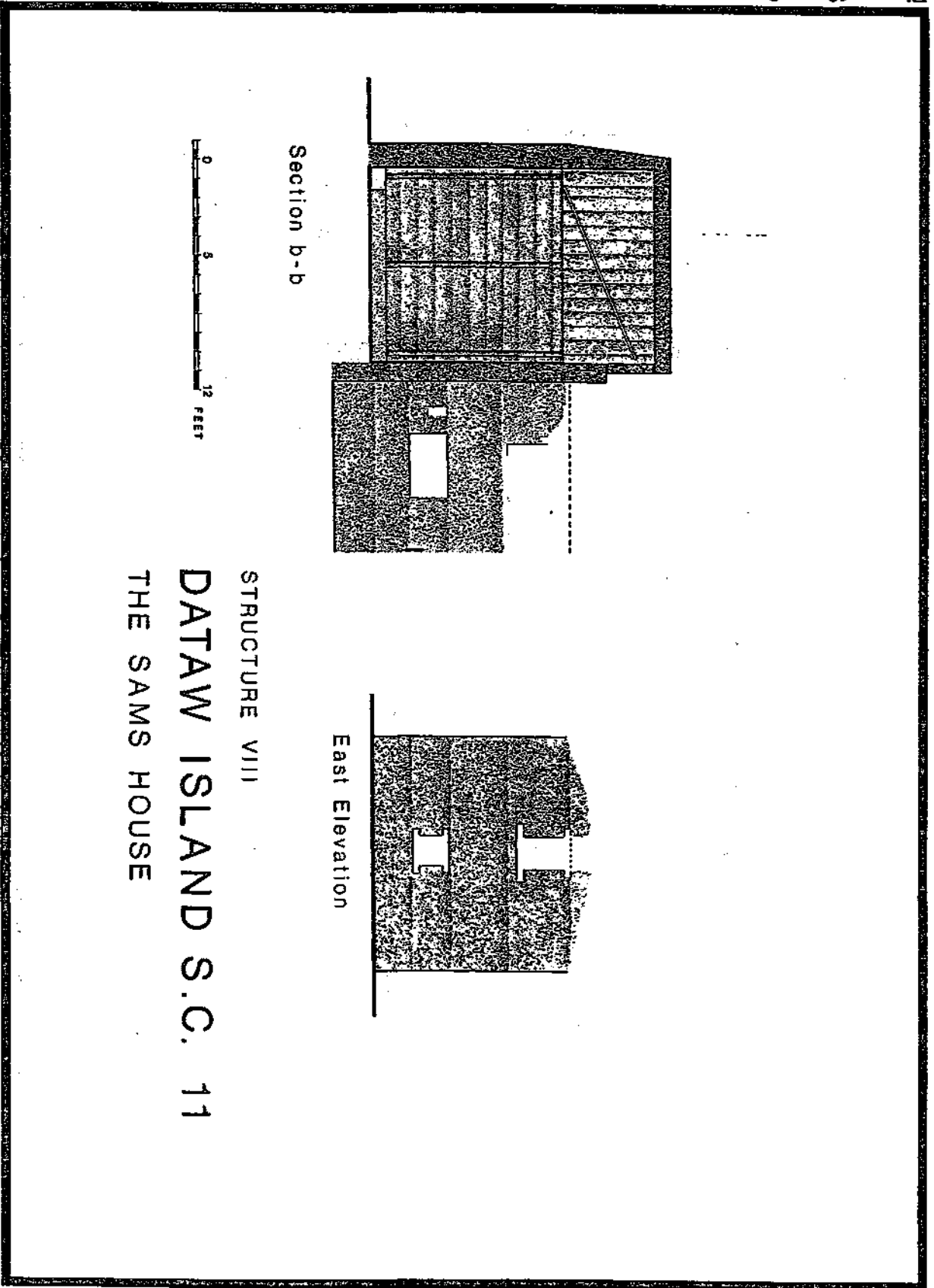
339



STRUCTURE VIII  
DATAW ISLAND S.C. 9



Figure 62. Structure VIII Sections and East Elevation.



Section b-b

East Elevation

STRUCTURE VIII  
DATAW ISLAND S.C. 11  
THE SAM'S HOUSE

symmetry (Figure 60). One, measuring about 3 ft 4 in wide by 1 ft 11 in high lighted Room B. Room A received north light through two openings of unequal size, the eastern example measuring about 1 ft 11 in high by 2 ft 9 in wide; the western example measuring 1 ft 11 in high by 3 ft 4 in wide. Second floor fenestration is almost lost along the north facade, eroded fragments showing windows were perhaps narrower than first floor openings.

Most of the south facade has collapsed (Figure 63) doorways giving access to Rooms A and B being the only openings known.

Tabby wall construction is atypical. Visible pour lines indicate formwork varied between 2 ft 4 in and 3 ft in height. Compaction of poured mortar was slight, semi-liquid tabby spilling and leaking as formboards were struck, an inexperienced or undersupervised crew perhaps performing the work.

~~Floor joist sockets related to the building's upper level give clear signs of alteration.~~ Two separate series are visible indicating original joists (spanning north/south) were cut out and replaced by new members (also spanning north/south) set at a higher elevation in order to increase headroom in Rooms A and B. This work raised the upper floor level 1 foot 4 inches, the basement undergoing concurrent excavation to a greater depth. Original joist sockets, cast in place without wall plates, measured 7 in deep by 3 in wide, sockets for replacement members 10 in deep by 10 in wide. New floor joists were inserted into holes hacked through north and south external tabby walls, tabby later being patched using broken brick and thick lime mortar. Lower north windows seem to have been adjusted in size, although how these operated vis a vis new floor supports extending below their heads is obscure. Whether circulation between upper and lower floors was achieved via an internal staircase, external steps, ladder or some other device is unknown.

I am unable to determine if archaeological investigation exposed lower floor surfaces or determined how high Rooms A and B were after alteration. Recent inspection suggests the tabby partition wall dividing lower spaces is a secondary feature. Relevant Field Notes are unclear on the subject, Lepionka failing to recognize he was looking at more than one building phase.

## STRUCTURE IX

Located east of Structure VIII (from which it is separated by an interval of about 62 ft) Structure IX must have been either a timber framed or (less probably) log building raised about 2 ft above present ground level upon tabby piers cast to a width of 1 ft - 1 ft 1 in. All superstructure elements are lost, the symmetrical pier system surviving to evidence an enclosed or semi-enclosed area measuring 29 ft 9 in east/west by 21 ft 4.5 in north/south. Piers define a broad central area 15 ft 4 in wide by 21 ft 4.5 long flanked east and west by two narrower aisles (Figure 63). Piers also reflect timber framing patterns, being "L" shaped at corners; "T" shaped where two intermediate cross beams aligned north/south junctioned with the outer cills and rectangular along the building's east/west axis. Lepionka excavated three 3 ft by 3 ft units within Structure IX but no notes or other records of his activities are available.

## STRUCTURE X

Located due east of the fenced Yard's south-east corner Structure X parallels Structure VI, an interval of 47 ft 3 in separating them. Incomplete tabby walls (8 in - 9 in) outline a building measuring 18 ft 2 in north/south by 12 ft east/west overall excluding an external end chimney (measuring 7 ft 4 in by 3 ft 8 in at base level) centered about the south elevation. Between October and December 1983 Lepionka cleared the Structure. According to his Field Notes (which lack plans and sections) Unit 1 (location not identified) revealed an entrance. Artifacts recovered included ivory buttons; mother of pearl buttons, and thimbles. A clay floor is mentioned. The fireplace incorporated one course of fired brick along back and side walls.

## BUILDING IDENTIFICATION

James Julius Sams (n.d.:5,6) enters into specifics about outbuildings grouped north and northeast of the Main House. His text, connected and edited to exclude extraneous remarks is as follows:

Back of the house was the dairy, on the east side of the dairy the well with the old oaken bucket...Northeast of the house, and almost directly behind the east house was the old tabby blade house...on the same line with the old tabby blade house was the stable. Between that and the tabby [blade?] house was the barn. In front of the stable was the overseers house...My father had a large pigeon house right back of the west wing of the dwelling house.

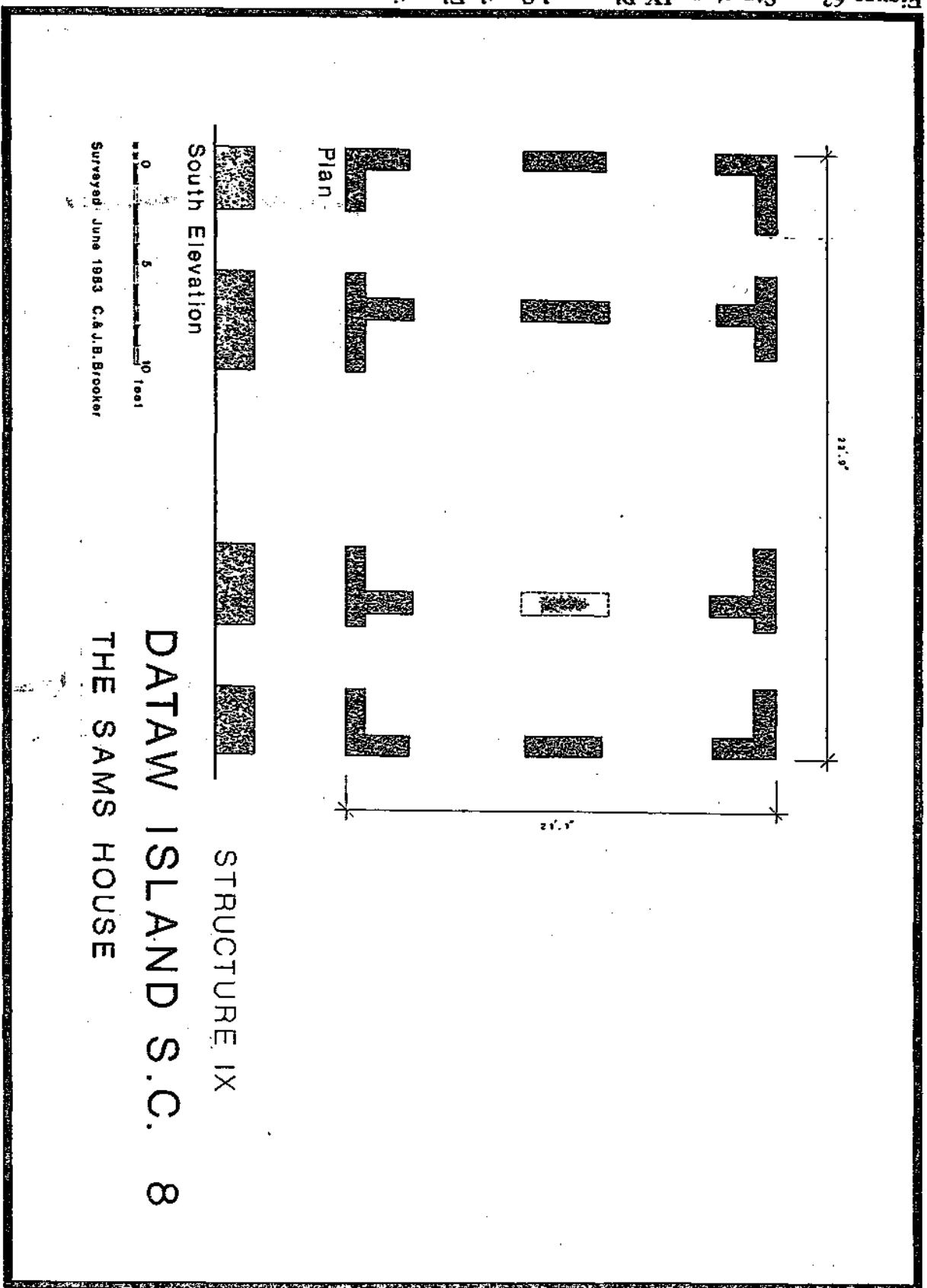
Lepionka (1988:114,116) has scrutinised this account and tried to match various activities Sams mentions against structures surviving today. Results are not clear-cut, the Memoir's "blade house" and "dairy" presenting intractable difficulties.

Thus, Sams places "the old tabby blade house" in a position corresponding with Structure VIII and locates "the dairy" near the West Wing. Lepionka (1988:116, personal communication 1992) conjectures that rather than a storage area for "cornstalks" (i.e., "blades") Structure VIII is in fact the dairy, its tabby roofed space having been "intended for cold storage" or use as an ice house. Rooms A and B "were constructed with a floor level excavated well below grade". Lepionka (1988:116) believes "the only purpose that this can be seen to fulfill is to assist in the maintenance of cooler temperatures".

Mid nineteenth century American building handbooks describing model dairy construction support these empirical judgements. Allen (1854:335-337) recommends a two story design, observing:

A good walled cellar is indispensable, well lighted, as a room for setting the milk with a broad, open flight of steps from the main floor above...Here too should stand the stone slabs where the butter is worked, and the churns to be driven by hand, or water or animal power.

Figure 63. Structure IX Plan and South Elevation.



Allan also mentions :

A receiving vat in which ice is deposited, to keep the milk at the right temperature-about 55 degrees fahrenheit-for raising the cream...the low temperature of the room [achieved] by the aid of water and ice, is also beneficial to the butter packed in kegs, keeping it cool and sweet...The washing and drying of pans, buckets and churns, should all be done in the room above, where the necessary kettles are set and kept from contact with the cool atmosphere of the lower room.

Robinson (1983:92) notes separate milk and scalding rooms were minimum requirements in late eighteenth/nineteenth century British dairies where work areas are commonly sunk two or three feet below ground. Again, according to Robinson (1983:92):

The dairy sometimes formed part of the steading but more commonly it was built elsewhere, in the garden or park, or near the house" [having by the late eighteenth century] taken on some of the connotations of goodness and simplicity, popularised by contemporary philosophers.

~~Dairies~~, he continues :

were polite buildings, the province of the lady of the house and her daughters; they were not merely the utilitarian work places of servants and labourers. Supervising the making of butter and cheese, the preparation of milk and cream, rennet and whey for the owner's table was a recognized occupation in the country for ladies...preparation was a fastidious business which could not be left to dirty or careless servants to perform.

(cf. Du Prey, 1982: 251)

Loose typological parallels can be drawn between Structure VIII and the model dairy Allan recommends. Robinson's comments demonstrate similar building types occurred on opposite sides of the Atlantic while Fox-Genovese (1988:116,117) confirms that wives and daughters of wealthy southern plantation owners (who rarely if ever set foot inside smoke houses, kitchens or other ancillary buildings) were, like wives and daughters of European landowners, not above supervising "buttering" themselves.

~~Rooms A and B of Structure VIII~~ suggest then milk and scalding rooms part sunk below ground. Alternatively it seems possible separate milk and churn rooms were housed at the building's lower level, scalding operations taking place on the second story above. Objections to the interpretation stem mainly from archaeological lacunae. No provision for the running water butter making usually entailed has been discovered. Lower floor surfaces (which I assume, perhaps incorrectly,) were of packed earth in Rooms A and B (but not in the tabby roofed area, where Lepionka mentions a lime mortar floor) raise questions about hygiene.

Location provides another clue to identification. On Dataw Island, formal or decorative attributes setting dairies apart as "the most elaborate and highly ornamented" of late eighteenth/early nineteenth century British (sometimes French, see Johannes Langner's Architecture pastorale sous Louis XVI, in Arts de France 3, 1963:171-86) farm buildings are not visible. Yet, flanking a shallow courtyard giving entrance to the Main Sams House, ~~redolent of domestic felicity,~~ polite in function, and seen by all visitors using Dataw's principal roadway, a dairy would be by no means out of place where Structure VIII stands considering the fashionable connotations European dairies had accrued several decades before 1800 (Du Prey 1982:245-252 who illustrates schemes by Robert Adam c. 1765 and John Soane [Craven Cottage Dairy, 1781; Hamells Park Dairy 1783]; also Vlach 1993:79 who views ~~South Eastern dairies as "an architectural emblem signalling the wealth of the planter class"~~).

If, as I think most probable, Structure VIII is a dairy, how are we to treat the Memoir's contrary testimony? Must it be assumed through lapses in memory, the account of James Julius Sams is wrong, a conclusion negating an otherwise essential source? Or is ~~the structure now visible much the same building James Julius (who was born in 1826) knew as a child?~~ Here, evidence of major alteration becomes significant, one feasible scenario being that the Memoir's "old tabby blade house" was converted from shed to dairy c. 1840, i.e., when James Julius was in his teens, Berners Barnwell Sams making its basement deeper, inserting new floor members, refashioning existing windows and adding cold storage space towards the west. For an opposite interpretation see Lepionka 1988:116, who in my opinion fails to recognize a history of building alteration. Similar operations it will be remembered occurred elsewhere on Site 38BU581, the Old Phase I Middle House having undergone similar transformation (see Chapter VIII above).

This does not explain why James Julius locates his dairy "behind" the West Wing (where no structural debris has ever been discovered); reconcile a mean occupation date of 1822 yielded by ceramics excavated from Rooms A and B; or explain the poor workmanship seen in the composite buildings eastern component. The only certain fact is that a dairy existed, Agricultural Census returns recording Berners Barnwell Sams produced modest quantities of butter on Dataw in 1850 and 1860 (Lepionka 1988:32-33).

Turning to questions of architectural affinity, Structure VIII's western component has no direct local counterpart. ~~The tabby roof of ridged form is now unique,~~ though flat tabby roofs are recorded. At the Thickets, near Darien, Georgia, Floyd (mss. notes, Georgia Historical Society, Savannah, M.H. & D.B. Floyd Collection:68-69) describes double slave houses with lime mortar roof finishes laid on tightly fitted timber boards supported by joists "2 to 3½ inches thick by 9 to 10 inches wide...set on edge about 20 inches apart" to achieve a span of about 14 ft. Fabricating formwork to cast an unsupported roof of the type illustrated by Figure 60 can only have been ~~possible on a small scale,~~ the clear span here measuring 10 ft 4 in. Formwork erection required patience and skill, impressions showing it made up using 8 - 9 in wide tongued and grooved timber boards aligned to follow the final roof slope (Figure 60).

Associated tabby wall construction carried forward using 1 ft high lift levels is atypical at Site 38BU581 and therefore difficult to date. An 1804 mean ceramic date clouds

chronological issues as it suggests the tabby roofed area was erected first, a result fabrication details deny. Tabby roof construction is supported upon the west (i.e., end) wall of Structure VIII's eastern component, the roof shape showing accommodation to a preexisting and freestanding building.

Compared to East and West Wings of the Main House, Structure VIII's eastern component exhibits poor quality tabby. Random lift heights make little sense unless they evidence alteration. Rectangular form work ties suggest building operations stated after the Revolution but since no comparable structure is known, any date based upon stylistic criteria has dubious validity.

Lepionka correlates Structure IX and a barn mentioned by James Julius Sams, located east of "the old tabby house". Assuming (i) "the old tabby house" and Structure VIII are identical, (ii) the Memoir's account cannot be dismissed as wholly confused, (iii) "the stable" also remarked by Sams was located further east, Lepionka's identification is acceptable.

"L" shaped corner piers resemble in size, shape and construction, those of an undocumented early nineteenth century outbuilding (measuring 32 ft 6 in by 19 ft) located near the Edwards House, Spring Island (Brooker 1990:146). On Spring Island, space inside the timber framed superstructure (now destroyed) was probably undivided. At Site 38BU581 tabby piers suggest one central space flanked east and west by aisles, an arrangement unmatched among Beaufort County's few extant Antebellum agricultural structures. Aisled barns dated before 1865 are common enough outside the region (see Prudon 1976 who gives an extensive bibliography), massive loss among all local vernacular building categories explaining Structure IX's present typological isolation.

James Julius (n.d.:6) states fences "running all around the barn" made a hog pen, an anecdote showing the barn and its adjacent hog pen were situated within earshot of the Main House:

the most exciting of the scenes connected with the hogs was the catching of those that were to be fattened for bacon. They were generally caught early in the morning. A squeal would wake us [ie. James Julius and his elder brother Horace]. Up we would jump, hurry on our clothes...dash down the [north] steps, and in a moment, would be strung along the fence which constituted the hog pen-not to see the hogs caught, that ended the fun, but to see the negroes catching the hogs (Sams n.d.:6).

Reached via a road or track leading south towards Little Landing, Structure X resembles Structures IV-VI identified above (see Chapter IX, Part 1) as quarters for household servants. Construction presents minor differences, Structure X incorporating a rectangular rather than splayed chimney base. Also, compared to Structures IV-VI, Structure X's chimney is opposed, being built against the building's south instead of north end. Variant construction does not alter Structure X's identification, its form typifying a single slave house.

Why it should be detached and distanced from the Yard enclosure is unclear. Lepionka (1988:114) observes this building "is presumably the overseers' house," (placed by James Julius Sams (n.d.:6), south of a stable located east of the barn), a determination which implies an overseer of slave or freedman status.

Black overseers were not uncommon, Fogel and Engerman (n.d.:200-201) remarking "even on estates with more than one hundred slaves, the proportion with white overseers was just 30 per cent". Contradicting Lepionka's notion is a Mr. Rushing who Berners Barnwell Sams "engaged as an overseer and teacher" when James Julius and his brother Horace were "quite young" (Sams n.d.:9,10).

Less than successful in his dual occupation, Rushing's position as tutor and epithet of "Mr." identifies him as white given the Memoir's biased racial overtone. Would Rushing have inhabited a minimal dwelling of Structure X's kind (assuming the house existed during Rushing's period of employment)? Fox Genovese (1972:103-104) notes the "steward's" or overseers' residence, was often "the second most impressive" plantation building, a description not applicable to Structure X.

I believe an altogether more plausible overseer's residence is illustrated by the Sams Map, which pictures a large, probably domestic building situated southeast of the point where Dataw's main road and Little Landing route intersect. From this position, the occupant could have observed all traffic moving east/west or north/south besides activities generated within the Main House; stable block (located north or northeast according to James Julius's account); dairy/blade house and servants quarters.

If not an overseer's house, we can only speculate about Structure X's use. Perhaps it housed a drover, boatman or other high status slave who merited accommodation near the master's residence. Equally, numerous buttons and several thimbles found inside the building may indicate an individual whose tasks were directed by female Sams family members: dress-making perhaps or mending of linens (the "Memoir" states Berners Barnwell Sams "owned tailors, Sams n.d.:4). Whatever the truth, the building was somewhat isolated, Lepionka finding no evidence of similar structures aligned in a row to the north (trenches E 20; E 30).

### **PART 3. STRUCTURES WEST AND NORTHWEST OF THE MAIN HOUSE**

#### **STRUCTURE XI**

Six hundred feet west or south-west of the Main House, Lepionka (1988:116) reports "a 40 [feet] square ground level foundation with a central east-west orientated internal wall". I have no personal knowledge of these features which were either backfilled or destroyed after excavation. Since Archaeological Field Notes, photographs and more detailed comments are wanting it is impossible to confirm if the Investigator's small scale plan (Lepionka 1988:115) captioned "Cotton House" illustrates (as seems likely) tabby foundation strips. Lepionka (1988:116) adds:



Justification for the term cotton house is provided by the Sams Sketch Map... Though it does not depict the building itself, it shows a road labelled "Cotton house road" connecting its approximate location with the south shore.

## **BURIAL GROUND AND CHAPEL**

Northwest of the Main House, tabby walls preserved to a height of 4 ft 2 in enclose an almost rectangular area measuring 80 ft by 70 ft (Figure 64). Inscribed headstones make it obvious that this is the Sams Family Burial Ground. A ruined structure occupying and defining its southeast corner must therefore be the Chapel mentioned by James Julius Sams (n.d.:5) who remarks:

West of the orange orchard was our family burying ground. It was shaded all over by the spread of the largest live oak I ever saw. This tree grew in the middle of the graveyard, and threw its limbs out and around in all directions, even taking under its cover the wall which encircled the yard. On the east of the oak between it and the orange orchard, was a chapel, which was so placed as to form part of the wall.

An anonymous note written c.1963 (photocopy on file, ALCOA South Carolina Inc. Beaufort) records the Chapel's last standing wall fell "in Hurricane Gracie". Today, discontinuous and eroded tabby fragments show the main (i.e., congregational) body of the building measured 20 ft 2 in north/south by 30 ft 4 in east/west. A smaller space (measuring 12 ft 3 in north/south by 10 ft 2 in east/west) centered upon the same long axis, projects at its east end. All visible external walls are 9 in thick. Impressions indicate these were cast in 1 ft 7.5 in high timber forms tied by 3 in by 1.5 in rectangular "pins" which matched those employed during erection of the Burial Ground's walled enclosure. Internal wall faces of the east (sanctuary) area preserve a series of vertical grooves 3.5 in - 4 in wide by approximately 3 in deep which probably represent timber fixing strips (now lost) for architraves. Only one wall opening (2 ft wide) survives eroded and incomplete on the south facade.

Four renderings of uncertain date illustrate the Chapel before its destruction. The first (photograph ALCOA South Carolina, Inc., Beaufort; original not seen) gives an exterior view taken from the southeast. A very simple structure is portrayed. Separate gable roofs enclose congregational and sanctuary spaces. Along the south facade, the main area is entered via a central doorway, two windows flanking the entrance right and left. Another window of equal size pierces the sanctuary's south wall. What looks like a doorway is also shown centered upon the sanctuary's end (i.e., east) elevation but this may be deceptive. Surviving walls indicate a door opening 3 ft 4 in wide in the same relative position was either blocked or converted into a window during a secondary construction phase.

The second and third are renderings attributed to Eugenia Sams (Private Collection, Beaufort; reproduced Graydon 1963:76). The first shows the Burial Ground with its family tombs and enclosing wall, the Chapel's north elevation appearing in perspective (Figure 65).

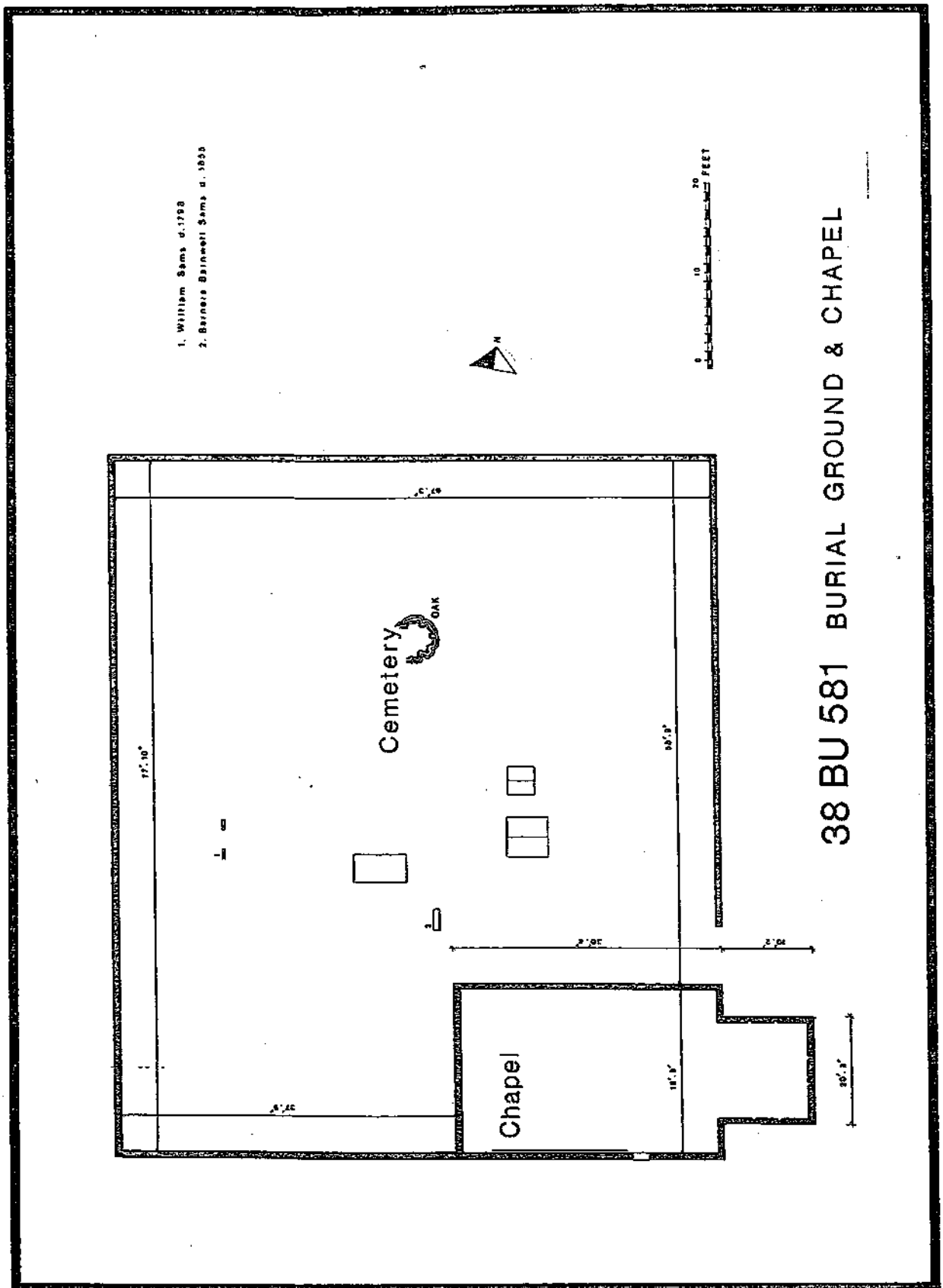


Figure 64. Plan of the Sams Family Chapel and Burial Ground.

Like the south facade already described, the north elevation (as depicted) incorporates a central transomed doorway flanked right and left by two 9 over 9 double-hung windows. The other also shows the Chapel's north elevation but from a greater distance (Figure 66). The sanctuary area is not illustrated in either rendering. However, an accomplished interior view signed Paul Brodie Del. portrays single windows on north and south walls plus a transomed doorway at the building's far east end (Figure 67). In front stands an imposing lectern separated from the congregation by a heavy balustraded railing ("U" shaped in plan) which projects into the congregational area. Five pairs of pews arranged at an angle to create a central access aisle, complete the furnishing. Interior surfaces appear plain, architraves around openings and possible dark painted surfaces extending about halfway up walls right and left of the lectern being the only decorative features. Narrow (probably tongued and grooved) timber floor boards are shown aligned east/west. Ceilings are flat and interior walls lack crown moldings. Doors seem of a board and batten variety.

## DISCUSSION

The Burial Ground's earliest dated tombstone is that of William Sams who died "on Dathaw," 16 January 1798. Inscriptions state this memorial and an adjacent tomb dedicated to Elizabeth Hext Sams (died 1813) were erected by Bernard Barwell Sams (South Carolina Historical and Genealogical Magazine [SCHGM] 1934(33):114-115). If the latter's filial duty included building a private Chapel in the immediate vicinity of his parent's burial place cannot be said, an almost effaced pencil note (now replaced by a typedwritten copy) on the Paul Brodie drawing giving the date 1783 and stating that the Chapel was "The Property of William Sams". Unfortunately, everything points to the pencil note being later than the drawing and it is impossible to say who added this information, though one can perhaps assume a Sams Family member responsible. Do we have then evidence of William Sams Building in tabby on Dataw Island, evidence which makes alteration of the middle house before 1798 more likely? As so often the case with chronological questions surrounding Site 38BU581's outbuildings, the answer must remain equivocal. The note may transmit an historical fact, or it might be the product of mistaken or wishful thinking by a family histoian--both interpretations are possible.

Beyond speculation there is little to link building of the Chapel and cemetery enclosure with any particular individual. Somewhat slender (9 in thick) Chapel walls resemble tabby construction seen in domestic slave houses erected by Berners Barwell Sams (see structures IV and VI above). Lepionka excavated several units, but no results are recorded. James Julius Sams, while describing the setting, does not mention who was responsible for its realization, though it seems the architectural assemblage stood complete when he visited his mother's grave on Dataw several months after her death in 1831 (Sams n.d.:11-12).

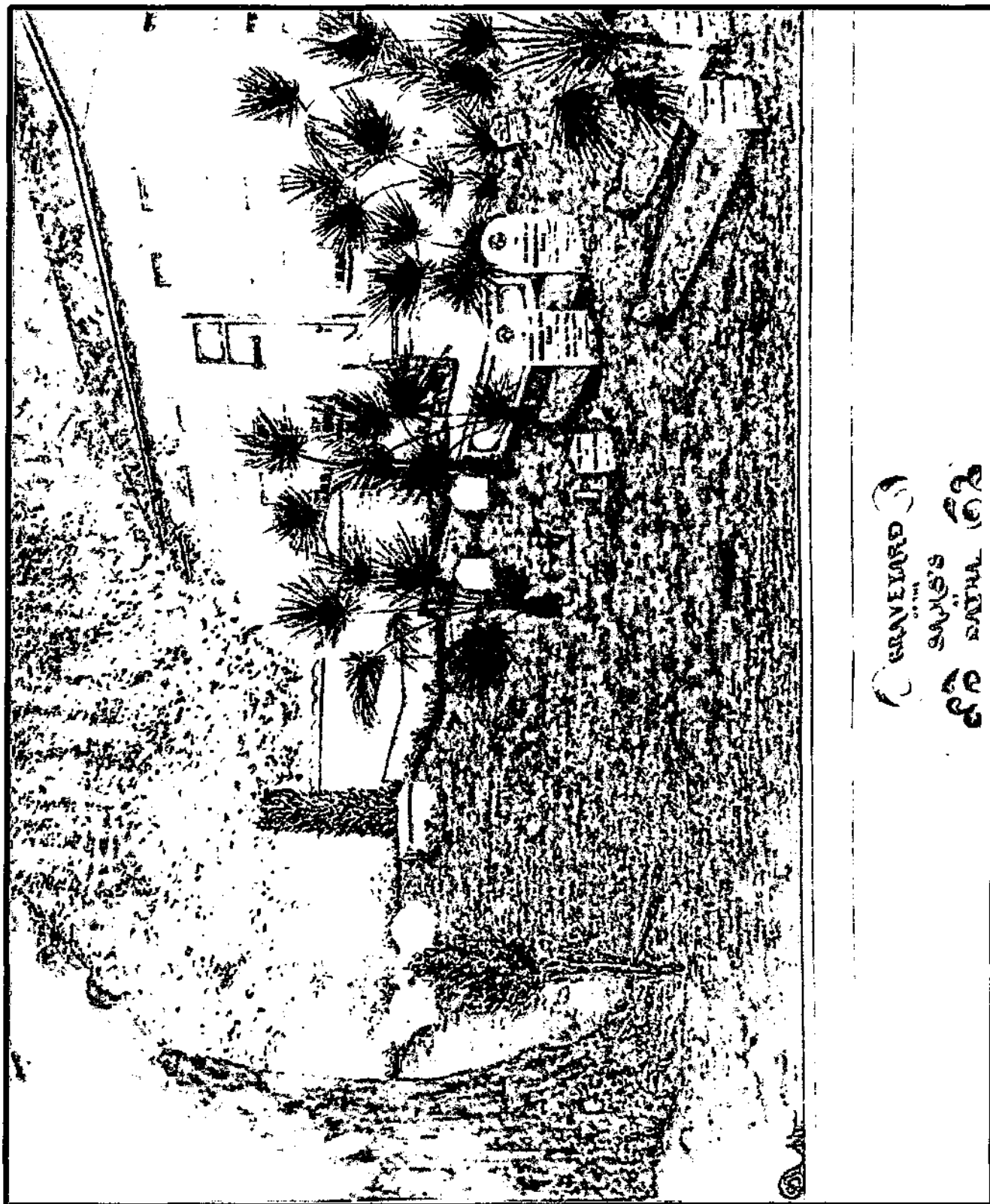


Figure 65. Rendering of the Sams Burial Ground, Enclosing Wall and Chapel (North Elevation), n.d.

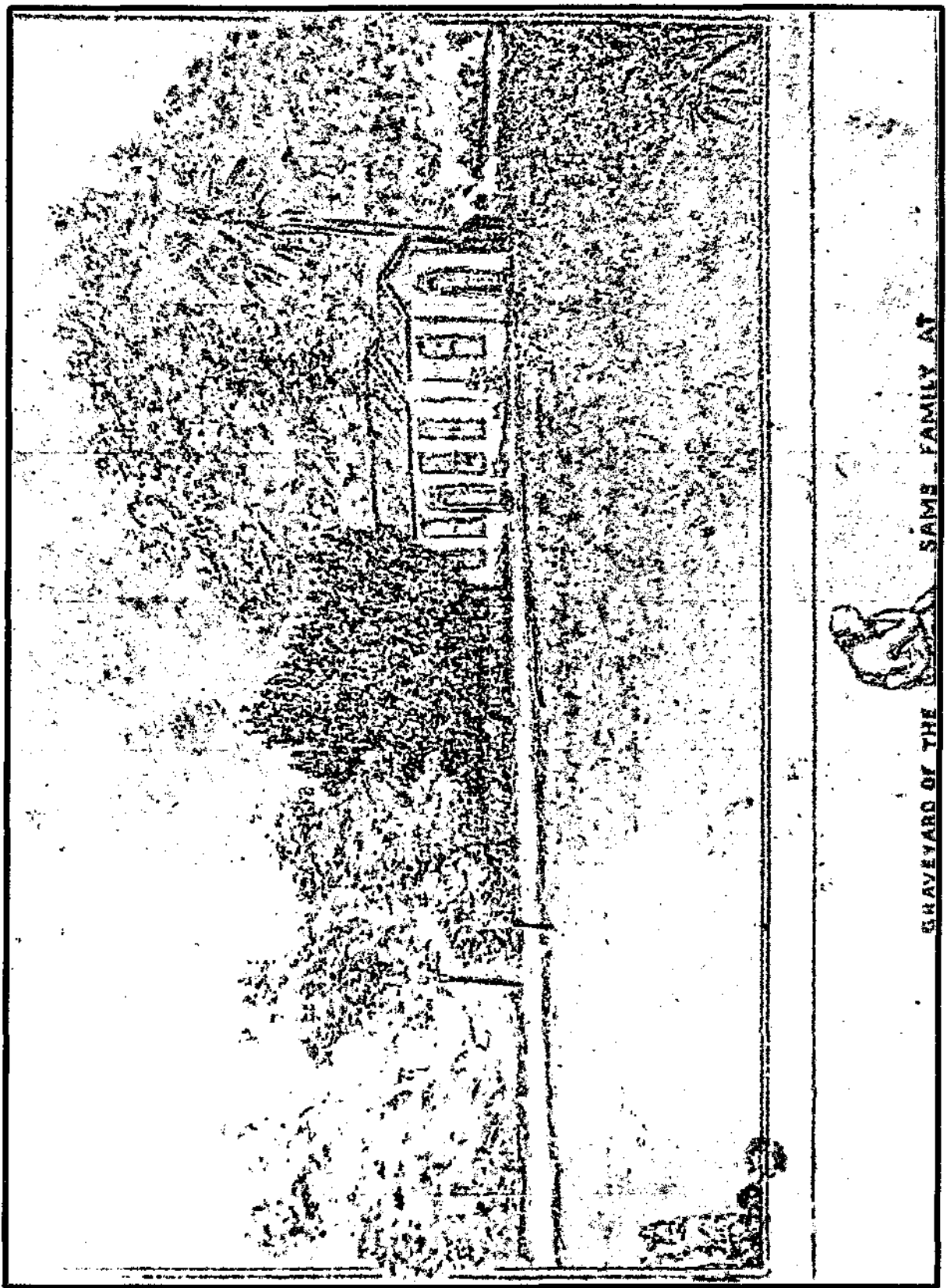


Figure 66. Rendering of the Sams Family Burial Ground and Chapel.

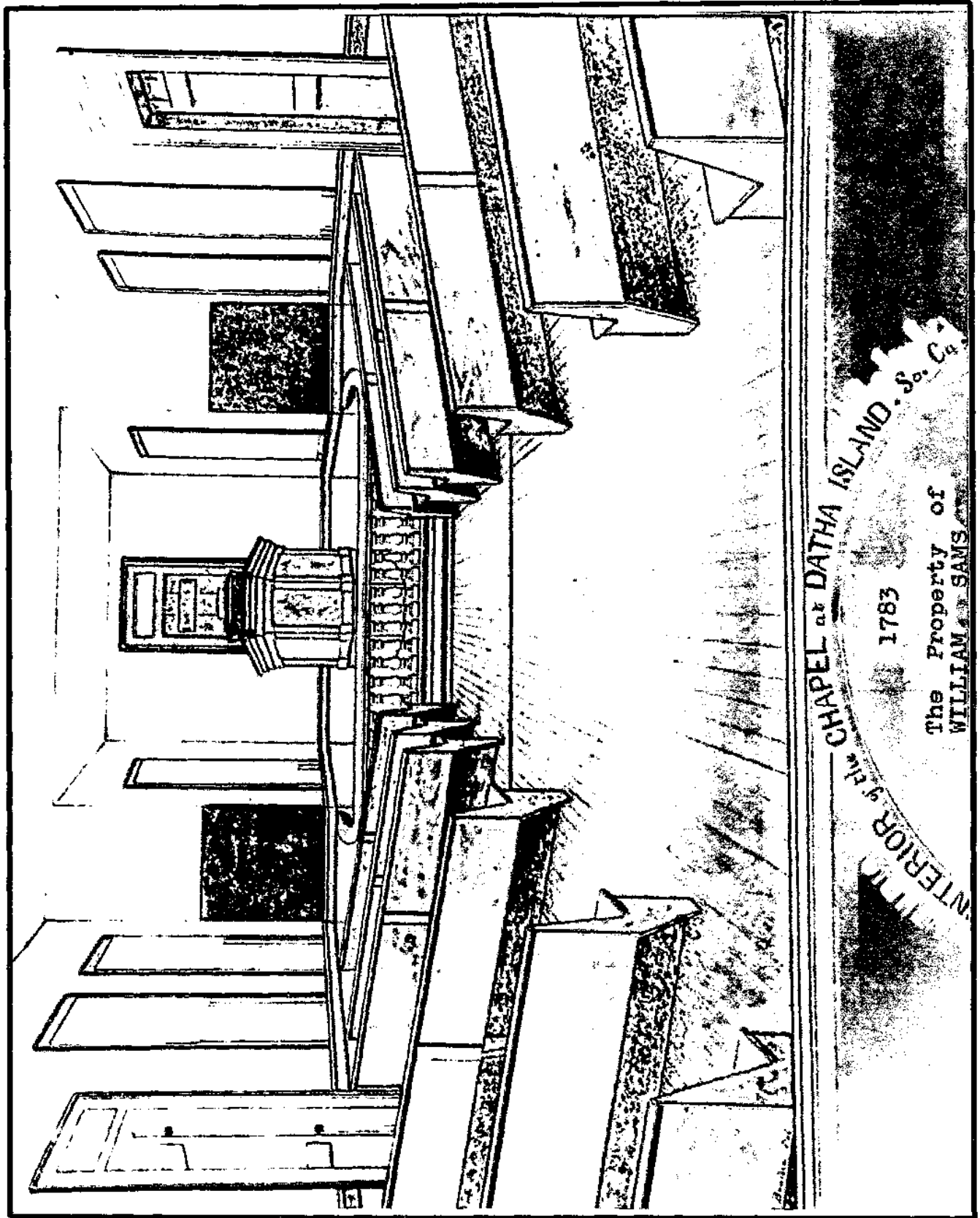


Figure 67. Interior View of the Sams Family CHapel By Paul Brodie Del., 1783

unaccountable unless the conjectured "sick house" (a normal component of larger plantation assemblages), was timber framed and/or located some distance away from the Main residence.

## CHAPTER X

### TABBY CONSTRUCTION

#### INTRODUCTION

James Julius Sams (n.d.:4) says his father, Berners Barnwell Sams "had a great preference" for tabby "and put up many houses built in this way, upon his plantation and on his premises in the town of Beaufort". James Julius gives a detailed account of tabby fabrication:

The way of construction was to make a box or several boxes according to the length and width of the building, each box so many feet long, say about fifteen or twenty feet, and about one and a half feet wide. These boxes were put in place, filled with the mixture, which was packed or pestled down, and allowed to stand until dry. The sides and ends of the boxes were held by moveable pins. When these pins were drawn out, the box would fall to pieces. The box was taken down and put upon the tabby already dry, and so box after box was packed or pestled until the walls were as high as you designed". (Sams n.d.:4)

Surviving structures at Site 38BU581 and outbuildings at 201 Laurens Street, Beaufort show Berners Barnwell Sams used tabby throughout his mature life. But tabby was never more than a material of convenience (cf. Glick 1976:155), useful only as long as alternative materials offering permanence (i.e., stone or brick) were too expensive or required skills going beyond those cultivated in the enclosed world of the coastal plantations. Significantly, when he built his massive Beaufort town house c. 1852 Berners Barnwell Sams chose brick, new kilns opened across the Beaufort River on Lady's Island (Brickyard Point) reducing the high transportation costs such construction involved. Tabby was now relegated to adjacent stables and domestic slave quarters, a pattern many Beaufort property owners followed after 1850.

Forty or more years earlier, options were different. In 1816, Thomas Spalding wrote:

[tabby structures] "are the cheapest buildings I know of, the easiest in the construction, may be made very beautiful and are very permanent (sic). They are the buildings of Spain, the boast of Barbary where some have stood these many centuries. All the success is in the making of the boxes carefully, carefully mixing the material and a thorough dry season for this erection."  
(Spalding to unknown correspondent, 20 July 1816 Ms., Georgia Historical Society, Savannah, Georgia).

These opinions were gained through experience on Sapelo Island, Georgia, an island remote from any urban center where Spalding built a Palladian inspired house of tabby between 1810 and 1812 (Lane 1990:69-71). In 1830, he found scholarly justification for his



convictions and sent The Southern Agriculturalist "a small book in French, upon the construction of Terre or Pise" which he believed the journal's editor might "advantageously extract from time to time" (Spalding 1830:617).

The book was doubtless part of Ecole d'architecture rurale (Paris 1790-1806) by Francois Cointeraux, a treatise well known to European architects intent upon improving rural housing and erecting model agricultural structures (Robinson 1983:53-55). Henry Holland, the most influential advocate had translated Cointeraux's Cahiers I-II into English in 1797 under the title Pise' or the art of building strong and durable walls, with nothing but earth, or the most common materials (Communications to the Board of Agriculture; on Subjects Relative to the Husbandry and Internal Improvement of the Country I:3-4 (1797) 387-403 and pls. XLVII-LIV) an article republished by the American Farmer in 1821 (1-5 30 March- 27 April 1821) 4, 11-13, 20-21, 28-29, 33-35).

Learning perhaps of prior translations, The Southern Agriculturalist never reprinted Cointeraux' work. Spalding's long introduction fared better, being published as comments On the mode of Constructing Tabby Buildings and the propriety of improving our plantations in a permanent manner. (Southern Agriculturalist, 1830, Vol.III, no 12, pp. 617-624).

The article and manuscript variants dated before and after 1830, i.e., Spalding to unknown correspondent, 1 July 1816, Georgia Historical Society, Savannah; Spalding to N.C. Whiting 30 July 1844 cited Kelso 1979:62, are important documents. Besides practical advice about tabby manufacture, they furnish a conceptual framework linking tabby with philosophical ideas about plantation "improvement;" historical notions concerning the transmission of technologies across cultural frontiers and analogies defining tabby by its mode of fabrication.

The letter dated 1816 is most relevant, showing Spalding's concepts were already formulated when renewed building activity was soon to begin on Dataw Island. While the main purpose here is analysis of construction methods exhibited by the Main Sams residence, Spalding introduces wider historic and technological themes. Three points should be stressed though. First, surviving works (i.e.,the Sugar Mill) Sapelo Island Georgia, show Spalding made low grade tabby, methods he devised departing from traditional practice. Second there is no record of Berners Barnwell Sams ever communicating with Thomas Spalding. Our only definite connection between the two planters is a comment indicating Sams subscribed to the Southern Agriculturalist in 1827 (Brooker 1991:115) and therefore probably read Spalding's article published three years later. Third, if Sams remained ignorant of tabby building activities on Sapelo until 1830, there was no need to re-invent fabrication techniques on Dataw Island, Old Beaufort District preserving an almost unbroken series of tabby structures extending back into the early eighteenth century.

This building corpus is explored below with the object of setting the Main Sams House against prevailing structural norms. Discussion relies upon sources remarkable for their scarcity. Extensive searches have produced very little prime information about either North or South Carolina's domestic tabby building dated much before 1770. To some extent civilian archival losses can be remedied through records describing military structures

containing materials called tapia, tappy, tapiér or tabby located at Beaufort, S.C (Fort Frederick; Fort Lyttleton I and II); St. Simons Island Georgia (Fort Frederica), Charleston Harbour, S.C (Fort Johnson, James Island), Dorchester, Charleston County and the entry of the Cape Fear River (Fort Johnston, Smithville, North Carolina). These demonstrate early tabby manufacture was often unsuccessful, the first examples being plagued with difficulties and ending in ruin. Disasters notwithstanding, inadequate skilled manpower, and financial shortfalls-problems exacerbated by remote locations and occasional hurricanes, ensured the material's use in military building down until the early nineteenth century.

Full presentation of defensive projects would be inappropriate here (though there is strong evidence showing private contractors moved between military and civil building sectors). Yet such records (including papers contained in National Archives Record Group 77; Journal South Carolina Commissioners of Fortification; Journal South Carolina Commons House of Assembly) have a value which transcends defensive concerns. They establish tabby architecture often developed in the context of public works overseen by planters, merchants or other individuals whose background ensured the material's transmission to rural and urban settings. Military sources also evidence tabby erected on a scale larger than otherwise recognizable from meager civilian building records. Finally we can see Beaufort District's extraordinary florescence of early nineteenth century tabby was not phenomenon. Rather, local experimentation over several generations had evolved techniques whereby an isolated coastal region might achieve stylish building without excessive financial burden.

Based upon sources mentioned, discussion begins (under Section 1), with tabby's technological diffusion and evolution over the Colonial period. Information presented mainly concerns the Carolinas; Florida and Georgia records having been discussed by Manucy (1978:32,66-73) and Kelso (1979:60-90). Data pertaining to cost and expense follows (Section 2), relative cheapness being the most important factor dictating use of formed, lime based fabrics. Section 3 emphasizes tabby construction's experimental nature, examining instances where premature material failure occurred. Section 4 describes large scale structures prefiguring the work of Berners Barnwell Sams and lists specific building techniques current over the nineteenth century's opening decades, techniques, it is argued, which made possible construction of the kind exemplified by the enlarged Sams House complex on Dataw Island. The final Section (5) places Dataw's early nineteenth century tabby within its regional context, exploring how Berners Barnwell Sams capitalized upon local building traditions. Earlier tabby on the island is left for future discussion, probable mid or late eighteenth century work being too insecurely dated for meaningful analysis at present.

## **EARLY DIFFUSION OF TABBY INTO BRITISH NORTH AMERICA**

Among building materials introduced into the Americas through sixteenth century European immigration, tapia is poorly documented and ill represented in the archaeological record. Utilizing methods long practiced throughout southern Spain, (from where many first Antillean settlers came), the material, fabricated by pounding earth, clay or limestone plus

free lime between timber form boards (Figure 68) was transitory, disappearing as hurricanes and corsairs ravaged newly founded coastal cities of Espanola and Puerto Rico.

If any tapia houses known to have existed soon after 1520 survive they are now buried deep beneath later rebuilding in Santo Domingo and San Juan. The same is true of early defensive structures, El Morro, San Juan, preserving its late sixteenth century fabric encased within "immense masonry carapaces" (Kubler and Soria 1959:66) dated to the 17th. and eighteenth centuries. Still, test excavation (Smith & Torres-Reyes 1962) at the fortress (surely one of the greatest of all American colonial monuments) has revealed work supervised in 1589 by Pedro de Salazar, who executed designs made one or two years earlier by the well known military engineer, Bautista Antonelli (Angulo Iniguez, 1942). Manucy and Torres-Reyes (173:40) reconstruct Salazar's building operations as follows:

after roughly leveling the foundation site, Salazar's workmen laid a footing five or six inches thick--a "floor" of sandstone spalls (chips) and clay soil mixed with lime for adhesion. On this foundation they raised a wall of mamposteria (a concrete of lime mortar mixed with stone or brick spalls). For this kind of work, the builders set up wooden forms into which they poured the concrete and tamped it thoroughly. After the material had hardened, they took off the formboards...the bastions were faced with kiln-baked bricks...The walls connecting the bastions, though also of mamposteria, looked like stone. The masons had lined the forms with stones dressed on the outer face to about six by twelve inches.

Facing perpetual financial difficulties, hard pressed Spanish authorities had fallen back upon analogous construction elsewhere. In 1540 the Crown ordered, (without result) "a fort of tabby concrete" at Cartagena, Colombia (Hoffman 1980:55-56). Ten years later Trujillo (Honduras) was, through personal intervention of the Audiencia of Guatemala's president, surrounded with tapia walls (Hoffman 1980:163); la Yaguana (Hispaniola) petitioned in 1550, for "a tapia stronghouse" incorporating curtain walls and central tower (Hoffman, 1980: 97). Utilizing common materials (earth or lime based compounds), tapia facilitated construction speed, an important factor considering Trujillo had been sacked and remained threatened, while Cartagena's nearest source of building stone was located six miles away (Hoffman 1980:54; for late sixteenth century tapia walls enclosing Santo Domingo see Angulo Iniguez 1942:32,33).

At Isabela (Dominican Republic) an outpost founded by Columbus in 1497, recent excavation has revealed certain administrative and domestic structures incorporated formed clay walls erected upon stone foundations (Deagan, personal communication, 1993). Tapia construction is vaguely reported from Capera (Puerto Rico) dated c. 1500. Scattered about the Central American mainland traces can be expected of building techniques which persisted well into the late 1700s, "even so important a civil monument as the Capitania, the seat of the audiencia," Antigua Guatemala (Markman 1966:25) being constructed (before 1682) using clay tamped between timber boards.

Further north, along the seaboard of Florida, Alabama, Georgia, and the Carolinas, compounds termed tapia, tapia con oston, tabby, tappy or tapier are more tangible. These

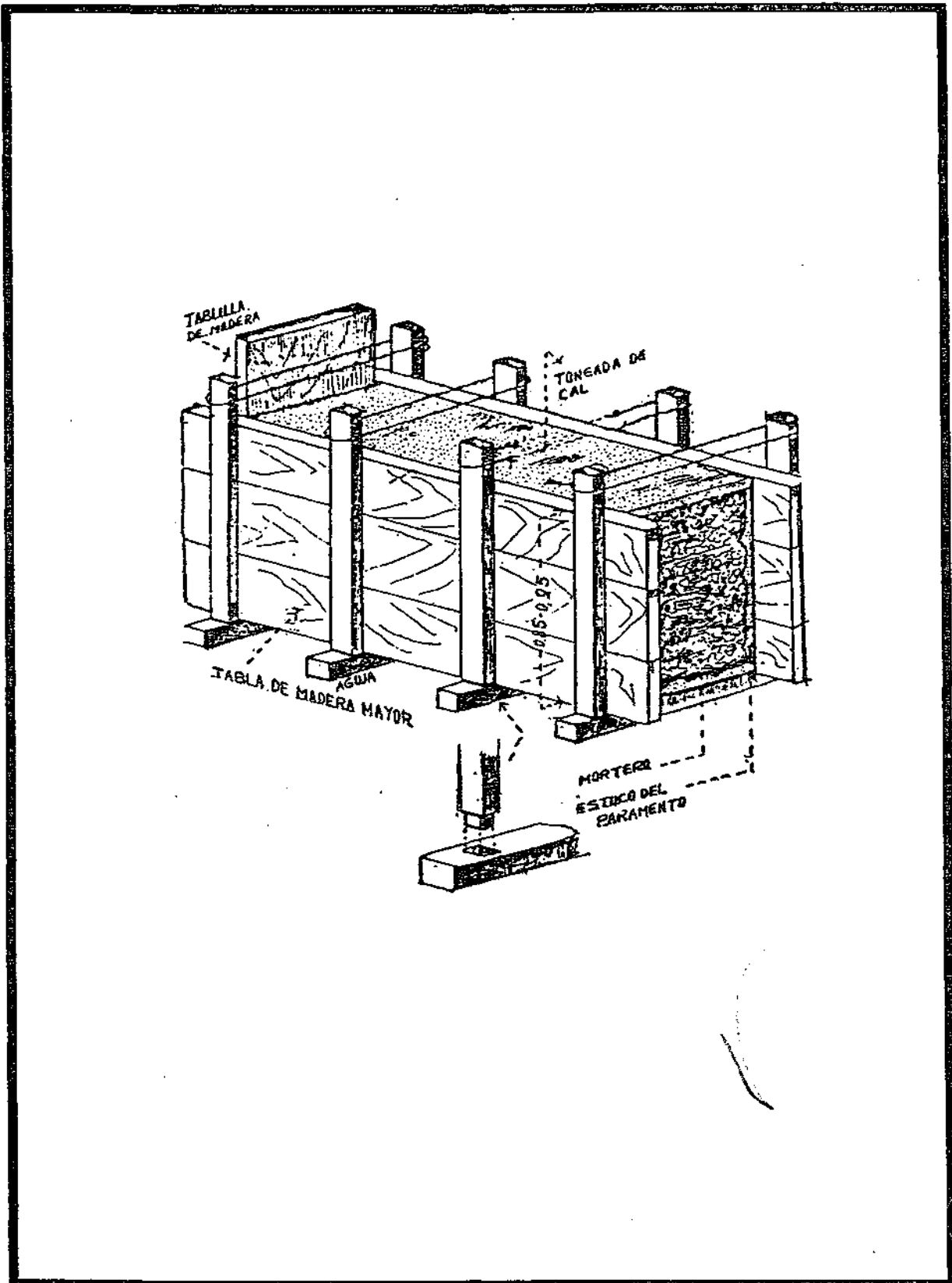


Figure 68. A Reconstruction of Tapia Style Framework Used in Medieval Spain and Colonial Central America.

utilized oyster shell--whole as a matrix and burned to produce lime, mixed with roughly equal amounts of sand and water tamped into reusable wooden forms. Although nothing remains visible above ground dated before 1730, it is clear tapia/tabby played an important role in creating shelter for colonists who confronted alien environments capable of yielding other durable building products only after extended effort.

Less certain are the paths manufacturing technologies followed as they diffused into North America. Kelso (1979:61) suggests the starting point was Spain's presidio of St. Augustine, Florida where by 1764 a third of houses then standing were erected using oyster shell tapia, i.e., tapia con ostion. From St. Augustine, he assumes knowledge passed into South Carolina, the earliest extant British colonial tabby construction appearing in 1734 at Fort Frederick, Port Royal Island. Later, the material migrated to Frederica Georgia, Kelso (1979:61) citing a freeholder named Henry Myers who states "the people" there had been taught how to cast oyster shell and lime using "square boxes of wood" in 1741.

Recent research has not altered this picture beyond establishing that tabby making was understood around Charleston before 1726. But detailed specifications and cost estimates then recorded (Journal, South Carolina Commons House of Assembly, 15 November 1726 - 11 March 1726-7) prompt questions concerning St. Augustine's real influence with respect to tabby's diffusion. If British settlers learned how to convert ubiquitous oyster shell into useful building products via the presidio, they adopted disparate fabrication methods. The scale of building presents striking contrasts, South Carolinians embarking upon massive tabby construction, i.e., Fort Frederick with walls five feet thick and equally ponderous fortifications at Dorchester near Charleston, for which no parallel exists among St. Augustine's often shoddy form cast structures (see John Bartram's description of houses with wracked tabby walls cited Manucy 1978:33).

Manufacturing process also differed. Spanish Florida's settlers preferred formwork about 1 ft high. Fort Frederick's lift levels are 1 ft 2 in - 1 ft 3 in (not 2 ft as Kelso [1979:62] implies), form height increasing (cf. a c.1780 Hornwork fragment, Charleston with 1 ft 4 in forms tied by 1 in diameter circular dowels set 3 ft 7.5 in on center) until c. 1790 when it became standardized around 2 ft. The standard was maintained in South Carolina down until 1835-40 when some local planters adopted Spalding's recommended 1 ft high forms.

The distinctions mentioned suggest two possibilities. First, if interchange of information took place, British and Spanish settlers followed separate paths as they developed their common constructional inheritance. Second, tabby building systems evolved along British North America's South-Eastern coasts developed not out of technological exchange with any single town (especially one like St. Augustine with a rudimentary command of the craft) but through more complex processes, involving local innovation and assimilation of experience derived via several cultural or geographic traditions.

## MATERIAL COSTS-THE PRIME FACTOR IN TABBYS USE

Documentation which, if extant, might clarify the issue of tabby's diffusion into British North America awaits discovery. Fortunately, historic sources (c. 1750-1840) emphasize the reason why tabby was often favored over brick or stone. Along the South Eastern coastal plain, stone quarries were almost unknown and brick manufacture localized. Conversely, shell could be found almost anywhere below high tide level, making tabby simply less expensive than alternative materials. An early confirmation comes from Dorchester, near Charleston. Hearing in 1757 that brick cost fifteen pounds per thousand plus freight "on the Bricks at Forty shillings per Thousand & lime at four pence per bushell," the South Carolina Commissioners of Fortification, who planned a fort and barrack block, decided "Tappy Work" would be "much cheaper and better" (Journal, June 16th. 1757). Later records (Statements of Contracts made by the Engineers Dept in the year 1820 NA RG 77, Misc. Papers #78) emphasize the same point. "Disease and the elements" coupled with an inexperienced and inefficient labor force prompted Captain James Gadsden to propose substituting "Tapia for the brick of the revetment walls of the fort at Mobile Point" Alabama, "tapia" costing \$10 per cubic yard while the contract price of brick was \$11 per cubic yard (see Engineers Department Washington, March 1821 Draft of letter to the Secretary of War. NA RG 77, Misc. Papers). Although no material substitution seems to have been made, the document is of considerable interest since it further emphasizes the role military engineers played in technological diffusion, Gadsden having earlier written reports describing Beaufort's tabby defensive structures, i.e., to Brig. General Swift, 1 June 1815, NA RG 77, Engineer Officers Reports 1812-1823:32-33.

Most documents are less explicit about tabby's relative cost, but, limited pricing data exists. At White Point, Charleston in 1726 (Journal South Carolina Commons House of Assembly, 20 January 1726) the "New [tabby] battery to mount 10 guns" it was estimated would "take 10,000 bushels of lime at 2s. per bushel; the entire battery requiring "twenty negroes working 200 days at 7/6 per day each". In 1757, based upon Charleston rates, 40,000 cubic feet of tabby made during construction of Fort Lyttleton I, Beaufort came to £5125. 11. 2. excluding daily labor which remained constant at 7/6 (Journal South Carolina Commissioners for Fortification, 25 August 1757).

Besides slaves hired out as day labourers (a mechanism guaranteed to ensure tabby's diffusion) gathering, transportation and burning of shell required major effort. Dorchester located 12 miles inland on a bluff rising above the Ashley River, lacked oyster deposits. Ever resourceful, Fortification Commissioners ordered (23 June 1757) "as many Boats as can be conveniently got for carrying up shells for that work" from the vicinity of Charleston. By 29 September 1757, Thomas Walker had delivered 2,325 bushels of live shells and 857 bushels of dead shells at the cost of £151.19.2. A second delivery (2,936 bushels) was made before 20 October 1757, Messrs Smith and Scott receiving £116.14. On Port Royal Island, during the following year, local commissioners overseeing Fort Lyttleton's construction (Nathaniel Barnwell, John Mulryne, John Gordon and Thomas Wigg, all prominent local planters) reported "boats unloading this day [21 January 1758] made up the quantity of shells deliver'd Seventy Thousand Bushels".

Collecting "live and dead" shell off banks and reefs was usual though not universal. Charles Drayton (who set-up his own lime-burning reverberatory furnace) sailing near the Edisto River's mouth discovered oyster shells "driven by the surfs...high up on the sandbanks" easily gathered. (Historic Charleston Foundation, Charleston, Diary of Charles H. Drayton Sr., 11 Febuary 1799). On Sapelo Island, Georgia, Thomas Spalding quarried ancient Indian middens, (Spalding 1844, cited Coulter 1937:73) a practice followed by late eighteenth/early nineteenth century owners of Dataw and Spring Islands whose standing tabby structures contain prehistoric pottery inclusions.

## **SUCCESS AND FAILURE IN TABBY MAKING**

Tabby making was uncertain at the beginning. Some first generation English and French settlers may have known pise or cob, (materials closely related to tabby). However, by 1700 North European use of these materials had become confined to garden walls, tenant cottages or modest farmhouses. Large scale American military construction and civil building in tabby stimulated invention, several cases showing cost efficiency developed only after an initial period of trial and error.

Successful manufacture required experience, close supervision and adequate funding. Improper attention to detail, ignorance of tabby's mechanical properties or interrupted casting might cause premature building failure absorbing all projected economies. Fort Frederick, Port Royal Island, (started 1734) provides a notorious instance. Named after Frederick, Prince of Wales, the tabby fort proceeded slowly, two contractors named Bond and Delabere having either miscalculated or deliberately discounted the project's scope (Journal, South Carolina Commons House of Assembly, 24 January 1734). Six or seven years after completion serious structural defects became obvious. Tabby defensive walls were "all down on the Land Side" leaving "the chieftest Part of the Cannon" inoperable. The magazine was "leaky," badly ventilated and unfit for storage, while an unplastered (tabby built?) barrack seemed barely weatherproof, becoming "most miserable " after driving rain (Journal South Carolina Commons House of Assembly, 8 February 1740). The conclusion was inescapable. Its walls having "tumbled in," Fort Frederick was a costly failure, meriting no further public expense. Governor Glen later delivered the Commons House of Assembly scathing commentary on the subject:

I am most ashamed to answer that part of your message relating to fort Frederick, or even give it the name of fort. It is injudiciously situated, ill constructed and is a low wall of Oyster shells which a man may leap over! And this is called a fort. But a Garden Fence is full as good a security. Nay it is really worse than nothing. For the name of Fort may decoy People to retire to it in case of danger which will undoubtedly prove destructive to every One who does so, whereas by betaking themselves to their boats or to the Woods they may have a chance to escape.

Forts and Fortifications, Batteries and Bastions, Ramparts and Ravelings, sound well; but if they are empty sounds, they will signify little. Let us therefore not amuse our Selves with words, but less take the Opinion of

Persons of experience which of them are good and will prove a real Defence in the Day of Danger; and let such be preserved: but let us not spend our money for what will not profit.

(Journal, South Carolina Commons House of Assembly, 5 May 1752)

Why Fort Frederick disassociated soon after construction is not recorded. The present ruin, shown on a plat dated 26 May 1864 [NARGI-33] (Figure 69) reveals few cracks around the surviving east bastion or substantial settlement along the "land side" indicating tabby separated horizontally along pour lines. Damage might be attributed to interrupted casting, faulty supervision or mechanical shock. Given the good workmanship lower wall levels evidence, contractual inexperience is an unlikely explanation. Fort Frederick probably shattered under stress generated by its own cannon, as did Fort Johnston, North Carolina (Colonial Records of North Carolina:vii,246) the Beaufort garrison squandering inadequate powder supplies upon daily signal shots.

If so, we have an indication that tabby's vulnerability to sudden imposed load whether the result of seismic disturbance, hurricane force winds or cannon, was not fully understood. Fort Frederick's partial collapse did make South Carolina's Fortification Commissioners mindful of obtaining skilled and attentive supervision. Their Journal (SCDAH, Columbia; South Carolina Historical Society, Charleston) chronicles an acrimonious dispute with a Mr. Ioor who seemed more concerned about his own indigo crop than undertaking Fort Dorchester's construction as contracted in 1758. "Unacquainted with carrying on the tappy work in a proper manner" Ioor was dismissed, the Commissioners employing Thomas Gordon instead and paying him twice Ioor's salary. Thereafter, operations went well, Gordon receiving regular payment plus moneys for "hire of negroes" (£13.6 paid on 25 February 1758) and "manufacture of tappy boxes" (£18.4 on 28 March 1758).

Underestimation of tabby's strength under load again caused catastrophic structural failure in the 1790s. This time the victim was Fort Johnston, North Carolina "protecting the entrance to the Cape Fear River," an informant writing in 1819:

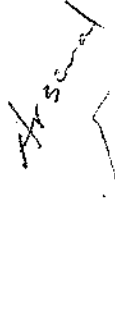
it...was determined that the fort [ruined during the revolution] should be rebuilt, of a composition of Lime and sand, called Tapia- and that Demi Bastions should be extended at the angles of the Front. A ditch was to have [illegible] accompanied the walls on Front and Flanks. Said Tapia walls were commenced, but so very thin were the walls, they would not, of themselves, stand to be filled up with earth, but gave way and fell down. The Contract was broken off, and the imperfect attempt lay in Ruins, as if an earthquake had thrown the surface into Hills and holes. (NA RG 77, Records of the Office of the Chief of Engineers, Fortifications Map File DR 62-A)

Moisture penetration into tabby fabrics produced less sudden deterioration but was still highly detrimental. That tabby required surface coatings was realized early, external stucco and internal plaster finishes being the rule in Colonial St. Augustine, Florida (Manucy 1978:70-71) and Georgia (Kelso,1979:67-68 who describes the Horton House,



Jekyll Island, built c. 1742?). A post-Colonial (1804) North Carolina source (NA RG 77) gives specific instructions stating "the whole [work] shall be finished off handsomely and usefully by protecting all the upright tapia work exposed to the weather with a coat of strong plaster [sic] as on the light house at Baldhead called rough Casting".

Erecting Beaufort's first Arsenal c.1795, Col. Thomas Talbird omitted stucco facings. His namesake, Thomas Talbird describes the building and subsequent events:

*Handwritten:*  The outer enclosure measures 100 feet by 61, And the wall is 10 feet high also built of Tabby work & is much decayed in places; and if not repaired at least in these parts it is apprehended it will fall in the lapse of a few years. These walls have never been rough-cast which is considered a great preservative & almost indispensable to Tabby work. And is further calculated to assist dampness; which these walls are more or less subject to. (SCDAH, Copy of Report from the Keeper of the Beaufort Arsenal dated 1 July 1825).

Moreover, "leaky" unglazed roof tiles (rather than impervious glazed ones) installed over the Magazine and "Laboratory" created persistent problems.

Bernard Barnwell Sam did not repeat the same mistakes. James Julius Sams (nd.:4) observes his father "generally superintended [tabby] work himself knowing how particular it was necessary to be". Inattention brought serious danger, the Memoir describing how:

On one occasion he [ie. Bernard Barnwell Sams] made a very narrow escape with his life. He was building an outhouse of large dimension in Beaufort. He found that there was something wrong with its construction. It had been carried up beyond the first story. While walking around it, it fell well nigh covering him with its ruins. The defect had been in one of the boxes, it had not been placed in a direct line, square with the others. In other word it produced a bowing wall, and a bowing wall will certainly fall (Sams nd.:4).

## THE EMERGENCE OF LARGE SCALE TABBY CONSTRUCTION

Despite faltering experiments, several large scale Colonial tabby buildings designed to accommodate military personnel were erected. The Kings Garrison, Frederica, GA measured 94 ft 6 in on each side and incorporated four narrow single story building ranges (with 1 ft thick tabby walls) arranged around a central courtyard (Linley 1982:321).

Seventeen or eighteen years later a "Return of Works done at Fort Lyttleton" Port Royal Island near Beaufort dated 16 November 1758 (Journal South Carolina Commissioners of Fortification) describes:

A row of double Barracks for Soldiers Measuring from out to out 136 feet in length, 30 feet 6 Inches wide, & 9 feet high from the Foundation to the Wall Plate of Tappy.

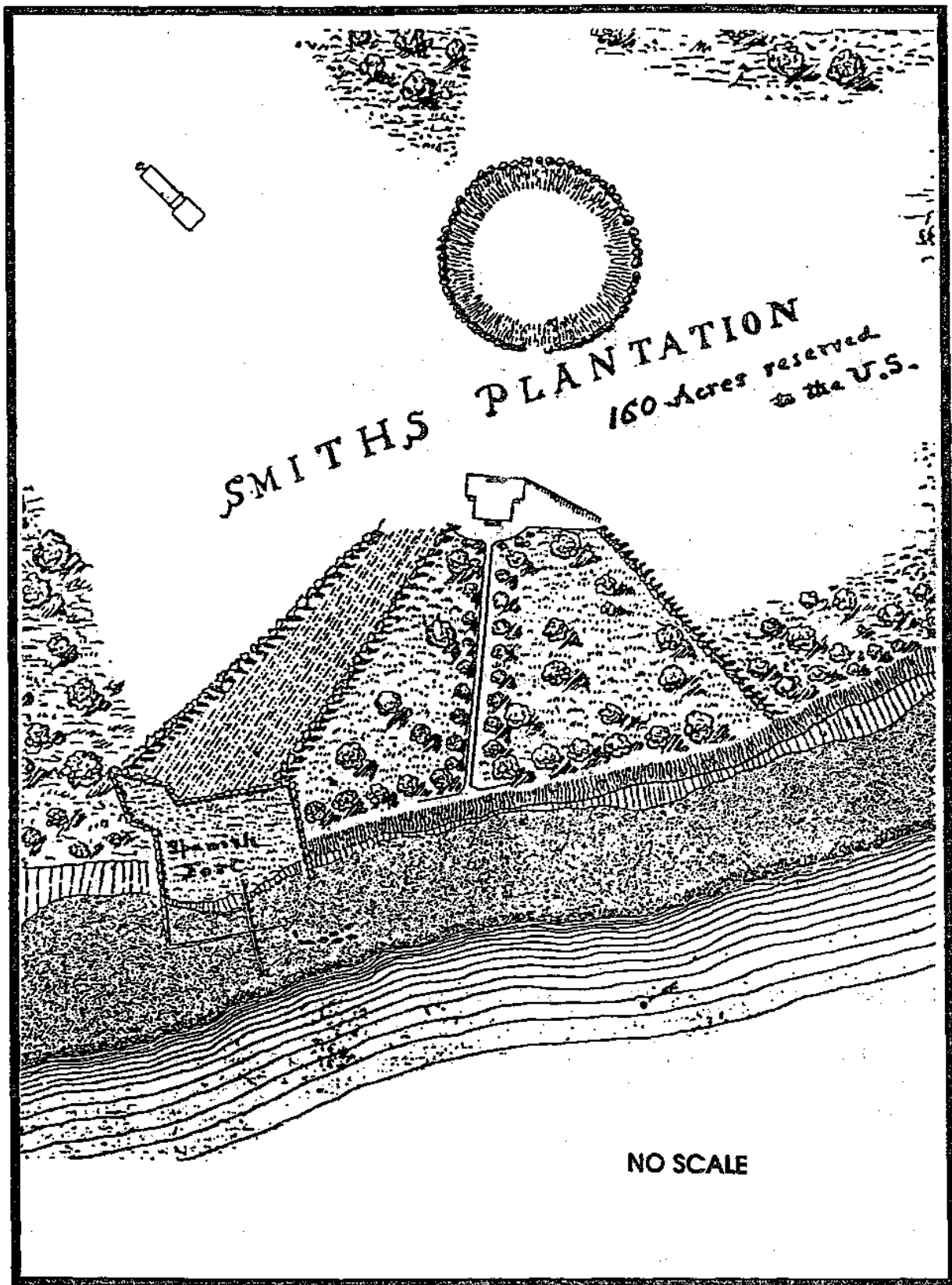


Figure 69. A Portion of an 1864 Plat of Smith's Plantation Showing Fort Frederick, Port Royal Island, South Carolina.

"Middle and cross partitions" were of "Tappy," dormer window had been installed over every apartment (but not "garrett" floors), door and window were provided with shutters. Also noted is:

A Tappy Wing to each of the soldiers Barracks 26 1/2 ft. long & 21 1/2 ft. wide divided into four apartments for Officers, Floor, lathed and plastered-  
A Chimney & closet in each.

After the American Revolution, tabby evolved rapidly. First, building in the material diversified, examples dated before 1820 ranging between simple structures, i.e., slave dwellings, barns, or enclosure walls, and complex fortifications of semi-circular, i.e., Fort Hampton, Beaufort, North Carolina; the second Fort Lytleton, Beaufort (Figure 70); Fort Winyaw, near Georgetown (Figure 71), or circular form (Martello Tower, Tybee Island, Georgia, for sugar mills see Brooker 1991). Second, scattered around present Beaufort County, two, three and sometimes four story high tabby residences appeared, exceeding in scale any known Colonial prototype, i.e., the 1½ story Retreat Plantation described above). Tabby's marked local popularity down until the 1840s reflects expansion fueled by fluctuating European markets for long staple cotton developed following the crop's successful introduction on Hilton Head Island (1790). Rosengarten (1986:70-77,81-88) has described the opening decades of the nineteenth century when Sea Island cotton production reached twenty two thousand bales or 8.5 million pounds (in 1801) and prices peaked at fifty to fifty five cents per pound (in 1819). Profits accelerated a building boom already underway c. 1790. Beaufort Town gained scores of new structures; neighboring islands new or improved plantation settlements. This regional rebuild cannot now be tracked in detail. Most public and private records have disappeared. The "Journal of the Proceedings of the Trustees of Beaufort College" (Ms. Beaufort County Library, Beaufort) though, furnishes a unique exception. An influential tabby structure erected ten or fifteen years before Berners Barwell Sams started his major construction/reconstruction work is detailed and individuals, (including several Sams Family relatives) named, individuals whom it will be seen, commissioned or knew through family connections, large scale tabby buildings Berners Barwell Sams emulated.

Abandoned because of yellow fever (1817) and later demolished, the first Beaufort College was predicated upon cheap construction. Col. Thomas Talbird (himself a College Trustee and leading local building contractor) solved the nascent institution's dilemma of providing suitable accommodation within its slender means by offering: (20 December 1800):

to build, complete and finish, an edifice of tabby one hundred and five feet long, forty four feet wide and three stories high, with eight private rooms and one public one in each story-to cover the building with tile and to find all the materials for the same except paint and roughcasting for the sum of three thousand, nine hundred and sixty five pounds and stipulated further to rough cast the building at any time after it shall be completed at the rate of 2/6 per square yard.

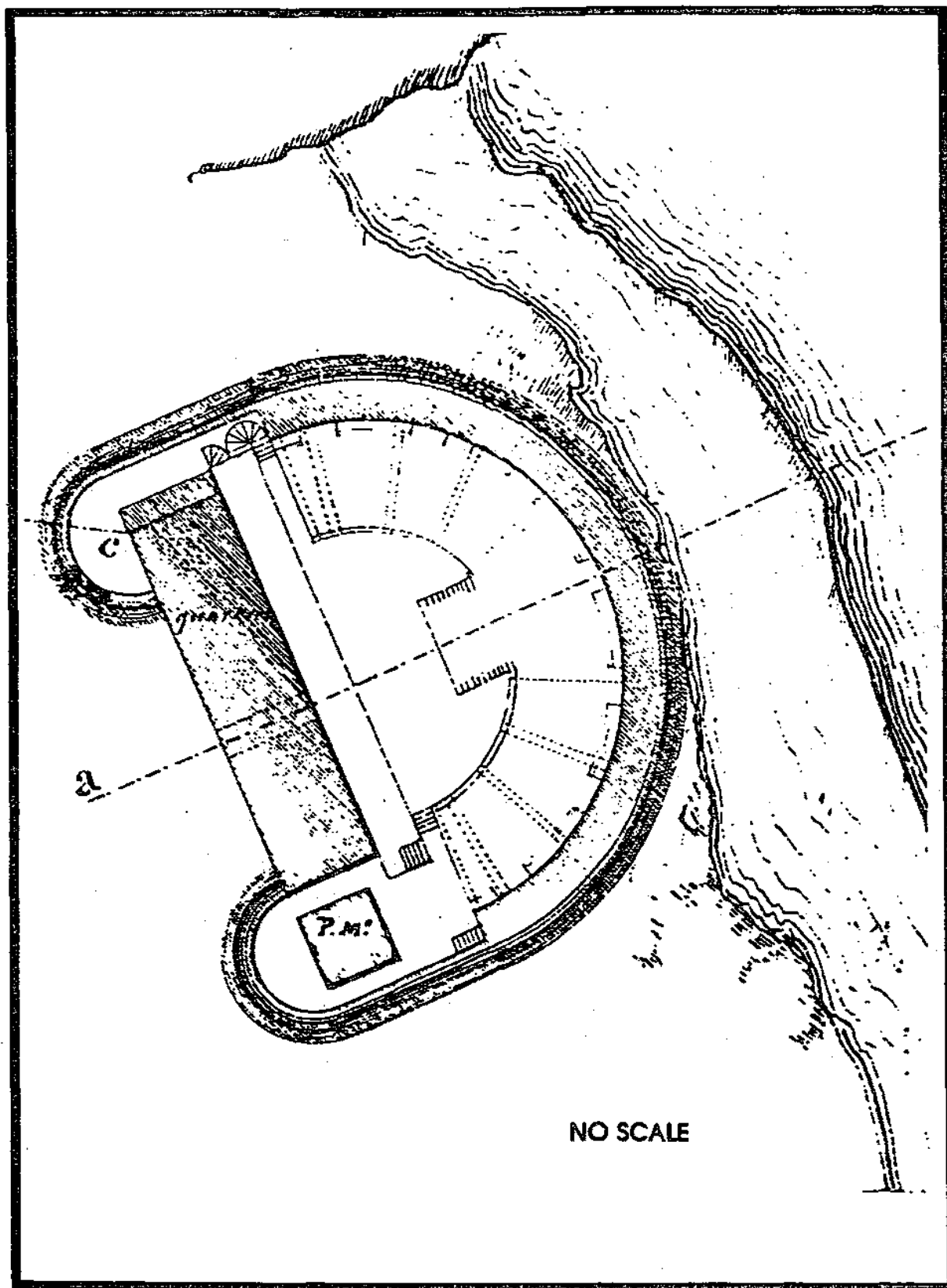


Figure 70. Detail of Semi-circular Tabby Fort Erected in 1811 at Fort Lyttleton, Port Royal Island, South Carolina.

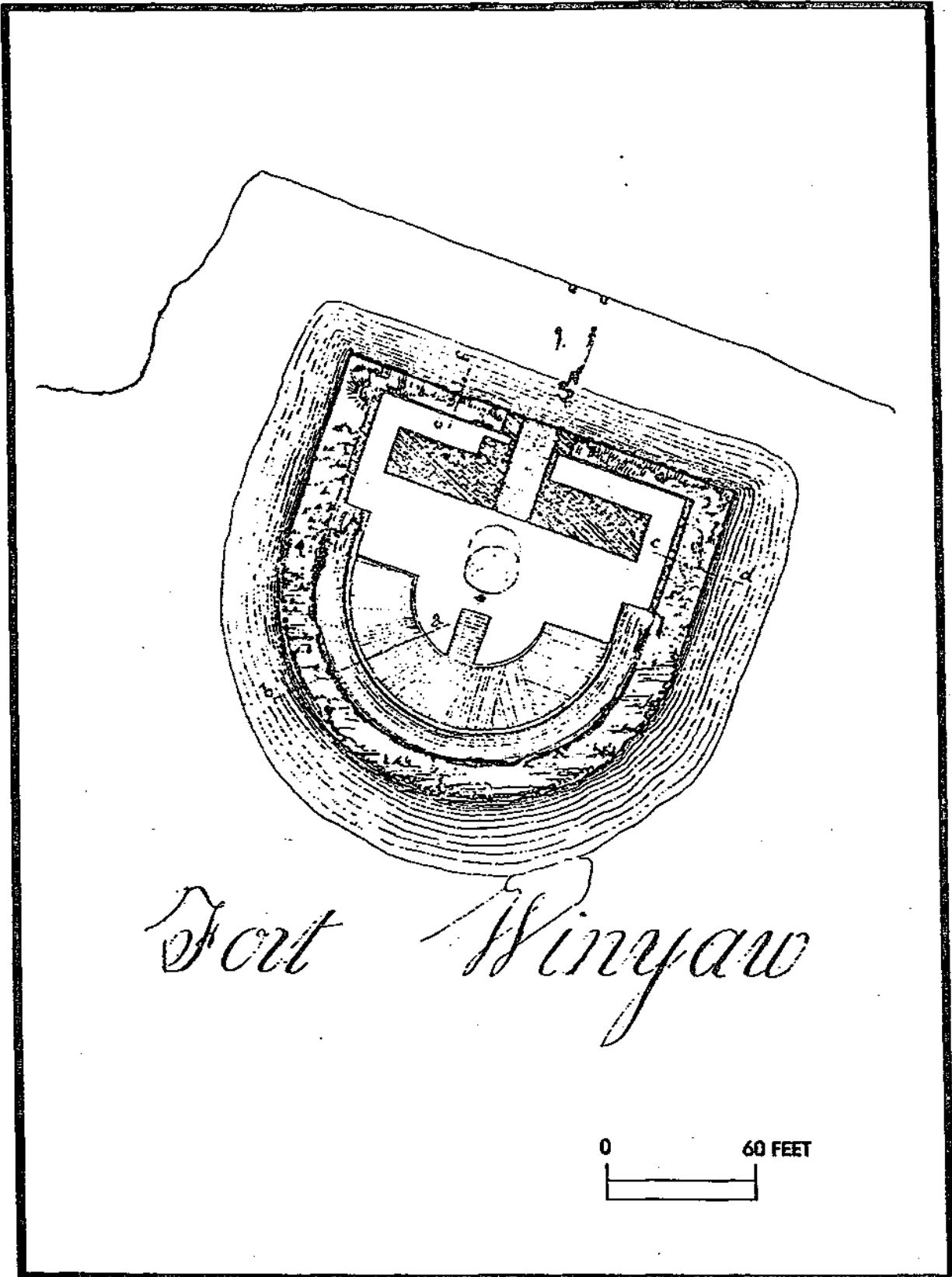


Figure 71. 1821 Drawing By Captain Poussin showing a Semi-circular Tabby Fort, Fort Winyaw, Georgetown County, South Carolina.

Reconsidered (12 January 1801) the plan "appeared too narrow". An additional sum of one hundred and fifty pounds was agreed "to widen the college six feet so that the whole width...was increased to fifty feet."

Started 2 November 1802, tabby walls reached second floor level before August 1803. Timber roof members were raised 28 December 1804, the Trustees exchanging roof material from tile to slate shipped out of New York.

Slow progress towards completion reflects Talbird's untimely death (date uncertain), insufficient funds and natural calamities, i.e., hurricane force winds. Despite delays and its exceptional size, the building (enclosing about 15,000 square feet) occasioned little additional expense beyond costs first budgeted. Prior experience probably contributed towards the outcome. Other than Thomas Talbird, three trustees (Thomas Fuller, president, James Mark Verdier, and Stephen Elliot) had earlier undertaken tabby building, acquiring working knowledge of the material's structural limitations and possibilities.

Beaufort's oldest surviving tabby dwellings are the Barnwell Gough House, built by Nathaniel Barnwell for his sister Elizabeth Gough (Figure 45) and Tabby Manse, built by Thomas Fuller, two related houses dated c. 1780-86. Both are "T" shaped, comprising two principal living floors (enclosing about 7,000 square feet total) over an elevated basement, each main entrance being approached south via a pedimented three story high portico. Inside, variant double pile plans (incorporating four rooms per story), feature a central hall and double height stairwell, staircases "returning to the upper story against opposite sides of the hall" (Lane 1985:134). Broad upper landings give onto paired lateral rear rooms and two larger spaces extending across respective entrance fronts.

Thomas Fuller owned another large tabby house (burned in 1907), located near the corner of Carteret and Bay Streets, Beaufort (Figure 72) erected by "Smith & Gordon, merchants from Savannah" c. 1800 (ms. note, Daner Collection, Historic Beaufort Foundation, Beaufort). Old photographs (National Archives A-1326 140 CHC; Daner Collection, Historic Beaufort Foundation, Beaufort) illustrate an asymmetric two story Federal Style structure raised over an elevated basement, approached via a pedimented double height porch facing south over the Beaufort River. The building's eastern extremity appears circular or elliptical. Non-linear formwork must have created difficulties, but, these were overcome (cf. the demolished tabby structure called "Barnwell Castle," Beaufort c. 1790?, where rear rooms projected as curved bays).

Adjacent stood the Rev. Stephen Elliot's distinguished tabby residence (now destroyed) a second Smith and Gordon project. Two stories high over an elevated basement, it incorporated a seven bay pedimented entrance facade and very tall hipped roof. Of similar construction, the "T" shaped, double pile Anchorage (date uncertain, now much altered) 1103 Bay Street, Beaufort was also an Elliot house, containing three full stories.

Talbird family members are associated with two more domestic buildings notable for high (3½ - 4 story) form cast external walls and single room depths, the Habersham House (c. 1820?) Bay Street, Beaufort (Figure 73) and Senator Talbird's now destroyed early nineteenth century (c. 1800) residence, Hancock Street, Beaufort.

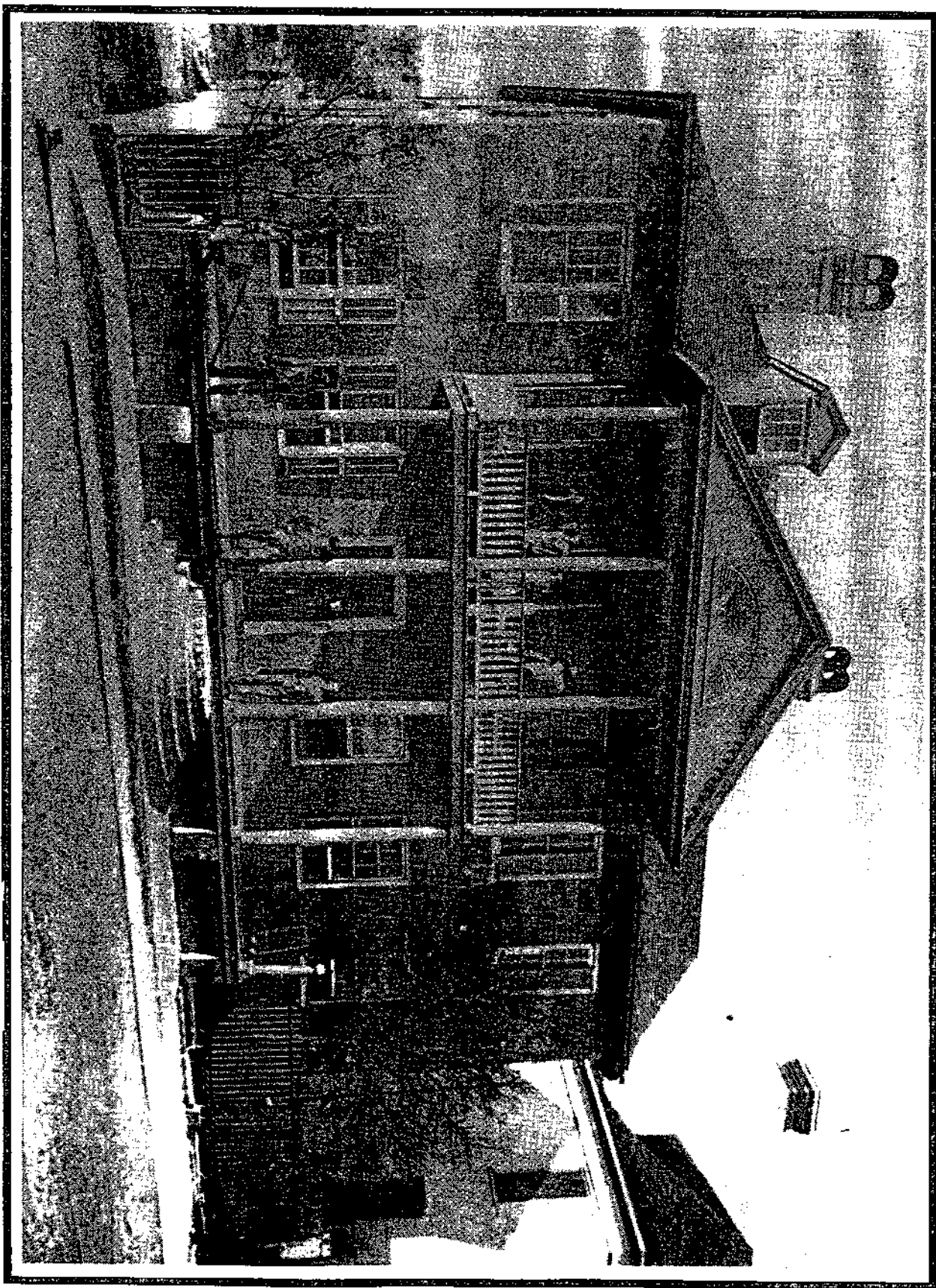


Figure 72. Photograph (c. 1864) of the Dr. Thomas Fuller House, Bay Street, Beaufort, South Carolina.

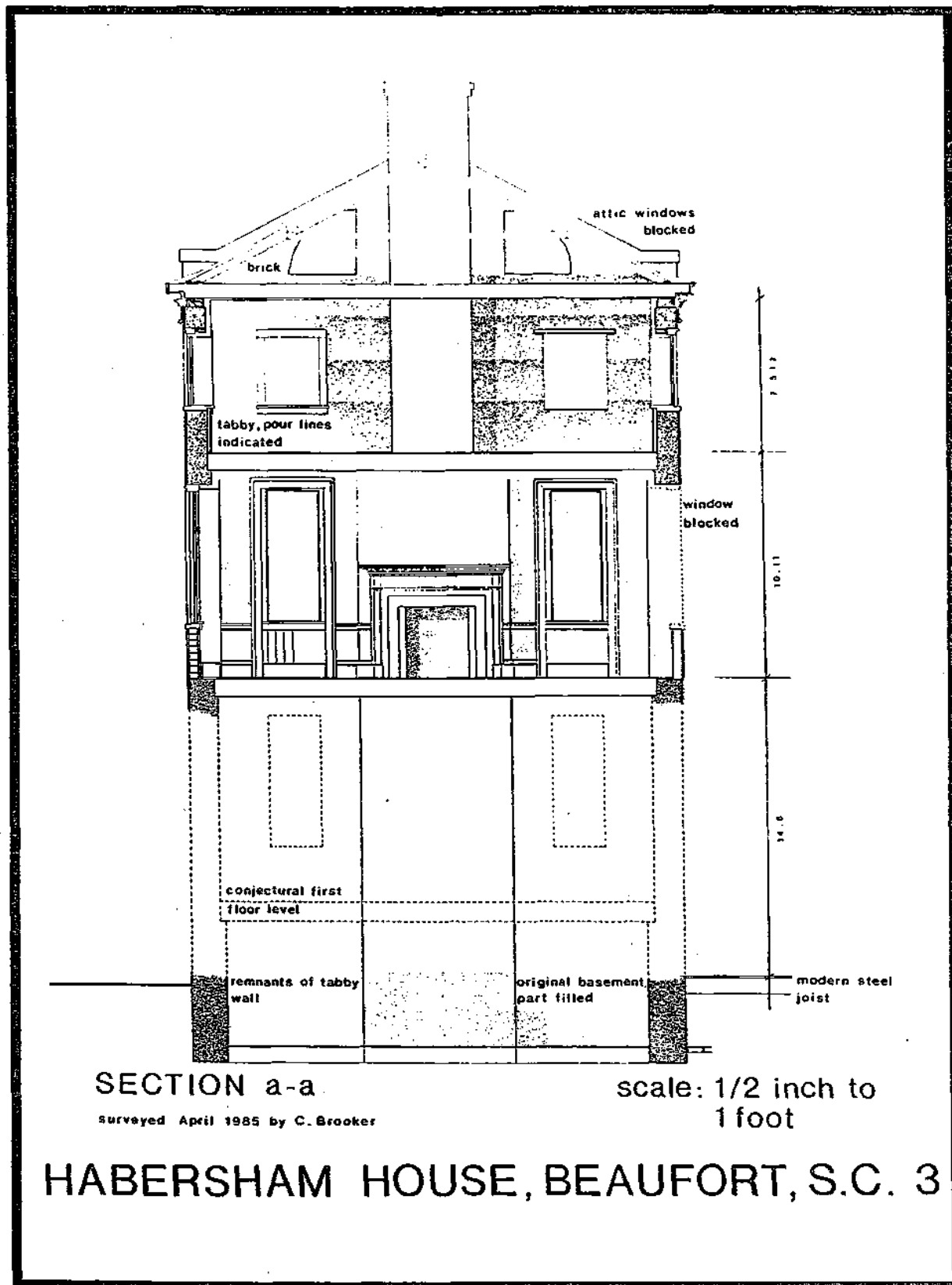


Figure 73. Vertical Section of the Habersham House, Beaufort, South Carolina (c. 1820).



Beaufort College Trustees and their close relatives were not the only persons who commissioned tabby construction c. 1800. They were though citizens linked by close kinship ties and mutual interests, facts which explain why their diverse residential projects used tabby to optimum mechanical and financial advantage. Extrapolating from surviving and excavated structures, the principles and techniques governing large scale Post-Revolutionary tabby construction may be summarized as follows:

### **General Principles**

Tabby is an artificial material composed of sand, lime and whole oyster shell aggregate. Different proportions of these constituents alter mechanical properties, tabby in all cases having low resistance to tensile and shear stresses. Core samples taken from the Barnwell-Gough House, Beaufort indicate bearing values are not uniform for any length of tabby wall and areas of extreme weakness occur. Casting semi liquid materials introduced further disabilities. Adhesion between pour levels was often poor, causing disassociation and structural separation. Large scale late eighteenth/early nineteenth century construction, overcame tabby's limitations by minimizing the mass of external walls; using timber members in conjunction with cast materials and (after a period of experimentation c 1780-1820) adopting linear building shapes which reduced structural spans.

### **Formwork Design**

Down until c. 1840 when Thomas Spalding's preference for 11 in or 1 ft high casting levels (Crook and O'Grady 1980:16) was sometimes imitated, Beaufort District formwork shows little variation. Typically, at Haig Point House, Daufuskie Island (c. 1828?) forms utilized 1 ft wide timber boards, tightly fitted together by means of tongued and grooved joints. Each "mould" comprised two panels, 2 ft high, distanced apart by 1.2 in square, timber pins (Brooker 1989:100-102). No vertical construction joints are visible among basement walls, suggesting forms (except where interrupted by wall openings) were continuous. The weight of cast material involved (estimated at 450 lbs. dry per foot run), means "moulds" must have been braced externally with timber battens. Masons laid up building corners in brick. These provided a true right angled junction and protected vulnerable tabby edges as formboards were struck, a practice followed at the Talbird House, Beaufort.

Two sources add eye witness information concerning the time allowed for tabby mixes to set. The duc de la Rochefaucauld Liancourt (1799 cited Binney 1980:916) who visited Beaufort Town in 1796 states:

mortar is poured into frames the length and thickness of the wall to be constructed. These forms have no bottoms but their sides are joined at certain intervals at top and bottom by pieces of wood. The mortar is pounded in with force and when brim full left for two or three days.

E. Gilman, by his own testimony, learned tabby making from General Alexander McComb, the engineer responsible for erecting Fort Lyttleton II, Port Royal (1809; 1811-12, Wade 1982:n.p.). Like Thomas Spalding, Gilman, in his pamphlet [the] Economical Builder, a Treatise on Tapia and Pise' (Washington, D.C. 1839) considered tabby a mere variant of pise construction, distinguished only by the use of oyster shell aggregates and limes. He remarks :

It is desirable to commence this kind of work pretty early in the season to give the wall time to harden. In good weather, the work of one day will be sufficiently hard to allow the moulds to be slacked off the next morning, to carry forward. These moulds are easily made and kept in their place, by little pine blocks, notched and put across the boards 3 or 4 feet apart...(Gilman 1839:4).

Figure 74 reproduces formwork as recommended by Gilman.

### **Foundations**

Foundation design varied. Neither the Barnwell Gough House nor Habersham House, Beaufort utilized spread wall footings. Basement walls maintained a common width, the initial pour (or pours) filling trenches extracted two or three feet below grade. Haig Point House, Daufuskie Island, shows initial construction required, thin, (1 ft deep) tabby strips cast without forms boards into foundation trenches defining the overall building plan. Wider than subsequent wall pours, the footings created a level base for wall forms and allowed their adjustment before casting operations commenced. Dimensional discrepancies were thereby minimized; structural tolerances being limited to plus or minus 0.36 in.

Gilman (1839:3) recommended using stone and mortar mixes below ground, a practice so far not attested among the few local tabby structures excavated:

Dig for a foundation the same as for other walls and set two boards on edge, parallel with and as near each other as you intend the wall for thickness; then place a layer of stones on the ground. Between the boards (called the mould) as closely together as you can, and with a rammer, tap them all lightly, to adjust them in their places; then pour in a layer of mortar (the sand need not be sifted for this mortar) over the stone; it should be made so thin that, with a little stirring, it will fill up all the vacancies between them; then another layer of stones, tapping them as before, and so on, till the mould is full. Good sound inch boards are quite sufficient for these moulds.

### **Exterior Walls**

In multi-story tabby construction, exterior wall thickness diminished with height. By thus reducing mass, material economies were achieved, the principle being recognized at Frederica, Georgia during the mid-eighteenth century, possibly earlier at St. Augustine,

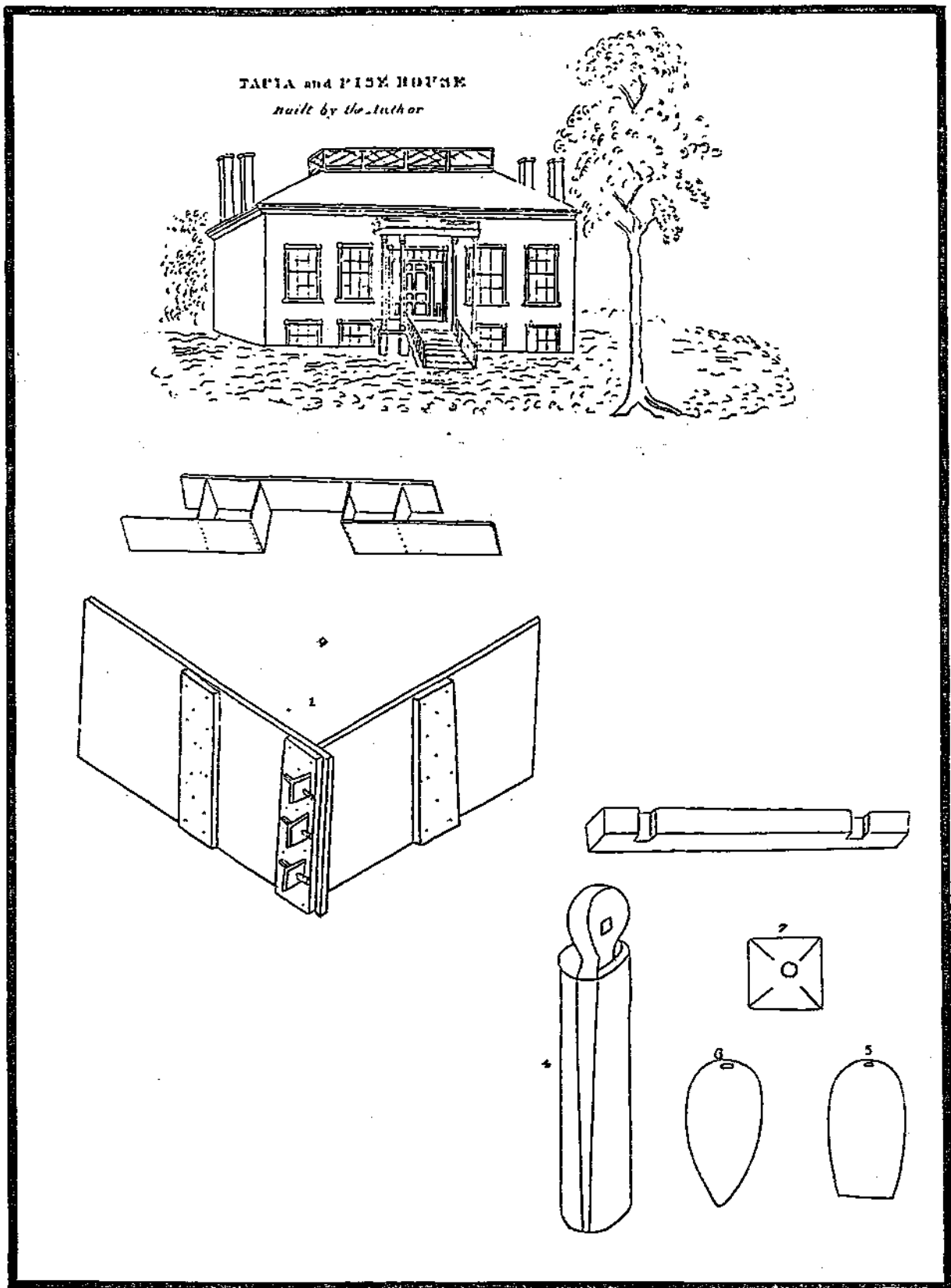


Figure 74. Details of Tabby Framework From E. Gilman, "The Economical Builder: A Treatise on Tapia and Pise Walls," 1839.

Florida (Kelso 1979:66-67) and among tapia buildings of Iberia before 1300. Gilman, (1839: 4-5) writes:

The thickness of the wall will depend on the size of the building, the height is to be carried & c. For a large house of two stories I should advise the cellar or basement story to be twenty inches, the first story above ground sixteen, and the second twelve inches thick.

Beaufort District builders utilized similar ratios, though they preferred somewhat higher safety margins when casting lower wall levels (Table 94). Tall or double pile structures evidence the most substantial construction, Haig Point House, Daufuskie Island, (probably three stories high with a "footprint" of 3,203 ft 7.5 in square) having 2 ft wide basement walls. Thinner external skins were possible in two story, single pile construction but at the expense of enclosed area unless some form of linear (cf. Bellevue, Georgia) or tripartite plan (cf. the enlarged Sams House, Dataw island; Edwards House, Spring Island) was adopted.

Table 94. Wall Thickness in Selected Domestic Tabby Structures Compared to Recommendations from E. Gilman's "Economical Builder: A Treatise on Tapia and Pise" 1839.

	<u>PLAN</u>	<u>DATE</u>	<u>BASEMENT</u>	<u>WALL THICKNESS IN FEET</u>		
				<u>1st FLOOR</u>	<u>2nd FLOOR</u>	<u>3rd FLOOR</u>
GILMAN		1839	1 ft 8 in	1 ft 4 in	1	-
Horton House Jekyll Island	SP	c1740	-	1 ft 6 in	1	-
Barnwell Gough House Beaufort	TDP	c1780	1 ft 10 in	1 ft 5 in	1	-
Baynard Ruins Hilton Head	DP	c1790	1 ft 10 in	1 ft 6 in	-	-
Edwards House II Spring Island	SP	c1805	-	1 ft 3 in	1	-
Sams House Wings Dataw Island	SP	c1820	-	1 ft 2 in	1	-
Habersham House Beaufort	SP	c1825	1 ft 9 in	1 ft 6 in	1 ft 3 in	1
White Hall Slave Tenement Near Ridgeland	SP	c1825	-	1 ft 6 in	1 ft 2 in	-
Haig Point House Daufuskie Island	TDP	c1830	2	1 ft 4 in	1	-

KEY TO PLAN TYPES: TDP = T Shaped Double Pile Plan DP = Rectangular Double Pile Plan SP = Single Pile Plan

## Floors, Windows and Roofs

Without lateral restraint or support any tall, thin wall becomes unstable, moving out of vertical under load. Always vulnerable to movement, tabby might fracture along lines of greatest weakness (i.e., pour levels) or where mass was least concentrated (i.e., above and around openings). Multi-story tabby structures achieved equilibrium through judicious introduction of timber members, these (unlike tabby), resisting tensile stress. Essential elements included:

### Floor joists

Cast into position as construction proceeded, joists provided intermediate ties, restraining walls from moving outward and counteracting any tendency towards inward movement. At the Barnwell Gough House, Beaufort, first floor joists span 26 ft, utilizing cypress (*Taxodium sempervirens*) logs adzed to more or less uniform 9 in by 3 in sections placed 18 inches on center. One end of each member is bedded into the building's exterior tabby walls, the other supported by 1 ft by 9.5 in intermediate heart pine beams. The Habersham House, Beaufort, evidences similar span/depth ratios, 3 in by 9.5 in floor joists, spaced 1 ft 5 in on center, spanning 24 ft. Here, ledges, (created as walls become less thick with height) carry 3 in deep by 5 in wide plates which receive the otherwise unsupported floor timbers.

### Lintels and Frames

All late eighteenth/early nineteenth century houses cited, exhibit generous openings lighting or leading into main living levels. Large openings further reduced labor and materials required when erecting external tabby building skins but also disrupted structural continuity. Timber lintels, window and door frames helped maintain stability. So too did porch framing.

Door and window frames were often substantial, sections deduced for the Edwards house, Spring Island, (with window openings 3 ft 6 in wide and 6 ft 6 in high), measuring 5 in by 3 in. Lintels over openings can seem shallow measuring 2.5 in to 3 in in depth at the Edwards House, Spring Island and Barnwell-Gough House, Beaufort (where original members are trimmed but otherwise unwrought logs).

Describing operational procedures Gilman (1839:4) states:

The door and window frames are set in as the work progresses, but in an unfinished state. The sills and jams (sic) only are made, like a box, the thickness of the wall braced out, to prevent the wall from pressing them inward.

## **Roof members**

Roofing large scale tabby structures presented challenges. Tall, thin tabby walls could not withstand concentrated loading, yet wide span roofs imposed heavy dead loads. Hurricanes aggravated the problem, requiring solutions capable of withstanding sustained and massive stress. The Barnwell-Gough House retains its original c. 1780 roof frame intact, a span of 43 ft having been accomplished by two parallel king post trusses spaced 8 ft 6 in apart. Erected between front and rear house walls (i.e., north-south) without intermediate support, each truss receives two principal hip rafters directly and a through-purlin secondary rafter system indirectly. Ceiling joists span between lateral (i.e., west or east) external walls (where they rest upon continuous timber plates) and the bottom string of a truss. Pegged mortise and tenon joints help maintain even load distribution, no exterior tabby bearing wall having ever fractured or timber frame connection split.

Labor entailed in cutting, transporting, jointing and erecting timber components for the roof frame described must have been prodigious. The Habersham House, Beaufort, (a narrow, one room deep structure), illustrates economies effected through linear planning. The roof frame is simple, consisting of 4.5 in by 5 in rafters tied at their apex by horizontal 3 in by 4.25 in collars, spanning 24 ft across the building's short axis.

## **TABBY BUILDING BY BERNERS BARNWELL SAMS ON DATAW ISLAND**

Berners Barnwell Sams, like other planters probably learned tabby making through observation and practice. Before 1820, English language handbooks aimed towards "workman" or those "ignorant" and "uninstructed" in architecture (Archer 1985:21) while useful for new or fashionable decorative motifs, offered no assistance whatsoever. Only travellers thought tabby manufacture worth description, comments by John Bartram (1792) and La Rochefoucault Liancourt (1799) being among the earliest published accounts.

Oral information was less hard to find. Wigg, Barnwell or Fuller family connections who understood the craft through long experience may well have offered Berners Barnwell Sams practical advice. We may also speculate, workers were at hand who had labored upon the vast enterprise of Fort Lyttleton II, Port Royal, (a semi circular fort enclosed by 15 ft wide tabby walls built c. 1811-12, Wade 1982:n.p) or several large tabby houses erected along Bay Street, Beaufort c. 1800-1815.

Whatever the source of his information and labor pool, Berners Barnwell made informed choices as he enlarged Dataw Island's old Sams House. Minor miscalculation or hesitation perhaps happened, i.e., when seating the East Wing's first floor joists (see above) but the fundamental division of living accommodation into two linked single pile, rectangular building envelopes brought real structural advantages.

Lower external walls of East and West Wings are less wide (1 ft 2 in) than those recorded from any other recorded tabby dwelling enclosing a comparable area (cf. Table

94). Measured against lower walls of the second phase Edwards House, Spring Island, savings were minimal. Nevertheless Berners Barnwell Sams was, it seems, very confident about his tabby making abilities, cutting costs when feasible and expending scarce resources upon structural elements he deemed critical. Expensive brick corner reinforcement (cf. Haig Point House, Daufuskie Island or the Talbird house, Beaufort) was excluded. Foundations received close attention, external walls being erected upon tabby strips 1 ft 6 in wide by 1 ft deep which produced stepped footings capable of resisting both building settlement and overturning moments.

Second floor joists also indicate careful placement. All (except conjectured trimmers around chimneys) were seated upon timber wall plates, and then anchored into position by a 1 ft high tabby cap compacted around joist ends. This detail is unusual, the only other known example being found in the main Baynard Plantation House, Hilton Head Island, South Carolina. If 1 ft deep, floor joists spanning 20 ft 4 in were more than adequate for the task they performed, current building codes requiring minimum span/depth ratios of 1:22. Elsewhere, personal observation suggests floor members exceeding calculated safety factors seldom occur among local late eighteenth and early nineteenth century buildings (cf. the Barnwell Gough House, Beaufort, described above). South Carolina builders, following trends established c. 1750 when British carpenters facing depleted forest reserves, discovered "they could build as substantial a house as before with smaller and fewer timbers" (Mercer 1975:126).

Facade design also typifies cautious building practice. North facade fenestration maintains high solid/void proportions, paired window arrangements leaving large blank wall areas (cf. the Baynard House, Hilton Head Island). On south facades, upper door openings interrupted wall continuity to greater degrees, any structural disability being offset by the bracing effect of Link construction and timber framed porches extending along each elevation (cf. the Edwards House, Spring Island, Figure 55).

We can assume that hipped roofs enclosing the two wings presented few difficulties. Narrow building plans allowed simple rafter systems, excluding heavy king post trusses like those of the Barnwell Gough House and Tabby Manse.

Standardized formwork height; tabby brick spandrels beneath window openings; shallow timber lintels over openings; window frames lined nearly flush with facades and scored stucco external finishes imitating stonework were all normal features. Fired brick confined to chimneys, porch piers and principal external stairways again reflects usual local practice.

Despite economies effected, large scale tabby making on the scale Berners Barnwell Sams undertook was a labor intensive operation. Thomas Spalding's "six men and two boys" who "collected their own shells, burnt their own lime, [and] mixed their own mortar" produced 135 cubic feet of tabby per week (Spalding 1830:619). Assuming work alternated between East and West Wings, each 2 ft high, lower level "round" on Dataw Island demanded about ten times as much tabby be manufactured per day. Results illustrate one stage "in the persistent development towards leanness of construction" (Fitchen 1961:75),

characteristic of Beaufort County's Post Revolutionary tabby architecture (a development best exemplified today by the endangered four story high Habersham House, Beaufort).

On Dataw, double pile building shapes and consequent massive roof frames were rejected. Likewise, perhaps because of the complex formwork involved, fashionable curved elevational forms seen at Barnwell Castle, Beaufort found no expression. Instead, abundant local materials, well tried techniques and a linear plan combined to produce c.1816-1819 an extensive residence at minimum cost. Slightly later (before 1829?) building continued with the erection of structures associated with the fenced Yard, the Yard itself being defined by tabby foundation strips into which timber posts were set. As argued above, the layout represented an improvement over previous ones, tabby providing the medium for a wide variety of outbuildings. Once more, economy seems to have driven the building process, Berners Barwell Sams making tabby walls enclosing dwellings inhabited by his household slaves of minimal but still serviceable thickness (8 - 9 in). How versatile the material could be is demonstrated in Structure VIII's western component where both walls and roof were cast to produce a complete tabby superstructure. There also exists some evidence that experimentation took place, formwork height and design fluctuating.

Unfortunately outbuildings beyond the Yard are not firmly dated and we cannot tell how exactly fabrication techniques evolved over the period Berners Barwell Sams occupied Site 38BU581. The degree to which tabby found employment in nearby slave settlements and other outlying parts of the plantation is also uncertain. A marked diminution of construction quality evidenced by Structure VIII's eastern component presents another problem, hinting at inadequate supervision inconsistent with the owners building activities elsewhere. Yet, tabby's ubiquity highlights the fact that its use brought real advantages, that Berners Barnwell Sams had capitalized upon tabby's inherent economies to "improve" at least his central settlement area "in a permanent manner" more than a decade before Thomas Spalding's recommendations were disseminated via the Southern Agriculturalist's December 1830 edition.

## SUMMARY CONCLUSIONS

John Michael Vlach's Back of the Big House, the Architecture of Plantation Slavery (Chapel Hill 1993) appeared after the present Report had been completed in draft form. The book is important since it presents documented examples of plantation outbuildings compiled from Historic American Building Survey files in which South Carolina is well represented. HABS drawings and photographs are accompanied by comments notable for their "movement away from the domains of the slaveholders to places in some ways claimed by their slaves" (Vlach 1993:xiv), areas ill known on Dataw Island. Coincidentally E.W. Bolton (Thomas and Denzinger, Architects, Beaufort) reminded me of Thomas C. Hubka's classic study Big House, Little House, Back House, Barn, the Connected Farm Buildings of New England (University Press of New England, 1984), a work which offers an effective counterpoint to some of the more doctrinaire statements presented in Back of the Big House.



For instance, Vlach's view that regular and orderly plantation layouts represent "a manipulation of the built environment" by planters who wanted "to convince themselves that they were both physically and symbolically above their slaves and other less wealthy whites" (Vlach 1963:228) may well have some merit. But it is clear from Hubka's text that after 1800, "improving" ideas built around formalized steadings exerted profound influences upon non-slave owning Northern farmers of moderate means and often Abolitionist sentiments.

Hubka also traces the origins of several outbuilding typologies and relates preferences for numerous detached structures (kitchens, barns etc.) found in early nineteenth century northern New England, to vernacular traditions developed well outside the context of slavery. Therefore if centralized Plantation layouts typified by Site 38BU581 proved adaptable to southern slave owners, they were not (with the exception of slave settlement areas) artifacts evolved solely in response to the "peculiar" institution.

Rather it should be observed, both Southern slave owners and egalitarian Northern small holders reached similar conclusions when pondering their future financial well-being over the nineteenth century's opening decades. Success within expanding regional or world markets depended upon achieving efficient production, "improved stock, improved buildings, improved implements, improved orchards, gardens, mowing, pastures, improved everything" (Maine Board of Agriculture, Third Annual Report of the Secretary, 1858 cited Hubka, 1984:194;note 52,212).

Berners Barnwell Sams must have realized this fact soon after inheriting his portion of Dataw Island. Ideas drawn from both local agricultural practice and authors molded by the Enlightenment were made real. True, the enlarged Sams residence underscores social gulfs separating master and slave; prosperous plantation owner and poor white farmer. Berners Barnwell Sams moved among an elite group and his remodeled plantation house, tidy rectangular yard, neat servant dwellings, gardens and surrounding orange groves proclaimed it. But to view Site 38BU581 only as "a direct material expression of...social power" (Vlach 1993:228) misses significant points.

Thus, the Sams family did not achieve wealth, position or even adequate housing at once. In the mid eighteenth century, agriculture on Dataw was it seems, an enterprise of uncertain outcome, a marginal activity carried on in a peripheral geographic area, which produced little surplus capital. When Williams Sams, his wife, children and dependent orphans took up residence at the early Middle House they can have found few architectural refinements. The first house, built perhaps as early as 1760 or as late as 1780 contained two living spaces plus maybe an attic. At best, the principal floor finish was of lime mortar. Alternatively, it may have been of beaten earth. Ground level rooms themselves were small, the single or one-and-one-half story dwelling enclosing altogether about 650 square feet.

Under William Sams' ownership, Dataw Island prospered or appears to have prospered if his will, dated 10 November 1795, (itemizing plate, furniture, beds, books and a riding chair along with domesticated animals) is a reliable indicator. Whether alteration of the Middle House occurred before 1795 is uncertain though I believe the large household recorded by 1790 United States Census returns (assuming all family members were resident for any length of time on Dataw) required more space than the unaltered building offered.

Whoever altered the original dwelling initiated patterns of structural reuse which were to be repeated. Like the Middle House, Structure VIII (probably a dairy) underwent partial rebuilding. Its floor was raised several feet, basement dug out and external tabby walls reconstituted. Hubka (1984:138) defines two building strategies operative in rural New England, first "the tradition of permanence, involving a high degree of building maintenance, reuse and preservation" and second "the tradition of change, involving the practices of building modification, alteration and adaption". Permanence is well illustrated by the Middle House, a structure which for all its spatial inadequacy was preserved as the centerpiece of later developments. Functional change is seen in Structure VIII where an addition and internal modifications seem to have produced a dairy out of what James Julius Sams called "the old tabby blade house". Predominant tabby construction at Site 38BU 581 preempted a characteristic New England preservation mode, that of moving old timber framed structures to different locations (Hubka 1984:139). New layouts required new buildings instead of the re-arrangement of existing ones. Nevertheless expense was minimized. There is evidence Berners Barnwell Sams planned his Yard around an already standing Kitchen (which may date back to the mid or late eighteenth century) and long established traffic routes connecting various plantation activity areas. Additional structures (i.e., servant dwellings, possible storage sheds) were kept small and cheaply fabricated using tabby.

The result lacked symmetry yet sustained order; coupled convenience with a "picturesque" sense of place. Landscapes surrounding the "big house" were indeed manipulated c. 1823. But their connotations, for those who could read them, spoke of humanity rather than tyranny, careful husbandry and benevolence on the owner's part. Of course, this may have been no more than a mask. Perhaps those sadistic public whippings and floggings Vlach (1993:229) recalls took place beyond the genteel central settlement area, in or near Dataw's slave "villages" about which almost nothing is recorded. We shall never know, since our best informant, James Julius Sams is a partial witness here, his testimony stressing filial respect while ignoring the brutal realities common to any slave owning regime.

The Memoir does show that there was a certain plainness and practicality about Berners Barwell Sams, attributes expressed by his enlarged Dataw residence. I have noted elsewhere (Architecture of the Vanderhorst House, Kiawah Island, South Carolina forthcoming) how several Low Country plantation owners adopted different styles for their town and country houses. To take two examples, fashionable motifs, clear academic quotations, expensive materials and fine craftsmanship can all be found in the Charleston houses of George Edwards (Smith & Smith 1917:212-221) and Thomas Heyward. On Spring Island and at White Hall (Jasper County) the same owners chose unconventional residential plans, used cheaper fabrics (chiefly tabby) and dispensed with highly crafted decorative details. If containing Anglo-Palladian references these plantation houses as enlarged over the period 1800-1825, were far from being high-style affairs. Instead they possessed experimental qualities, exhibiting ad-hoc plan solutions developed about pre-existing late eighteenth century building components of modest proportions. Ostentation and extravagant display may have counted in the city. Rural estates set amidst malarial wetlands demanded something different. Isolation, summer heat, winter freezes, intermittent drought or flood and the ever present specter of hurricane force storms

dictated an aesthetic distantly dependent upon urban architectural models. Along the Broad River's tributaries surely an owner's domestic comfort or what passed for domestic comfort counted more than putting up fashionable edifices designed to intimidate poor white neighbors and overawe plantation slaves.

Not that resultant structures lacked an impressive scale. Linear plans, extended porches linking separate building masses, colonnades, external stairs--all the devices which aided cross ventilation and gave shade produced a cumulative effect. On Dataw, main (i.e., north and south) facades of the enlarged Sams House were about 116 ft long. However it should be remembered, enclosed spaces were relatively narrow (about 18 ft 6 in wide) and, excluding service areas (i.e., ground level storage rooms, attics, porches) the total living area was under 2,000 square feet (cf. the Phase I Edwards House, Spring Island which enclosed about 1,400 square feet).

Moreover, the design process seems to have been guided by non-professional hands. Just as he was his own builder, Berners Barnwell Sams doubtless was his own architect, eschewing monumentality in favor of an almost simplistic solution molded about specific family needs. The design, James Julius Sams notes, comprised three separate houses rather than one large structure. Berners Barnwell Sams had no desire to sweep away the work of previous owners, his new East and West Wings matching the old Middle House in dimension, though not in organization. Architectural vocabularies adopted were plain. Flat facades, modulated only by spare fenestration patterns predominated except along the south front where upper porch supports took the form of plastered brick Tuscan columns. The latter perhaps evidence a choice that added a classical note to landscapes viewed across Jenkins Creek. Hubka (1984:196-197) writes:

The appeal of classicism permeated every level of society...the image of Greece and Rome became a symbol of progress, and virtue and was contrasted with the real and imagined decadence of European oligarchies and their urban industrialism. Americans selectively edited the classical sources for its anticity message and, in the Jeffersonian pastoral tradition, produced a classical image that sanctioned America's agrarian simplicity. Agricultural writers in New England and throughout America seized this classical image to justify the labor and virtues of the soil, and they would continue to evoke classical imagery in defense of agriculture until long after the Civil War.

Of the various themes explored in this Report, tabby construction is the least contentious. We have seen how Berners Barnwell Sams operated within and capitalized upon local vernacular building traditions insofar as the latter can now be traced. Chronological and functional questions remain about certain structures, especially those pre-dating inception of the plantation Yard--questions which may be resolved when Beaufort County's early agricultural building legacy becomes better known or if archaeological investigation is ever resumed at Site 38BU581. Still contradictory is the meaning of the building group as a whole, if the meaning of any building assemblage is taken to include the intellectual stimulus which brought its shape, formal character and imagery into being. The signals we have been dealing with, classical allusion for instance, notions of progress and improvement, of virtue; benevolence; the "picturesque"; dignity through labor; plainness and

rural simplicity, all seem at variance with an agricultural regime dependent upon commercial traffic in human life. The final message site 38BU581's ruined tabby building group sends is therefore uneasy, complex and like plantation slavery itself, incomprehensible at a visceral level to the modern observer. We can only pick our way through the incompatible beliefs, opposed ideas and elusive concepts identified, trying on the journey to avoid our own most extreme stereotypes.

## CHAPTER XI

### SUMMARY

Data recovery investigations at the B.B. Sams and L.R. Sams Plantation sites (38BU581, 38BU496, 38BU507, 38BU515, and 38BU565) were undertaken in an effort to document the historic development of Dataw Island as reflected in the architectural and archaeological artifacts that remain on the island. These investigations were initiated in 1983. Extensive excavations were conducted at the B.B. Sams Plantation Site (38BU581) over a five year period. Analysis of the recovered artifacts were conducted since that date until the spring of 1993.

As noted in Chapter I, this report attempts to address specific research issues appropriate for the kinds of data recovered from the Sams Plantations sites. Brief summaries of how these issues were approached follow.

The construction and settlement history of the B.B. Sams Plantation main house were documented through the analyses of architectural and archaeological data. The main house and the walled enclosure possessed two episodes of construction. The Middle House (or central rooms) of the main house apparently were built in the eighteenth century, possibly as early as 1760. At the latest, it may have been built by William Sams in the early 1780s after he acquired Dataw Island. Then, a major construction episode occurred, probably around 1826 under the direction of B.B. Sams. Variations in tabby construction techniques were noticeable but not significant, probably due to the nearly complete renovation of the Middle House in the 1820s. Artifact distributions within the rooms of the main house demonstrated that earlier deposits were present, particularly to the rear and east side of the Middle House. This distribution would be in keeping with refuse disposal patterns noted by South (1977) for eighteenth century houses in the region. Thus, B.B. Sams renovations of the main house and the surrounding areas disrupted and disturbed artifact deposits associated with the earlier occupations of 38BU581. Few late nineteenth century artifacts are present in the main house, supporting the historical accounts of the abandonment of the site in the 1860s and its destruction by fire soon thereafter.

Efforts to identify components within the artifacts recovered from the main house were not as successful as anticipated. However, analysis of relative ceramic costs among creamwares, pearlwares/whitewares, and ironstones indicated that the early to mid-nineteenth century occupation of the house (B.B. Sams) possessed the more expensive ceramic vessels than those employed by earlier residents (William Sams and others). The late nineteenth century types retain the relative costs of the early/mid-nineteenth century types.

Functional roles of each room or component of the main house could not be clearly defined. J.J. Sams' (n.d.) memoirs provide descriptions of how most of the rooms were employed. Artifactual evidence to support or refute these functions were ambiguous.

Diachronic changes in the occupation of the main house could not be interpreted from the artifacts recovered.

The functions of the attached outbuildings were documented fairly well by their associated artifact assemblages. A history of occupation suggests that the area around Structure I probably served as an eighteenth century activity area within the site. Structure IV also may have been used during the early occupation of the site. Structure I was interpreted as a kitchen as a result of historical accounts and the artifacts present. The other structures attached to the tabby enclosure appear to represent residences, presumably of slaves who served the main house or nearby plantation facilities. Structures IV and VII witnessed some variation from the other residences. Structure IV was slightly larger and possessed the highest density of faunal remains after Structure I (the kitchen). Possibly, Structure IV served as a food preparation area for Structure VII or other nearby residences. Structure VII possessed no chimney but possessed a similar artifact assemblage as the other residences along the tabby enclosure. Possibly, this structure served as a communal residence for unmarried male or female slaves.

The functions of other buildings at 38BU581 generally were supported by the artifacts recovered. Structure VIII was interpreted as a dairy or storage facility. Artifacts recovered from this structure display higher frequencies of utilitarian vessels. The West Room of this structure also was built before the adjoining East Rooms. Ceramics recovered from the rooms of Structure VIII support an eighteenth century construction date for the West Room. Structure X, similar in size and plan to the slave residences on the eastern wall of the enclosure, was suggested by Lepionka (1988) to represent an overseer's house. Ceramics recovered from Structure X display higher relative costs than those from any other structure. The ceramic assemblage from Structure X also displays the highest density of later ceramic types. These data support the interpretation of this structure as the residence of an individual of higher social standing than the slave residences. An overseer or driver would certainly fill such a role.

Comparisons between the slave residences at 38BU581 and its associated slave settlements (38BU496, 38BU507, and 38BU496) indicate few differences between the kinds of vessels and the relative cost of vessels associated with each. This suggests that all of B.B. Sams slaves had equal access to ceramic vessels and other commodities. The main house and kitchen do display greater diversity in ceramic and vessel types. However, socioeconomic indicators are fairly equal among all structures at 38BU581 and the outlying slave settlements. The occupation dates for the outlying settlements appear to vary, possibly in relation to B.B. Sams' renovations of the 38BU581 main house.

Comparisons between the L.R. Sams Plantation residence at 38BU515 and those associated with the B.B. Sams Plantation suggest that L.R. Sams' slaves possessed less expensive ceramic vessels than the slaves of his brother. The occupation period for 38BU515 appears to correspond well with the subdivision of Dataw Island by L.R. and B.B. Sams and the hurricane of 1893.

Artifact assemblages associated with the slave residences on Dataw Island possess few traits that are expected to be associated with African American sites. Vessel types are

nearly identical to those recovered from the main house and kitchen at 38BU581. The relative cost of vessels is also quite similar, and higher than many sites in the region. These data suggest that the slaves on Dataw Island had developed lifeways fairly similar to their owners, the Sams family, at least as these lifeways are reflected in the refuse from their former residences. The generally late date of occupation (1820s-1850s) for these sites may account for much of this apparent acculturation. The relative size of the slave population on Dataw Island also may have contributed to a rapid assimilation into Euro-American lifeways.

Finally, B.B. Sams would be described as a middle sized planter, based on his holdings on Dataw Island. However, ceramic vessel assemblages from his residences and his slave houses display fairly high relative costs. This suggests that Sams was willing to invest portions of his income in the material culture of his laborers and his country home. As noted above, L.R. Sams does not appear to have purchased vessels of equal value for his slaves as B.B. Sams. Perhaps this attests to the relative wealth of the two brothers beyond Dataw Island.

In closing, this report culminates over ten years of effort on the part of ALCOA South Carolina, Inc. to document the historic development of Dataw Island. This effort has involved innumerable individuals, all of whom provided information that contributed to the present report. Given the great length of time and the variation in personnel throughout the course of the project, the results of the analyses as presented herein provide an interpretation of the development of the island that could not be acquired through other sources. As such, this research provides a major contribution to the growing body of data concerning plantations in the South Carolina Low Country and beyond.