CONSTRUCTION SEQUENCE FOR 228 EAST CAPITOL STREET
LOT 1, SQUARE 759

This paper has been prepared as an adendum to Sleuthing and Old House by James M. Osborn which addresses the history of the house and the immediate neighborhood.

The construction sequence for the house is clear, except for the basement. Additional data may be discovered when and if the house is renovated. The outline below is for the first floor.

Phase 1: A two story frame house one room deep with outbuildings (A+B) was constructed in 1839; 

Phase 2: A two story frame addition was added, probably in 1844;

Phase 3: An east addition was added in 1872 along with a third floor on the original house and the first addition. The stairway, second floor fireplaces and interior trim date from this time. The west and north walls of the phase 1 building and the west wall of the phase 2 addition were removed at this time.

Phase 4: The outbuilding marked as "A" above was removed around the turn of the century (before 1908). The outbuilding marked as "B" had been removed at an earlier date from lot 1. (It is conceivable that this building was moved 25 feet north to lot M which had been purchased by the owners of 228 in 1872).

Additional changes, particularly with respect to the basement, will be discussed in the following material.
PHASE 1

The first improvement to lot 1, according to tax assessments, occurred in 1840 following purchase of the lot by Horatio R. Maryman, police constable. The presumption is that this construction occurred on the western half of the lot on the section now occupied by 228 East Capitol. The assessed value was $400, which would indicate a substantial dwelling and/or shops. Given the construction sequences for 228 East Capitol and the architecture of the adjoining buildings to the east, we believe that this assessment represents a dwelling with various outbuildings.

The first part of 228 was a two story dwelling with interior dimensions of 20 feet wide and 15 feet deep. It was built on 5 1/2 x 4 inch sills with 3 x 4 inch studs and 3 x 9 1/2 inch joists 16 feet long spaced 23 - 27 inches apart. The joists were squared with an adze and ripped with a reciprocating saw (?-check). The corner posts carried the second floor and attic but the remaining posts were not visible at the time of inspection. The sills rested on brick foundations 9 inches wide (one brick) and (originally) two feet in depth.

The first floor was divided into two rooms approximately 12 and 8 feet wide, as shown by two joists set 3 inches apart. The first floor ceiling is eight feet high. Therefore, the 8 foot "room" probably contained a federal stairway leading to the second floor (the width being required to accommodate a decent entry space and at least one landing). The original flooring on the first and second floor (much of which remains) was random width (5 to 8 inches) tongue and groove.

The exterior appearance of the house is conjectural at this point but may be revealed during future renovations. It is reasonable to believe that the original front (south) facade was three bays wide, clapboarded, with a width of approximately 20 feet eight inches. None of the original openings remain. The door and each of two windows would have been about three feet wide, thus breaking the facade into seven "sections" of 3 feet each. Three windows on the second floor would have been aligned over the first floor openings. (Two ancient windows are located in the third floor rear and may date from the original house. They are six over six sash measuring 34 x 54 inches). Given the time of construction, we presume that the house was finished with a gable roof. The existing floor boards on the third floor do not appear to date from the original construction which may indicate that dormers were not included. The rear facade would have mirrored the front facade except that the rear door would have been slightly to the east to accommodate the rise of the stairs.

A chimney stack would have been constructed on the east end with fireplaces on both the first and second floor in the approximate location of the existing stack. However, there is some evidence
to suggest that the original stack was located on the exterior of the building rather than the interior as at present. The first evidence is that the original chimney foundation was not constructed at the same time as the adjoining section of the wall foundation. The second concerns the lot dimensions. Lot 1 was 55 feet wide; it now consists of three lots of 14 feet 7 inches, 14 feet 5 inches and 26 feet. The first two contain houses constructed in 1844. One may conjecture that Maryman's original intent was to construct two houses on lot 1, dividing the property into two pieces each 27 1/2 feet wide. If this was the case, there would be no reason to place the east wall of the house 1 1/2 feet off the property line, the passageway on the opposite side being limited to 5 feet. An exterior chimney also would have provided a bit more room in the relatively narrow 12 foot living room. An alternative analysis is that the chimney foundation is original and that the sills were constructed on posts or stones with the brick foundations added several years later. (The base of the first floor fireplace was reworked in about 1926).

The construction in 1839 would have contained several outbuildings: a detached kitchen and a necessary at a minimum and possibly a stable or workshop. The Boschke map of 1857 outlines those buildings listed as "1", "2", "A" and "B" on page 1 of this addendum. Building "A" also is on the 1887 Hopkins Map and its presumed outline is represented by an existing brick walk (west facade) and a reported but no longer existing row of bricks (north facade). Both sets of bricks probably were installed to divert rainwater away from the base of the building. Perhaps "A" was constructed as a 12 x 12 foot kitchen with a (later) 6 x 12 foot shed addition. Building "B" may have been the stable reported by Osborn which is shown on lot M in the 1887 map (if one accepts the thought that the draftsman forgot the cross lines) and is listed in the 1878 tax survey on lot ___. The stable on lot M measured 10 x 26 feet while the structure in the 1857 map does not cover the width of the lot. Perhaps the width was increased when (and if) it was moved to lot M.

PHASE 2

The back ell of the original house ("2") was added during the second phase but the date of its construction is problematic, although it must date between 1844 and 1857. The back ell was 13 1/2 feet wide (east-west) and 12 1/2 deep (interior dimensions) with two floors, both being on the same level as the floors of the original house. It is presumed that the width was controlled by the back door of the original house and the depth controlled by the existence of a detached kitchen. The joists were 3 x 8 inches running east-west and rested on sills, the notches now being visible on the west ends of the remaining original joices. The sills rest on original foundations one brick thick and two feet deep. (A large section in the center of the first floor has been removed and reinstalled while the joists below have been
removed and replaced by north-south joists. This probably was
done in the 1870s to install a hot air furnace, there being no
external access to the basement.) The west wall of this addition
have been removed but it undoubtedly contained one window and a
door on the first floor. The south wall probably contained two
windows (as currently exist--) since the gable of the kitchen may
have precluded one center window. The floors now are 4 to 7 inch
tongue and groove boards and probably are original. The chimney
stack on the east wall was constructed after the foundations were
laid.

We presume that the ell was not constructed in 1839 because the
foundation from the front to the back is not continuous (? -
check), the size of the joists varies from the front, and the ell
itself is rather "stuby" to have been original. In addition, the
joists run the long dimension and are perpendicular to those in
the original house. The assumption is that these joists were
laid on the foundation for the adjoining house which was built in
1844.

The value of the improvements for lot 1 are:

1840: $400
1844: 2,000 (addition of 230 and 232 East Capitol)
1849: 1,800
1851: 2,000
1859: 600 (plus $600 each for 230 and 232)
1860: 800 for 228 East Capitol, $600 each for the others.

When lot 1 was divided into three lots, the improvements on each
lot were given the same value. The houses at 230 and 232 are
twins and should have the same value, except that the Boscke map
of 1857 shows a large outbuilding at 232. While this may have
burned by 1859, the presumption is that Maryman simply divided
the total assessment by three, which would be to his advantage
since he retained possession of 228. The increase to $800 in
1860 would then have been a reevaluation rather than an
improvement. The changes in 1849 and 1851 may have been due to a
loss and replacement of a building, or may have reflected lower
values due to the recession of the 1840s. At any rate, the tax
assessment, while not establishing a date for the construction of
the ell, does imply that there were no additions of any
significance to lot 1 between 1844 and 1859. The chimney in the
ell was not built at the same time as the foundation, indicating
that 230 was constructed before the chimney. A reasonable,
although not conclusive, date for the ell is 1844.
The third phase of construction created the house that now exists at 228 East Capitol through an extensive remodeling of the existing house and the addition of a new section of the west. This remodeling may be dated by the increase in the value of improvements from $800 in 1871 (?) to $2,000 in 1872 (?). Dr. John L. Crouse purchased the house in the late 1860s and neighborhood tradition says that he used the house for his office as well as his residence.

The remodeling consisted of the expansion of buildings 1 and 2 to the full width of the property, the addition of a full third story with a flat roof, a complete alteration of the front facade, the replacement and relocation of the stairway, the replacement of the interior trim and the mantles, and the expansion of the basement.

In order to accomplish the renovation, extensive changes were made to all of the original exterior walls except those on the east and the north wall of building 2. The west wall of building 1 was removed and a new exterior wall constructed on the lot line (the existing building on lot 2 was not then on the property line). The west wall of building 2 also was removed and a new wall constructed on the lot line. However, this new west wall on the lot line was extended only to a depth of 24 1/2 feet, ending 5 1/2 feet short of the north wall of building 2. This new west wall was not carried to the full 30 foot depth because it would have left the first floor of building 2 without any exterior windows. A porch occupied this space which measured 5 1/2 x 8+ feet.

The flooring in the hall of building 1 was removed and pieces of the wall studs were cut and notched into the floor joists thus permitting the new hall flooring to run north-south. East-west joices were run from the original west sill to the new west wall allowing north-south flooring in building 3. Similarly, joists were run from the west sill of building 2 to the new west wall. (The flooring in this section, however, was replaced about 1930.)

A new interior north-south wall was constructed 6 feet 8 inches from the new west wall to a depth of 24 1/2 feet. A new west wall was constructed for the first floor of building 2, reducing its width from 13 1/2 feet to 12 feet, the same width as the first floor room in building 1. The two rooms created on the west presumably were used by Dr. Crouse as his office since a separate access door was provided from the new foyer.

The original north wall of building 1 was either removed or extensively altered to provide a wall with pocket doors (a portion of the wall was probably retained with the pocket doors added on the south, or building 1, side, thus accounting for its current 11 inch depth).
The same principles were followed on the second floor (see diagram). The original north wall of building 1 was removed and replaced by a new wall 1 1/2 feet to the south in order to provide the rooms in building 1 and building 2 with equal depths as well as equal widths. The old flooring was not removed, however, so that some of the flooring in the northeast room runs east-west (from building 1) while the majority runs north-south (from building 2). The southwest bedroom has a similar floor pattern with the part from building 1 running east-west and the new flooring from building 3 running north-south. There is a cabinet in the north wall of the chimney stack in the northeast bedroom that probably dates from its original construction, even though the mantle in circa 1872.

The floor boards on the third floor all run in the same direction, east-west (?), indicating that the attics in buildings 1 and 2 were not floored (the third floor joists were not visible at the time of inspection). Fireplaces were not installed in the third floor, although there is evidence that a stove was used in the northeast room (but removed prior to 1922). The trim is different and slightly inferior to that on the first and second floor.

The crawl space above the third floor has approximately 4 feet of headroom on the south facade which drops to 0 feet on the north facade. The rafters run north-south. Several of these rafters were fashioned from used lumber and it is presumed that some of the rafters from the gable roofs of buildings 1 and 2 were used in the construction of the present roof.

The front facade of the building was substantially altered in appearance. The center and east windows of building 1 were removed and replaced by double windows centrally located in the southeast rooms (the first floor bay may not have been added at this time). The front door (and the window above) was moved about a foot to the east to center it on the new hall. One window was installed on each level of building 3 and placed to balance with the other windows (and therefore is not centered in the building 3 room on the first floor-?). The front was covered with new clapboard which is not now visible (and may have been removed with the installation of the stucco surface in 1923).

The rear facade of the building may not have been altered at this time since the detached kitchen still abutted building 2. The new west wall of building 2 would have had a window or door installed to the porch as has been done on the second and third floors. Clapboard was installed in the porch areas on the northwest corner of the building and is still visible on each level. It is not known whether any changes were made at this time to the rear facade above the detached kitchen.

It is not clear at this time exactly how the load bearing walls were strengthened to carry the added weight of the third floor
walls and the flat roof. It is conceivable that a new foundation was built under the front facade and that additional posts were inserted in the walls, but there is no visible evidence that this was done. No additional support was provided for the middle wall (i.e., the north facade of building 1). New posts would have been difficult to install in the north facade because of the detached kitchen and the porch structure of building 3. Perhaps the original construction was deemed to be sufficiently strong to carry a third floor and flat roof (with whatever amounts of snow that might accumulate).

PHASE 4

A number of minor changes have been made at 228 East Capitol between 1872 and the present. These changes are described below, but not necessarily in chronological order. The assessment values for the 228 portion of lot 1 were: 1873, $2,000; 1878, 1889, $1,200; 1893, a misprint occurred, but it probably was $1,200; 1908, $1,000; 1917, 1922, $1,300; 1923, $2,000.

KITCHEN: We believe that a detached kitchen (building A) was constructed in 1839 approximately 14 feet from the rear of building 1. It probably was a one floor frame structure with gable roof with a fireplace on the north wall. The outline of a structure measuring approximately 12 feet wide by 18 feet deep is shown on the 1857 and 1887 maps (check later maps). In addition the previously mentioned brick pathways confirm the dimensions. The original structure probably was not a full 18 feet deep unless it was divided into two rooms. A typical development would have been the construction of a kitchen 12 x 12 feet with a 6 x 12 foot shed addition on the rear. The latter eventually would have been enclosed to form an additional room. The structure is not visible in an 1880 photograph from the Capitol dome, indicating that it was, indeed, only one story. The detached kitchen was removed prior to 1922. It was replaced by the creation of a kitchen in the northwest corner of building 3. This was accomplished by expanding the existing room by removing the north wall and enclosing the porch. A chimney stack for a stove (?) was built into (?) the brick wall on the west property line. A coal range was built in the kitchen in 1922.

STABLE: Building B is shown as a detached building in the 1857 map. It was located immediately behind the detached kitchen and seems to measure approximately 12 x 12. The 1873 assessment does not list a detached building on either lot 1 or lot M (necessaries were not listed). The 1878 assessment. The 1889 assessment lists a detached building on lot M worth $200. The 1908 assessment does not list a structure on lot M. The stable should be visible, but is not, in the 1880 photograph taken from the Capitol dome. The 1887 map does not definitely show a structure on lot M, but there is an outline of a building with dimensions of 10' x 26 feet (the draftsman may have omitted
the cross marking indicating a stable). Osborn reports that he and his father removed the stable in 1924 (3) (see drawing and floor plan by Osborn) Pieces of the stable were used in the basement of the main as support posts (describe).

BAY: The bay window on the east side of the front facade is not shown in the 1887 Hopkins map. However, this could have been an omission because the bays on the map were added by freehand after the maps had been drafted. The bay probably was added in the 1872 remodeling.

GAS: Natural gas pipes were added to the building during the 1872 remodeling. The gas originally was used for lighting but not for heat. Most of the lighting was provided by wall lamps, but there may have been a ceiling fixture in the living room (there being a cut out in the floor boards on the room above). It is not known whether a gas stove was incorporated in the detached kitchen at that time (check gas pipes).

HEAT: The fireplaces on the first floor were rebuilt in 1872 and 1930 (?). The fireplaces on the second floor were rebuilt in 1872. There is no indication of hearths on the second floor in either building 1 or building 2. Therefore, it seems likely that the house was heated with latrises between 1839 and 1872. A hot air coal burning furnace was installed in the basement in the 1870s, possibly during the remodeling of 1872. As previously mentioned, it appears as though the furnace was inserted in the basement of building 2 by removing a section of floor and joists. The furnace used the chimney in building 2. A coal bin was constructed on the southeast corner of the basement in building 1. This raises an interesting question because there is no indication of external access to the basement prior to 1891. It is possible that a window existed in the foundation wall under the double east windows, indicating that the bay window was not installed until after 1891. The rooms in building 3 were heated by hot air. A steam (?) heat system subsequently replaced the hot air furnace (prior to 1922 ?), bringing about the installation of radiators on the first and second floors. The third floor has not been heated at least since 1922. Gas replaced coal as fuel.

PLUMBING: There is no indication as to the date that running water was first installed in the house. The single bathroom was constructed by enclosing the second floor porch on the northwest corner of the house and providing additional access from the stairwell. The plumbing probably was installed in the 1890s but could have been later (check pipes to detached kitchen). The house at 230 East Capitol had an outdoor toilet as late as 1930 (?).

ELECTRIC: Electricity was installed in 1930 (?). The wiring was run in the ceilings by removing the plaster below rather than the floor above.
BASEMENT

Brick foundations existed at one time under each of the exterior walls of building 1. The north and west foundations have been removed but evidence of their existence remains at their intersections with the east and south walls. The first brick foundations were two feet deep and one brick (9 inches) thick as shown in the east wall. The chimney foundation was not constructed at the same time as the east wall and therefore it is conceivable that brick was not used in the original construction but was, at any rate, added shortly thereafter.

The majority of the east wall was extended to a full seven foot depth along with the chimney base. We assume that this occurred at the time of the construction of the house at 230 East Capitol in 1844, but it could have been some years later. Given the extension of the chimney base at that time, we assume that the south wall and part of the east wall also were extended to full depth. The north wall was not carried to full depth. Thus the earliest basement had three brick walls and a rear wall of earth extending approximately two feet under the house (sufficient to carry the remaining two foot foundation on the north wall).

The north ends of several joists in the center of building 1 rotted away, indicating a lengthy association with the ground below. Repairs were made by "sistering" several feet of the joists and carrying them to the joists in building 2 (?-check lengths). One of these "sisters" was notched to accommodate the sill under north wall of building 1.

Building 2 had two foot foundations under its east and north (?) walls and probably under its west wall, although no evidence of such a wall remains. The east and north walls were subsequently carried to full depth, probably during the 1872 remodeling. Two brick posts are contained within the north wall; they probably were installed to carry the sill during the extension of the north wall, although no evidence of this method of construction exists in the east wall.

Building 3 shows no evidence of any foundations that were built at the time of its construction, although it is conceivable that the existing two foot foundations under the north wall were carried to the west property line. In addition, a two foot brick foundation probably was constructed under the west wall of building 3, evidence of its existence having been removed with the construction of the house at 226 in 1891.

Two brick pillars were constructed in building 1 two feet south of the north wall to carry an east-west beam used to support the first floor joists, presumably at the time that the full basement was carried into building 2. Two similar posts were constructed under the west wall of building 2 to carry a north-south beam to support the east-west floor joists. Thus the west wall of the basement on the north was a dirt bank. (It is conceivable, but
doubtful, that the north wall also was a dirt bank until the removal of the detached kitchen.) A bitumin floor was laid under building 1 and 2, (but not building 3,) probably in 1872 (?- check northwest corner).

The west wall of building 1 was removed after 1891 and the basement extended to the full width of the building. Unfortunately, no support was provided to carry the intersecting joists, thus causing the floors above to sag at this point.

The existing external access is in the south wall of the post 1891 basement addition. There is no evidence of any other point of external access, although the south wall may have been completely rebuilt in 1872 or thereafter. Since there is no other possible point of external access, we presume that there was an opening in the south wall, probably under the east window. It is conceivable (but doubtful, given the absence of bitumen) that the existing door actually was installed in 1872 through the excavation of the first six feet under building 3. (This in turn would have permitted the construction of the bay at that time.) The only other possibility for an external access would have been the northwest corner of building 1 under the federal stairs.

The existing internal access is under the 1872 stairs. This stairway was replaced by duplicate stairs in 1900 (?). Pre-1872 internal access may have existed under the original stairway, but the remaining joists show no evidence of an opening to the basement (? -check). In addition, the absence of a full south wall under building 1 seems to preclude this possibility.

In summary, external access to the basement probably existed in the south wall under the east window from 1844 to 1891 when the existing access was constructed. There was no internal access to the basement until 1872 when stairs were provided under the new main stairs.
228 East Capitol

First Floors

South

1839

1844

Property Line

Facades

Outline of 1872

1839 Front

1844 Rear

Basement

135' 102' 46' 1/2 = 284' 1/2

50

62

66

48

43

35

29' 3" plus foundations

1872 - Third floor - same as second floor