CRBIB#002025 32623
INDE132

ARCHEOLOGICAL REPORT ON THE INVESTIGATION OF A BRICK VAULT CATCHMENT, "Cistern Number 2," BENEATH THE CEMENT FLOOR BASEMENT OF OLD CITY HALL

By
John L. Cotter

OFFICIAL CENTRAL FILES

CRDID 002025
INDE 133
391/132977

INDEPENDENCE N. H. P.

✓	SUPERINTENDENT
✓	ASST. SUPERINTENDENT
✓	ADMINISTRATION
	PERSONNEL
	PROCUREMENT
	PROJECT CLERK
✓	INTERPRETATION
	RANGER SERVICES
	MAINT. & REHAB.
✓	FILE
✓	Platt

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NORTHEAST REGION
143 SOUTH THIRD STREET
PHILADELPHIA, PA. 19106

IN REPLY REFER TO:
H2215-CHAA
NER

JUN 11 1964

Memorandum

To: Director

From: Acting Resource Studies Advisor, Northeast Region

Subject: Archeological Report on the Investigation of a Brick Vault Catchment, "Cistern Number 2," Beneath the Cement Floor, Basement of Old City Hall, Independence

We are forwarding to you herewith, for your information and files, a copy of the above subject report, produced by Staff Archeologist John L. Cotter.

Murray H. Nelligan

Murray H. Nelligan

Enclosure

cc:
Supt., Independence w/copy of report
Chief, EODC w/copy of report

HISTORY
RECEIVED

ARCHEOLOGICAL REPORT ON THE INVESTIGATION OF A BRICK VAULT CATCHMENT, "Cistern Number 2," BENEATH THE CEMENT FLOOR, BASEMENT OF OLD CITY HALL

During March, 1963, certain repairs to water drain pipes in the basement of Old City Hall required the removal of sections of the cement flooring. As portions of the sub-floor area were exposed several traces of brick work came to light, none of which appeared significant, except a second bricklined pit which was found in the room adjacent to, and west of, the room in which archeologist Bruce Powell located a larger cistern, designated "Cistern Number 1," in the late 1950's. Cistern Number 1 was determined to be precedent to the Old City Hall structure built in 1790 and was octagonal in shape, in accordance with two old plats now on file at Independence National Historical Park.

No historical record, however, has been located for Cistern Number 2 which was topped by a rectangular masonry collar laid down after the top of the original vault opening was destroyed. Less than two feet of vaulting remained intact above the spring line and the evidence indicated a double course of stringers comprising vault closer around a manhole entrace. A 2" x 6" plank appears to have been inset in the brick work across a spring line probably for facilitating cleaning

of the catch basin. The depth of the bricklined, cyclindrical, slightly tapering pit beneath the spring line was twelve feet. Above the bottom three feet a relatively clean earth fill was mixed with bits of masonry and occasional artifacts dating from the late 19th century. The bottom three feet comprised a dark moist organic-impregnated clay fill interspersed with numerous artifacts and apparently representing material left after the last collection in the catchment vault. It is probable that the catchment was intended to serve a latrine or drain and was periodically emptied, since the floor at the bottom was bricked. No drainage was otherwise indicated.

Artifacts at the bottom three feet of fill comprised various personal objects, including pieces of vulcanized rubber comb dating from the 1850's and certain other artifacts such as clay pipes which could be dated by type in the mid 19th century. It appears that from this evidence the last three feet of fill could date around 1850-60. The bricks comprising the vault were mold-made by hand with struck and sandy faces and measured 8½ x 4½ x 2 1/8 inches. At the four to five foot level of the fill of dark masonry debris, a glazed header measured 8½ x 3 3/4 x 2 1/8 inches. At the top of the cistern a brick measured 8½ x 3 7/8 x 2¼. The following data record the daily observations during the excavations, the field specimens, photographs and summation of artifact data. The drawing of the cross section and plan of the vault catchment completes the report.

Investigations in Basement of Old City Hall,

Beneath Cement Floor,

Conducted By

John L. Cotter

3/5/63

In the course of investigating and repairing water drain pipes, workmen hired on the accelerated work program at INHP located brick masonry walls in the same room where a large cistern had been located and excavated by Bruce Powell in 1960. This cistern was determined to be precedent to the Old City Hall structure, built in 1790, and was found to be recorded, in its octagonal shape, in at least two old plats prior to that date, now on file at INHP. (see John Platt)

The walls in question did not appear old, and are evidently intended as channels in which drain pipes (cast iron) were laid.

James Crawford, architect at INHP, notified me and agreed to break more of the concrete floor and record all walls and features, beside the drain pipes. Lee Nelson and Penny Hartshorne were notified, but Lee has no labor or draftsmen to assist the work.

In the room directly west of the Cistern No. 1 room, on the opposite side of a brick partition not extending to the ceiling, an apparent

second cistern or privy vault, brick masonry corbelled over a circular pit, vault broken by water pipe laid in recent time. The pipe was left intact, but the already damaged vault opening, the original dimensions of which could not be determined, was further enlarged so that the fill could be tested.

Two workman, Worth McKellar (10-pt. vet., 6159 Jefferson St., Phila., 31, TR 8-1103, temporary workman) and Joseph Berry, temporary workman, were assigned and instructed to save all artifacts and place in bags by separate 1-foot levels, as the fill of the Cistern No. 2 was removed. The cistern appears to be about five feet in diameter below the vault, and circular, of good brick masonry, the bricks laid as stringers in courses.

3/6/63

Now three feet in Cistern. Fill consists of clean dirt, mortar and brick rubble—brick apparently same as that used in vaulted roof, although there may be more bricks presented in fill than could have come from the broken vault. Probably additional brick and dirt refuse was used to fill the cistern when it was abandoned and filled. On the evidence of an intact brown glass, conical-mouthed bottle on which is molded "POP BEER" this fill was added in the period of 1880-1900. Work continuing.

3/7-8/63

Continued below six feet from spring of cistern vault: Still same clean clay earth, yellow and moist, with bricks and mortar debris included. No artifacts other than slate roof tiles and bricks.

3/11/63

Work of clearing "Cistern #2" progressed from 8 to 10 feet plus. At ten feet the change from yellow clay fill with brick and mortar debris to dark gray clay muck was noted. In this muck the artifact content immediately became apparent, and soon produced a wealth of personl artifacts: At 10 to 11 feet a silvered watch case with closure intact on both sides, stem, for attachment to fob or cord, not winding. Verdegris coming through the silvering. Animal garbage bone, a rib of a small animal, adhering to one side of watch. Also numerous clay pipe stems, early 19th century?— and half a dozen fragmentary pipe bowls of white clay, probably early 19th century. Glass and ceramic object fragments, not yet cleaned for description. Pieces of cloth and leather, black and rotten, but identifiable. Garbage bones admixed but not in quantity. One small fragment of gold sheathing from a piece of jewelry or a fancy ornament, 1/2 inch long.

Will continue 3/13/63 to excavate bottom fill of Cistern #2, which is evidently a catch basin at the end of its use. Now done 11 feet plus. Artifact removal to basement of Second Bank accomplished. Sampling of bricks from top fill to 11 feet.

3/13/63

Continued excavating bottom of Cistern #2. At 11 feet plus, bottom appears near—some sandy deposit evident. FS 16 shows many clay pipes, first quarter 19th century (?) an elixir bottle and a sauce bottle. A small twisted bar of gold one inch long and a piece of gold filigree ornament, probably ear bob or dress ornament (1½ x 1 inch, approximately).

Expect to complete dig today or tomorrow. Fill continues to appear filled with brick and mortar fragments, ash, muck and artifacts. Greasy mass, moist, but no standing water. Tom McCoy now doing all digging, as he has since first five feet. He is small and agile enough to do the job. Very intelligent and dependable. Former electronic computer operator for a military agency, he says. High school plus business school training, he states. Good for future archeological work. Likes the work. Temporary laborer.

3/14-15/63

McCoy completed excavation of lowest muck fill. Bottom of cistern is bricked and wall-finished. Wall measures twelve feet from vault spring to bottom. Vault, although broken, was originally at least two feet from spring to opening. There is evidence of square masonry top to vault. At present a recent rectangular wall surrounds the cistern vault, extending nearly to the cement floor.

3/19/63

Tom McCoy finished cleaning the artifacts--good job. Met Robert J. Colborn, research historian, INHP at lab in basement of Second Bank, and he and Dave Wallace looked over the collection and noted the pipes in particular. Colborn had a copy of Rex L. Wilson's Clay Tobacco Pipes from Ft. Laramie, reprinted from Annals of Wyoming, Oct., 1961, which very cogently describes the pipes from the 1820-1860 period there. Wilson also describes the manufacture of clay pipes very ably. This will require careful study and comparison. One "TD" pipe with letters encircled by 13 stars is in the cistern collection and is described exactly by Wilson from a Ft. Laramie find.

Among artifacts in cistern was a piece of wood 2.6 feet long and 0.3 feet wide, 0.1 thick, maximum. Possibly cedar, charred. This could be from debris of roof fire in Old City Hall.

Wilson quotes Authur Woodward as saying all the "TD" pipes are "Dublin" style at Ft. Laramie. The elaborately decorated "Dublin" style clay pipes "safely fall within the trapper-military periods and date between 1834 and 1860."

To focus the present collection data, a fortunate find was made of a fragment of vulcanized rubber comb inscribed "Rob Goodyears Patent 1849." Goodyear's first vulcanizing patent was in 1844 (ECY BRIT 11th ED) and he had 60 subsequent patents on the process. This comb fragment was in the upper portion of the muck fill at about 10-11 feet in FS lot 15. This would—as an item of short use, due to easy breakage—have been deposited not long after purchase, and the rapid turnover of such merchandise in stores as a perishable and popular item would have left, probably, a relatively short interval between the patent and the sale. Thus the date of the last artifact deposit in the bottom of the cistern would likely be ca 1850.

Other artifacts include a large copper penny—too corroded to identify date without processing, a second, fragmentary copper

coin, completely illegible, 43 other whole and fragmentary (enough to show decoration) pipe bowls, and 42 pipe stems of clay (numbers by quick inspection—not final). One pipe is lettered on the bowl "J Richards OXFORD ST ABOVE FRANKFORD ROAD PHILA" and has a scrawled, large S R in raised letters on opposite sides.

A silvered brass watch case, a derringer barrel, silvered, four elixir bottles, one with cork intact and liquid contents (dark mass with some evident filiments like hairs in liquid) two squared, molded drug bottles of green glass, thick green dark glass bottle fragments and two conical bottle tops of dark green, green window glass fragments (light), a small, metal bound rectangular (1½ x 2 inches) glass sandwich—possible mirror or photo container, a pewter spoon, two finely-made and finished bone tooth brushes, garbage bones, sheep, turkey, lead fragments, brick—8¼ x 4 x 2 1/8. At the four to five feet level of the fill of dirt and masonry debris a brick with a glazed header and measured 8 1/8 x 3 3/4 x 2 1/8. At one foot (top of cistern vault break) a brick measured 8½ x 3 7/8 x 2 1/4.

At two feet a tile brick measured four inches wide by 1 1/8 by 8 1/8 (sill or trimming brick). Also pieces of roofing slate in top fill above ten feet depth below spring of vault. At eleven feet, in muck, scraps of string, or cord, at twelve feet two pieces of cast iron.

Three objects of gold were found at lowest depth—12 feet—a filigree costume ornament, and two fragments of gold for jewelry.

OLD CITY HALL: CISTERN #2, 1963

GLASS BOTTLES

FS-1: 1 frag. green
FS-3: Calif. Pop Beer (Phila. Robertson and Co.)
FS-4: 1 green frag.
FS-14: 1 elixir, multi-sided
FS-15: fancy clear bottle neck and base
6 clear glass frag.
1 round vial frag.
1 square medicine
4 green frag.
1 larger clear base and neck
1 small medicine bottle, filled with indet. fluid
FS-16: green soda "PA-"
8 frag. -CTL[illegible]
1 light green, sq. shouldered med.
1 clear, sq. shouldered med., frag.
1 clear molded frag.
2 light green sq. sh.
4 green frag. soda, REED, Phila. water
1 light green round medicine
6 blue frag. soda--2
1 clear frag.
1 clear perfume,cyl.
1 pale green squared medicine
1 frag. green glass
FS-17: 1 elixir
8 frag. small, thin-walled, green (light)

MISCELLANEOUS

FS-13: 2 frag. window
FS-15: 3 frags. window
FS-16: 16 frags. window
1 Double glass frame 2x2½ in., brass frame--photo?
1 milky frag.
FS-17: 1 glass grommet?

METAL-IRON

FS-15: 1 frag. frame rim
1 spike
FS-16: 1 cast stove frag.
1 frag. knife handle
1 derringer barrel, gilt
1 cane handle
1 pocket knife frag.
1 cut spike
FS-17: 1 large hook
3 frag. pen knife
1 small frag. metal frame
3 frag. nails, indet.
1 small frag. sheet
1 large type letter "J" (type metal)
1 button
1 knife handle frag.

COPPER, BRONZE, BRASS

FS-16: 1 bronze key (clock?)
3 buttons
1 bronze door key
1 bronze fixture
1 copper U.S. cent
1 copper coin, indet.
FS-17: 1 brass key
1 copper ornament
3 brass buttons, hemisph.
1 small brass folding hinge
1 brass watch case
1 spectacle frag.
1 bronze ring

GOLD, ETC.

FS-17: 1 pewter medallion
FS-16: 1 wire, gold,twisted
1 band frag., gold
1 filament ornament, gold
1 lead frag.
FS-17: 1 thimble, silver
2 filagree ornament of gold
1 gold and moonstone ornament
1 frag. gold wire
1 frag. gold leaf foil

OLD CITY HALL: CISTERN #2, 1963

Ceramics

Bricks

FS-1
8½x3 3/4x2¼
FS-2
Tile brick
8½x4x1 1/16
FS-9
8½x3 3/4x2 1/16
FS-12
2 tile brick frag.
FS-16
1 molded
8 3/16x4x2 1/16
FS-18
1 molded
8½x4x2¼
FS-19
1 molded
8 1/16x4x2

Earthenware

FS-3
1 plain pipe bowl, large and modern
FS-12
lead-glaze frag.
FS-13
Pipe bowls:
1-TD
1-stamped 517
Lead glaze frag.
FS-15
blue glaze finial
Pipes:
1 Richards bowl
1 stamped stem
1 plain
FS-16
Pipes:
Plain bowls—4
Decorated bowls—36
J. Richards, Oxford St. Frankford Rd. Script R—3 bowls
Medallion on bowl—1
TD and 14 stars—1
Fluted—2

Earthenware (cont.)

Stems:
Plain-44, small hole
Decorated—Peter Borni—3
Elbow pipe, crude, for wood stem—1
Marble—1
Lead glaze red utility—1 sherd
FS-17
Pipes: Bowls:
Plain—7
Decorated—27
Fluted—19
Richards,etc.—1
Eagle & stars—3
Tobacco leaves—1
Stamped—3
Pipes—Stems:
Plain-37,
Decorated—6
Marbles—2
Lead-glaze utility—4

Stoneware

FS-16
Glazed—2 fragments
Green edge—1 (?)
Ironware—1

Porcelain

FS-16
Moulded ring—1 (grommet?)

OLD CITY HALL: CISTERN #2, 1963

ORGANIC

Manufactured

FS-2: 1 large roofing slate
FS-3: 1 large roof slate
FS-4: 2 slate frag.
FS-12: 1 slate fragment
FS-15: 1 vulcanized rubber comb frag. "Goodyear Pt. 1849"
FS-16: 1 bone handle
2 toothbrushes, carved bone
1 leather lace
1 leather thong?
1 small wooden handle
1 lead pencil
FS-17: 3 frag. vulcanized rubber comb, one stamped "Ptd 1851"
1 small turned ivory handle
1 turned horn button
3 bone buttons, perforated
1 bone domino
1 frag. wood
1 frag. striped silk
1 shoe lace
7 fragments of leather

Natural

FS-13: 1 pig bone
1 chicken bone
FS-14: 1 pig bone
FS-16: 3 oyster shells
8 bird bones
5 mammal, indet.
2 beef
1 wood frag. with spike
1 wood frag. marked V
1 peanut
1 antler fragment
2 peach pits
1 wood fragment
FS-17: 2 walnuts
8 peach pits
2 duck bones
2 cut garbage bones, indet.
1 small bird skull frag.?

FIELD SPECIMEN DATA

FS NO.	Lot	Square	Depth	Identification	Association
1			0-1' from top of cistern collar	1 recent brick	Cistern #2 -- SW corner room opposite fire door
2			1'-2'	Mis. Brick and slate (roofing)	"
3			1' below spring of vault	Brick, Morter and Slate	"
4			2' - 3'	Same	"
5			3'- 4'	Same	"
6			4'- 5'	Same (Sample not kept)	"
7			5'- 6'	Same (Sample not kept)	"
8			6'- 7'	Same (Nothing kept)	"
9			7'- 8'	Nothing	Cistern #2 Basement of Old City Hall - 1880-1900 full of debris

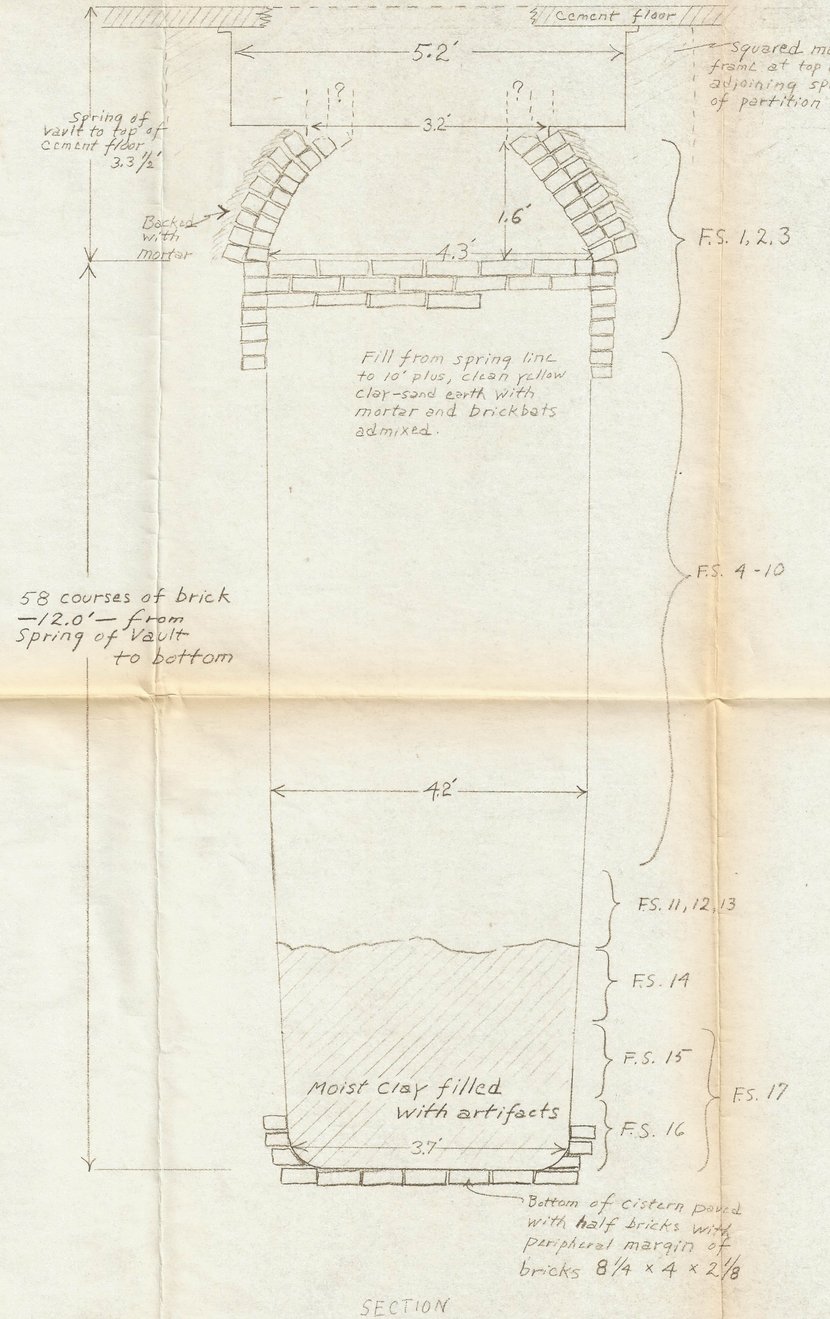
FIELD SPECIMEN DATA

FS NO.	Lot	Square	Depth	Identification	Association
10			7'- 8'	Nothing kept—same masonry fill	
11			8'- 9'		
12			8'- 9'		
13			9' below spring of vault	Few artifacts—change in fill indicated at cistern bottom	
14			9'- 10' below spring of vault	Personal artifacts in dark clay muck	Silver watch, clay pipe fragments, etc.
15			10'-11' below spring of vault	Clay pipe stems, glass, ceramics, garbage bones—one gold sheathing—very delicate—1/2' long	Muck—dark clay at bottom of catch basin
16			11'- 12' from spring of vault	Miscellaneous objects	Same, bottom of cistern
17			10'- 12' below spring of vault	Miscellaneous objects	Same, reworked fill after removal

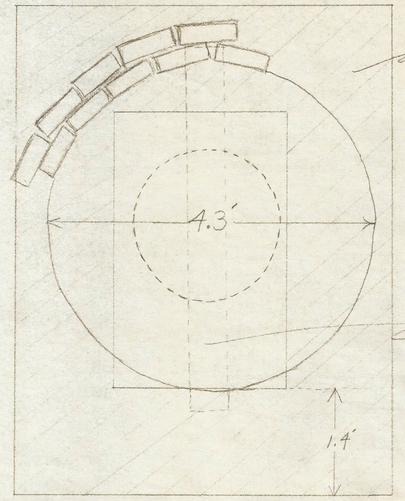
PHOTOGRAPH DATA

B/W

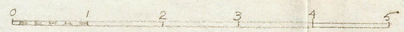
Site	Photo No.	Neg. No.	Feature Data	Date
Old City Hall Basement	1—2		Shots of exposed drain pipes, NW corner of basement	3/5/63
"	3		Shot of pipe exposed in middle room (near hot water tank)	3/5/63
"	4		Near Cistern #1 Drain pipes and electrical conducts between brick masonry walls.	3/5/63
"	5		Cistern #2 in room by fire door (SW corner)	3/5/63



SECTION



PLAN - TOP



SCALE IN FT.

"CISTERN # 2" - A CATCHMENT VAULT IN BASEMENT OF OLD CITY HALL

ESSENTIAL DATA

Mortar: questionable - only thin mud between bricks, + sand.
Brick size: 8"x 4"x 2 1/8"
Cement floor surface to spring of vault, 3.35'
Floor of rectangular masonry covering to spring of vault, 1.6'
Measurement across rectangular cover 5.2'
Courses of brick: Top of vault to spring 14. Spring to bottom: 58
Diameter of vault at spring: 4.3"; 5' above bottom, 4.2'; at bottom, 3.7'

BASIC DATA

ORIENTATION

PREPARED	
J.L. Cotter	
DESIGNED	
J.L. Cotter	
DRAWN	
CHECKED	
DATE	INITIAL
REVISED	

SCALE	MARK	DESCRIPTION OF REVISION

RECOMMENDED — DATE

APPROVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NORTHEAST R.E.G.
PREPARED BY
RESOURCES PL.
OFFICE
VAULT "CISTERN #2"
TITLE OF DRAWING
OLD CITY HALL
LOCATION WITHIN PARK
INDEPENDENCE N.H.P.
NAME OF PARK

REGION	
N.E.	
PCP NO.	
SHEET 1	OF 1
DRAWING NO.	
NHP: IND 2020	
DATE 6/3/64	