

If you do not need this report after it has served your purpose, please return it to the Geological Survey, using the official mailing label at the end

UNITED STATES DEPARTMENT OF THE INTERIOR

**FLOODS OF
OHIO AND MISSISSIPPI RIVERS
JANUARY-FEBRUARY 1937**

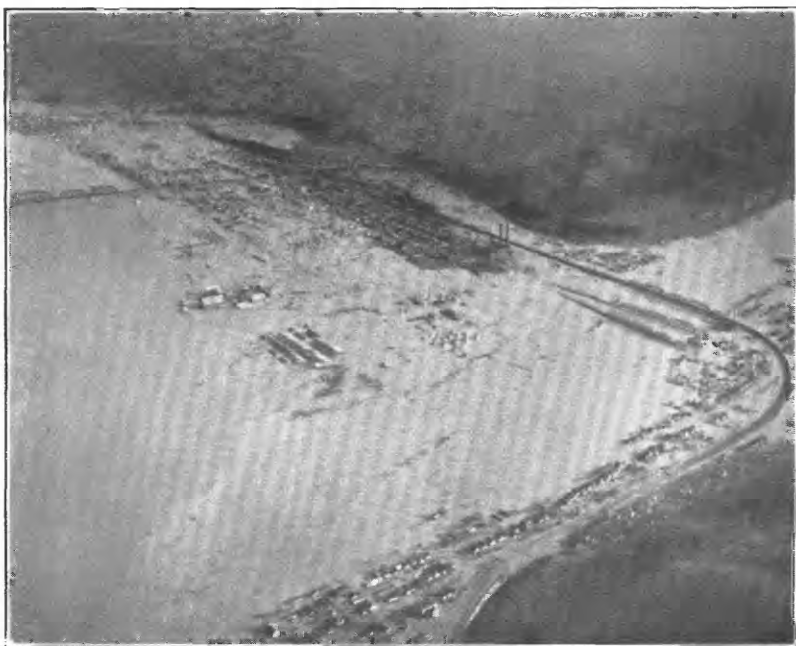
Prepared in cooperation with the
FEDERAL EMERGENCY ADMINISTRATION
OF PUBLIC WORKS

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 838



A. NEW RICHMOND, OHIO, JANUARY 23, 1937.

Three days before crest, which was about 7 feet higher than the stage of the river when this picture was taken. Official photograph, United States Army Air Corps.



B. MOUTH OF THE BIG SANDY RIVER, JANUARY 26, 1937.

Kenova, W. Va., above the mouth, and Catlettsburg, Ky., below the mouth. Courtesy of Aerial Surveys of Pittsburgh, Inc.

FLOOD SCENES ON THE OHIO RIVER.



A. FLOOD WRECKAGE AT UNIONTOWN, KY.



B. CLEANING UP AFTER THE FLOOD.

Interior of a store in Evansville, Ind. Only one of thousands of such scenes.

FLOOD DAMAGE ON THE OHIO RIVER.



A. SCENE AFTER ICE STORM WHICH DISRUPTED TELEPHONE COMMUNICATION IN SOUTHERN ILLINOIS, JANUARY 26, 1937.



B. SCENE NEAR EDDYVILLE, KY., JANUARY 23, 1937.

After the main highway was flooded by the Cumberland River the National Guard was stationed on the only road leading to the town. Courtesy of Corps of Engineers, United States Army.



A. LEAVENWORTH, IND., FEBRUARY 2, 1937.
Courtesy of 38th Division Aviation, Indiana National Guard.



B. MOUND CITY, ILL., FEBRUARY 5, 1937.
Official photograph, United States Army Air Corps.
FLOOD SCENES ON THE OHIO RIVER.



A. SCENE ON DECEMBER 22, 1936, PRIOR TO THE FLOOD.



B. SCENE ON JANUARY 26, 1937, WHEN THE STAGE OF THE RIVER WAS ABOUT 1 FOOT BELOW THE CREST.

RECORDER HOUSE ON THE OHIO RIVER AT DAM 53, ABOUT 18 MILES ABOVE CAIRO, ILL.



**A. MISSISSIPPI RIVER AT MEMPHIS, TENN., AT THE CREST OF THE FLOOD
ON FEBRUARY 10, 1937.**

Recorder house at Harrahan Bridge.



B. ATCHAFALAYA RIVER AT KROTZ SPRINGS, LA., FEBRUARY 1937.

View east along Missouri Pacific Railroad at about the crest of the flood.



A. LOUISVILLE, KY., JANUARY 27, 1937.

Courtesy of 38th Division Aviation, Indiana National Guard.



B. EVANSVILLE, IND., JANUARY 26, 1937.

Courtesy of 38th Division Aviation, Indiana National Guard.

FLOOD SCENES ON THE OHIO RIVER.



A. EVANSVILLE, IND., AT CREST STAGE OF THE OHIO RIVER.
Note street lights.



B. OVERFLOW FROM THE KENTUCKY RIVER AT FRANKFORT, KY.



A. OHIO RIVER AT MARKLAND, IND., FEBRUARY 3, 1937.

Courtesy of 38th Division Aviation, Indiana National Guard.



B. OVERFLOW OF THE WABASH RIVER AT MOUNT CARMEL, ILL., JANUARY 25, 1937.

Official photograph, United States Army Air Corps.



A. PRIOR TO OVERTOPPING OF THE LEVEE, JANUARY 25, 1937.
Official photograph, United States Army Air Corps.



B. SUBSEQUENT TO OVERTOPPING OF THE LEVEE.
Official photograph, United States Army Air Corps.
OHIO RIVER AT SHAWNEETOWN, ILL.



A. APPROXIMATELY 28 MILES ABOVE THE MOUTH, FEBRUARY 20, 1937.

A 700-pound steer caught in the fork of a tree and left hanging as the river level receded. Courtesy of Corps of Engineers, United States Army.



B. FOX BLUFF, TENN., JANUARY 26, 1937.

View upstream from top of bluff. Courtesy of Corps of Engineers, United States Army.

FLOOD SCENES ON THE CUMBERLAND RIVER.



A. NASHVILLE, TENN., JANUARY 26, 1937.

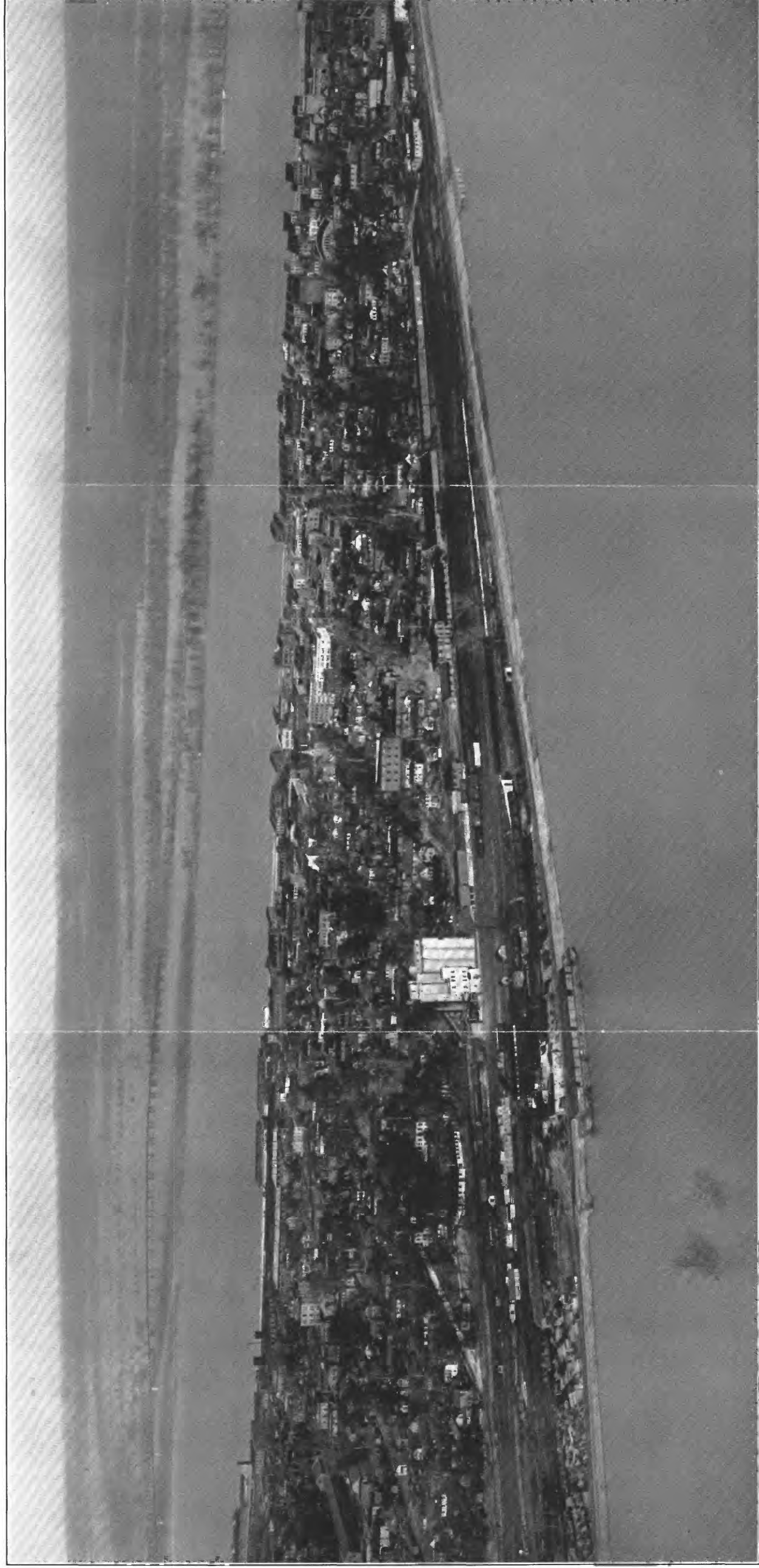
View across flooded section from top of State Capitol. Courtesy of Corps of Engineers, United States Army



B. UPSTREAM SIDE OF FLOODED ILLINOIS CENTRAL RAILROAD BRIDGE AT MILE 31.5, FEBRUARY 5, 1937.

Courtesy of Corps of Engineers, United States Army.

FLOOD SCENES ON THE CUMBERLAND RIVER.

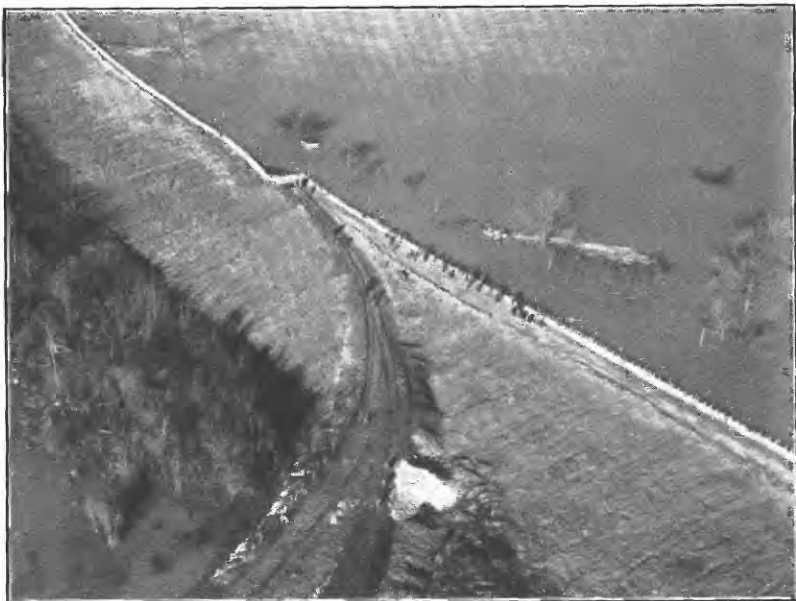


FLOOD SCENE AT CAIRO, ILL., FEBRUARY 5, 1937.

The city was successfully protected from overflow by its surrounding levee. The flood was near its crest at the time this picture was taken. Official photograph, United States Army Air Corps.



A. LOOKING NORTH ALONG THE OHIO RIVER AT THE LEVEE, FEBRUARY 4, 1937.



B. VIEW OF RIVER FRONT, FEBRUARY 5, 1937.

Official photograph, United States Army Air Corps.

LEVEE ALONG OHIO RIVER AT CAIRO, ILL., SHOWING THE EMERGENCY
EMBANKMENT FOR PROTECTION AGAINST OVERTOPPING.



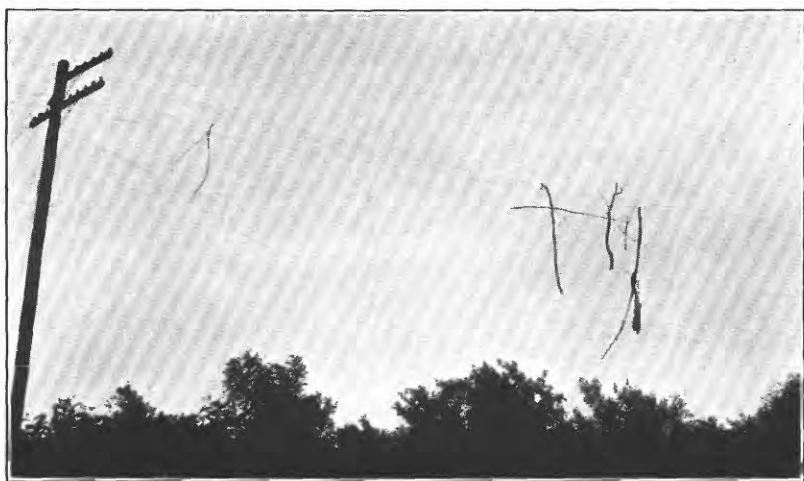
A. BRICK HOUSE, NEW RICHMOND, CLERMONT COUNTY, OHIO, DESTROYED BY FLOOD OF JANUARY 1937.



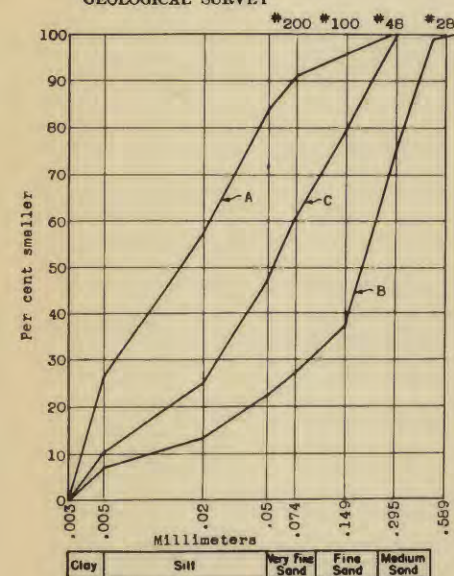
B. HOUSE EAST OF BUENA VISTA, ADAMS COUNTY, OHIO, TORN FROM FOUNDATION AND OVERTURNED BY FLOOD OF JANUARY 1937.



A. FLOOD DEBRIS NEAR BELLEVUE, CAMPBELL COUNTY, KY

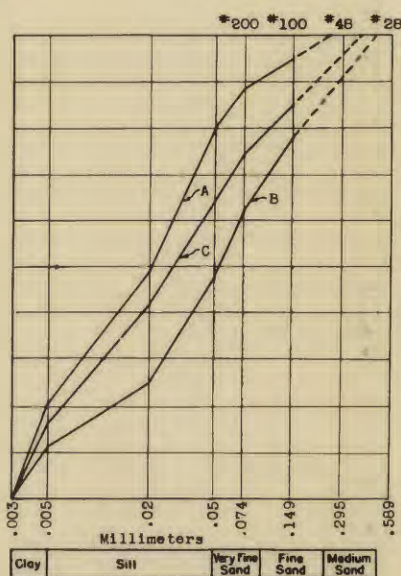


B. FLOOD DEBRIS ABOVE U. S. HIGHWAY 41 NEAR EVANSVILLE,
VANDENBERG COUNTY, IND.



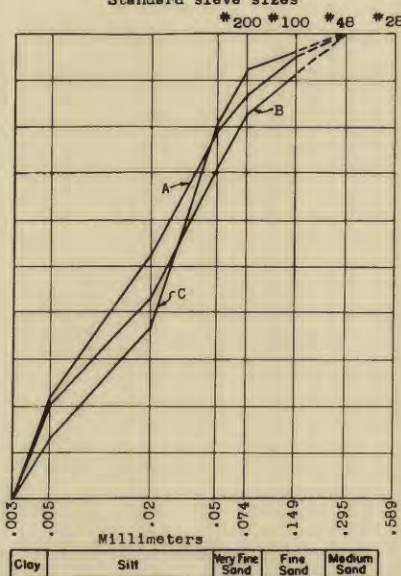
Samples, top of ridge east of Hodges Bayou, Cairo quad., Ill.-Ky.-Mo. A, Top fine silt deposit. B, Underlying sand deposit. C, Underlying soil.

Figure 1



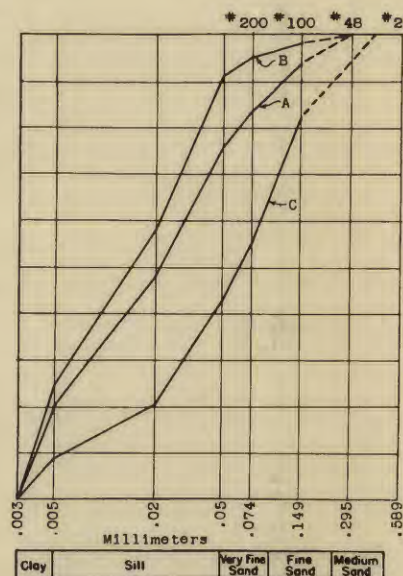
A, Composite, 159 analyses, 11 groupings; finer textured flood deposits; Ohio Valley area.
B, Composite, 12 analyses, coarser flood deposits (sand), Ohio Valley area.
C, Composite, 4 analyses, Potomac River deposits, Seneca quad., Md.-Va.

Figure 2



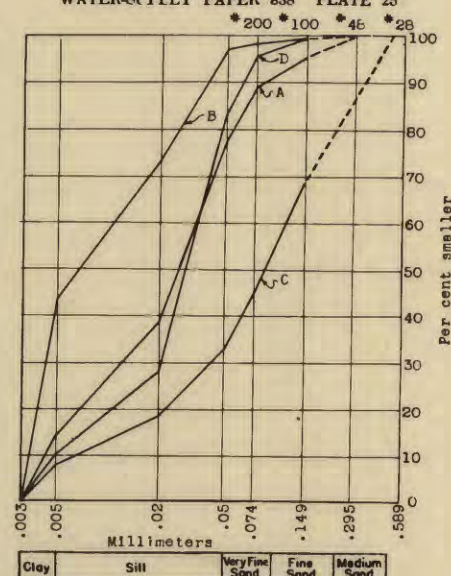
A, Composite, 23 analyses; areas near river.
B, Composite, 13 analyses; inter-mediate areas.
C, Composite, 23 analyses; outer marginal area flooded.

Figure 3



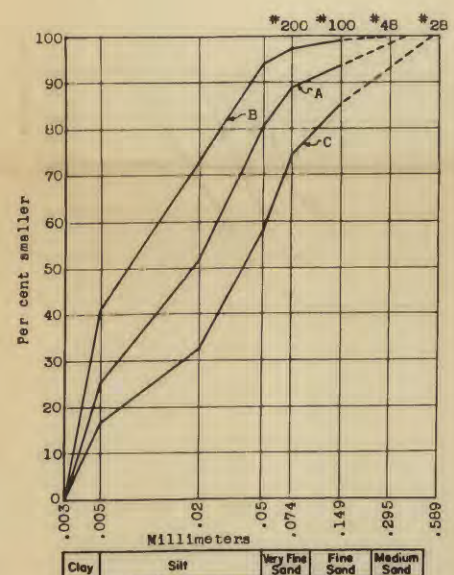
A, Composite of 17 analyses of samples from places on river bank.
B, Sample 106-2, with 91.1 percent of particles less than 50 microns in diameter.
C, Sample 41, with 42.8 percent of particles less than 50 microns in diameter.

Figure 4



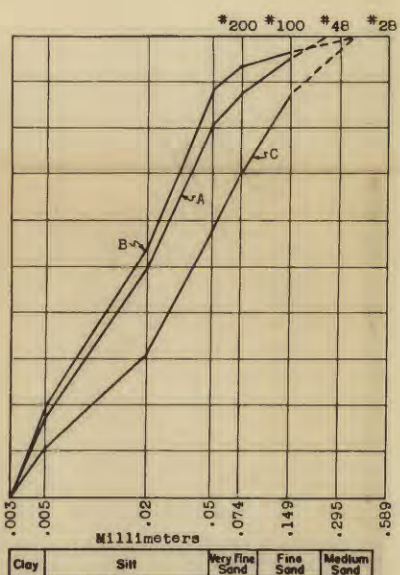
A, Composite, 34 analyses, samples taken in tributaries.
B, Sample 102-4 from locality beneath lower bridge across Licking Creek at Newport, Ky.
C, Sample 142-1 from Paddy Creek 1/2 mile E of Proctorville, Ohio, Guyandot quad., W. Va.-Ohio.
D, Sample 60 from highway crossing of Fourmile Creek, 3 miles E of Metropolis, Ill., Paducah quad., Ky.-Ill.

Figure 5



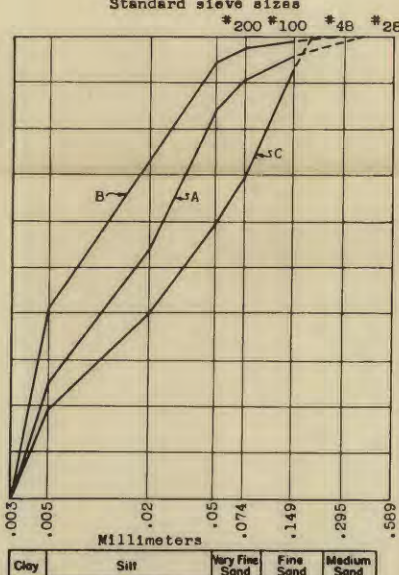
A, Composite, 11 analyses, samples taken from open country away from river bank and tributaries.
B, Sample 75, clay deposit on flood plain about 1 mile SE of Evansville, Ind., Henderson quad., Ky.-Ind.
C, Sample 28, meadow in NE 1/4 sec. 20, T. 15 S., R. 1 W., Cairo quad., Ill.-Ky.-Mo.

Figure 6



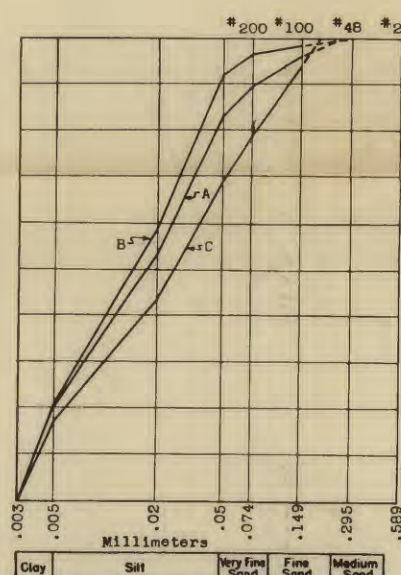
A, Composite, 7 analyses, samples from narrower part of valley.
B, Finest textured sample (99), in a building in town of California, Ohio, East Cincinnati quad.
C, Coarsest textured sample (146-2), Cox Landing, W. Va., Guyandot quad.

Figure 7



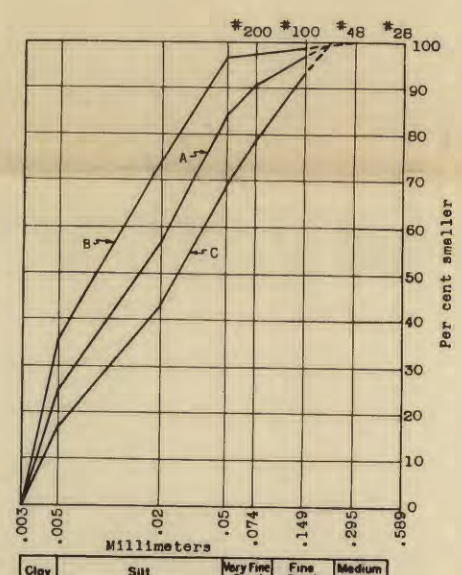
A, Composite, 17 analyses, samples from wider part of Ohio Valley.
B, Finest textured sample (75)-flood plain near S end of Causeway SE of Evansville, Ind.
C, Coarsest textured sample (47), ferry landing East Cairo, Ky.

Figure 8



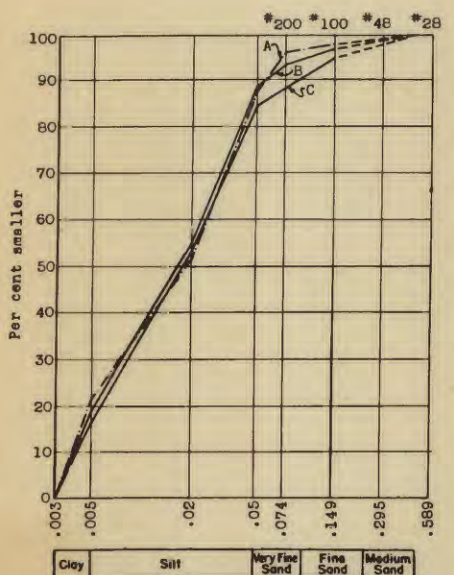
A, Composite, 7 analyses, samples taken beneath river bluffs.
B, Finest textured sample (119-2), Vaysville quad., Ohio-Ky., at Eagle Creek where crossed by Highway 52.
C, Coarsest textured sample (140), Guyandot quad., Ohio-W. Va., at mouth of Symmes Creek.

Figure 9



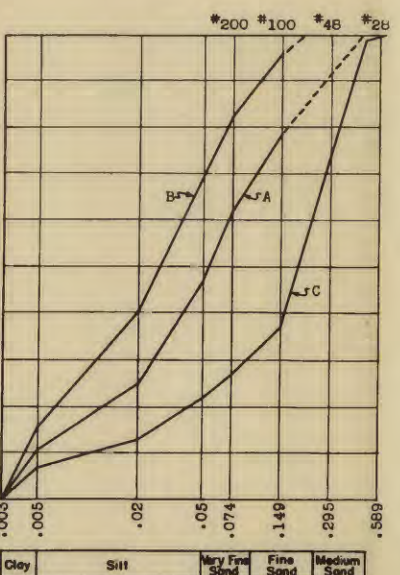
A, Composite, 4 analyses of samples taken below junction of large tributaries.
B, Finest textured sample (102-4), near mouth of Licking Creek at Newport, Ky.
C, Coarsest textured sample (140), Guyandot quad., at mouth of Symmes Creek.

Figure 10



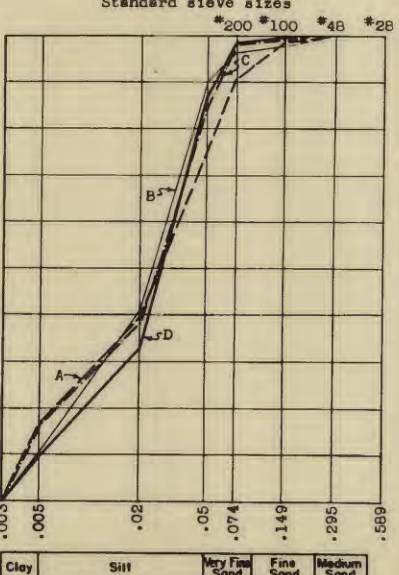
A, Sample 17-4 from girders of bridge over Hodges Bayou, sec. 3, T. 16 S., R. 1 E., Cairo quad., Ill.-Ky.-Mo.
B, Sample 99 from window sills and window frames at California, Ohio, East Cincinnati quad.
C, Sample 126-1 from bridge girder at crossing of Stout Creek, 1/2 mile W of Rome, Ohio, Vanceburg quad.

Figure 11



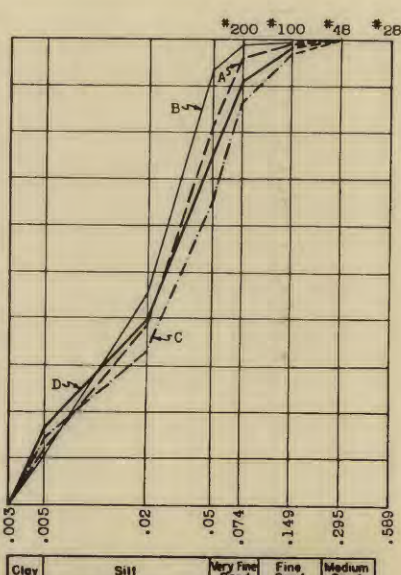
A, Composite, 12 analyses of sandy silt samples.
B, Finest textured sample, Lawrenceburg ferry, Ky. side, Lawrenceburg quad., Ohio-Ky.
C, Coarsest textured sample, Hodges Bayou area, ridge to east, Cairo quad., Ill.-Ky.-Mo.

Figure 12



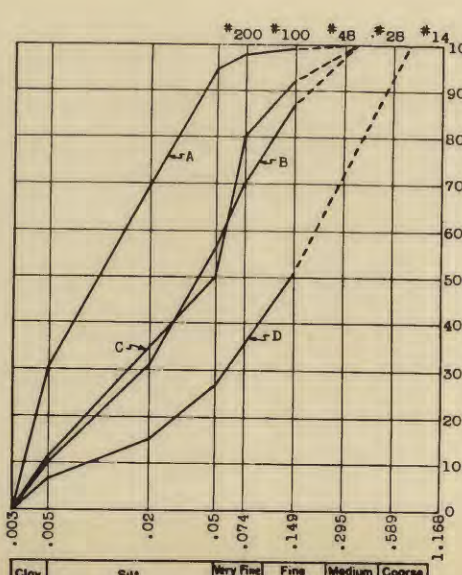
A, Loess at locality 110 (sample 110-9). (See table, pp. 724-725.)
B, Loessial soil beneath flood deposit at locality 33. (See table, p. 715.)
C, Loessial soil at locality 77. (See table, p. 717.)
D, Loessial soil beneath flood deposit at locality 82. (See table, p. 717.)

Figure 13



A, Average of 9 analyses of flood samples at locality 110. (See table, p. 727.)
B, Finest textured sample (110-1).
C, Coarsest textured sample (110-8).
D, Loess underlying flood deposits (110-9).

Figure 14



A and B, Silt and sand deposits of the flood of June 1937 at Cox Landing, W. Va., Guyandot quad.
C and D, Corresponding deposits of the flood of January 1937 at same locality.

Figure 15

Bureau of Soils Classification

GRAPHS OF MECHANICAL ANALYSES OF OHIO RIVER SILT.



A. WATER-MARKED BARN AND SHED IN CAMP SPRING HOLLOW, MASON COUNTY, KY., ABOUT 1½ MILES FROM THE OHIO RIVER SPRINGDALE QUADRANGLE.

Height of water indicated by light tint.



B. WATER-MARKED BARN ON BLUFF ABOVE TWELVEMILE CREEK, ON THE WEST SIDE OF NEW RICHMOND, OHIO, AND ON THE SAME TERRACE WITH THE TOWN.

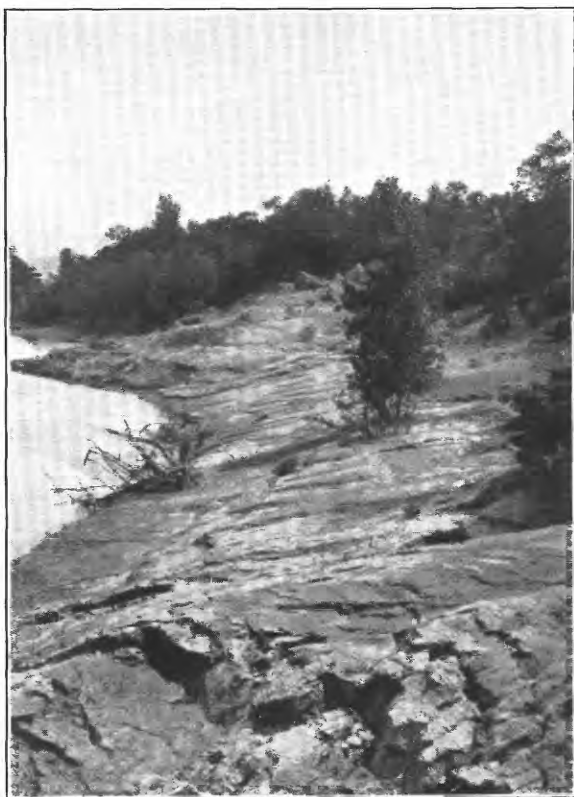
Collapsed sheds in middle ground. Height of water indicated by light tint.



A. FLOOD DEPOSIT BENEATH LOWER BRIDGE OVER LICKING CREEK, NEAR MOUTH AT NEWPORT, KY.



B. FLOOD DEPOSIT AND WATER-MARKED BLUFF NEAR KENTUCKY END OF AURORA FERRY, LAWRENCEBURG QUADRANGLE.



A. DETAIL OF WEST BANK.



B. GENERAL VIEW.

Shows recent landslip a little below sky line at right.

FLOOD DEPOSITS ALONG POST CREEK CUTOFF, JUST SOUTH OF
BRIDGE ON ILLINOIS STATE HIGHWAY 37, LA CENTRE QUAD-
RANGLE.

