

**THE DEVELOPMENT OF THE FEDERAL  
PROGRAM OF FLOOD CONTROL ON  
THE MISSISSIPPI RIVER**

**BY  
ARTHUR DEWITT FRANK, A. M.**

**SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY  
IN THE  
FACULTY OF POLITICAL SCIENCE  
COLUMBIA UNIVERSITY**

**NEW YORK  
1930**

**COPYRIGHT, 1930**

**BY**

**COLUMBIA UNIVERSITY PRESS**

**PRINTED IN THE UNITED STATES OF AMERICA**

## ACKNOWLEDGMENTS

This opportunity is taken to express my gratitude to Professor David S. Muzzey, under whose direction this study was made, for his valuable criticism and his generous aid.

I also wish to express my thanks to the members of the Staff of the Library of Congress and to Edith Pierce Frank for their most helpful services.

A. D. F.

## PREFACE

Floods of the Mississippi river have been one of the greatest natural enemies that the people of any section of the United States have ever encountered. The tremendously fertile delta area constitutes one of the potential garden spots of the world. The lure of such valuable land has been the leading factor in keeping up the morale of the men who have fought the river, so that they have willingly faced numerous almost insurmountable difficulties.

For many years the riparian owners carried on the struggle unaided by any government. Then, parishes and counties began to help. States and, finally, the United States came to the rescue when it became evident that the burden was too heavy for the local communities. The program of the Federal government has continuously expanded until at present it assumes practically all of the responsibility.

This volume attempts to trace the development of the ever increasing program of the Federal government. Special attention has been given to the forces that have aided or hindered the growth of such a colossal system of internal improvement.

Many theories of control have been advanced and considered. Numerous bitter controversies have occurred both among hydraulic engineers and among laymen concerning the various methods of flood control. This volume has neither attempted to solve technical engineering problems nor to settle controversies. It has only stated the outstanding ones as they have affected the development of the program of the Federal government.

A. D. F.

GREENVILLE, N. C., MARCH, 1930.

# TABLE OF CONTENTS

	PAGE
CHAPTER I	
Beginnings of Federal Control of Floods on the Mississippi River . . . . .	11
CHAPTER II	
Chaotic Conditions and the Creation of the Mississippi River Commission . . . . .	28
CHAPTER III	
Arguments for Federal Control . . . . .	45
CHAPTER IV	
Arguments against Federal Control . . . . .	75
CHAPTER V	
Constitutional Basis for Federal Control . . . . .	86
CHAPTER VI	
Proposed Plans for the Control of Mississippi Floods . . . . .	97
CHAPTER VII	
Progress under the Mississippi River Commission, 1879-1926 . . . . .	134
CHAPTER VIII	
Forces that Have Created Sentiment for Federal Control . . . . .	157
CHAPTER IX	
The Flood of 1927 and the Legislation of 1928 . . . . .	187
CHAPTER X	
Results of the Jones-Reid Act to November, 1929 . . . . .	244
APPENDIX . . . . .	253
INDEX . . . . .	267

## APPENDIX

### DOCUMENTS OF THE UNITED STATES GOVERNMENT

- Alcorn, James L., *Mississippi River Levees*, Washington, Government Printing Office, 1873.
- Aswell, James B., *Flood Control a National Obligation*, Washington, Government Printing Office, 1928.
- Frankenfield, H. C., *The Floods of the Spring of 1903 in the Mississippi Watershed*, Washington, Weather Bureau Bulletin M, 1904.
- Humphreys, Andrew A. and Abbot, Henry L., *Report upon the Physics and Hydraulics of the Mississippi River*, Washington, War Department, 1861.
- Lewis, Barbour, *Levees of the Mississippi*, Washington, Government Printing Office, 1874.
- Louisiana, *Mississippi River Levees, Memorial of Citizens of the State of Louisiana in Favor of Nationalizing the Levees of the Mississippi River*, House Miscellaneous Document No. 41; 42nd Cong., 3rd Sess., 1873.
- Townsend, C. McD., *Elements of Flood Control, Address at St. Louis in 1913*, House Document 51, 63rd Cong., 1st Sess., 1913.
- , *Flood Control of the Mississippi River, Speech at Memphis in 1912*, Senate Document 1094; 62nd Cong., 3rd Sess., 1912.
- United States Congress, *Congressional Globe*, 28th Cong., 1st Sess., 1833-4; 29th Cong., 1st Sess., 1846; 34th Cong., 1st Sess., part 3, 1855; 40th Cong., 2nd Sess., part 5, 1868; 42nd Cong., 1st Sess., part 2, 1871; 42nd Cong., 2nd Sess., part 1, 1871; 42nd Cong., 3rd Sess., part 3, 1873.
- United States Congress. *Congressional Record*, 43rd Cong., 1st Sess., part 4, 1874; 43rd Cong., 1st Sess., part 5, 1874; 43rd Cong. 2nd Sess., part 2, 1875; 44th Cong., 1st Sess., part 2, 1876; 45th Cong., 3rd Sess., part 1, 1879; 45th Cong., 3rd Sess. part 2, 1879; 45th Cong., 3rd Sess., Appendix, 1879; 46th Cong., 1st Sess., Part 1, 1879; 46th Cong., 1st Sess., part 2, 1879; 47th Cong. 1st Sess., part 2, 1882; 47th Cong., 1st Sess., part 3, 1882; 47th Cong., 1st Sess., part 4, 1882; 51st Cong., 1st Sess., part 6, 1890; 52nd Cong. 1st Sess., part 2, 1892; 52nd Cong., 1st Sess., part 3, 1892; 55th Cong., 1st Sess., part 1, 1897; 55th Cong., 1st Sess., part 2, 1897; 59th Cong. 1st Sess., part 10, 1906; 63rd Cong., 2nd Sess., part 19, 1914; 64th Cong., 1st

- Sess., part 2, 1916; 64th Cong., 1st Sess., part 6, 1916; 64th Cong., 1st Sess., part 9, 1916; 64th Cong. 1st Sess., part 10, 1916; 64th Cong., 1st Sess., part 11, 1916; 64th Cong. 2nd Sess., part 6, 1917; 67th Cong., 4th Sess., part 7, 1923; 70th Cong., 1st Sess., part 1, 1927; 70th Cong., 1st Sess., part 3, 1928; 70th Cong., 1st Sess., part 4, 1928; 70th Cong., 1st Sess. part 5, 1928; 70th Cong., 1st Sess., part 6, 1928; 70th Cong., 1st Sess., part 7, 1928; 70th Cong., 1st Sess., part 8, 1928; 70th Cong., 1st Sess., part 10, 1928; 70th Cong., 1st Sess., part 11, 1928.
- United States Congress. House. Committee on Flood Control, *Hearings on Mississippi River Floods*, 64th Cong., 1st Sess., 1916; 67th Cong., 4th Sess., 1922; 68th Cong., 1st Sess., 1924; 70th Cong., 1st Sess., 1927.
- United States Congress. House. Committee on Flood Control, *Abstract of Hearings before the Committee on Flood Control*, Committee Document No. 18; 70th Cong., 1st Sess., 1928.
- United States Congress. House. Committee on Flood Control, *Analysis of Plans of Army Engineers and Mississippi River Commission by L. T. Berthe*, Committee Document No. 11; 70th Cong., 1st Sess., 1928.
- United States Congress. House. Committee on Flood Control, *Bibliography on Flood Control Prepared by the Division of Bibliography*, Library of Congress; Committee Document No. 4; 70th Cong., 1st Sess., 1927.
- United States Congress. House. Committee on Flood Control, *Brief of Hearings before the Committee on Flood Control*, Committee Document No. 24; 70th Cong., 1st Sess., 1928.
- United States Congress. House. Committee on Flood Control, *Brief Submitted by Oscar Johnson on Plan of Army Engineers*, Committee Document No. 22; 70th Cong., 1st Sess., 1928.
- United States Congress. House. Committee on Flood Control, *Brief Submitted by John E. Martineau on Plan of Army Engineers*, Committee Document No. 9, 70th Cong., 1st Sess., 1928.
- United States Congress. House. Committee on Flood Control, *Brief Submitted by Governor O. H. Simpson of Louisiana on Plan of Army Engineers*, Committee Document No. 19; 70th Cong., 1st Sess., 1928.
- United States Congress. House. *Message from the President of the United States Transmitting, with Favorable Recommendation, the Plan of the Army Engineers*, House Document No. 90; 70th Cong., 1st Sess., 1927.
- United States Congress. House. Committee on Flood Control, *Report of Committee of Chief Engineers of Railroads Operating in Mississippi Valley on Plan of Army Engineers*, Committee Document No. 23; 70th Cong., 1st Sess., 1928.

- United States Congress. House. Committee on Flood Control, *Report on the Control of Floods of the Mississippi River by Means of Diversion Channels*, Committee Document No. 3; 70th Cong., 1st Session, 1927.
- United States Congress. House. Committee on Flood Control, *Report on the Control of Floods of the Mississippi River by Means of Reservoirs*, Committee Document No. 2; 7th Cong., 1st Sess., 1927.
- United States Congress. House. Committee on Flood Control, *Report Submitted by Hon. Frank R. Reid to Accompany S. 3740*, House Report No. 1100; 70th Cong., 1st Sess., 1928.
- United States Congress. House. Committee on Flood Control, *Report Submitted by Hon. Frank R. Reid to Accompany House Bill 8219*, Report not numbered; 70th Cong., 1st Sess., March, 1928.
- United States Congress. House. Committee on Flood Control, *Report on Diversion Channel through St. Francis Basin*, Committee Document No. 25; 70th Cong., 1st Sess., 1928.
- United States Congress. House. Committee on Flood Control, *Report on Improvement of Mississippi River for Navigation*, Committee Document No. 6; 70th Cong., 1st Sess., 1928.
- United States Congress. House. Committee on Flood Control, *Report Submitted by Several Engineers at Request of Governor Len Small of Illinois*, Committee Document No. 20; 70th Cong., 1st Sess., 1928.
- United States Congress. House. Committee on Flood Control, *Reports on the Ohio and Mississippi Rivers by General S. Bernard and Col. Jos. G. Totten in 1822, Charles Ellet, Jr. in 1852 and Gen. A. A. Humphreys in 1866*—Reprint, Committee Document No. 17; 70th Cong., 1st Sess., 1928.
- United States Congress. House. Committee on Flood Control, *Special Report of the Mississippi River Commission on Revision of Plans for Improvement of Navigation and Flood Control of the Mississippi River*, Committee Document No. 1; 70th Congress, 1st Sess., 1927.
- United States Congress. House. Committee on Flood Control, *Statement of Hon. Frank R. Reid in Regard to House Bill 8219*, Committee Document No. 7; 70th Cong., 1st Sess., 1927.
- United States Congress. House. Committee on Flood Control, *Statement of Former Senator William Lorimer of Illinois*, Committee Document No. 26; 70th Cong., 1st Sess., 1928.
- United States Congress. House. Committee on Levees and Improvements of the Mississippi River, *Improvement of the Mississippi River*, House Report No. 714; 45th Cong., 2nd Sess., 1878.
- United States Congress. House. Committee on Levees and Improvement of the Mississippi River, *Levees of the Mississippi River*, House Miscellaneous Document No. 127; 51st Cong., 2nd Sess., 1891.



- United States Congress. House. Committee on Levees and Improvements of the Mississippi River, *Mississippi River Improvements*, Hearings 1906.
- United States Congress. House. Committee on Rivers and Harbors, *Floods and Levees of the Mississippi River*, Report 300, Part 2; 63rd Cong., 2nd Sess., 1914.
- United States Congress. House. Select Committee on the Mississippi Levees, *Report of April 12, 1872*, House Report 44; 42nd Cong., 2nd Sess., 1872.
- United States Congress. Senate. Committee on Commerce. *Hearings on the Prevention of Floods on the Mississippi River*, 1904, 1910, 1912, 1914, 1917, 1928.
- United States Congress. Senate. Committee on Improvements of the Mississippi River, *Hearings on Levees of the Mississippi*, 1888.
- United States. Engineer Department, *Report of the Board of Engineers on the Ohio and Mississippi Rivers, Made in the Year 1821 by General S. Bernard and Col. J. G. Totten*, House Document No. 35; 17th Cong., 2nd Sess., 1823.
- United States. Inland Waterways Commission, *Preliminary Report*, Senate Document No. 325; 60th Cong., 1st Sess., 1908.
- United States. Mississippi River Commission. *Official Annual Report*, 1881, 1882, 1883, 1884, 1888, 1892, 1897, 1911, 1912, 1913, 1916, 1921, 1922, 1923.
- United States. Mississippi River Commission, *Contributions by Districts or Localities Benefitted by the Construction of Levees on Mississippi River*, House Document No. 645; 69th Cong., 1st Sess., 1916.
- United States. Mississippi River Commission, *Separation of the Red and Atchafalaya Rivers from the Mississippi River*, House Document No. 841; 63rd Cong., 2nd Sess., 1914.
- United States National Waterway Commission, *Final Report*, Senate Document 469; 62nd Cong., 2nd Sess., 1912.
- United States. Treasury Department, *Levees—Mississippi and Other Rivers*, House Document 11; 24th Cong., 1st Sess., 1835.
- United States. War Department, *Letter of the Secretary of War, Communicating a Copy of Gen. A. A. Humphreys' Report on the Levees of the Mississippi*, Senate Executive Document No. 8; 40th Cong., 1st Sess., 1866.
- United States. War Department, *Letter from the Secretary of War, Relative to the Improvement of the Ohio River*, House Executive Document No. 127; 43rd Cong., 1st Sess.
- United States. War Department, *Report of the Secretary of War, Communicating Reports in Reference to the Inundations of the Mississippi River*, Senate Document No. 20; 32nd Cong., 1st Sess., 1852.

- United States. War Department, *Report of the Secretary of War, Communicating Reports in Reference to the Inundations of the Mississippi River*, Senate Executive Document No. 49; 32nd Cong., 1st Sess., 1852.
- United States. Weather Bureau, *Floods of the Mississippi River*, Weather Bureau 1897, Weather Bureau Publication No. 143.
- United States. Weather Bureau, *Destructive Floods in the United States in 1913*, Water Supply Paper 96.
- West, Charles H., *Improvement of the Mississippi River*, Senate Document No. 600; 62nd Cong., 2nd Sess., 1912.

## OTHER DOCUMENTS

- Chamber of Commerce of the United States, *Referendum No. 51 on the Report of the Committee on Mississippi Flood Control*, Washington, 1927.
- Interstate Mississippi River Improvement and Levee Association, *Proceedings of the Convention of 1890 at Vicksburg*, Vicksburg, 1890.
- Kemper, J. P., *Proposed Plan for Flood Control below the Arkansas, etc.; A Report to the Safe River Committee of 100*, New Orleans, 1925.
- Klorer, John *Report of the Engineers' Committee of the Safe River Committee of 100*, New Orleans, 1923.
- Louisiana. General Assembly. Senate. Committee on Levees, *Report of March 21, 1850*, New Orleans, 1853.
- Mississippi River Improvement Convention, *Official Report of the Proceedings of the Convention Held in St. Louis in 1881*, St. Louis, 1881.
- Mississippi Flood Control Association, *Losses and Damages Resulting from the Flood of 1927*, Memphis, 1927.
- Mississippi River Levee Association, *Public Sentiment as Expressed by Mayors of Cities and Commercial Organizations*, Memphis, 1916.
- Mississippi River Levee Association, *Letters from Prominent Bankers Favoring Legislation by Congress to Prevent Floods*, Memphis, 1913.
- Pittsburgh Flood Commission, *Report Containing Results of Surveys, etc.*, Pittsburgh, 1912.

## BOOKS AND PAMPHLETS

- Alvord, John W. and Burdick, Charles B., *Relief from Floods*, McGraw-Hill, New York, 1918.
- Bock, Carl A., *History of the Miami Flood Control Project*, Dayton, Ohio, 1918.
- Beman, L. T., *Flood Control*, H. W. Wilson, New York, 1928.
- Channing, Edward, *The Jeffersonian System*, New York, 1906.
- Cline, I. M., *Floods in the Lower Mississippi Valley*, New Orleans, 1927.
- DuPratz, Le Page, *History of Louisiana, 1774*, An Early History of Louisiana, London, 1774.

- Darby, William, *Geographical Description of Louisiana*, Publisher and Date not given.
- Editorial Research Reports, *Economic Effects of the Mississippi Flood of 1927*, Washington, 1928. Mimeographed.
- Ellet, Charles, *The Mississippi and Ohio Rivers: Containing Plans for the Protection of the Delta from Inundation*, Philadelphia, 1853.
- Flint, Timothy, *History and Geography of the Mississippi Valley*, Cincinnati, 1832.
- Forshey, Caleb G., *The Delta of the Mississippi: the Physics of the River, etc.*, Cambridge, 1873.
- Fox, John A., *The Mississippi River Flood Problem; How Floods Can Be Prevented*, Washington, 1914.
- Haupt, Herman, *The Problem of the Mississippi, Reprint from the Gulf Ports Marine Journal*, New Orleans, 1905.
- Henry, Alfred J., *Floods in the Ohio River, 1870-1913*, Washington, 1913.
- Humphreys, Benjamin G., *Floods and Levees of the Mississippi River*, Washington, 1914.
- McMaster, John B., *History of the People of the United States, Vols. 1 and 2*, New York.
- Mississippi River Flood Control Association, *The Flood of 1927*, Memphis 1927.
- Morgan, Arthur E., *The Miami Valley and the 1913 Flood*, Dayton, Ohio, 1917.
- Moses, Barnette E., *The Problem of the Mississippi*, Washington, 1914.
- New York World. The World Almanac*, 1929.
- Ogg, Frederic A., *The Opening of the Mississippi*, New York, 1904.
- Parker, Walter, *Why Flood Control and River Regulation Are Essential to the Economic Welfare of the Mississippi Valley and the Nation*, New Orleans, 1925.
- Pickles, George W., *Drainage and Flood Control Engineering*, New York, 1925.
- Porter, K. H., *National Party Platforms*, New York, 1924.
- Randall, Henry S., *Life of Thomas Jefferson*, 3 vols., New York, 1858.
- Reynolds, Robert V. R., *Grazing and Floods*, Washington, 1911.
- Richardson, James D., *Messages and Papers of the Presidents*, vols. 2, 3, 5, 6 and 7.
- Rightor, Henry, *Standard History of New Orleans*, Chicago, 1890.
- St. Francis Levee District of Arkansas, *Report of the Officers, 1924-5*, Memphis, 1925.
- Safe River Committee of 100, *Report of the Engineering Committee*, New Orleans, 1922.
- Saxon, Lyle, *Father Mississippi*, New York, 1927.
- Stoddard, Ames, *Sketches of Louisiana*, Mathew Carey, Philadelphia, 1812.

- Taylor, Robert S., *Mississippi River Improvement; Collected Speeches and Magazine Articles*, Washington, 1921.
- Tompkins, Frank H., *Riparian Lands of the Mississippi River*, Chicago, 1901.

## MAGAZINE ARTICLES

- American Railway Engineering Association, "Series of Articles on Various Phases of the Flood of 1927," *Bulletin*, July, 1927, V. 29: 1-96.
- Bell, Stephen, "Untamed Mississippi," *Commerce and Finance*, April 27, 1927, V. 16: 838-9.
- Blake, E. E., "Flood Control by Flood Prevention," *Manufacturers' Record*, June 9, 1927, V. 91: 63-4.
- Brown, Robert M., "Notes on the Mississippi River Flood of 1903 and on the Floods of Other Years," *American Geographical Society Bulletin*, February, 1906, V. 38: 131-4.
- "Can Floods Be Prevented?" *New Republic*, May 18, 1927, V. 50: 344 f.
- Child, Richard W., "After the Flood Is Over," *Saturday Evening Post*, July 2, 1927, V. 200: 8-9.
- Chittenden, H. M., "Detention Reservoirs, with Spillway Outlets, As an Agency in Flood Control," *American Society of Civil Engineers*, Sept., 1917, V. 43: 43 and 1425-44 and 2009-15 and 2467-70.
- Cockrill, W. R., "A Plan to Drain the Lower Mississippi Valley," *De Bow's Review*, V. 8: 1850.
- "Congressmen Discuss the Pros and Cons of a Special Session of Congress," *Manufacturers' Record*, May 19, 1927, V. 91: 53-9.
- "Control v. Prevention," An Imposing Array of Opinions of Prominent Engineers, Scientists and Business Men. *Cassier's Monthly*, V. 44, July, 1913: 35 ff.
- Dabney, A. L., "Success of the Mississippi River Levees in the Flood of 1922," *American Society of Civil Engineers, Proceedings*, August, 1923, V. 49: 1149-54.
- Davis, Henry P., "And the Waters Prevailed," *Nature Magazine*, July, 1927, V. 10: 31-3.
- Delano, Frederic A., "The Report of the Committee on Mississippi Flood Control Appointed by the United States Chamber of Commerce," *Annals of the American Academy of Political and Social Science*, January, 1928, V. 135.
- "Economic Consequences of the Mississippi Flood," *The Nation's Business*, V. 15: 52.
- Edmonds, Richard W., "This Flood Could Have Been Prevented; Others Must Be," *Manufacturers' Record*, June 2, 1927, V. 91: 79-80.
- Ely, Richard T., "Farm Relief and Flood Control," *American Review of Reviews*, November, 1927, V. 76: 487 f.

- Fauntleroy, Thomas, "Lord, Plant My Feet on High Ground," *Independent*, June 4, 1927, V. 118: 580-6.
- "First Effects of the Mississippi Flood," *Literary Digest*, June 18, 1927, V. 93: 8-10.
- "Flood Control Fight in Congress," *Literary Digest*, Dec., 24, 1927, V. 95: 8.
- "Four Stages of the Flood," *The Survey*, July 1, 1927, V. 58.
- Fox, John A., "Prevention of Mississippi River Floods A National Duty," *Rand-McNally Bankers' Monthly*, Feb., 1915, V. 32: 13-18.
- Freeman, John R., "Taming the Mississippi," *Outlook*, June 8, 1927, V. 146: 182-6; *Outlook*, June 15, 1927, V. 146: 219-22.
- Garner, George, "A Great River Conference at Chicago," *Manufacturers' Record*, June 9, 1927, V. 91: 59-62.
- , "The Time Has Come to Demand and Command Action," *Manufacturers' Record*, July 21, 1927, V. 92: 83 f.
- Goins, Craddock, "Congress Must Translate Neglect into Action, etc.," *Manufacturers' Record*, May 12, 1927, V. 91: 63 f.
- , "Picture Story of the Mississippi Valley Flooded Area," *Manufacturers' Record*, May 26, 1927, V. 91: 65-8.
- Gray, George W., "When the Flooded Mississippi Rushes Downward to the Sea," *American Magazine*, December, 1926, V. 102: 52-5.
- Greeley, W. B., "The Part of Forestry in Flood Control," *American Forests and Forest Life*, July, 1927, V. 33.
- Hardee, William J., "High Water Protection Methods on the Lower Mississippi River," *Journal of the Association of Engineering Societies*, August, 1900, V. 25: 85-106.
- Harrington, D. V., "Financial and Business Effects of the Mississippi Flood," *Magazine of Wall Street*, June 18, 1927, V. 40: 282-5.
- Harris, L. O., "The Battle for the Delta," *Independent*, May 14, 1903, V. 55.
- Hart, Albert B., "Mississippi Floods," *Current History*, June, 1927, V. 26: 458-9.
- "Hoover's Flood Control Plan," *Commerce and Finance*, July 27, 1927, V. 16: 1495 f.
- Hoover, Herbert, "Greatest Peace-time Calamity," *Commercial and Financial Chronicle*, June 4, 1927, V. 124: 3301-3.
- , "The Improvement of Our Mid-West Waterways," *Annals of the American Academy of Political and Social Science*, Jan., 1928, V. 135.
- Horton, A. H., "The Effects of the Conservation of Flow in the Ohio Basin on Floods in the Lower Mississippi," *Engineering News*, June 11, 1908, V. 59.
- "How Hoover's Forces Fought the Flood," *Literary Digest*, July 30, 1927, V. 94: 37, 40, 42.

- Irwin, Will, "The Aftermath of Mud and Money," *The Survey*, July 1, 1927, V. 58: 358.
- , "Can We Tame the Mississippi," *World's Work*, Aug., 1927, V, 54: 405-15.
- Jadwin, Gen. Edgar, Small, Len, *et al.*, "Should States of Mississippi Flood Area Share Costs of Flood Control Projects.," *Congressional Digest*, February, 1928, V. 7: 49.
- Kellogg, Arthur, "Up from the Bottom Lands," *The Survey*, July 1, 1927, V. 58: 360-6.
- Kerr, F. M. ., "Red and Atchafalaya Rivers with Relation to Their Separation from the Mississippi River," *Journal of the Association of Engineering Societies*, March, 1911, V. 46: 185-206.
- "Law of the River," *Outlook*, May 25, 1927, V. 146: 104-5.
- Martineau, John E., "Government Control," *Century*, Sept., 1927, V. 114: 639.
- , "Why Investors Should Be Interested in Flood Control of the Mississippi and Its Tributaries," *Commercial and Financial Chronicle*, Oct. 15, 1927, V. 125: 2074-6.
- "Mississippi—Father of Waters," *Nation*, May 11, 1927, V. 124: 518.
- "Mississippi Flood Control Plan Submitted to President Coolidge by Secretary Hoover," *Commercial and Financial Chronicle*, July 30, 1927, V. 125: 600.
- "Mississippi Flood Four Hundred Years Ago," *Literary Digest*, July 30, 1927, V. 94.
- "Mississippi Flood of 1927," *The Congressional Digest*, Feb., 1928, V. 7: 42.
- "Mississippi Record Flood Crest Passes Memphis," *Engineering News-Record*, April 28, 1927, V. 98: 702-7.
- "The Mississippi Will Quickly Rebuild," *Manufacturers' Record*, May 5, 1927, V. 91: 73 f.
- Monette, John W., "The Mississippi Floods," *Publications of Mississippi Historical Society*, 1903, V. 7: 427-478.
- Moore, Willis L., "Forests and Floods," *American Review of Reviews*, Aug., 1927, V. 76: 199-200.
- Morgan, Arthur E. and Bock, C. A., "History of Flood Control in Ohio," *Ohio Archeological and Historical Quarterly*, Oct., 1925, V. 34: 474-505.
- Morgan, Arthur E., "A Policy for the Mississippi," *The Annals of the American Academy of Political and Social Science*, Jan., 1928, V. 135.
- Newell, F. H., "Mississippi River Floods," *American Review of Reviews*, June, 1927, V. 75: 592-600.
- Newlands, Francis G., "How Floods May Be Prevented," *National Waterways*, June, 1913, V. 1: 316-24.

- "Newspaper Editorials on Mississippi Floods," *Public Opinion*, April 1, 1897, V. 22: 393.
- Oakes, J. C., "Flood Prevention and Protection from the Point of View of the Federal Government," *Engineering and Contracting*, March 18, 1914, V. 41: 338-41.
- "Operating Results Show Floods' Effect on Railroads," *Railway Age*, Aug. 6, 1927, V. 83: 272.
- Parker, John M., "After the Flood," *Outlook*, June 1, 1927, V. 146: 148-9.
- , "Louisiana Looks to Washington," *Survey*, July 1, 1927, V. 58: 359.
- Parker, Walter, "The Problem of the Mississippi," *Commerce and Finance*, May 11, 1927, V. 16: 938.
- Payne, John Barton, "Review of Red Cross Relief Activities in Mississippi Flood Areas," *Congressional Digest*, Feb., 1928, V. 7: 42.
- Pickett, William D., "The Floods of the Mississippi Delta; Their Cause and Suggestions as to Their Control," *Proceedings of the American Society of Civil Engineers*, Nov., 1908, V. 34: 1232-51.
- Pinchot, Gifford, "Prevention First," *Survey*, July 1, 1927, V. 58: 367-9.
- , "Some Essential Principles of Water Conservation as Applied to Mississippi Flood Control," *Annals of the American Academy of Political and Social Science*, Jan., 1928, V. 135.
- Potter, Charles L., "How the Mississippi River Is Regulated," *Engineering News-Record*, April 2, 1925, V. 94: 508-14 and 556-9.
- , "Levees on the Mississippi Tend to Lower River Bed," *Engineering News-Record*, Feb. 14, 1924, V. 92: 280-2.
- "Recent Great Flood: What May Be Done to Prevent Such Inundations in the Future," *Scientific American*, April 12, 1913, V. 108: 336-7.
- Ricker, Samuel, "The Crevasses of Louisiana," *De Bow's Review*, Feb., 1851, V. 10.
- Seddon, James A., "Reservoirs and the Control of the Lower Mississippi," *Journal of the Western Society of Engineers*, Aug., 1900, V. 5: 259-91.
- Sherman, E. A., "What Forests Can Do for the Mississippi River," *The Annals of the American Academy of Political and Social Science*, Jan., 1928, V. 135.
- Simons, P. T., "Flood Probability," *Engineering News-Record*, April 29, 1926, V. 96: 704.
- Simpich, Frederick, "Great Mississippi Flood of 1927," *National Geographic Magazine*, Sept., 1927, V. 52: 243-89.
- "Sinking of Land as a Cause for the Mississippi Floods," *Science*, N. S., June 3, 1927, V. 65, Supp: 10-12.
- Smith, J. Russell, "Plan or Perish," *Survey*, July 1, 1927, V. 58: 370-7.
- , "Wealth from Mississippi Mud," *Survey*, Nov. 1, 1927, V. 59: 127-31.

- Spears, R. S., "Real Problem of the Mississippi," *Scientific American*, Feb. 15, 1913, V. 108: 155.
- "Steps Taken by the Federal Government for Mississippi Flood Relief," *Congressional Digest*, Feb., 1928, V. 7: 41.
- Stone, A. H., "And the Waters Prevailed," *Commerce and Finance*, June 1, 1927, V. 16: 1101-2.
- Sullivan, H. G., "Credits in the Flood Area," *Credit Monthly*, June, 1927, V. 29: 19-20.
- Sullivan, Mark, "President's View of Extra Session Vexing to South," *Manufacturers' Record*, Aug. 4, 1927, V. 92: 78.
- "Summary of Plans of Army Engineers and the Mississippi River Commission," *Congressional Digest*, Feb., 1928, V. 7: 49.
- "Suspicion of Pork in the Flood Control Bill," *Literary Digest*, April 14, 1928, V. 97: 10.
- Surain, G. F., "The Influence of Forests on Climate, Floods and Erosion," *Engineering News*, April 14, 1910, V. 63: 427-9.
- Sweinhart, H. L., "Mastering the Mississippi; Interview with J. E. Ransdell," *Outlook*, July 26, 1922, V. 131: 518-9.
- Switzer, J. E., "A Trip to the Mississippi-Yazoo Flood District," *Journal of Geography*, Nov., 1927.
- "Symposium on the Flood's Lesson: Burton, Theodore; Caldwell, A. S.; Hill, James J.; Cox, James M.," *Review of Reviews*, June, 1913, V. 47.
- "Taming the Father of Waters," *Journal of Forestry*, May, 1927, V. 25: 507-9.
- Taylor, Harry, "Problems of Flood Control," *Scientific Monthly*, April, 1923, V. 16: 352 f.
- "Telephone in the Mississippi Flood," *Literary Digest*, Aug. 20, 1927, V. 94: 21.
- Thomas, Lewis F., "Basic Factors in Flood Frequency in the Lower Mississippi River," *The Annals of the American Academy of Political and Social Science*, Jan., 1928, V. 135.
- "To End Floods," *World's Work*, May, 1913, V. 26: 22-4.
- Tolman, Charles F., "When the Waters Break Loose," *Nature Magazine*, April, 1925, V. 5.
- Townsend, Curtis McD., "Levee Construction on the Mississippi and Its Effect on River Section," *Engineering and Contracting*, Jan. 14, 1920, V. 53.
- , "The Problem of Flood Control," *National Waterways*, June, 1913, V. 1.
- , "Why the Spillways will not Solve the Mississippi Problem," *Engineering News-Record*, Jan. 4, 1923, V. 90.
- Walker, J. Bernard, "Curbing the Mississippi," *Scientific American*, Feb., 1928, V.



- "Washington, Webster and Roosevelt on the Mississippi Valley," *Manufacturers' Record*, June 2, 1927, V. 91: 68.
- White, O. P., "And the Floods Came," *Collier's Weekly*, July 9, 1927, V. 80: 5-6.
- White, Walter, "The Negro and the Flood," *Nation*, June 22, 1927, V. 124: 688-9.
- "Why Flood Experts Disagree," *Literary Digest*, July 2, 1927, V. 94: 21-2.
- Williams, Frank E., "The Geography of the Mississippi Valley," *Annals of the American Academy of Political and Social Science*, Jan., 1928, V. 135.
- Winter, T. G., "Man-Made Floods," *Outlook*, May 18, 1927, V. 146: 88.
- Zon, Raphael, "Do Forests Prevent Floods?" *American Forests and Forest Life*, July, 1927, V. 33.

## NEWSPAPERS

- Baltimore Sun*, April 17, 1927.
- Chicago Tribune*, April 12, 1882; April 22, 1882; April 24, 1882; April 25, 1897; April 18, 1927.
- Cleveland Plain Dealer*, April 18, 1927.
- Detroit Free Press*, May 5, 1927; May 7, 1927; May 11, 1927.
- Indianapolis Star*, May 13, 1927.
- Jacksonville Times-Union*, April 4, 1897.
- Kansas City Daily Star*, April 27, 1927.
- Memphis Commercial Appeal*, May 4, 1897; April 4, 1913; April 20, 1913; May 7, 1927; Oct. 9, 1927; Oct. 21, 1927; Oct. 25, 1927; Nov. 7, 1927; Nov. 22, 1927; Dec. 5, 1927; Mar. 16, 1928; April 25, 1928; April 26, 1928; April 30, 1928; May 17, 1928; May 22, 1928; May 23, 1928; May 24, 1928; June 20, 1928; August 18, 1928; Nov. 30, 1928.
- Memphis News Scimitar*, May 12, 1913; Jan. 12, 1914; Dec. 2, 1914.
- New Orleans States*, April 18, 1897.
- New Orleans Times-Democrat*, April 5, 1882; April 10, 1882; April 17, 1882; April 19, 1882; April 22, 1882.
- New Orleans Times-Picayune*, April 6, 1912; April 15, 1912; April 25, 1913; April 30, 1913; May 19, 1913; May 4, 1922; May 8, 1922; May 23, 1922; April 25, 1927; May 3, 1927; May 4, 1927; May 6, 1927; May 19, 1927; May 22, 1927; June 4, 1927; June 23, 1927; July 10, 1927; Sept. 24, 1927; Oct. 16, 1927; Oct. 18, 1927; Oct. 25, 1927; Dec. 6, 1927; Dec. 9, 1927; Dec. 21, 1927; Jan. 19, 1928; Jan. 26, 1928; Jan. 29, 1928; May 16, 1928; June 13, 1928; August 17, 1928.
- New York Herald Tribune*, May 2, 1927.
- New York Times*, April 21, 1882; April 22, 1882; April 6, 1913; May 19, 1927; May 23, 1927; May 29, 1927; June 2, 1927; June 3, 1927; June

5, 1927; June 23, 1927; July 13, 1927; August 21, 1927; Sept. 18, 1927; Nov. 27, 1927; Jan. 24, 1928; Jan. 29, 1928; Feb. 24, 1928; Feb. 26, 1928; April 19, 1928; April 29, 1928; Dec. 9, 1928; Sept. 30, 1929.

*New York World*, April 26, 1927; April 24, 1927.

*Pittsburgh Post*, May 5, 1927.

*Raleigh News and Observer*, Nov. 14, 1928; Jan. 27, 1929.

*St. Louis Globe-Democrat*, April 7, 1897; May 1, 1927; May 5, 1927.

*San Francisco Chronicle*, April 7, 1897.

*United States Daily*, May 5, 1927; May 6, 1927; May 17, 1927; June 4, 1927; June 18, 1927; Sept. 20, 1927; Sept. 28, 1927; Oct. 7, 1927; Oct. 13, 1927; Oct. 19, 1927; Oct. 28, 1927; Nov. 18, 1927; August 17, 1928.

*Washington Post*, April 21, 1897; Feb. 17, 1928; Aug. 29, 1928.

*Washington Star*, June 12, 1927.

*Hartford Daily Courant*, May 30, 1897.

# INDEX

## A

- Agencies building levees, 69
- Agricultural Finance Corporations, 200
- Alluvial deposits of the delta, 100

## B

- Bernard, S. and Totten, Joseph G., survey of Mississippi river, 17
- Board of Improvement of the Mississippi, early work of, 41
- Bradstreet's reviews quoted, 159
- Bureau of Correspondence established, 167

## C

- Calhoun, John C., introduces bill to improve Mississippi, 18
- Chamber of Commerce of the U. S., pledges support of federal control, 176; referendum on federal control, 206
- Chicago Flood Control Conference, 208
- Civil War's effects on levees, 30
- Clay, Henry, calls for survey for levees, 20
- Coolidge, Calvin, favors Jadwin plan, 228; favors local contribution, 240; opposes special session, 214
- Constitutionality of federal control, denied, 79; supported, 89
- Cotton tax effect on levee building, 32
- Crevasse, caused by weak foundations, 127; causes of in 1927 flood, 191; effects on flood heights, 114; number in various floods, 147
- Cut-offs condemned by engineers, 61

## D

- Dabney, T. G., opposes diversion, 119
- Davis, Dwight, represents President Coolidge, 209

- Delta land companies favor federal control, 164
- Delta people, fight for federal control, 157; rejoice over Jones-Reid Act, 244
- Drainage basin of the Mississippi, shape of, 47; size of, 49

## E

- Ellet, Charles, report on Mississippi, 24
- Engineering societies, create sentiment for federal control, 165

## F

- Farm lands of the delta, decreases in value, 31; tax burden on, 31
- Federal government, aids in causing floods, 61; first aid for levees, 23
- Flood control, comical plans for, 98
- Flood Control Board submits plan, 247
- Flood Credits Corporations, 201
- Floods, area of causation, 49; before discovery of America, 13; complex causes of, 50; great series during Civil War, 30; man-made disasters, 57
- Flowage rights, controversy over, 251
- Fox, John A., lobbyist, 171; propagandist, 169; Secretary-Manager of Mississippi River Levee Associations, 168
- Funds for flood control difficult to get, 76

## G

- Garfield, James A., introduces bill to relieve flood sufferers, 38
- Gauge heights estimated for 1927 flood, 188
- Guaranty Survey, quoted, 159
- General welfare, the, as a basis for federal control, 51; economic aspects, 52; humanitarian aspects, 53

## H

- Hoover, Herbert, Chairman Mississippi Flood Committee, 190; favors federal control, 194; quoted, 177; work of in flood relief, 191
- House Committee on Flood Control, conducts extensive investigation, 216
- Humphreys, A. A., report of in 1866, 34
- Humphreys, A. A. and Abbott, H. S., report of on the Mississippi, 24

## I

- Internal improvements, general movement favorable to federal control, 19
- Interstate commerce, as a basis for federal control, 71
- Interstate drainage, a basis for federal control, 48
- Investment bankers favor federal control, 54
- Investors in delta securities, favor federal control, 162

## J

- Jadwin, Edgar, plan of control, 224
- Jones Bill, 233
- Jones-Reid bill, a compromise bill, 243

## L

- La Salle, found Mississippi at flood, 14
- Levee boards, competition between, 68; impoverished by flood of 1927, 238
- Levees, amount of earth in, 146; built by the Pharaohs, 15; condition of in 1858, 26; constructed by riparian owners, 21; early provisions for, 26; first federal aid for, 23; raise flood heights, 63; used in Europe before 1700, 15; when Louisiana became a state, 16
- Local contribution, controversy over, 239
- Losses from 1927 flood, 193
- Louisiana Engineering Society, favors levees, 122

- Louisiana Levee Company, chartered, 32

## M

- Manufacturers favor federal control, 160
- Mississippi Flood Committee created, 190
- Mississippi river, appropriation for survey in 1820, 17; eroded materials carried by, 102; peculiarities of, 99; question of control in 1783, 11
- Mississippi river Flood Control Association, publishes data on flood of 1927, 193
- Mississippi River Levee Association, created, 168; fights for control by levees, 172
- Mississippi River Commission, confidence of the delta people in, 122; created, 42; opposes five-foot safety margin, 146; opposes outlets, 116; organization of, 136; presents comprehensive plan of control, 222; proves regimen of river has not changed, 129; reorganized, 246; upholds theories of the Corps of Engineers, 130; works with local boards, 138
- Mississippi Valley Conventions, frequent meetings of, 22
- Motion pictures, favor federal control, 180

## N

- National defense, a basis for federal control, 74
- Navigation cause of early interest in the Mississippi, 16
- Navigation interests, alliance of flood-control interests with, 41
- Nelson Commission, report of quoted, 184
- Newlands, Francis G., fights for comprehensive plan of control, 132
- New Orleans, demands outlets, 115

## O

- Organizations favoring federal control, 205
- Outlets closed by levees, 64

## P

- Pinchot, Gifford, criticises Corps of Engineers, 231; opposes "levees only", 126  
 Political party platforms, favor federal control, 182  
 Pork-barrel politics, in flood-control legislation, 83  
 Press, the, campaign for federal control conducted by, 203  
 Public health, effects of floods on, 73

## R

- Railways of the delta, contribute funds for propaganda for federal control, 85; operation stopped by floods, 91; support movement for complete federal control, 163  
 Reclamation, as an argument against federal control, 77  
 Reconstruction after Civil War, delays levee building, 36  
 Red Cross, created sentiment for federal control, 179; work of in flood of 1927, 197  
 Reforestation, an aid to flood control, 110  
 Reid, Frank R., bill bearing his name presented, 233; Chairman of House Committee on Flood

- Control, 216; urges federal control, 67  
 Reservoirs, in Miami basin, 105; opposed by officials, 108; report of board of engineers on, 107  
 Revetments, as an aid to flood control, 153; cost of, 154

## S

- Safe River Committee of 100, wants diversion, 173; works for outlets, 114  
 Sectionalism in flood-control legislation, 82  
 Smith, J. Russell, urged comprehensive plan of control, 133  
 Swamp and overflowed land acts, 23  
 Special session of Congress, controversy over in 1927, 212

## U

- United States Mail, delayed and injured by floods, 72

## W

- Warren Committee, report quoted, 185  
 World War, delay in levee building program caused by, 152

## VITA

---

ARTHUR DEWITT FRANK was born in Hardin County, Tennessee on November 22, 1892. After receiving his early training in the schools of his home county, he began his college education at West Tennessee State Normal School, Memphis. He earned his B.S. and M.A. degrees at George Peabody College for Teachers. Then, he spent a short while in graduate study at the University of Chicago and passed on to Columbia. During his college career, he held two fellowships with the General Education Board. The author has had experience as a teacher in secondary schools and colleges, which experience was broken into by service for two years in the United States Army during the World War. He became an instructor in History in East Carolina Teachers College, Greenville, North Carolina in 1924 and was made chairman of the department one year later, a position that he has since held. The interest in flood control likely began with personal observation of and experience with several floods at various points from Memphis to New Orleans. The fact that many personal friends and some relatives have suffered heavy losses from inundations doubtless served to intensify the interest in the problem.