THE WABASH AND ERIE CANAL

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INTRODUCTION

When the white man first came to that part of the United States designated by historians as the "Old Northwest", he found an unsurpassed natural transportation system in the form of the Great Lakes and the Mississippi River and its tributaries. The divide between the Great Lakes and the Mississippi River system was nowhere high; and, consequently, the later construction of canals to connect the two systems presented no insurmountable engineering problems.

In northeastern Indiana the headwaters of the Maumee River and the Wabash River lie within a few miles of each other. Geologists say that in the immediate post-glacial period the two rivers were one, forming a mighty stream that emptied the waters of Lake Erie into the Ohio River. However, when the glacier had receded further, the level of Lake Erie was lowered, and another outlet was formed. A divide appeared to separate the former outlet into two rivers — the Maumee flowing northeastward into Lake Erie, and the Wabash flowing in a southerly direction to the Ohio. The Wabash and Erie Canal was built for the purpose of reuniting these rivers into one great waterway for commercial purposes.
CHAPTER I — THE BACKGROUND

In order to gain a clear understanding of the background of the Wabash and Erie Canal, it is necessary to go back to the days of the Indians and the French. The waters of the Maumee and the Wabash often heard the splash of Indian paddles. These rivers constituted a main highway between the northern and southern Indian tribes. The portage between the Maumee and the Wabash was easy and many French used this route into the Indian country. During the period when the Old Northwest was under French control, the Maumee-Wabash route proved valuable as the most nearly direct route between Canada and New Orleans.

Although these rivers were frequently traversed by fur traders, it was not until 1718 that Ouiatanon, the first settlement on this route, was established. The exact location of Ouiatanon is not known, but it was situated about fourteen miles up the Wabash from the present site of Attica. This was a favorite locality of the Pottowattomie, Miami, and Kickapoo Indians.

Trading posts were soon established at Terre Haute, Vincennes, and Fort Wayne. Large quantities of fur were shipped out of this region during the French occupancy. The fur traffic at Ouiatanon alone amounted to approximately 8000 pounds.

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1 Jacob Piatt Dunn, Indiana and Indianans, I, 386. Hereafter, this work will be cited as Dunn, Indiana.
2 Wesley J. Whicker, Historical Sketches of the Wabash Valley, 3-4.
sterling annually. It is said that an Indian squaw amassed a fortune by collecting tolls from traders who used the portage at Fort Wayne.

Early travellers, explorers, and traders along the Wabash-Maumee route noted the easy portage between the rivers and frequently suggested the possibility of a canal to connect the two. Sometimes beavers would construct substitutes for a canal. Travellers in 1774 noted many beaver dams on the small stream flowing into the Wabash near Fort Wayne. In periods of low water, travellers would break down these dams in order to raise the water downstream. This temporary high water would float boats and canoes across the shallows. After their passage the beavers would always build new dams. Because of this service the beavers were regarded as sacred and neither Indians nor white men hunted them.

The portage at Fort Wayne was only a few miles long. Because of this short divide, many people suggested the possibility of a canal. George Washington was only one of several statesmen interested in the Northwest who discussed the advantages of a waterway connecting Lake Erie and the Ohio River.

When settlers began to come to Ohio and Indiana, the

6 Logan Esarey, A History of Indiana, I, 354. Hereafter, this work will be cited as Esarey, Indiana.
question of canals immediately became a very practical problem. During the presidencies of John Quincy Adams and Andrew Jackson, the whole nation became interested in internal improvements. The country was prosperous but transportation facilities fell far behind the capacity to produce. The development of transportation in the years following 1815 was perhaps the most significant factor in American history between the inauguration of Washington and the firing on Fort Sumter.

This remarkable development by the United States of the means of inland transportation was made necessary by the character of the American West. The westward progress of the pioneers made internal improvements a vital issue. Newly settled communities must have an accessible market in order to be prosperous. It was necessary for the western farmer to get his surplus to the East. Unless he did so no amount of labor could add much to his wealth or to his means of enjoyment. As long as the cost of transportation placed it beyond the farmer's power to buy manufactured goods from the East or to sell his own produce at a profit, there could be no very great degree of prosperity in the West.

Similarly the East wanted internal improvements in order to gain a more extensive market for its manufactured goods. Talk of internal improvements was in the air. In 1808 Gallatin's famous report on transportation appeared. "Good roads

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7For a good exposition of this problem see: Israel D. Andrews, Communication from the Secretary of the Treasury transmitting the report of Israel D. Andrews, consul of the U.S. for Canada and New Brunswick, on the Trade and Commerce of the British North American Colonies and upon the Great Lakes and Rivers; also notice of the internal improvements of each state ... (in 32nd. Cong., 1st. Sess., Senate Executive Documents, No.11), 354.
and canals", he said, "will shorten distances, facilitate commercial and personal intercourse, and unite by a still more intimate community of interests, the most remote quarters of the United States.

The national spirit aroused by the War of 1812 strengthened the sentiment for improvements. It demonstrated the military need for better means of transportation. Internal improvement bills were passed by Congress but vetoed by Presidents Madison and Monroe. Although they thought that the construction of roads and canals was beyond the scope of the federal government, they agreed to the need of internal improvements. In 1822, Monroe said, "The advantages which would be derived from such improvements are incalculable. The facility which would thereby be afforded to the transportation of the whole of the rich productions of our country to market would alone more than amply compensate for all the labor and expenses attending them .... In every line their good effects would be most sensibly felt .... Parts the most remote from each other would be brought more closely together. Distant lands would be made more valuable, and the industry of our fellow citizens on every portion of our soil would be better rewarded".


9 Elbert J. Benton, The Wabash Trade Route in the Development of the Old Northwest (John Hopkins University Studies, Series X, Nos. 1-2), 36. Hereafter, this work will be cited as Benton, Wabash Trade Route.

10 Callender, op. cit., 399-400.
At the same time John C. Calhoun was saying: "Let us bind the republic together with roads and canals". Henry Clay advocated an "American System" which involved tariffs for the East and internal improvements for the West. In the years following the election of 1824, when the American system was endorsed by the voters, the entire nation was in a frenzy of excitement over improvements in transportation. That was the principal subject occupying the attention of the press. The National Road was being pushed, the Erie Canal was proving successful, Pennsylvania was building her "system", and the Baltimore and Ohio and Charleston and Hamburg railroads were being built. Even state constitutions of the period made provisions for encouraging internal improvements.

In 1817 New York had undertaken the construction of a canal from Albany to Buffalo. This action on the part of that state had momentous consequences for the western country. It was perhaps the successful management of the New York enterprise, more than anything else, that caused the outburst of enthusiasm for local improvements in the West. The tolls on the Erie Canal in the first nine years of operation more than paid the cost of construction. Towns along the canal were prosperous and flourishing. Echoes of success came not

12 Harold U. Faulkner, American Economic History, 324.
14 Carman, op. cit., 117.
only from the New York enterprise but also from other eastern canals. It was said that on the Chesapeake and Ohio Canal an unbroken line of canal boats extended as far as the eye could see. The sentiment for canals in the West boomed.

In 1827 Congress granted to Ohio a free right-of-way and sections of land to aid in building canals. Two cross-state canals were started. By 1832, they appeared to be very successful. The tolls on the Miami Canal had already reached $6000 per month and on the Ohio Canal, between Portsmouth and Cleveland, $30,000 per month.

This interest in internal improvements spread to Indiana. As early as 1817, Governor Clinton of New York had written to Governor Jennings of Indiana about the need for canals. Governor Jennings discussed the matter in the legislature of that year. Later governors also urged the policy of internal improvements. Of course the building of a feeder for the Erie Canal, such as the proposed Wabash Canal, would be encouraged by New York State. In 1818, DeWitt Clinton wrote to a sponsor of the Indiana canal saying, "I have found the way to get into Lake Erie and you have shown me how to get out of it.... You have extended my project 600 miles".

In 1818, a United States government surveyor reported that

15 Logan Esarey, "Internal Improvements in Early Indiana", Indiana Hist. Soc. Pub., V, 96-97(1896). Hereafter, this work will be cited as Esarey, "Internal Improvements".
16 Ibid., 96.
17 Journal of the House of Representatives of the State of Indiana, at their Second Session at Corydon, 1817-18, 8.
a canal connecting the Wabash and Maumee rivers need be only six miles long. In view of the actual length of the later canal, this report shows the unsubstantial foundation on which leaders of the time based their plans. Citizens of Fort Wayne in 1823 employed engineers to survey from the Maumee to the mouth of the Little River at the Wabash where it was believed the proposed canal could be terminated. The greatest difference in levels was found to be only twenty feet. At a mass meeting, the citizens adopted resolutions asking the national government to locate a canal between the two rivers. James B. Ray, a strong internal improvements man, was elected governor of the state in 1825. In the same year, news items of progress on the Ohio canals appeared in the Indiana press and were read with great interest. The canal fever was rising.

During the years following 1825 the population of the Wabash and Maumee valleys had been rapidly increasing. The Wabash Valley had always been considered one of the richest areas of land in the West. For many years this region had attracted attention. The writer of a letter appearing in the Indianapolis Gazette in 1827 "... could not but wonder that the wisdom and goodness of Providence should have so long withheld such enchanting regions from the possession of civilized man .... The utmost luxuriance of soil is com-

19Esarey, Indiana, I, 354.
20Dunn, Indiana, I, 387.
21Esarey, Indiana, I, 81–83.
bined with the unequaled charms of natural scenery. So grand and striking is the contrast between the majestic forests and the levelar undulating champaign -- with such indescribable effect are the trees made to border on the extensive plains, sometimes putting out in leafy promontories, sometimes standing in insulated clusters, sometimes arranged in rows like colonnades -- that the beholder is forcibly reminded of the Elysian field of the poets. Or rather, he feels that he is standing amidst the finer manor fields of the Lord of Creation; and no temple ever more naturally prompted the heart to worship".

This description of the Wabash country is perhaps too enthusiastic, but the region did contain much excellent farming land. The canal agitation brought many settlers to the Upper Wabash valley about 1825. However, in the absence of convenient transportation facilities, a population living in the midst of fertility was in poverty. These people demanded roads and canals but they may have been carried away by their own desperate need for transportation facilities. They did not stop to think that canals might not be fitted for vast regions of rather scanty population. The building of canals through unsettled areas where land was hardly worth the government price of $1.25 an acre was justified upon the reasoning that a canal would cause population to increase, prices to rise, and taxable values to grow rapidly enough to warrant

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22 April 3. However, it was known at the time that this land was subject to ague and fever. See: John Peter Paul, We Run Canal Line, 19-20.

23 Esarey, Indiana, I, 276.
the outlay of money. Fabulous arguments could be reared on the basis of comparative prices. A bushel of corn brought twelve to twenty cents at Indianapolis and fifty cents on riverboard. Figuring sixty bushels to the acre the loss on a single acre due to lack of transportation would amount to $18. On 100 acres the loss would be $1800. There were millions of such acres. Corn could be bought for fifteen cents on the prairies but it cost three times as much in freight charges to get it to an eastern market. Arguments such as these convinced the people of Indiana that internal improvements would bring prosperity to their state. In his message to the legislature in 1825, Governor Ray said, "On the construction of roads and canals we must rely as the safest and most certain State policy, to relieve our situation; place us first among the states in the Union and change the cry of hard times into an open acknowledgment of contentedness."

Thus, by 1828, the sentiment in Indiana was strong for internal improvements. All parties favored them.

24 Esarey, "Internal Improvements", 91.
25 Ibid., 48.
26 William Henry Smith, The History of the State of Indiana, 205.
27 Esarey, Indiana, I, 357.
CHAPTER II — LEGISLATION FOR THE CANAL

In 1824, President Monroe signed the General Survey Bill, thereby reversing himself in regard to internal improvements and the Federal Constitution. Under this bill the Wabash-Maumee route was surveyed by the War Department as one of the routes suitable for improvement. However, before the canal could be built, federal aid had to be obtained in securing the land. In regard to this aid, the national government pursued its customary inconsistent policy concerning internal improvements. Federal assistance had been asked but not obtained for the Erie Canal. Indiana, however, was given the aid she sought. In 1824, a committee of the Indiana Legislature recommended the building of a canal twenty-five miles long at an estimated cost of $43,485. Congress was asked to donate lands to extinguish the Indian title along the proposed water route. Congress replied with an act granting to Indiana the right-of-way and ninety feet on either side of the completed canal, with the stipulation that the work be completed within twelve years.

This land grant seemed illiberal to the young state. In its report to the Indiana Legislature, the committee said that

\[1\text{John Ewing, Report from Committee to Whom Governors Message of 1824 was Referred, 3-8.}\]

\[2\text{Dunn, Indiana, I, 387.}\]
interest of the state ought to be willing to accept it."

When a second application was made, the national government proved to be much more liberal. In 1827, Congress granted a quarter of a million acres to Illinois for the proposed Illinois River and Lake Michigan Canal. The same Congress presented an even handsomer gift to Indiana. By an act of March 2, 1827, Congress granted the state alternate sections for five miles on each side of a canal connecting navigable points on the Wabash and Maumee with the stipulation that the state should commence work within five years. Although there was considerable difference of opinion concerning the length of the proposed canal, friends of the measure probably thought that a canal fifty miles long would be sufficient to connect navigable points on the two rivers. The nation donated to the state a strip of land worth $1,000,000 toward the building of a canal whose estimated cost was only $1,100,000, and vested title in the state. It was expected that the increase in the value of the alternate sections reserved by the nation would compensate it for its donation.

On January 5, 1828, Indiana accepted the land grant and

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3 Journal of the House of Representatives of the State of Indiana, being the Ninth Session of the General Assembly, began and held at Indianapolis, in said state, on Monday the tenth day of January, 1825, 177.


5 Ohio Joint Resolution Relative to the construction and maintenance of the Wabash and Erie Canal, within the states of Indiana and Ohio, February 21, 1871.

6 Benton, Wabash Trade Route, 43.

7 Esarey, "Internal Improvements", 91.
thereby committed itself to the building of the canal. A board of three commissioners was set up to locate the canal, select the town sites, make estimates, hire surveyors, and finance the undertaking. However, the commissioners found themselves without authority to proceed. A fight was necessary to gain this authority from the Legislature and for four years the battle for the Wabash Canal was waged in the press and in the Legislature.

Considerable difference of opinion appeared over the advisability of building the Wabash canal. Two distinct parties had grown up in the state. One consisted of those settlers who lived along the Ohio and lower Wabash rivers and looked to New Orleans for a market, and the other was made up of those newer immigrants who had come from the East over the National Road and looked to the East for their market. The members of the Legislature from the Whitewater district near the Ohio River wanted a canal for their own section. At that time five-sixths of the population of the state lived in the southern counties. The proposed Wabash canal would be far to the north of the settled part of the state and would, it seemed, never benefit most of the people who would pay for it. In addition, mutterings of discontent came from Ohio over the high taxes which that state was bearing in order to complete its canals.

8 Ibid., 86.
9 Esarey, Indiana, I, 356-358.
10 Ibid., I, 353.
11 Esarey, "Internal Improvements", 88.
12 Esarey, Indiana, I, 357-359.
The question of railways was also carefully canvassed. A considerable group was in favor of railroads while the commissioners and their friends advocated a canal. Canals, according to their proponents, had been successfully tested in England. It was argued that the money spent on canals, in contrast to that spent on railroad material, would remain in the state. The expense of keeping a railroad in repair was said to be greater than in the case of a canal, while a railroad, if double tracked, would be just as expensive to build. Furthermore, a railroad would make the farmer dependent on a monopoly while any farmer could build and operate his own canal boat.

In addition to the rival railroad and canal parties there was a large group who did not want to run the state into debt for something not absolutely needed. Until 1832 the issue of a Wabash canal hung in the balance. In that year, the canal bill came to a vote in the State Legislature. Just before the crucial balloting, Colonel John McNaivy, a famous backwoods orator from the upper Wabash valley, is said to have risen and shouted, "Mr. Speaker, our population on the Wabash am great but our resources for salt am slim. Salt! They cannot emigrate up the Wabash."

Whether it was due to the old settler's oratory or not,

13Benton, Wabash Trade Route, 47.
14Charles Roll, Indiana, II, 104.
15Esarey, Indiana, I, 357-358.
16Seymour Dunbar, A History of Travel in America, III, 234. Hereafter, this work will be cited as Dunbar, Travel in America.
the decision went to the canal. The bill passed, thus putting
the Wabash project on its feet. A canal fund was constituted
and placed in the hands of three fund commissioners. The cost
of the canal was estimated at $1,081,970. Money was to be
borrowed at six per cent, pledging the land, tolls, and the
faith of the state for its repayment. Land sales, which had
been begun earlier, were to reopen in October, 1832. The canal
was divided into sections one-half mile long for which full
plans and specifications had been prepared by the engineers.
Each section was to be let to the lowest responsible bidder
and work on the canal was to begin by March 2, 1832.

After the passage of the bill, opposition to the canal
gradually melted away. The building of the waterway was re-
garded by most citizens as the settled policy of the State.

In order to construct a canal that would connect navi-
gable points on the Wabash and Maumee, it was found necessary
for part of the canal to be built in Ohio. In 1829, a con-
ference was held in Cincinnati between representatives of
the two states and it was agreed that Ohio build that part of
the canal which would extend into Ohio. In turn Indiana would
transfer to Ohio that part of the federal land grant that lay
in Ohio. Each state was to complete her share of the canal
within fifteen years and the citizens of either state were to

17However, in the same year, twelve joint stock companies
were incorporated by the Legislature to build railroads in the
state. The names of some of the best men in the state were on
these charters. See Esarey, Indiana, I, 360-361.
18Ibid., I, 358-359.
19Ibid., 359.
have the same privileges throughout the entire length of the canal. Indiana ratified the agreement and Congress accepted the proposed transfer of part of the federal land grant from Indiana to Ohio. However, Ohio delayed in taking action. Ohio was afraid that the Wabash canal would take trade away from her projected Miami and Erie Canal. This delay caused some ill-feeling in Indiana. However, Ohio eventually ratified the joint agreement and the cooperation of the two states in the project was assured.

In the meantime Indiana had begun work. On February 22, 1832, the birthday anniversary of an early advocate of the canal, ground was broken at Fort Wayne. A big celebration was held at the time. There were speeches, bonfires, and ceremonies. The first contracts for construction were let on March 1, 1832. During the first year, thirty-eight contracts were made covering about twenty miles and calling for $117,000 in payment. By 1834, a small part near Fort Wayne was completed and the first boat had been launched. During the season of 1834, thirty-six and one-half miles of the canal were put under construction. The first division of the canal built, a section about thirty-two miles long from Fort Wayne to the Wabash

20 Ohio, Joint Resolution, February 21, 1871, op. cit.
21 Benton, Wabash Trade Route, 50.
22 Ohio, Joint Resolution, February 21, 1871, op. cit.
23 Esarey, "Internal Improvements", 91.
24 Ibid., 93.
25 Journal of the House of Representatives of the State of Indiana, during the nineteenth session of the General Assembly, commenced at Indianapolis on Monday, the First Day of December, 1834, 13.
River, cost only $7,177 permile to construct, even though construction was carried on through a comparative wilderness where the cost of transporting supplies was heavy. Navigation on this portion of the canal was opened on July 4, 1836. On that day, the "Indiana" made the first trip over the thirty-two miles from Fort Wayne to the Wabash. The "Indiana" was commanded by Oliver Fairchild, an old sea captain. The passengers were all men, and the party was said to have been the liveliest party ever to travel on a canal boat.

It had been the original intention to make the mouth of the Tippecanoe River the southern terminus of the canal, but the commissioners decided that Lafayette was the real head of navigation on the Wabash and that the canal should go down to that city. The General Assembly of 1834 ordered the extension. The commissioners had planned to have the canal follow the north side of the river from Logansport to the mouth of the Tippecanoe. However, the merchants and business men of Delphi and Lafayette objected. It was then decided to have the canal cross the river at Carrollton in the back water of a dam to be constructed at Pittsburg. The dam was built with a chute for rafts bound downstream but without a steamboat lock. The business men of Logansport and Peru objected strenuously. They did

26 Dunn, Indiana, I, 391.
27 Journal of the House of Representatives of the State of Indiana, being the twentieth session of the General Assembly commenced at Indianapolis on Monday, the Seventh Day of December, 1835, 13
28 Dunn, Indiana, I, 393.
29 Esarey, Indiana, I, 360.
not want to be cut off from the steamboat trade of the lower Wabash. As a consequence, the legislature of 1838 passed a law that a steamboat lock be cut in the Pittsburg Dam.

The early part of the 1830’s was a period of frenzied expansion throughout the West. Land speculation was widespread. The imagination of the people was fired, and many expected to gain great wealth with rapidity and ease. Land sales increased. Speculation increased, especially in agricultural lands. People were eager to borrow money, buy land, and to sale in a short while at a handsome profit. Interest rates were high and banks were eager to lend. Bank loans and bank notes increased rapidly after the downfall of the Second National Bank. These western speculators were gambling on the future growth of the country’s wealth. They wanted to gain the “unearned increment” in land values without cost. This mania for speculation was not confined to land. A traveler wrote in 1835 that, "Everybody is speculating. The most daring enterprises find encouragement, all projects find subscribers?"

During the three years prior to 1838, this speculation was especially extensive. An argument heard frequently in Indiana and other western states during this period of inflation was

30 Benjamin F. Stuart, History of the Wabash and Valley, 40-41. Hereafter, this work will be cited as Stuart, History of the Wabash.

"borrow money and construct internal improvements". The real or apparent success of the lesser projects led men to enter boldly upon great enterprises. In December, 1834, the Governor of Indiana advocated internal improvements as a sound policy based on reason, not speculation. He pointed to the increased value of canal lands in Ohio and New York. The successful management of the Erie Canal was a strong argument for canals in the west. The rivalry of eastern cities for western commerce led to free lending on the part of Eastern capitalists. The credit of the western states was good. They could borrow money easily and in their eyes there was no good reason why they should delay the construction of the internal improvements which were so badly needed. The argument was that canals would always be worth their cost price, and that the tolls would pay for repairs, interest, and original cost. The money spent would be returned to the increased taxable value of the land. The Erie Canal had already added three times as much to the value of the land as the canal had cost. Leading politicians in Indiana told the farmers in 1836 that the amount of the additional taxation required to build an extensive system of internal improvements would require only the profit from "an additional hen and chickens". It was even hoped and proph-

32 Esarey, Indiana, I, 361.
34 Adams, Public Debts, 327-331.
36 Esarey, "Internal Improvements", 97.
37 Debates in Indiana, Constitutional Convention, 1850-'51, I, 677. Hereafter, this work will be cited as Indiana Debates.
esied that an internal improvements system would not only pay for itself, but would eventually relieve the people from all taxation. The income from such a system would pay for all the expenses of the state government. The people would be free from tax gatherers.

The general enthusiasm for internal improvements was reflected in the enthusiasm of the legislators. The 1834-35 session of the Indiana Legislature was spent in trying to organize the sentiment for improvement. The problem was whether internal improvements were wanted, but which canal or road to build first. Each section of the state wanted the rapid prosecution of its own particular public work. A group advocating a canal for the Whitewater Valley wanted their canal to be built first, while the "Wabash Band" wanted the rapid completion of the Wabash Canal.

In the next session of the Legislature, a bill passed the Senate for the prosecution of the Wabash and Erie Canal. Mr. Kilgore, who represented the Whitewater district, was alarmed. He was afraid that, if the bill passed unamended, the Whitewater project might be lost. Therefore, he worked frantically all night getting pledges for aid in amending the bill to include the Whitewater Canal. Legislators were won over to the Whitewater proposal by including in the amendments their own pet projects. His log-rolling methods were successful. The amendments were adopted and the bill thus amended—the Mammoth Inter-

38 Jason B. Brown, Wabash and Erie Canal, Bond Question, 2.
39 Esarey, "Internal Improvements", 98.
The act provided that the Governor should appoint, by and with the consent of the Senate, a Canal Board to locate and supervise the work provided for, meet semi-annually, and make a report to the legislature at every session. The board was to take such measures as necessary to commence, construct, and complete eight great works including the Whitewater Canal, the Central Canal to run from the Wabash Canal near Fort Wayne through Indianapolis to the Ohio River, a railroad from Madison through Indianapolis to Lafayette, a turnpike from New Albany to Vincennes, and an extension of the Wabash and Erie Canal to Terre Haute, thence by cross-cut canal to the Central Canal. The sum of $1,300,000 was appropriated for this extension of the Wabash Canal. A general fund was set up for all the works. The Fund Commissioners were authorized to borrow $10,000,000 on twenty-five years' time at six per cent. interest, pledging for payment of principal and interest all the canals, railroads, and turnpikes, all grounds, rents, tolls, profits, plus the faith of the state. The right of eminent domain was given to the Canal Board. The Board was to build these public works with all possible haste.

Notwithstanding the log-rolling methods used in securing

40 Indiana Debates, I, 675-678.
41Esarey, "Internal Improvements", 101. If all the works authorized by the bill of 1836 had been completed, the cost would have amounted to $30,000,000 and the entire tolls would not have paid for the repairs of the first twenty years. See: The Indiana Gazetteer, or Topographical Dictionary of the State of Indiana, Third Edition, 25.
the passage of the bill, Indiana did not plunge hastily or against her will into internal improvements. The state had tried to avoid just such precipitate action. The legislature had previously ordered surveys made to get the facts, and the whole question of an extensive system of public improvements was submitted to the people in the election of the fall of 1835. An internal improvements policy was one of the two chief issues of that election, and "the system" was widely discussed in newspapers and on the stump. Every angle of the question was taken up. The surveys for the improvements had proved favorable. An opponent of the bill said later that in the election the people endorsed the internal improvements policy in all its breadth and width. At any rate, after the election, both parties, Whigs and Democrats, supported the plan. Public opinion was thoroughly in accord with a policy of extensive public improvements. In the final vote in the Senate, the bill won by a two-thirds majority. The House passed the bill by the overwhelming vote of 65 to 18.

Indiana has been criticized for embarking on such an extensive program of canal building. The canals proved to be failures, it is true; but, at that time, canals were regarded as the most approved method of transport. Railroads were regarded as purely local transportation routes, to be used chiefly to supply connections between points which had no facilities

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42 Indiana Debates, I, 676.
43 Benton, Wabash Trade Route, 51-52.
for water transportation. This was shown by the many short, disconnected lines of the period. A railroad was deemed practicable only when a canal or pike was impossible. In England, railroads had yielded only sixty nine per cent on investments while canals yielded from fifteen to over one hundred per cent. The Indiana canals failed because of bad administrative and financial methods and because of a revolution in the means of transportation, which the people of Indiana could not have been expected to have foreseen in 1836.

On January 27, 1836, when the governor signed the Mammoth Internal Improvements Bill, he was signing a bill which, taken in all its aspects, immediate and remote, was probably the most important measure ever signed by an Indiana governor. The bill carried appropriations of one-sixth of the wealth of the state at that time and mortgaged the resources of the state for fifty years to come. The bill had a more extensive effect on the history of Indiana and it proved to be the source of more political controversy than any other act ever passed by the Indiana Legislature.

On the passage of the act, the people went wild with joy. They saw an era of prosperity ahead that would drive poverty from the land and make all men rich. In Indianapolis, every pane of glass in the city was illuminated, and the population turned out on the streets as for a big holiday. A grand ball

45 William F. Gephart, Transportation and Industrial Development in the Middle West, Columbia University Studies, XXXIV, 119
46 Benton, Wabash Trade Route, 51-52.
47 Esarey, "Internal Improvements", 101.
48 Dunn, Indiana, I, 394.
was held at which there was feasting, music, and dancing. The joy was not limited to Indianapolis. News of the passage of the bill was received with bonfires, fireworks, speeches, and celebrations from Fort Wayne to Evansville. Not only in Indiana, but outside the state from Boston to New Orleans, people praised the "magnificent spirit of progress" shown by the young state.

The immediate effect of the passage of the Bill of 1836 was to cause a boom in every town along the routes of the proposed improvements. Many entirely new cities sprang up on paper. Land that had been bought within the year at three dollars an acre was now parceled out in town lots to be sold at from $50 to $200 each. Passage of the bill stimulated immigration into the state. An emigrant guide for 1836 praised Indiana as being far superior to Ohio as a land for immigrants, because internal improvements would soon make almost every county easy of access.

After the passage of the Bill of 1836, the public was eager to have every work completed without delay. The Governor urged wise planning and a careful policy in disbursing the money. Many other people also favored a policy of classification which would have built one line at a time. The backers of the bill had contemplated surveys only for most of the proposed improvements. However, when the surveyors were in the field, the local residents became intoxicated with the idea that a railroad or a

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49 Indiana Debates, I, 675.
50 Esarey, "Internal Improvements", 103.
51 Ibid., 103-104.
53 Esarey, Indiana, I, 367.
canal would pass close to them. Some sections which had opposed the bill now wanted a share of the improvements. The populace became canal crazy and railroad crazy and were incapable of judging the wisdom of the amount of taxation that could be borne or the method of prosecuting the works. The state officials were forced to commence all of the public works immediately. Representative Kilgore had foreseen something of this result. On the evening of the passage of the bill, he and another legislator remained alone in their hotel room while the others were celebrating. The two foresaw the collapse of the system and "looked to the future with fearful forebodings". They were afraid of this precipitate and inconsiderate action of the people.

When the Board of Internal Improvements met in March, 1836, the meeting was anything but harmonious. Each commissioner wanted his favorite work completed as soon as possible. There was a scramble for the lion's share of the money. It was finally decided to put under contract those works which would first provide revenue. Under this plan, the Wabash and Erie Canal was to be extended west as quickly as possible and the cross-cut canal.

54 The "calf bill" was introduced by members the next year in order to get some improvements for those left out of the original bill. It failed of passage. Robert Owen later said that the people of Posey and adjoining counties thought in 1836 that "if we must be taxed for the support of this system, let us, at least, have a share in its benefits." He supported the "calf bill". Owen had come into the legislature after the bill of 1836 was passed, and he regarded the system as already fixed on the people of the land. See: Indiana Debates, I, 675, 684.
55 Ibid., I, 677.
56 Ibid., 679.
from Terre Haute was to be begun. The canal fund commissioners were authorized to negotiate a loan of $500,000 in order to speed work on the canal.

57 Esarey, Indiana, I, 366-367.
CHAPTER III -- CONSTRUCTION

Many difficulties and problems attended the construction of the Wabash and Erie Canal. The route lay through forests, swamps, prairies, and fields of solid stone. Cuts, levees, feeder, dams, bridges, locks, and pools had to be built. One of the most famous of the dams along the canal was the one at Pittsburg, six miles below Carrollton. This dam across the Wabash was six hundred feet long. The Pittsburg Dam was built for three purposes. It stilled the current in the river so that canal boats could be towed across it, it fed water to the canal, and it furnished water power for manufacturing. The canal crossed the river in the slack water six miles above the dam at Carrollton. A towpath bridge was later built across the river at Carrollton, but before this was built, towing horses or mules were carried across the river on a ferry boat. In Lafayette, where the canal crossed from the east bank to the west bank, the towing animals crossed on a bridge. The Pittsburg Dam was built first without a steamboat lock, but one was later cut to enable steamers to go up the river past the dam.

Between the Tippecanoe River and Lafayette, the canal had to cross the river again, this time at Ballard's Bluff in the pool of a dam. At Birmingham Bluff it proved necessary to

1Stuart, History of the Wabash, 47.
2William M. Reser, Wabash and Erie Canal and its Local Importance, 5-6.
3Stuart, op. cit., 40-41.
build the canal out in the river. The embankment was first protected by brush rip rap; but, as that did not prove effective, it was necessary to protect it with a layer of stone. This stone protection was laid for more than a mile at a cost of $14,000. Stone facing such as this was found to be the only sure protection against slides from banks of blue clay and quicksand.

In constructing the canal, the right-of-way, ninety feet wide, was first cleared of timber, logs, stumps, brush, and stone. Most of this clearing was done by the nearby settlers. They were good axmen and had their own teams. After the right-of-way was cleared, a ditch four feet deep was dug and the dirt thrown up as a levee. The top dirt was loaded into carts drawn by horses and dumped on the levee. Then when the ditch grew deeper, the dirt was loaded on wheelbarrows and pushed on plank walks to the levee. When the ditch was completed, a layer of soil would be spread on the bottom for protection against crawfish. The tools used in construction included the ax, saw, pick, spade, auger, chisel, hammer, hand-drill, wheelbarrow, cart, and wagon. The power was furnished by men, horses, and oxen. In places, the canal was not dug but was formed by piling earth on each side to form embankments.  

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6Stuart, History of the Wabash, 42-45.
Many locks had to be constructed. The locks on the Wabash and Erie admitted boats of about sixty tons burden. A lock had two side walls each 116 feet long, six feet thick, and eighteen feet deep with coping on the top. These walls were built on timbers laid crosswise with a space of twenty feet between them. The walls were sealed with heavy lumber for their protection and also for the protection of the boats passing through. At each end of the lock were large double gates with wickets to control the water when a boat was passing. Provision was made to carry the overflow. The iron for the locks was forged in near-by towns.

Farmers along the canal kept rafts on which to cross the canal. There were 150 bridges over the Indiana portion of completed waterway. Between Logansport and Delphi, a distance of twenty five miles, there were twelve locks and sixteen overhead bridges. The canal crossed creeks in its path on stone arches. When the canal encountered larger streams it crossed them on large wooden aqueducts. The aqueduct over the Eel River at Logansport was 400 feet long. Other long aqueducts were built across Coal Creek, Sugar Creek, Raccoon Creek, and Otter Creek. Bridges over the canal were built on trestles eighteen feet high. On top of the trestle stringers were laid heavy planks twelve feet long for the floor. Guard rails were

9 Stuart, History of the Wabash, 45-46.
10 Irons for all of the locks between Logansport and Delphi were hand forged by a Mr. Pitch. See: ibid.
11 Esarey, Indiana, I, 388.
put up on either side and the approaches were made of dirt and
12
extended back in the road nearly 100 feet. Sound oak timber
for bridge building was worth one and one-half cents per foot
on the stump. Getting it out, hauling, and counterhewing
amounted to five cents more, making a total of six and one-half
cents plus the expense of framing and raising. The average
13
contract price was twelve cents per foot. Labor costs con-
stituted the principal expense item of building the canal.
The contractors for section 89 of the canal at Wabash reported
14
the following expense account:

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Rate</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grubbing and clearing</td>
<td>60.49 cu. yds.</td>
<td>$10.00</td>
<td>$604.90</td>
</tr>
<tr>
<td>Excavating earth</td>
<td>25,708</td>
<td>.11 1/2</td>
<td>2956.42</td>
</tr>
<tr>
<td>Excavating rock</td>
<td>1,354</td>
<td>.64</td>
<td>866.56</td>
</tr>
<tr>
<td>Excavating looch pit</td>
<td>823</td>
<td>.20</td>
<td>184.60</td>
</tr>
<tr>
<td>Excavating rock pit</td>
<td>999</td>
<td>.64</td>
<td>639.36</td>
</tr>
<tr>
<td>Full embankment</td>
<td>2,340</td>
<td>.13</td>
<td>304.20</td>
</tr>
<tr>
<td>Puddle</td>
<td>371</td>
<td>.25</td>
<td>92.75</td>
</tr>
<tr>
<td>Timber</td>
<td>1,179</td>
<td>.06</td>
<td>70.74</td>
</tr>
<tr>
<td>Two inch plank</td>
<td>1,885</td>
<td>.06</td>
<td>113.10</td>
</tr>
<tr>
<td>Lock, gates, and sills</td>
<td></td>
<td></td>
<td>550.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>22,226.38</strong></td>
</tr>
</tbody>
</table>

Between Wild Cat Creek and Lafayette, trouble was had
with water seeping into the gravelly soil. To remedy this
difficulty, large bunches of brush and small tree tops were
drawn up and down in the channel by oxen. This caused the
earth to "puddle". When dried and hardened it was almost
15
impervious to water and the canal was ready for use. Great

12Stuart, History of the Wabash, 45-47.
13"Report of the Superintendent", Documentary Journal of
Indiana, 1845, 144.
14Loela Hockett, "The Wabash and Erie Canal in Wabash
County", Indiana Magazine of History, XXIV, 297(December, 1928).
difficulty was also had with the gravel beds south of Attica. When, in 1846, the canal reached Attica, it was stopped there because of the leakage of the water through the gravel below town. For two years Attica was the end of navigation on the canal. The steamboats came up the river and unloaded at her wharves. Her rivals, Williamsport, Rob Roy, Independence, and Maysville lost their industries to the booming town of Attica. Their hotels lost their guests, stores were stripped of their merchandise, and grass grew on the streets. In desperation, Williamsport constructed at great expense a "side out" canal across the river bottoms just below Attica to connect with the main canal. A big celebration featuring the roasting of an ox was held at its opening, but the side out proved a failure because of lack of a sufficient supply of water. The rivalry between Covington and Attica assumed the proportions of the famous Attica War. When the canal bed had been dug between Attica and Covington, the people of Attica wouldn't open the locks to let water down to Covington. This was because of leakage in the gravel below Attica but the people of Covington thought that Attica was purposely holding up the canal. They demanded an investigation, but were not satisfied with its outcome. Thereupon, Covington issued a call for volunteers. Three hundred armed men responded; and, dragging a cannon and led by a future United States Senator, the army marched on Attica. At their approach, the defense rallied. The men of Attica, reinforced by the boatmen who had heard the racket, went forth to meet the enemy. The men from Covington sus-
seeded in breaking the locks open, but straw put in the canal by the Attica men prevented much of the water from escaping. The casualties resulting from this comic opera war included several broken heads and duckings in the canal. Considerable ill feeling between the citizens of the two towns lasted for several years, cropping out especially in politics. However, the canal reached Covington shortly afterward, and the advantage which Attica had enjoyed did not prove to be permanent.

In 1836, even engineers didn't know the difficulties of maintaining high line canals. Much of the canal had to be built on top of the ground by means of embankments. Numerous breaks occurred in these embankments and their repair greatly increased the cost of the canal above the original estimate. It is practically impossible to maintain a high line canal with earthen banks in a country subject to floods and abounding with burrowing water animals such as muskrats who dig through canal banks. When the water once starts through a muskrat hole, the embankment is soon washed away. Floods and breaches such as these were continually damaging the Wabash and Erie Canal, delaying passengers and freight. In

16Whicker, op. cit., 73 et seq.
17Dunn, Indiana, I, 398.
18Ibid., I, 399.
19Beste, op. cit., II, 183. On May 4, 1856, 14,000 cubic yards of the canal bank slid bodily into the river at Flas-sel's Ferry, four miles from the aqueduct over the White River. The break was repaired and the water turned in only to have 10,000 more cubic yards slide into the river. This time the break was very carefully repaired. The banks were lined with clay; but, inside twenty four hours after the water was turned in, 5,000 more cubic yards slid in. The engineers finally patched it up so that it would stay. See: Dunn, Indiana, I, 409.
1845, the superintendent of the Indiana portion of the canal reported that during the year he had expended $16,555.56 for repairing damage caused by floods, washed away banks, and slides from bluffs along the canal. After a flood in 1844, the contents of a mill dam broke through adjacent levees with such force and swiftness that a packet boat, the "Kentucky", was carried bodily through the gap into the river bottom and broken into pieces among the trees. Three passengers were drowned. The canal bed also constantly tended to fill up. Dredges were kept at work continuously to keep it deep enough for boats.

Another problem in constructing and maintaining the canal was the water supply. Because of the low divide between the Maumee and Little Rivers it was comparatively easy to get water on that summit level. In order to obtain a constant supply of water for the portion of the canal down to Terre Haute, dams were built across creeks emptying into the Wabash River. The water thus accumulated was let into the canal. Among the largest of these "feeders" were those constructed at Sugar Creek, Nel River, and Wild Cat Creek. Even with these feeders there was often trouble in getting enough water to supply the canal in a dry season.

The "cross-cut" from Terre Haute to Point Commerce (modern

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20 In Documentary Journal, 139.
21 George S. Cottman and Max R. Hyman, Centennial History and Handbook of Indiana, and a Survey of the State by Counties, 115.
22 Whicker, op. cit., 82.
23 Stuart, History of the Wabash, 28.
Worthington) was the most difficult part of the whole canal to construct. It had to cross the "summit" where the water supply was scarce. To supply the south side of the divide, water was brought from the Splunge Reservoir, which covered about 4000 acres of land, with a feeder at Rawley's Mill. For the north side of the summit, a reservoir was constructed in Birch Creek Valley in Clay County with a feeder two and a half miles long that carried the water to the summit level. Numerous other reservoirs and feeder dams had to be built for the remainder of the southern portion of the canal which followed the Hel River to the White River, down the White River Valley to Petersburg, thence across country to Evansville.

Much the same problems of construction were being met with on the Ohio portion of the canal. On March 3, 1834, the Ohio Legislature authorized construction of the canal from Toledo to the Indiana state line. In the summer of 1834 engineers were at work locating the route of the canal. However, they were delayed by the unhealthiness of the region. The question of the northern boundary of the state was also holding up any definite action on the canal. This Ohio-Michigan boundary dispute prevented any settlement of the terminating point of the canal.

However, by 1837 the boundary question was settled and

26 Esarey, Indiana, I, 387.
work got under way. By the end of that year contracts had been let for the construction of the entire line. The time was favorable for construction because of the abundance of labor available at a low price due to the suspension of much business in the East.

As preparations for the canal were going on the spirit of speculation raged in the Maumee Valley. Although the country was as yet sparsely populated, villages were laid out and cities were planned. People in the towns, along the route of the canal, saw a rosy future before them. If all the projected canals of Ohio, Indiana and Illinois should be completed Toledo would become the center of over one thousand miles of inland navigation, and would become the chief city in the West. In 1837, the editor of the Maumee Express pictured the effect of the new canal in the following terms: "A new empire will be opened to the gaze of the admiring world. A new era will commence in agriculture, in the occupation of a soil of untold fertility, by a free, an enlightened, and a happy people. Commerce will learn a new lesson in this vast field of national intercommunication. The arts and sciences will flourish...."

Several difficulties were encountered in fixing the exact route of the canal. In the first place there was the question as to whether it should terminate at the foot of the rapids of the Maumee or whether it should be carried a few miles farther to Manhattan on Toledo Bay. Many persons thought that it was

\footnotesize
\begin{itemize}
\item[29] "Report of Public Works", Ohio Executive Documents, 1838, 7.
\item[31] Editorial in the Toledo Gazette, Nov. 12, 1836.
\item[32] June 3.
\end{itemize}
unnecessary to extend a canal alongside a navigable river from
the rapids to Toledo. Of course the citizens of Maumee wanted
it to terminate at the rapids. That would make Maumee a great
lake port. However, the chief engineer advised the extension
of the canal to Manhattan because of some uncertainty in regard
to navigation for lake vessels on the lower Maumee. This view
finally prevailed and the canal line had its termination at
Manhattan, just below Toledo. However, for several years the
Toledo and Maumee papers carried on a lively dispute over the
relative advantages of their respective cities as a terminus
for the canal system.

Another difficult question about the location of the canal
concerned the little town of Gilead in Wood County. The engi-
near found it cheaper to construct the canal on the north bank
of the river. However, many citizens including those of Gilead
who lived on the south bank protested that they would lose all
their rights of navigation on the canal, hydraulic power, etc.
In 1837, the engineers proposed the construction of a feeder
dam across the river at the head of the rapids. To do this,
it would be necessary to buy a considerable land on the Gilead
side of the river. Satisfactory arrangements for this purchase
could not be arranged. The people of Gilead were opposed to a
dam at that point because it would have meant the destruction

33 "Report of Committee on Canal", Ohio House Journal, 1837-
38, 8 (appendix).
34 Editorials in The Toledo Gazette, July 20, 1836, and
Maumee Express, April 29, 1837.
35 "Report of Board of Public Works", Ohio House Journal,
1837-1838, 8-9.
of part of the town by backwater. It was not until 1844 that the question was settled. The proposed dam was constructed further upstream so as to not interfere with the rights and privileges of Gilead.

There was also some conflict over the width of the canal. It was finally decided to enlarge its dimensions from Junction to Toledo. That part of the canal would have to bear the concentrated traffic of both the Wabash and Erie and the Miami Canal. When completed the canal from Manhattan to Junction was sixty feet wide at the water line and six feet deep. From Junction on to the state line it was only fifty feet wide and five feet deep.

On the Ohio portion of the canal, contractors had great difficulty in constructing their stone masonry. The stone for locks, culverts, and facings was brought by lake boats from the peninsula in Ottawa County. At Toledo the stone was transferred to canal boats and then taken through the canal to the point where it was to be delivered. From Defiance to the state line, locks were constructed of wood, owing to the prohibitive cost of transporting stone to that locality.

The completed canal had twenty-six locks from Manhattan to the state line. A side-cut at Toledo, one mile long, connected the main channel with the Maumee River by the way of Swan Creek. Another side-cut at Maumee looked into the river by means of

38 Ibid., 1842, 19.
39 Ibid., 1841, 14.
six locks, comprising a descent of sixty-three feet. A dam at
the head of the rapids diverted water for the canal below and
also for hydraulic power. Between Toledo and this dam, water
could be used conveniently for power. The entire fall between
the level of the canal and the river could be utilized.

Above the dam at the rapids there was slack water navigation
for some distance in the pool behind the dam. Twenty-six miles
farther up at Independence there was another feeder dam nine
feet high. From Independence the river was used for slackwater
navigation up to Defiance, four miles above. At Defiance the
Maumee was crossed by a towing path bridge, and the canal
turned away southward from the river and toward Junction, eight
and one-half miles away. From there the line went west again
to the reservoir and the state line.

A few miles this side of the state line was the reservoir.
The Six Mile Reservoir covered 2500 acres and was built at a
cost of over $170,000. Its purpose was to supply water for the
canal from Defiance to the state line. By 1843 the reservoir
was completed. The entire tract had been cleared of heavy tim-
ber, except for a belt a few rods wide along the edges to pro-
tect the banks from erosion. Because of the flat country it
was necessary to build an embankment around the area to be fil-
led with water. This levee was five to fourteen feet high and
ten miles in length. In the center of the embankment a two inch
plank fence was constructed as high as the top water line to

40 Ibid., 1842, 16.
41 Ibid., 17-18.
42 Ibid., 1841, 15-16.
keep crawfish and water rats from cutting through and breach-

43 ing the banks.

This canal, when completed, was for size and strength su-

perior to any other canal in Ohio. It had almost three times
the capacity of the Ohio Canal, and consequently it was com-

parative expensive to build. However, there was not a pro-

ligate expenditure of money an the Wabash and Erie Canal in
Ohio as was claimed by some at the time. During the year of
1837 the whole line had been placed under contract to the
lowest responsible bidders. Bids were previously invited by
advertisements in a large number of newspapers in both Ohio
and neighboring states. As it turned out, many contractors
had taken work at lower prices than were justified. In the
years from 1838 to 1841, a number of sections were abandoned
by contractors. Most of these failures were due to the high
cost of provisions and labor that prevailed during part of
the time. These sections were relet at low prices. In all
probability more money was lost by the unfortunate contrac-
tors than was gained by the fortunate ones. The canal was
an expensive one, but, in the opinion of the Board of Public
44 Works, it could not have been completed for much less.

After the Ohio portion of the canal was completed, the
following provisions were made for keeping it in repair.
The canal was divided into three divisions of about thirty
miles each. For each division there was a superintendent

43 Ibid., 1842, 18-19.
44 Ibid., 28-30.
employed at thirty dollars a month. The superintendent lived on a canal boat belonging to the state where the laborers employed on his division also lived. There were five locktenders on the whole length of the canal to Indiana. In addition there was a resident engineer who had charge of the entire portion of the canal in Ohio.

At times difficulty was encountered in securing laborers to construct the Wabash and Erie Canal. During this period workers were in demand on all the western internal improvements. Public works in Illinois and Michigan competed with the canal in Ohio and Indiana for labor. High wages had to be paid to induce workers to stay on the line. The contractors on the canal bid against each other for the available labor supply. Many men were also drawn away from canal work by the liberal Federal land policy. When men could buy land for a trifle and become independent farmers, there was often little incentive to become a laborer on the canal. A poster at Evansville in 1837 advertised for two thousand men to work on the canal. The prospective laborer was urged to work on the canal for a few months and then with his earnings to buy government land at $1.25 an acre and make a "permanent home in this flourishing and rapidly growing state".

Labor for use on the Wabash and Erie was recruited from two sources—local inhabitants and immigrants. It is impossible to determine the percentage contributed by each source.

46 Poster on display in the Indiana State Library and Historical Building in Indianapolis.
to the labor supply. However, it seems probable from incidental references in the evidence at hand that most of the unskilled workers on the Wabash and Erie were Irish immigrants.

Conditions in Ireland during this period facilitated large-scale emigration to Canada and the United States. During the first few decades of the century the population of Ireland was increasingly more rapidly than that of any other country of Europe. At the same time Ireland remained unindustrialized and almost wholly dependent on agriculture. Rebellion, famine, restrictive legislation, and absentee landlordism combined to restrict the Irish to a life of poverty and to destroy their faith in Ireland's future.

As a result of this situation many thousands of Irish emigrated to America. A quarter of a million came to the United States between 1820 and 1840. This furnished a constant supply of cheap labor for use on internal improvements. The Erie Canal was crowded with boats carrying produce to the East and emigrants to the West. One observer reported that a surprising number of these emigrants were Irish, on their way to Ohio — to the new and prosperous state in the West. The rapid


48 William Forbes Adams, Ireland and Irish Emigration to the New World from 1815 to the Famine, 336. Hereafter, this work will cited as Adams, Irish Emigration.


50 William Bullock, "Sketch of a Journey ...", Early Western Travels, 1748-1846, A Series of Annotated Reprints..., ed. by Huben Gold Thwaites, XIX, 151.
growth of Catholic parishes along the routes of the Ohio canals showed the influence of these Irish immigrants.

These newcomers were, in general, poverty-stricken and ignorant of improved and large-scale agriculture. In their minds, farming was associated with unrest and insecurity. Therefore, the Irish did not become farmers as most of the German immigrants of the period did. Cash wages in a lively city or construction camp interested Irishmen more than did agriculture. Gregariousness was a feature of the Irish character but solitude and isolation was the condition on the agricultural frontier. One Irish farmer remarked that he liked the low taxes, absence of rent, and social equality of his life in the New World. At the same time, however, he lamented the fact that when in Ireland after work "I could then go to a fair, or a wake, or a dance, or I could spend the winter nights in a neighbor's house cracking jokes by a turf fire. If I had these but a sore head I would have a neighbor within every hundred yards of me that would run to see me. But here everyone can get so much land, and generally has so much, that they call them neighbors that lives two or three miles off — ooh! the sorra take such neighbors, I would say." Moved by such considerations, a great number of Irish immigrants who came West worked on the canals of Ohio and Indiana.

Wages on the canal were generally high. The reports of

52. Adams, Irish Emigration, 341-342.
the Ohio Board of Public Works during this period frequently refer to the high price it was necessary to pay for labor because of the competition of other internal improvement projects. Whenever a section of the canal was put under construction, there would be a general advance in the price of labor and provisions in the vicinity. These conditions added to the cost of the canal and made many contractors lose money.

The working day on the canal extended from sunrise to sunset. Wages in Ohio averaged about ten dollars a month for ordinary labor with higher amounts for semi-skilled labor. Contractors allowed from $1.50 to $1.75 a week per man for board. Almost always provisions were made for a barrel or two of whiskey at periodical intervals. According to an estimate made by the chief engineer on the Wabash and Erie in Indiana, the average canal laborer removed eight cubic yards of earth per day. The contract price was twelve cents per yard. Therefore he earned ninety-six cents a day for his contractor. In normal times the cost of the laborer per day including board was seventy cents, leaving a twenty-six cent margin of profit to the contractor.

The canal laborers were paid by the contractors and not by the state. At times labor troubles would arise over the pay. A few contractors on the Ohio canals were dishonest.

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54 Letter, Samuel Kasheer to Alfred Kelly, Feb. 7, 1829, in the collection of documents relating to the Ohio Canals in the library of the Ohio State Archaeological and Historical Society at Columbus. Hereafter, this collection will be cited as Canal Papers.

55 Receipts of Laborers, 1830”, Canal Papers.

and absconded, leaving their workers unpaid. This lack of integrity on the part of a few of the employers brought some sections of the canals into disrepute.

However, when laborers failed to receive their pay, the fault usually lay in the fact that the state had not paid the contractor. Numerous complaints by contractors that they were not receiving their money came to state officials in Ohio. One contractor on the Wabash and Erie wrote that men could not be hired because those who had been working had not been paid for several months. He added that this was due to his failure to receive any money from the State on his contract. In 1843 the Board of Public Works reported that for the past fifteen months no money had been available with which to pay the canal contractors.

Notwithstanding these financial difficulties the work of constructing the canal proceeded. When money was not to be had promises were made to the laborers. Sometimes when contractors were hard pressed to keep their men on the job, they would offer a keg of whiskey as an inducement to continue work.

The construction work on the canal consisted of the fol-

57 Letter, William Patrick to Alfred Kelly, August 20, 1827, Canal Papers.
58 "Report of Canal Commissioners", Journal of the Senate of the State of Ohio ... 1826, 125.
60 "Report of Board of Public Works", Ohio Executive Documents, 1843, 19.
61 Charles Sumner Van Tassel, Story of the Maumee Valley, Toledo and the Sandusky Region, I, 810.
lowing types:

1. Grubbing and clearing, - all trees, brush, logs and stumps 
had to be cleared from the canal bed and for a number of feet 
on either side.

2. Mucking and ditching, - all rubbish, loose dirt. etc. was 
cleared from under each bank of the canal to insure its resting 
on solid ground and proper drainage.

3. Embankment and excavation, - the towing path had to be 
made smooth and even as well as the opposite bank and excava-
tion was necessary in both rock and soil.

4. Puddling, - around locks and culverts several layers of 
gravel and clay were mixed with water and then trodden by 
horses and cattle or punched down to make a tight surface.

5. Locks and culverts, - these were constructed of either 
wood or stone.

6. Protection, - at places layers of stone were laid over 
banks to prevent erosion.

About one thousand men worked on the Wabash and Erie line 
in Indiana in 1834. These workers lived in camps along the 
waterway. The long line of huts resembled the barracks of a 
fortified post. The chief means of recreation of these Irish-
men were Sunday drinking carousals and fights. Picks, shovels, 
clubs, and stones were used freely. If any were killed, as 
frequently happened in a fight, the dead were covered with dirt 
for the levee. The diggers were about equally divided between

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63 Esarey, "Internal Improvements", 94.  
64 Stuart, History of the Wabash, 44.
"Corkers" and "Way Downers" from Kerry, and representatives of the two groups never met without a fight. Feuds between the Catholics and Orangemen were common on all public works of the period. Once, on the Potomac, the regular army was called out to keep the peace. On another occasion in Indiana, 400 militia were required to stop an impending battle near Lagro when several hundred Corkers had armed themselves and were moving up the line to wipe out their enemies. One day in 1835, a steamboat landed at Peru and a fight commenced between Logansport and Peru groups. Several hundred Irish canal workers joined in on the side of Peru. When the Logansport party saw the Irishmen coming along the canal banks with picks in their hands, they beat a hasty retreat to their steamboat and shoved off. They got away barely in time for the Irish were yelling, "We'll sink your d__d dugout", and the interloping steamboat would have very likely met that fate if the canal workers could have reached her.

The canal took a terrible toll of lives through disease. At the time when the canals were being built, much of the country through which it passed was unhealthful. This was particularly true of the river bottoms where the construction was being carried on. It is said that every six feet of the canal cost the life of one employee. Travelers reported that in places where the canal was not dug but was made by piling up

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65 Esarey, "Internal Improvements, 94-95.
66 Sanford C. Cox, Recollections of the Early Settlements of the Wabash Valley, 145-146.
67 Stuart, History of the Wabash, 42.
embankments, water trickled through these embankments and flooded the nearby country, forming morasses and swamps with many lakes and ponds dotting the woods. Mosquitoes and malaria were notoriously bad in all the river bottoms, undrain- ed swamps, and flat lands. The sun was unable to penetrate the deep foliage down to the swamps and the drowned wood- lands. Smallpox, typhoid, pneumonia, and Malaria ravaged the country side. Country which is today healthy was then quite the opposite. Every fall people shook with the ague. Travelers considered themselves fortunate to get through the Wabash country without sickness.

The shanties which quartered the workers were generally unsanitary, and the laborers fell victims to the ravages of disease. The doctor regularly made the rounds in the camps handing out quinine, calomel, and blue mass. Whiskey was used without stint as a protection against malaria and snake bites. The most vigorous were not immune to "canal fever". At regular intervals during the day, a boy would pass along the line of workers giving to each man his "jigger full" of whiskey, but notwithstanding all the precautions taken, thousands of workers died, and were buried in shallow graves along the line.

Asiatic cholera first appeared on the Wabash in the spring of 1833. During the summers of 1849 and 1854 the

68 Beste, op. cit., II, 207.
69 Esarey, Indiana, I, 432-433.
70 Whicker, op. cit., 82.
71 Beste, op. cit., II, 220.
72 Stuart, History of the Wabash, 43.
cholera was especially bad. It visited the lands along the canal like the angel of desolation. In Lafayette during these two summers, it killed 600 persons. In 1849 the disease broke out at several other places along the canal. It stopped land sales, cut the tolls, and demoralized the construction gangs. At one camp in 1848, four hundred out of six hundred diggers died of the cholera. Two hundred of the dead were buried in an old graveyard at Attica while a huge trench was dug near the camp for the rest.

The canal reservoirs were often blamed for the diseases. These reservoirs usually were swamps full of natural submarine forest growths and in summer frequently became stagnant frog ponds. Because of the prevailing idea that the Birch Creek reservoir would cause disease, local residents threatened to destroy it while the surveys were being made. A commission of physicians reported in 1853 that the reservoir did not harm the healthfulness of the region, but the residents refused to believe the report. Mobs of armed men cut the dam in 1854 and again in 1855. Militia were sent and finally a compromise was reached whereby the citizens allowed the dam to remain intact.

This condition of widespread disease on the canal was

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73 Cox, op. cit., 153.
74 Esarey, Indiana, I, 388.
75 Whicker, op. cit., 77.
76 Esarey, Indiana, I, 391.
77 See page 33.
78 Holliday, loc. cit., 93-95.
partly responsible for the low moral conditions which prevailed along the Wabash and Erie as well as on other canals of the period. Liquor was used widely as a preventative against disease. However, the canal worker, and particularly the Irish, drank more whiskey than was necessary for medicinal purposes. The drinking was the cause of many of the fights which occurred in the construction camps. The chief difficulty which the Irish experienced in getting along was their liking for liquor. The Irishman's vice seemed to be alcohol. His propensity for drink earned him the sobriquet of "drunken Irish".

Several factors favored a large per capita consumption of liquor on the part of the Irish laborer. In the first place, whiskey was cheap on the frontier. Even the best quality cost little and inferior grades could be purchased by even the poorest Irishman. However, the responsibility for drinking cannot be placed entirely on the shoulders of the poor laborers who bought cheap whiskey. Canal contractors were partly responsible. They supplied whiskey to the Irishman in order to get every last ounce of energy out of him.

Catholic priests attempted to remedy conditions. One of them observed that the "lower class of the Irish, such as work on canals, is too fond of drinking". The priests at-

80 Adams, Irish Emigration, 362-364.
81 John Francis Maguire, The Irish in America, 287.
82 See page 42-43.
83 William M. McNamara, The Catholic Church on the Northern Indiana Frontier, 1789-1844. A dissertation submitted to Catholic University of America ... Degree of Doctor of Philosophy (Studies in American Church History, XII), 67.
tempted to improve social and moral conditions in the construc-
tion camps. However, they were severely handicapped in their efforts by lack of numbers. Often the Irish laborer on the canal would not see a priest for months at a time. There were very few of them available for the work on the frontier during these years.

The situation in the Toledo district during the construction of the Wabash and Erie was illustrative of the difficulties generally of the Irish, and the problem involved in the construction of the canal. In 1839, the Board of Public Works reported that the contractors on the Wabash and Erie were working under difficulties. The usual high price of provisions and labor wherever a canal was under construc-
tion was enhanced in this case by the remoteness of the line and by recurring epidemics among the workers. Furthermore, the contractors had not been receiving funds from the State on their contracts. As a result, they had been forced for several months to pay their laborers in Michigan "wild-cat" bills. This currency depreciated rapidly and caused further distress for all concerned.

Sickness seemed to be unusually prevalent in the Maumee region and the nearby notorious Black Swamp. The unhealthful

Catholic Almanac, 1832, 32, cited in McNamara, The Catholic Parishes in Ohio, 43.
Ohio Executive Documents, 14.
Clark Waggoner, (ed.), History of the City of Toledo and Lucas County, Ohio. Illustrated, 595.

The Black Swamp was a level, densely forested, and swampy region extending from the Maumee River southward for some fifty miles. Letters from the Maumee district in the Canal Papers are full of references to sickness.
nature of the valley made it difficult to secure workers for the construction gangs. One contractor wrote from Maumee City in 1838 saying that "here in truth almost everybody is sick and hands are very scarce". In order to secure laborers he had caused a notice to be published Editorially in the Express for 2000 hands with a request that other papers in the vicinity of a surplus laboring population would give it an insertion and it has been noticed by nearly all the Eastern papers.

The Catholic population of Toledo at this time was composed mainly of Irish and German immigrants who had come to work on the canal. For many years the Irish largely predominated in this work.

In 1841 the first definite step toward permanent Catholic work in this area was taken. Father Rappe was sent to Toledo in that year. His parish extended from Toledo to Indiana and south as far as Allen County. Father Rappe found a difficult task before him. He found a great deal of intemperance among the laborers. Hard earned money was being spent on drink instead of on the worker's families. In addition to the problem of liquor, there was the dreaded "Maumee fever" to cope with.

Rappe worked hard in organizing parish and temperance societies. In 1846, he was joined in Toledo by another priest who came to aid him in the fight against disease and intemper-

80 Oscar White to William Wall, August 12, Canal Papers.
89 Waggoner, op. cit., 596.
90 Ibid., 595.
ance. "At certain seasons", wrote the new priest, "it was almost impossible to meet a healthy looking person, and frequently entire families were sick and unable to help one another. Apart from the terrible malarial fever, we were occasionally visited by such epidemics as erysipelas, and towards the end of 1847 we saw the ship fever emigrants landing on the docks to die among strangers within a few hours after arrival".

However, sickness and other difficulties did not stop the work on the Wabash and Erie. Indiana and Ohio continued construction even after the speculative mania of the early 1830's had passed. This boom reached its height in 1826. Landsales in Indiana for that year amounted to three million acres. This total was more than that of any other state with the exception of Michigan.

The inevitable collapse of the speculative boom came in 1837. However, the panic of that year did not effect Indiana at once. Money was still being borrowed from the East for the internal improvements. The continued expenditure of these funds kept business going in Indiana until the latter part of 1838, when the State found it impossible to float more loans. The system finally broke down because of failure to secure more money from the East. In August, 1838, the board ordered all work, except that on the Wabash and Erie Canal, to cease. Business in Indiana was paralysed when work stopped because it had depended heavily on money furnished by

91 Ibid.
92 Roll, op. cit., II, 6.
93 Ibid., II, 18.
The system of 1836 which had been welcomed with so much rejoicing had now come to a tragic end. By 1839, almost ten millions of dollars had been spent. Much of it had gone into surveys. Most of the proposed lines were only one-third to one-half completed. It was estimated in 1840 that at least $20,000,000 more would be needed to complete the projects. A strong reaction set in against the whole idea of internal improvements. They became as much despised as they had once been popular and favored. In 1841, the Legislature authorized the organization of private companies to take over all of the unfinished internal improvements except the Wabash and Erie Canal. This canal was retained by the state. The same act abolished the Board of Internal Improvements and substituted a Canal Commissioner and also a State Agent to perform the duties of the former Fund Commissioner.

The state undertook to complete this one canal to Terre Haute. A second grant of land was made by Congress in 1841 to continue the work. Ohio's part of the canal was completed to Maumee Bay in 1843. On July 4, of that year, the canal was formally opened from Toledo to Lafayette. A big celebration was held in Fort Wayne. The speaker, referring to the marked influence which the canal was already exerting, said, "The war dance is ended, the war song is sung, the war drum is silent, and the Indian has departed...The forest is

94 Esarey, Indiana, I, 370-373.
95 Roll, op. cit., II, 19.
96 Benton, Wabash Trade Route, 60.
fading and falling and towns and villages are arising and flourishing." In 1845, the Miami and Erie Canal was completed by Ohio from Cincinnati to its junction with the Wabash and Erie Canal at Junction in Paulding county, Ohio. This gave to the Wabash and Erie a connection with Cincinnati.

Before 1843, the gross receipts from canal tolls in Indiana were not very large. It was hoped that the canal would pay more after its completion to Lafayette. The tolls did rise five hundred per cent, but they still fell short of paying running expenses.

97 Esarey, "Internal Improvements", 95.
98 Roll, op. cit., II, 23.
99 Esarey, Indiana, I, 379.
CHAPTER IV — FINANCING THE INDIANA PORTION OF THE WABASH AND ERIE CANAL

In 1839, the whole program of internal improvements in Indiana collapsed. Work was stopped in that year on all of the state projects with the exception of the Wabash and Erie Canal. Most of the blame for this breakdown must be laid, not on the undertaking, but on the business methods followed. The Panic of 1837 together with heavy monetary losses due to lax methods of financing state bonds wrecked Indiana's system of internal improvements. The works contemplated were rather extensive considering the sparse population of the state at that time, nevertheless the internal improvements program would have had a very fair chance of success if it had been properly managed. However, the business methods followed by the state were anything but good. Too much of an overhead organization had been set up. There were too many commiss- ioners, engineers, staff officers, paymasters, land agents, and finance agents in New York, Baltimore and Boston. Many of the positions were sinecures. Much money was wasted on numerous corps of surveyors hired in 1836. These corps became popularly known as the "Eating Brigade".

Since the sale of government donated lands was a disappointment, about five-sixths of the funds necessary for the

1Benton, Wabash Trade Route, 57.
proposed work on roads, canals, and railroads had to be raised by bond issues. During the first year of work expenses ran to nearly $4,000,000.

The "System" orators had promised no higher taxation, consequently the Assembly had made no provision for payment of the interest on the bond issues. It was necessary, therefore, to pay interest charges out of funds consisting of receipts from the sale of bonds. The business of the fund commissioners was poorly handled. No books were kept. They have been charged with making immense sums of money by dealing in state securities. Their reports were incomplete or inconsistent and it seems that the bonds were signed and delivered to the members of the board to sell as best they could. The annual report of the Canal Fund Commissioners in 1837 is revealing. It stated that: "The Board in the contracts which were made during the present year on the sale of the state bonds, made no stipulations as to the kind of funds to be received...". Agents who were selling the bonds seem to have taken advantage of provisions such as this. Many of the bonds sold on credit or for securities in the face of a law to the contrary, and in several instances the purchaser lost money in speculations and could not pay. In some cases, the agent of the State was at the same time a member of the firm.

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4Esarey, Indiana, I, 373-374.
5Reports of the Ind. Canal Fund Commissioners", Docs. of the House (1837), No. 13, 2.
6The Morris Canal and Banking Company of New York failed while owing the State of Indiana $2,112,200.
of brokers who took the bonds, sold them, and then failed to pay the proceeds to the State. The cost to the State in negotiating the sale amounted to twenty-five per cent of the total value of the bonds offered for sale. From a total bond issue of almost $15,000,000, the State realized $8,593,000.00 in cash, and $4,000,000.00 in worthless securities, while about $2,000,000 was embezzled or misappropriated by its officers and agents. Much of this loss resulting from the sale of the bonds might have been avoided if the authorities had not been in such a hurry to complete the works projected. They yielded to pressure from interested citizens and indulged in the most precipitate haste in letting contracts.

The State government paid little attention to all these irregularities until the money began to fail after 1839. A resolution offered in the Senate at the time referred to "notorious" current rumors of fraud, gross negligence, mismanagement, and wasteful, unnecessary, and unlawful expenditures by the Board of Internal Improvement. In his message of December, 1841, the governor of the State said that, "Every fair and impartial mind must receive the impression, that Indiana has been in many cases the victim of preconcerted imposition and fraud. If broken banks were to be resuscitated for dishonest purposes, Indiana Bonds were obtained

7 Esarey, Indiana, I, 385.
8 Ibid., I, 376-377.
9 Benton, Wabash Trade Route, 59.
10 Journal of the Senate of the State of Indiana (1841), 28-29.
by the projectors to aid the enterprise. If clamorous creditors were to be satisfied it is to be feared that they sometimes lent assistance to their debtors in cajoling our agents out of their bonds. If heavily operating institutions were involved in extensive speculations under which they must sink, unless a powerful effort was put forth, Indiana bonds were procured at nearly their par value, and thrown upon the money market at reduced prices, to raise the means of meeting a pressing emergency.\textsuperscript{11}

By 1839, the State could find no more purchasers for its bonds, and, consequently, the entire system collapsed. Fortunately, the credit of the State failed before all the indebtedness contemplated under the Act of 1836 had been incurred. As it was, the state was bankrupt. Its income was not sufficient to cover interest payments. The State could not raise money through additional taxation because of the stagnation in business and fall in the appraisal value of all property since the panic of 1837.

The General Assembly of 1839 was low grade and seemed bewildered by the state of affairs. The stealing of public funds went on before the eyes of the members while they were trying to investigate. Petty party politics engaged the attention of the legislators and prevented the adoption of any measures to meet the interest payments. Treasury notes were

\textsuperscript{11}Ibid., 19-20.
\textsuperscript{12}General Laws of the State of Indiana (1840), 228.
\textsuperscript{13}The Indiana Journal, (Indianapolis), March 14, 1840.
issued to meet some of the State's obligations. These notes upset the currency system, and then, to make the financial confusion even worse, land scrip was issued and made receivable for tolls and duties on the Wabash and Erie. This scrip depreciated greatly and caused contractors working on the canal to find it almost impossible to secure materials and labor at a fair price owing to the inconvertibility of the scrip into good money. As a consequence, the work on the canal was not pushed.

Indiana was not the only state to become involved in debt in the late thirties. The invitation to embark in great public works was alluring to all states in the years preceding the panic of 1837, because of the process of inflation through which the nation was passing. States took up these internal improvement projects because it was thought that private enterprise would be inadequate to meet the demand. Corporations did not undertake the canals because the idea of corporate control had not yet been sufficiently developed. There was a certain distrust of private corporations. Some said that internal improvements could be more economically made under public authority than by any private company. In 1824, a committee of the Indiana Legislature advised against private improvement of the navigation of the Wabash River. The committee argued that the matter was too

14 Esarey, Indiana, I, 385.
16 Adams, op. cit., 321-331.
17 Callender, "Early Transportation and Banking", loc. cit., 155.
important to submit to the discretion of a corporation, that
a corporation would take too long to do it, and that a cor-
poration wouldn't be able to raise enough money without the
backing of the faith of the state. Private corporations
were not able to secure large amounts of capital in those
days. However, the most influential argument for the build-
ing of the canals and roads by the state was that these im-
provements would be of sufficient benefit to the community
to justify the state in undertaking them even if private cap-
ital did not. The improvements were expected to pay, but
even if they didn't it would be worth while to keep them up.

Funds for western internal improvements were easily ob-
tained. The credit of the states in the prosperous thirties
seemed inexhaustible. New York State had demonstrated that
it was easy to get the capital necessary by the issue of state
bonds. The East had quite a bit of capital to invest in
promising undertakings, and the rivalry of eastern cities for
western trade caused Easterners to loan freely to those west-
ern enterprises which would benefit their own particular
section. However, the East was financing her own improve-
ments and most of the state securities had to be sold in
Europe. These bonds were considered an excellent investment
in England where there was a great surplus of capital, be-
cause canals had been profitable in England and because the

18 Ewing, _op. cit._, 5.
19 Callender, _loc. cit._, 151 et seq.
20 Faulkner, _op. cit._, 324.
21 Callender, _loc. cit._, 153.
United States had recently paid off her debt. English investors, to their sorrow, didn’t always distinguish between state and nation in America.

At the very time that the national government was paying off its funded debt in order to guard against governmental extravagance, the state governments were creating a funded debt of $200,000,000, more than the federal government had ever owed. By 1840, only seven states had not contracted a debt for internal improvements. Every state south and west of New York had caught the fever. Ohio bonded herself for $27,000,000 to help the farmer; Illinois spent $11,000,000; and Michigan, with a population of only 100,000, had acquired a debt of $5,000,000. In 1842, eight of these states, including Pennsylvania, Maryland, Mississippi, Michigan, Illinois, and Indiana, were unable to continue their interest payments. As in Indiana, no more money could be borrowed to meet the interest. In those states, the term creditor was synonymous with the word enemy.

In Indiana, no interest was paid on the internal improvement bonds from 1841 to 1846. The legislature issued bonds in 1841 to pay the interest charges, but they were naturally worthless, and when tendered to the bondholders, nearly all refused them. In the session of 1842, a tax bill of 1841

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23 Kirkland, op. cit., 280.
24 Callender, loc. cit., 114.
25 Carman, op. cit., 123.
26 W. A. Scott, The Repudiation of State Debts, 228.
27 Jason B. Brown, Wabash and Erie Canal, Bond Question, 3.
28 Benton, Wabash Trade Route, 60.
which had distinctly pledged certain taxes for payment of the
debt was repealed. The legislators separated without doing
anything further in regard to the matter. In the meantime,
the foreign bondholders were writing letters to the Governor
calling attention to the pledge of the state's faith made in
their contracts. They appealed to the honor and integrity
of the state and called upon her to redeem her engagements
and pay the interest. However, nothing was done.

The rate of increase of the population of the state fell
off after 1840. One reason for this was the fear held by
prospective immigrants of repudiation, or of oppressive tax-
ation because of the debts. According to Governor Whitcomb,
the debt was causing citizens to sell out and move from the
state. The tendency was toward increasing gloom, despon-
dency, and depression in business generally. As a result,
private persons, most of whom were in debt, had trouble pay-
ing their own creditors.

The General Assembly and many citizens of the State were
loud in their protestations of honesty in 1844 and '45.
They would pay every cent of the public debt. According to
them it was not a question of inclination but one of ability.
The people wanted some settlement of the debt question and

29 Extra State Sentinel (Indianapolis), June 17, 1842.
30 Proceedings of the Canal Convention assembled at Terre
Haute, May 22, 1845, for the purpose of applying the proceeds
of the liberal grant of land by the general government, to-
wards extending the Wabash and Erie Canal to the Ohio River,
at Evansville, 14.
31 Brown, op. cit., 12.
32 Indiana Democrat (Indianapolis), January 9, 1846.
probably most of them were against repudiation.

A large part of the Indiana Internal Improvement Bonds had been sold to the Rothschilds, Barings, and Lloyds of London and Paris. These creditors kept making insistent appeals for the payment of their interest. The London firms and the big New York banking house had bought bonds in the first place, but they did not hold them now. They were interested in payment because they had sold the bonds as good securities to private individuals of small property and of moderate income. By this time, the bonds had depreciated to thirty cents on the dollar, but speculators had not acquired many of them. Most of them were still in the hands of the original purchasers.

In the hope of getting some action out of the Indiana Legislature, the bondholders hired Charles Butler of New York to look after their interests. After visiting Michigan on a similar mission, he reached Indiana in 1845. He gave a series of addresses over the State for the purpose of rallying the anti-repudiation sentiment but no sweeping opinion for full payment could be aroused. Many persons believed that the State shouldn't pay the bonds since it had been swindled out of so much of the money. Others

33 Proceedings of Canal Convention (1845), 9-14.
34 Ibid.
35 Extra State Sentinel, (Indianapolis), June 17, 1842.
36 Proceedings of the Canal Convention (1845), 15-16.
37 In his later life Butler was one of the founders of the Union Theological Seminary and of the University of the City of New York.
38 Esarey, Indiana, I, 380-381.
saw no way of raising the money with which to meet the oblig-
ations.

A convention was assembled at Terre Haute during the next
year for the purpose of uniting public opinion in favor of
extending the canal to the Ohio River. In his opening speech,
the president of the canal convention declared that the canal
was an enterprise presenting "the most practicable and feas-
ible plan" of enabling the state to liquidate the public
debt. It was said that the Federal land grant along the
proposed route would be nearly enough to pay for the canal's
construction, and, judging by the receipts of the Ohio canals,
the extension to Terre Haute would be highly successful as a
financial proposition. The completion of the Indiana canal
was regarded favorably by leading statesmen, men of science,
business men, and farmers. Competent engineers estimated
in 1845 that the Wabash and Erie Canal, if completed, would
be yielding revenues of $400,000 a year by 1850 and $500,000
a year by 1855. Mr. Butler was convinced of the wisdom of

39 Journal of the House of Representatives of the State of
Indiana (1845), 380.
40 Proceedings of the Canal Convention (1845), 3, 8.
41 Ibid., 9.
42 Memorial of Stockholders, (1847), 3. At the convention
one speaker said flour sold at Evansville for $4 to $4.50 a
barrel while at Terre Haute at $3.25 to $3.50. The freight
by canal between these two cities he asserted would not be
over 25¢ per barrel. Thus even the small farmer who had a sur-
plus of only ten barrels to sell would save enough by the canal
to pay his taxes, county and state.
43 Memorial of Stockholders (1857), 29-30. Actually in 1858,
tolls amounted to $157,158, and in 1855 they had declined to
$140,339.
extending the canal. He told the convention, "I have care-
fully compared the prospective profits of this canal with the
certain profits of the Ohio Canal. There has been said to be
no analogy between the two. My opinion is, that the Wabash
and Erie Canal, will in three years after its completion to
the Ohio River produce more revenue, annually, than the other
has at any time, within the ten years of its existence; and
such is the confidence of your bondholders in the revenue to
be derived from this canal that I think they would even be
willing to come forward and say to you, 'Pay us by your State
tax and otherwise, a portion of the interest on your public
debt, and we shall be willing to look to the revenues of this
canal for the balance.""

The convention in its report earnestly recommended fol-
lowing this plan of Butler's. A warning was sounded against
the indifference toward the credit of the State which existed
in some quarters. Now was the time, said the report, when a
satisfactory adjustment of the problem could most easily be
made and the State be put in her proper position as a public
creditor. If such a settlement were carried out, the conven-
tion believed that honor and prosperity would come again to
the State.

After the convention, Butler went to Indianapolis to
urge the legislators to take action. The prospects in the
capital city were none too bright. Politicians on both

44 Proceedings of the Canal Convention (1845), 19.
45 Committee of the Canal Convention, Address to the Citizens
of the State of Indiana (1845), 8.
sides were afraid to move. The governor, who was a candidate for senator in the ensuing election, was afraid to open his mouth. In letters to his wife Butler said that the governor dared not use the word "pay" or "tax".

In December, Butler addressed the Legislature saying that he represented with scarcely an exception the class of trustees, guardians, widows, and retired and aged persons, whose object in buying the bonds was investment and whose sole reliance for support was placed on the interest received. His address urging payment was generally favorably received, and he went to work with a committee to draft a plan of settlement. Butler's first proposal to the committee was that the state pay by taxation the whole of the debt and three per cent of the interest. For the remaining two per cent of interest, the bondholders were to rely on the canal tolls.

The creditors were also to supply one third of the necessary capital for completing the canal to Evansville. Butler compromised when the committee regarded this proposition as beyond the ability of the State to pay, and submitted a second proposition. According to this proposal the bondholders would substantially release the State from the payment of one-

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46 Nov. 29, 1845, and Dec. 7, 1845, in G. L. Prentiss, The Union Theological Seminary in the City of New York; Its Design and Another Decade of its History, with a Sketch of the Life and Public Services of Charles Butler, L. D. D., 454-456. This work contains a collection of the letters of Butler, and will be cited, hereafter, as Prentiss, Butler.

47 Prentiss, Butler, 460.

48 Report of Joint Committee in Relation to the Public Debt (Documentary Journal), Reports, 1845, Doc. No. 21, Part 2, 232.
half of the entire funded debt and would make that half a charge against the canal. Butler converted the majority of the committee to his idea and its report favored the plan.

The report of the committee was introduced in the legislature in the form of a bill. This measure was thoroughly discussed and encountered stiff opposition in some of the newspapers as well as in the capital building. Heated speeches and numerous political threats were made during the debate. One man claimed that it sold the people out, land and all to the British. However, country newspapers, preachers, and many others supported the bill. One enthusiastic believer in the bill wrote to a newspaper as follows: "accept the proposition and at once you restore the credit of the State. The foul stain of repudiation will be wiped away. Indiana will immediately take a proud stand among her debt-paying sister states -- immigration and wealth will flow into the state -- confidence and credit will be restored -- joy and gladness will beam on every countenance -- and no man will be ashamed to be called a Hoosier." The young Henry Ward Beecher preached a strong sermon in favor of the bill to a full church which contained many members of the legislature. The measure finally came to a vote and was passed in January, 1846, des-

49 Ibid., 241-244.
50 Ibid., 235.
51 Indiana Democrat, (Indianapolis), January 23, 1846.
52 Letter, Butler to his wife, January 4, 1846, in Prentiss, Butler, 481-482.
53 Indiana Democrat, January 13, 1846.
54 Letter, Butler to wife, Jan. 4, 1846, in Prentiss, Butler, 481.
pite attempts to delay action until after the elections.

According to the terms of the Butler Bill of 1846, the old bonds were to be surrendered and new bonds issued to the holders, the principal and half the interest of these new securities was to be paid by the State and the other half of the interest to be paid by the revenues of the canal. Section 32 of the act gave the State the option to call in the old bonds and issue in the place of each one two certificates covering the principal and interest. One-half of these new certificates would be payable through taxation and the other half would be paid by the canal revenues. After the state had called in the old bonds, "...its faith and revenues shall be only pledged and responsible for the payment of one-half of said principal and interest... for the other half... the holders shall look solely and exclusively to said canal...". It was understood by all parties that the State would follow this option in carrying out the bill. The State put the canal and all lands in trust for the bondholders and certificate holders. Three trustees were to be appointed, two by the bondholders and one by the State, to administer the trust. The bondholders were to advance $2,225,000 to complete the canal to Evansville. When this subscription had been made by the bondholders and when one-half of the old bonds had been turned

55January 13, 1846, ibid., 489.
56State of Indiana, An Act, to Provide for the Funded Debt of the State of Indiana, 1846 and 1847, 16-17. Hereafter, this document containing both acts will be referred to as Funded Debt Act.
in and cancelled the act was to go into effect. A further provision reserved the right to the State to take over the canal after the creditors had secured full payment from its revenues.

The bondholders met in London in May, 1846, and considered the act of the Indiana Legislature. They assented to the principle of paying half of the debt from the canal revenues, but certain changes were suggested. Accordingly, Butler came back to Indiana in December, 1846, to present the amendments to the legislature. A bill incorporating these modifications was passed on January 27, 1847. In the new act the amount to be advanced by the stockholders for the completion of the canal was reduced from $2,225,000 to $800,000. The new bill also put into force the option contained in the first law. One-half of the bonds and interest was to be paid by the revenues of the canal.

The bondholders agreed to the new bill; and, by June, 1847, had surrendered most of their bonds. On July 31, the governor transferred the canal and the lands to the trustees of the bondholders in full payment and discharge of one-half

58 Funded Debt Act, 1-18, passim.

59 General Laws of the State of Indiana passed on the Thirty-first Session... begun... in December, (1846), 3. Dr. Logan Esarey contends that the act of 1847 differed radically from the act of the previous year. In the opinion of the writer, this view is mistaken. Cf. Esarey, op. cit., I, 383; Benton, op. cit., 71-73; Charles Roll, Indiana, II, 24; Indiana Democrat, January 13, 1846; and the two laws themselves, Funded Debt Act.
the debt. The state levied a property tax of twenty-five cents per hundred dollars and a seventy-five cent poll tax to pay the other half of the debt.

The bill was apparently a fair settlement and was regarded as final. A United States Senate committee endorsed the settlement as the best that could be had under the circumstances. Indiana has been accused of repudiation, but the settlement of 1847 was not quite of that nature. Instead it was a compromise settlement in which the debtor surrendered the entire property mortgaged to the creditor and in addition agreed to pay one-half of the debt. That is not repudiation. Nevertheless, Indiana did compromise with her creditors. It is doubtful whether the state could have met all its obligations, because the currency had been disrupted by floods of treasury notes, bank scrip, and canal scrip. However, Ohio, in a similar circumstance, had met her debt through taxation. Ohio was saved from repud-

60 Brown, op. cit., 3. According to the state auditor, on Jan. 1, 1847, the state bonds outstanding amounted to $11,068,000. The interest due on these from Jan. 1, 1841 to Jan. 1, 1847 was $3,326,940, making a total principal and interest of $14,394,940. See: Funded Debt Act, 1847. The state sent J.F.D. Lanier to Europe to secure the surrender of the old bonds and to give in return the new stocks, - one-half canal and half state. He saw the governor of the Bank of England; Baron Rothschild of London, Baron James Rothschild of Paris, etc., and succeeded in taking up nearly all of the outstanding bonds. See: J. F. D. Lanier, Sketch of the Life of J. F. D. Lanier, 39.

61 Brown, op. cit., 3-4.
62 Benton, Wabash Trade Route, 72.
64 Roll, op. cit., II, 24.
isation largely through the efforts of Alfred Kelly, one of the first sponsors of canals in that state. Although the state credit was strengthened after the passage of the Butler Bills, the reputation of Indiana suffered because of the compromise. Several other states either repudiated their internal improvement debts or compromised with their creditors. The reputation of the country abroad suffered a good deal as a result. Many foreigners agreed with the opinion expressed earlier by the London Times: "America is not the country it's cracked up to be; too many speculators and gamblers, indeed, to be plain, I look upon it...as one vast swindling shop".

Both borrower and lender confidently expected in 1847 that the Wabash and Erie Canal would pay its share of the debt. There is no good reason to think that Butler and the bondholders were not satisfied with the agreement of 1847. Both thought that the canal would pay if extended to Evansville. The Act of 1847 held out to the bondholders every reasonable assurance of reimbursing themselves from the revenues of the canal. At that time the canal was regarded by intelligent persons both inside and outside the state as being a main channel of transportation for future years. It was subject only to the competition of the Wabash River. In 1846 Governor Whitcomb told one of the creditors that not only he but some of the most sagacious and intelligent engineers and busi-

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67 Reports of U.S. Senate Committees, 1847, No. 86, 3.
ness men in the country would be greatly deceived if in the
course of a few years the net income of the canal didn't rise
greatly. After the passage of the Bill, Butler wrote to his
wife saying that, "My labors have been crowned with complete
success. The public credit of Indiana is restored and her
bondholders provided for".

The compromise not forced upon the creditors. Butler
suggested it. The bondholders sought the agreement and they
definitely ratified it. The resolution of May 30, 1846,
signed by Rothschild, Baring Bros., and the other large for-
eign bondholders stated that they "concurred in the principle
laid down in the act of the legislature... for the adjustment
of the public debt of the state, by the payment of one moi-
ety by the property and tolls of the canal, the state to be
freed from responsibility on that portion of the debt...".

The State of Indiana acted in good faith in 1847. It
also expected the canal to pay. If the state had anticipa-
ted the failure of the canal, it would not have made such
careful provisions for the return of the canal after the
debt had been paid. In both the Act of 1846 and the Act of
1847, the State expressly reserved the right to resume the

68 Memorial of Stockholders, 1857, 10
69 January 17, 1846, in Prentiss, Butler, 492. Some historian-
s think that Butler would naturally maintain that he had
been successful in his job and that therefore his letter can-
ot be relied upon. However, he would hardly have any interest
in deceiving his wife and children. Butler was a man of high
moral and religious principles and his letters to his wife are
frank and convincing. See: Dunn, Indiana, I, 405.
No. 86, 11.
work when that part of the debt authorized to be paid out of the canal revenues had been paid. Ohio also expected the arrangement to work out well. In 1848, the Board of Public Works of that state called the Butler agreement "a well conceived arrangement between the State of Indiana and her creditors", 72 and prophesied an immediate increase in canal tolls. As late as 1853, a competent observer believed that the Wabash and Erie Canal would again pass into the hands of the State of Indiana because of the ultimate payment of the whole of the debt. 73

However, the expectations of those who believed in the canal failed to materialize. The railroads came in the next few years and took away most of the business of the Wabash and Erie Canal. With the dwindling away of the receipts of the canal, the creditors who had agreed to accept the canal in payment for half of their bonds, saw their security steadily shrinking. The bondholders became alarmed and sent petitions to the Legislature urging that their rights be safeguarded. In 1857, a committee presented a memorial asking for payment in full because the State had allowed railways to be constructed that would compete with the canal. As a result, the security of the bondholders had been made practically valueless. The bondholders didn't question the right or the usefulness of the Legislature's policy in granting railroad charters. Yet the State had attempted to forestall railroad

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71 Funded Debt Act, 12, 29.
74 Memorial of Stockholders, 1857, 24-25.
competition in the Wabash Valley. After the passage of the Debt Act of 1847, three annual Legislatures had refused to grant charters to proposed railroads in the Wabash Valley, because railroads there would destroy the canal revenues. However, the Legislature had not been able to withstand the strong pressure for railroads, and in a few years the Wabash Valley Road had been constructed. The bondholders admitted that the State should take advantage of improved means of transportation, but they asked redress on the part of the State for impairing their security which they had been guaranteed from harm or molestation. They argued that the State could not ignore interests which it had already created, and was therefore morally bound to make reparation.

In 1870, a case arose that involved the issue between the State and the bondholders. John W. Garrett brought suit to secure payment on forty-one of the canal bonds which had not been turned in under the terms of the agreement of 1847. The Carroll Circuit Court upheld the Garrett Bonds as valid. The governor of the State consulted his legal advisors to determine the best method of dealing with this unwelcome situation. He was told that Garrett had the legal right to payment in spite of provisions to the contrary in the act of 1847. To refuse payment because he had failed to turn

75 Annual Report of the Board of Trustees of Wabash and Erie Canal, 1860, 278.
76 Memorial of Stockholders, 1857, 24-25.
77 Documents in relation to the suit of John W. Garrett, versus The Trustees of the Wabash and Erie Canal, 5-10.
in his bonds under the conditions of the Butler Bill would have been reputation and would have violated the section of the United States Constitution forbidding a State to pass a law impairing the obligation of contracts. While the State could not have been held for the payment of these bonds because it could not be sued, Garrett could have collected from the trustees of the canal. If the State had permitted the trustees to pay the bonds, the action would have amounted to confiscation of the property of the bondholders who had accepted the Butler Bill, and if this were allowed to happen the State would be morally bound to rescind the Butler Bill and to pay all the bondholders. Pressure of public opinion would probably have forced such action. In order to avoid this possibility the matter was brought before the Legislature of 1871 which appropriated money with which to pay the Garrett bonds.

Meanwhile, those stockholders who had accepted the compromise of 1847 were still petitioning for the complete payment of their bonds. Considerable bitterness was evidenced in Indiana over this attempt of the bondholders to abrogate the Butler Bill and to secure payment of the other half of their bonds. They were called "swindlers" and "robbers".

78 Ibid., 53-56.
79 Dunn, Indiana, I, 410. The last twenty of the old canal bonds which had not been exchanged in 1847 turned up in 1877. The Legislature promptly provided for their payment and thus closed all of the state's liability under the Butler Bill.
80 Memorial of Stockholders, 1870; Ibid., 1871.
81 The Indianapolis Journal, November 22, 1870.
Most of the residents of Indiana seemed to agree with the opinion stated by Governor Morton in 1866 when he told Baron Rothschild that the revolution in transportation was "an act of God" for which the State could not be held accountable. In order to settle the question and to prevent any future Legislature from paying the bonds, a constitutional amendment was adopted in 1873, which provided that no law should ever be passed to pay the debts other than according to the settlement of 1847. In that way the question of the Indiana internal improvement bonds was closed.

82William Dudley Foulke, Life of Oliver P. Morton including his important speeches, I, 461-462.
CHAPTER V — THE CANAL IN USE

In 1847, Charles Butler, who had been selected by the bondholders as one of their representatives on the board of trustees of the Wabash Canal, was elected president of the board. The bondholders advanced $814,000 for the completion of the canal from Terre Haute to Evansville and during the year 1848 work was pushed on this extension. By 1853, the entire length of the canal had been completed and the first boat from Toledo reached Evansville.

The years 1847-1856 were the heyday of the canal. Tolls increased about eleven per cent yearly between 1846 and 1852. The tolls were lowered in 1852 but the receipts still increased. This year constituted the high-water mark of the canal. In Indiana, the tolls and water rents that year a-

2 Annual Report of the Board of Trustees of the Wabash and Erie Canal, to the General Assembly, December 26, 1856, Documentary Journal of Indiana, 277.
3 Dunn, Indiana, I, 409.
4 Documents of the General Assembly of Indiana at the Forty-first session, begun on the tenth day of January, 1861, Part 1, Indianapolis, 1861, Doc. 6. Annual Report of the Trustees of the Wabash and Erie Canal, for the year 1860, To the Legislature, 678.
mounted to $193,400. Deducting the expenses of operating the canal for that year left $126,163.00 as the net profit of the canal at its best. This would pay five per cent on an investment of approximately $2,500,000.00. The canal still promised to be a success in 1852.

The major part of the revenues received from the canal consisted of tolls. Although the rental of water power and water rights proved a failure as the source of much revenue, yet some income was received in this way. The surplus water power developed along the canal was used for manufacturing. In 1851, nine flourishing mills, eight saw mills, three paper mills, eight carding and fulling mills, two oil mills, and one iron establishment used water power from the canal. In other years the list also included elevators, and chair and organ factories. The charge for this water power was $30.00 per horsepower per year. At the dams, water was taken from the

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5The trustees' report of December, 1856, tabulates the receipts of the canal between 1846 and 1856 as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Length of Completed Canal</th>
<th>Total Revenue (Tolls and Water Rent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1846</td>
<td>138 miles</td>
<td>$102,484.00</td>
</tr>
<tr>
<td>1847</td>
<td>175</td>
<td>125,983.00</td>
</tr>
<tr>
<td>1848</td>
<td>189</td>
<td>146,149.00</td>
</tr>
<tr>
<td>1849</td>
<td>189</td>
<td>134,659.00</td>
</tr>
<tr>
<td>1850</td>
<td>226</td>
<td>157,158.00</td>
</tr>
<tr>
<td>1851</td>
<td>281</td>
<td>179,283.00</td>
</tr>
<tr>
<td>1852</td>
<td>281</td>
<td>192,400.00</td>
</tr>
<tr>
<td>1853</td>
<td>308</td>
<td>181,206.00</td>
</tr>
<tr>
<td>1854</td>
<td>308</td>
<td>180,525.00</td>
</tr>
<tr>
<td>1855</td>
<td>380</td>
<td>140,399.00</td>
</tr>
<tr>
<td>1856</td>
<td>380</td>
<td>113,423.00</td>
</tr>
</tbody>
</table>

6Esarey, Indiana, I, 389-390.
7Benton, Wabash Trade Route, 78.
8Stuart, History of the Wabash, 51.
canal in races and turned the wheels. Waste water that passed around the locks was also sometimes used. Some persons were permitted to insert a pipe in the canal and draw off an inch of water for tanneries, still houses, stock water and other purposes. $10.00 per year was paid for each privilege with the condition that the right to draw off water might be discontinued during times of drought. Complaints were voiced that many of the leasees believed that the canal was made for their own special benefit. Some of them wasted much of the water and then refused to pay the state for it.

The canal boats were usually about 100 feet long. Merchant boats were larger than the scows used on the canal and had a cabin placed at the back with a place on the cabin for the pilot. Freight boats were usually pulled by three mules hitched tandem style to a towline 250 feet long. The driver rode the rear mule. When a hard pull was encountered, as on a sand bar or when entering a lock, bags of sand were put on the lead mule to hold him to the ground. Three miles an hour was a good speed for the freight boat. In 1862, a steam canal boat ran from Lafayette to Toledo in fast time, but

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9 A man at Lafayette leased the water power to run one mill for the sum of $250 per year, and the water sufficient to run a paper mill with a 14-foot overshot wheel for $162 per year. An overshot wheel 8 feet in diameter required 625 cubic feet of water per minute to propel one pair of 4 1/2-foot stones. A twelve-foot wheel required 416 2/3 cubic feet. See: Rose, op. cit., 11-12.

10 At lock No. 16 a leasee could use the waste water for any machinery he wished at the rate of $65 per year.

11 "Report of Superintendent", Documentary Journal of Indiana, 1845, 125 et seq.

12 Stuart, History of the Wabash, 50-57.
its wash so damaged the banks that it wasn't allowed to make more than one trip.

Uniform toll rates were generally maintained throughout the entire length of the canal. The toll for a boat used chiefly for freight was 2.4 cents per mile in 1845. Rates of toll charged boat owners on a few cargoes were:

For each 1000 pounds of:                         Per mile, but not over 100 miles | Over 100 miles

<table>
<thead>
<tr>
<th>Item</th>
<th>Per mile</th>
<th>Over 100 miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>8 mills</td>
<td>5 mills</td>
</tr>
<tr>
<td>Apples</td>
<td>8 mills</td>
<td>5 mills</td>
</tr>
<tr>
<td>Coal</td>
<td>3 mills</td>
<td>1 mills</td>
</tr>
<tr>
<td>Wheat</td>
<td>11 mills</td>
<td>8 mills</td>
</tr>
<tr>
<td>Salt</td>
<td>5 mills</td>
<td>4 mills</td>
</tr>
<tr>
<td>Sugar</td>
<td>25 mills</td>
<td>12 mills</td>
</tr>
<tr>
<td>Whiskey</td>
<td>11 mills</td>
<td>8 mills</td>
</tr>
<tr>
<td>Potatoes and other vegetables</td>
<td>8 mills</td>
<td>5 mills</td>
</tr>
<tr>
<td>Iron tools</td>
<td>19 mills</td>
<td>12 mills</td>
</tr>
<tr>
<td>Domestic animals</td>
<td>11 mills</td>
<td>8 mills</td>
</tr>
<tr>
<td>Merchandise, including dry goods, groceries, cutlery, hardware, crockery, and glassware</td>
<td>30 mills</td>
<td>22 mills</td>
</tr>
</tbody>
</table>

No two boats on the Wabash and Erie Canal were permitted to have the same name. Many of the passenger boats were named for states, such as the "Ohio", "Indiana", "Kentucky", "Missouri", etc. These packet boats were painted all colors. Horses instead of mules furnished the motive power. The crew of a boat usually consisted of six men, --the Captain.

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13 Reser, op. cit., 8.
14 Benton, Wabash Trade Route, 57.
16 Board of Trustees of the Wabash and Erie Canal, Orders, Rules, and Regulations, with a Table of Distances on the Wabash and Erie Canal from State Line to Evansville, 12.
17 Dunbar, Travel in America, III, 852.
two steersmen or pilots, two drivers, and a cook. The Captain, who was constantly on duty from dawn until after the passengers went to bed, looked after the fares and the general interests and welfare of the boat and passengers. The two pilots operated the steering gear and worked in shifts of six hours each. The drivers also worked in shifts, while the cook worked all the time. The salary scale was as follows:

| Captain | $50 to $60 per month and keep |
| Steersmen | 35 to 50 per month and keep |
| Drivers | 20 per month and keep |

The packets were built along a more or less standard pattern. They had no hold or underdeck. On the deck in the bow was a small covered cabin with five or six bunks for the crew. A partition separated these quarters from the wash room and dressing room for women. In it was a looking glass, a hand basin, towels, and a comb and brush for the use of the ladies. Aft of this room was the women's cabin. It was a rule on the boats that no gentleman should go into the ladies' saloon without express invitation. Consequently, the ladies' dressing room was sacred to the female sex. Breakfast was served separately to women and children in their cabins.

A large saloon about 45 feet long occupied the middle portion of the boat. This saloon was the sitting room of all by day. Meals were served here either on solid tables or on boards laid on trestles. At night, shelves were let

18 Ibid., III, 863-864.
19 Ibid., III, 853-859.
down from the walls to form beds for the men. These bunks were in tiers of three and were about three feet apart. In a large packet, there would be about seven bunks along each side. Straw mattresses and pillows were available to sleep on. Aft of the main cabin were the kitchen, steward's room, and offices. A flat roof covered the whole of the saloons, and on it were piled the luggage.

The passengers chose their berths in the order in which they embarked. Sometimes arguments as to priority arose. Lower berths were usually preferred, although they suffered a disadvantage in that the upper ones might break and fall, thereby embarrassing the person und erneath. When traffic was heavy, the pigeonholes were all occupied and mattresses were spread on the floor and even on the tables. A room made for forty to sleep in sometimes accommodated eighty or ninety. The men didn't have room to undress; they just took off tie, coat, and shirt, and hung them on a clothesline strung across the room. This often created quite a scenic effect.

When a boat was crowded, the men's washroom would prove to be too small. Therefore, buckets would be lowered into the canal, and the men would perform their morning ablutions in the cabin. They formed in line to use the massive comb and brush which was always chained to the washroom wall. No wonder that the Toledo hotels seemed luxurious to newly

20 Beste, op. cit., II, 193.
21 Ibid., II, 219.
22 Dunbar, Travel in America, III, 853-857.
arrived canal passengers.

At first, the passenger boats stopped at farmhouses along the way to eat. When the number of packets increased and regular schedules came to be kept, meals were served on board. The food was all put on the table at one time, as was the custom in the taverns of the day. It was impossible to serve food of much variety or excellence on the boats. Since the food was usually limited in quantity, the travelers' motto was "eat fast and get more". Richard Beste, an Englishman who journeyed with his family over the canal in 1855, complained of the "wretched fare" on the canal boats. His family had to live on bad tea and coffee, heavy hot corn bread, and dry, small, much under-done beef steaks. Furthermore, if anyone dared to ask for a second helping, the captain looked "very black". Since Beste was afraid to drink the canal water alone, he bought whiskey to mix with it. A doctor advised him to give each of his children a tablespoon of brandy every night and morning, in the hope of keeping off the ague and fever of the canal.

However, the life on the canal packets was not all discomfort and hardship. The canal boat had its advantages. Although travel was slow, it was safe. There were no collisions or explosions such as occurred on river steamships. Neither was there noise of wheels, rumble of

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23 Beste, op. cit., II, 220.
24 Dunbar, Travel in America, III, 841-859.
25 Beste, op. cit., II, 195 et seq.
a stage coach, or the jolting of bad roads.

The monotony of passing through dull muddy canal water was broken by the many locks. The violent rushing of waters from above while the boat was rising in the lock created a current of air which was appreciated on hot summer days, although it was not so agreeable to feel the boat strike the wall or the floodgates suddenly with sufficient force to throw down those who were not on their guard. Canal boats were required to have fenders of rope to keep the iron parts of the boat from damaging the lock gates. Posts were set above and below the locks and the first of two similar boats within the block had the right-of-way. Passenger boats had preference over freight boats. Sometimes there were arguments and fights as to which boat had the priority. Cases have been recorded on the Ohio Canal of two boats arriving at a lock together and the crew of the leading boat dropping stones behind the gates of the lock in order to hinder the boat behind and prevent it from catching up. Similar things happened on the Wabash and Erie.

According to the rules set up in 1856, no boat was to lie in a lock or any other place where it would obstruct traffic, and no boat without special permission was to be

26 Frances Anne Kemble, "Boat, Stage, Railroad and Canal", National Expansion 1783-1845 (American History Told by Contemporaries, III, ed. by Albert Bushnell Hart), 567.
27 Beate, op. cit., II, 196.
28 Board of Trustees, Rules and Regulations, 6.
29 Stuart, History of the Wabash, 51.
30 Letter, Jacob Blukensdufer to Alfred Kelly, June 17, 1833, Canal Papers.
moored on the canal longer than four days except in a basin or in places where the canal was wide enough for three boats to pass. When boats going in opposite directions approached a narrow place in the canal, the boat going from Lake Erie was to stop at a distance from the narrow place till the other one had passed it. When two boats met they were to turn to the right; and, since there was a towpath on one side of the canal only, the boat away from the towpath was to have its horses stop so as to allow the other boat to pass over its towrope. When a boat was overtaken, it was to turn from the towpath and let the other pass. Since the boats travelled both night and day, they were required to carry conspicuous lights. All boats had to be under the charge of a captain, and every owner had to register his boat. If the boat wasn't registered no clearance would be granted, and no boat was allowed to navigate unless its master had his clearance papers. These papers and the bills of lading had to be in good order. The rules were enforced and the tolls collected by inspectors, collectors, and superintendents who had offices at the main towns along the canal. When a boat arrived, an officer went aboard it to inspect the clearance papers, the passenger lists, and to check the bills of lading against the cargo.

Travelling on the canal was fully as idyllic and picturesque as that on the river steamers. On sunny days,
passengers strolled on the top deck of the boat or sat under the sun umbrellas and enjoyed the scenery. Leisurely hours were spent in pleasant company. People smoked, played games, discoursed, and argued politics. Acquaintances were soon made, friendships sprang up, and courtships began. When the boat was delayed, congenial young couples would step off and stroll on ahead picking flowers. A picturesque sight was presented by the swaggering driver with slouch hat and top boots, lashing his horses to a trot, in order to keep up the scheduled speed of five or six miles per hour. On approaching a town, there was a great blowing of horns. Since all the news came by packet boat, a large percentage of the population of the town would come out to greet it. When the boat docked, everybody on board went ashore to mingle with the townspeople and to ask and answer innumerable questions until the boat horn sounded the signal for leaving. Moonlight summer nights were especially delightful on the canal boats. The older people enjoyed the moonlight on the wooded country from the upper deck of the gliding packet. Singing, laughter, and young peoples' voices floated up to them from the cabins where perhaps a dance was in progress, music being supplied by a fiddle, or an accordion, or a combination of the two.

At first, the passenger boats on the canal didn't run

32 Beste, op. cit., II, 211.
33 Cottman, loc. cit., 126.
34 "Internal Improvements in Indiana", Ind. Mag. Hist., III, 105-106 (Sept., 1907).
35 Dunbar, Travel in America, III, 859-860.
on any fixed schedules. They started only when a profitable number of passengers was assured. It was not until 1844 that the first regular packet line between Toledo and Lafayette commenced operating. At this time fifty-six hours were required for the 242 miles between these towns. Packets were generally pulled by three horses and made a scheduled time in relays. Fresh teams were kept at posts along the canal where the changes were made. Great competition was displayed in the passenger trade, and a fine outfit, good accommodations, and rapid transit drew the best of the traffic. However, most immigrants and others of small resources rode on line boats which were slower and offered less in the way of trappings and accommodations, but were cheaper than the packets.

In 1845, the superintendent of the canal in Indiana announced the tolls as four mills per mile on each passenger twelve years of age or older. Every such passenger was allowed fifty pounds of baggage or household furniture toll free. Each boat used chiefly for passengers was charged five cents per mile. The owners of the boats fixed their own charges. On the packets lines, a passenger could buy a ticket from Lafayette to Fort Wayne for $3.75 and from Fort Wayne to Toledo for $3.25. By 1848, the trip from New York City to Lafayette, Indiana, could be made by the

36 Ibid., 841.
37 Benton, Wabash Trade Route, 110.
38 Stuart, History of the Wabash, 50.
39 Dunbar, Travel in America, III, 861.
40 Rates of Toll on the Wabash and Erie Canal in Indiana...
41 Dunbar, Travel in America, III, 482.
Erie Canal, a steamboat on Lake Erie, and the Wabash Canal in fifteen days at a cost of $8.25. By using a railroad, the steamboat, and the Wabash Canal, the trip could be shortened to seven and one-half days but it would cost $12.50. However, exasperating delays sometimes upset these schedules. A guidebook of 1837 offered these final suggestions to travelers going to the West: "Emigrants and travelers will find it to their interest always to be a little skeptical relative to statements of stage, steam, and canal-boat agents, to make some allowances in their calculations for delays, difficulties, and expenses, and, above all to feel perfectly patient and in good humor with themselves, the officers, company, and the world, even if they do not move quite as rapid and fare quite as well as they desire."

Another type of boat on the canal was the family boat, which served both as a home and a travelling conveyance. This type of houseboat was arranged inside to suit the taste of the family. Some of these boats were the homes of those employed on the canal. Others conveyed their families on long trips along the canal.

To be captain of a canal boat was the ambition of many boys of the 40's and 50's. One typical young man became a driver on the Wabash and Erie at the age of sixteen with the

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42 Ibid., III, 1120.
43 Peck, op. cit., 360-361.
44 Dunbar, Travel in America, 864.
determination to acquire his own boat. He saved his money, and by the time he reached twenty, he had bought an old boat and some mules. With the earnings from these, he bought a new boat a few years later. This canal-boat captain lived on the boat with his crew. Wild game was abundant along the canal and always provided fresh meat. Once a sudden cold snap in the fall froze his boat in solid, and he was forced to leave it in the midst of a wilderness until spring with its load of 2,200 bushels of wheat. The steersman and his wife made the cabin cozy and stayed on the boat all winter.

A romantic picturesqueness and comradeship existed in the canal and stagecoach days that was not found in equal degree in the railroad age that followed. Cogs, levers, and differentials did not have the same appeal to the imagination as did eyes, muscles, and arms. The canal was a placid, easy stream. Its traffic ran quietly, softly, and smoothly. Navigation was easy. Men and mules took their jobs as monotonous, but usually mild burdens. There was no hurrying. Railroads might fill rush orders; but not the canals.

The canal bred its own characters. The boat hands were considered a rough set. The driver and his mules often had a hard lot. They had to endure hot sun and icy rain, storms, mud, mosquitoes, and flies. When hard work and the monotony

45 Toledo Blade, January 16, 1935.
46 Hulbert, op. cit., 134.
47 Carl Sandburg, The American Songbag, 171.
48 Hockett, loc. cit., 301.
49 Stuart, History of the Wabash, 50-51.
of the life bore down on the crew, the canal folk did what so
many sailors and longshoremen have always done. They took to
drink and to song, and to hopes for an end of the voyage.
Their true feelings were voiced in tunes which they sang to
while away the dreary hours along the towpath. These folk-
songs of the canal people show better than anything else the
kind of life they led and their reactions to it. On the Erie,
drivers chanted:

"I've got a mule, her name is Sal,
Fifteen miles on the Erie Canal.
She's a good old worker and a good old pal,
Fifteen miles on the Erie Canal.
We've hauled some barges in our day,
Filled with lumber, coal and hay,
And we know every inch of the way
From Albany to Buffalo.

Low-bridge, everybody down!
Low-bridge, for we're passing through town,
And you'll always know your neighbor,
You'll always know your pal,
If you've ever navigated on the Erie Canal."

Again:

"Drop a tear for Big Foot Sal,
The best dam coak on the Erie Canal."

A canal pilot told how to navigate during a storm in
his story of the "Raging Canawl":

"Now, says Fred, let me tell you how to manage wind
and weather,
In a storm, hug to the towpath, and then lay feather
to feather;
And when the weather is bad, and the wind blows a gale,
Just jump ashore, knock down a horse—that's taking in
a sail

50 Sandburg, op. cit., 173.
51 Ibid., 171
And if you wish to see both sides of the canal --
And it be so foggy that you cannot see the track,
Just call the driver aboard and hitch a lantern
on his back." 52

A boatman told of his troubles in the following manner:

"We were forty miles from Albany,
Forget it I never shall,
What a terrible storm we had one night
On the Erie Canal.

Oh the Erie she was a-rising
The gin was getting low
And I scarcely think
We'll get a drink
Till we get to Buffalo.
Till we get to Buffalo.

We were loaded down with barley,
We were chuck up full of rye;
And the captain he looked down at me
With his goddam wicked eye.
Oh the girls are in the Police Gazette,
The crew are all in jail;
I'm the only living sea cook's son
That's left to tell the tale." 53

52 Ibid., 179.
53 Ibid., 180.
CHAPTER VI — THE DECLINE OF THE CANAL

Traffic on the Wabash and Erie Canal reached its high water mark in 1852. It is significant to note that this was before the entire canal was opened. After 1852, the canal traffic steadily declined although the entire line was open for business. The reason for this decline lies for the most part in railroad competition. This competition was strikingly shown in the fact that during five of the most prosperous years of the canal, well over one-half of the total pounds of imports cleared at Fort Wayne consisted of "bar and R. R. iron". The canal was helping to build its rival and successor.

Between 1850 and 1860, more than $34,000,000 was invested in Indiana railroads, and a total of 2,163 miles were completed. In 1852, the legislature passed a general law for the incorporation of railroads. No limitation was made on railroads competing with the canal. The Michigan Southern Railroad to the north of the canal was already offering competition in passenger service by 1853. Ground was broken for the Wabash

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1 The decline in business during these years can be seen in the following figures of the total amount of tonnage arriving and clearing from Toledo:

1852 - 322,385 tons.
1853 - 327,893 "
1854 - 335,565 "
1855 - 208,296 "
1858 - 143,459 "
1859 - 107,937 "

2 Bondholders' Memorial of 1857, 322.
3 W. N. Logan (and others), Handbook of Indiana Geology, 41.
Valley Railroad in July of the same year. This road was to parallel the route of the canal from Toledo westward, and many of the same Irishmen who helped build the canal also worked on the construction of the Wabash Railroad. The railroad reached Lafayette and Logansport in 1856. This road and one that was being built north from Evansville resulted in a pronounced decrease in the canal traffic.

In Ohio, aso, railroad competition developed. The Mad River and Lake Erie Railroad was completed just three years after the Miami Canal was completed to Junction. Thus, the Wabash and Erie early in its life had competition from a rival route of trade between Lake Erie and the Ohio River. Several new macadamized roads in the Miami Valley also drew business from the Ohio portion of the Wabash and Erie Canal.

The Wabash Valley Railroad was naturally the chief competitor of the canal in Ohio. This road paralleled the Maumee and Wabash Rivers and drew an enormous amount of trade away from the canal boats. By 1855, lumber was one of the few remaining commodities carried in large quantities on the waterway. In 1856 the railroad was advertising the fact that it was open for business as far west as Attica, Indiana.

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4*Logansport Journal*, July 30, 1853.
5Whicker, *op. cit.*, 85.
6Dunbar, *Travel in America*, III, 842.
7"Report of Board of Public Works* Ohio Executive Documents, 1848, 144.
8Ibid., 144-145.
9*The Defiance Democrat*, March 3, 1855. See: page for an example of trade drawn from the canal by the railroad.
10*Daily Toledo Blade*, October 27, 1856.
Although the canal offered cheaper rates and pleasanter travel, yet, finally, it bowed to the competition of the railroad. The railroad enjoyed certain advantages over the canal. In the first place, the railroad was cheaper to construct. The cost of the railroad was less even if the country was flat. In level country, the road-bed of the railroad was comparatively inexpensive. The cost of railway construction increased in overcoming elevation, it is true, but it increased much less proportionally than the cost of canal construction under the same circumstances. In hilly country, the cost of constructing canals was almost prohibitive.

When a canal was built and in operation, it was usually necessary for freight to be transshipped and its bulk to be broken. A broken rail, or wagon, and water route was almost unavoidable. In the case of agricultural products, feeders to the collecting centers had to be numerous and of unusual length. The railroads had the advantage here because the cost of a ramifying system of feeder canals large enough to avoid transshipment to the main line was altogether prohibitive, even in a level country. In the case of railroads, transshipment in any part of the country was unnecessary. Side tracks could be cheaply extended to every village or factory and goods could be loaded or unloaded at the door of the factory.

The railroad had another advantage over the canal be-

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11Harold G. Moulton, Waterways Versus Railways, 47-49.
12Ibid., 58-59.
cause of the speed. If canal boats travelled faster than five
or six miles an hour, the waves eroded the banks causing
slides and other damage. The Michigan Southern Railroad was
already drawing passengers from the canal in 1853. Shippers
also preferred the faster transportation. Sometimes grain was
required to be delivered for contracts sooner than could be
done by canal. Grain in bad condition was more liable to suf-
fer damage in the long canal voyage.

A canal in a country such as Indiana which is cold part
of the year must remain idle several months each winter while
a railroad can run the year around. The Wabash and Erie
Canal was usually closed from November 1 to March 1. The
opening of the canal was sometimes delayed until even later
than this. Canal service was also frequently interrupted
during the summer months by breaks in the canal banks, floods,
drought, and other things. The railroad, on the other hand,
was not much affected by cold, snow, frost, slack water, or
other seasonal changes. This does not mean to imply that
railway service was always dependable. The early railroads

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\[13\text{Logansport Journal, July 30, 1853; see: ibid., August}

\[14\text{6, 1853, also. Reser, op. cit., 7.} \]
also suffered sometimes from the weather. However, the business man could be surer of getting his shipment through promptly on the railroad than on the canal. Furthermore, shippers didn't readily change from one mode of transport to another. If they had to ship by railroad part of the year, they were likely to use the railroad all the time rather than to change back and forth from one agent to another.

Public interest in the Wabash and Erie Canal rapidly waned after the railroads began to be built. People lost confidence in the canal's utility. The advantages of the railroad caused merchants to hold up their shipments for weeks before the arrival of the railroad track at Lafayette. A Logansport paper of 1856 summarized the advantages which the coming railroad would bring to that city. According to the editor, it would "...render us entirely independent of the canal, and enable our merchants and produce men to ship produce and import goods at all seasons of the year...It will

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15 In February, 1856, the superintendent of an eastern railroad reported that, "...something like a dozen locomotives were brought in disabled in one week --some with pumps frozen up and bursted; some with the side rods broken; some cylinders bursted, but the greatest difficulty was in the broken tires of wheels-- These are of the best wrought iron, over two inches thick, but they were not sufficient to withstand the difference between the cast iron centres and the wrought iron bands upon a frozen road, where all elasticity was congealed to rocky solidity. The breakage of axles, wheels, rails, and in fact all the stationary or moving iron, has required a most unyielding vigilance, and an extraordinary expense." — Logansport Journal, February 23, 1856.

16 Moulton, op. cit., 51-52.

17 Benton, Wabash Trade Route, 80.
shorten by about twelve hours the time of the passenger, (to Philadelphia) and the period usually occupied in receiving freights, indefinitely. It gives the choice of a number of lines and substitutes certainty for the very irregular means heretofore possessed of eastern communication." When the Wabash Valley Railroad was opened to Logansport on March 20, 1856, the business men and citizens welcomed it with a big all-day celebration. There were bands, speeches, a parade, gay parties, and a banquet and ball which lasted until the wee hours of the morning. In his speech that day, the mayor said, "...the Logansport merchant may now be in Toledo in 9 hours and in New York and Philadelphia in 36 or 8! What a wonderful triumph for enterprise, skill, and of the age by which time and space (to say nothing of travelers) are so nearly annihilated... We have been obliged to retain our grain and pork, of which our country affords so large a surplus, until spring or summer, to the great loss of our agricultural and commercial interests...(now) at all seasons we will be able to ship our heavy surplus, and have reasonable return, without depending on our ancient friend, whose unfortunate proclivities to freeze and dry up, and break, have made it so unreliable and expensive to our people."

The coming of the railroad was opposed by all the

18 Logansport Journal, February 23, 1856.
19 Logansport Journal, March 22, 1856.
vested interests,—tavern keepers, and turnpike, stagecoach, steamboat, and canal interests. In New York State, the canal interests secured the passage of a law in 1833 prohibiting railroads in the state from carrying freight. This law was later modified, but not until 1851 were all restrictions on the railroad from Buffalo to Albany removed.

In Indiana, the Wabash and Erie Canal was left to make out as well as it could in the face of railroad competition. The canal tried to meet this competition. In 1852, the trustees reduced tolls in order to increase the popularity of the canal and to discourage the construction of railroads. When the railroad did come, one item of income after another was lost by the canal. Passenger traffic and package goods were quickly lost to the trains. The railroads cut rates on competitive freight until only bulk goods such as grain and flour were left to the canal. Even then, railroad transportation was often preferred for bulk goods, for, unless the grain was perfectly dry, it was liable to heat when shipped over long distances in large masses such as canal boats carried. Grain in poor condition suffered less injury when shipped by railroad than if shipped by canal; then too, the railroad could carry bulk goods at cost or at a loss in order to crush canal competition and the canal

\[\text{Carman, op. cit., 129.}\]
\[\text{Benton, Wabash Trade Route, 76-79.}\]
\[\text{Moulton, op. cit., 89.}\]
couldn't meet this rate-cutting because these bulky goods constituted its sole traffic. During one season, the Wabash and Erie Railroad loaded 920,000 bushels of grain at canal points just between Toledo and the Indiana state line. If shipped by canal, this grain would have made 460 boat loads and contributed $10,000 to tolls for the year.

Thus, by 1854, in spite of the reduction of tolls, goods like corn, iron, wheat, and lumber articles that paid light tolls constituted the canal's main traffic, while the better paying exports went to the railroads. In their report of 1856, the trustees almost plaintively asked the General Assembly for aid in solving their problems. They said that too "...the result of the year's business shows plainly that the canal cannot successfully compete with the railways, for that class of traffic, which, from its greater value in small bulk and weight, can afford to pay the greater charge for transportation. The business of the Canal for the last three years, as exhibited in the annual reports would seem to be conclusive on this point...". The trustees' estimate for the three years of 1856, 57, and 58 showed that the annual loss of tolls to railroads on the canal above Terre Haute

23Moulton, op. cit., 62.
24"Report of Board of Public Works", Ohio Executive Documents, 1858, 113.
25George S. Cottman, "Internal Improvements in Indiana", Ind. Mag. Hist., III, 10(Sept., 1907). Hereafter, this work will be cited as Cottman, "Internal Improvements".
26Report of Trustees, Indiana, 1856, 276.
amounted to $150,000.00. The superintendent of the canal also complained of unfair competitive methods used by the railroads. According to his statement, the railroads often rented the warehouses of merchants doing business with the canal and then either closed them or moved them to the railroad.

The Board of Public Works in Ohio was also complaining of the unfair competition of railroads. It charged the railroads with making special contracts, frequent changes in rates, and charging less for freight from points on a canal than for freight going the same distance but from points away from the canals. In 1860 the president of the Board of Public Works told an audience that the canal boat owners "meet at every point active and ever watchful railroad freight agents with full control of the freight charge and ready to contract either for separate lots, for the season's business or even for years in advance at such rates as they find necessary to receive the business. The railroads have actually taken possession of the grain market at points where canals and railways compete, and require their agents to purchase grain for the storage of which they use the empty

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27 Report of Trustees, 1860, Indiana, 277-78. The receipts in tolls at Fort Wayne declined as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Toll Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850</td>
<td>$57,511.00</td>
</tr>
<tr>
<td>1851</td>
<td>$66,357.00</td>
</tr>
<tr>
<td>1852</td>
<td>$61,231.00</td>
</tr>
<tr>
<td>1853</td>
<td>$65,923.00</td>
</tr>
<tr>
<td>1854</td>
<td>$56,935.00</td>
</tr>
<tr>
<td>1855</td>
<td>$40,834.00</td>
</tr>
<tr>
<td>1856</td>
<td>$27,747.00</td>
</tr>
<tr>
<td>1857</td>
<td>$15,964.00</td>
</tr>
<tr>
<td>1858</td>
<td>$15,191.00</td>
</tr>
</tbody>
</table>


cars on the sidetracks. The canals at these points receive only the surplus which the railroads cannot carry". The canal business lacked the energy, economy, the close and vigilant management which was a feature of the railway industry. Canal interests failed to develop a systematic organization of their business to keep pace with the developing industrial demands.

One of the worst features of the railroad competition lay in the fact that practically no return cargoes could be found for canal boats going to Toledo. Imports caught by the canal dwindled away and boats were forced to return westward empty. The merchandise going west was all carried by train. Therefore, the whole expense of a two-way voyage on the canal was borne by the outgoing cargo. In order to pay expenses, the canal could not cut toll rates too much.

These difficulties which the canal encountered caused confidence in its future to wane. Money ceased to be invested in boat building and investments in canal property were withdrawn. Finally, in 1860, the Wabash Railroad began a drastic system of rate cutting and rebates and soon attracted practically all of the remaining trade from the northern part of the canal.

The southern portion of the Wabash and Erie never had a chance to be a success. In the first place, the cost of its

30 William F. Gephart, Transportation and Industrial Development in the Middle West, 124.
31 Ibid., 126.
33 Ibid., 278.
34 Esarey, Indiana, I, 392.
maintenance was too high. This part of the canal ran at an angle to the natural drainage of the region and many expensive cuts, fills, and locks had to be constructed. The expense of upkeep proved to be almost prohibitive on these, especially on the deep cut south of Petersburg. Furthermore, floods in the White River frequently caused the canal to be closed for long periods. The entire line was rendered comparatively useless for three years because of the destruction of the Birch Creek Reservoir.

In the second place, the Evansville and Crawfordsville Railroad was in construction before the canal below Terre Haute could be tested. This early railroad competition discouraged business men from engaging in the business of boating south of Terre Haute. Very few boats were built and the highest number used on this section never exceeded thirty-three. Practically no passengers were ever carried on this part of the canal. The Evansville and Crawfordsville Railroad was opened to Vincennes by the beginning of 1854, and by the close of that year it had secured most of the passengers that might have traveled by canal. The Chief Engineer said that the middle division between Terre Haute and Newberry must receive help or be abandoned. Navigation was finally discontinued in 1860 on all of the canal south of Terre Haute.

35 Report of Trustees, (Indiana), 1856, 277-278.
36 Ibid., 1860, 278.
37 See page
38 Esarey, Indiana, I, 392.
Thus, by the time the Wabash and Erie Canal was completed and in operation, it was obsolete. It was impossible for both canal and railroad to be paying works despite the proverbial productiveness of the Wabash country. One of them had to go, and it was the canal that surrendered because of its competitive weakness. The construction of the railroads helped the farmer by securing for him the lowest possible transportation cost through competition, but, at the same time, capital previously invested in the canal was sacrificed. If the Wabash and Erie had been completed a few decades before the railroads came, it doubtless would have paid well.

By 1859, the revenue of the canal had declined so greatly that the canal board ordered most of its officers and employees to quit. The few remaining were put on reduced salaries. In 1860, the trustees reported that they had no more money with which to maintain the canal. The Wabash and Erie was in a critical situation.

That part of the canal below Terre Haute had been abandoned in 1860. By 1870, the canal above Terre Haute, which had been the best paying portion, was in a very poor condition and consisted of little more than stagnant pools of water. By

39 The other western canals were also ruined by railroad competition.
40 Report of Trustees, (Indiana), 1856, 287.
41 Logan, op. cit., 36.
42 Esarey, Indiana, I, 392.
44 Esarey, Indiana, I, 392. In 1874 the aqueduct over Deer Creek gave way as a boat was passing over. The negro driver and his mules were drowned.
1874, the traffic was purely local. Occasional schoos were in use up until 1875 or 1876. The last boat to clear from Covington to Lafayette started on November 13, 1875.

Since there was no hope of realizing any more revenue from the canal, the bondholders brought suit in Federal Court and the canal was sold on February 12, 1876. The property and lands were divided up and disposed of to speculators. That portion of the canal in Wabash County brought $505.00. The entire length of the canal in Indiana sold for $96,260.00.

During the period of the bondholders' operation of the canal, they had paid $436,545.00 for repairs alone and had received only $274,019.00 in tolls. The State and the bondholders together had expended $8,259,244.00 on the canal. In addition there had been federal land grants amounting to 1,457,366 acres. The total receipts from tolls, rents, and land sales amounted to $5,477,238.00. The canal had proven to be a tremendous failure.

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45Whicker, op. cit., 80-81.
46Benton, Wabash Trade Route, 87.
47Reser, op. cit., 14.
48Esarey, Indiana, I, 392.
49This was twice the size of the federal donation of land for schools in Indiana. See: ibid., I, 393.
50Ibid., I, 392-393.
51Benton gives the following statement (page 88):

Expenditures for construction to July 1, 1847-$4,062,573.
Expenditures for construction to July 1, 1874-2,375,236.
Paid in interest ----------------------------- 605,370.
Ordinary repair ----------------------------- 631,900.
Extraordinary repairs ---------------------- 211,411.
Salaries and office expenses --------------- 373,652.
Total ---------------------------------- $8,259,244.

Receipts:
From lands and revenues to 1847 -------------- $1,575,106.
From lands and revenues, 1847 to 1874 ------ 3,904,132.
Total ------------------------ $5,477,238.
After the sale, the canal in Indiana rapidly fell into complete ruin. Little attempt was made to maintain or repair it. However, the Ohio section of the canal was still in good condition. Since the abandonment of the canal in Indiana destroyed its value in Ohio as far as Junction and greatly decreased the usefulness of the remainder, Ohio complained bitterly about Indiana's failure to maintain her part of the canal. She regarded the action as a breach of the compact made by Indiana with Ohio and with the United States Government. However, Indiana considered the Wabash and Erie Canal dead.

In 1861, all the Ohio canals had been leased to a private company which paid the state an annual rental. The company was to keep the canals repaired and in good condition. However, the leasees found the arrangement to be a poor bargain and in 1877 refused to pay the arrears on the rent. The canals were again taken over by the state. However, by this time the Wabash and Erie was in pretty bad condition and it was abandoned for everything but local use.

52 After 1874, power consumers of Lafayette had to keep up their section of the canal and the feeder dams. This was an expensive process, so much so that, by 1888, every industry in Lafayette that was supplied with water by the canal had ceased operations. See: Reser, op. cit., 13.

53 Ohio, Joint Resolution Relative to the Construction and Maintenance of the Wabash and Erie Canal, within the States of Indiana and Ohio, February 21, 1871.

54 In 1880, Congress authorized the Secretary of War to make a survey and an estimate of the cost and practicability of making a ship canal out of the old Wabash and Erie. Again, in 1929, a survey was made by the national government to determine the feasibility of making a barge canal out of the old canal, but nothing came of either proposal. By 1934, large sections of the canal had been filled in and even the route once followed by the old water way was difficult to locate. See: Roll, op. cit., II, 395. However, much of the Ohio section of the canal is still intact.

CHAPTER VII — INFLUENCE OF THE CANAL

The political influence of the Wabash and Erie Canal as a separate entity was confined largely to Indiana since this particular canal comprised only a small part of Ohio's total canal system. However, the Wabash and Erie was the chief canal in Indiana and it exerted a profound influence on the political history of that state. This experiment by Indiana in state ownership might have turned out to be an inspiring success, but as it happened, the venture of the state into the transportation field proved to be a miserable financial failure. After the episode with state agents in 1836 and the year following, people never divorced the canal's management from politics. Since the experience with the canal, Indiana has built no railroads or in any other way competed with private initiative in commercial matters. Private individuals and corporations shouldered the burden of building the railways. Public opinion turned to the opposite extreme. Internal improvements were very unpopular; and, in the constitutional convention of 1850, there was much agitation for action to make a repetition of the events of 1836 impossible even if the people approved of such a step by a popular vote. The new Indiana State Constitution of 1850 prohibited, with only a few specific exceptions, the passage of any law authorizing indebtedness. Article 5.

1Esarey, Indiana, I, 717.
2Indiana Debates, 1850-51, 676-77.
Section 10 of the Indiana Constitution of 1850 provides that: "No law shall authorize any debt to be contracted on behalf of the state, except in the following cases: To meet casual deficits in the revenue; to pay the interest on the state debt; to repel invasion, suppress insurrection, or if hostilities be threatened, provide for the public defence."  

However, not all of the influence of the canal was negative in character. On the contrary, the canal was a strong positive force in the development of Indiana and Ohio. A great amount of commerce, was borne on the Wabash and Erie. During the canal's heyday, the region which it traversed was regarded as the best grain belt in the Northwest, and an immense amount of corn and wheat was exported to the East by way of the canal. As early as 1844, it was common at Lafayette for four or five hundred wagons to unload grain at the canal in a single day. At Wabash, it was not unusual for wagons loaded with grain to line both sides of the road to the river waiting their turn to unload at the elevators. There were nine of these elevators at Wabash; but sometimes, when boats were late, they could not take care of all the grain awaiting shipment on the canal. Farmers were forced to dump their corn and wheat by the side of the road until it could be taken into the elevators. Toledo became the chief port of export for corn in the United States. Ind-

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4Benton, Wabash Trade Route, 103.
5Ibid., 101.
6Hackett, loc. cit., 302.
ian corn shipped from that city rose from insignificance to millions of bushels in a few years after the opening of the canal. In 1844, 5,262 bushels of corn were shipped out of Toledo from the Maumee and Wabash Valleys. By 1851, the amount had increased to 2,775,149 bushels. As a result of the great increase in corn, flour, lard, and bacon shipped via the canal, the export business at Toledo exceeded that on the Ohio Canal as early as 1846.

Wheat, flour, and corn constituted a large proportion of the traffic on the Wabash and Erie, but this was by no means all of the trade. In 1852, 88,000 barrels of salt were transported on the canal. Since the canal traversed a heavily forested territory, it naturally became the highway for lumber and firewood. The manufacture and shipping of lumber was conducted along the canal on an enormous scale. In addition to lumber, grain, and salt, articles carried by the canal included stone, lime, pork, whiskey, apples, staves, cider, iron, tools, and all kinds of merchandise and "store goods". This enumeration does not include the thousands of passengers who yearly used the canal. The total amount of

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7 Benton, Wabash Trade Route, 99.
9 Esarey, Indiana, I, 369.
10 Some of the items carried on the canal during the relatively poor season of 1845 were: (see Doc. Journal, Report of Superintendent, 1845):

<table>
<thead>
<tr>
<th>Articles cleared at:</th>
<th>Fort Wayne</th>
<th>Logansport</th>
<th>Lafayette</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchandise (in pounds)</td>
<td>5,883,964.</td>
<td>286,412.</td>
<td>343,169.</td>
</tr>
<tr>
<td>Lumber and shingles</td>
<td>1,259,113.</td>
<td>272,261.</td>
<td>373,473.</td>
</tr>
<tr>
<td>Lard and pork (bbls.)</td>
<td>136.</td>
<td>816.</td>
<td>11,413.</td>
</tr>
<tr>
<td>Wheat by the bushel</td>
<td>18,668.</td>
<td>102,994.</td>
<td>422,098.</td>
</tr>
<tr>
<td>Miles traveled by passengers</td>
<td>257,778.</td>
<td>23,248.</td>
<td>289,274.</td>
</tr>
</tbody>
</table>
the canal trade reached tremendous proportions. Even in 1855, after the decline in traffic had set in, 308,667 tons of articles were transported by the Wabash and Erie; and, during the season of open water, the canal carried a continuous stream of traffic. One observer saw a boat sink in a lock at Antwerp, Ohio. During the 24 hours which were required to raise the craft he said that the number of boats waiting to go up or down the canal became so great and they were packed in so closely that it was possible to walk two miles by merely stepping from one boat to another.

The influence of the Wabash and Erie can be seen in the rapid increase of traffic on Lake Erie after the opening of the canal. This canal was one of the main factors that caused the lake trade to jump from $65,000,000 in 1841 to over $300,000, 000 in 1851. In the latter year, Buffalo was employing a fleet of one hundred steamers and six hundred sailing vessels. Her docks were crowded and her basins thronged with ships bringing the produce of the West. The influence of the western improvements--chief among them, the Wabash and Erie Canal--was also strikingly shown in a twelve-fold increase between 1835 and 1849 in grain shipped to the East over the Erie

12 The Toledo Blade, January 16, 1935.
14 Kirkland, op. cit., 289.
Canal. By 1851, only eleven per cent of the whole quantity of wheat and flour reaching New York City came from New York State. A large part of the remainder came from the area served by the Wabash and Erie Canal.

This great increase in traffic over the New York canal was an indication that the trade of the West was being diverted by the western canals from New Orleans to New York. Before the construction of these canals, the only practicable way for Indiana and other western farmers to dispose of their surplus was to send it downstream to New Orleans by way of the Ohio and Mississippi Rivers. Imports were also received by way of New Orleans. Merchandise brought directly from the East had to bear almost prohibitive hauling charges across the Alleghenies. Even in 1835, after the Erie Canal had been opened for freight, the cheapest route from New York to Southern Indiana was not by way of the New York Canal but by way of New Orleans.


Flugel and Faulkner, op. cit., 207.

Benton, Wabash Trade Route, 108-109. The National Road was an important artery for immigrants, but it was too costly for freight and couldn't compete with the Missis. R. in that way.

Benton, Wabash Trade Route, 105.
After the completion of the Wabash and Erie Canal through the middle and northern parts of Indiana, nearly all the trade of these regions, as well as the commerce of the Maumee Valley, was diverted to the northward. Above Terre Haute, the trade went upstream. This reversal of trade occurred because of certain advantages which the northern route, comprised of the canals and Lake Erie, held over the southern route. The northern route was shorter, and, consequently, freight rates were lower than on the southern route. The steamboats on the Mississippi were cheaper to operate than northern canal boats, but they had to pay heavy insurance rates which made up for that saving. In the next place, the facilities for receiving and forwarding grain were better at Toledo than at the Ohio River ports. Consequently, shippers received better service if they used the northern route than if they shipped their grain by way of New Orleans. The fact that prices paid for farm products were greater at Toledo than at New Orleans also helped cause trade to flow northward. New York was a far better market than New Orleans. Furthermore, there was less danger of grain being injured by climate if shipped on the northern route than if sent to the East by way of New Orleans. The warehouses in New Orleans had an especially bad reputation in this respect.

19 Ibid., 105-106.
20 Callender, op. cit., 338-339.
21 Logan, op. cit., 39.
As a result of these advantages which the northern route held, the trade of Indiana and the other states of the West slipped more and more away from New Orleans. In 1845, it was estimated that one-half of the produce of the Mississippi Valley was shipped to the seaboard by way of New Orleans and one-half by way of canals and trains. In 1846, for the first time, receipts of flour and wheat at Buffalo exceeded those at New Orleans. During the decade of the '40's, the Hudson was receiving over three-fifths of the western produce. New Orleans was receiving less western grain and becoming more and more of a cotton city. As one southerner (Professor DeBow) said, "...the bold, vigorous and sustained effort of the North has succeeded in reversing the very law of nature's God, rolled back the tide of the Mississippi and its ten thousand tributary streams, until their mouths, practically and commercially, are more at New York than at New Orleans."

Thus, the West was establishing commercial connections with the East, though it was not neglecting them altogether with New Orleans. Steamboats increased on western waters despite the canals, and New Orleans remained a worthy rival of New York. The Mississippi seemed to have as much busi-

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23 Switzler, Report on the Commerce of the Mississippi, loc. cit., 211-212. Between 1841 and 1851 there was received at seaboard:
by the Mississippi ------- $857,658,164.00.
by the Hudson ---------- $484,924,174.00.
But only $282,642,620.00 of that received by the Mississippi was western produce.

24 Flugel and Faulkner, op. cit., 385.
hess as it could handle. There was plenty of commerce for New Orleans from other regions than those served by the canals. Along the Ohio River as far as Wheeling, goods continued to be sent via river. Competition between the two routes was scarcely felt at Cincinnati until after 1850. However, the trade of the upper Wabash Valley had been turned to New York and the East.

The canal also gave an opportunity for people living in the Maumee and upper Wabash region to import southern goods. In 1847, the Ohio Board of Public Works reported that a large proportion of sugar, molasses, and other groceries used in northern Indiana and along the Lake Shore was being drawn from the south by the canal.

A new wave of immigration to the West started about 1832. The Wabash and Erie Canal promptly became the most popular highway for the immigrants coming to the Maumee region and the northern part of Indiana. Many German and Irish settlers came in by way of the canal. These foreigners, unlike the interstate immigrants, didn't have teams and wagons but had to take the means of transportation at hand. Consequently, a large number of foreign-born immigrants came in by the canal and settled along its banks. During

25 Switzler, Report on Commerce of the Mississippi, loc. cit., 203. Benton disagrees with this. He says that much of the trade drawn to the Ohio River was diverted northward by way of the Ohio canals at Cincinnati and Portsmouth. See: Benton, Wabash Trade Route, 108.

26 Logan, op. cit., 39.

27 Benton, Wabash Trade Route, 97.
the decade of the thirties, the Fort Wayne land office was thronged with settlers attracted by the opening of the canal. Immigrants came in an uninterrupted stream. The Wabash country filled up fast. Many new counties were being organized in 1836, and the population of all counties bordering on the canal increased rapidly. By 1840, the canal region contained 270,000 people, while before the coming of the canal there had been almost none. Between 1840 and 1853 the amount of taxable real property in twelve northwestern Ohio counties increased nearly three hundred per cent as a result of the influx of settlers drawn here to a large degree because of the canal. The influence of the canal can be grafically shown in Indiana by a comparison of the county of Huntington which bordered on the canal and Noble county which had far better natural advantages but was not on the canal. During the decade of the forties, the population of Noble county increased by one hundred and ninety per cent, while in the canal county of Huntington the increase was three hundred and ninety-nine per cent or over twice as great.

Nearly all of these new immigrants to the northern part of Indiana came from Ohio, Pennsylvania, New York, and New England, while the settlers in the southern part of Indiana were mainly from Kentucky and Virginia. The residents of

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28 Esarey, Indiana, I, 344.
29 Indiana Democrat, (Indianapolis), February 25, 1836.
30 Logan, op. cit., 39.
32 Benton, Wabash Trade Route, 95.
the upper Wabash Valley looked to the East for a market, and merchants went by packet to eastern cities for their goods, while merchants from the southern part of the state still shipped their goods to New Orleans. Thus, the financial, commercial, and sentimental ties of the northern part of the state were with the East and the North, while those of the southern part of the state were with the South. The Yankee northern part of the state fought the Democrats of the Ohio Valley at every turn. There had been a good deal of early pro-slavery sentiment in Indiana; but, by 1860, the region tributary to the Erie Canal and New York—the region that had been built up by the Wabash Canal—was sufficiently strong to bind Indiana to the North and to the Union. If it had not been for this influence exerted by the Wabash and Erie Canal, the business and economic connections with the South would have made Indiana at least a "border state" in 1861.

The canal created or gave the first substantial measure of growth to Huntington, Wabash, Peru, Logansport, Attica, Covington, Delphi, Lafayette, and other towns. In 1830, Crawfordsville was larger than any other town in western Indiana, but Lafayette on the canal soon surpassed it in size. The growth of older cities such as Toledo, Fort Wayne, Terre Haute, and Evansville was greatly stimu-

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33 Cottman, "Internal Improvements", 106.
34 Benton, Wabash Trade Route, 108.
35 See "Attica War", page
36 Cox, op. cit., 59.
lated by the canal. Some of the towns which sprang into prominence, such as Pittsburgh and Lagro, were to fade into insignificance after the canal era had passed, but in their day they were thriving centers of trade, sometimes at Pittsburgh there would be as many as twelve boats loading and unloading at one time. Everywhere, mills, foundaries, docks, warehouses, and elevators arose. Business thrived. A government official said in 1853 that the valley of the Wabash River "...is celebrated for its fertility and is filled with large and flourishing cities, which owe their existence and traffic to the canal, and are the depots of trade for the surrounding country."

The Wabash and Erie and other western canals encouraged and helped to make possible an economic specialization within the nation. As a result of the improved means of transportation, the East and the West could specialize in the production of those products for which each section was best fitted. Manufacturing came to be more and more centralized in the East, while the West specialized in the production of grains and foodstuffs. The canals enabled the West to import eastern manufactured goods and the East to import western agricultural products. Large-scale agriculture in the East became impossible because of the competition offered by the more fertile western lands, and the Northwest became the

37 Logan, op. cit., 39
38 Stuart, History of the Wabash, 52.
granary of the nation.

The Wabash and Erie Canal played an important role in this change. It raised the price of farm products in the region which it served and reduced the cost of imports. By this rise in the prices of farm products and fall in the cost of manufactured goods, the canal enabled the farmers of northern Indiana to specialize in the production of grains and other products for export. In 1840, the farmers near Delphi hauled wheat to Michigan City where they sold it for forty-five cents a bushel and bought salt at nine dollars a barrel. When the canal came, wheat brought one dollar a bushel and salt cost only four dollars a barrel.

Before the coming of the canal, agriculture was conducted on a small scale, production being limited to home consumption. After the canal came, large farms tended to replace small clearings and much wheat and corn was raised. Lands formerly not worth cultivating were not cleared, drained, and farmed. The increase in the size of farms and the ready sale of grain at higher prices brought about the introduction of improved agricultural machinery. This, in turn, made larger crops possible.

The canal brought into the Wabash and Maumee valleys a new life and a new energy, both economic and social. Before the coming of the canal much of the business had been done by barter, but with the increased volume of trade and the

40 Kirkland, op. cit., 266.
41 Benton, Wabash Trade Route, 109.
42 Ibid., 99.
business relations with the East brought by the canal, barter gave way to the use of money. Their increased wealth and the facilities offered by the canal enable people to travel more. The entire standard of living was raised. An editorial writer commenting on this change said that, "Farm produce brings eastern prices, and enables producers to indulge in, and pay for, the luxuries and necessaries of life."

In conclusion, it may be said that the Wabash and Erie Canal, both in itself and through the extensive economic, social, and political changes which it inaugurated, exerted a far-reaching influence on the history of Indiana and Ohio.

The canal was not successful as a financial or money-making proposition, and it was soon rendered obsolete by a revolution in transportation. However, it seems probable that the canal was fully justified by the development which it brought about in the region which it traversed.

43Gottman, "Internal Improvements", 105.
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