

Canals and Railroads Open Illinois

Theme: Human Interaction with the Environment

Habit of Mind: Understand the Relationship between Geography and History as a Matrix of Time and Place, and as Context for Events

Focus: Illinois, with its rolling prairies and rich soil, had the potential to become an agricultural leader. The early French explorers recognized the need for a canal that would connect the Great Lakes to the Illinois and Mississippi Rivers, but it was not until early in the nineteenth century, after Illinois had become a state, that entrepreneurs actively promoted a transportation system for Illinois. The state government responded in 1837 with the Internal Improvement Act, which appropriated \$10,000,000 for a network of roads, canals, and railroads. The Illinois and Michigan (I&M) Canal was the first important link in the state’s inland waterway system, connecting the Chicago region to LaSalle and the Illinois River by the late 1840s. The I&M Canal soon faced intense competition from railroads, which were more expensive for shipping freight, but much faster. By 1850, about 110 miles of railroad track were in place in Illinois, largely in the northern region of the state. The boom in railroad construction began in earnest when the state government granted public lands to the Illinois Central Railroad to use or to sell to raise capital for the construction of a railroad from Galena to Cairo with a branch extending to Chicago. The construction was completed in five years. By the time of the Civil War, 2,867 miles of track crisscrossed the state.

As the canals and railroads expanded, however, residents filed lawsuits stemming from allegations of damage to the environment and broken promises regarding safety. The railroads retained several lawyers, including Abraham Lincoln, to represent their interests. The prairie lawyer was also engaged in legal issues surrounding the Illinois and Michigan Canal Company. In this lesson students will analyze documents to evaluate the impact of new modes of transportation in Illinois, which simultaneously increased prosperity and caused environmental problems affecting the lives of individual citizens.

Note: The legal document, “Report of the Commissioners,” includes geographic terms related to specific places and to relative locations that may challenge less experienced students. Teachers may wish to edit this document to help students successfully complete the activities in part 2 of section C, “You be the Judge.”

Objectives: The students will be able to:

1. Analyze a poem.
2. Analyze a historical legal document.
3. Compare and contrast the impact of two forms of transportation on the environment.

Illinois Learning Standards

16.E.5a Analyze positive and negative aspects of human effects on the environment in the United States including damming rivers, fencing prairies and building cities.

15.A.5b Analyze the impact of economic growth.

17.D. Understand the historical significance of geography.

Procedures

1. Discovery

- A. A Prominent Poet Praises Progress: “I like to see it lap the miles,” by Emily Dickinson (1830-1886). Students read the poem and analyze each stanza. The comparison of the train to a horse can be used to frame the discussion of technological progress.
- B. Illinois Requires A Better Transportation Network. Create a classroom chart, “A Better Transportation Network for Illinois, 1820-1850.” The chart will identify the *need* for a network of canals and railroads, *problems to overcome* in finance and construction, and predict the *environmental impact* of a canal and railroad system in Illinois during this period. (See attached model).
 - 1) The chart might include in its “Need” section the movement of goods and people within the state and spread of information between places.
 - 2) The “Problems to Overcome” section might include capital formation, management and labor issues, and property rights issues.
 - 3) The “Predictions” section might include the potential for increased pollution and damage to the physical features of the land and waterways.
 - 4) Teaching Opportunity: Refer to the series of maps and charts contained in the following lessons in the *Lincoln Legal Papers Curriculum: Moving People through the Prairie State, 1820-1860* and *Illinois Agriculture and the Marketplace, 1830-1860*. These maps and charts should stimulate student thinking as they complete the chart. In addition, call attention to the population figures below that might affect the court’s decisions in litigation over expanded transportation in Illinois:
 - a) Peru, Illinois in 1842 was nearly wiped out by a cholera epidemic that left less than 200 people alive. In 1850, however, the population stood at approximately 3,000 people.
 - b) LaSalle County had 9,340 people in 1840; 17,815 in 1850; and 48,332 in 1860.
 - c) Meanwhile, Chicago’s population exploded. In 1820, there were about 200 people in the area. In 1840, the figure stood at 4,479. In 1845, there were 12,088 people and in 1850, there were 29,968 people in Chicago. In 1855, the population stood at 80,023; and in 1860, some 109,263 people lived in the burgeoning “Metropolis of the Mid-Continent.”
- C. Ask students to look at the map of the route of the Illinois and Michigan Canal. Which towns and cities are located along the route of the canal? Note: The I&M Canal route has been designated as a National Historic Corridor by the United States Department of the Interior. Ask students why this designation is significant.

- 2. Going to Court.** Lincoln Legal Documents Describe the Conflict between Modernization and the Local Environment.
- A.** Review case summary. Distribute copies of Document 6-A: Declaration from *Allen v. Illinois Central Railroad* and the student guide, *Analyzing a Lincoln Legal Document*. In *Allen v. Illinois Central Railroad* (1855), the railroad retained Abraham Lincoln. As the railroad's attorney he argued that the railroad had an agreement with Allen for a right of way through his land. Yet after completing two months of work, Allen refused to allow the Illinois Central to proceed further on the construction of the road. The railroad disregarded his requests and continued with their work. The jury found the railroad guilty and awarded Allen \$762.50 in damages.
 - B.** Distribute excerpts from Document 6-B: Report of Commissioners (1853). The Commissioners were appointed to take evidence for the state government relative to certain claims laid against the Illinois and Michigan Canal. Several individuals alleged that the Canal Company's modification to Fox River, which was a feeder waterway for the canal, caused environmental damage and created financial hardships for local landowners. Abraham Lincoln served as one of the Commissioners.
- 3. You be the Judge.** Use *Analyzing a Lincoln Legal Document* to review the information provided in Document 6-A: Declaration. Review the testimony in Document 6-B: Report of Commissioners.
- A.** Questions the judge might ask: Mr. Allen filed several cases against the railroad during the 1850s. Does this fact make his claims of broken promises and broken oral contracts less meaningful?
 - 1) Why did the railroad think it had the right to take soil from Mr. Allen's property without his permission? How might Mr. Lincoln have answered this question?
 - 2) Allen claims that the damage to his property caused him to lose the benefit and enjoyment of the land, and that the actions of the railroad caused a great deal of damage as well. Why was the enjoyment of his property so important to him?
 - 3) The railroad obviously had a need to take a great volume of soil from Allen's property, probably to construct the roadbed or for some other construction or engineering purpose. What would have happened to the railroad's plans to build its network of tracks in Illinois if Mr. Allen, and other citizens like him, completely refused to cooperate with the railroad?
 - 4) Ordinary individuals are not different from powerful corporations when it comes to enforcing the Rule of Law. Mr. Allen asked for \$5,000 but was awarded \$762.50. Nevertheless, how does this case bear out that fundamental concept, which lies at the heart of the spirit of the law in the United States?
 - B.** Questions the judge might ask. Read the testimony that the citizens of LaSalle presented to the Commissioners in support of their neighbor, Mr. R. D. Lyman.
 - 1) Why do references to maps seem to play such an important part in the testimony?
 - 2) Lyman and his witnesses testified about the value of his property: it has in fact increased, but he claimed it could be worth more if only he were able to exploit the coal resources under the waters of the feeder waterway. Do you think the

Canal Company should pay Lyman some money for his alleged loss of potential revenue? No one knew the full extent of the coal resources in this area until the feeder was constructed. In other words, why should the Canal Company have to pay damages for what Lyman did not know he had until his land was disturbed?

- 3) Should the company pay him money for damages to his flooded property, which he claimed was now worthless?
- 4) Were Lyman's claims about the high value of the coal be a way for him to demand a higher amount in damages to his farmland on account of the flooding?
- 5) How would your court rule? Was Lyman simply a victim of progress with no redress for his grievance? The Canal Company pointed out that the town of Ottawa had profited from the canal, and that all the property in its hinterland had also increased in value, including Lyman's. At what point does the economic benefit of the larger community take precedence over the loss of gain of one individual?

4. **Conclusion and Assessment.** Write to Learn. Return to the chart created at the beginning of the lesson. Ask students to make a judgment in a persuasive essay whether the long-term benefits of the canals and railroads outweighed the environmental and quality of life problems associated with the building of the railroads and waterways. See the rubric for assessing students' performance in knowledge, reasoning, and communication.

Additional Activities

Illinois History Day Project. Using a railroad map, topographical maps of Illinois, printed documents and images, students should conduct research into the number and types of natural areas (for example, wetlands, rivers, farmland, hills, and forests) which were disturbed during the building of the canals and railroads in their region of the state.

Conduct a Classroom Debate. The resolution to be debated might be: "The need for increased industrial development in the local community is more important than the preservation of the natural environment and the property rights of individual citizens who are dislocated by expansion."

The Poet, Mr. Allen, and the Illinois Central Railroad. Ask students to write an expository essay responding to these questions. How would Mr. Allen and the officials of the Illinois Central Railroad react to the poem by Emily Dickinson? What do you think they would have said to the poet?

Sources and Materials

Emily Dickinson, *I like to see it lap the miles* (1891)

A Better Transportation Network for Illinois, 1820-1850

Analyzing a Lincoln Legal Document

Document 6-A: Declaration, *Allen v. Illinois Central Railroad* (1855)

Document 6-B: *Report of Commissioners*, excerpt from *Canal Claims* (1853)

Maps

6.1: Location & Course of the Illinois & Michigan Canal

6.2: Fall River and southern part of Rutland townships (1870)

6.3: Ottawa township (1876)

Glossary of Terms

I like to see it lap the miles

(1891)

Emily Dickinson

**I like to see it lap the miles,
And lick the valleys up,
And stop to feed itself at tanks;
And then, prodigious, step**

**Around a pile of mountains,
And, supercilious, peer
In shanties by the side of roads;
And then a quarry pare**

**To fit its sides, and crawl between,
Complaining all the while
In horrid, hooting stanza;
Then chase itself down hill**

**And neigh like Boanerges;
Then, punctual as a star,
Stop - docile and omnipotent -
At its own stable door.**

Emily Dickinson, *Poems*, 2d series, compiled by Mabel Loomis Todd and T. W. Higginson, (Boston: Roberts Brothers, 1891), 39.

A Better Transportation Network for Illinois, 1820-1850

Canals

Railroads

Need

Problems to Overcome

Finance

Construction

Predictions

Analyzing a Lincoln Legal Document

Case Brief

Complete Case Name _____

Date of Document: _____

Court(s):

- Justice of the Peace Court
- County Circuit Court
- U.S. District Court
- U.S. Circuit Court
- U.S. Supreme Court
- Illinois Supreme Court

Term of Court _____

Division (check one):

- Chancery
- Common Law
- Criminal
- Probate
- Appellate

Action (check one):

- Debt
- Divorce
- Ejectment
- Injunction
- Trespass
- Trespass on the Case

- Other _____

Open the File: Interrogate the Document

Parties to the case. Who is going to court?

Plaintiff(s) _____

Defendant(s): _____

Legal Counsel:

attorney(s) for the plaintiff(s) _____

attorney(s) for the defendant(s) _____

Who else was in court or is mentioned in the document? _____

Synopsis: Summarize the Contents of the Document

Type of document

What is the plaintiff's allegation?

What is the defendant's position?

What, if any, other information is provided in this legal document?

Why is this issue in the hands of attorneys and other officers of the law?

Lincoln and the Rule of Law.

Why would Lincoln agree to serve as an attorney in this case?

What does this case reveal about Lincoln's law practice?

If you could ask Lincoln or his partner a question about this case, what would it be?

How might you determine the outcome of this case?

Synthesis: Illinois History and the Rule of Law

What evidence in the document helps you understand more about the major historical trends that shaped the history of Illinois?

What evidence in the document helps you understand the relationship between *where* something happened and *what* happened?

Does this document include any "quotable-quotes," or examples of a regional speech or period expressions?

What evidence in the document helps you understand the values, beliefs, and ideals of people who lived in Illinois when this document was written?

What evidence in the document helps you understand how conflict among individuals and/or businesses would be resolved through the rule of law?

What evidence in the document helps you understand the patterns of daily life and the concerns of the common people in Illinois?

Document 6-A (Transcription)

Allen v. Illinois Central Railroad

Case Summary: Wilson Allen claimed that the Illinois Central Railroad excavated fifty thousand cubic feet of earth and soil from his property for their own use in building the railroad and left unfilled mines and pits. Allen sued the railroad in a Common Law action and requested \$5,000 in damages. The railroad retained Abraham Lincoln and Clifton H. Moore and pleaded not guilty. The jury found the railroad guilty and awarded \$762.50 in damages. Lincoln received \$150 for his legal services in this case and fourteen other cases for the Illinois Central Railroad.

Declaration

State of Illinois
County of DeWitt

Of the May term A.D. 1854 of the DeWitt County Circuit
Court

The Illinois Central Rail Road Company (a corporation created under and by virtue of the laws of the state of Illinois) William L. Perce Samuel Keith Silas Clark & Willard P Naramore Defendants in this suit [were] attached to answer Wilson Allen the Plaintiff in this suit of a plea of trespass and thereupon the said Plaintiff by J. B. M^cKinly his attorney complains

For that the said Defendant on the first day of May in the year of our Lord one thousand eight hundred and fifty three and on divers ^{^other^} days & times between that day and the day of the commencement of this suit with force and arms broke and entered the Plaintiffs close towit at the County of DeWitt and State of Illinois and bounded being the South West quarter of the North west quarter of section N^o fourteen in Township N^o Nineteen North of Range two east of the 3^d Principal Meridian and there and then with Shovels Pickaxes plows scrapers and other iron instruments dug up turned and subverted the earth & soil towit twenty acres of earth and soil of the said close of the said plaintiff and then and there dug made and sunk divers mines pits shafts and holes of great depth and breadth towit of the depth of twelve feet and the breadth of fifty rods and of the length of one hundred rods in the said close of the said Plaintiff there and from and out of the said holes and pits so dug as aforesaid got out and took divers large quantities of earth & soil of great value towit of [:-:-] ^{^five^} thousand dollars and the same so [raised] dug and got from and out of the said pits & holes they the said defendants then & there seized took and carried away and converted to their use towit of the county of state aforesaid

And for that the said defendants on the day and year first aforesaid and on divers [other] days and times between that day and the ^{^day^} of the commencement of this suit with force and arms broke and entered ~~the~~ ^{^[two]} certain [^] closes of the said plaintiff towit at the County of DeWitt aforesaid and bounded towit the one abutting on the east on a certain close in the possession of the Illinois Central Railroad Company - on the west on a certain close called the Illinois Central Railroad - on the north on a certain close in the Possession of John S. Barger - on the South [on] a certain close in the Possession of Wilson Allen the other said close abutting on the East on a certain close called the Illinois Central Railroad - on the west on a certain close in the Possession of Wilson Allen on the north on a certain close in the Possession of John S. Barger on the south on a certain close in the Possession of Wilson Allen and then and there with shovels pick-axes plows scrapers & other iron instruments dug

up turned and subverted the earth & soil towit ~~twenty~~ ^{ten} acres ^{on} the one certain c[lose] aforesaid & ten acres on the other close aforesaid ^{of} earth and soil of of the said close ~~of~~ of the said Plaintiff and others and there made and sunk divers ~~towit~~ mines pits shafts & holes towit four mines four pits four shafts and ten holes in and upon each of said closes of great depth breadth length ~~width~~ towit each of the depth of twelve feet and of the breadth of fifty rods and of the length of fifty rods in each of the said closes of the said plaintiff [then] [^][and] [^][from] and out of the said mines pits shafts & holes so dug made and sunk as aforesaid [^]raised [^]got & took divers large quantities of earth & soil of great value towit of the value of \$5000⁰⁰/₁₀₀ and the same so raised dug got from and out of the said mines pits shafts and holes they the said defendants then & there seized took and carried away and converted to their the defendants own use towit on the said several days & times aforesaid at the state & county aforesaid &c

And also for that the said defendants on the same day and year first aforesaid with force and arms &c towit at the county & state aforesaid seized took & carried away certain goods chattels & effects towit fifty thousand cubic yards of earth and said ~~there & then found and being~~ of great value towit of the value of \$ of lawful money of the united states there then found and and being and converted and disposed of the same to their own use and other wrongs to the said Plaintiff then and there did to the great damage of the said Plaintiff and against the peace & dignity of the People of the State of Illinois ~~wherefore the said Plaintiff with that he is injured and hath sustained damages to the amount of \$5000⁰⁰/₁₀₀ and therefore he brings suit &c~~

Swett & McKinly
Plff's atty

And for that the said defendant on the day and year first aforesaid and on divers other days and times between that day and the day of the commencement of this suit with force arms broke and entered the close of the said plaintiff towit at the County DeWitt aforesaid and bounded towit The South West quarter of the North west quarter of section numbered fourteen and ~~fifteen acres off of the east side of the south east quarter of the north east quarter of section number fifteen~~ and three acres off of the north end of the north west quarter of the south west quarter of section fourteen all in township number nineteen north in Range number two east and known as the Wilson Allen lower mill property and in the aforesaid county and state and then and there with shovels pick axes plows scrapers and other iron instruments dug up turned and subverted the [ea]rth and soil towit ten acres of earth and soil of the said close of the said Plaintiff and then & there made and sunk divers mines pits shafts & holes to wit four mines four pits four shafts and ten holes in and upon the said close of great depth breadth length towit each of the debth of ten feet of the breadth of forty rods and of the length of fifty rods in and upon said close of the said Plaintiff there and from and out of the said mines pits shafts & holes so dug made & sunk as aforesaid raised got & took [divers] large quantities of earth and soil of great value towi[t] of the value of 5000\$ and the same so raised dug got from and out of the said mines pits shafts & holes they the said defendants then & there seized took & carried away and converted to their the defendants own use to wit at the County of Dewitt aforesaid and [. . .] the days & dates aforesaid and other wrongs to the said plaintiffs then & there did to the great Damage of the plaintiff and against the peace & dignity of the people of the state &c whereof the said Plaintiff saith he is damaged to the amount of 5000\$ & therefore brings suit &c

[Leonard] Swett & [James B.] M^cKinl[e]y
attys for Plff

Document 6-B (Excerpt Transcription)

Summary: On June 22, 1852, the Illinois General Assembly appointed Hugh T. Dickey of Chicago, Abraham Lincoln of Springfield, and Noah Johnston of Jefferson County as commissioners to take evidence in relation to claims against the state for damages for right of way and injury to property resulting from the construction of the Illinois and Michigan Canal. When Dickey declined to take action, Lincoln and Johnston, after placing notices in the Chicago, Joliet, and Ottawa papers of their investigation, met in Ottawa, Illinois, to take evidence and testimony from witnesses to the complaints. Roswell D. Lyman presented his claim before the legislature and later appeared before the two commissioners. His evidence and the cross-examination by state's counsel, appeared in a report from the commissioners submitted to Governor Augustus C. French for his report to the 18th General Assembly in 1853.

Report of Commissioners

CANAL CLAIMS.

COMMUNICATION FROM THE GOVERNOR,

Transmitting the Report of the Commissioners appointed to investigate Canal Claims; also, the Attorneys' reports on same.

Joseph H. Wagner, being duly sworn, says he is acquainted with sec. 6, T. 33 N., R. 4 E., that the plat marked "R. D. Lyman, No. 1," fairly represents said section, that witness is county surveyor, and made the plat from actual survey and the original field notes of the United States survey. Notes at the bottom of the plat are correct, there are coal beds between the river and the feeder on the north eastern subdivision of the section; extent of these beds from S.W. to N.E. about forty rods, and from the river to and under the feeder; so much of the coal as lies under the feeder, and also so much as lies near adjacent to the feeder, cannot be worked without injury to the feeder, and the breakage of the feeder is some detriment to the working of the remainder; the strata of coal is about two feet thick; all the subdivisions of said section which are marked "Lyman" are inclosed and the greater part cultivated as farm land; Lyman's residence is on said land at the point where the word "house" is written on the plat. To travel from Lyman's residence to the coal bed he must go a mile and a half further than he would if the feeder were not there, unless he should ford the feeder, which is impracticable, and the same distance to reach that part of his farm lying south of the feeder; the residence of Lyman a mile and a quarter from Ottawa, and the coal land one and three quarters. From 8 to 12, south of where the east and west line passing through the middle of said section crosses said feeder, there is a waste weir or place for surplus water to escape. The water runs a distance of about twelve rods over another coal bed into the river. This last mentioned coal bed has a stratum of about two feet, it is opened about four rods one way and thirty or forty feet the other, doubtless extends further, but how far is not known. So far, witness thinks, the waste water aforesaid has facilitated the raising of coal from the bed, but thinks it will ultimately be an injury to it. Thinks Lyman's farm is, at this time, worth from twenty to twenty-five dollars per acre.

Cross-Examination.—In the winter of 1842-3 thinks the land was worth eight dollars per acre. The town of Ottawa was laid out on state canal land, part on a donation by the state to the county, and part as a state's addition to the town; the proximity of Lyman's land to Ottawa has something to do with its enhanced value. The construction of the canal has enhanced the value of all lands on the line, and Lyman's with the rest, and witness thinks if Lyman's land had been his, would have preferred having the canal, without compensation, to not having it at all.

Re-examined.—Lyman's land derives no particular advantage from the canal, but only the common advantage with other lands on the line. The feeder, witness considers a decided disadvantage to Lyman's farm, on the whole, though it gives a small advantage of bringing stock water more convenient to him. Witness thinks the lands lying along the Illinois river are as much benefited by the canal as those immediately on the line. The feeder, witness thinks, indispensably necessary to the canal, but that it might have been constructed at less expense, just as beneficial for the canal and less injurious to Lyman's land.

George H. Norris, by Mr. Edwards, for the state, says he has and is prosecuting a claim against the state, for damage done by the canal on one track and by a feeder on another.

By Lyman's counsel.—Lyman's land is not cut by the main canal, it is a half mile distant, and Fox river is between at the nearest point. Witness thinks Lyman's farm is now worth twenty-five dollars per acre; Lyman has occupied and possessed said farm for near fifteen years. Witness knew Downey Buchanan, who testified for Lyman on his original application, and knows that he is now dead, and with good opportunities for knowing, he does not believe he had any interest in this or any similar claim. Witness thinks that Lyman's coal beds, taken separately from the other land, is worth four or five hundred dollars per acre. Feeder is not navigable with canal boats freighted; tried it several times and failed.

State of Illinois

La Salle county, ss.

Henry J. Reed, being first duly sworn, says that he is well acquainted with the farm of R. D. Lyman on the west fraction of the north-east quarter of sec. six (6,) town. 33, range 4, east of the third principal meridian; that he has been acquainted with said land about eighteen years; that Roswell D. Lyman has been in possession of the same since about 1839, claiming title; that said land is an improved and cultivated farm; that there is on said tract of land a valuable coal bed on the north-east corner of the fraction. Said feeder runs across said coal bed for forty rods or more; said coal bed is of a good quality and the strata of coal about two feet thick. I think the coal on that land is worth two cents a bushel. The coal bed cannot be worked nearer than almost twelve feet of the base of the feeder bank. To get to this coal bed or to that part of his land which is across the feeder from his house, Lyman has to travel at least one mile and a half further than he would have to do if the feeder was not there. On that piece of land which is marked "Cashman and Lyman," on the plat, there is a bank on each side of the feeder 75 feet wide, making 150 feet in width, exclusive of the bed of the feeder, which is rendered utterly useless by reason of the deposit of earth and sand excavated from the feeder. On the same land, on the north side of the feeder, about three acres are overflowed by water setting back from the feeder. On the south side of the feeder about six acres of land is rendered useless, by reason of the drainage from the feeder. On the same land is a coal bed of a good quality, about two feet thick, over which the feeder runs. I believe there is coal under the bed of the feeder in its whole length on section six aforesaid. . . .

Joseph H. Wagner, being duly sworn, deposes and says, that he is acquainted with the situation of the W. fraction of S. W. $\frac{1}{4}$ sec. 32, T. 34, R. 4 E. That the feeder of the Illinois and Michigan canal runs through said tract from the north to the south end, rendering it almost valueless for farming purposes; that there is a bed of coal to the extent of several acres on said land, part of which is covered by said feeder and its banks, that the coal land is materially injured in value by the leakage from the feeder rendering it more difficult and expensive excavating the coal; the only way to haul coal from that portion of the land lying east of the feeder is by hauling it either on the bank of the feeder, or across Fox river, which in the winter season is difficult and sometimes dangerous; there is no bridge by which a team can cross from one portion of the land to the other, without traveling at least two and a half miles. Aside from the damage done the land for farming purposes, in my opinion the value of the land lessens by the construction of the feeder, one thousand dollars.

Cross-Examination.—This land was worth in 1842, from eight to ten dollars; was not in the country before 1842. The lands up the feeder its whole length, four miles, excepting sections one and two, which are now worth from twenty-five to thirty dollars per acre in 1842 suppose they were worth from six to ten dollars per acre, though was not so well acquainted then; sections one and two are now valuable; section one is canal land and section two is not. Witness is county surveyor.

Re-examination.—If the feeder was not there the coal bed would be worth a cent and a half per square foot as it is; that which is accessible is not worth more than half as much, to say nothing of that which is covered by the feeder and banks. That part of the land west of the feeder is, for farming purposes, worth twenty-five dollars per acre; that between the feeder and river is, for farming purposes, worthless; the land between the feeder and river is some wetter in consequence of the feeder, but would still be good meadow land if it were accessible; as it is not, without a bridge, and it would not be so convenient even with a bridge, the land between the feeder and river, including the coal bed, is worth ten dollars per acre. The cost of a bridge to reach the land between the feeder and river, would be more than the value of the land. The feeder is not navigable for ordinary canal boats, but witness has seen it navigated by small flat boats drawing ten inches water, in transporting flour and bran from the Dayton mills. . . .

R. E. Goodell states on oath, that he has resided in the town of Ottawa eighteen years last past, during which time the Fox river feeder of the Illinois and Michigan canal was constructed; that since the construction of said feeder he has been well acquainted with the value of real estate in the state's addition to Ottawa and the adjoining lands; that in his opinion the state's addition to said town has increased as much in value, since the construction of said feeder, as any part of section number two, adjoining the same. The town of Ottawa is situated on section eleven, and most of the part I refer to, to wit, the state's addition to Ottawa, is nearer the court house than any part of section two. The increased value of section eleven has been caused, in my opinion, by the nearer location it has to the business part of the town, and the completion of the canal. I think that the valuation of section two in a body has been increased by the completion of the canal. At the time the canal was completed, I think I would rather have the land in section two with the canal than without it. The land which is used on the W. $\frac{1}{2}$ S.E. $\frac{1}{4}$ for the feeder, I consider worth at least six hundred dollars per acre. The land overflowed by the feeder and the canal I think in a body valueless. The injury done by the overflowing the eighty acres with the feeder I consider not less than eight thousand dollars. By the construction of the canal without the feeder, unless the state built a culvert so as to let the water pass off, there would have been nearly the same amount of land overflowed; this would have been in consequence of the construction of the canal. The plat herewith filed, marked "Plat of lands near Ottawa," is a correct map. . . .

Glossary Of Terms

abutting: to touch on one end or side; border.

acre: a unit of land measure equal to 43,560 square feet or 4,047 square meters.

Boanerges: a powerful and blunt orator or speaker.

bushel: a unit of dry measure equal to 32 quarts or 30.28 liters.

chattel: an item of movable property.

close: a portion of land enclosed by a fence, by walls, or by ownership of adjoining properties. In law, an interest in land entitling the owner to compensation for damages.

commencement: the start of an action.

corporation: a group of persons authorized by law to act as a single person and legally endowed with various rights and duties.

cross examination: the questioning of a witness who has already testified in order to check or discredit the witness's testimony, knowledge, or credibility.

culvert: a drain crossing under a road or embankment.

declaration: a written statement by a plaintiff in a common law action that sets forth the facts and the legal basis for his or her case.

defendant: the person against whom someone brings a legal action. In criminal cases, the defendant is the person accused of a crime. In civil cases, the defendant is the person being sued. In some civil cases, the defendant is called the respondent.

depose: the act of swearing as to the accuracy of a statement in written testimony.

detriment: damage, harm.

divers: various, several.

docile: easily led or managed.

effects: movable property; goods or personal belongings.

feeder: a waterway that supplies, replenishes, or connects one body of water with another.

license: a right or permission granted by a government or business to engage in some activity or to do some act.

meridian: a line from which degrees of longitude are measured on a map or globe.

omnipotent: all powerful.

plaintiff: the person who initiates a lawsuit. In some civil cases, the plaintiff is called the petitioner.

plat: a plan, map, or chart of a piece of land with present or proposed features.

plea: a defendant's answer to a plaintiff's claim in a lawsuit.

prodigious: extraordinary.

proximity: very near, closeness.

rod: a unit of linear measurement equal to 16.5 feet or 5.03 meters.

section: a unit of land equal to one square mile in area; one of the 36 subdivisions of a township.

strata/stratum: a bed or layer of rock whose make-up is similar throughout.

trespass: a legal action to obtain compensation for a wrong committed with force by the defendant against the plaintiff; to enter wrongfully or without consent upon the property of another.

valuation: appraisal of property; an item's estimated or determined market value.

waste weir: a dam in a stream or river to raise the water level or to divert its flow.

with force and arms: with violence, against the property or person of another.