

## **The Straightening of the North English River**

**A History of Drainage District No. 9**

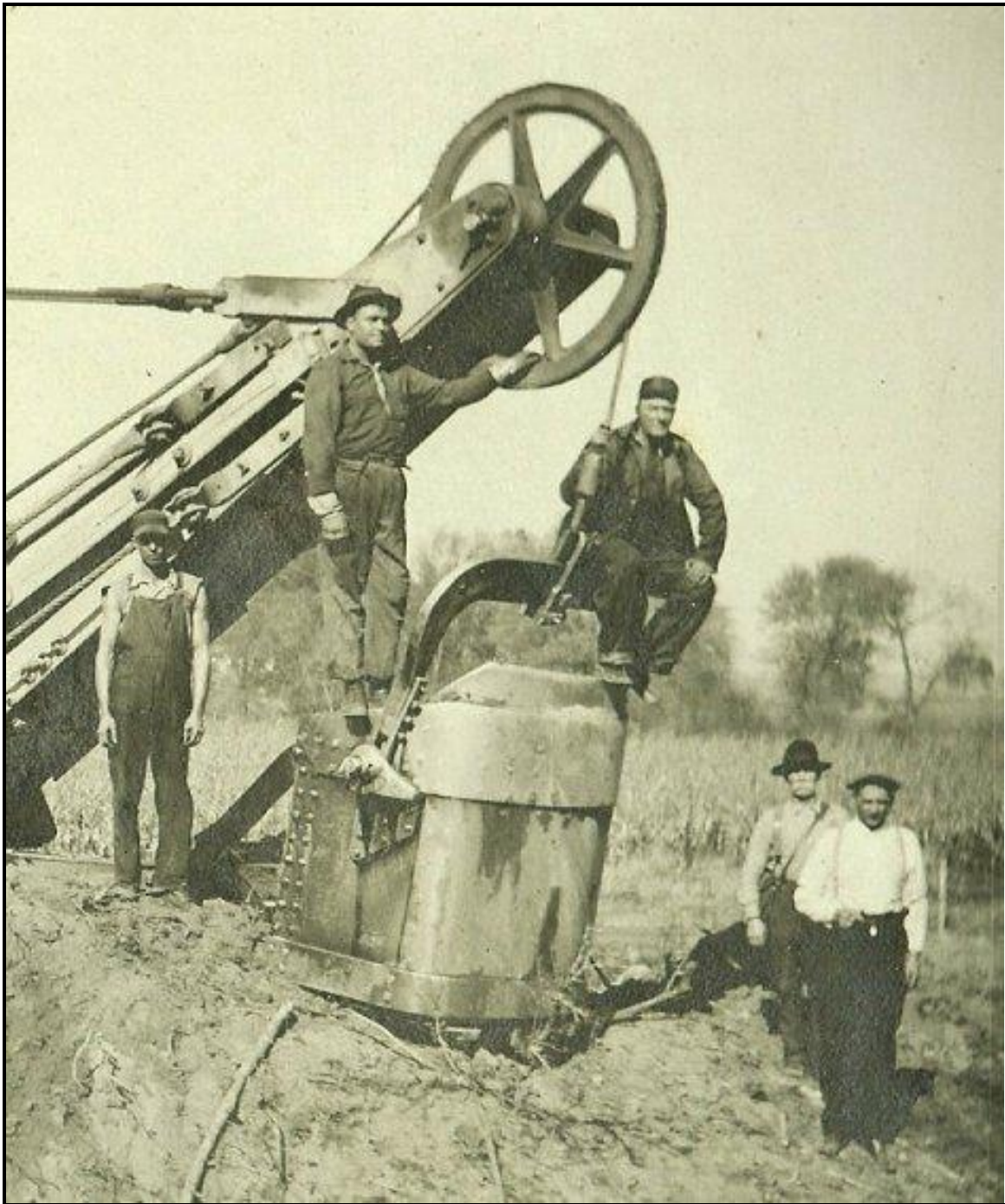
**English, Fillmore and Greene Townships, Iowa County**

**November 1920 – January 1923**

*"The river was always bothersome, meandering all over a flat a mile wide in the summer, just a creek a few feet wide but when snow melted or heavy rains came a mile was its width." - North English Record, January 25, 1923 – Page 1*

By Dave Jackson - English Valleys History Center, Inc.

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"Iowa county has initiated work on the greatest drainage district program in its history; one of the biggest in Iowa; and one that is remarkable in that not a single taxpayer filed an objection to the work, despite the fact that it will cost the property owners \$200,000."

"The dredging of the North English river, near Williamsburg has begun, and when the great work is concluded, the 25 mile course of the stream will be reduced to 13 ½ miles; thousands of acres of worthless land will be reclaimed, and a million cubic yards of dredging will have been done. The contract forecasts two years of work." *The Cedar Rapids Evening Gazette*, Thursday June 2, 1921, Page 1.

One of the first organized attempts at watershed management of the English River was conceived in early 1920 by a group of farmers of Iowa County. The rich, productive bottomland of this 25-mile stretch of river was impacted by regular flooding that affected crop production. The north fork of the English River in English and Fillmore townships meandered back and forth like a winding snake as it made its way from Millersburg to Green Valley, just above the point where the north and south forks of the English came together near the intersection of Washington, Iowa and Keokuk counties. According to area newspapers the river could easily grow to a mile wide during the regular flood events.

A page one headline of the Cedar Rapids Gazette called the project “one of the biggest river projects in Iowa history”, and predicted to be the first of many along the English river. The farmers who envisioned the plan to cut across the many winding turns to create a straight riverbed were called progressive and foresighted. Their idea was simple; cut a straight, deep, new riverbed through the windings and draw the volume of water down quickly and efficiently. Their plan would shorten the course of the river from 25 miles to about 13 miles, to drain off and reclaim much of the flooded land. A 150-foot strip of easement was identified on each side of the river through the resulting 13-mile stretch. Every tree was removed within the easement, creating a clean, new riverbank. Nearly 1 million cubic yards of excavation were completed. The total area of improvement was over 8,000 acres of choice farmland.

## **Profile of the English River Dredging**

Project Name: Drainage Improvement District No. 9

Project Description: The drainage of over 8,000 acres of farmland along the North Branch of the English River by dredging and straightening 25 miles of the crooked river bed. The end result will be a riverbed of 13.2 miles.

Project Location: From a point just north of Millersburg, Iowa at the Pilot and Lincoln Townships line to a point directly south of Green Valley at Fillmore and Greene township line. (Note: the actual job was also later extended east from Green Valley to near the forks of the North and South English rivers.)

Project Start: November 1, 1920.

Project Cost: \$200,000

Average Cost Per Acre: \$25.00

Project Engineer: Joseph C. Watkins, Civil Engineer, Iowa City, Iowa.

Contractor: Clyde A. Walb Construction Co. 152 N. Detroit St., La Grange, Ind.

Specifications: From a point south of Green Valley at the Fillmore/Greene twp. line, west to where the Milwaukee railway crosses the river, the excavation will be 13 feet deep, with a bottom width of 30 feet. From the Milwaukee crossing to the junction with Devil's Run, the bottom width of the ditch will be 22 feet, the depth will be 12 feet. The remainder of the distance will have a bottom width of 20 feet. The bottom width of the new ditch will be 2 feet below the present bed of the river.

**Project Completion: January 1923**

The nearly 1 million cubic yards of river bottom excavated during the English River Drainage District project was accomplished by a crude adaptation of mounting a steam shovel on a boat.

When I was a child in the 1950s and early 60s the term "steam shovel" was still commonplace. Left over from the 1920's – 40s, the heyday of the large steam-powered digging equipment, the term had not quite caught up to the diesel technology that replaced it. As a youngster I thought any commercial piece of construction equipment for excavating large holes was called a steam shovel. The fact that steam power industrialized the country for a period of 100 years from the period beginning in the 1830s through the 1930s would account for the continued loose use of the term. Steam was King. Steam-powered sawmills were well documented in use in Iowa from the 1850s through the 1930s, and were responsible for the milling of rough timber that was used to build area homes and businesses. Several movable steam saw mills, ones that looked much like a locomotive engine were operated in the area through the 1930s. In many towns that were not on viable riverbanks, steam boilers turned the heavy round burrs that milled the grain. And steam locomotives carried people and goods, displacing horse-powered transportation. At some point they applied the technology to farm machinery such as threshing machines. Coal-fired steam plants, even today, power much of the country.

In 1839, a man named William Otis patented the original design for steam shovel. He built a limited number of these steam-powered shovels during the 30-year life of the patent, and held clear sway over the industry. These were largely manufactured for use on tracks for railroad construction. It wasn't until the 1870s, when the patent had expired, that other companies began to jump in and build steam shovels that became adapted for other uses. In the 1880s and 90s, the shovel was mounted onto a frame and boat runners to create the river dredge. Two of the popular companies were the Marion Steam Shovel Dredge Company and Fairbanks Steam Shovel Company. Both lines of product were manufactured in Marion, Ohio, also known as "Steam Shovel City." Steam shovel dredges were used to build great projects such as the Panama Canal, and smaller drainage district projects all over the United States.

In the year 1920 a group of farmers along the North Branch of the English River in Iowa County got together and petitioned the county supervisors to accept their proposal for straightening the yet untamed river along their farmland. It meandered in a winding snakelike action through their fields. Twice a year, in the spring and the

fall, it rebelled against its banks and let the landowners know that nature was still in charge. Even today I have seen the English transform from a relative meager stream into an angry river bursting at its seams, and within a few hours overtake a thousand acres in the lower central portion of Fillmore township and down to the southeast corner.

In the fall of 1920, the machinery, equipment and lumber that comprised the steam-powered dredge were unloaded at a point on the North English river north of Millersburg. There were the boom, bucket, a steam boiler, water tank, coal bunker, three steam-operated engines, winches, steel cables, operator's controls, and pontoons. Lumber was used to construct the house around the frame that protected all this equipment. By today's standard, the steam shovel that was mounted on a wood-framed boat was a crude and rudimentary digging tool. Yet shovel by shovel full, the steam-powered dredge inched its way down the English river and moved nearly a million cubic yards of dirt. Working its path between the windings and turns, the floating behemoth cut a nearly straight route through fresh soil, creating a new river bed up to 30 feet wide and 13 feet deep. The men who operated the dredge used the soil tailings to fill in the curves. They worked day and night, two shifts, and all day Sunday. On good days they progressed 200 feet forward. In a little over two years, a 25-mile stretch of bends and turns was transformed to just over 13 miles of lineal course, or a bit over  $\frac{1}{2}$  of its original length. The premise was to draw the water down quickly and more efficiently.

The work must have seemed painfully slow, but the men who worked on the great dredge of the English river were used to the slow, steady pace. They were the men of the Clyde A. Walb Construction Company of La Grange, Indiana. They worked similar jobs all over the country. Clyde Walb was also the vice chairman of the Indiana State Board of Registration for Professional Engineers and Land Surveyors.

The steam shovel dredge that worked on the English River Project regularly drew the curiosity of hundreds of onlookers from the broader area who visited the site to see the operation of the dredge equipment and the progress on the river project. Bridges over the river had to be disassembled or removed and rebuilt. The removal of the railroad tracks at the Milwaukee & St. Paul Railway bridge that permitted the dredging boat to pass through drew particularly large crowds on a Sunday afternoon in June of 1922. The Williamsburg Journal-Tribune reported that "the scene was thronged all day by thousands who came for many miles around."

The superintendent of the project was Joseph C. Watkins, a civil engineer of Iowa City, and formerly a city and county engineer at Iowa City. Joe Watkins became somewhat of a hero-celebrity during his work on the river-straightening project. For the farmers who directly benefited as a result of the dredging work, and the area residents who looked on in awed curiosity, the project may well have been the 8<sup>th</sup> wonder of the world.

When the bill came due to individual farmers in the form of a tax levy on their individual lands, the feat would be how to pay for it. According to local resident Marlo Matthes, the project "broke" some of the farmers and they ended up losing their land

because they couldn't pay the tax assessment. This account is corroborated by legal notices of tax sales of land adjoining the river in the years immediately following the work of straightening the river.

Over the two and a half years from June 1920 through January 1923, the large excavation project was featured in area newspapers, beginning with the description of the significant project and Notice to Contractors for potential bidders:

Williamsburg Journal-Tribune

June 3, 1920

### **Drainage District No. 9**

#### **Farmers of Fillmore, English and Pilot Townships Will Straighten English River. A \$200,000 Project**

The Board of Supervisors of Iowa County approved the petition of a lot of farmers, in the south part of the county to permit the improvement of the crooked English River. The matter was started some time last year; attorney W.E. Wallace was the attorney for the petitioners, and the statistical data was furnished by J.C. Watkins, a civil engineer of Iowa City. The final hearing was set for last week, and the surprising thing about it all was in the fact that there was not one objection to the plan as was filed, and not one claim for damages. The improvement will be handled in conformity with the drainage laws of Iowa, and the section will be known as District No. 9. The area affected by the improvement totals nearly 8,000 acres, and the average cost per acre will be in the neighborhood of \$25.00, on some farms it will be much more than this, while on others it will be much less, the determining factor being the measure of benefit the improvement will impart to the several farms.

The district begins in Fillmore township, at a point directly south of Green Valley, and will follow the course of the English River to a point on the line between Pilot and Lincoln townships. From the starting point to where the Milwaukee railway crosses the river, the excavation will be 13 feet deep, with a bottom width of 30 feet; the slope will be  $\frac{1}{2}$  foot to the foot. From the Milwaukee crossing the junction with Devil's Run, the bottom width of the ditch will be 22 feet, the depth will be 12 feet, and the slope  $\frac{1}{2}$  to 1. The remainder of the distance will have a bottom width of 20 feet. The bottom width of the new ditch will be 2 feet below the present bed of the river, and this will prevent the stream from cutting a new channel and going off on a meandering tour.

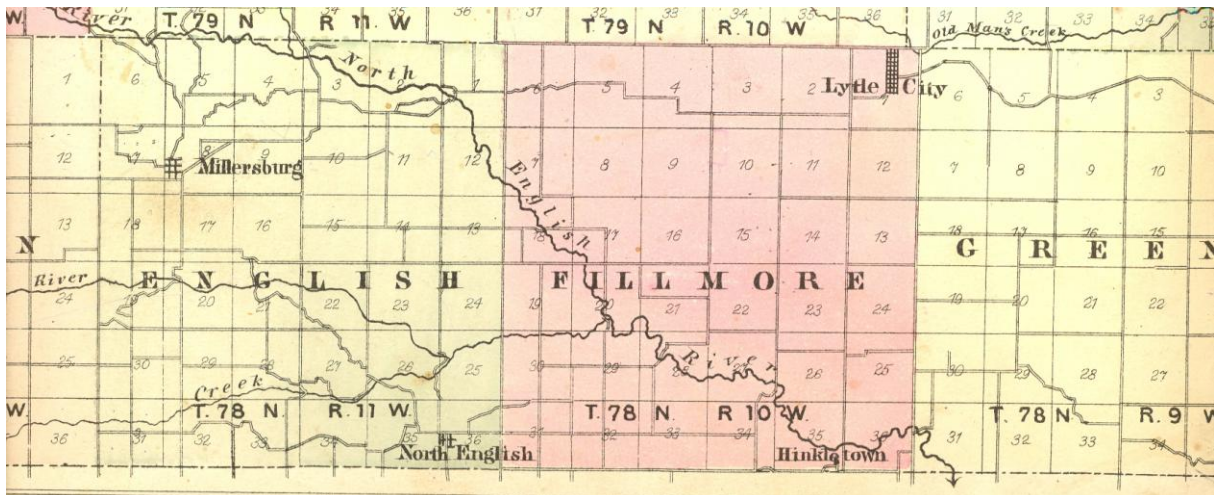
Nearly all our readers are familiar with the section known as the "English River Bottom"; some of the choicest land in the state is bordering this stream, but the river was always inclined to get out of its bed, and overflow the rich bottom lands. The distance of the new river bed 13.3 miles, while the distance of the present stream, measured by all its windings and turnings, is 24 miles; it will be seen, therefore, that the distance is reduced by 46%. The fall of the present stream is  $2\frac{1}{2}$  feet, with the fall of the new bed will be 3.78 feet.



The plan adopted by Engineer Watkins is one that adheres closely to the present course of the river; the new ditch will simply cut through the narrow intersections around which the stream meanders, and the openings of the old bed will be filled with the excavation from the new channel. The carrying capacity of the big ditch will be many times that of the present crooked river, so that all flood water will be speedily handled.

The right of way for the improvement will be 150 feet, and all trees now growing on this will be removed. It is hoped the work on the river may begin this year.

The farmers behind this improvement are to be commended for their good judgment; land is too valuable to be buried in a flood of water that might just as well be passed on in a few hours as in that many days, and the improvement started by these progressive farmers will soon be copied by the other communities along the English River.



Map of the North English River as it appeared winding through English, Fillmore and Greene townships prior to its straightening. The project commenced north of Millersburg in northwest English township and ended just east of Hinkletown (Foote), in Greene township. Twenty-five miles of meandering river were reduced to just over 13 miles.

Williamsburg Journal Tribune

Thursday, July 1, 1920

### **Notice To Contractors.**

Notice is hereby given that sealed proposals will be received up to 2 o'clock P.M. of August 4, 1920, at the Office of the Auditor of Iowa County, at Marengo, Iowa, for the construction of the North English River Drainage District No. 9 of Iowa county, Iowa, according to the file in the office of the County Auditor of Iowa County.

The work will consist of the construction of a channel approximately 13.2 miles in length whose course is as direct as may be thru the average center line of the

windings of the North English River, and the clearing of the right of way which is 150 feet in width. Beginning at or near the center line of Section 35 of Fillmore Township; thence running northwesterly 20,400 feet to the bridge of the Chicago, Milwaukee and St. Paul Railway in Section 29 in Fillmore Township. The ditch will be 30 feet in bottom width, with side slopes of  $\frac{1}{2}$  to 1 and an average depth of 13 feet; thence on to the junction with Devil's Run in the Northeast corner of Section 4 of English Township, 34,100 feet the ditch to be 22 feet in bottom width, side slopes  $\frac{1}{2}$  to 1 and an average depth of 12 feet; thence on westerly on the west side of Section 31 of Pilot Township 15,100 feet, the ditch to be 20 feet in bottom width, side slopes  $\frac{1}{2}$  to 1 and an average depth of 12 feet, all of the above being in Iowa County, Iowa.

The estimated volume of excavation is 957,000 cubic yards, construction is to commence on or before November 1, 1920 and shall be completed on or before November 1, 1922.

Payment for the above work shall be in warrants at par on the English River Drainage District No. 9 of Iowa County, Iowa, issued by the County Auditor of Iowa County on monthly estimates of the Engineer as by law provided.

Bids must be on blanks furnished from the office of the County Auditor, or from J.C. Watkins of Iowa City, Iowa, Engineer in charge and must state a price per cubic yard, must be signed in the recognized name of the contractor or firm who expect to do the work and must be accompanied by a check in favor of the County Auditor of Iowa County, Iowa, certified by some bank in Iowa, or in cash the sum of Ten Thousand (\$10,000) Dollars as a guarantee that if awarded the contract, the bidder will enter into contract and give bond as by law provided within Ten (10) days from the notification of the acceptance of his proposal, in the case he fails to do so in the amount of the check will be forfeited as liquidated damages to the English River Drainage District No. 9.

The bids will be opened at 2 o'clock P.M. on August 4, 1920, by the chairman of the Board of Supervisors of Iowa County and the contracted awarded thereafter as soon as practicable. But the Board reserves the right to postpone entering into contract until such time as they may have negotiated for the sale of bonds of the said district, and the Board also reserves the right to waive defects and to reject any or all bids.

Bids must be sealed and marked on the outside of the envelope "Bid For North English River Ditch" and be in the hands of the County Auditor of Iowa County, Iowa, before 2 P.M. of August 4<sup>th</sup>, 1920. Dated at Marengo, Iowa County, Iowa, this 26<sup>th</sup> day of June, 1920. A.H. Turner, County Auditor.

Williamsburg Journal Tribune

December 16, 1920

Dan Goodman, of southwest of town was in the city Monday transacting business. Mr. Goodman says that the work of unloading the machinery for the straightening of the English River is being done and is being hauled out to the place where the work



will start. This is a big undertaking and the farmers will be greatly benefited by the improvements. Although the river is a small stream there are times of the year when it tries to look like the Mississippi river and takes everything which is loose in its path with it.



Early photograph of the North River Bridge, also known as Rock's Bridge, that was located directly north of Hinkletown on the line between Sections 36 and 36, southeast Fillmore township. This photograph of the Gray family of Hinkletown, was likely taken prior to the river straightening, and shows the high river and field flooding in the background.

The Cedar Rapids Evening Gazette

Thursday June 2, 1921

**Iowa County Has Big Drainage Job (Page One Headline)**

**No Objections Are Filed**

**Dredging of North English River Will Shorten Course and Reclaim Much Land**

Special to the Gazette.

IOWA COUNTY, June 2<sup>nd</sup>. -- Iowa county has initiated work on the greatest drainage district program in its history; one of the biggest in Iowa; and one that is remarkable

in that not a single taxpayer filed an objection to the work, despite the fact that it will cost the property owners \$200,000.

The dredging of the North English river, near Williamsburg has begun, and when the great work is concluded, the 25 mile course of the stream will be reduced to 13 ½ miles; thousands of acres of worthless land will be reclaimed, and a million cubic yards of dredging will have been done. The contract forecasts two years of work.

The contractors are the Walb Construction Company of LeGrange, Ill. (NOTE: should be La Grange, Indiana), and the supervising engineer is Joe C. Watkins, of Iowa City, formerly city and county engineer here. The unanimity of the tax-payers action is based on the fact that the property owners, before appearing before the board of supervisors with a plea for the improvement, visited the Skunk river drainage district in Jasper county, and discovered what splendid results came from kindred work. Then every last man voted for the drainage district in Iowa county.

#### North English Record

June 16, 1921

They are straightening up the North English River, down in Iowa County, and it is a great sight to see the big machinery at work. They work two shifts, and the work goes on day and night and Sunday, and the citizens take advantage of Sunday to visit the works. Fully one thousand persons were there last Sunday and the Sunday before. Many of them watched the big shovel at work while others amused themselves by catching with their hands, the big fish that are left high and dry by the drainage process. – Deep River Record.

#### Iowa City Press-Citizen

June 29, 1921

The English river drainage project is progressing at the rate of two hundred feet a day under the direction of Engineer Joe Watkins and the Walb Construction Company of La Grange, Ind., has the contract.

#### Iowa City Press-Citizen

July 3, 1921

There were about one hundred and fifty people from Wellman at Yankee Point Sunday to see dredging of the river where the Milwaukee crossed the river. It was quite a sight to see how perfectly the machinery worked. There were cars from Cedar Rapids, Iowa City, Sigourney, North English and Parnell.



This image of the operating boom and bucket of the dredge shows some of the onlookers in the background. Enlargement of the photo shows children sitting on a bank of dirt. Joseph C. Watkins, a civil engineer of Iowa City, was the superintendent. Watkins was educated at the University of Iowa Engineering School. The photograph was taken south of Keiser's Corner, near Green Valley, in Fillmore township, northwest of Hinkletown, and southeast of the present day Squirrel Bridge on County Highway F67.

Williamsburg Journal Tribune

July 21, 1921

**Big Project**

The work of straightening the English river is progressing quite nicely. The dredge has cut a channel about a mile and a quarter long so far. This is quite a piece of machinery and every Sunday large crowds are out to see the monster at work. It is a large boat on which are installed the engines, boilers, etc., necessary to run the large shovel which scoops up the earth in great quantities, depositing it on the sides, thus forming a high bank for the river. The river will have to rise quite high in order to overflow this dike.

The men who are running the dredge have their home on a boat and live right on the water, the house following the dredge along as it moves forward.

The work has been going on for some time and it is estimated it will take about two years to complete the work at the rate at which it has been going on. The project runs down to Greene township, and will be a great thing to the farmers who own land along the river as it will do away with the overflowing of the river.

Williamsburg Journal-Tribune

Thursday, September 29, 1921

Dan Goodman, of the Millersburg vicinity was in the city the forepart of the week transacting business. Dan reports work of the straightening of the English river progressing quite rapidly.

North English Record

September 22, 1921 – Page 1

**Watching the Dredge**

The big dredge that is at work out on the North English river is doing an excellent job of straightening out that meandering stream. At first sight the machine has the appearance of a river freighter. The huge arm with a large shovel or dipper on the end, goes down and then up and then moves to the side to dump its load on the bank. The depth of which they are digging varies a few inches according to the fall of the river, but the general depth is about 11 feet.

When we got there the dredge was undergoing some repairing in nature of a broken cable, which takes the load of dirt to the bank. The water boy came over in a boat and transported us to the dredge. The crew consists of three men, the foreman who

acts as control man, his helper, who also has charge of some other control levers, and the fireman and machinist.

The dredge is owned by the Walb Construction Company, and was brought from Minnesota here. From the way the foreman described the moving of the dredge to the river, it must have been some job. Inside are three compound engines, one for raising and lowering the dredge proper, another for raising and lowering the shovel, and still another for carrying the shovel to the bank. After a while the repairs were completed and the big machine started operations. The raucous clash and clang of the cable drums started and proceeded with monotonous regularity. Both men at the controls did their work in perfect unison, with a result that the big shovel dropped into the water and rose bringing forth its capacity of mud and dirt a yard and a half. After it was up high enough it was swung around and dumped on the bank.

A cofferdam is first built, damming up the river so that the dredge can be floated. The steam shovel is supported on stilts which prevents the dredge from slipping back when the shovel is lifted.

A large amount of coal is used because of the necessity of a full head of steam on account of two and sometimes three engines running all the time. This coal is brought from North English via truck.

A large houseboat was anchored up the river a ways, being used as a home for the workers and their families. Every time it is necessary to move, the boat is floated down the river and the dredge men have their home with them at all times.

The river formerly took up twenty-six miles of land to go about thirteen, meandering all over the country. When there were heavy rains, the stream was unable to carry away the water as rapidly as it was fed, and as a result was spread all over the bottoms, making hundreds of acres useless and many roads near the river impassable for weeks at a time. Now the river with the proper gradient and straight channel, will be able to carry away all the water easily and without spreading all over the lowlands. It is being paid for by the farmers along the river, according to a graduated scale of benefits, the county being the promoter of the enterprise. The farmers along the river deserve a lot of credit for having the work done, and we are certain that when the job is completed Iowa county can all be proud of fixing one of the most annoying rivers of the State.

North English Record

September 22, 1921 – Page 1

### **North English River on Rampage**

Iowa county's little Missouri river has had a hard time getting rid of all the water which fell last week. Some of the most terrific storms known have hit us and, in some as high as six inches of rain has fallen. The river is all over the bottom and in some places across the road to the depth of 5 or 6 feet. Travel to the north was impossible

Friday and Saturday, but Sunday the river began to recede again. All the farmers along the line are waiting expectantly for the channel to eliminate these floods which make that stream from a quarter to a half mile wide.

A man in a large Cadillac car came here and was in a hurry to be on his way to Uniontown, Pennsylvania. He hired the Dixon Auto Company to take his car across the river. The job was done with the help of horses from a farm near the river. The water almost came up over the doors and several times the heavy car was in danger of being carried away by the swift current, but they landed it across alright and the man phoned back from Marengo that he was able to cross the Iowa river alright.

Williamsburg Journal-Tribune

Thursday, December 22, 1921

The force of ditchers on the English River are now directly west of Parnell, and will get their coal, piling, bridge and other necessary material from here instead of from North English, this point being closer.

Charles Wyant, who accidentally shot himself last Sunday with a small caliber revolver, is progressing quite favorable. Charles was down where the dredge was working when the accident happened. Charlie is a resident of Millersburg.

Williamsburg Journal Tribune

June 1, 1922

### **To Move Bridge**

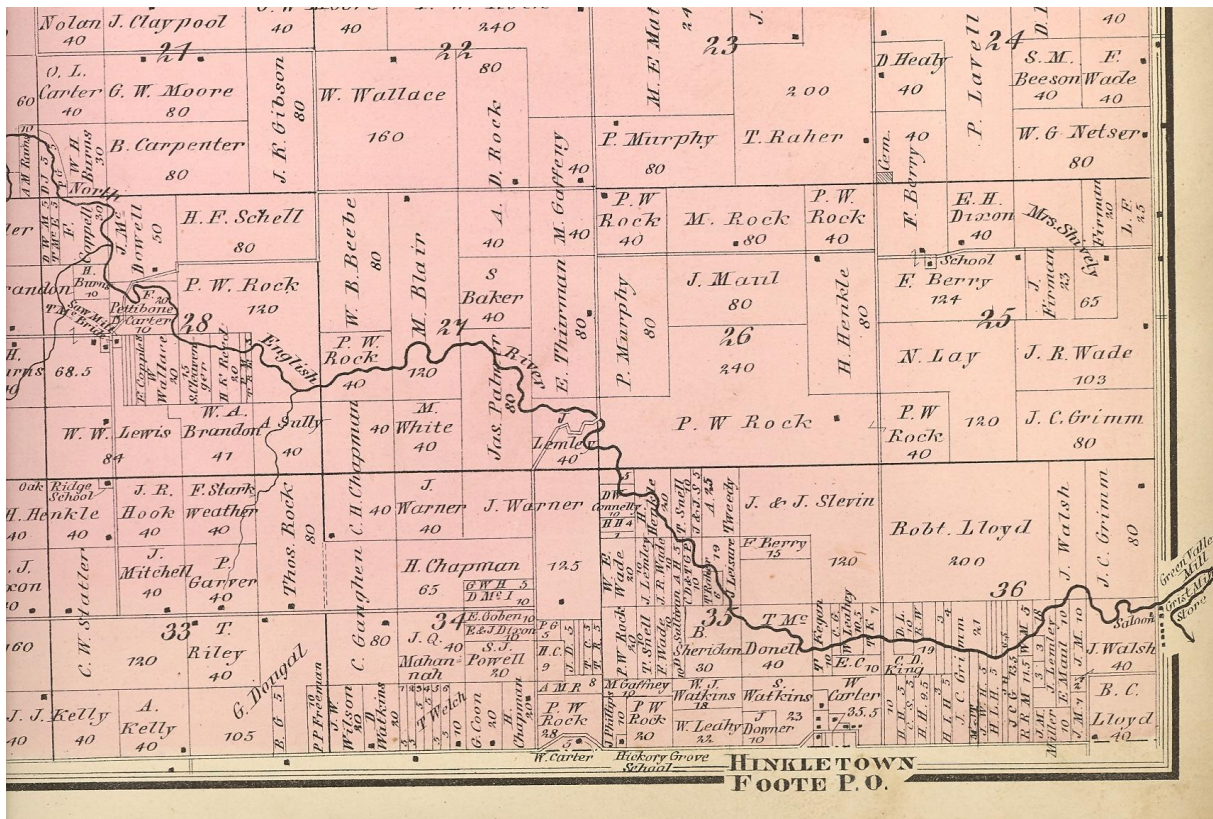
The dredging outfit which is working on the English river project will soon reach the railroad bridge south of Parnell. The engineers for the railroad company who were on the job last week figured out ways and means for the dredge to pass the bridge. It was decided that the track over the bridge would have to be raised and moved back, or order to allow the passing of the big machine. This will cost in the neighborhood of \$1800 and will hold up traffic on the road for a period of about eighteen hours.

Williamsburg Journal-Tribune

Thursday, June 15, 1922

The straightening of the English river south of town is going to spoil some dandy swimming holes, so think many of the boys, who always like to indulge in a plunge during the bathing season. The big ditcher on the English river has reached the railroad bridge and preparations are underway to permit of its passing through.





A four-mile stretch of the north branch of the English River as it flowed through Fillmore township prior to the drainage project. The map shows the large number of landowners affected in this short stretch of the river. Not a single landowner in the full 25-mile length objected to the project.

Williamsburg Journal-Tribune

Thursday, June 22, 1922

A large crowd from here drove up to see the dredge on Sunday afternoon.

The Dredge and Railway Co., have come to an amicable agreement, and work on the part of the latter began Thursday in preparation for the big machine to go through the bridge at the English river three miles south (of Parnell.)

Williamsburg Journal-Tribune

Thursday, June 29, 1922

A large number of our (Yankee Lane) people went to see dredge work on Sunday.

The moving of the main span of the iron bridge over the English river, three miles south, to permit the crossing of the big steam ditcher was accomplished last Sunday without a hitch in arrangements. The feat was witnessed by several hundred people and the scene was thronged all day by thousands who came for many miles around. The public highway was blocked with autos for three quarters of a mile so it was difficult to get through. Work on moving the huge span began at 5:00 a.m., with

about 35 trained mechanics, a locomotive, a big iron derrick, and a powerful steam wrecker. By six p.m. the big dredge had worked across the right of way followed by the living cabin and by ten p.m. the huge steel span was back in position and the track was ready for the resumption of traffic. The breaking away of the water, twice, by which the dredge is floated caused a three or four hours delay in the operations otherwise the job moved along like clockwork. Several refreshment stands were pitched on the adjacent grounds, and they done a rushing job all day.



Hauling dirt on temporary bridge over English River during the drainage district project. A mobile shovel rests on the opposite riverbank. This may have been related to using excavated material from the new riverbed to refill the winding loops, or perhaps to prepare for a bridge rebuilding effort during the larger river-straightening project. From the appearance of the site, the dredge had already moved through this area and was working downstream.

Williamsburg Journal-Tribune

Thursday, June 29, 1922

### **Holbrook News**

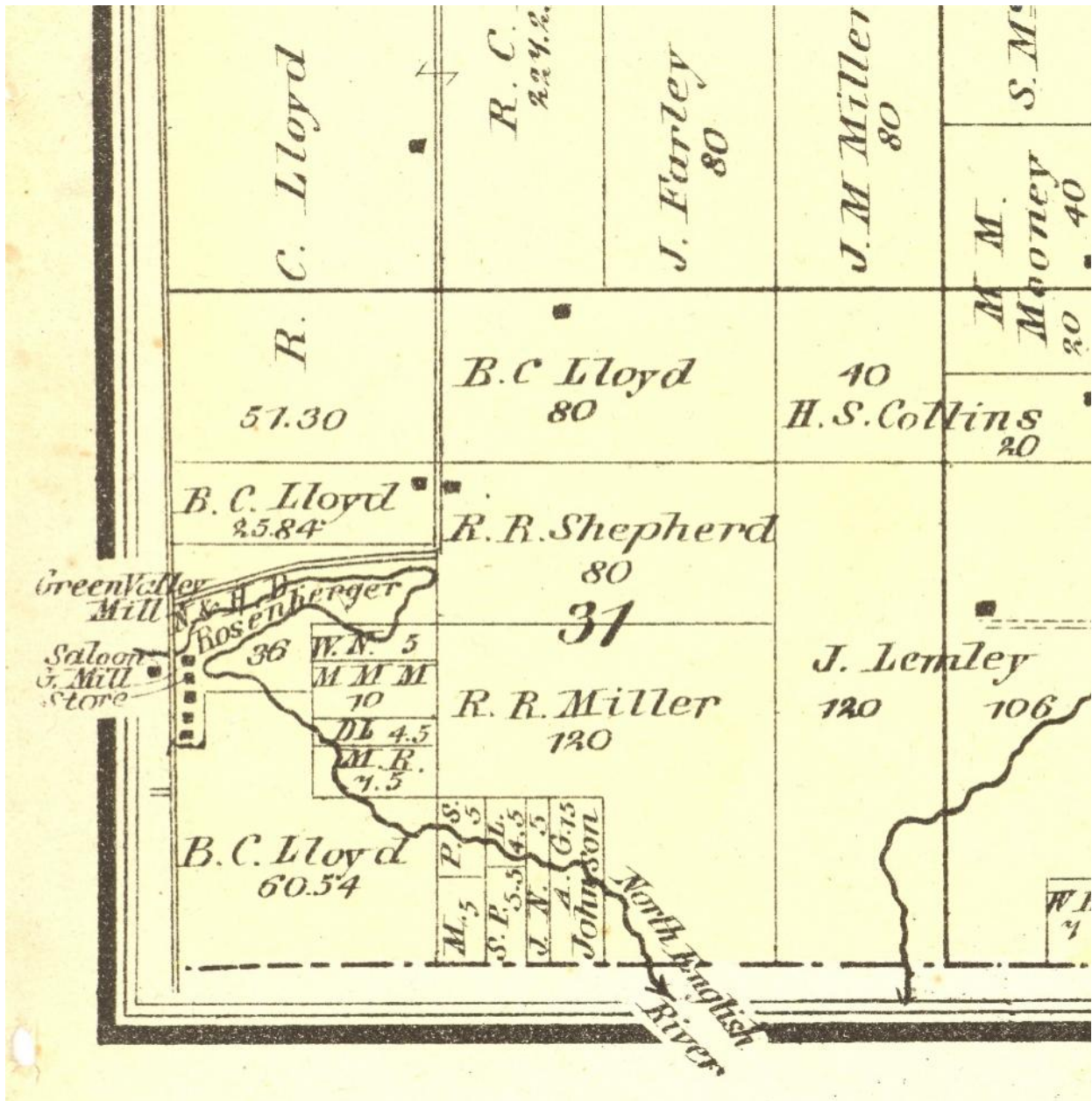
Quite a number of people from this vicinity went down to the English river on Sunday to see them move the railroad bridge on the Milwaukee so the big dredge that is straightening the river could pass through.

Williamsburg Journal-Tribune

Thursday, August 6, 1922

## North English River Is Being Straightened

NORTH ENGLISH, August 5 – The big dredge which is straightening the North English river is making satisfactory progress. Owing to the dam which had been constructed and continuing heavy rains the river has been flooding considerable land. The dam was opened a few days ago and the flood water released. A new bridge will be built between here and Parnell but it will be several weeks before it is completed.



The original project was bid to end at the township line between Fillmore and Greene townships, at Green Valley (above). As the project neared completion, the scope of work was extended southeast of Green Valley. This 1875 map shows the large winding of the river at Green Valley. Oral and written accounts relate that Indians from the Mesquaki Reservation came annually to camp and fish on the "island" (marked Rosenberg above) from the 1880s through early 1900s.



Thursday, September 14, 1922

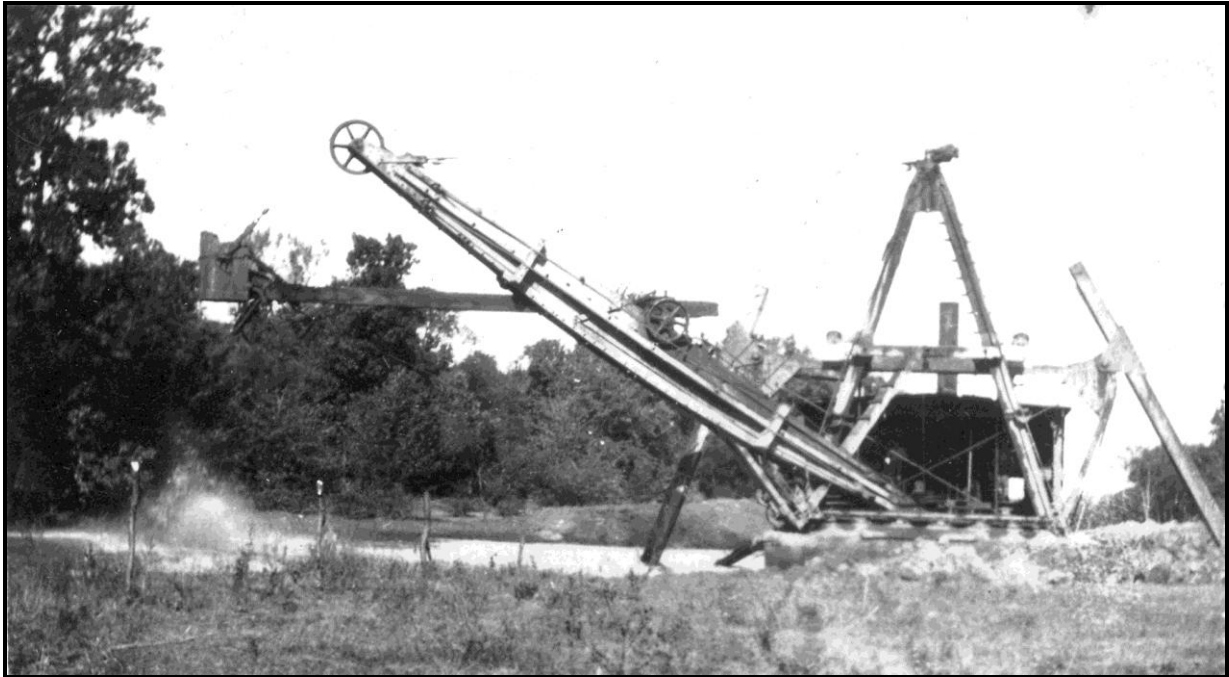
The Dredge Co. are storing an immense quantity of coal on the station. Their work has been extended about three miles and they expect to be busy until Christmas and then some.

Track foreman Dewey has increased his working force to six men. The highway bridge, south of town over the English River on the Pershing Highway is out of commission on account of straightening the river. (NOTE: The Pershing Highway was established in 1920 and started at Winnipeg, Manitoba and through Waterloo, Vinton, Marengo, North English, Keota, all the way to New Orleans. In those days it crossed the North English River at Ballard's Bridge.)



Ballard's Bridge over the English River, northeast of North English. The bridges along the river in some cases had to be lifted or rebuilt during the project. The Cedar Rapids Gazette cited the project as "one of the biggest drainage district programs" in the State. The original intent was to straighten all the meandering windings of the river in order to significantly reduce the amount of time to drain the river during flood stage. Cofferdams had to be built at intervals to sufficiently fill the river so that the dredge could float.

The project promised farmers that "thousands of worthless acres will be reclaimed, and a million cubic yards of dredging will have been done." "Now the river with the proper gradient and straight channel, will be able to carry away all the water easily and without spreading all over the lowlands." – *North English Record*



North English Record

January 25, 1923 – Page 1

### **Big Dredge Finally Finishes River Job**

The dredge of the Walb Construction Company finished the job of straightening the North English river and the men have just about completed dismantling the dredge. The river was always bothersome, meandering all over a flat a mile wide in the summer, just a creek a few feet wide but when snow melted or heavy rains came a mile was its width.

For over two years the big machine has taken shovelfuls day and night and slowly cutting a channel 13 miles long for the river but the same ground that the old channel took 26 miles.

The men who have dismantled it announced that the machine and the hulk will be left until another job is secured and the contract let. It is said that Washington County is considering the straightening of the English river which meanders like the North English.

The Walb Company has a number of their machines working in the Kankakee river straightening and deepening it. The contract amounts to \$1,500,000.

Williamsburg Journal-Tribune

Thursday, March 15, 1923

## **Skunk River To Be Straightened Up**

The farmers along the lower Skunk River are following the actions of the North English and are getting ready to straighten the South Skunk river near the Mahaska county line. Nearly 15,500 acres will be reclaimed. The average cost will be \$17.07 per acre or a close estimate of the total cost of \$265,000 when the dredging contract which is to be signed this spring is completed. This will shorten and straighten the river over 18 miles when over 1,207,000 cubic yards of dirt will be moved with a thirty foot ditch across the bottom and a fall of approximately ten inches, where formerly there has been a fall of but six. Farmers claim they have but one cop in this district since 1917 because of the high waters in the spring. – North English Record.

A few months after the commencement of the project, the Iowa county supervisors began the process of notifying landowners of their individual assessments, through public notice in the North English Record, September 1921:

### **Notice of Assessment of Benefits**

You and each of you are hereby notified that the commissioners appointed by the Board of Supervisors of Iowa County, Iowa, to personally inspect and classify all the lands benefited by the location of Drainage District No. Nine of Iowa County, Iowa, in tracts of forty acres or less, in a graduated scale of benefits, to be numbered according to the benefits to be received by the proposed improvement, and to make an equitable apportionment of the costs, expenses of construction fees and damages assessed for the contribution of said improvement, did on the 31<sup>st</sup> day of August, A.D,1921, make their report to the Board of Supervisors of Iowa County, Iowa, and did then and there file same in the Office of the Auditor of Iowa County, Iowa.

You are further notified that the real estate owned or occupied by you and each of you and situated within said drainage district descriptions of which is set up opposite the name of the owner there of in the foregoing schedule.

### **Biographical Information on Joseph C. Watkins – Civil Engineer**

Joseph Cook Watkins was born in Iowa City on August 21,1877. He was the son of a pioneer Congregationalist preacher. Both parents were born in Wales. The old homestead of his parents was on the northeast corner of Linn and E. College Street, directly across from the old Iowa City Carnegie Library, later a University building called Old Public Library. According to the 1885 Iowa census, seven children were living with their mother, Catherine Watkins, 49, and were listed as Maggie, 24, Marjorie, 19, Emma, 17, Samuel, 14, Anna, 13, Wendell, 10, and Joseph, 7. Joe was the youngest of the family.

Joe attended the Iowa City schools and the City High School, and as with his siblings, the State University of Iowa. Margaret (Maggie) was a teacher at the Iowa School for the Deaf. Anna graduated with honors from Iowa City High School and



attended S.U.I. Law School and worked in the law offices of Senator George W. Ball. She married a prominent Kansas City attorney, Charles H. Washburn. Anna died suddenly in August 1928, leaving a wide circle of family and friends in Iowa City. Samuel R. Watkins also graduated the law school and was a successful Chicago attorney and Secretary of the Municipal Voters League there. Emma became a well-known published author and professor at the State University of Iowa. Wendell Phillips Watkins attended the State University of Iowa and served nearly three decades as a mail carrier in Iowa City. He was a member of the Modern Woodmen, Elks and Knights of Pythias. Wendell died suddenly at the age of 46 in January 1922.

In 1900, Joe was in the military, Company I, 50<sup>th</sup> Iowa Infantry, and served in the Spanish-American War. According to the Iowa City newspaper in 1900, "Joe Watkins has resigned his position as second lieutenant of Company I., and will leave the city shortly for Mississippi, where he will join a party of civil engineers engaged in railroad work." *Iowa City Daily Press*, July 12, 1900. After a period he returned to Iowa City, where he served public offices and set up his own civil engineering practice, called the Iowa Valley Engineering Company.

During the county elections held November 3, 1903, Joseph Watkins was elected to the Office of County Surveyor. ("For the office, of County Surveyor, Joseph Watkins having received the greatest number of votes is hereby declared duly elected." *Iowa City Daily Press*, November 18, 1903.)

The following advertisement appeared in the *Iowa City Daily Press* newspaper, May 24, 1910: "J.C. Watkins, Civil Engineer. City and country surveying. Drainage a specialty. Office and residence, both phones. 205 S. Linn St." A month earlier, the Thirteenth Federal Census was conducted in Iowa City. The census shows Joe Watkins, 32, born in Iowa and of Welsh descent, living with his mother Katherine, 75, the head of household, and two sisters, Emma and Margaret, both school teachers in their 40s. His profession is listed as civil engineer.

Joe Watkins became the City Engineer in Iowa City beginning 1911, and served for several years before becoming County Engineer prior to 1916. On the evening of April 3, 1911, incoming Mayor of Iowa City, George W. Koontz, appointed Joe Watkins as city engineer. Watkin's name appeared in the headline on page 3 of the *Iowa City Citizen* the following day: "New Mayor and Council are Now In – Appointive Officers Named – Joe Watkins Appointed City Engineer."

During this time Watkins married his wife Nettie. "Iowa City is making excellent improvements at the foot of Folsom hill, just west of the Iowa river. City Engineer Joe Watkins is supervising the work well." September 28, 1911. *Iowa City Daily Press*. In April 1912, as city engineer, he was appointed special commissioner in the case of Attorney W.F. Murphy vs A.N. Slaby. This was a notorious lawsuit involving two large contiguous landowners on the Iowa River in Penn township, Johnson County, and the infringement of fencing that affected the water rights of Mr. Slaby.

In 1912, Watkins designed a system of flashing lights for communicating alarms between the City Jail and patrol officers on the beat. According to the *Iowa City Daily Press*, it was an innovative idea and would be supervised, installed and tested by city engineer Watkins.

*Iowa City Daily Press*, February 9, 1912: **Electricity for Police? New method of Flashing Lights is Probable. Call Officers Who are Out on Street by Means of Big Streams of Alarming Lights from on High.**

Iowa City police are to be called by electricity, if present plans go through. The idea is to erect a 100-Watt Tungsten arc at the corner tenanted by W. S. Thomas, the hardware man, and to place a similar light at the Coldren theatre corner. These will be located high in the air above the ordinary electric lights, and will be linked with the city hall jail by wires.

### **Press the Button—Does the Rest.**

When the man at the city hall jail wants the police-brother who is out on the street somewhere—and it is aimed to keep a man at the hall all the time, day and night, under the new regime—he will turn on the switch, and the big red globe (it will probably be of that color) will glow warmly, and will send its rays flashing down the street.

### **Can Call Police Easily.**

Thus, the traveling policeman will see the alarm flash easily, and hasten to the city hall. The old method of whistling, or giving the "rattle" for the brother-officer is all right, when the night is quiet—but, let a racket prevail, or a big crowd be abroad, and a whistle goes about as far as a lullaby song.

### **Cost Relatively Small.**

City Engineer Joe Watkins estimates that the innovation will cost about \$150 to be installed, and only about 25 cents a year to be maintained, as the city hall has its motor, and the electric power, after once connection is made, won't amount to "shucks," as to expense. The committee on public grounds and buildings, and the city engineer will have charge of the installation, and will test the matter thoroughly before they put in the system. If it isn't feasible, it won't be adopted. If it works well, it is a "sure go." The desire of Chief of Police John W. Miller is to see this innovation effective and the council agrees with him. Mayor Koontz as suggested above, desires to have one officer at the jail, every minute of the day and night.

### **Mayor Anticipates Good.**

Mayor Koontz believes the new scheme will insure effective work, also, in keeping the men on the street alert and watchful at all times, during the night, as they will be trained to watch the standards, and be on the qui vive for the flashing warnings.

An article in the Iowa City Citizen, August 21, 1916, indicates that Watkins was no longer the city engineer: **Watkins at Muscatine** – Departure of Isaac Mathewson of Muscatine in order that he might be ready at the first opportunity to look at his interests in that country, has given Joe Watkins, formerly city engineer of Iowa City, a fine position in that city, where he is superintending some paving work for the city of Muscatine. Mr. Mathewson owns about 20,000 acres of land near Chihuahua City, and at the time of the acute trouble of two years ago he walked the entire 200 miles from his property to the United States frontier, making the last 100 miles almost entirely at night.

It appears that by 1919 Joe Watkins had resigned from public service in order to continue his private engineering practice. He was selected as the low bidder on several paving projects, including the streets and sidewalks of Marengo, Muscatine and Iowa City.

On May 18, 1919, the following article appeared in the *Iowa City Citizen*: **A Wise Council at Marengo** – Marengo Sentinel: The city council showed much wisdom in selecting the engineers for the paving campaign. Major Goldthwaite of this city and Joe Watkins were selected to do the work. We know that Major Goldthwaite is a capable engineer and Mr. Watkins has had a wide experience in the work of engineering paving propositions. Marengo is indeed fortunate in securing the services of the two gentlemen. We'll get a good job of paving.

*Iowa City Daily Press* – July 8, 1922

### **CONTRACT TO J.C. WATKINS**

Contractor Joe Watkins, formerly city engineer and county engineer, was awarded the 1922 cement sidewalk building contract by the city council last night. He underbid all competitors, as was proven by the bids which the street's and alley's committee opened and to the council as a whole. The committee recommended that the contract be awarded to Mr. Watkins, and this was done.

The bidders and bids follow:

J. C. Watkins—16.4c per sq. ft. and 90c per cu. yd. for excavation.

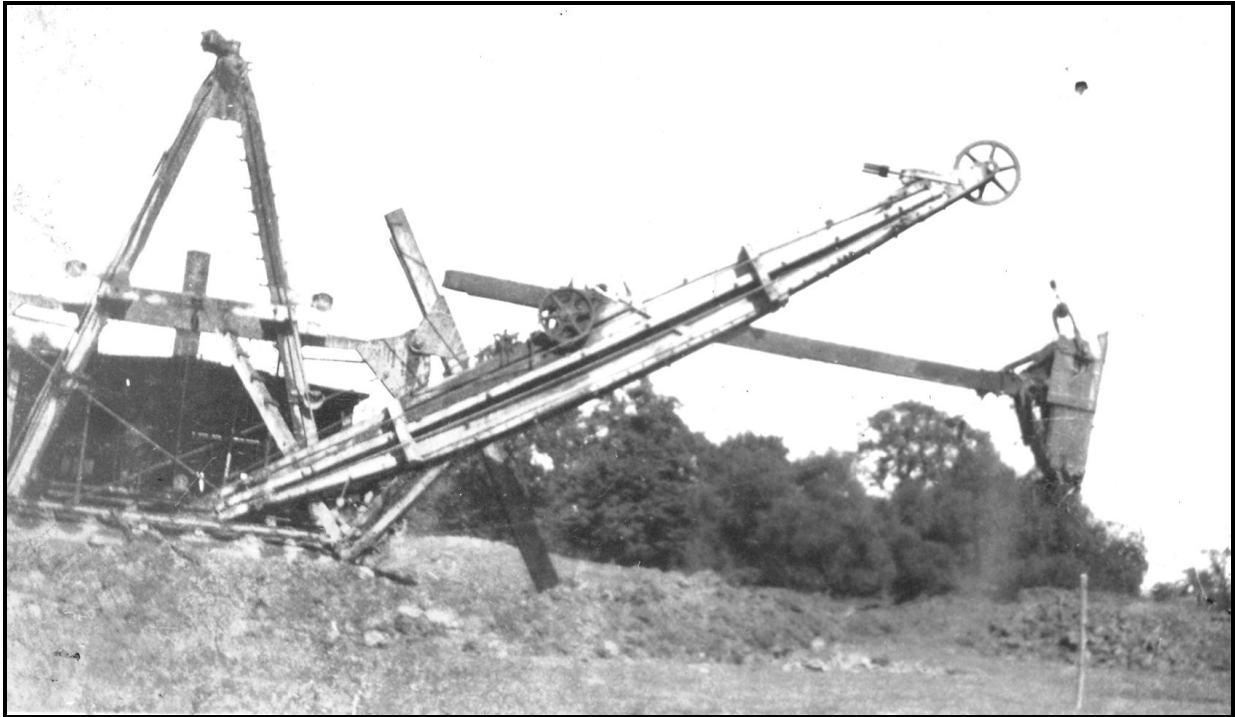
William Weidle—17c per sq. ft., and 50c per cu. yd. for excavation.

William L. Wusser—19c per sq. ft., and 80c per cu. yd. for excavation.

Thomas E. Reha—18c per sq. ft., and 80c per cu. yd. for excavation.

Catherine Hughes Watkins, Joe's mother, died at the age of 86 in 1920. She is buried in Iowa City's Oakland Cemetery.

For both of the Federal Censuses of 1920 and 1930, Joe and Nettie Watkins were still living on East College Street in Iowa City, presumably at the site of the original home where he was born. It appears that during these years, Watkins alternated between public service and his private business.

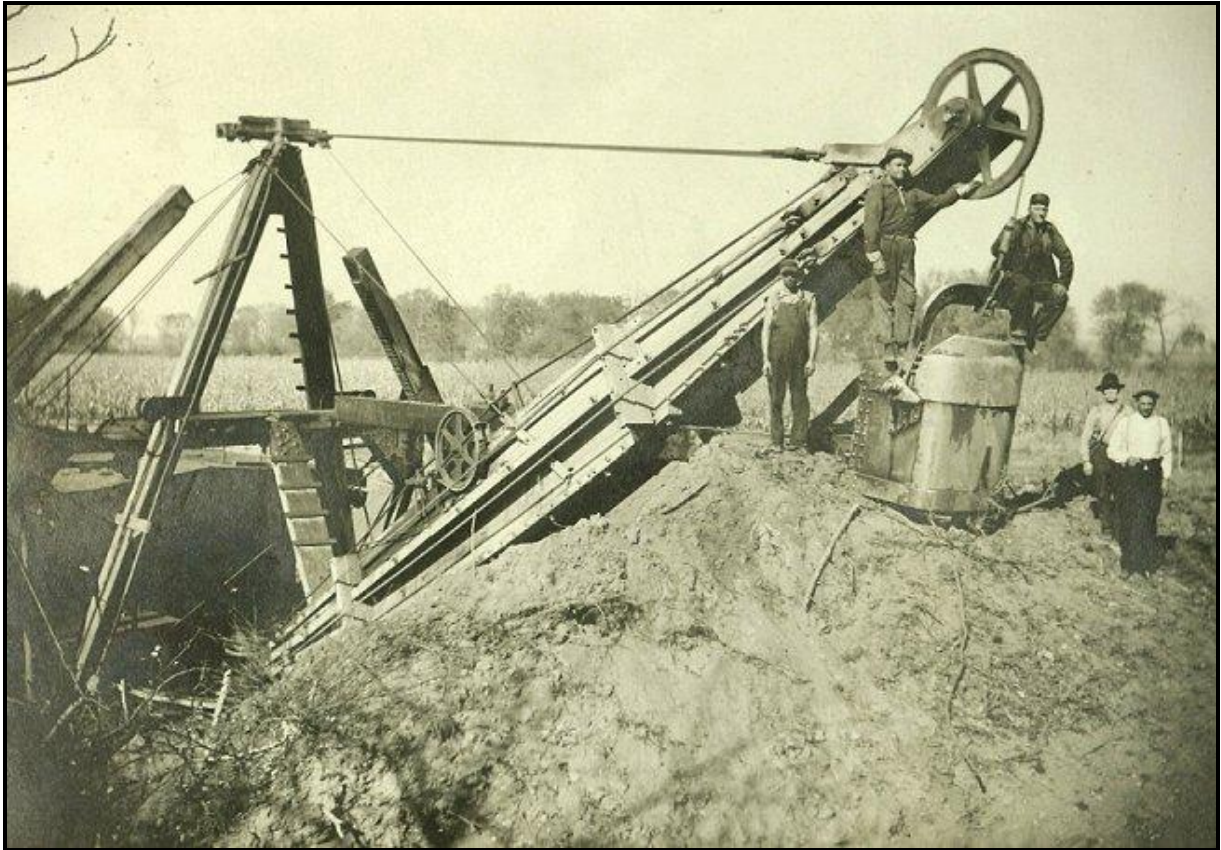


*"This is quite a piece of machinery and every Sunday large crowds are out to see the monster at work. It is a large boat on which are installed the engines, boilers, etc., necessary to run the large shovel which scoops up the earth in great quantities, depositing it on the sides, thus forming a high bank for the river." - Williamsburg Journal Tribune*

*"At first sight the machine has the appearance of a river freighter. The huge arm with a large shovel or dipper on the end, goes down and then up and then moves to the side to dump its load on the bank. The depth of which they are digging varies a few inches according to the fall of the river, but the general depth is about 11 feet." - North English Record*

*"Inside are three compound engines, one for raising and lowering the dredge proper, another for raising and lowering the shovel, and still another for carrying the shovel to the bank. The raucous clash and clang of the cable drums started and proceeded with monotonous regularity. Both men at the controls did their work in perfect unison, with a result that the big shovel dropped into the water and rose bringing forth its capacity of mud and dirt a yard and a half. After it was up high enough it was swung around and dumped on the bank." - North English Record*

*"The plan adopted by Engineer Watkins is one that adheres closely to the present course of the river; the new ditch will simply cut through the narrow intersections around which the stream meanders, and the openings of the old bed will be filled with the excavation from the new channel. The carrying capacity of the big ditch will be many times that of the present crooked river, so that all flood water will be speedily handled." - Williamsburg Journal-Tribune*



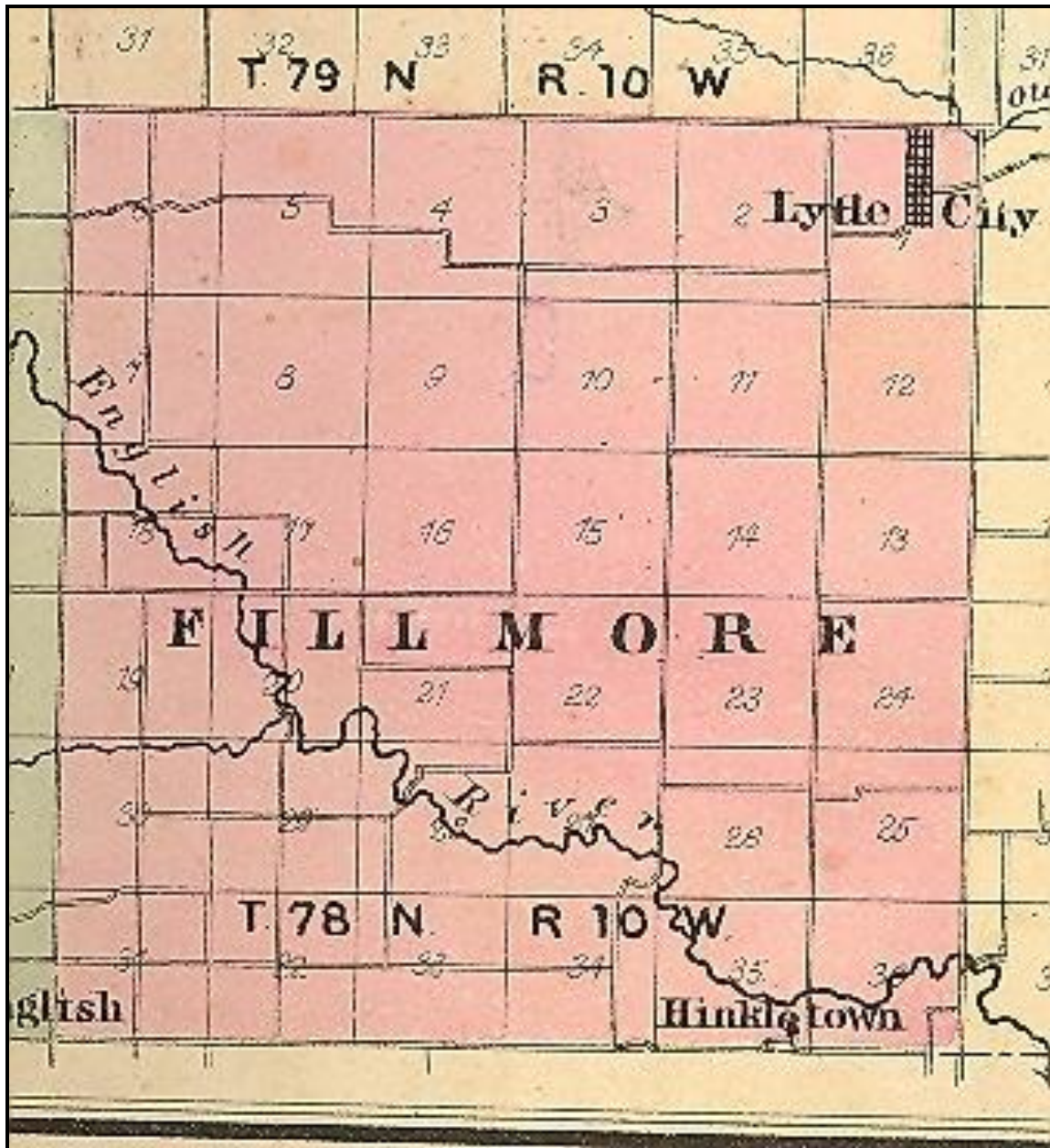
*"The crew consists of three men, the foreman who acts as control man, his helper, who also has charge of some other control levers, and the fireman and machinist." - North English Record.*

*"The men who are running the dredge have their home on a boat and live right on the water, the house following the dredge along as it moves forward." - Williamsburg Journal-Tribune.*

*"A large houseboat was anchored up the river a ways, being used as a home for the workers and their families. Every time it is necessary to move, the boat is floated down the river and the dredge men have their home with them at all times." – North English Record.*

*"They work two shifts, and the work goes on day and night and Sunday, and the citizens take advantage of Sunday to visit the works. Fully one thousand persons were there last Sunday and the Sunday before. Many of them watched the big shovel at work while others amused themselves by catching with their hands, the big fish that are left high and dry by the drainage process." – Deep River Record.*





Dave Jackson lives along the North English River at the site of the ghost town of Hinkletown, in Fillmore township, Iowa County. He is president of the English Valleys History Center, a 501c3 organization dedicated to collecting and preserving the rich history of the English Valleys area. Dave is a member of the Community Advisory Team working with the English River Watershed Management Authority.