

HUNTINGTON COUNTY.

This county is in the form of a rectangle, with the greater diameter lying north and south. It contains about 384 square miles. The physical features of the county are not marked by any prominent hills or elevated points, the general surface being slightly elevated table land that will hardly exceed 300 feet above the surface of Lake Erie. It is well watered by Wabash river and its tributaries, Little river, Salamonia river, Silver and Clear creeks, and a number of small branches which flow from the north and south into the principal stream. It will be seen, by reference to a good map, that Wabash and St. Mary's rivers rise in Mercer and Shelby counties, Ohio, on opposite sides of a narrow water-shed, and flow in the same direction, northwest, until the latter stream reaches a point near Fort Wayne, from whence it turns northeast and joins the Maumee, which flows northeast to lake Erie. St. Joseph river rises in Michigan, flows southwest to Fort Wayne where it also joins the Maumee river. This remarkable hydrographical feature of this part of the State has long attracted the attention of topographers and geographers. A very instructive map and account of this region was published by S. K. Gilbert, in the 1st vol. Geo. Rep. of Ohio. Prof. Gilbert attributes this water phenomena to at least two concentric elevated ridges, one near Defiance, in Ohio, and the other near Fort Wayne, these ridges being terminal moraines.

While there is much evidence presented by the course of the streams and other physiographical features of the country to sustain this view of the subject, there are yet some striking facts which seem to indicate that both St. Joseph

and St. Mary's rivers were once tributaries of Wabash river. The waters of Little river have their rise in a marsh seven miles southwest of Fort Wayne, and this swamp, in times of freshets, brings it into intimate connection with St. Mary's river. The old bed of Little river, where it emerges from the swamp, is as broad as the Wabash in the southeast corner of Huntington county and fully as broad as the St. Joseph at Fort Wayne. That the latter stream and St. Mary's river once formed a part of Little river and constituted the main source of Wabash river may be further inferred from their general parallelism to the courses of the streams that enter the Wabash from the southeast and northeast; Salamonina and Mississinnawa on the one side and Eel and Tippecanoe rivers on the other.

The only well marked evidence which I saw of terminal moraines in this county lies along both banks of Little and Wabash rivers. The large boulders which mark their boundaries are 40 to 50 feet above the beds of the streams. These boulders are very conspicuous above and below the town of Huntington. This county was named in honor of Samuel Huntington, one of the signers of the Declaration of Independence. Huntington is the county seat and is situated on Little river, two miles above its junction with Wabash river. It is built on the boulder terrace fifty two feet above Wabash river and Erie canal, which is here, by engineers' levels, eleven feet lower than Fort Wayne. It is a flourishing town with a population of between 3,000 and 4,000. Mr. Thomas Roche furnished me with the following list of manufactures and the value of manufactured articles for the current year; also, the amount of produce shipped, all of which speaks very well for the prosperity of the town and the resources of the county:

Taylor & Forsythe, plow handles, employ thirty hands and ship annually to the value of twenty thousand dollars.

C. E. Bryant, staves and headings, employs one hundred hands and do an annual business of seventy-five thousand dollars.

Henry Drover, spokes and bent wood, employs twenty hands and ships twenty-four thousand dollars worth annually.

W. J. Campbell, cigar manufacturer, works five hands and produces eight thousand dollars worth annually.

Maffett & Roche, foundry, do an annual business of sixteen thousand dollars.

Hassin & Son, shippers of butter and eggs, sell to the amount of forty-two thousand dollars.

Arnold, Thomas & Co., flouring mills, manufacture twenty thousand dollars worth annually.

Adam Renauer, furniture, employs twelve hands and sells annually fourteen thousand dollars worth of goods.

F. Kapp, furniture, annual sales five thousand dollars.

E. T. Taylor, boot and shoe manufacturer, ships to the value of twenty thousand dollars and gives employment to thirteen hands.

Snider & Son, work four hands and sell annually six thousand dollars worth of boots and shoes.

I. Mangris, employs six hands, sells boots and shoes to the amount of nine thousand dollars.

W. Fisher works five hands in the boot and shoe business and does an annual business of seven thousand five hundred dollars.

Thomas Slack & Co., deals in lumber to the amount of fifteen thousand dollars per year.

Annual shipments from Huntington :

237,000 bushels of wheat.

176,000 bushels of corn.

53,000 bushels of flaxseed.

79,000 bushels of oats.

8,000 bushels of clover and grass seeds.

30,000 hogs.

B. H. Reynolds shipped, on commission, 800,000 wagon spokes and 400,000 feet of hickory and oak lumber.

Warren and Mt. Etna, on Salamonía river, in Salamonía and Polk townships, Markle on Wabash river in Rock creek township, and Antioch, in Dallas township, on the

Toledo, Wabash & Western railroad, are all towns of considerable importance.

The Toledo, Wabash & Western railroad, follows along the banks of Little river and crosses to the south side of Wabash river a short distance below Huntington, to cut off a considerable bend which the latter stream makes to the north, but re-crosses the river at the western edge of the county and continues along its shores to Attica, in Fountain county.

GEOLOGY.

The only rocks exposed, in place in this county, are of paleozoic age and belong to the Niagara epoch. The erratic material composing the glacial drift, rests immediately upon the Niagara, and is succeeded by clay, without organic remains, which may or may not belong to the loess. On this clay we have the recent soil accumulations.

The most eastern out-crop of the Niagara, in the county, is at Markle on the Wabash river. The rock here is quarried from the bed of the river. It has a blue-gray color, irregular fracture, is in four to six-inch layers, and in this part of the county is a favorite building stone. The section exposed in the river bank at Markle, is :

SECTION AT MARKLE:

	Fl.
Drift	6
Buff magnesian limestone, schistose and cherty, and contains a few Niagara fossils.....	10
Bluish gray thin bedded limestone, in bed of Wabash river	37
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The strata have a local dip of 20° southeast. The crop may be followed for two or three miles up and down the stream. The analysis of this stone shows it to be composed of :

Moisture75
Carbonic acid and combined water	48.50
Insoluble matter.....	2.25
Iron and alumina.....	2.50

Lime.....	37.56
Magnesia.....	7.58
Sulphuric acid.....	.27
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	99.37

The beds used for masonry can only be quarried during periods of low water when the current can be turned from it by inexpensive temporary dams. Another crop of this stone is seen along the Salamonina at Warren and at points above and below. Half a mile east of Warren, John A. Lewis has a lime kiln situated in a shallow ravine on the crop of the porous, buff magnesian limestone. In quarrying he has gone down only six feet. The stone is schistose and false bedded, which gives it the appearance of having a strong dip to the southwest. Analysis of

Limestone from John A. Lewis' quarry :

Moisture.....	.75.
Carbonic acid and combined water.....	50.25.
Insoluble matter.....	1.50.
Iron and alumina.....	3.20
Lime	30.80
Magnesia	10.45
Sulphuric acid.....	.06.
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	97.01

One mile below Warren, Elisha Christman has a lime kiln, and is using the stone from a crop on the bank of Salamonina river. Six to eight feet of stone is seen above the bed of the stream. Similar rock is seen again near the grist mill at Bellmont.

At the bridge over Wabash river, one and a half miles south of Huntington, there is a crop of Niagara exposed, sixteen feet above the bed of the river. This stone was used in the bridge abutments, but already shows signs of rapid decay by crumbling under the influence of water and frost. The principal part of the bed is an earthy limestone, and presents the appearance of a very good hydraulic stone. Its composition in 100 parts is :

Moisture.....	.40
Carbonic acid and combined water.....	35.10
Insoluble silicates.....	32.50
Iron and Alumina.....	1.90
Oxide of manganese.....	.40
Lime.....	24.92
Magnesia.....	4.32
Sulphuric acid.....	.14

 99.68

It will be seen that this stone differs from the Markle stone in the large amount of insoluble silicates which it contains, 32.50 per cent., the former only having 2.25 per cent. As before stated, it will make a very good hydraulic cement but is totally unsuited for masonry where durability is desired.

The greatest development of the Niagara is seen along the banks of Little river above and below Huntington. The most easterly crop is on John McCarty's land on section 18, township 28, range 10, about three and a half miles from Huntington. From this point east it remains covered by drift and is penetrated at the depth of eighty-eight feet by the Fort Wayne well. Lime kilns have been established all along the crop and the burning of lime constitutes one of the chief industries of the county.

Thirty one kilns were in active operation making caustic lime at the time of my visit. Eight of the number are perpetual kilns, the remainder are occasional kilns which require to be completely discharged and cooled before re-filling. The companies are here given in the order of their location on the river, commencing with the one farthest up the stream. The number of bushels of lime annually burned is also given.

NAME OF OWNER OR FIRM.	Number of Kilns.	Cords of Wood Consumed	Bushels of Lime Produced.
John McCarty.....	1	400	20,000
A. Bower.....	2	460	23,000
Foster & Fulton.....	3	1,000	50,000
E. S. Wheeler.....	2	1,200	57,000
Berry & Booser.....	2	1,100	53,000
Hawley & Bro.....	2	1,200	59,000
A. Beck.....	3	1,800	90,000
Smith & Morton.....	2	600	30,000
James Lillie & Co.....	4	1,900	100,000
M. Baltus.....	6	1,900	100,000
Pound & Co.....	2	400	20,000
Mollering & Son.....	2	300	15,000
Total.....	31	12,260	617,000

It will be seen by this table that the annual make of lime amounts to about 617,000 bushels and the consumption of wood to 12,260 cords; being an average of nearly 400 cords of wood and 20,000 bushels of lime per kiln, and an average of 50 bushels of lime for each cord of wood consumed.

This lime is held in high estimation and meets with a ready market not only in Indiana, but in Ohio and Illinois, as well. The composition of the stone used at the respective kilns on Little river is given in the following table:

TABLE OF ANALYSES OF LIMESTONES FROM HUNTINGTON COUNTY.

NAME OF OWNER.	Moisture at 212 degrees, F.	Carbonic acid and combined water.	Alumina, with some oxide of Iron.	Lime.	Magnesia.	Sulphuric Acid.	Insoluble Matter.	Oxide of Manganese.
Fert Wayne Co., lower quarry.....No. 1	.25	45.25	18.00	28.90	3.96	.27	3.65	
Hawley Bros.....No. 2	.50	49.52	8.25	31.92	9.58	.54	.50	
One mile below Markle.....No. 3	.75	48.50	2.50	37.54	7.56	.27	2.25	
Hawley'sNo. 4	.30	49.20	2.50	33.44	12.61	.34	1.50	
Warren road, near bridgeNo. 5	.40	35.10	1.90	24.92	4.32	.14	32.50	.40
Amos Bowers.....No. 6	.35	45.15	18.50	31.08	4.32	.30	.50	
Berry Bros.....No. 7	.80	47.20	9.00	29.12	12.43	.27	1.00	
McCartyNo. 8	.60	50.90	11.50	27.44	8.28	.00	1.25	
Drover.....No. 9	1.00	58.00	4.50	17.64	18.20	.00	.60	
John A LewisNo. 10	.75	50.25	3.20	30.80	10.45	.06	1.50	

The quality of the burnt lime is mainly due to the constituents of the limestone from which it is made. When the stone is principally composed of carbonate of lime the resulting lime is what is called by the masons "fat lime" or quick setting. But if the stone is a dolomite, composed of equal equivalents of carbonate of lime and carbonate of magnesia, the resulting lime forms a short, thin pulp with water and is termed "poor." For ordinary mortar, fat lime is objectionable on account of the rapidity with which it sets and becomes too hard to enter into close combination with the brick. Therefore, a medium quality of lime, termed "slow setting," is sought for, since it will yield a mortar that when spread over a large space will give the mason an opportunity to adjust a number of bricks before it commences to set. This property is found in lime where the magnesia does not form too large a per cent.

From the table of analyses, it will be seen that the composition of the limestones in this county varies as regards the amount of insoluble silicates, alumina and magnesia, which they contain, nor is it fully understood why these substances, when present in quick-lime in proportions that are quite variable, give to it hydraulic properties, so that, with our present chemical knowledge of the subject, one is at a loss, in the absence of actual practical tests made of its binding qualities, to decide where the mortar ceases to be air-setting and becomes hydraulic or water-setting.

Nos. 1, 2, 3, 4, 6, 7, 8, 9 and 10, yield good but slow air-setting caustic lime. No. 5 will undoubtedly give a lime that will have hydraulic properties, or set under water.

The limestone, which is considered the best for making quick-lime, is a buff, porous stone containing large quantities of casts of *Pentamerus oblongus*, *Amphicoelia costata*, *Rhynchonella* sp?, *Orthis annulatum*, *O. crebescens*, *Chonophyllum niagarensis*, *Favosites niagarensis*, *Halysites catenulata*, *Fenestella* sp?. These fossils are particularly abundant at McCarty's quarry. *Pentamerus oblongus* is especially conspicuous and gives the stone the appearance of a breccia.

The stone lies so close to the surface that very little

stripping is required in order to reach the layers suitable for lime.

The following section will show the depth to which the stone has been worked at the quarries and the amount of earth that has been removed.

SECTION OF M. BALTUS' QUARRY:

	Ft.
Soil	2
Schistose buff magnesian limestone.....	6
Best stone for burning.....	2
Little river.	

SECTION AT BERRY BROS.' QUARRY:

	Ft.
Surface soil.....	3 to 4
Friable magnesian limestone.....	9
Thick bedded limestone.....	3
Little river.	

SECTION AT HAWLEY BROS.' QUARRY:

Soil and clay.	
Buff porous magnesian limestone.....	10 to 12 ft.
Bed of Little river.	

SECTION AT LILLIE & CO.'S QUARRY:

	Ft.
Surface, black mold.....	1
Magnesian limestone.....	7

The rock at the above quarries lies in waves, and is peculiarly characterized by false bedding, which sometimes gives the appearance of a disturbed strata, dipping in various directions at a high angle. There are quarries on the left bank of the river, where the buff magnesian limestone, so famous for the good lime which it yields, is mixed with, and sometimes replaced by, a bluish earthy hydraulic limestone, resembling the stone at the bridge over Wabash river. Considerable money has been spent in trying to make of it a marketable lime, and to introduce it as a building stone, but in both instances it has proved comparatively worthless; it may, however, by judicious selection, be used for the manufacture of hydraulic cement.

Just along the west edge of Huntington, quarries have been opened at several places, running north from the river, for flagging and building stone. At the most southern opening, about one hundred yards from the river, we find :

Loose chert	6 feet.
Blue flag-stone, beds in three inch layers.....	6 feet.

The dip at this quarry appears to be 8° in the direction of 40° east of south. The chert is in large detached masses and mixed with buff magnesian limestone. North, seventy yards, at another quarry, the buff magnesian limestone is free from chert, but is schistose and false bedded, with an apparent dip of 20° at the south part of the quarry, but going back some ten yards the apparent dip is 37° S. 40° E. Half a mile down the stream, the rocks at the river edge dip about 80° S. 70° E. At the Drover quarry, owned by Mollering & Co., a large opening has been made by quarrying stone for lime. The rocks are false bedded and appear to dip in every direction from the centre of the quarry.

The surface rocks, where excavations commenced and went to the depth of 20 feet, is, buff magnesian, coral bearing limestone. In some parts of the quarry there are masses of *Favosites niagarensis* so large as to lead at once to the belief that the entire bed of stone was derived from an ancient coral reef. The great disorder of the strata, mainly due to false bedding or peculiar arrangement of the material constituting the present rocks, has led many to infer that this irregularity was due to earthquake or volcanic action. This is the more deceptive since the apparent elevations have their surfaces capped with enduring beds of chert or impure flint, and along the local waves in the strata stand in elevated knobs which fancy has construed into volcanic cones. Huntington is located on one of these flint ridges and the locality was known to the Indians by the name of "*We-pe-cha-an-gan-ge*" or flint place. The flint of this locality was of great value to the Indians

as the material of which they fashioned their arrow points, spear points and flint knives.

At dam No. 1 across Wabash river, two miles below Huntington, the Niagara rock appears along the left bank of the stream and served for one of the abutments of the dam. The beds are thin, cherty and much weathered on exposed edges. The rock forms the bed of the river and presents a vertical face ten and a half feet in high on the left shore, while in the bottom on the opposite side of the river it is entirely replaced by the drift. A few feet below the dam there is a slight anticlinal axis, the dip being 4° S. E. on one side of the crown and 4° N. W. on the other.

Col. Milligan's quarry, just below Huntington on the bank of Little river, has been leased by a practical quarryman, Charles Krock, and he is taking out some of the best looking stone for flagging and mason work to be found in the neighborhood. The stripping is quite light, and the section obtained, shows:

	Ft.	In.
Soil	1	00
Buff, rubble, chert, mostly loose.....	1	06
Buff rubble, good.....	2	06
Flagstone.....	0	02
Flagstone.....	0	05
Building stone.....	0	08
Building stone.....	0	09
Bed of Little river.		
	7	00

On Wabash river, about one mile northwest of Antioch, Joseph Leidy has opened a quarry to procure stone for the abutments of a new bridge to be built across the river where the road leading north from Antioch crosses it. The stone is quarried at a crop in the river bank and furnished the following section :

	Ft.
Earth stripping.....	1
Buff, schistose, magnesia limestone.....	3
Flint strata.....	1 to 2
Buff, magnesian limestone, some blue spots and bands, principal rock used.....	15
Bed of Wabash river.	

The beds are very irregular, with an apparent dip of 8° to the southwest. On the opposite side of the river and at Loon creek, similar rock is seen. The entire thickness at the crop is twenty feet, and the apparent dip is 20° northeast. This stone was quarried and used in the construction of locks on the canal, but can not be considered a durable stone. Near this old quarry and on section 22, township 28, range 8, there is a strong chalybeate spring. It rises up above the surface of the ground and flows over the side of the gum curbing in a bold stream; it is strongly charged with iron, and is cool and pleasant to the taste. The water possesses valuable medicinal properties, is close to the thriving village of Antioch on the Toledo, Wabash & Western railroad, and might be made a place of resort for invalids who require a mild tonic. An additional attraction may also be found in the saline sulphur water, on section 14, township 28, range 8, scarcely a mile distant from the chalybeate spring.

The sulphur water flows from an artesian well bored for coal oil on the bank of Silver creek. No record could be found of this bore, but it is supposed that the water comes from a depth of about 600 feet, and flows out at the top of a wooden pump stock, four or five feet above the surface. Judging by the taste, it is strong in chloride of sodium and other mineral salts, and emits a strong odor of sulphureted hydrogen mixed with marsh gas, carbureted hydrogen. The existence of the latter gas, in the boggy places along the creek, led to the selection of this locality as one most likely to furnish oil, from the well known fact that carbureted hydrogen usually accompanies the oil in the famous wells on Oil creek, in Pennsylvania. In this case, however, no oil was obtained. Anywhere in the marsh near the well, if a stick is run down into the mud and vegetable matter, carbureted hydrogen will escape, and if touched with a lighted match takes fire and burns. This well is peculiarly interesting, since it lies almost mid-way between Fort Wayne, where a well was bored to the depth of 3,000 feet, and Wabash, where a well went to the depth

of 2270 feet, neither of which found water that would rise to the surface.

It will be seen from the foregoing remarks, that the only stratified rocks found in the county crop in a few localities along the streams, and that while they are eminently suited for the manufacture of quick-lime, it is only in rare instances that layers are found at all suitable for masonry, where durability is considered of prime importance. The Niagara, in this State, is not metalliferous, it does not even furnish notable quantities of iron-ore. Nevertheless, some years ago there was considerable excitement raised about the reported existence of gold in the rocks at the Drover quarry, now owned by Mollering & Co. Specimens of the reported gold ore were taken to New York, by Mr. Backus, and they were reported by some one to yield \$158.00 to the ton. Stock to the amount of \$10,000 was sold and with the money thus raised, the company erected a mill and purchased the necessary machinery for crushing the rock and saving the precious metal. Unfortunately for the success of the enterprise, the rock, as any intelligent geologist could have told them at a glance, proved totally barren of precious metals, and all the company could realize after spending much money, was the value of the, to them, useless machinery.

Mr. John Roche pointed out to me the exact spot where Mr. Backus obtained his specimens and the mineral which he mistook for gold. It proved to be iron pyrites partly decomposed on the surface and filling isolated cavities in the cherty, magnesian limestone.

GLACIAL DRIFT.

The drift covers the entire county, and can not be less than 100 to 130 feet thick over a great portion of the table-land. The upper portion is composed of irregular beds of sand, clay and gravel. Boulders and hard plastic clay lie

at the base. The larger boulders, "Roches moutonnees," lie along both shores of Little river and Wabash river at an elevation of 40 to 50 feet above the streams. They are particularly abundant above and below Huntington on the right bank of Little river. Their surfaces are scratched and grooved but I was unable to find glacial scratches on the stratified rocks where they are exposed to view. This may, in part, be due to the fact that no fresh surface of the upper layers were seen, and the readiness with which the Niagara weathers, would soon obliterate all traces of such marks. From the manner in which the boulders lie along the borders of Little river, one is led to the conclusion that the stream has cut its way between two lateral moraines. A very large granite boulder, weighing many tons, lies in the bed of Little river three and a half miles above Huntington, which, from a fancied resemblance in shape to a saddle, has received the name of "Saddle Rock." This boulder rests immediately on the Niagara which is here seen in the bed of the river for the last time as you ascend the stream, and is not again found above the surface in an easterly direction before reaching the borders of Ohio. The large beds of sand found in the upper part of the drift are particularly valuable in this part of the State since they furnish the only source from which this essential ingredient of good mortar can be had. There is a very large deposit of sand in the northwest border of Huntington. It is ten or twelve feet thick and the lines of deposition present the characteristic features of what is termed in rock strata "false bedding." The sand from this pit is held in high estimation by the masons and plasterers, and finds a ready market.

ANTIQUITIES.

Though the present site of Huntington and the "Forks of the Wabash," as the junction of Little river with that stream was familiarly called by the early settlers of the county, was the favorite abode of savages, yet, strange to

say, no traces of the works of the pre-historic mound builder are found in the county, except along Salamoniam river, in the southeast corner, opposite Warren, where, on a high eminence in the bend of the latter river, there are two mounds. The first one visited is at Daniel Adsits. It is about twenty-five feet in circumference and six feet high. A slight excavation had been made into the top, but so far as could be learned no relics were found. there is a shallow trench completely encircling it. From the top the view overlooks the Salamoniam and its fine fertile bottoms. The other mound is about a quarter of a mile to the northwest, and in a cultivated orchard belonging to John D. Jones, and near his barn. This mound has been nearly destroyed by the plow, and I was unable to learn that it possessed any peculiar features, or contained any relics. Mr. Jones informed me that he had, from time to time, picked up on his farm, stone axes, pipes, flint arrow and spear points, but could give no special account of the existence of other mounds. Though I followed Salamoniam river for many miles above Warren, and made repeated inquiries about mounds, I could not learn of any others in the county.

TIMBER.

This county was originally covered with a fine forest, but clearing the land for farming purposes and the conversion of trees into lumber has greatly reduced its area and stripped it of many of its finest representatives. Among the principal forest trees are white oak, poplar, black walnut, beech, ash, sugar tree, burr oak, red oak, elm and some cottonwood on wet land. On the road to Silverville, three and a half miles northwest of Huntington, I measured a white oak tree that proved to be twenty feet and three inches in diameter, four feet from the ground.

AGRICULTURE.

The county may be divided into upland soil and bottom-land soil. The former is situated on the level plains which

lie from 80 to 120 feet above the river and creek bottoms. It is of every variety, from stiff yellowish clay to sandy loam and black muck. This land is generally underlaid by a stiff, tenacious clay which retains the surface water and gives rise to extensive marshes. These marshes, until drained by ditches, were filled with aquatic plants, and were impassable to horsemen. I was taken by Mr. John Roche to his farm, located on the site of a large swamp, the former home of beavers, and the dams which these industrious animals had constructed across narrow necks of the swamp, in order to confine the water and protect their homes against the dangers of drouth, are still to be seen. When drained this land is unsurpassed by any in the county for corn, wheat, oats and grasses. The loose, porous, buff soil, on the table lands, is a clayey marl and may be ranked as the best character of land for producing large yields of wheat and clover. The river and creek bottoms are everywhere arable lands, and produce fine crops of grain and grass. The immense swamp, which lies along the southeastern border of the county has been, in a great measure, ditched and drained by the energy and enterprise of Mr. John Roche. The reclaimed soil is a deep black, sandy loam, and though the season had been remarkably wet, I saw as good corn growing on it as could be found on land originally dry.

All the clayey land in the county will be greatly improved by under-draining, and no better investment can be made by farmers than one which is to provide tile for a thorough system of under-drains. Where the land has been long in cultivation the under-drains should be followed up by an annual application of fertilizers to the soil, such as will return to the land the plant food which has been removed by carting off the crops. Taken altogether the lands of Huntington county take a very high rank for fertility.

CONCLUSION.

I desire in this place to return thanks to the citizens of

the county for the courtesy uniformly extended to me while making the survey. My obligations are especially due to John Roche, Thos. Roche, Hon. A. H. Shafer, M. D., Robert Simonton, W. W. Hawley, Maj. J. W. Purviance, Alfred Moore attorney at law, W. McGrew First National Bank, Daniel Hitch, Hon. Mr. Sayler attorney at law, J. R. Slack attorney at law, T. L. Lewis county clerk, S. Emley sheriff, and L. J. Day recorder.

In consequence of the great length of the report for 1875 and the small sum appropriated for the public printing, my observations in Decatur, Hamilton and Madison counties will have to be withheld until the publication of the next report.
