Public sentiment is for drainage after the drainage has been constructed and paid for but decidedly against drainage before the drainage is established. This is more or less true in all public improvements. In a small town, over in Illinois, the town board decided to establish concrete sidewalks in the main portion of the town and at the hearing a wealthy old resident, very strenuously objected to the construction of the sidewalks for the reason that concrete is hard on bare feet. Fortunately in public improvements the majority is not always against. But my experience in drainage work for twenty-six years, has convinced me that the pessimists are in the majority when a drainage improvement is to be established, and from my knowledge of the history of drainage I am convinced that it has always been so.

In the first place we inherited that trait from the old country. Several hundred years ago England decided to reclaim a vast territory of land on the east coast known as Finland. This was swampy country, too wet for cultivation and only fit for pasture and hunting. It was thinly settled by a shiftless people who made what little living they had by hunting. The only title they had to the land was a squatter’s right. The Crown donated forty thousand pounds for the purpose of building levies and drainage canals, but the natives organized to oppose the improvements. In the contest much property was destroyed and some lives were lost. So effective was the opposition of these Finmmen, that the completion of the improvement was delayed more than a hundred years.

**Development of Drainage in Indiana**

The drainage history of our own country includes similar episodes but in lesser degree. Our forefathers came into this country, a native wilderness, built their houses on the hills, cut the timber off the high ground and pastured and hunted on the low ground. As room was plentiful they had no incentive to go to the trouble of draining the swamps. Thousands of acres in the northern part of Indiana were too wet for settlement. This land was deeded by the government to the state on condition that the state would drain the land. As the population became thicker and land more valuable, it was the state that took the initiative in the drainage improvements. This government land was deeded out in forty acre allotments...
on condition that the grantee would drain eighty acres. This drainage was accomplished in some cases by digging a ditch two spades deep and three or four spades wide but tradition has it that in many cases they would hitch six head of oxen to a log and drag it up and down an existing water course between the sloughs or simply mow a swath of grass through the sloughs. These ditches are known as the old state ditches. I have seen traces of a few in Starke and Pulaski counties but have never run across the records of any of them.

In this connection it is interesting to read over the field notes of the original government survey. These notes are continuously referring to marshes and swamps with hardly enough timber to provide witness trees. At the close of the field notes of each township the surveyor always gave a description of the general character of the soil, timber, and such. For T 34N; R4W., his only remarks were these, "This will be a good place for squatters, as there is no longer any danger of the land ever being sold out from under them." With this vague conception of original conditions, we can understand some of the difficulties and necessities for drainage.

With the exception of these state ditches nothing of any consequence was done in drainage in this part of the state until about 1883, owing to the fact that the majority opposed new drainage. The only law prior to this date, that I have ever found, required the organization of drainage districts but the majority could defeat the project. I have not read a record of the establishment of any ditch under this law in the above named counties.

I think it was in 1883 when our venerable Judge Burson of Pulaski County (now living at Winamac) was a member of the Legislature, together with some other farseeing legislators introduced and secured the passage of a bill that only required five signatures on a petition to start a drainage proceedings and a two thirds majority on a remonstrance to defeat the project. This principal, with some variations, has been the law ever since under which drainage has progressed very rapidly. Much credit is due these men for our present drainage system. In a sense this law recognizes the right of the minority to rule the majority, but without this law I am afraid our drainage would be in a poor condition. Township 34 North, Range 1 West, for instance, instead of being covered with large productive farms, supporting a large population as it is today, would still be the home of bull-frogs, blackbirds and muskrats. When Mr. Robinson got up the petition to reclaim the greater part of this township, so great was the opposition, that he had to deed small tracts of land to relatives and friends to keep the opposition from getting the necessary two-fifths to defeat the project. As the last expression of opposition, his effigy was burned on the public square in Knox.
Defects in Drainage Laws

The drainage situation as it stands on our statutes today, is an outgrowth of forty-four years' experience. It is much better than it used to be, yet in two respects, it is not as good as it was a few years ago. Let us look at the petition. Land owners desiring to drain their lands secure an attorney to write up the petition, and it is in the power of this attorney to determine the character and extent of the drainage system. Most attorneys know something of the drainage laws but not many of them know much about drainage problems. Their chief interests are, first, to see that the petition is extensive enough to secure the drainage their clients require, and secondly, to get their four per cent with as little work as possible. In most cases they will describe only enough of the routes and name only enough of the affected land owners to accomplish these results.

It used to be that the engineer and viewers could extend the routes sufficiently to complete a system, but in 1919 the legislature passed a law requiring the petition to name two-thirds of the land owners affected and to describe two-thirds of the route to be drained. In practice this does not affect the attorney in writing the petition, as was intended, for in many cases to name two-thirds of the land owners affected, he would be faced with a two-thirds remonstrance. So he plays safe by naming only land-owners in that portion of the drainage system who are not liable to remonstrate. Thus the drainage commissioner's hands are tied in making their report. The results are poor alignment and "piece-meal" construction.

The most serious defect in our drainage laws is the trial of remonstrances against assessments. The theory of the law sounds good, but in practice it works against justice. In every community there are people who consider the benefits derived from any improvement greater than the costs and there are also in that same community those who think the costs of any improvement are greater than the benefits. The lawyers for the remonstrance pick the latter class for witnesses. They will testify that the land will not be benefited by improvements, and I have heard them go so far as to say that the land would be worth several dollars per acre less after the construction of the drain. The attorneys for the petitioners choose the other extreme with similar testimonies on the other side. The judge who is supposed to know nothing of the case except from the evidence given has no facts on which to base a judgment and, being human, and wanting to let everybody out as easy as possible, usually reduces each assessment ten per cent in which case the costs in the trial follows the ditch. If he had reduced it any less, the costs would be taxed to the remonstrator. So common is this practice that many land owners always remon-
strate against their assessment whether it is great or small. Many attorneys if not interested in the petition, will call on each landowner urging him to remonstrate, offering to take his case for a certain per cent of the reduction and almost promise to get ten per cent or more off. It takes time to try all these cases, and it often happens that some land owner gets worked up to a high pitch of excitement during the trial and is not satisfied with his 10% off. He may take the case to the supreme court where it remains for several years; meanwhile the farmers are all losing crops for want of a ditch. So critical is this condition in a drainage case, that many attorneys for the petitioners, rather than take the risk of excessive delays which would be costly to their clients, will call in all the attorneys for the remonstrance and get around a table and adjust the assessments in a conference. Then these findings are taken to the judge who makes the order accordingly. Now it does not require a legally trained mind to see there is no justice in this method. While all trials do not result as above described, far too many of consequence do.

Drainage assessments are made on the basis of benefits. Benefits in a drainage procedure can only be determined through an experienced man's judgment, and the best way for a man to form a judgment is to simply see for himself and not depend on "hear-say." Therefore the remedy is to simply go back to the old law providing for "re-viewers." Let them send the second set of re-viewers in certain cases, if necessary, but let their verdict be final. It would save costly litigation and long delays in getting drainage constructed, and come much nearer to justice than by the present method.

Evidence Against Drainage Opponents

Enough of the law. I want to get back to the subject of "public sentiment." The "Finn-men" today do not live in the undeveloped or undrained land. By that I mean the men who discourage the reclamation of wet lands live, not on the land, but in the large cities. These men have a strange organization and are putting out much propaganda for the purpose of fixing public sentiment against draining wild or undeveloped land. Their aim is to keep these wild lands for hunting and fishing purposes, and I believe that their purpose is truly laudable. But it would be much better for them to buy the property and own it themselves than to try to get the state to maintain it for them.

I have read much of their literature and I have seen three statements pertaining to this (Starke) county which I believe I am qualified to show are untrue. Some of their statements are as follows: First, "The cost of the drainage of the Kankakee Swamps is more than the benefits derived thereby."
Second; "After the swamps have been drained most of the land has been found to be worthless."

Third; "Draining the swamps and lowering the water level, has ruined thousands of acres of what was before good land."

As to the first, that is a matter of figures. A conservative estimate of the cost of the drainage of the Kankakee River is around one million dollars, and there has been reclaimed between thirty and forty thousand acres. The land, before being drained, sold from ten to twenty dollars per acre and since being drained for ninety to one hundred dollars per acre.

As to the second statement, a glimpse of the crops raised on this ground last year would be sufficient to convince any man that the ground is not worthless. I have seen 800 bushels of onions, 60 bushels of corn and 40 pounds of mint oil grown per acre on this land. I have surveyed on this land from T32N; R4E to T36N; R1W and I have not seen any land that was worthless.

The third statement is not so easy to disprove but on the other hand, they never have proved its accuracy. To my knowledge, no one has been able to show what effect lowering the water level in a lake or water course has on the water level on the higher lands. Experiments are now being conducted to determine this fact but no conclusive results have yet been obtained.

It is true that hundreds of farms which used to be productive are now abandoned, but this can be explained more satisfactorily in another way. Before the low lands were drained our best farmers were on the high ground and they kept their farms productive, but after the low lands were drained these farmers moved to the richer lands and left the high ground to the poorer farmers. The proof of this theory lies in the fact that not all of the good farmers left the high ground. We have several good farmers who stayed on the high ground and their land is as productive today as it ever was, perhaps more so. Then too we have about as many abandoned farms to the section in the Tippecanoe water-shed which is not connected in any way with the Kankakee River. The Tippecanoe has never been dredged, on the contrary they have been building dams in this river. When all the facts are known, the logical conclusion is that the drainage of the Kankakee River has proved of great benefit to all concerned.

Let the sportsmen of the city have their hunting grounds but let's not sacrifice the most fertile lands we have for that purpose. If Chicago and the Calumet District keeps on growing we will need every acre of this ground to feed the population in the next ten years.