

The Interurban Electric Railways of Ohio

BY GEORGE S. DAVIS

The spirit of electric railway building is pervading the entire country, hardly any section having a considerable population being without some projects of this kind, but it is claimed, and with good reason, that in no other section has the development reached so promising a stage as in Ohio. Unless there is a reaction against electric railway enterprises, and this contingency is not feared for some time to come, it is claimed that within two or three years the electric railways of Ohio will closely rival in mileage the steam roads of that State. This may seem an astonishing proposition in view of the fact that Ohio ranks among the first States in the Union in respect to railways, having something like 9000 miles of steam road in operation, but a glance at the accompanying map and the consideration of a few figures on the subject will prove that the statement is not far from correct. At the present time there are in operation in the cities and towns of Ohio 898 miles of electric railways; Cleveland and Cincinnati each having over 200 miles of track, and Toledo and Columbus about 100 miles each. Of the interurban roads running from one town to another there are in operation, according to latest estimates, 868 miles, while there are in actual process of construction no less than 1435 miles of road. Before referring to the roads which are being projected, it will add weight to these figures to consider a bit of information furnished the writer by the Secretary of State, who has charge of all incorporations. He states that from Nov. 15, 1898, to Nov. 15, 1899, there were incorporated in Ohio forty-two railways, with capital stock amounting to \$15,666,000; increase of capital stock for the same period, \$2,180,000; Nov. 15, 1899 to Nov. 15, 1900, thirty-three railways, with \$10,352,000 capital stock, and \$5,915,000 increase of capital stock, and from Nov. 15, 1900, to July 1, 1901, sixty-nine railways, with \$25,579,000 capital stock, and \$8,947,000 increase of capital stock. The aggregate of the above indicates that in less than three years, 144 companies, with \$51,597,000 capital stock have been organized in Ohio to build electric railways in that State, not to mention several which have been incorporated in other States for the same purpose, while various companies interested in the business have during that period increased their capital stock \$17,042,000. As many of the companies now operating lines in Ohio were organized prior to 1898, it will be seen that the vast majority of projects are still incomplete. Of course there is no doubt that a number of these companies have already dropped out of the field, but after careful researches, covering a period of nearly two years, the writer figures that franchises and rights of way have been secured or are being secured for 4800 miles of road on which no work other than surveying, and in some cases grading, has been done. Of course, it is not claimed that all of these projects will be carried out; far from it. Hardly a week passes but there are reorganizations or consolidations, but the fact remains that every portion of Ohio, excepting possibly a small section of the central portion of the State, which is very hilly, and a strip through the southern portion, which is sparsely settled, is being crossed and recrossed by electric railway projects.

In some portions of the State, notably in the northern central portion and in the vicinity of Cincinnati, there are more electric railway projects than could be kept track of by a United States census official. New companies are organized; they consolidate with some other project, and then they both give up the fight, and their places are taken by others. In some counties electric railway promoters are

more numerous than tramps in hard times, and the situation is aptly described by a country newspaper, located in the northern part of the State, in this manner: "Electric railway men are thicker than flies in summer these days, and they appear to have entirely superseded the lightning rod agents of former days. The progressive farmers in these parts all have special rooms set for conferences with railway promoters, and hardly a day passes but they are called into use. A well dressed stranger drives up, and the farmer at once ushers him into the conference room, where paper and pen are kept. The right of way through farm or along highway is signed, and the promoter passes on to the next with neatness and despatch. Thus far nothing has been seen of cars hereabouts, but if the farmers keep on granting rights of way, it is hoped that some day the real thing will materialize."

In a number of places there are two or more companies fighting for the same route; some of them having actually commenced construction work. Up to a few days ago there was a route between Tiffin and Port Clinton, which was being fought for by three different companies. Each was determined to build, and each had crews of men at work grading. It is understood that two of them have now so far secured the advantage over the others that one of them agreed to sell out. Within the last two or three weeks no less than four companies have sold out or reached amicable agreements with rival companies, so that only one line will be built. On the other hand, there are at present a number of routes which are being built by two or more strong companies, which show no sign of yielding, having announced that they will build and operate their lines, no matter what is done by rival companies. It would seem that the only logical outcome of such rivalry is consolidation, as it has already been proven in one or two instances in this State that two lines between the same points are not profitable; it was only very recently that two roads which have been in operation for several years consolidated because neither was paying. Electric railway financiers of long experience say that no matter what may be the population of two towns, they would not consider it a good investment to parallel a road which is in successful operation, since the operating line can, at a comparatively small expense, increase its facilities to take care of all possible demands, whereas the new line must build from the ground up.

The strong rivalry for territory is bound to have one good effect, however, and that is, it is tending to improve the character and construction of new lines. It is safe to say that one-half of the lines now projected in Ohio are being promoted by people who have little or no capital. The promoters secure the consents of property owners, get franchises from towns and counties, make preliminary surveys, and then appeal to the financiers. If the project is taken up, and the road is built, the promoters secure a block of stock, and perhaps good positions for their trouble; if not, their grants soon expire, and they are out their time and expenses. For this reason it is now a question of presenting to the capitalists the most inviting proposition. Time was when a franchise for a line along the highway was eagerly sought for, but these days a private right of way through farms, or, at least, along the highway inside the fences is generally demanded. Options are secured on the private right of way, and if the road is built, it is bought for all time, whereas the highway franchises are usually granted only for twenty-five years. To permit of competition with the railways, high speed is necessary, and this can only be obtained on private right of way. On the whole, the "pike" roads are rapidly falling into disrepute, and it is probable that few of them will be built in the

future. Some of the latest examples of electric railway construction in this State, compare favorably with the best steam roads. Lines are now being built which are carefully graded and ballasted; 60-lb., 70-lb., and, in some cases, 80-lb. rails are used, and curves and grades are practically eliminated. Roads which will operate at 60 miles and 70 miles an hour, with third-rail system, with through sleeping and dining cars, are being freely talked of, but they are still for the future.

For the present the more conservative and successful lines are satisfied with from 30 miles to 35 miles an hour, with little or no attempt to compete for time with the steam roads. In this connection it might be stated that the ideas of various promoters appear to differ widely on the question of the future of electric railways. By some it is claimed that the day is not far distant when electric lines will be operating through trains with sleeping and dining cars, and will compete in every respect with the through steam trunk lines, and it appears that a number of projectors are building with such plans in view. On the other hand, many practical electric railway people claim that the traction lines are opening up a field which is entirely distinct and outside the province of steam roads. It is claimed that, except in a limited degree, the traction lines are not, and never will be, in competition with steam roads, but that each has a distinct field, which will be worked hand in hand. It is claimed that the majority of electric lines now in operation serve as feeders to the steam roads, taking care of a class of business which, while it has heretofore, through necessity, fallen to the steam roads, has never been profitable, and is one which they are now more than willing to turn over to the new industry. Such a statement may be contrary to the general belief that the traction lines are making deep inroads into the profits of the steam roads, and in this respect a recent interview with a high official of the Lake Shore & Michigan Southern Railway, one of the leading trunk lines, is of interest. He said: "If trunk lines could abolish short hauls and frequent stops, it would mean money in the pockets of stockholders. The short haul is a drain, and if the electric roads will take care of this class of business, it will prove a boon to us. I believe the ideal arrangement would be to have the electric roads act as feeders to the steam roads. Travelers could be brought from the towns into the larger cities on the electric cars, and take through fast trains for distant points. In Cleveland, for instance, we would be glad if an arrangement could be made with the traction companies to bring into the city passengers from points within 50 miles or so, in order that it would not be necessary to stop trains between, say, Erie and Cleveland and Cleveland and Toledo. The frequent stops between these points by some of our trains cost us more than the additional traffic amounts to."

Unfortunately for the steam roads, however, they are not all trunk lines, and it is doubtful if the managements of some of the shorter and less important lines which are bound to lose much of their business to the traction lines will coincide with these views. While it will relieve them of passenger business, which may or may not have been profitable, it will also take away from them a large amount of freight business.

Under a recent decision of the Supreme Court of Ohio the carrying of freight through city streets, where franchises have been secured, was declared perfectly legal, and nearly all the roads in operation are now employing combination cars, and hauling large quantities of package freight. A number of roads have recently inaugurated exclusive freight car service, and this branch is proving a profitable and important factor in the business of nearly

all lines; the writer has in mind a road in which the package freight business furnishes one-third of the gross receipts. Where this practice will end, no one seems willing to predict. It is entering largely into the plans of every promotor of electric railways in Ohio at the present time, and that it is bound to draw from the steam roads much of the business which has been theirs in the past can not be questioned.

And it is a noticeable fact that the majority of the very people who at present contend that the electric roads are to act as feeders to the steam roads are projecting systems of traction lines, which, when connected, will give through lines, running clear across the State, connecting all the important centers. One of these systems is already over 300 miles in length, while there will be several which will be 200 miles or more long. It is said that it is not the intention at present to operate through cars the length of these lines, but it is clear that the day is not far distant when this will be done, and in order to compete for through traffic, no expense is being spared to provide perfect track and roadbed, and speedy equipment. One feature which has always hindered the speed of interurban roads is that in running into or passing through the larger cities the cars have been operated by the city roads on the same schedule as the local cars, so that it frequently happens that it requires almost as long to run the 5 miles or 6 miles into the center of the city as for 30 miles or 35 miles in the country over private right of way. In some of the cities, Cincinnati and Columbus, for instance, the interurbans have been kept out of the center of the city, because the city lines have a wide gage track, and declined to make satisfactory terms for an adjustment of the matter. In Columbus this has been obviated by an interurban company securing its own right of way through the city.

Many of the new electric railways are filling a long-felt want by opening up territory which has never been traversed by steam roads, while nearly all of them will prove of inestimable value in providing short cuts from one town to another. It will be noticed that the general trend of electric lines is from north to south, whereas the majority of steam trunk lines have an easterly and westerly direction; hence the electric lines are furnishing short routes between towns on different trunk lines, which heretofore have only been accessible by driving, or long and circuitous travel by railway.

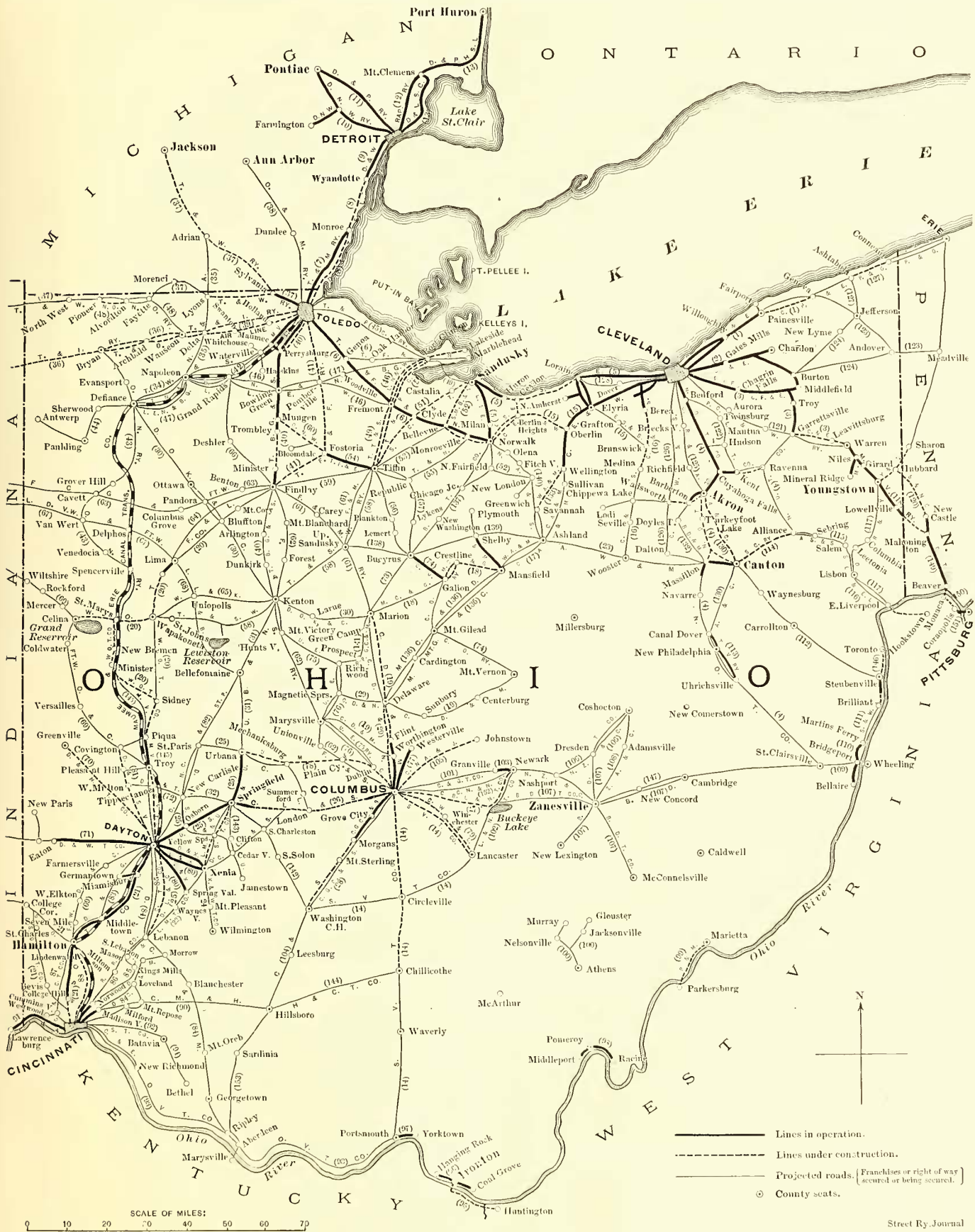
In a word, the electric lines will tend to divert to the natural centers, business which heretofore has been forced to follow the steam roads, and in this way they are bound to be an all important factor in the development of the State.

Just at present the greatest retarding influence to this development is the inability to secure material promptly. Never, even in the palmy days of steam road building, has there been such a demand for ties, rails, etc. It is said that rails can not be guaranteed for delivery inside of six months, while car manufacturers and builders of engines, boilers and electrical equipment are requiring longer time on deliveries than ever before. Even labor is scarce, and companies which are pushing construction work would frequently employ twice as many men and teams if they could get them.

Before going into the subject of the various roads, it is well to state that this is not claimed to be an accurate and infallible review of the situation in Ohio. It is safe to say that nothing of the kind could be compiled at this time, since, as has been intimated, the majority of projects are still in an embryo stage, and the severe competition for territory makes promotors extremely backward about outlining their plans. Sometimes, however, they take the

other tangent and describe their project as through a powerful telescope; then they reverse the telescope and to the writer in an attempt to draw a map showing the describe the efforts of rival promoters. Naturally they are operations of a large syndicate, which is headed by Cleve-

An article on Ohio electric railways was first suggested to the writer in an attempt to draw a map showing the operations of a large syndicate, which is headed by Cleve-



MAP SHOWING THE ELECTRIC RAILWAYS OF OHIO

not accurate in either case. Very often the real promoters are hidden behind attorneys and figureheads, but on the whole this will give an idea as to the aims of the leading promoters.

land people. He soon discovered that it would require a complete map of Ohio, as their plans extend to all portions of the State. This accomplished, and the operations of another leading Cleveland syndicate were indicated; then

those of all the known promoters from the Forest City were included, until it became evident that Cleveland is the corner-stone of the entire institution in Ohio, and it only required the insertion of a few more lines to cover all of the known projects of the State.

Numerous Cleveland investors have had their attention called to electric railway projects through the fact that some of the earliest and most successful examples of suburban lines were built radiating from that point. These roads have been extended from time to time, until, as intimated,

Cleveland systems are covering not only the entire State of Ohio, but are extending into other States and distant sections of the country. As in all industries, there are acknowledged leaders in this movement, and at the present time the operations of Cleveland people are controlled by two distinct and leading syndicates, and a dozen or more smaller ones.

It is almost unnecessary to state that the most important and best

known of these syndicates is popularly known as the Everett-Moore syndicate, which is composed largely of capitalists who own the largest local system in Cleveland, known as the Cleveland Electric Railway Company. Of late the movements of this syndicate have been heralded throughout the length and breadth of the country. During the past few months scarcely a day has passed but there have been reports of Everett-Moore purchases, and although as a matter of fact its efforts of late have been confined almost entirely to Ohio and Michigan, there have been rumors from all parts of the country as to the alleged plans of these people. It is a matter of interest to note that in the telephone field the syndicate is equally as important, if not more so, as in the line in question, as it is building up an independent system, covering the whole of Ohio and a portion of Michigan.

Just who constitute the Everett-Moore syndicate is a matter which has caused much discussion; on the whole, it is an ambiguous term. It is not a closed corporation in any sense of the word, but consists of a group of men, nearly all Clevelanders, who invest in projects established or promoted by H. A. Everett and E. W. Moore. These gentlemen are generally supposed to have control of nearly all the interests with which they are identified, but as a matter of fact, this is not the case. Neither are the interests of the two gentlemen identical. For instance, Mr. Everett has important interests in electric railways at Winnipeg, London, Montreal and Toronto, in which Mr. Moore is not interested, while Mr. Moore has a controlling interest in systems at Wheeling, W. Va., and Syracuse, N. Y., with which Mr. Everett is not connected. In the case of a number of different roads which have recently passed into the hands of Everett-Moore control, the former owners have not disposed of all of their interests, but have simply exchanged some of their stock for that of other Everett-Moore projects. In this way the personnel of the "syndicate" has recently been greatly enlarged. It is generally supposed that the recent moves made by this syndicate have been financed by New York bankers, but is understood that this is not the case; the majority of the stock having been easily subscribed among Cleveland

people. Just at present the leading people in the syndicate have under consideration plans for the formation of a controlling organization for the purpose of handling its bonds.

Among the best known and most influential capitalists who are heavily interested in Everett-Moore enterprises are Barney Mahler, Ralph A. Harmon, Charles W. Wason, W. H. Lamprecht, C. W. Collister, J. B. Hanna, C. H. Price, E. G. Tiltonson, H. Clark Ford, H. A. Sherwin, and H. P. McIntosh, of Cleveland, and J. R. Nutt and James Christy, of Akron. These gentlemen are collectively interested in all of the projects, although not individually. Some of them are also interested in what is known as the Pomeroy-Mandelbaum syndicate, which is the strongest rival of the Everett-Moore syndicate in Ohio.

It is claimed that the Everett-Moore syndicate controls fully 1500 miles of electric railways, either building and in operation. This includes the local lines in Cleveland, Detroit, Toledo, Akron and Sandusky, the interests above mentioned as being held by Messrs. Everett and Moore, as well as projects in various portions of the country which will be referred to later, the exact status of which are not known. Of the main system of Everett-Moore inter-urban roads it is figured that there are 506 miles in operation, 232 miles under actual construction, and 305 miles proposed, with move made toward securing right of way. The system includes all the roads radiating from Cleveland, with the exception of the Cleveland, Elyria & Western Railway, and nearly all of those radiating from Detroit, with a connecting link between. The most easterly terminus of the system is Youngstown, which is to be reached by a traffic arrangement over a short section of another road, while the northwestern terminus is Port Huron, Mich.; a thorough line over 360 miles in length, fully completed, except for a short section between Lorain and Sandusky, and another between Monroe and Detroit, both of which will soon be closed. The connecting link in this great system was the Toledo, Fremont & Norwalk Railway (No. 6), and the series of deals for the control of this property have extended over several months. A number of times it was reported that the deal had been closed, but it was just as often denied within a day or so. It is said that the Comstock Construction Company, of Detroit, which built and owned the road, set its price, and held out until the syndicate came to its terms; appreciating that it would be cheaper for the syndicate to buy the line than to parallel it and stand a fight. It is understood that the price paid for the property was about \$3,350,000. It is said that the Toledo Traction Company and the lighting plant cost \$11,000,000, while the Detroit properties are said to have cost about \$40,000,000, which give some idea as to the ability of this syndicate to finance its propositions.

As to the future, the syndicate has much in view. Along the lake shore to the east the line at present reaches Painesville, and is being built to Ashtabula. It is said Buffalo is the ultimate terminus, and is understood that rights-of-way men working in the interests of the syndicate are



H. A. EVERETT



E. W. MOORE

already engaged on the route in Pennsylvania and New York States. South of Cleveland the system reaches Barberton, and is building to Canton and Massillon. It is understood that it is the intention to extend the Massillon branch to St. Clairsville to connect with a line being built out of Wheeling by the Wheeling Traction Company, in which Mr. Moore is interested. From Columbus to the southern extremity of the State there is a line in process of construction, with a branch to Lancaster. Undoubtedly this road will be connected with the line extending south from Cleveland, giving the syndicate a system extending clear across the State from north to south. In Michigan it is understood that the syndicate is figuring on properties besides those already secured, and two of them which are under consideration will give a line from Detroit to Bay City. There is talk that the Youngstown line will be extended to Pittsburgh, but this is denied by Mr. Moore. It is true, nevertheless, that there will shortly be a through line between Cleveland and Pittsburgh, as shown on the map, by way of the Beaver Valley Traction Company (No. 149), and the Monaca & Coraopolis Railway (No. 150), which is under construction, and which will connect with the lines of the Southern Traction Company (No. 151), running into Pittsburgh.

The lines of the Everett-Moore syndicate, as designated on the map are as follows: Cleveland, Painesville & Eastern Railway (No. 1), 50 miles in operation, 20 miles building, 20 miles contemplated; Cleveland & Eastern Railway (No. 2), 40 miles in operation; Cleveland & Chagrin Falls Railway, and the Chagrin Falls & Eastern Railway (practically one line) (No. 3), 45 miles in operation, 15 miles building; Northern Ohio Traction Company (No. 4), 45 miles in operation, 50 miles building, 120 miles contemplated; Lake Shore Electric Railway (a recent consolidation of the Lorain & Cleveland, Sandusky & Interurban, and the Sandusky, Norwalk & Southern) (No. 5), 55 miles in operation, 37 miles building; Toledo, Fremont & Norwalk Railway (No. 6), 60 miles in operation, 35 miles contemplated; Toledo & Monroe Railway (No. 7), 23 miles in operation; Detroit & Toledo Shore Line (No. 8), 38 miles building; Detroit & Wyandotte Railway (No. 9), 11 miles in



F. J. POMEROY

operation; Detroit & North Western Railway (No. 10), 60 miles in operation; Detroit & Pontiac Railway (No. 11), 30 miles in operation; Rapid Railway (No. 12), 17 miles in operation; Detroit & Port Huron Short Line (No. 13), 110 miles in operation; Scioto Valley Traction Company (No. 14), 75 miles building, 90 miles contemplated. It is stated that in the near future the lines in Michigan are to be consolidated and controlled

as a part of the Detroit United Railways.

The Cleveland, Elyria & Western Railway Company, which built the first suburban line running into Cleveland, formed the nucleus of what is known as the Pomeroy-Mandelbaum syndicate. Strictly speaking, it applies to the properties which are promoted by the Pomeroy and their associates, or financed by M. J. Mandelbaum & Company; F. T. Pomeroy and M. J. Mandelbaum being interested in practically the same line of projects, so far as electric railways are concerned. Others who are prominent in the syndicate are: A. H. Pomeroy, O. D. Pomeroy, A. E. Atkins, Will Christy, H. C. Lang, L. M. Coe, L. J. Wolf, H.

Q. Sangeant, S. C. Smith, M. A. Sprague, F. D. Carpenter, and E. F. Schneider.

The Pomeroy-Mandelbaum syndicate is also working on a system of roads which will extend clear across the State, and the system in Ohio promises to be even more extensive than that of the Everett-Moore syndicate. This indicates that, despite the fact the members of the two syndicates are closely allied, the various interests being so intermingled that it is almost impossible to separate them, there is still an individuality about the two syndicates.

Evidence of this is shown from the fact that the Lake Shore Electric Railway, an Everett-Moore road, and the Cleveland, Elyria & Western Railway, a Pomeroy-Mandelbaum road, are building parallel lines within a stone's throw of each other for a distance of 10 miles, between Berlin Heights and Norwalk. Despite the fact that there are stockholders who are interested in both roads,



M. J. MANDELBAUM

and an amicable arrangement would save a large sum of money, it is now evident that each will build its own road between these points. It is said that the secret of this particular contention is that each set of managers believes the other is encroaching on his territory. It is said that when the two syndicates first commenced business, an understanding was arrived at, whereby the Pomeroy-Mandelbaum syndicate should build in a southwesterly direction from Cleveland, while the Everett-Moore crowd were to control the territory directly south and directly west. The clash came when both proposed building to Norwalk, and now neither will yield the point.

The chief project of the Pomeroy-Mandelbaum syndicate has in contemplation a road from Cincinnati to Toledo, and from Cincinnati to Cleveland, with probably a line from Cleveland to Columbus. The Cleveland, Elyria & Western Railway (No. 15) has 65 miles in operation, 33 miles building, and 17 miles contemplated; the contemplated line being a spur line, which will be known as the Elyria, Grafton & Southern Railway. The C. E. & W. gives a road from Cleveland to Norwalk. In the western part of the State is the Western Ohio Railway (No. 20), 5 miles of which has just been placed in operation, 40 miles building, and 85 miles contemplated. When completed this line will extend from Findlay to Piqua, by way of Lima, Wapakoneta, St. Marys, New Bremen, Minister and Sidney. There will also be a direct line from Wapakoneta to Sidney, and a northern extension from Findlay to Toledo. The latter route has not been settled on; it may be built, or an existing line may be purchased. Between Piqua and Dayton there is a break which will be filled by the purchase, or perhaps traffic arrangement, of two lines, one in operation and the other nearly completed. From Dayton, reaching almost to Cincinnati, is the Southern Ohio Traction Company's line (No. 21), which is considered one of the best properties in the State. This company has 64 miles in operation, 5 miles building (giving entrance to Cincinnati), and 65 miles contemplated; the latter being two spur lines, or feeders. One of them will be known as the Hamilton, Oxford & Western Railway, extending from Hamilton to Connersville, Ind., and the other from Cincinnati to connect with the above line at College Corner to be known as the Cincinnati, Venice & Western Railway.

It is believed the Western Ohio Railway, and the Cleveland, Elyria & Western Railway, will be connected by an extension from Norwalk to Findlay, by way of Tiffin, and it is reported that right of way is already being secured, but this is denied. From the Berea branch of the C. E. & W. is being built the Cleveland & Southern Railway (No. 16). This will be in operation to Medina before many months, and will be extended to Wooster. The Cleveland, Ashland & Mansfield Railway (No. 17) will extend from the Wellington branch of the C. E. & W. to Mansfield, 38



A. E. APLEYARD

miles contemplated. At the latter point it will connect with the Mansfield, Crestline & Galion Railway (No. 18), of which 18 miles are building. It is the intention to extend this line to Marion, 20 miles, where it would connect with the Columbus, Delaware & Marion Railway (No. 19). This road is being promoted by F. D. Simons and L. A. Simons, of Columbus, and J. W. Holcomb and J. Lattimer, of Cleveland, but it is thought they are backed by the Pomeroy-Mandelbaum syndicate, and that eventually the road will become a part of the system. The Cleveland, Delaware & Marion Railway (No. 19) includes a direct line to Marion and spur lines to Mt. Vernon and Marysville. Twelve miles of this is in operation, being an old line, the Columbus, Clintonville & Worthington, which was purchased some time ago; 35 miles are in process of construction, and 75 miles are contemplated. This line, with the others mentioned, would give a through line from Cleveland to Columbus. In addition to this there is the Little Miami Traction Company (No. 22), which is under construction from Springfield to Xenia, and which will be extended eventually to Lebanon, and possibly to Cincinnati. There is also an east and west line, the Ashland, Wooster & Massillon Railway (No. 23), which will connect two of the syndicate's north and south roads. This line is promoted by Colonel Hurd, Judge Dissette and others, who have been identified with lines built by the syndicate, and it is understood that it will be included in the system.

As outlined above, the system of the Pomeroy-Mandelbaum syndicate includes 146 miles of road in operation, 148 miles under construction, and 351 miles contemplated. It will be noticed that as is the case of the Everett-Moore lines, all roads lead to Cleveland, the "Rome" of Northern Ohio. The members of both syndicates are enthusiastic in their belief that Cleveland is bound to become a great city. A railway map will show that fully a score of the leading towns of this section of the State have been comparatively isolated from the State Metropolis, and their business has followed the course of the east and west trunk lines to Toledo or Pittsburgh. With good connection for Cleveland, their business will be turned in that direction, it is believed.

While not strictly a traction line, the Maumee & Erie Canal Transportation Company may well be considered under this head. As is generally known, the proposition contemplates the operation by electric motors running on tracks, of canal boats. The canal, which is indicated in the

map by a special dotted line, extends from Toledo to Cincinnati. The company is capitalized at \$3,000,000, and is composed of nearly all of the members of both the large Cleveland syndicates. Work has already been started on the track, which is to follow the canal tow path, and it is expected a section of the canal will be in operation by electricity before the close of this year. Contrary to general opinion, this will be strictly a freight proposition.

Although it is impossible to consider them at this time, it is of interest to note the members of the two syndicates are backing a dozen or more important electric railway projects in various portions of the country, notably in the Fox River Valley in Illinois, the Richmond & Petersburg Railway in Virginia, the Baltimore & Washington Railway in Maryland, and a line from Decatur, Ill., to Springfield and Bloomington. Another group of promoters who are doing much toward building up the State is what is popularly known as the Appleyard syndicate, which proposes making Columbus, the State capital, the hub of an extensive system of roads. The popular conception of this syndicate is incorrect, as there are several lines which are being built or contemplated by some of the leading members of the syndicate, but which are not strictly Appleyard syndicate properties. Eventually they may become so, but this is not a matter of certainty.

The first of the Appleyard roads, the Dayton, Springfield & Urbana Railway (No. 25), was promoted several years ago by John G. Webb, a prominent business man of Springfield, and J. S. Harshman, a millionaire capitalist of that city. Mr. Harshman is now president of all the roads included in the syndicate, while Mr. Webb fills the position of treasurer of the various lines. The financing of this project was placed in the hands of A. E. Appleyard, a Bostonian, who has financed and built a number of electric railways in various portions of the country, and who has since been the financial head of the syndicate. In the present enterprises Mr. Appleyard represents a number of Boston capitalists, and it is the financing of the projects which gives the group its title.

The second line of the group was the Columbus, London & Springfield Railway (No. 26), which is now nearing completion, being in operation for a short distance at each end. This line is being built under the supervision of H. A. Fisher, one who has had long experience in railway building, and who now has the general management of the various projects of the syndicate. Besides Messrs. Appleyard, Webb, Harshman and Fisher, there are interested in the properties of the syndicate: Emmett Tompkins, Charles A. Alderman, F. J. Green, John M. Good and others, of Columbus and Springfield.

The complete system in operation and projected, controlled by Mr. Appleyard's interests, includes the Dayton, Springfield & Urbana Railway (No. 25), with branches, 51 miles in operation, 2 miles building; the Columbus, London & Springfield Railway (No. 26), with branches, 14 miles in operation, and 38 miles building; the Columbus, Grove City & Southwestern Railway (No. 28), 14 miles in operation, and 25 miles contemplated; the Urbana, Bellefontaine & Northern Railway (No. 31), 20 miles contemplated; and the Springfield & Western Railway (No. 32), 15 miles contemplated. The Columbus, Buckeye Lake & Newark Traction Company (No. 27) is being built by Mr. Appleyard for Tucker, Anthony & Company, of Boston, and from an operating standpoint it is a part of the syndicate system. It will be 45 miles in length. Construction work is being pushed on the lines building, and it is stated that the system will be in full operation between Newark and Dayton within the next two months.

In building into Columbus, the syndicate secured the

right to, and has constructed, a loop surrounding the State capital, in the very heart of the city, and has lines radiating from this loop in all directions to the city limits; thus providing for the greatest possible development of the inter-urban proposition in the Capitol City. This method of operating was made necessary on account of the broad gage tracks of the city system of roads.

The lines building and proposed by the individual members of the syndicate, but having no direct connection with it, are also very extensive.

Recently Mr. Appleyard secured control of the Dayton, Lebanon & Cincinnati Railway, a steam road extending from Dayton to Lebanon. It is understood that it is to be equipped for electricity, and it will form an important addition to the system promoted by these people, giving, as it does, a link in the direction of Cincinnati. It is also reported that Mr. Appleyard is endeavoring to secure control of another short steam road in that vicinity, which would give entrance to the former metropolis. The Dayton, Lebanon & Cincinnati Railway is shown in the map as being under construction. Several of the members of the syndicate have recently organized the Dayton, Springfield & Urbana Southwestern Railway, with a view to building several short lines radiating from Springfield. J. S. Harshman, John G. Webb, H. A. Fisher, with James Loren, of Columbus, are actively interested in the Columbus, Delaware & Northern Traction Company (No. 29), which is engaged in building a line between Columbus, Delaware & Marion, with a view to bringing into Columbus several lines from the northern part of the State, which are headed in that direction. This line closely parallels the Columbus, Delaware & Marion Railway (No. 19), and the struggle between the two strong companies promises to be long and interesting. The former company has secured control of the local lines in Delaware, giving a route through that city, while the latter has purchased the Worthington, Clintonville & Columbus Railway, a short line operating to Worthington, with another short line extending to Flint.

Chief among the lines which will connect with the Columbus, Delaware & Northern Railway is the Defiance, Ottawa, Kenton & Columbus Railway (No. 30), recently organized by H. A. Fisher, D. J. Ryan, George H. Jones, John H. Sheets, Nelson Mathews and others. Considerable right of way has been secured for this line, which will be one of the longest in the State. The exact route has not yet been determined, but it will connect with the Columbus, Delaware & Northern at either Marion or Columbus.

The lines in which the above group of promoters are interested include 80 miles in operation, 125 miles building and about 300 miles contemplated. Toledo is the center of operations for several syndicates which are extending their lines into Michigan and Indiana, as well as to all parts of Ohio.

One of the most attractive propositions in the State is the Toledo & Western Railway (No. 37), which is owned by a syndicate composed of Luther Allen, Judge C. M. Stone, N. O. Stone, I. N. Topliff, F. C. McMillen and J. R. Seagrave, of Cleveland, and F. E. Seagrave, of Toledo. The line will cover a very rich section of farming country which heretofore has been almost isolated. Thirty years ago this section was known as the "Black Swamp," but drainage and irrigation has made it what is claimed to be, without exception the most productive spot in the country. The line is in operation to Sylvania, 10 miles from Toledo, and it is claimed the returns for this strip thus far have exceeded all expectations. At this point one branch extends into Michigan, and the other on through northern Ohio

into Indiana; it is said that the western terminus will be Goshen. This section will be placed in operation to Lyons, 35 miles, in the near future. The Michigan division will extend to Adrian, and eventually to Jackson. A rival of this project was the Northern Ohio Railway Company (No. 48), which proposed to build from Wauseon to Fayette, and then parallel the Toledo & Western Railway, into Indiana. Considerable work was done between Fayette and Pioneer, but it is reported that very recently the promoters have effected a consolidation of interests with the Toledo & Western. W. H. Cummer, G. W. Kurtz, J. W. Cable and A. C. Van Dreisden, of Toledo, were the promoters.

The Toledo & Maumee Valley Railway (No. 35) operates two lines, paralleling the Maumee River, forming a loop at Perrysburg. The road is owned by A. K. Detwiler, G. G. Metzger, G. K. Detwiler, C. P. Griffin and others. They have commenced work on an extension of this road, which will be known as the Toledo, Waterville & Southern Railway (No. 34), following the Maumee River, and touching Waterville, Grand Rapids, Napoleon and Defiance. Portions of this route are being contested by three other companies. The line will be 65 miles long, 10 miles of which will shortly be in operation. From Napoleon this syndicate also proposes to build a north and south road, which will extend to Adrian, Mich. (No. 35), touching Wauseon, Delta and Lyons; it will be 40 miles long. The same people are also promoting the Toledo & Indiana Railway (No. 36), which is to parallel the Lake Shore Railway (steam) from Toledo to Bryan, and on into Indiana, the western terminus not having been announced. Considerable right of way has been secured, and work has been started near Swanton. Despite this fact this project has a rival, which is said to be even further along in its construction work, and is said to have placed contracts for all material. The second line is the Toledo & Bryan Air Line (No. 39), which is promoted by J. L. Yost, W. C. Brewer, J. C. Bonner, Milton Taylor, William P. Heston, R. G. Kerlin, John G. Adams and other prominent Toledo people. Both companies are pushing construction, and the result will probably be a survival of the fittest.

The Toledo, Waterville & Southern Railway (No. 34) also has a rival in the Toledo, Napoleon & Defiance Railway (No. 42), which has been working over practically the same route. This fight has been long and exciting. In some places one secured the franchise and the other proposed to build around the town, while in the next place it was vice versa. In one town the competition was so fierce that one of the companies agreed to handle local traffic free of charge to secure the franchise. The Toledo, Napoleon & Defiance Railway was promoted by Richard Hattersley, Charles E. Sutton, John F. Kumler, H. C. Webster and others, of Toledo. It has been reported very recently that the promoters have sold out their franchises to Cleveland people, but this can not be verified.

The Toledo, Bowling Green & Southern Railway (No. 40) is the result of the recent purchase and consolidation of the Findlay Street Railway, and the Toledo, Bowling Green & Fremont Railway. The new owners are H. Burk-



H. A. FISHER

hold and George Kerper, of Cincinnati, who owned the Findlay Street Railway. A stretch of 12 miles between Trombley and Mortimer is being built to connect the two lines. The company has also announced that it will build its own line into the center of Toledo; heretofore cars have been operated over the tracks of the Toledo & Maumee Valley Railway (No. 33), from Perrysburg. It is also stated that the line will eventually be extended from Findlay to Kenton, 35 miles.

It is said that the Michigan & Ohio Railway Company, which was incorporated some months ago by Judge J. W. Donovan, W. L. Robinson, Milton Carmichael and W. H. Ashwell, of Detroit, will build a system extending from Toledo to Dundee, Ypsilanti and Ann Arbor, Mich. (No. 38). It is understood that these parties have been attempting to effect a consolidation with the Shore Acres Railway Company, a company which is building a short line from Toledo to a pleasure resort on the lake shore near the State line.

The Ohio Northern Railway (No. 43) is the outgrowth of a project for a line from Bryan to Defiance. It is said that construction work will start in the near future, and that the line is to be extended south from Defiance to St. Marys, where it will connect with the Western Ohio Railway (No. 20). The line will be 80 miles in length and right of way is being secured by way of Grover Hill, Van Wert and Spencerville. The promoters are E. W. Frink and A. J. Prentice, of Cleveland; W. D. Sherwood, Elias Bartholomew and others, of Lima.

The Toledo, Fostoria & Findlay Railway (No. 41) is practically completed between Findlay and Fostoria, and work has been started between Toledo and Findlay. There is to be a spur line to Prairie Depot, and the road will have a mileage of 55 miles. It is being built by the Dover Construction Company, of Canal Dover, and it is owned by E. A. Wentz, Samuel Croxton, E. Reeves and others of that place. It is financed by the Western Reserve Trust Company, of Cleveland. Capital stock, \$1,500,000.

E. J. Frost, of Defiance, is promoting a line to extend from Defiance to Antwerp, touching Paulding, Hicksville and Sherwood (No. 44). It will be 35 miles long.

The lake shore route from Toledo to Port Clinton, touching a rich and isolated fruit belt, has long been looked upon as a fine opening for an electric line and several companies have projected lines through this territory. The most promising appears to be the Toledo & Port Clinton Interurban Railway (No. 45). G. W. Acker, C. Dedeane, W. B. Geroe, L. Galshall, T. J. Smith and others, of Toledo, are the promoters.

The Lakeside, Napoleon & Western Railway (No. 46) and the Lake Erie, Bowling Green & Napoleon Railway (No. 47) are rivals for an east and west line extending from Port Clinton to Pemberville, Bowling Green, Grand Rapids, Napoleon and Defiance. Between Port Clinton and Pemberville, it is understood the former will go by way of Fremont and the latter by way of Woodville. The former company was organized some months ago by G. H. Brown, of Fort Wayne; N. A. Clemons, Port Clinton; Morris Reese, Pemberville; D. Black and L. C. Cole, of Bowling Green, and S. W. Heller, of Toledo. It is claimed that all rights of way have been secured and that 25 miles of grading has been done. Between Port Clinton and Fremont, the company did considerable construction work, but it is understood that it has recently sold out this section to a rival company for the same route. The Lake Erie, Bowling Green & Napoleon Railway was organized a short time ago by Luther Black, Dr. J. H. Whitehead, R. A. Beatty, G. W. Loomis, A. E. Royce, F. M. Young, M. L. Case, Wesley Powell, F. W. Dunn, Dr. W. M. Tuller, Dr.

F. W. Rogers, D. B. Whipple and others, of Bowling Green.

The Toledo, Tiffin & Sandusky Railway (No. 49) was organized about a year ago to build a system centering from Port Clinton, with lines extending to Toledo, Tiffin and Sandusky. The promoters are J. F. Bunn and George D. Loomis, of Tiffin; B. W. Wilson, of Port Clinton, who are said to be backed by New York and Chicago people. A large amount of grading has been done between Tiffin and Port Clinton, this being one of three lines working on the same route.

The Kerline Brothers Company, of Toledo, promoters of the Tiffin & Port Clinton Railway (No. 50) evidently propose to build a line between the two towns despite competition. They are pushing construction work, and it is reported that they have bought out the Lakeside, Napoleon & Western Railway (No. 46), which has been working over the same route. They have also the local line in Fremont.

The Sandusky, Clyde & Tiffin Railway (No. 51) has started grading on a line from Tiffin to Sandusky. Promoters are: J. C. Parker, I. S. Comstock, W. W. Johnson and G. L. Butler, of Sandusky.

The Sandusky, Bellevue, Monroeville & Norwalk Railway (No. 52) is another road in which construction work has been delayed for some time. The proposed route is from Sandusky to Bellevue and then to Norwalk, paralleling the Toledo, Fremont & Norwalk Railway (No. 6). Spur lines are to extend from Norwalk to Chicago Junction, New London and other towns. A large amount of construction work was done last year and a power house was partially completed, but it is understood that work has been stopped since that time. The promoters are Clark Rude and W. E. Guerin, of Sandusky; J. McLean and J. L. Dailey, of Philadelphia. It is claimed the road will be completed.

Tiffin promises to be one of the most important centers in the State. Besides the lines previously mentioned, there are the following: The Tiffin, Fostoria & Eastern (No. 54), in operation to Fostoria, owned by S. B. Sneath and others, of Tiffin; the Tiffin & Southwestern Railway (No. 58), which will be 75 miles long, extending to Wapakoneta, by way of Kenton and Upper Sandusky, with a spur line to Lewiston Reservoir, and promoted by Henry Price and J. B. Seymour, of Kenton; W. S. Rogers and C. W. Timmerman, of Wapakoneta; L. Selle, of Tiffin, and Robert Carve, of Upper Sandusky; the Tiffin & Findlay Railway (No. 59), promoted by local people; the Tiffin, Republic & Bucyrus (No. 57), promoted by E. B. Finley, of Tiffin; the Tiffin, Plankton & Bucyrus Railway (No. 56), promoted by Wert Brothers, of Tiffin; the Tiffin & Norwalk Railway (No. 55), which is promoted by S. W. Owen, of Tiffin, also a branch of the Findlay & Marion Railway (No. 61), will probably be built from Upper Sandusky to Tiffin. The Findlay & Marion Railway (No. 61) is promoted by M. A. Smalley, C. E. Schwartzbaugh, of Toledo; Allen Smalley, Upper Sandusky; Asa Jones and J. H. Ruhlman, of Youngstown; J. Blackford and David Joy, of Findlay. A private right of way has been purchased.

The Findlay, Columbus Grove & Fort Wayne Railway (No. 63) will be 110 miles long. It is promoted by H. W. Begg, Columbus Grove; H. H. Day, Pandora; J. A. Kimmell and C. E. Niles, of Findlay. Incorporated for \$500,000. The Findlay & Lima Railway (No. 64) is projected to parallel the Western Ohio Railway (No. 20) between Findlay and Lima, and there have been sharp contests for right of way. J. S. Neeley, A. D. Miller, Frank Seiber, T. D. Robb and Louis Koch were the incorporators. H. J. McGowan, of Indianapolis, is said to be interested.

The Findlay & Southern Railway (No. 62) promises to be a very important line. It will extend from Findlay to Columbus, 90 miles, and nearly all rights of way have been secured. R. Rosentock, of Cleveland; J. Odenbaugh, of Sandusky; H. D. Hammond, Mount Blanchard, are the promoters. Barney & Company, Philadelphia, are said to be financing the project. The Ohio Northwestern Railway (No. 60) is under construction from Fostoria to Mungen, where it will connect with the Toledo, Bowling Green & Southern Railway (No. 40). It is said the line will be extended to Napoleon. W. B. Marks, Levi Harbaugh, W. D. Clark and others, of Fostoria, are the promoters. Findlay people are promoting a line to extend from Findlay to Deshler and Grand Rapids (No. 66). The Wapakoneta & Kenton Railway (No. 65) is promoted by J. H. Goeke, C. T. Kolter, S. A. Haskins, H. C. Settgage and W. C. Brorein.

Another line which will extend into Indiana is the Lima, Delphos, Van Wert & Fort Wayne Railway (No. 69). It will be 75 miles long and is promoted by A. C. Parmenter and D. J. Cable, of Lima, and Henry Neff, J. B. Kerr, W. P. Heston, and W. F. Numan, of Toledo. It will parallel the Pennsylvania Railway (steam). The Lima, Lewiston & Bellefontaine Railway (No. 68) will extend from Lima to Bellefontaine, touching Lewiston Reservoir. W. W. Fisher, Bellefontaine, is president; W. P. Heston, Toledo, vice-president; X. H. Holler, Lima, secretary, and J. M. Boose, Lima, treasurer. Right of way has been secured.

Probably the longest single line in the country is proposed by the Fort Wayne, Dayton & Cincinnati Traction Company. The main line (No. 69) will extend from Fort Wayne to Cincinnati, something over 200 miles, and it is claimed there will be branches in Ohio and Indiana which will give the system 350 miles. The main line is to be operated from a single power house at Celina, on Grand Reservoir, and it is claimed that options on nearly all the right of way have been secured. It is stated that trains drawn by electric locomotives will be used and that freight trains, as well as passenger, will be operated. The company is incorporated in South Dakota and Ohio with \$1,000,000 capital stock. Officers are: Dr. S. M. George, Dayton, president; D. W. La Fetra, New York, vice-president; Charles L. Hyde, Pierre, S. D., second vice-president; C. W. Gephard, Dayton, secretary-treasurer; Ira Hodgson, Dayton, chief engineer.

The Miami Valley Railway Company operates a line from Troy to Piqua (No. 145), a distance of 15 miles, and proposes to extend on to Minster, 23 miles. This line, with the Dayton & Troy Railway (No. 72), forms a connecting link for the system of the Pomeroy-Mandelbaum syndicate, and it is understood that overtures are being made for its purchase. W. P. Orr and others, of Piqua, are the owners.

Dayton is the center of a system of interurban roads which is probably equaled by no other city of double its size in the country, and if proposed roads are built it will closely rival Cleveland as a terminus. The majority of the lines centering in Dayton have been built by local people. Besides the Southern Ohio Traction Company's line (No. 21) and the Dayton, Springfield & Urbana Railway (No. 25), the following roads are in operation, or practically so: The Dayton & Xenia Traction Company (No. 80), three lines recently consolidated, aggregating 49 miles in operation, owned by Thomas T. Robinson and others, of Boston; the Dayton & Western Traction Company (No. 71), completed to Eaton, and to be extended to Richmond, and the Dayton & Troy Railway (No. 72), under construction to Troy and nearly completed, owned by V. Winters, C. B. Clegg, D. B. Corwin and others, of Dayton; these people

also own the Dayton City Railway and the Oakwood Street Railway, local lines; the Dayton & Northern Traction Company (No. 71), nearly completed to Greenville, 41 miles, owned by Dr. J. E. Lowes and others, of Dayton. The Dayton & Stillwater Valley Railway (No. 81) was promoted by Judge Dennis Dwyer and Albert Emanuel, but it has recently been sold to the Robinson syndicate, of Boston. It is under construction, 25 miles, and 15 miles are contemplated. The Dayton, New Carlisle & St. Paris Railway (No. 82) is promoted by C. E. Layton, H. N. Reynolds, John A. Brake, B. H. Rannels and others, of Dayton. It is said it will extend to Bellefontaine. The Dayton, Cincinnati & Maysville Railway (No. 84) is promoted by E. D. Smith, D. W. Hogan, H. L. Day, W. V. Whitaker and others, of Blanchester; H. W. Blair, S. Woodward and H. F. Anderson, of Morrow; John Moore, of Georgetown, and F. M. Conden, of Cincinnati. The proposed road will be about 110 miles long, extending from Dayton to the Ohio River at Aberdeen, with a branch from Morrow to Cincinnati. A number of franchises have been secured. The Dayton, Germantown & Hamilton Railway (No. 83) has secured a private right of way between Dayton and Middletown, and it is claimed the road will be built at once. It is one of several proposed competitors of the Southern Ohio Traction Company (No. 21), and it is promoted by J. O. Arnold and T. C. Lindsey, of Dayton. It is said to be backed by the Cincinnati, Hamilton & Dayton Railway (steam), which has lost much suburban business to the Southern Ohio Traction Company, and it has recently absorbed a small line in Middletown, which was owned by the steam line company. It is said the road will be extended to Cincinnati.

The development of interurban business in the vicinity of Cincinnati, the former State metropolis, has been surprisingly slow, one principal reason being because of the fact that interurban roads have been unable to gain entrance to the business, or even residence section of the city; the city lines have a broad gage and decline to arbitrate matters with the interurbans. Now, however, it appears that they are making up for lost time, and at present there are more electric railway projects in Hamilton County than in any other in the State. The Southern Ohio Traction Company (No. 21) operates only to College Hill, 9 miles from the center of the city, but it has recently purchased a short steam road which will bring it within 5 miles of the center. The Cincinnati, Lawrenceburg & Aurora Railway (No. 91), extending into Indiana, 34 miles in length, is the only other line at present in operation. It is owned by J. C. Hooven, Stanley Shaffer and others, of Hamilton. The Mill Creek Valley Railway (No. 88), another competitor for the Southern Ohio Traction Company, is completed nearly to Hamilton, cars being in operation a portion of the distance. It is controlled by H. Burkhold and H. H. Hoffman, of Cincinnati. There are two companies contesting for the same route between Cincinnati, Lebanon and Dayton (No. 85), and each has secured certain franchises. One of the projects is headed by Wayland P. Sunderland and H. Wolff, and the other by James B. Swing, T. R. French, C. A. Bosworth and others. The route passes through a large number of suburban towns. A syndicate composed of Lee Brooks, Charles Davis, Guy Mallon, James Kennedy, J. M. Hutton, G. R. Scrugham, Ellis Kinkhead and others, has recently incorporated three roads, the Suburban Traction Company (No. 92), the Cincinnati & Eastern Railway (No. 94), and the Rapid Railway Company (No. 86). The first will extend to Batavia and Bethel, the second to New Richmond, and the third to Lebanon, and perhaps to Dayton. The Cleveland & Cincinnati Railway (No. 87) is a road concerning which there

is considerable comment regarding its plans. It is said to be incorporated under the laws governing steam roads, and it is claimed that steam, as well as electricity, will be used. It has applied for franchises for several short lines in Hamilton County, and for a line paralleling the Southern Ohio Traction Company to Hamilton and Dayton. The promoters are Powell Crossley, W. F. Hart, D. H. Hunt, E. G. Simon and others, of Cincinnati.

The Cincinnati & Columbus Traction Company (route not shown) proposes to build a direct line from Cincinnati to Columbus. The promoters are Henry Burkhold, Philip Swing, Richard E. Swing, Frank Dune and others, of Cincinnati. The Ohio Valley Interurban Railway Company is being promoted by John Kilgore, formerly at the head of the Cincinnati Street Railway Company, who is said to contemplate a line following the Ohio Valley to Portsmouth (No. 93), with lines in the city. The Cincinnati, Milford & Loveland Railway (No. 89), and the Cincinnati, Milford & Hillsboro Railway (No. 90) touch a number of good towns in the Little Miami Valley. The latter will extend to Hillsboro, and is being promoted by W. F. Roudebush, of Batavia; W. D. Murphey, of Milford; H. McKeehan and H. M. Huggins, of Cincinnati. H. M. Huggins is also interested in the Hillsboro & Ohio River Traction Company (No. 153), which was recently organized by Charles Orr, Thomas H. Hogsett and Monroe Warner, of Cleveland; James E. McDermott and O. Z. Blair, of Cincinnati. The line will extend from Hillsboro to Aberdeen, and eventually it will be extended north to Lebanon to connect with the Xenia & Wilmington Traction Company (No. 24), which is promoted by Charles Orr, Thomas H. Hogsett, H. M. Yost and William Sage, of Cleveland, and John P. Martin, of Springfield. This line in turn will connect with the Little Miami Traction Company (No. 22), building from Springfield to Dayton, which was promoted by John P. Martin and Charles Orr, and is now controlled by the Pomeroy-Mandelbaum syndicate. It is believed that these four proposed lines will eventually be turned over to the Pomeroy-Mandelbaum syndicate.

From Hillsboro to Chillicothe a road will be built by the Hillsboro & Chillicothe Traction Company (No. 144), which is promoted by Charles H. Hoyt, W. H. Wallace and J. C. Short, of Hillsboro. This project has been financed by New York people and it is said work will start at once.

The Columbus & Southern Railway (No. 104) recently turned over its franchises in the Scioto Valley to the Scioto Valley Traction Company (No. 14), and is now working on a road from Hillsboro to Washington Court House and Columbus. It will parallel the Columbus, Grove City & Southwestern Railway (No. 28), and it is claimed that construction work has started near Mount Sterling. The officers are: J. M. Wilson, president; Z. F. Downs, vice-president; H. F. Hoffman, treasurer; Smiley Caldwell, secretary; all of Columbus.

Columbus is to have several lines besides those of the Appleyard interests, although the Columbus & Westerville (No. 77), which is owned by the Columbus Railway Company, is the only one in operation. The Urbana, Mechanicsburg & Columbus Railway (No. 78) is under construction, and it will have a competitor in a branch of the Columbus, London & Springfield Railway (No. 26), which is also being built; the former line was promoted by Gen. A. J. Axline, of Columbus. Two companies are also constructing lines between Columbus and Lancaster; the Scioto Valley Traction Company (No. 14), previously referred to, and the Columbus, Winchester & Lancaster Railway (No. 79). This line is being built by T. A. Simons, E. D. Simons, D. C. Beggs, Howard Park, W. G. Boland

and others who are interested in the Columbus, Delaware & Marion Railway (No. 19). It is claimed that the entire right of way has been secured and construction work has been started. Work is also being pushed on the Columbus, New Albany & Johnstown Railway (No. 105), which is promoted by Columbus people. Thomas N. Fordyce, of Detroit, is in charge of construction work. The Columbus & Granville Traction Company (No. 101) has recently been organized by F. W. Douthart, New York; M. M. Jillett, Newark; W. H. Jones, L. F. Keisweter and John Field, Columbus, and John Thor, Baltimore. The line will connect with the Newark & Granville Railway (No. 103), which is in operation.

The Columbus, Newark & Eastern Railway, just incorporated by R. H. York, H. J. Uhl, Martin Horr, A. G. Collins and A. R. Horr, of Cleveland, also proposes to build from Columbus to Newark, making three lines between these points, although in different routes.

A franchise for a line between Newark and Lancaster (No. 102) has been held for some time by the Lancaster & Newark Traction Company, but it is said that this has been turned over to a new company recently incorporated as the Ohio Central Railway Company, which proposes to build a through line from Columbus to Bridgeport. The promoters of this company are: J. S. Sites, Charles A. Spenny, W. B. Cosgrove and Henry C. Werner, of Columbus. The Richwood, Marysville & Columbus Railway (No. 76) proposes to build a line to Byhalia and Kenton. Promoters: John Hendrixon, N. E. Niggitt, William King, F. V. Fullington and R. L. Woodburn. The Union Electric Railway (No. 75), incorporated in Delaware, holds franchises for an extensive system north of Columbus. C. N. Buchanan, of Pittsburgh, is president, and Thomas N. Kerr, Columbus, secretary.

Zanesville promises to be the center of an important system. The Black Diamond Traction Company (No. 107) is securing franchises for 150 miles of proposed roads radiating from Zanesville. It is claimed they will extend to Hebron, to Dresden and Coshocton, to Cambridge, to McConnellsville and to New Lexington. On the line to Cambridge this company has a competitor in a company promoted by L. C. Taylor and John S. Black, of Zanesville, who propose to build a line from Zanesville to St. Clairsville and Bridgeport (No. 147). Both companies hold extensive franchises. The Newark, Zanesville & Coshocton Railway (No. 106) proposes to build from Newark to Zanesville with a branch from Nashport to Coshocton. Franchises have been secured in several places. Promoters: J. H. Ickes, Charles H. Hunt, J. K. Hamill, C. H. Seidel and W. O. Littick. Then there is the Zanesville, Adamsville & Coshocton Railway (No. 108), which is promoted by J. B. Wilson, E. G. Abbott and H. E. Buckner, of Zanesville.

In the Ohio River Valley are several lines in operation and others being built. The Camden Interstate Railway (No. 95), extending from Huntington, W. Va., to Catlettsburg, Ky., and Ironton, Ohio, 12 miles, is being built. The Ironton Electric Railway (No. 96) extends 6 miles on either side of Ironton. It is owned by J. T. Byron, of Ironton. At Portsmouth there is a short line in operation (No. 97). The Pomeroy & Middleport Railway (No. 98), operating 12 miles, is owned by Judge D. A. Russell, of Pomeroy. From Marietta to Parkersburg there is a 15-mile road under construction and owned by Parkersburg people. The Athens, Nelsonville & Hocking Valley Traction Company will build lines from Athens to Nelsonville and Glouster (No. 100). Promoters: Thomas Selz, S. R. Pine, N. C. Hanning, and Robert Klein, of Dayton, and H. H. Homing, Athens. The Wheeling Traction Company,

which is controlled by E. W. Moore, of Cleveland, is building a line from Bridgeport to St. Clairsville (No. 109), and from Steubenville to Bridgeport (No. 111). It is understood that it controls the Bellaire, Bridgeport & Martin's Ferry Railway (No. 110), which operates a 12-mile road. The Steubenville, Mingoe & Ohio Valley Traction Company (No. 146) operates 5 miles, and is building a 10-mile extension to Brilliant. J. M. Ferguson has secured right of way for a line from Steubenville to Canton (No. 112) by way of Carrollton and Waynesburg.

In addition to those previously referred to, there are several roads which have Cleveland in view as a terminus. The Cleveland & Warren Railway (No. 121) is promoted by Senator Martin Dodge, who proposes to build a direct line from Cleveland to Warren. He has secured considerable right of way and franchises at several points. The Portage Lakes Traction Company (No. 122) holds franchises in several towns. It is promoted by Judge J. Lamson, V. C. Taylor and Carl Nau, of Cleveland. The Cleveland, Wadsworth & Southern Railway (No. 126), was organized recently by E. A. Akers, G. F. Anthony, W. H. Hill, C. S. Horner and others, of Cleveland, to build a line from that place to West Lebanon with branches to Akron and Massillon. The Cleveland, Richfield & Akron Railway (No. 125) is promoted by T. C. Childs, of Akron, who is having a contest with other promoters, supposed to represent the Everett-Moore syndicate, for a franchise over the same route. The route is shorter than that operated by the Northern Ohio Traction Company (No. 4). Mr. Childs was also the promoter of the Akron & Canton Railway (No. 130), which is competing with the Northern Ohio Traction Company (No. 4) for a line between Akron and Canton, both having commenced construction work. It is promoted by a strong syndicate composed of P. L. Saltentall and C. Eldridge, of Boston; L. E. Meyers, Chicago; William Hoover, New Berlin, and Charles Kolp, J. C. Welty and A. C. Brant, of Canton. It is claimed that an extensive system is to be built which will extend from Cleveland to Columbus, by way of Canton, New Philadelphia, Canal Dover, Coshocton, Zanesville and Newark. It is supposed that some of the lines being built on this route are backed by the syndicate. Franchises have been secured for an extension of the Canton line to New Philadelphia. A portion of this route is already covered by the Tuscarawas Railway (No. 113), which is owned by F. T. Pomeroy, of Cleveland; 10 miles of road are in operation.

From Canton to Alliance and Sebring a line is under construction by the Stark Electric Railway (No. 114). C. Morley, of Cleveland, and R. Jacobs, of Canton, are promoting the enterprise, backed by Cleveland capitalists. A rival of this line for the portion of its route is the Alliance, Sebring & Salem Railway (No. 116), promoted by J. C. Whitela and H. T. Dempsey, of Beaver Falls, Pa.; Herman Klein, of Allegheny, and C. A. McDonald, of Pittsburgh. The same people are promoting the Coropolis & Monica Railway (No. 151), connecting the two Pennsylvania towns.

The roads radiating from Youngstown are controlled by two strong syndicates. The Mahoning Valley Railway Company (No. 118) operates 31 miles from Warren to Lowellville, and is building extensions to Leavittsburg and to New Castle. The system includes several short spur lines, and the Youngstown city lines. It is owned by Myron T. Herrick, James Parmely and B. F. Miles, of Cleveland. The Youngstown & Sharon Railway (No. 119) and the Sharon & New Castle Railway (No. 120) are a part of the system being built by the Penhale-Devitt syndicate, of New York and Chicago, which has been buying up a large amount of electric lighting and railway property in

Eastern Pennsylvania and in the vicinity of Youngstown. It is said that under an arrangement with A. M. and J. K. Jolley, of Pittsburgh, and Richard Quay and S. Battles, of Philadelphia, who are also building roads in Eastern Pennsylvania, the syndicate will have lines from Youngstown to Pittsburg, and from Youngstown to Erie, Pa.; some of them being already under construction. Several lines have been projected from Salem to East Liverpool, and several franchises have been granted to different parties, but it is believed that the Salem, Lisbon & East Liverpool Railway (No. 116), which is promoted by U. G. Smith, F. N. Hait, Charles Taylor, George H. Billman and H. H. Poppleton, of Cleveland, have the advantage. The line has been surveyed and it is said construction work will start in the near future.

The Ohio River & Youngstown Railway (No. 117) was recently organized by Walter S. Snyder, W. E. Nye, Albert Fassig, George E. Long, John Patterson, of Youngstown, to build a line from Youngstown to East Liverpool. An extensive system of franchises was secured a year ago in the northeastern corner of the State by Eugene Rowdon, of Windsor; W. H. Dodge, of New Lyme, and S. L. Osborn, of Andover, representing the Burton, Jefferson & Andover Railway (No. 124). It is believed these people are simply speculating in franchises, as they have recently sold a franchise from Jefferson to Ashtabula to the Pennsylvania & Ohio Railway (No. 127), which is building between Conneaut and Ashtabula, and they are said to be endeavoring to sell a franchise from Burton to Andover and Meadville, Pa., to the Cleveland & Eastern Railway (No. 2), which would give the latter a through line from Cleveland to Meadville. The Pennsylvania & Ohio Railway (No. 127), above mentioned, has 4 miles in operation, 15 miles under construction, and it contemplates building an extension east to Erie, and another west to Painesville. It is owned by Thomas Fricker, of Ashtabula. Another string of franchises are held by P. W. Tuttle, C. W. Goodrich, C. E. Barnum and F. S. Turner, of Geneva, and L. B. Stanley, of Collinwood. They contemplate a line from Painesville, through Geneva, Jefferson and Andover to Meadville, Pa. (No. 123), and it is understood that they have done considerable grading in order to hold their franchises.

Between Lorain and Elyria there is in operation the Lorain Street Railway (No. 129), one of the oldest interurbans in the State and said to be the first to inaugurate a 3-cent fare for local traffic. This was done recently, and the dissatisfaction caused thereby among the citizens of Elyria was recently referred to in the STREET RAILWAY JOURNAL. The road is owned by P. S. Du Pont.

Residents of Lorain and Dover are securing right of way for a line from South Lorain to Cleveland (No. 128). The road has been incorporated under the title of the Cleveland & South Lorain Traction Company, by Charles W. Wells, James H. Burke, Edwin H. Richards, H. A. Beekerman and Frank W. Nowak. Reuben Hall and Calvin Pease are the promoters, and the capital stock is \$500,000. The Lorain & Cleveland Railway (No. 5) and the Cleveland, Elyria & Western Railway (No. 15) already operate between these points.

The Canton-Massillon Railway (No. 131) has recently been placed in operation between these two towns. It is 12 miles in length and an extension is being built to Navarre, 5 miles. It is owned by Thomas Lynch, E. Fogel and other Canton people. The Barberton, Doylestown & Massillon Railway (No. 132) holds franchises for 20 miles of road. A. E. Townsend, of Barberton, is the promoter.

T. Y. McCray, L. D. McCray, F. T. Boles and F. D. Campbell are securing franchises for about 75 miles of road between Wellington, Mansfield, Mount Giload and Colum-

bus. It is said that considerable grading has been done at various points. A rival of this road is the Mansfield, Cardington & Delaware Railway (No. 136), which was recently organized with A. A. Whitney, Mount Gilead, president; R. F. Chase, Cardington, vice-president; C. W. Schaff, Mount Gilead, secretary, and W. A. James, Cardington, treasurer. The Citizen's Railway Company, of Mansfield, has just completed and placed in operation a 14-mile extension to Shelby (No. 134). It is to be extended to Plymouth, 7 miles. S. N. Ford, Mansfield, is president.

Work is to be started in the near future on the Buckeye Traction Company's line (No. 137), which will extend from Bucyrus to Norwalk. H. G. Flickinger, S. J. Kibler, R. V. Sears, W. A. Blicke and others, of Bucyrus and Norwalk, are promoters. The Ohio Central Traction Company, of Bucyrus (No. 74), operates a line to Galion, and is building to Crestline, paralleling the line being built by the Pomeroy-Mandelbaum syndicate. It is said that an extension will be built from Galion to Mount Vernon. Franchises for lines radiating from Bucyrus are being secured as follows: Bucyrus to Marion (No. 73), ex-Attorney-General Frank Monnett, Columbus; Upper Sandusky to Bucyrus (No. 138), W. G. Gear, of Upper Sandusky; Bucyrus to Ashland (No. 139).

The Norwalk, Ashland & Southern Railway (No. 140) was organized some time ago by Judge C. P. Wickham, C. F. Jackson and H. A. Thomas, of Ashland, and Josephus Clark, of New London. It is claimed that work will start in the near future. The Marion, Green Camp, Prospect & Richwood Railway (No. 142) is being promoted by French Crow, J. N. Scott, James Moore and F. E. Guthrey, of Marion.

A right of way for a line from Springfield to Washington Court House (No. 142) is being secured by L. H. Houston, Edward Houston, J. F. Rankin and S. B. Rankin, of South Charleston, and D. I. Worthington, of Washington Court House. Harry Frye, Jr., of Springfield, is securing a right of way from Springfield to Clifton and Cedarville (No. 143). The Dayton, Springfield & Urbana Railway (No. 25) is securing a similar right of way. The Hamilton & Lebanon Railway (No. 148) is promoted by Frank M. Hughes, of Hamilton. It is understood that construction work has been started.

The members of the Everett-Moore syndicate, of Cleveland, were in New York the past week arranging the details for the consolidation into one company of the various interests which have recently been acquired by the syndicate. The syndicate controls nineteen electric railway, light, heat and power companies in, between and radiating out from Cleveland, Toledo and Detroit, with a total capitalization of in the neighborhood of \$100,000,000. It is stated that new stock will be issued to the individual stockholders now in the companies now controlled by the syndicate. It is stated that the syndicate has under contemplation the purchase of a number of additional properties in Ohio and Michigan.

The following is a list of the principal towns and cities in Ohio, with their populations:

Aberdeen	711	Berea	2,510
Ada	2,576	Berlin Heights	625
Adamsville	201	Bethel	850
Akron City	42,728	Blanchester	1,788
Alliance	8,974	Bloomdale	740
Alvordton	482	Bluffton	1,783
Andover	815	Bowling Green	5,067
Antwerp	1,206	Bridgeport	3,963
Archbold	958	Brilliant	646
Ashland	4,087	Bryan	3,131
Ashtabula	12,949	Bucyrus	6,560
Athens	3,066	Burton	727
Barberton	4,354	Cadiz	1,755
Bedford	1,486	Caldwell	927
Bellaire	9,912	Cambridge	8,241
Bellefontaine	6,649	Canal Dover	5,422
Bellevue	4,101	Canal Winchester	662

Canton	30,667	Milan	653
Cardington	1,354	Mingo Junction	2,954
Carrollton	1,271	Minster	1,465
Carthage	2,559	Monroeville	1,211
Cedarville	1,189	Montpelier	1,869
Celina	2,815	Morrow	869
Chagrin Falls	1,586	Moscow	475
Chardon	1,360	Mt. Blanchard	456
Chicago Junction	2,348	Mt. Gilead	1,528
Chillicothe	12,976	Mt. Vernon	6,633
Cincinnati	325,902	Napoleon	3,639
Circleville	6,991	Nashville	766
Cleveland	381,768	Navarre	963
Clyde	2,515	Nelsonville	5,421
College Corner	378	New Albany	224
College Hill	1,104	Newark	18,157
Collinwood	3,639	New Bremen	1,318
Columbiana	1,339	New Carlisle	995
Columbus	125,560	New Comerstown	2,659
Columbus Grove	1,935	New London	1,180
Conneaut	7,133	New Paris	790
Coshocton	6,473	New Philadelphia	6,213
Crestline	3,282	Niles	7,468
Cuyahoga Falls	3,186	North Amherst	1,758
Dayton	85,333	North Baltimore	3,561
Defiance	7,579	Norwalk	7,074
Delaware	7,940	Oak Harbor	1,631
Delphos	4,517	Oberlin	4,082
Dennison	3,763	Orrville	1,901
Deshler	1,628	Ottawa	2,322
Doylestown	1,057	Oxford	2,009
Dresden	1,600	Painesville	5,024
East Liverpool	16,485	Pandora	409
Eaton	3,155	Paulding	2,080
Elmore	1,025	Pemberville	1,081
Elyria	8,791	Perrysburg	1,766
Fairport	2,073	Piqua	12,172
Findlay	17,613	Plain City	1,432
Forest	1,155	Plymouth	1,154
Fostoria	7,730	Pomeroy	4,639
Frazesburg	730	Portsmouth	17,870
Fremont	8,439	Prospect	983
Galion	7,282	Put-in-Bay	317
Gallipolis	5,432	Ravenna	4,003
Garrettsville	1,145	Republic	656
Geneva	2,342	Richwood	1,640
Genoa	824	Ripley	2,248
Georgetown	1,529	St. Marys	5,359
Germantown	1,702	St. Paris	1,222
Grafton	1,098	Salem	7,582
Grand Rapids	549	Sandusky	19,664
Granville	1,425	Sebring	387
Green Camp	369	Seven Mile	256
Greenville	5,501	Seville	602
Greenwich	849	Shelby	4,685
Grove City	656	Sidney	5,688
Hamilton	23,914	South Charleston	1,096
Hebron	455	Spencerville	1,874
Hillsboro	4,535	Springfield	38,253
Hiram	659	Spring Valley	522
Hubbard	1,230	Steubenville	14,349
Hudson	983	Stryker	1,206
Huron	1,708	Sunbury	464
Ironton	11,868	Swanton	887
Jackson	4,672	Tiffin	10,989
Jefferson	1,319	Tippecanoe	1,703
Jerry City	555	Toledo	131,822
Johnstown	638	Toronto	3,526
Kent	4,541	Trenton	387
Kenton	6,852	Troy	5,881
Lancaster	8,991	Uhrichsville	4,582
Lebanon	2,867	Upper Sandusky	3,355
Leetonia	2,744	Urbana	6,808
Lima	21,723	Van Wert	6,422
Lisbon	3,330	Vermilion	1,184
Lodi	846	Wadsworth	1,764
Logan	3,480	Wapakoneta	3,915
London	3,511	Warren	8,529
Lorain	16,028	Washington Court House	5,751
McConnellsville	1,825	Waterville	703
Madison	768	Wauseon	2,148
Mansfield	17,640	Waverly	1,854
Mantua	743	Waynesburg	613
Marietta	13,348	Wellington	2,094
Marion	11,862	Wellsville	6,146
Martin's Ferry	7,760	Willoughby	1,753
Marysville	3,048	Wilmington	3,613
Massillon	11,944	Woodville	831
Maumee	1,856	Wooster	6,063
Mechanicsburg	1,617	Worthington	443
Medina	2,232	Xenia	8,696
Mentor	624	Yellow Springs	1,371
Miamisburg	3,941	Youngstown	44,885
Middletown	9,215	Zanesville	23,538

New Underground for London

The Parliamentary Committee on Underground Railway Schemes in London has a report which recommends the construction of a new line from Hammersmith, along Piccadilly, to the city with a branch from Piccadilly Circus to the Angel Inn at Islington. At a meeting of the shareholders of the Metropolitan Underground Railway, July 26, Col. Mellor, the chairman, in discussing the electrification of the line, said that the Ganz tender stood out from all others by reason of simplicity and economy. The company's experts who were sent to Buda-Pest to examine the Ganz system there reported that it possessed features of such novelty and importance as to amount practically to a new departure in electric traction.