

OPPORTUNITIES ARE MANY

A CHANCE FOR RICHMOND TO
CAPTURE BUSINESS.

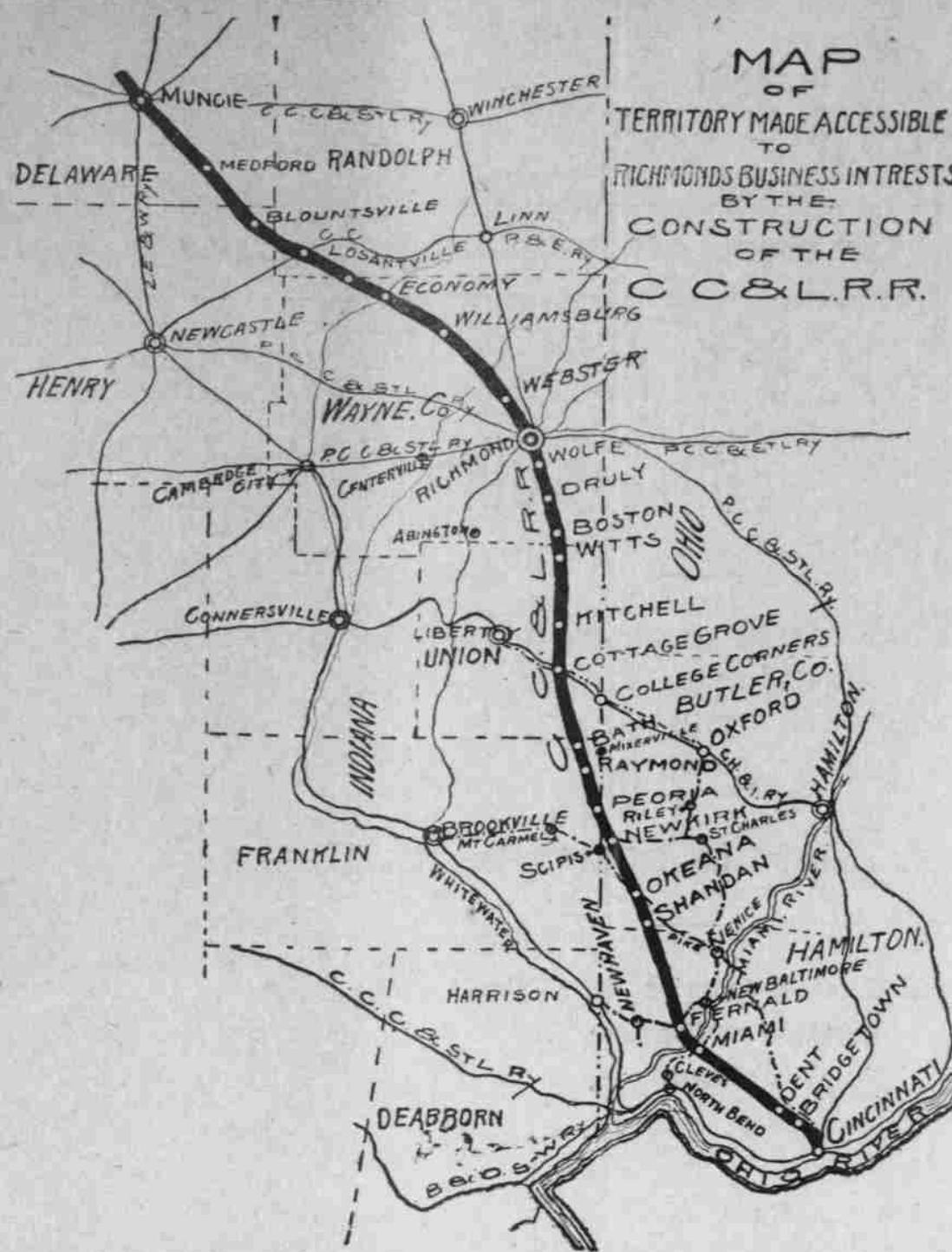
THE C., C. & L. RAILROAD

How it was Built, Where it Goes,
and Who Built It—The Modern
Wonder in Railroad Build-
ing and Engineering.

The C. C. & L. railroad is the "New Straight Line." If Richmond intends to get the benefit which she is entitled to and can easily get from this new great outlet to the south and north, which by the way has been a long felt want with us, she must be up and doing. Other cities are reaching out for this trade, and the first in will be apt to hold what they get, and which rightfully belongs to us if gone after and taken care of. Our claims to this territory

enough there to pay back our subsidy in five years; while the retail trade thrown within our reach from these rich villagers and richer farmers would be tremendous. The little may here given will indicate this—where is such another section? To the north we have actually no competition until we come to Muncie; and to the south there is nothing until Cincinnati is reached. Note the towns between, from which we can draw business and trade in every line. They are legion; they are flourishing places, full of business. They range in size from that of Centerville to that of Boston. Put all together they would make a city larger than Richmond; so that, if seen to properly this line may be said to have more than doubled the size of this city, because it has bound us by steel to these towns, and provided a train service such that these people can get here and home again any day, easily and cheaply. All that is needed is for us to make it an object to them to come and they will come; it is now up to us. I talked with many of these people last week, and they told me so. They will tell others if asked, and will come here to spend money if invited in the proper way. One good cheap trade excursion gotten up here would amply demonstrate this. "Look at the Map." Note the nice towns on the highways connecting with the railroad, and all within three to five miles of it.

This together with the completion of the line which was only an accom-



could be intelligently presented to capitalists; and secure the necessary options on land that lay along the proposed route through the city. In the latter location has been executed one of the smoothest of engineering feats, giving to Richmond her "other railroad" through the center of the city, with all its conveniences, while eliminating to the greatest extent possible the dangerous grade crossings and other objectionable features. Even that Main street bridge ruction arises from subsequent causes.

Two separate routes were surveyed by these gentlemen, with the plans and estimates, and Mr. Weber undertook the task of financing the proposition. To his untiring persistence is due the credit for the accomplishment of this purpose, and the release of Richmond from the grasp of a monopoly which for years had sucked her very life-blood. He was in touch with capitalists in various localities, and largely on his representations this project was taken up by a group of wealthy men under the leadership of R. W. A. Bradford, Jr., of Boston, and Mr. H. A. Christy of Chicago. They recognized the value of the scheme. The scope of the plan was enlarged and the financial part arranged for a thorough line from Chicago to Cincinnati, passing through Richmond, Muncie, Marion, Converse, Peru and various other thriving towns, and rich farming communities. Mr. Bradford, especially, had built railroads in the wild west and determined to introduce western methods into the "effete east." The manner in which he did so is still enlarging the optical systems of every magnate of Cincinnati. Accordingly he called to his aid Mr. H. L. Jackson, a civil engineer of ability with years of experience to his credit and with Mr. Weber as consulting engineer and Mr. Charles as assistant, work was begun on the first of May, 1900. Since that time the road has located and constructed its entire line from Chicago to Cincinnati, breaking all records in railroad building in this part of the world, overcoming the most stupendous of obstacles, and causing old conservative managements to stare with astonishment. No railroad in the country has caused more wonder, or been the subject of more newspaper comment than this. Press writers have connected it with almost every system in the country, from the Pennsylvania and Big Four to the Wabash and the Rock Island. The fact remains that all bills have been paid promptly, all obligations are met, no stock is for sale, and no bonds on the market—in spite of the immense cost of the undertaking. The engineering and constructional features are worthy of note; every thing is the best that can be bought—heavy rails, steel bridges, concrete masonry, handsome station buildings, all evidences of a first class road.

A trip down the line shows much of interest both to the professional and the lover of the picturesque. The Tippecanoe and Elletts rivers, the two prettiest streams in Indiana, are crossed by steel bridges. At Peru we ran for miles on the "banks of the Wabash," occupying the tow path of the old canal of past and gone prominence and usefulness; and here are located the shops which Richmond needed in her business and should have had, had the Commercial

Club "got theirs." Crossing the Wabash finally on a steel bridge of six spans, on concrete masonry, we pass through the winter quarters of the Wallace shows, seeing perhaps an elephant or a camel playing sportively along the track. At Converse we meet the Pennsylvania and crossing under this railroad we show our appreciation of a good thing by keeping at its side for ten miles into Marion, smelling of oil from end to end of the line. Through a large part of Marion and over the principal streets the road is elevated. We reach Jonesboro and Gas City, run along the Mississinewa for some distance and here meet up with one of those famous "sink holes" which with others further north so severely taxed the engineering department. These holes, while presenting the ordinary surface appearance of the ground around, when any bank or bridge is put thereon give way, swallow apparently all material that can be put in and seem to be actually bottomless. Train load after train load of earth was thrown in without any apparent effect. In this hole a large mattress of timber was placed. The logs were laid in a sort of grillage, the brush wired in and around them. It took twenty-two acres of timber to fill this one hole, only a few hundred feet across. Passing Fowlerston and Gaston, small and busy, we cross the White river at "Magie Muncie" on a three-span "through" girder steel bridge. Here is an example of the rapidity and thoroughness of construction. Work was begun May 28, and July 11, trains crossed! In the six weeks two abutments and two river piers had been built and the superstructure erected. Fred Charles was in charge here. Leaving the pretty station at Muncie we follow the bank of the White river, finding here another evidence of ingenuity. The road crosses here under the L. E. & W. and the Big Four roads, thus bringing the grade five feet lower than high water in the river. The road bed is protected against overflow by an especially designed drainage system, planned by Mr. Weber, and executed by Mr. Charles, to whom neither holes, rivers or railroads were the slightest of barriers. Richmond folks, too, gentlemen and ladies.

At Richmond for several miles the line runs along the picturesque White river, crossing two branches of the river on steel bridges, one of which is the longest in the state. Here is the "Whitewater branch." We call it the piano works switch back; but any one seeing the ingenuity and efficiency of it will at once agree that it deserves a better name. It descends into the river gorge which is as deep here as that at Niagara below the Falls, so that engineering ability of a high order was needed to make it practical. The Starr piano works and other industries are located here, so that this branch of the road though expensive, is a paying investment. We then traverse the "Short Creek" and "Elkhorn" of the country, where for forty years almost every railroad system in this part of the country has made survey after survey; but it remained for Mr. Jackson to find the route and this company to furnish the nerve, money and ability to tackle the problem, so difficult a country is to build over. They did it, placing the line on the tableland of Indiana where for 22 miles smooth sailing is

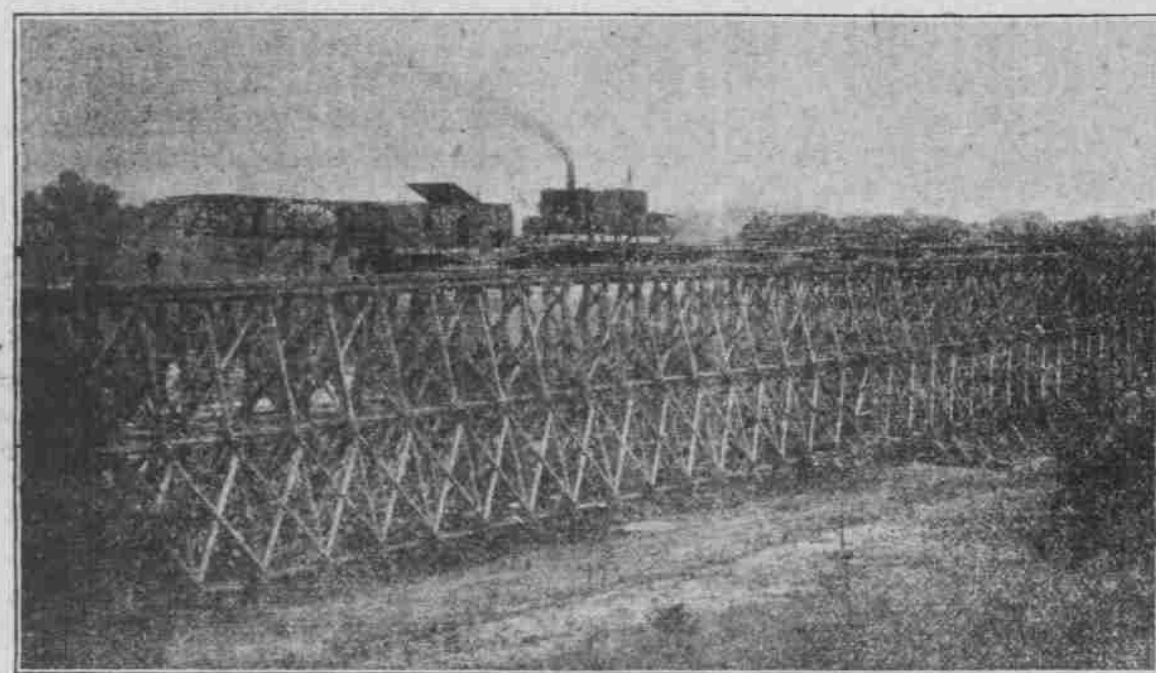
found, and the road is a "tangent"—a straight line without a curve. The problem of dropping from this table land down to the valley of the Miami river and from there through the hills and knolls that surround Cincinnati was also one that baffled and bluffed many a railroad in times past. It was reserved for Mr. Jackson's genius to discover and devote a practical route through and over and under these seemingly impassable obstacles. The result is the marvel of engineers and railroad men. The Dry Fork near Okeana, Ohio, "look at the map" is crossed on an 840 foot trestle 63 feet above the bed of the stream. It is upon this trestle that the track laying machine is shown in the picture I give elsewhere.

This track laying machine automatically and accurately lifts the ties into position, the most drugging labor in all railroad construction. It furnishes motive power for its own construction train and is complete within itself. There were places where it laid ties and rails at the rate of 1,800 feet per hour. One most interesting feature of the machine is the manner in which, with very few men, the ties and rails are lifted from the cars to the road bed, connected and spiked, while the train is moving right along all the time. An endless chain carrier puts the ties in place, and a crane suspended on a steel truss lowers the rails in advance of the train, which thus builds its own track as it advances. By the use of this machine the road was run into Cincinnati many weeks

line of the road—the other railroads away beneath—the straight-away shuttle through the air by which miles of travel and hours of time are saved in getting right straight into the heart of the town.

For several miles within the city limits the road is "up in the air"—elevated. Over Quebec avenue the trains are 100 feet above the tops of the street cars. This viaduct is 540 feet of steel and 770 feet of trestle; the latter three lengths of telegraph pole high, beside the piling and piers. Higher than any steeple in Richmond. The Mill creek viaduct jumps two streets, the C. H. & D. railroad, with five tracks, the B. & O. S.-W. railroad, with five tracks, the Big Four freight yards, with six tracks, Mill creek and a long stretch of Mill creek bottoms. About 835 feet of this is steel; the remainder, 2,592 feet, of wood. It was on observing this bridge that a passenger with vivid imagination exclaimed "By Jimminy; day half to take der bridge down to let der sun set."

It is a great piece of work that reflects credit on its designers, both in its execution and in the foresight it indicates. When other roads are forced to elevate their tracks, as they will be in the near future, this is already up and this tremendous expense will be saved—clear profit. It has been the policy to avoid everywhere grade crossings either of railroads or wagon roads. Thus fitted up for high speed running, with its distance from Cincinnati to Chicago materially shorter than any other

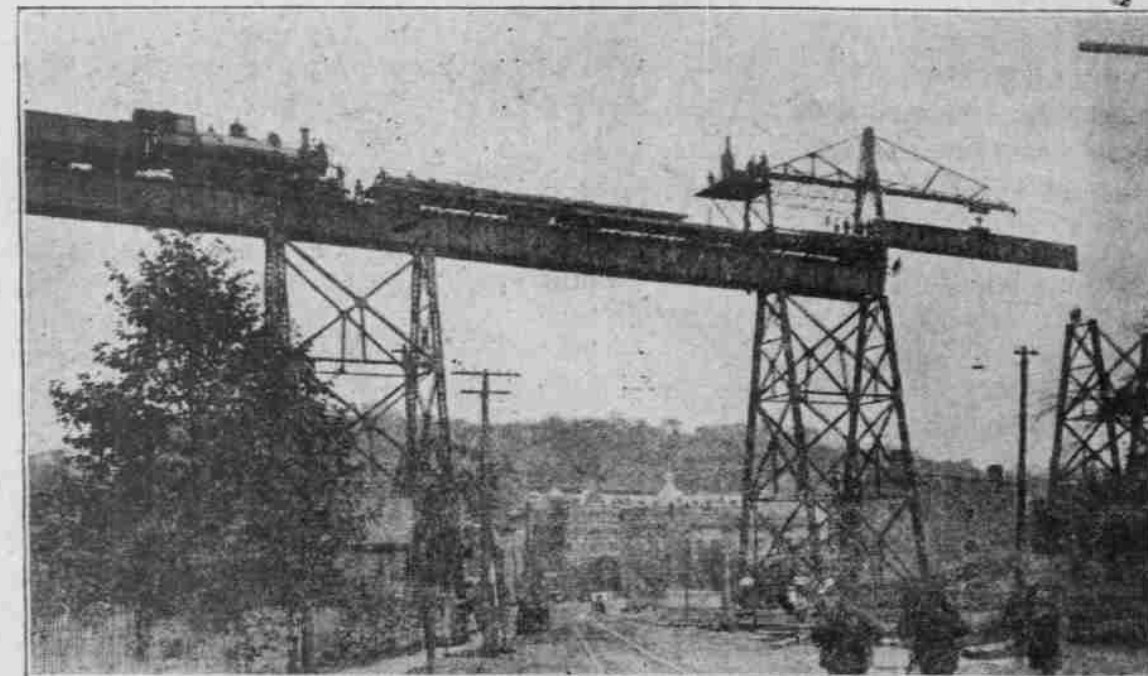


Oklana Trestle and the Track Laying Machine.

and trade are many. Engineer Weber backed up by our citizens, first schemed the road, then put the route on paper, surveyed, figured, and actually financed it, by getting capital back of it. Then, we gave the largest subsidy voted by any point along the line. In addition we are the most important point on the line between Chicago and Cincinnati. There is no town of the same size and business force like Richmond, except those two on the entire line. It only remains for us to assert ourselves to make this line one of the best business builders ever within the reach of our cable tow, since the first railroad run in here from the south, in the '40's.

It is to be hoped that steps will be taken by the Commercial Club, or if not by them by some other organization, that will secure to us this trade to the south which this road is an outlet for, and which would naturally tend in this direction if encouraged to come. We have been used to getting the trade north of us to the confines of the county and south as far as Liberty, perhaps; but this new line opens out to us a vast territory, the richest in Indiana and Ohio, for trade purposes, of which we have heretofore known little or nothing because it was beyond our reach. We have never had the opportunity which is now ours. There is a stretch of good towns and farming community equal to that right around us, which properly taken care of could double the trade of Richmond, and more, both in retail and wholesale lines. Our wholesale hardware and grocery firms alone can get business

plished fact last week, and made so in such a phenomenal manner, will, I believe, render interesting a partial account of the cause and circumstances of the beginning and building of this line. The origin of the project must be in the action of the city council. Five years ago this city, the prettiest and wealthiest per capita in the middle west, besides a manufacturing center making every thing from brooms to pianos, was in the grasp of a monopoly; the railroads branching out in six different directions all under Pennsylvania control, and trains run in such a way that it was extremely difficult to get in or out from lack of connections with other lines, while some sections were actually inaccessible to us all. To remedy this situation action was taken by the people and the council. A committee was appointed to secure the building of more roads, either steam or electric, the city engineer and his department being directed to make any necessary surveys, etc. The late Benjamin Starr was at the head of this committee; than whom no man in the state had more friends or was more esteemed. The other members of the committee were Messrs. Wissler, Bradbury, Rehling and Barnes. Of the various routes discussed the most feasible seemed a line from Richmond to Cincinnati. Accordingly the city engineer, Mr. H. L. Jackson and his assistant, Mr. Fred Charles undertook the work of making the surveys and plans, taking to their assistance Messrs. Hempleman, Graff and Burns, the latter to raise the necessary finance to put the scheme on its feet so that it



Quebec Avenue and the Hundred-Foot High Trestle—The Catholic Home For Aged People Near By.

earlier than could have otherwise been accomplished. The machine is made at Scranton, Pa., and weighs fifty tons. It is the only one, and its inventor, Mr. Hurley, goes with it. The work done on the C., C. & L. demonstrated that with forty men the machine can lay from two and one-half to three miles of track per day of ten hours. It is so constructed that it will lay track at the same speed that the train moves, or its speed can be doubled. It handles all weights of rail, up to 400 tons to the mile.

The Miami river is crossed by six spans of steel and many feet of wooden trestle approach. We glide along the bank of the Miami through a valley as pretty as a picture, the garden spot of Hamilton county, to Miamitown; climb the tortuous course of Taylor creek, along the bluffs and reach the summit, and lo! just under our feet and reached by pier lies the beautiful city of Cincinnati. We are at the "Summit." Here again the locating ability of Mr. Jackson, the designing ability of Mr. Weber, and the financial genius of Mr. Bradford were again taxed to enable them to reach the center of Cincinnati; and reached it through work so gigantic and unexpected that it was called, until completed, by conservative railroad men, "Bradford's Folly"; not as a spirit of derogation, but in sheer wonderment at the boldness and audacity of the scheme. It is impossible to do justice to it by description. A picture or two given elsewhere will give a better idea of it. Look at the houses far below the

line, it will be in good shape to capture the through business as well as give good local service.

Mr. Bradford and his associates are well-known in financial circles and have the full confidence of every one. Mr. H. L. Jackson, the chief engineer, is a western man, hailing from Wichita, having had years of experience on such roads as the Rock Island, Santa Fe, the Frisco and many other western roads. No better man can be found the country over.

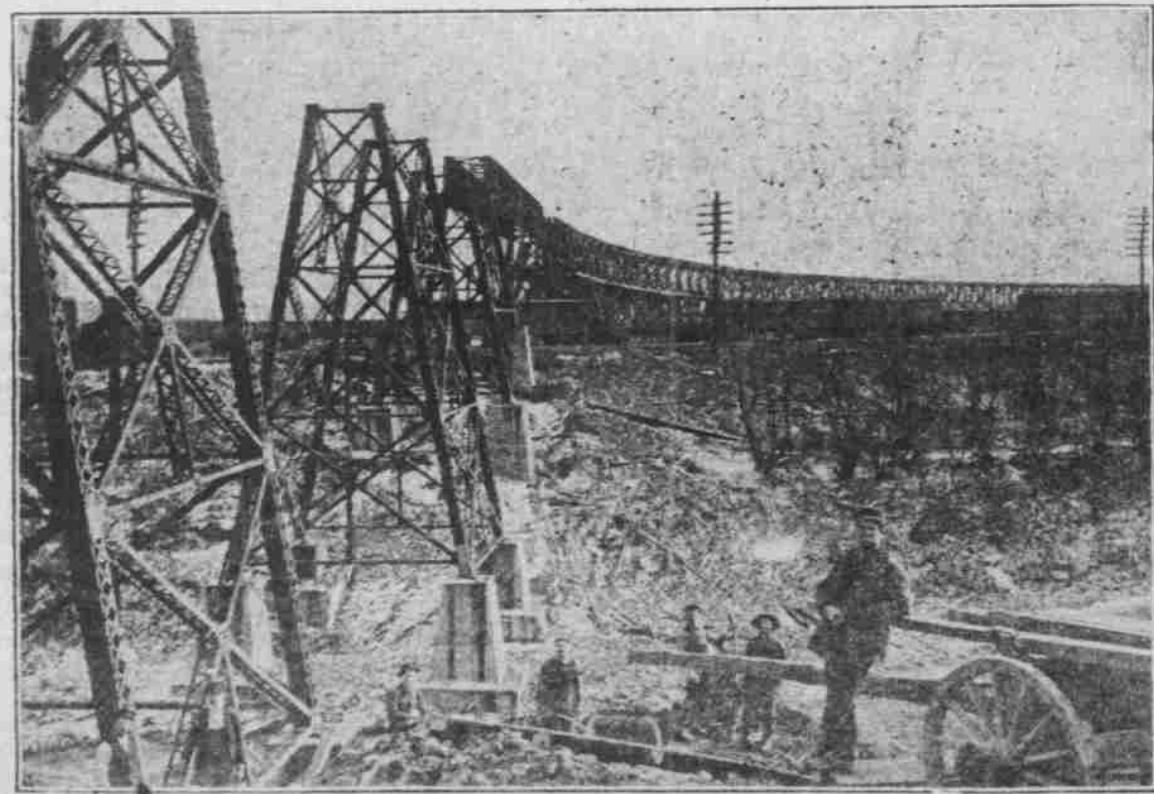
Mr. Fred Charles was assistant to Mr. Weber for many years. He has had charge of the construction of all bridges especially and is an expert in concrete work. The general manager was Mr. W. I. Allen, for many years on the Rock Island in the same capacity, and a thorough railroad man, knowing all branches of the service, and very popular with all who are connected with him. He has since resigned and the office changed to general superintendent.

Others who have had part in this road building are Messrs. W. H. Stice, J. J. Sroufe, F. J. Hunt, R. M. Henley, C. L. Persons, T. H. Robbins and J. M. Harper, division engineers.

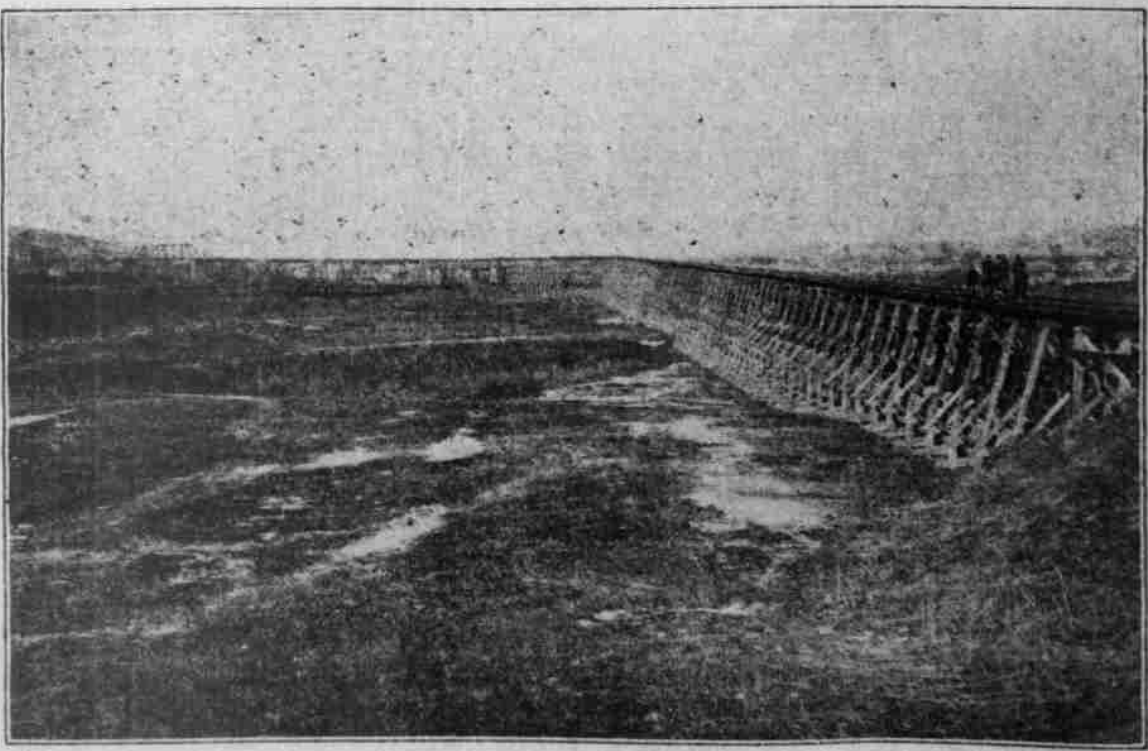
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Constructing Big Bridge in Cincinnati.



Mill Creek Valley and Trestle Up Girard Avenue.