

# Good Roads



MONROE COUNTY, N.Y.

and

FEDERAL HIGHWAYS

1918





CONCRETE GUARD RAIL  
ON ATLANTIC AVENUE DUGWAY  
Making a Beautiful Highway Wider and More Attractive



J. Y. McCLINTOCK

Mem. Am. Soc. C. E.

Monroe County Superintendent of Highways

An Optimist as to a National Trunk Line from New York West  
Through Rochester



GEORGE C. DIEHL

Chairman Good Roads Committee

American Automobile Association and New York State Motor Federation

The Most Prominent Figure in Good Roads Construction  
in the Country Today

## N. Y. STATE MOTOR FEDERATION FAVORS FEDERAL HIGHWAY COMMISSION

RESOLUTION ADOPTED AT ANNUAL CONVENTION HELD AT  
ROCHESTER, N. Y., DECEMBER 13TH-14TH, 1918

WHEREAS, The President of the United States in his recent message to Congress, recognized the value of improved highway construction in the general transport system of the Nation and definitely recommended and urged their rapid development, and

WHEREAS, This work is necessary to give employment to the returning soldiers and also to furnish worthy projects on which unemployed labor can be engaged during the period of readjustment, and

WHEREAS, We recognize the necessity for a well defined and connected system of improved roadways in order to expedite the distribution of large volumes of foodstuffs now wasted on account of the lack of proper and adequate highway transportation and to better serve the economic and military needs of the Nation, therefore be it

RESOLVED, That a general Federal Highway Commission be created to promote and guide this powerful economic development of both highways and highway traffic and establish a National highway system. Be it further

RESOLVED, That the present appropriation for Federal aid to the states be continued and increased and the states urged to undertake extensive highway construction so as to keep pace with the development of this country and its transportation needs; and in carrying out the provisions of the present Federal Aid Act, or any amendment thereto, that the State Highway Commission shall co-operate with the Federal Highways Commission, and be it further

RESOLVED, That all governmental activities with respect to highways be administered by the Federal Highways Commission.





STUTSON ST. APPROACH TO CHARLOTTE BRIDGE, ROCHESTER  
Showing McClintock Cube Pavement  
Entrance to Lake Shore Boulevard, made possible by recently  
adopted constitutional proposition

#### LAKE SHORE BOULEVARD

RESOLUTION ADOPTED JANUARY 8, 1919, BY ROCHESTER AUTOMOBILE  
CLUB AT ANNUAL MEETING

WHEREAS, The adoption of the constitutional proposition at the last election enables the legislature to appropriate a considerable sum of money from the balance due to Monroe County from the moneys received from the sale of the second fifty million dollar bond issue for highways, and

WHEREAS, It is expected that such appropriation may be used on proposed Shore Road, and

WHEREAS, A section of this boulevard has been laid out and graded, with necessary culverts built, extending from the East Side Boulevard easterly about one mile, the land for such boulevard being given by George A. Gillette, Jay A. Stanton and others, and many beautiful lots in this section have been sold to prospective builders, and

WHEREAS, It is evident that this boulevard should be extended easterly to form what may be the main entrance from the city to Durand-Eastman Park, therefore

RESOLVED, That the Automobile Club of Rochester urge the authorities of the City of Rochester, County of Monroe, and the Town of Irondequoit, to make provision for extending such boulevard easterly so as to properly develop the travel between the city and Durand-Eastman Park.



FREDERICK R. SMITH, M. D.  
Ex-Chairman Monroe County Board of Supervisors  
President Automobile Club of Rochester  
President New York State Motor Federation  
A Constructionist in all Public Affairs



HENRY A. BOWMAN  
Supervisor, Town of Webster  
Chairman Goods Roads Committee, Monroe County Board of Supervisors  
Enthusiastic Road Builder

REPORT OF DELEGATES TO CONVENTION OF AMERICAN  
ASSOCIATION OF STATE HIGHWAY OFFICIALS  
AND HIGHWAY INDUSTRIES

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December 16, 1918.

*To the Honorable, the Board of Supervisors of the County of Monroe:*

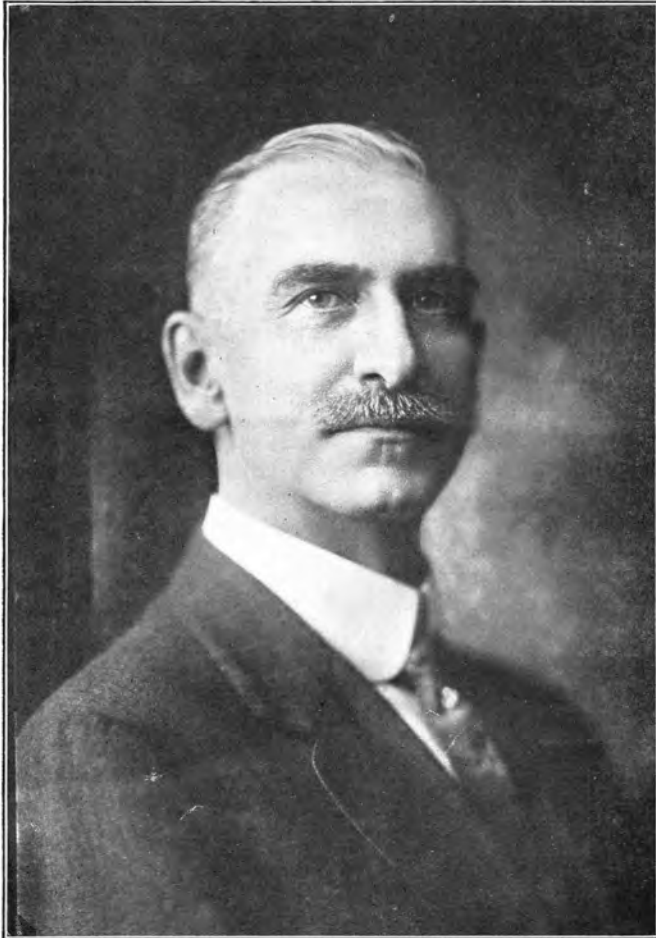
Gentlemen—In accordance with your resolution, we attended the convention of the American Association of State Highway Officials and Highway Industries held in Chicago, December 11 and 12. The meeting was very largely attended. Bright men of the country, representing 40 states, were there, including road builders, material manufacturers and builders of motor vehicles, both touring cars and trucks, also representatives of the U. S. Bureau of Public Roads.

Realizing that it would be a good opportunity to discuss with leaders of thought, concerning highway problems, we took with us the following proposition that in case the federal government should decide to build any roads, they should, no matter what other roads were built, construct two highways or routes in which the County of Monroe is directly interested. First—a great trunk line from Buffalo to New York, following in general the line of the New York Central & Hudson River Railroad. Second—a great north and south road from Rochester following in general the line of the Buffalo, Rochester & Pittsburgh R. R. to Pittsburgh, and that these two roads should be made with a hard surface at least 22 ft. wide of sufficient strength to sustain a load of twenty tons on four wheels, with radii of all curves to be not less than 900 ft. with no grades exceeding 5 ft. in 100.

We discussed this proposition with many people at Cleveland, Toledo and Chicago, including highway men, railroad engineers, motorists and operators and manufacturers of trucks, and learned that on account of the prevailing sentiment apparently the country over, we were conservative in such proposition.

At Chicago, on the 10th of December, the American Association of State Highway Officials and Highway Industries, by the vote, favored extension of the government aid to highway building in accordance with the law that has been in force three years, which provides for government aid apportioned among the states somewhat in the manner in which the State of New York apportioned the money received from bond issues among the counties; that is, in accordance with the area, population and mileage of post roads as certified by the Postmaster General and the moneys so apportioned to be paid to each state after it had furnished as much money as the government allotment and the combined amount to be spent under the direction of the State Highway Department with the approval of the U. S. Bureau of Public Roads.

Notwithstanding this, at the joint meeting on the 11th and 12th, when the representatives of the Highway Industries were with them, they authorized the preparation of a law to be submitted to Congress,



HON. THOMAS B. DUNN

Representative in Congress of Monroe County  
Ranking Member in Next Congress for Chairmanship of Committee  
on Post Roads, to which all Proposed Legislation on  
National Good Roads is Referred

providing for the building of national highways by the government which should be selected by a governmental commission to be established, independent of any of the existing governmental department, and further, that the cost of these roads should be borne by the government in full and that they should be maintained by it.

This action taken in Chicago has been approved unanimously by the New York State Motorists' Federation which includes the Rochester Automobile Club as well as the Buffalo club, etc.

In view of this action and on account of the great interests of the County of Monroe in such possible legislation, we recommend that the Good Roads Committee be instructed to attempt to secure through our delegation in the New York Legislature at Albany a joint resolution by the Legislature of the State of New York, urging upon the National Congress the advisability of specifying in the proposed law these two great routes to be put at the head of any national routes that may be selected under such proposed law.

Very respectfully submitted,

HENRY A. BOWMAN,  
Chairman of the Good Roads Committee.

J. Y. McCLINTOCK,  
County Superintendent.

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RESOLUTION—ADOPTION OF REPORT OF COUNTY SUPERINTENDENT  
AND CHAIRMAN OF GOOD ROADS COMMITTEE ON  
NATIONAL GOOD ROADS CONVENTION.

BY SUPERVISOR BOWMAN:

December 30, 1918.

RESOLVED, That the report submitted by the Chairman of the Good Roads Committee and the County Superintendent of Highways at the meeting of December 19th, is hereby adopted and accepted as the expression of the sentiment of the Board of Supervisors of Monroe County.

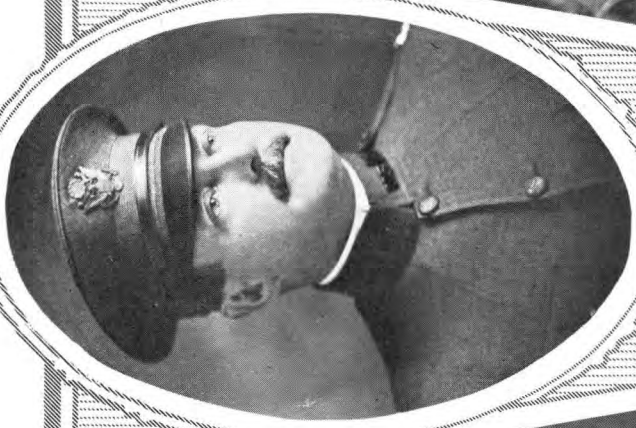
Adopted.



RESIDENCE OF WARHAM WHITNEY, ROCHESTER BEACH



CHESTER R. SIME  
Member of Company I,  
Third Infantry, N. Y. G.



GEORGE C. WRIGHT  
Captain of Engineers, U. S. A.



HERBERT C. SNELGROVE  
Lieutenant, Air Service  
Military Aeronautics  
Representatives of Monroe County Superintendent's Office in the World War

# ANNUAL REPORT OF COUNTY SUPERINTENDENT OF HIGHWAYS

Rochester, N. Y., Dec. 17, 1918.

*To the Honorable, the Board of Supervisors of the County of Monroe:*

Gentlemen—The following report of highway work for the year 1918, as hereby submitted, together with tables showing details:

### CHARACTERISTICS OF MONROE COUNTY ROADS, 1918

Total mileage outside of cities and villages.....	1,362.52	miles
State and county roads completed or under contract	345.22	“
County roads paid for by county and town.....	4.56	“
Macadam roads built by towns.....	438.64	“
Gravel roads built by towns.....	248.30	“
Total mileage of improved roads.....	1,036.72	“
Total mileage of unimproved roads.....	325.80	“

### WORK DONE IN 1918 BY TOWNS

For building and repairing roads.....	\$265,519.07
For building and repairing bridges.....	16,607.64
For highway machinery.....	10,592.60
For snow and miscellaneous purposes.....	19,083.60

Total .....\$311,802.91

Amount paid to Supervisors and Town Superintendents  
for road work.....\$ 24,857.00

Total expenditures by towns for road work.....\$336,659.91

### WORK DONE BY TOWNS IN 1918

- Miles of macadam road built, 25.8 miles.
- Average cost per mile, \$6,230.
- Miles of macadam resurfaced, 13.37 miles.
- Average cost per mile, \$2,400.
- Miles gravel road built during year, 6.36 miles.
- Average cost per mile, \$2,325.
- Number of cast iron steel culverts, 26.
- Number of concrete culverts built under 5 feet, 46.
- Number of concrete bridges between 5 feet and 20 feet, two.
- Number of bridges between 20 and 50 feet, two.

### MOTOR VEHICLE LICENSE FUNDS

The following amounts were received from the State Treasurer as the County's portion from the moneys raised by motor vehicle licenses:

In 1916 and 1917.....	\$ 96,047.24
In 1918 to Nov. 31, 1918.....	102,137.11

Total .....\$198,184.35

Appropriations from this fund have been made to December 3, 1918, as follows:

	Received From County	Raised By Towns		Received From County	Raised By Towns
Brighton ...	\$10,000.00	\$1,500.00	Ogden .....	\$10,000.00	\$1,500.00
Chili .....	5,000.00	750.00	Parma .....	17,000.00	2,550.00
Clarkson ...	8,000.00	1,200.00	Penfield .....	13,000.00	1,950.00
Gates .....	3,000.00	450.00	Perinton .....	4,000.00	600.00
Greece .....	15,000.00	2,250.00	Rush .....	7,000.00	1,050.00
Hamlin .....	20,000.00	3,000.00	Sweden .....	10,000.00	1,500.00
Henrietta ...	12,000.00	1,800.00	Webster .....	25,000.00	3,750.00
Irondequoit ..	17,000.00	2,550.00			
Mendon .....	5,000.00	750.00	Total.....	\$181,000.00	\$27,150.00

#### NOTICEABLE TOWN WORK DONE IN 1918

**BRIGHTON**—Home Acres Tract finished this year, 3.1 miles of street macadam, cost \$30,000, paid by local assessment, but forming part of the highway system of the town.

Finishing of improvement on Crittenden Road to entrance at South Park, paid for with automobile money.

The improvement of Westfall Road, from West Henrietta Road to city line, to afford a good road for passage of army trucks to the Aviation Field. Part of this done by the town funds and part by special appropriation from county for war purposes.

The widening of old stone arch bridge on East Avenue over Allen's Creek, concrete beams and slab, at a cost of \$2,044.00.

**CHILI**—Contract was let by the County to the Horseheads Construction Company for putting new steel bridge over the Black Creek on Scottsville Road at a cost of \$4,000, assessed 50 per cent. on county, 25 per cent on town of Chili, and 25 per cent on town of Wheatland. This was the first action taken under the amendment of the Highway Law permitting the county building bridges without reference to a vote by the town in which the bridge is located.

**CLARKSON**—1.1 miles of road on Orleans-County Line Road, with money appropriated from Motor Vehicle License Fund.

**GATES**—Steel concrete bridge was built on Coldwater Road, 25 ft. span, 26 ft. wide; cost, \$1,183.

Also, several important pieces of macadam road were built in good shape, 10 ft. wide.

**GREECE**—A first-class pavement was laid on North Greece Road, 12 ft. wide, macadam and tarred after being finished. Done with money from Motor Vehicle License Fund.

At the intersection of Ridgeway Avenue and Eddy Road, the grade was lowered 3 ft., graded on Eddy Road and the avenue and stoned 8 ft. wide, to make it passable. This is the beginning of a pretentious project to be finished in the future. This portion of the town will be in the city of Rochester after January 1st; cost \$6,500. Put Tarvia B on quite a length of town roads with satisfactory result.

**HAMLIN**—Built a nice stretch of macadam road on Hamlin Center Road, about a mile long, 12 ft. wide, with automobile money.

Also, built a nice piece of road to the lake on the Walker Road,  $\frac{3}{4}$ -mile long, 12 ft. wide. At the end at the lake, at Sunnyside Beach, the road was widened with concrete on both sides, making the parking and turn-around place for machines 36 ft. wide, 150 ft. long.

Built a steel concrete bridge, 16 ft. span, slab 20 ft. wide.

HENRIETTA—Nice piece of pavement was put on Middle Road, about a mile long, 12 ft. wide, with automobile money.

Also, beginning of improvement of the River Road with automobile money, 12 ft. wide of macadam.

IRONDEQUOIT—Titus Avenue, about  $1\frac{1}{2}$  miles long, 16 ft. wide, built and graded, with automobile money.

Tarvia was put on many of the town roads.

MENDON—Good work was done in this town with gravel which is local material.

OGDEN—The important improvement in this town was the building of the Canal Road, the road on the north side of the canal, with fieldstone base and good gravel top, paid for with automobile money.

PARMA—Several miles of town macadam were resurfaced and improved. Quite a mileage of new macadam was built. Oil and tarvia were used for quite a long stretch of roads in this town. The  $1\frac{1}{2}$  miles of crushed slag were put on the Moul Road at a cost of \$6,918.00, 12 ft. wide. Also, the Lighthouse Road, .67-mile, 10 ft. wide, of crushed slag, at a cost of \$5,210. Both of these were paid for out of automobile money. The town built 5,000 ft. of snow fence. They also built about the same amount of snow fence in 1917, and are well pleased with the results.

PENFIELD—One good concrete bridge was built, and a mile of road was improved with macadam 12 ft. wide, paid for out of the automobile money.

PERINTON—One piece of road was built, about  $\frac{1}{2}$ -mile, limestone macadam 12 ft., with stone brought by trucks from the Genesee River in the city, costing \$3.00 per yard dropped on the road. This was paid for out of the automobile money.

PITTSFORD—A good piece of road was built, 12 ft. wide of crushed slag, about  $\frac{1}{2}$  mile long.

RIGA—A piece of road 1.1 mile long, 10 ft. wide, of crushed stone was built.

RUSH—One mile of road was built, of limestone macadam, 12 ft. wide. Paid for out of automobile money.

SWEDEN—Two and one-half miles of local stone macadam, 12 ft. wide, built with automobile money.

WEBSTER—Important improvement made on the north end of Holt Road,  $\frac{3}{4}$  mile long. Extensive grading and rebuilding of two steel concrete bridges. Macadam put on 12 ft. wide. Paid for out of automobile money.

WHEATLAND—Built new steel concrete bridge over Raceway, 30 ft. span, 20 ft. wide, at a cost of \$1,829.00—very creditable structure.

### CONCRETE GUARD RAIL

The reinforced concrete guard rail devised by myself has been found efficient and advantageous and has been adopted by the State of New York and put on state roads to a considerable extent. It has been placed upon so many roads in this county as to form a characteristic feature of the highway system. During this season quite long stretches have been put up by the state on the Dugway roads with best of results. On account of there being a tie rod and anchor block behind each post, it was possible to make the existing road effectively wider by several feet on each side, as well as safer. It looks well and is popular with everybody who uses the highways. The state manufactured and set up some of this rail last year by patrolmen who otherwise would have been laid off, and it is understood that they propose during the coming winter to manufacture some more.

### STATE HIGHWAYS

Several State-County highways and also State Route Thirty which were under contract, were held up for the duration of the war so that but little new construction was made, except one creditable piece of work on Route Thirty between Spencerport and Brockport, which was finished during the year under contract, with waterbound macadam.

Under maintenance, the most creditable work done by the state was resurfacing the Pittsford-Mendon Road, while under the immediate direction of H. G. Hotchkiss, all the state roads in the county were kept in good repair, and I believe as a whole, the system of state roads in the county today is in better shape than ever before.

### CUBE PAVEMENT

This is one of the peculiar characteristics of Monroe County at this time. There are already laid short stretches of it, affording a good demonstration of its possibilities under varying intensity of traffic and variety of foundation, including concrete, broken stone macadam, tar-via macadam and gravel. Some of these pieces have been laid nine and ten years and show that they will stand up under heavy traffic and afford a material for surfacing that can be used advantageously by the town forces so as to make available the local material for foundation and permit of building a comparatively cheap road.

I believe that when conditions become normal, these vitrified shale cubes will be made and laid in large quantities as the development over the world indicates that the small cubes promise to become the most popular surface pavement. Many of the most important streets in Germany and Austria are surfaced with small granite cubes and within a few years, they have been manufactured at some granite quarries in North Carolina, and I believe also in Massachusetts, and have been laid to some extent on important highways in this country, including Brooklyn, New York, Dayton, Ohio, and several others. I have lately seen a city street in Cleveland, laid this year with granite cubes brought from Salisbury, N. C., in comparison with adjacent brick pavements which have their greatest development around that city. In talking with Mr. Stinchcomb, county surveyor of Cayuga

County, last week, he expressed his interest in the subject and undertook to arrange for laying another street in Cleveland where they could be compared under the same traffic conditions with brick pavement, asphalt and granite cubes, provided he can get the vitrified cubes during the coming year.

I am in hopes that it will be possible to get the state highway commissioner to try out the manufacture of small cubes from each of the four kinds of available stone found in New York State, and feel certain that it will be concluded that they can be made advantageously by the state from the bluestone of Ulster County, the granites and marbles of Northern New York and the Medina sandstone from the western portion of the state, and that for the purpose the inmates of the reformatory institutions can be advantageously used. I will also say here that the inmates of the Elmira Reformatory can be effectively employed in the manufacture of vitrified shale cubes from material that has been demonstrated to be suitable, and taken from the shale pit immediately adjacent to the reformatory.

In company with the other counties of this state, we are interested to have this development made because many of us who are conversant with what has yet been accomplished in pavements, are not convinced that Portland cement concrete is the final thing in pavements.

#### CHARLOTTE BRIDGE

The Charlotte Bridge has been finally completed and all the contracts thereon have been settled up. I repeat from my report of 1917 the following: "We have carefully prepared material for a special report to be made on this subject which will be most valuable as a record of Monroe County achievement and will also show to our own people and others outside, the splendid possibility of great development along the Rochester seacoast, made attainable by the construction of the bridge, and as a beautiful book will be used to attract attention and assist in securing possible help from the Legislature at Albany and the Congress at Washington, because we are located at the very heart of, perhaps, the most attractive district in all the world for the building of one of the great cities where not only will industry thrive advantageously, but where families can be afforded the most complete comfort and enjoyment."

#### PUBLICITY

As no separate report and map were published during the year, we took advantage of the Rochester Exposition held in the fall of this year, to distribute a leaflet upon which were shown a bird's-eye view of the Rochester seacoast and proposed Shore Road, pictures of Charlotte Bridge, and pictures of noticeable town road constructions, as well as application of the concrete guard rail to Dugway Roads, also the characteristics of Monroe County roads, with the name of the Good Roads committee. This leaflet was printed and distributed, about ten thousand in number, and was well received by everybody, and no doubt, was effective in tending to educate our people to the possibilities of the county, and to encourage the continuing of efforts that have already been made.

#### ROCHESTER SEACOAST AND PROPOSED SHORE ROAD

It is understood that the constitutional proposition which was voted upon at the November election was carried. This enables the legislature to provide for expending in Monroe County some two or three hundred thousand dollars of balance left from the sale of the second fifty million dollar highway bond issue. Consequently, we can hopefully look to a beginning on the construction of such a shore road.

Within the last two years, the town of Irondequoit has graded and built culverts so as to permit the use of about a mile in length of this Shore Road, extending from the East Side Boulevard easterly toward Durand-Eastman Park, opening to the development of some of the finest building lots in the county.

#### MAINTAINING MOTOR TRUCK TRAVEL IN WINTER

The demand from the Automobile Clubs and other truck owners for removing the snow so as to permit the use of roads the year round, has been so great that the State Highway Department has not only undertaken to keep the great State Route 6, between Buffalo and Albany, clear, but also a connection from Rochester to that route at Ionia, so that we will have an experience this winter to guide us in further efforts.

Under contract with the State Highway Commission, three of our towns, Brighton, Pittsford and Mendon, have built and erected over two miles of snow fence in Brighton, Pittsford and Mendon, and these same towns have built and set up a considerable mileage of snow fence on other highways, while several of the other towns have provided themselves with quite a number of miles of snow fence, so that we can say that a good beginning has been made.

In addition to the snow fence, the State Highway Department has authorized that three town superintendents whom they paid for the snow fence, to expend thirty dollars per mile, shovelling or plowing. Further, the Rochester Automobile Club has offered to assist in clearing the Scottsville Road from snow so as to make a winter connection with State Route 6 at Caledonia.

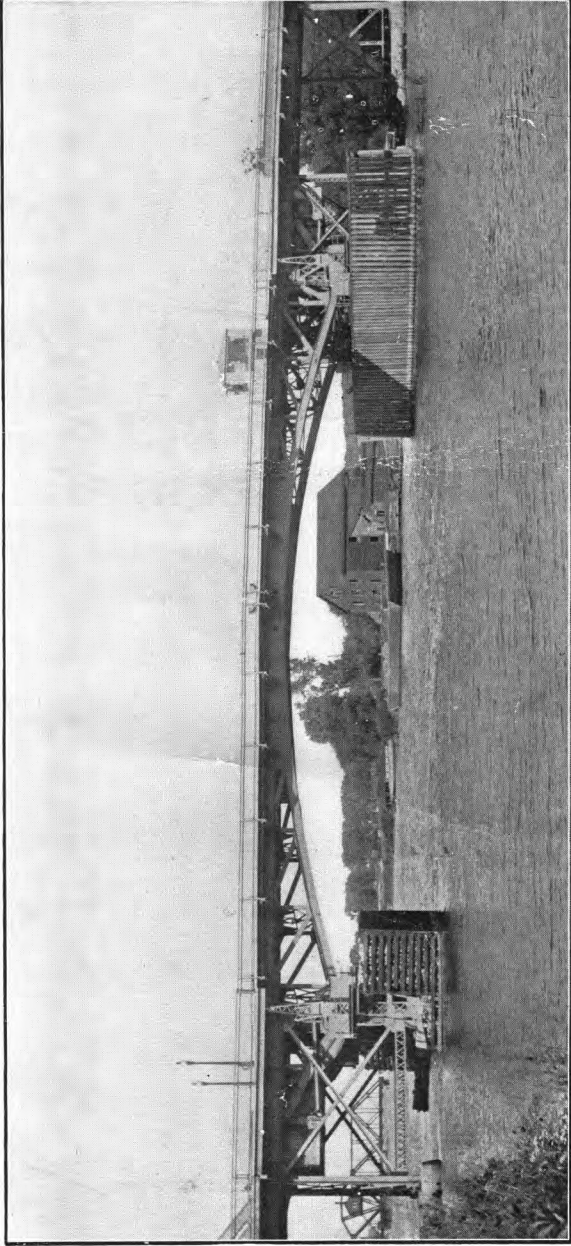
#### WAR CONDITIONS

During the whole of the war, strenuous war conditions prevailed so that it was difficult to get labor and material and everything cost very much more than ever before, so that what work was done generally cost from two to two and one-half times more than what it would have cost in normal times.

As a matter of record, from our office Mr. Herbert C. Snelgrove entered the army and was awarded a commission as second lieutenant in aviation work; and Mr. George C. Wright, my principal assistant, was impelled by a sense of duty to enlist this fall. Mr. Wright had had many years ago an experience of one year at West Point before taking a full course and degree at Cornell University, so that he not only made a creditable looking officer, but was awarded a commission as Captain of Engineers, U. S. A., and has been, and is now serving at Camp Humphreys, Va.

Respectfully submitted,

J. Y. McCLINTOCK, County Superintendent.



### CHARLOTTE RIVER BRIDGE

The Completion of which at a Cost of \$350,000 Makes Possible the Construction of the  
Proposed Boulevard Along Rochester Sea Coast



ROCHESTER SEA COAST