the Board of Water Commissioners.

To the Honorable the Common Coun-

Gentlemen-Aftemplied advertisement, bids for tur said sewnd erectstructural secial ass roof of addition to boiler a use at Water Works Park were received by the Board of Water Commissioners as follows:

Daigle Iron Works, \$2,145; 20

days.

Lewis-Hall Iron Works, \$2,150; 45

days.

The board has awarded the contract to the Daigle Iron Works, the lowest bidder, for the sum of \$2,145.00, and respectfully requests your Honorable Body to approve the same.

> Respectfully submitted, H. S. STARKEY,

Secretary.

By Councilman Kronk:

Resolved, That the contract en-tered into between the Board of Commissioners and the Daigle Iron Works, for furnishing and erecting structural steel for roof of addition to boiler house at Water Works Park, for the sum of \$2,145, they being the lowest bidder, be and the same is hereby approved and confirmed.

Adopted as follows:

Yeas-Councilmen Bradley, Castator, Kronk, Littlefield, Vernor, Watson, and the President Pro Tem .- 7. Nays-None.

From the Board of Water Commissioners.

To the Honorable the Common Council:

Gentlemen-Pursuant to our advertisement, the Board of Water Commissioners received proposals for furnishing and erecting thee (3) one hundred million gallon motor driven centrifugal pumps as follows:

Allis Chalmers Co., Milwaukee, Wis., \$76,700, 270 days.

Platt Iron Works, Dayton, Ohio,

\$74.850, 180 days.

Worthington Pump & Machinery Corp., New York City, N. Y., General Electric equipment, \$71,000; Westinghouse Electric equipment, \$78,000, 180 days.

D'Olier Centrifugat Pump & Machine Co., Wheeler Rotrex vacuum pumps, \$50,500; Blaisdell vacuum

pumps, \$50,000, 180 days.

The board has awarded the contract to the D'Olier Centrifugal Pump & Machine Co. (for Blaisdell vacuum pumps) for the sum \$50,000, they being the lowest bidder, and respectfully requests your Honorable Body to approve the same.

> Respectfully submitted, H. S. STARKEY,

By Councilman Kronk:

Resolved, That the contract entered into between the Board of Commissioners and Water the D'Olier Centrifugal Pump & chine Company for furnishing and erecting three (3) one hundred million gallon motor operated centrifugal pumps (Blaisdell vacuum pumps), for the sum of \$50,000, they being the lowest bidder, be and the same is hereby approved and confirmed.

Adopted as follows:

Yeas—Councilmen Bradley, Cas-tator, Kronk, Littlefield, Vernor, Watson, and the President Pro Tem.

Nays-None.

From the Recorder's Court.

To the Honorable the Common Council:

Gentlemen-I respectfully report to your Honorable Body that a jury anly impanelled in the Recorder's Court, in the matter of opening Annland avenue from avenue to Livernois avenue, where not already open, as a public street and highway, rendered a verdict in favor of said opening, Wednesday, June 28th, 1922, which was confirmed by the August 22nd, 1922. Tuesday, Court

In accordance with the statute, I herewith transmit a certified copy of said verdict, and of the judgment of confirmation.

Respectfully,

CHAS. W. CASGRAIN, Clerk.

Accepted and place! on file.

From the Recorder's Court.

To the Honorable the Common Council:

Gentlemen-I respectfully report to your Honorable Body that a jury duly impanelled in the Recorder's Court, in the matter of widening alley in the block between Wilson, Byron, Euclid and Philadelphia avenues, where not already widened, as a public alley, rendered a verdict in favor of said opening, Wednesday, June 28th, 1922, which was confirmed by the Court Thursday, August 31st, 1922.

In accordance with the statute, I herewith transmit a certified copy of said verdict, and of the judgment of confirmation.

Respectfully,

CHAS. W. CASGRAIN, Clerk.

Accepted and placed on file.

From the Recorder's Court.

To the Honorable the Common Coun-

Gentlemen-I respectfully report to your Honorable Body that a jury duly impanelled in the Recorder's Secretary. Court, in the matter of opening

Larned street from Mt. Elliott avenue and the alley first west Elliott thereof, where not already open, as a public street and highway, rendered a verdict in favor of said opening, Thursday, 1922, which was confirmed by the Court Thursday, August 31st, 1922.

In accordance with the statute, I herewith transmit a certified copy of said verdict, and of the judgment of confirmation.

Respectfully,

CHAS. W. CASGRAIN,

Accepted and placed on file. Clerk.

From Department of Recreation.

To the Honorable, the Common Coun-

Gentlemen-Pursuont to our advertisement in the Legal News for Tennis Court Backstops around St. Clair Playfield and Playground No. 18, the following proposals were re-

Barnes Wire Fence Co., \$1.78 per lineal foot.

Cyclone Fence Co., \$1.73 per lineal

As the Cyclone Fence Company are the lowest bidders, we respectfully request that the Department of Recreation be authorized to enter into a contract with the Cyclone Fence Company.

> Respectfully yours, C. E. BREWER

Commissioner of Recreation.

By Councilman Littleleld:

Resolved, That the Department of Recreation be and is hereby authorized and directed to enter into contract with Cyclone Fence Co. for tennis court backstops around St. Clair Playfield and Playground No. 18, at \$1.73 per lineal foot.

Adopted as follows:

Yeas—Councilmen Bradley, Castar, Kronk, Littlefield, Vernor, tor, Kronk, Littlefield, Watson, and the President Pro Tem.

Nays-None.

From Department of Recreation.

To the Honorable, the Common Coun-

Gentlemen-Pursuant to advertisement in the Legal News for tiling and waterproofing of the Pool Elmwood, the following proposals were received:

The C. J. Netting Co......\$6,907 00 The Martin-Gibson Co..... 6,306 00 General Mosaic Co..... 5,000.00

After consulting with Mr. Markam, engineer for the Detroit Street Railways, and makng a few changes in the specifications, the General Mosaic Company has agreed to do this work for \$4,000.00.

The Department of Recreation respectfully requests your Honorable Body to authorize it to enter into

contract with the General Mosaic Company for this work.

Respectfully submitted, C. E. BREWER,

Commissioner of Recreation.

By Councilman Castator:

Resolved, That the Department of Recreation be and it is hereby authorized and directed to enter into contract with General Mosaic Company for tiling and waterproofing of pool at Elmwood Recreation Center, for the sum of \$4,000.

Adopted as follows:

Yeas—Councilmen Bradley, Casta-r, Kronk, Littlefield, Vernor, tor, Kronk, Littlefield, Watson, and the President Pro Tem.

Nays-None.

From the Research Engineer.

To the Honorable the Common Council:

Gentlemen-I wish to report that I have made good progress on the work relating to failure of pavements on the streets of Detroit. In this work it is necessary to take up samples of pavement for the necessary tests which determine its character and stability.

The only available means at present is by use of pneumatic drilling. This method is far superior to the ordinary method of using hand tools but is really a very crude and expensive method.

The testing of cement before use and the concrete a few weeks after placing are very necessary, but are not a guarantee that the concrete will be a durable one when placed in service. The "curing" of the concrete is of vital importance. Whether or not this has been properly done can be best determined at the end of a year.

The foregoing can be economically carried out by the use of a Core Drill which cuts fom the pavement a sample all ready for testing. The hole is about 71/2 inches diameter and can be cut by one man in 15 The use of this machine minutes. will afford an excellent means for following up construction work and determine its uniformity and compliance with specifications.

The following States and cities are now using this method: Pennsylvania, Minnesota, North Carolina, California, Ohio, Indiana, Iowa, Arizona, Illinois, Maryland, New Jersey, Kansas, Michigan, Oregon, Virginia, and the City of New York and Boro of Queens. A list of 16 states and two cities.

Commissioner Martin has pressed his approval of the purchase of an equipment of this character. I wish to also recommend its pur-The cost will not exceed chase. £1,800.

Respectfully submitted, J. C. M'CABE, Research Engineer. General order for Monday.