

## LEGAL DECISIONS AFFECTING MUNICIPALITIES.

LEWIS V. CITY OF LONDON .- Judgement by Judge McMahon, in the Court of Common Pleas at Toronto in action tried without a jury at London. Action to recover against the corporation of the city of London the damages which the plaintiffs sought but failed to recover against the defendants in Lewis v. Alexander, 21 A.R., 613, and 24 S.C.R., 551. Judgement for plaintiffs for an injunction restraining defendants from permitting filth and refuse from water-closets or other noxious or foul matter from being carried on to the premises of the plaintiffs, and declaring plaintiffs right to damages, with a reference to the local Master at London to assess the same, and with costs of action and reference. Injunction suspended for five months to enable defendants to abate the nuisance, with liberty to apply to extend the time.

Stafford vs. The City of Montreal.-Plaintiff is proprietor of a lot of land and premises on Sebastopol street, Point St. Charles, in the City of Montreal, under deed of 24th November, 1886. He owned the land and premises in the year 1890, when the defendants, for the public benefit, authorized the Grand Trunk Railway Company of Canada, to construct a permanent subway at a place commonly known as "The Crossing," on Wellington street, where Sebastopol street connected directly with Wellington. The construction of the subway changed the level of Wellington street, and cut off direct communication with Sebastopol. Instead of direct communication, a small passage from twelve to fourteen feet wide was made leading from Sebastopol street to Congregation street, and thence through the subway to Wellington. Plaintiff claims that, being thus deprived of his full access to Wellington street, his property has been damaged and decreased in value for all time, and he claims five hundred dollars Defendants plead a general indemnity denegation in fact and in law. This case is almost identical with that of Drummond vs. Mayor, Aldermen and citizens of Montreal, decided by the Privy Council in England and reported in the 22nd vol., L. C. Jurist. In that judgement, their Lordships state :- " It certainly then appears that, in France, the depreciation caused to a house by stopping one end of a street, supposing it to remain open at the other, is not regarded as an interference with a servitude, nor (standing alone) such direct and immediate damage as will give a title to indemnity, and, if this be so, there seems to be no reason or authority for declaring the law to be otherwise in Canada." Demolombe, Traiti des Servitudes, at No. 699 B., deals directly with such a

case as the present one, and specifically states that the public authorities may make, without indemnity, such alteration for general utility, Pages 205: "Comme si, par example, l'administration dominait la largun de le place ou de la rue. Ou meme si elle fermait la rue par l'un de ses touts, de manion a en faire une impasse." In this case, the defendants did not go so far as to make un impasse; they left a narrow passage. Plaintiff, although his access has been diminished, has, within a short distance of his property, Farard street, through which to communicate with Congregation street, and thence to Wellington. The authorities on the French law, hold that, 'n such a case, the droit d'acces is not materially interfered with. Then, it must have been evident, from the nature of the place, even in 1886, date of plaintiff's purchase, that at some future time, a subway or other means of avoiding the railway crossings would have to be made for the protection of the public at the Point, when the construction complained of had been erected, and though it cannot be contended that such a subway was unforeseen at the date of plaintiff's purchase, under these circumstances plaintiff's action is dismissed.

## SLATE DEBRIS FOR PAVEMENTS.

Why should not the slate débris brick be tried for street pavements? asks the British Clayworker. We are aware that several attempts have been made to utilize slate débris, but we do not know of any concern that may be said to be making slate bricks for the market with a large amount of success. And yet the difficulties in the matter of machinery have been overcome, and in one recent case of failure at least, there was no difficulty as to capital.

Talking the other day to a well-known firm who have made a life-long study of the tests of various materials, we were informed that, in the course of certain trials, it was found that a brick made of slate débris was one of the strongest and hardest materials they had ever tested. So strong, in fact, was it that the machine used was not of sufficient power to crush it whole, and it became necessary to cut the brick in two, and use the whole strength of the machine upon the half brick. Even then they only succeeded in crushing it when the maximum power of the machine was employed.

## THE INVESTIGATION OF PUBLIC WATER SUPPLIES.\*

By FLOYD DAVIS.

One of the most important factors in the prolongation of life and preservation of health in any community is a pure and wholescme water supply. The necessity of measures which enable municipal authorities to secure such water, in quantities to meet all demands, is now fully recognized by every intelligent citizen, who also knows that pure sources of supply can generally be determined only by a thorough and careful investigation. As the population of our country increases,

the sources of contamination likewise multiply; so year after year it becomes more difficult to secure an adequate supply of water for cities and towns that shall be entirely free from dangerous impurity. In mountainous regions, where the conditions for self-purification are most favorable, we generally find the purest waters; in great abundance; yet in the Mississippi valley, where the streams are generally sluggish and frequently heavily laden with organic impurity, and in the eastern States, where the rivers are sewer-polluted, the problem of securing pure water is difficult, and it is sometimes almost impossible with limited means to furnish a supply that is beyond dispute in its quality.

Many of our cities and towns lie adjacent to public water courses, from which the water, polluted or otherwise, is pnmped through mains, without proper purification, to be drunk by the people. Under such a disregard for sanitary considerations it is not strange that we are still maintaining in some parts of the country a typhoid fever rate higher than that prevailing in any other civilized country. Our typhoid death rate is too frequently many-fold what it is in some European cities, like London and Berlin, which have expended millions of dollars to secure for their citizens a pure and wholesome supply of filtered water.

The ideal water for manufacturing and domestic purposes is distilled, and the amount of impurities, both inorganic and organic, found in natural water is, there-fore, a measure of its purity. It is rare that the mineral constituents have any marked effect on the quality of a water for drinking, since the poisonous compounds of barium, iron, zinc, copper, lead, and arsenic, which may exist in it, are not often found in sources that are available for the supply of cities and towns; and in the sanitary investigations of a water supply we do not usually look for these subtances. But the mineral constituents have a bearing upon the use of a water for boiler and manufacturing purposes. Its suitability for the generation of steam is determined mainly by the amount of lime, magnesia, and mineral acids which it may contain, since these bases incrust the boiler and the acids corrode it. Magnesium chlorid is especially objectionable. The mineral salts also characterize a water for manufacturing purposes, since a hard water containing much iron is unsuited for the manufacture of starch; a water having much magnesium in it is not desirable in the manufacture of beer; while water for distilleries should be as pure as possible.

These are considerations of importance only for particular purposes, but every public water supply must be used domestically by large numbers of people, and the substances which vitiate it for such purpose are of greatest importance in its sanitary investigation. They are organic, both vegetable and animal, and exist in different proportions in all natural waters that have any communication with the snrface of the soil. The manner in which they gain access to water, and their relations to health and disease, have been discossed in a former number of this magazine.\* Suffice it, therefore, to say here that decaying animal matter is indirectly far more dangerous than decaying vegetation, for it is from animal sources that the infectious bacteria, now considered the real agents of disease, are mainly derived. Upon the danger from these various impurities is based our classification of water supplies. (To be Continued.)

December, 1891.

<sup>\*</sup> From Engineering Magazine.