IMPORTANT DECISION ON THE BITULITHIC PAVEMENT.

BOSTON, Mass., March 23.

To the Editor, Municipal Journal:

A suit entitled Warren Brothers C mpany vs. W. C. Evans, for the threatened infringement of the Warren basic patent, under which the Bitulithic pavement is laid, was recently before the Circuit Court of Appeals for the Fourth Circuit sitting in Philadelphia, wherein both the validity of the patent was attacked, and its threatened infringement denied.

Judge Buffington, in delivering the opinion of the Court stated: "This patent has been considered by the various Federal Courts and its validity established" and also that "The present case turns on the question of infringement."

The specifications under which the contract in suit was awarded, which it was claimed would necessarily require the construction of a pavement infringing the claims of the Warren basic patent, provided for the use of "Bitumen"; "Limestone dust or Portland Cement"; "Stone, ¾-in. hard crushed"; and "Sand, coarse to fine."

The Court held that under these specifications the contractor was called upon to use stone of one grade only, viz., three-quarter inch stone, "which was not the run of the crusher," and that this was not the composition called for by the specifications and claims of the Warren patent.

After considering the several claims of the patent sued upon, all of which require the use of a graded mineral aggregate, and after referring to the several cases of Warren Brothers Company vs. Owosso, 166 Fed. Rep. 309, Warren Brothers Company vs. New York, 187 Fed. Rep. 831, and Warren Brothers Company vs. Grand Rapids, 216 Fed. Rep. 231, in all of which cases the validity of the patent in suit was sustained and injunctions issued to restrain its threatened infringement where the pavement had not already been laid before suit was commenced, the court pointed out that in the New York case the mineral aggregate "was the resultant run of the crusher, which would necessarily have smaller grades of stone." The court summarized its conclusion by saying: "It will thus be seen that in all these cases there was a series of graded stones, namethe present case there is but a single grade of stone, namely, that which will pass through a three-quarter inch mesh and that which is caught on a one-half inch mesh."

As neither "run of the crusher" nor different sizes of stone were required to be used, the court said there could be no infringement in this case, and the suit was accordingly dismissed.

This decision raises the following questions:

1. The practicability of actually furnishing a stone in large commercial quantities of the uniform size which the court construes to be required by the specifications referred to, to-wit: Stone all of which "passes through a ¾-in. mesh and that which is caught on a ½-in. mesh." Certainly no such finely screened, uniformly sized product has ever been furnished by any crushing plant operating along commercial lines. Furthermore, stone about 1-in. size, that is, passing a 1⅛-in. screen and retained on ordinary dust jackets in the crusher plant, is the size of stone most generally in demand for most purposes such as building construction, sidewalks, etc. The use exclusively of the intermediate portion ("which will pass a ¾-in. mesh and that which is caught on a ½-in. as defined by the court to be "three-quarter inch stone") of this ordinary crusher product in the quantities required for the wearing surface of a street pavement would evidently very greatly increase the cost of stone, and doubtless most stone producers would not agree to furnish stone of this limited size.

More particularly, approximately 50% of the ordinary stone crusher product is of one inch and finer sizes. Of this total of 50% finer than one inch, approximately 50%, that is 25% of the entire crusher product, is coarser than ¼-in. size. Of this 25%, only 40% or a total of 10% of the product of the crusher is of the uniform size which the Court in this case decides is described by the specifications in suit, to-wit: that which "will pass a ¾-in. mesh and that which is retained on a ½-in. mesh." In other words, to comply with such specifications a contractor can use only 10% of the product of his crusher or from the crusher from which he purchases his supply, and other disposition must be made of the other 90%. For instance, given a paving contract to be laid at the rate of 1,000 square yards, requiring 75 cubic yards of crushed stone per day, and a crusher plant having a rated capacity of 150 cubic yards per day, that crusher would only furnish 15 cubic yards per day or one-fifth of the daily requirements of stone for such a paving contract. In other words, it would take five such crushing plants to keep the paving plant in operation, and the person supplying the stone would have to find another market for 90% of the product of his crushers. Aside from this, the production of such a stone would require additional intermediate separating screen and bin facilities, which are not commercially used, and which could be installed only at great expense and inconvenience. In other words, the Court has excluded from the scope of the patent in suit the use of a stone which has never been practically produced, and cannot be produced without such increased expense and inconvenience that at least most owners of crushing plants would not undertake to do so, and then, under that extreme construction of the specifications says that Warren's basic patent, No. 727,505, would not be infringed.

2. It is a self-evident fact that neither as high degree of stability nor freedom from voids can be produced by a mineral aggregate consisting of such a uniform sized stone and sand as is produced by the construction generally adopted, in which various sizes of crushed stone or gravel, sand and pulverized stone are used in such definite proportions as will produce the highest degree of stability, freedom from voids and utility.

3. Even though such a construction, using uniform sized stone (passing ¾-in. and retained on ½-in. screen) and sand be held to come outside of the Warren Basic Patent No. 727,505, it is very clearly directly in the teeth of the Warren Patent No. 695,421, the single, very clear claim of which is as follows:

"A wearing layer of a street sheet pavement composed of a dense mineral body consisting only of relatively large elements, one-half inch and upward in diameter, and relatively small elements, one-tenth of an inch in diameter and less, having predetermined proportions and intimately and uniformly associated throughout the body to eliminate voids, provide stability and a wearing surface and a uniting weatherproof, bituminous vehicle intimately associated with all the mineral elements serving to combine and unite them, fill the voids remaining unfilled and to form with the mineral body a solid, stable, homogeneous, tenacious, elastic, bituminous wearing layer."

As far as we know this patent, No. 695,421, has never been infringed in any actual construction. Very truly yours,

WARREN BROTHERS COMPANY,
By E. C. Warren, President.

TOURISTS FOR CANADA.

According to figures compiled by Canadian Pacific Railway officials, 10 per cent of the money spent by tourists in Europe would amount to $500,000,000, a sum equal to the value of the Canadian wheat crop in 1916. This money spent annually in the West would develop a record era of prosperity, officials assert. Officers of the various boards of trade in Western Canada will co-operate with the railway officials to bring this additional revenue to the West. Plans to induce American tourists to visit the various tourist resorts in Canada are now nearing completion. Board of trade members will distribute literature, which is now being prepared, relating to their respective cities at all Canadian pleasure resorts.

All tourists travelling through Western Canada will be taken over lines which go through the most attractive districts. An effort will be made to impress upon the tourists the advantages Western Canada offers to settlers. The officials hope to induce tourists to urge their friends at home to visit Western Canada and see for themselves the opportunities that await settlers. C. E. McPherson, assistant traffic manager of western lines of the Canadian Pacific Railway, has returned from a trip to California, where 10,000 American tourists are spending the winter and early spring. Many of these tourists will return to their homes in Chicago, New York, Detroit, Boston and other eastern cities over the Canadian Pacific through Western Canada, Mr. McPherson asserted.

Passenger officials are receiving many inquiries from American tourists regarding traffic accommodations to Alaska, where extra efforts are being made this year to attract tourists who before the war visited Europe.

These visitors will pass through the grain districts of Western Canada and the Canadian Pacific Rockies.

The unusually interesting attractions at Skagway, Alaska, 1,000 miles from Vancouver, and the health-producing climate at Atlin, one of the greatest summer health resorts in the world, are making a strong appeal to tourists.