

Exciting Meeting at Court House.

(Continued from Page 1.)

ward and offers some explanations. He states that a rich top of bitumen and sand was placed over our pavement on account of our wet weather conditions.

When Mr. Johnston was asked as to whether bitulithic pavement was ever laid like our pavement in other cities he stated that a little was laid in Portland and some in the east.

A. B. Beals had the floor for some two hours or more and discussed the situation to some extent. Dwelling upon the report of Gordon V. Skilton, professor, department of Civil Engineering, Oregon Agricultural College, and upon some literature sent out by the Warren Bros. Co.

Following is Mr. Skilton's communication and report:

Corvallis, Oregon, Feb. 24, 1913.
Mr. A. G. Beals,
Tillamook, Oregon.

Dear Sir:

On February 10, 1913 I made a personal examination and inspection of your paved streets and Prof. S. H. Graf, assistant professor of Experimental Engineering at the Oregon Agricultural College, has made careful tests of the samples shipped to the college by your committee and following is a brief informal statement of our findings of facts.

Our laboratory examinations have been limited to the samples sent to the College by your committee and to a few collected by me while in your city. With one exception the samples collected by me were taken from sections of the pavement that had previously been dug up by the committee and were sent to the college at my request because I wished to investigate more fully than by some of the samples previously sent.

I took no samples from the streets (with one exception) for the following reasons:

1st. Numerous samples had been taken by your committee and I was informed that they were well identified and authenticated. I offered to take samples if there were any questions as to the fairness of the samples that had been taken but both Mr. Speaker of the Paving Company and your Mayor assured me that there was no such question. They stated to me that they believed the samples were representative of the condition of the streets. I concurred in this view after seeing where the samples had been taken from and did not deem it necessary to further dig up or destroy the streets.

2nd. I was convinced after my inspection that the main cause of the troubles, that are alleged to exist, are due to defective workmanship and lack of proper care, not only in laying the pavement but in preparing the foundation to receive it.

Mr. Graf's report on his examination of the samples is so complete that I deem it unnecessary for me to go further into that side of the question. His investigation has been very carefully conducted and I agree with his findings and the conclusions that he draws from the same.

Samples "A" and "B" referred to by Mr. Graf on page two of his report are the two samples received by the college on Feb. 13. He understood from a conversation with me that one of these samples represented rock that was rejected, but the facts are it represented the softer rock that was mixed with the other in the pavement. The Dunite represents the rock that shows the evidences of weathering and the samples sent were, if anything above the average for quality. This rock is comparatively soft but seems to resist the abrasion test fairly well on account of its toughness. The presence of this rock may cause the development of small pit holes in the surface of the pavement after a few years of wear but would not be fatal provided there were no other fatal weaknesses.

From the material standpoint, the most serious lack of conformity with the specifications is the fact, as brought out by Mr. Graf's report, and as is shown by an inspection of the samples that the surface or wearing coat has been covered with patches of sand and asphaltic cement instead of the prescribed "bitulithic" surfacing material. (Note by editor: It will be remembered that Mr. Johnston, the Warren Construction Co.'s chemist, stated that all our pavement was covered with a sand and bitumen sheeting.) One of the chief advantages or recommending qualities of the Bitulithic pavement is the fact that it possesses "inherent stability" due to the fact that it is composed of properly graded and crushed stone so proportioned as to give a density nearest that of solid stone. These sizes are to be from 1 1/2 inches down to the finest stone. There was not one of the samples examined by us that even approximately conformed to the specifications in this important respect. If the claims of the paving company for the superior advantages or their peculiar pavement is at all true then the portions of the surface

of your pavements that are covered with the sand-asphalt covering are certainly inferior to what you have a reasonable right to expect under your contract. In other words such portions of your streets are not in conformity with your contract and are inferior to the pavement your contract calls for. I have made no effort to ascertain what proportion of your streets are covered with this asphalt and sand mixture and do not venture any opinion on the same but it is reasonable to assume that a large portion is so covered, and in many cases, is covered so covered. I believe this covering is used not because it, in itself, is essentially cheaper than the surfacing coat called for in the specifications but to cover up and conceal defects. Your specifications are definite and carefully worded on the question of the composition of the wearing surface and a study of the samples leaves no doubt that they have not been complied with.

In substantiation of this view I am sending you a mass of literature issued by the Warren Construction Company and which I presume they will not question, in which this point is made clear, and in many cases, is backed up by supreme court decisions. I hope you will take the trouble to carefully study this literature as it bears directly on the point at issue.

My opinion arrived at after the most careful study of your whole problem is that probably 90 per cent of your trouble is chargeable to poor workmanship and to lack of proper bearing power in your foundation. It is axiomatic in regard to all pavements of this nature that the foundation must be good. My inspection of your streets and more especially of Stillwell Ave. and other streets in that part of the town has led me to believe that the ground was not sufficiently firm or compact before the stone in the foundation course was laid to permit it to be thoroughly consolidated by rolling. With a soft ground under this stone the effect of the rolling is to crowd the dirt and mud up into the interstices of the stone and make it impossible for them to be sufficiently consolidated. You may verify this statement at your pleasure by digging in to portions of these streets where you will find the condition existing that I have referred to. After the mud has been forced into the stone no amount of subsequent rolling will ever produce good results. It follows, logically, that unless the stone foundation upon which the wearing coat is laid is sufficiently firm that the wearing coat itself can not be thoroughly solidified. The effect of the roller passing over it will be to push a wave ahead causing the surface to crack and destroy a portion of the bond that may already exist. Your specifications call for the thorough rolling of the sub-foundation and expressly states that where said sub-foundation is not of suitable material to permit thorough compacting that it must be removed and replaced with suitable material.

If this had been done in all instances I believe your troubles would have been of a negligible quantity. Without this thorough and substantially constructed sub-foundation I do not believe that it is possible to construct a pavement that will meet the requirements of your specifications. It will not be possible to roll it sufficiently nor will any amount of rolling properly solidify it. The pavement will move and creep as the roller passes over it and will probably get worse instead of better with continued rolling. It will be impossible to get the necessary compression to solidify the pavement as called for by the specifications. The surface will be more or less open and spongy and will likely be covered with cracks and it will be irregular or uneven. This, I believe, is why the asphaltic mastic (asphalt and sand) was used on the surface. Its office was to even up these irregularities that were impossible to remove with the roller, to seal the cracks that had been opened and generally to prepare the surface to pass inspection.

Respectfully submitted,
Gordon V. Skilton.

The report of S. H. Graf, assistant professor of experimental engineering, follows Mr. Skilton's report, but we will not give the same as it coincides with Mr. Skilton's report in nearly every instance. We might state, however, that in the chemical analysis made by Mr. Graf, he finds in the top dressing or wearing surface of the samples sent him the following percentages of sand, or matter that will go through a 10-mesh screen, which means one and the same thing: Sample No. 1 contained 92.75.1 per cent sand; sample No. 2, 97.411.5 per cent; sample No. 3, 95.013.7 per cent; sample No. 4, 91.44.6 per cent; sample No. 5, 94.312.6 per cent.

A report from the Portland Bacteriological Laboratory gives the analysis of samples of the top dressing or wearing surface as follows: Sample No. 1, bitumen, 12.50 per cent, sand 87.40 per cent; sample No. 2, bitumen 11.95 per cent, sand 88.05 per cent; sample No. 3, bitumen 13.55 per cent, sand 86.35 per cent.

After discussing Mr. Skilton's report and dwelling to some extent on Mr. Graf's chemical analysis, Mr. Beals launched into a consideration of some

of the literature of the Warren Bros. Co., patentees of the bitulithic pavement. This literature gives us some very valuable information about bitulithic pavement and in order that we may realize the full import of this information as it applies to our case, we will first state the evidence as given on Friday and then state what Warren Brothers say about it.

Beginning with the foundation let us first consider the testimony that was given. It was brought out quite clearly that Engineer Richardson, after carefully examining our soil, was convinced that it was too spongy for the laying of bitulithic pavement and he so advised the council. Mr. Wren, the roller man for the construction company, also testified to the effect that the ground was very spongy; and for that matter we believe it was quite evident to anyone who watched the work of the rollers last summer, that our soil was very spongy and springy. Now let us see what the Warren Bros. Co. says about the laying of bitulithic pavement on spongy soil.

From circular issued by Warren Bros. Co., patentees: "The specifications for the foundation of the BITULITHIC pavement should be made after careful examination of the character of the sub-soil or material over which the pavement is to be laid. If the sub-soil is of a character such as gravel which can be rolled solid, bituminous base is recommended.

"If the sub-soil is spongy clay, or other material which cannot be rolled to provide a solid sub-foundation, hydraulic concrete foundation is not only advisable but necessary."

Let us now consider the evidence that was given in regard to the wearing surface of our pavement, which is composed of from 87 to 96 per cent sand and the rest bitumen and lays from one-half to an inch and three-quarters in thickness over our entire pavement. Mr. Johnston, the chemist for the Warren Construction Co., stated that this sheet of sand and bitumen was placed on the pavement for the purpose of better protecting the pavement from moisture, and Mr. Speaker also stated that this preparation would turn water better than the bitulithic as generally laid. What does the Warren Bros. Co. say about bituminous or asphalt pavement, which is apparently what we have got, standing water?

From circular issued by Warren Bros. Co.:

"The History of the Asphalt Paving Business leads us fully to recognize the weaknesses of the ordinary bituminous or asphalt pavement, chiefly due to the following causes:

- 1st. Rotting effect of water owing to the soluble salts contained in many grades of asphalt.
- 2nd. Liability to shift under traffic.
- 3rd. Fineness and lack of rigidity of the mineral grain (sand) used in the wearing surface.
- 4th. Impracticability of using with such fine material as sand, which when compacted contains at least 25 per cent (and frequently as high as 40 per cent of voids) enough asphalt to even approximately fill the fine voids in the mixture. It is impossible without the danger of shifting under traffic, to use more than 10 per cent to 11 per cent by weight of pure bitumen, with the sand grain, and anything in excess of this will CAUSE the surface to roll or shift under traffic. It often shifts with this or even a lower percentage of bitumen, unless the bituminous cement is tempered so hard that it cannot stand water usage without cracking.

"It will readily be seen that a mineral aggregate with 25 to 40 per cent voids mixed with a deficiency of bituminous cement cannot be water-tight and will absorb moisture either from the foundation or surface. With minute sub-divided particles of bitumen subjected to attack by water, and the bituminous material itself inherently susceptible to its disintegrating influences, the pavement will crumble after exposure to continued moisture. When the bituminous cement has begun to decay so that it no longer has its cementitious properties, the particles of sand will readily separate from the pavement.

"Liability to crack in cold weather. "These inherent defects in the asphalt and sand mixture, known as 'asphalt pavement,' the BITULITHIC pavement is constructed to overcome:

- (a) By making a mixture of stone and bitumen so dense that it will not absorb moisture."

In summing up the question of wearing surface we will give the requirements as laid down by the Warren Bros. Co., and taken from their literature.

From circular issued by Warren Bros. Co., patentees:

"Upon the foundation is spread the wearing surface which is compressed with a heavy road roller to a thickness of two inches. The surface mixture is made of the best stone obtainable, varying in size from a maximum of 1 inch or 1 1/2 inches down to an impalpable powder, the various sizes of smaller stone, sand and impalpable powder being provided to fill the spaces between the larger stones. The proportions used of the various sizes of mineral are pre-determined by physical tests with a view to obtaining the smallest percentage of air spaces or voids in the

mineral mixture, and vary with the character and shape of particles of stone used in each particular case."

A perusal of the above ought to convince the most doubtful that the Warren Bros. Co., patentees, never anticipated using a sheet of sand and bitumen for a wearing surface for their bitulithic pavement as has been done in our case. Note their statement A in 3th article under discussion which states that the wearing surface of the bitulithic pavement is constructed to overcome the defects of the asphalt and sand mixture. "By making a mixture of stone and bitumen so dense that it will not absorb moisture."

Warren Bros. Co. claim that the bitumen is not used in their surface as a wearing material but as a binder.

The representatives of the Warren Construction Co., present did not have much to say at the meeting as compared to the efforts put forth by the citizens committee.

After all the evidence was in, the council went into an adjoining room and for nearly an hour sat in executive session before coming to a decision. After re-entering the court room the mayor gave the people assembled their decision which was to the effect that the council would adjourn until Monday night and then adjourn for two weeks before making the assessment.

Immediately after the council adjourned the following resolutions were introduced to the citizens there gathered:

"Be it resolved by the citizens of Tillamook City, Oregon, on this 28th day of February, 1913, that we hereby heartily endorse the action of the Citizens' Committee in the investigations made by them to determine the quality of the pavement recently laid in our city by the Warren Construction Company."

The above resolution was unanimously endorsed by a hearty and rousing vote of about 200 citizens there gathered.

A recent Supreme Court decision relative to a paving assessment may be of interest to our people.

The decision was handed down by the Supreme Court in the case, Hendry and others vs. City of Salem, Feb. 4, 1913, Pacific Reporter, Vol. 123, page 531.

The decision in part says: "When the proceedings for making a street improvement were regular and the city council had jurisdiction to order the improvement, and to enter into the contract, mere irregularities in the work did not release the property owners from the obligation of paying their assessment."

"Where the city council accepts a street improvement, its decision that the improvement complies with the contract is, in the absence of fraud, conclusive on the property owner."

NEHALEM NEWS.

From Enterprise:

Fireman Burkette was scalded quite severely about the face while working Monday at the Wheeler mill with steam caused by a broken flue in one of the boilers. Dr. Randle was called to Wheeler to attend to his injuries until he could be sent to Portland the following morning. Mr. Burkette's eyes were entirely closed as a result of the burns he sustained, but no serious consequences are anticipated as it is believed that the eye balls are not affected.

Owing to the fact that the present accommodations of the Zimmerman Hotel are inadequate, Z. L. Rector, the lessee, has purchased a lot adjoining the hotel this week upon which he intends to build an annex in order to accommodate the traveling public. The addition will be 25 by 60 feet, two stories high, and adds fourteen more rooms to the number already in service. Mr. Rector having resigned his position with the Wheeler Lumber Co. as manager, will devote his entire time to the hotel business. He intends to let a contract for erecting the annex at once.

Joe, Effenberger was taken to Portland for medical attention Tuesday morning owing to serious illness. He was placed in the Good Samaritan Hospital where a number of leading physicians in that city were called into consultation to examine him. They pronounced it a very serious case and grave doubts are entertained by them as to his recovery. He has been failing in health for the past year. D. C. Perego and W. H. Effenberger accompanied him to Portland, the former to remain at the hospital with the patient as long as his services are necessary.

Ludtke & Batterson, the local butchers have decided to cut down on the meat supply in their shops until they can make arrangements for the purchase of more cattle. At present it is an impossibility for them to buy beef cattle at any price and are therefore compelled to limit their output to the supply still on hand. The demand for meat has grown to larger proportions of late, a total of 30 head of full grown cattle being required each week to supply the camps, mills and hotels in this vicinity. This was due to such a drain upon the source of supply in this county and it has therefore been overtaxed

with the result that our butchers have decided to cut us to half rations until further notice. The shops at Wheeler and Nehalem will be open two days of each week hereafter and it will be advisable for patrons to come early at such times in order to get what they want or else run chances of getting nothing at all.

E. T. Halton purchased a lot in Wheeler this week. He proposes to erect a substantial building on the property to be used as a store in the near future.

Tilden & Lamb are driving piling on the north fork of the Nehalem for a bridge across Boyakin Creek near Andrew Grasley's place. This bridge has been a source of endless trouble for years since the posts under the bridge were washed out repeatedly during high water. This trouble will be eliminated in the future, however, so that the farmers in that vicinity may not endanger their lives while crossing it as has often been the past.

Contractor Mead and crew have been busy engaged during the past week in making the fill in the county road above the Elmore Cannery at upper town. This will straighten out the road considerably, besides cutting down the grade. Mr. Mead is also figuring on a contract to widen out the dike across the McDonald farm on the East end of the North Fork bridge which is too narrow to permit the passing of teams meeting at this portion of the road with any degree of safety.

Arrangements for the 20-foot road from Tohl's old store to Foster's mill along the waterfront are about completed as all rights of way have been secured through the lots along the bank of the river. The roadway is to be 12 feet wide and will be built of lumber, it being thought best under present circumstances to do so. Eventually this will no doubt be changed to a permanent dirt road bed when conditions justify the change.

T. J. Ballantine will make cheese for Andrew Grasley at the Alderlva Cheese factory this coming season having signed a season contract this week. Mr. Grasley may count himself fortunate to have secured the services of such an able cheese maker as Mr. Ballantine he being a past master in the art of manufacturing first class cheese. He has won numerous medals at state fairs and dairy product shows in Canada and in Oregon also during the past which is sufficient evidence to prove his worth as a specialist in his line. The factory will start about March 1st.

EXECUTION SALE.

By virtue of an execution and order of sale issued upon a judgment and decree rendered and entered in the Circuit Court of the State of Oregon for Tillamook County in the suit wherein M. S. Copeland is plaintiff and the Nehalem Coal Company (a corporation), C. F. Pearson, Paul Schrader and B. Soderlund are defendants, duly attested on the 18th day of February, 1913, and to me, the undersigned, sheriff of Tillamook County, directed, and commanding me to make sale of the lands, premises and franchises hereinafter described to satisfy the several judgments and decrees in said judgment and decrees as follows, to-wit:

First: A judgment and decree in favor of M. S. Copeland and against the defendant Nehalem Coal Company for the sum of \$13,976.90, together with her costs and disbursements taxed at \$21.20 and interest thereon at the rate of 7 per cent per annum from the 16th day of January, 1913.

Second: A joint judgment and decree in favor of C. F. Pearson and Paul Schrader and against the defendant Nehalem Coal Company for the sum of \$569.95, together with their costs and disbursements taxed at \$10.00, with interest thereon at the rate of 7 per cent per annum from the 16th day of January, 1913.

Third: A judgment and decree in favor of defendant B. Soderlund and against the defendant Nehalem Coal Company for the sum of \$381.14, together with his costs and disbursements taxed at \$10.00, together with interest thereon at the rate of 7 per cent per annum from the 16th day of January, 1913.

Fourth: A judgment and decree in favor of Paul Schrader personally against the defendant Nehalem Coal Company for the sum of \$569.95, together with his costs and disbursements taxed at \$10.00, with interest thereon at the rate of 7 per cent per annum from the 16th day of January, 1913.

NOTICE IS HEREBY GIVEN that I will on Saturday, the 5th day of April, A. D. 1913, at the hour of ten o'clock A. M. of said day, at and in front of the Courthouse door, at the City of Tillamook, in the County of Tillamook and State of Oregon, offer for sale and sell at public auction to the highest bidder for cash in hand at one of sale and subject to confirmation thereof by the Court all and singular the real estate and premises in said decrees described, to-wit:

All of Lot One (1), in Section Five (5) and all of Lot Six (6) of Section Four (4), excepting the fifteen (15) acres known as the Union Mill Co.'s land; and all tide lands, wharfing and water rights adjacent to said Lot One (1) and southerly thereof extending to the channel of the Nehalem River, and rights adjacent to Lot Six (6) in Section Four (4) and southerly thereof extending to the channel of the Nehalem River, all in Township Two (2) North of Range Ten (10) West of the Willamette Meridian. Also in addition to said upland on said Lot One (1) and Six (6) all of the land between ordinary high tide line and ordinary low tide line appurtenant and adjacent to said Lot One (1) and Section Five (5) and to said Lot Six (6) in said Section Four (4), and all water, wharfing and other rights eastwardly thereof to the channel of said river,

Also the Northwest quarter (N.W. 1/4) of the Northeast quarter (N.E. 1/4) of the Northwest quarter (N.W. 1/4) of Section Twenty-seven (27), and the Southeast half (S.E. 1/2) of the Southwest quarter (S.W. 1/4) of Section Twenty-seven (27), all in Township Three (3) North of Range Ten (10) West of the Willamette Meridian granted to one Cook by Andrew Klein and dated July 9, 1901, subject to conditions and qualifications contained in the deed thereof to W. J. Cook, also that certain right of way five feet in width over and across the following described real estate, to-wit: The Southwest quarter (S.W. 1/4) of the Northwest quarter (N.W. 1/4) of Section Twenty-three (23) in Township Three (3) North of Range Ten (10) West of the Willamette Meridian, and also the following described lands, to-wit:

Beginning at the Northeast corner of Section Twenty (20) in Township Three (3) North of Range Ten (10) West of the Willamette Meridian, thence southerly along the east boundary of said Section Twenty (20) half (1/2) mile, more or less, to a quarter corner between Sections Twenty (20) and Twenty-one (21), Township and Range, thence along said quarter section line one-half (1/2) mile, more or less, to the boundary of said Section Twenty (20) half (1/2) mile, more or less, thence north along said section line one-half (1/2) mile, more or less, to the easterly along the aforesaid north boundary line eighty-two and one-half (82 1/2) feet to the place of beginning.

Also the North half (N. 1/2) of North half (N. 1/2) of Section Sixteen (16) in Township Three (3) North of Range Ten (10) West of the Willamette Meridian.

Also the Southwest quarter (S.W. 1/4) of Section sixteen (16) in Township Three (3) North of Range Ten (10) West of the Willamette Meridian, containing one hundred and sixty (60) acres, all of the above described lands and premises being situated in the County of Tillamook, State of Oregon, together with all and singular the covenants, hereditaments and appurtenances thereto belonging, or in anywise appertaining.

That at said sale, I will sell separate the following portions of said real estate, to-wit:

First: The Northwest quarter (N.W. 1/4) of the Northeast quarter (N.E. 1/4) of the Northwest quarter (N.W. 1/4) of Section Twenty-seven (27), the Southeast half (S.E. 1/2) of the Southwest quarter (S.W. 1/4) of Section numbered Twenty-two (22), a fifty (50) foot right way across the Southwest quarter (S.W. 1/4) of the Northwest quarter (N.W. 1/4) of Section numbered Twenty-three (23), accordingly as granted by me, executed by Herman Schollmeyer dated July 9, 1901, and recorded in the office of the Recorder of Conveyances in and for Tillamook County, at page 100, Book 100, Accounts of Deeds.

Tillamook County, Oregon, all in Township numbered Three (3) North of Range numbered Ten (10) West of the Willamette Meridian, in said County and State, together with all the covenants, hereditaments and appurtenances thereto belonging, and if there shall not be sufficient to satisfy the amount of said several judgments, costs and interest, then I will sell separate the following portion of said real estate, to-wit:

Second: The Northeast quarter (N.E. 1/4) of the Northwest quarter (N.W. 1/4) of Section numbered Twenty-seven (27), in Township numbered Three (3) North of Range numbered Ten (10) West of the Willamette Meridian, together with the tenements, hereditaments and appurtenances thereto belonging, and if the proceeds of such sale shall be insufficient to satisfy the amount of said judgments, decrees, interest and costs, then I will sell separate the following portion of said real estate, to-wit:

Third: The Southeast quarter (S.E. 1/4) of Section numbered Nine (9), in Township numbered Three (3) North of Range numbered Ten (10) West of the Willamette Meridian, and the following bounded and described tract, to-wit:

Beginning at the Northeast corner of Section numbered Twenty (20), in said Township and Range aforesaid, thence running south one-half (1/2) mile to the quarter section post on the line between said Section numbered Twenty (20) aforesaid and Section numbered Twenty-one (21), in said township and range, thence west along the quarter section line a distance of eighty-two and one-half (82 1/2) feet; thence north on a line parallel with the east boundary line of said Section numbered Twenty (20) aforesaid one-half (1/2) mile to the north boundary line of said Section Twenty (20) aforesaid, thence east along the north line of such Section to the place of beginning, together with all the covenants, hereditaments and appurtenances thereto belonging, or in anywise appertaining.

DATED at Tillamook, Tillamook County, Oregon, this 27th day of February, A. D. 1913.

H. CRENSHAW,
Sheriff of Tillamook County,
State of Oregon.

Chronic Stomach Trouble Cured.

There is nothing more discouraging than a chronic disorder of the stomach. It is not surprising that many suffer for years with such an ailment when a permanent cure is within their reach and may be had for a trifle. "About one year ago," says P. H. Beck, of Wakelee, Mich., "I bought a package of Chamberlain's Tablets, and since using them I have felt perfectly well. I had previously used a number of different medicines, but none of them were of any lasting benefit." For sale by all dealers.

The Tillamook Herald gives 50 Gold Bond Trading Stamps with every \$1.50 subscription.