Reliable Data Dealing With Laying of Different Forms Submitted for Taxpayers' Benefit by Samuel Hill.

Interesting and valuable information for taxpayers and others interested in street pavements and their cost has been prepared by Samuel Hill, president of the Home Telephone company, and even better known as "the good roads builder," whose roads near his country home at Maryhill, Wash, are models of their kind.

Mr. Hill has gone to much pains and expense in gathering his data to make reliable and complete. Some cona fusion exists in the minds of many persons as to the difference between the various pavements on the market, and one of Mr. Hill's chief objects has been to make his data valuable for reference in such cases.

"Asphalt pavement is laid in two forms, sheet asphalt and block asphalt," said Mr. Hill today. "The sheet asphalt is the common American form of an asphalt pavement. The wearing surface is made from one and a half to two inches thick and is composed of about 90 per cent of sharp sand and 10 per cent of asphalt. Permanent Base.

"This pavement is always laid on a concrete base and the wearing surface (either tar or asphalt). This layer is described above there is usually placed a binder course of broken stone coated with asphalitic cement about one and a number two rock (% to 1% inch). This binder half inches in thickness. This binder course is made richer in asphalt than thick. On top of this course is spread the wearing coat so as to adhere betanother course of the tarred stone the wearing coat so as to address as the first. ter to the concrete base. A sheet aschips of the same thickness as the first. The road is then thoroughly rolled. The phalt pavement under the Seattle specified on the contract on the contract of the contra Tications has been laid by contract on tarred stone chips are forced up and a five inch concrete base for \$1.45 per down between the number two rock and square yard. This is, however, a very the whole is bound into a compact cheap price. In Portland it would be between \$1.85 and \$2.

"The asphalt block pavement is used in a number of cities. The blocks are uniform in shape and usually 4 inches by 5 inches by 12 inches in size. They are composed of a mixture of crushed stone and asphaltic cement in about the laid to a depth of six inches and thor-oughly rolled. On this is placed about proportions 87 per cent of the former and 13 per cent of the latter. Laid on a concrete base this pavement is very similar to the sheet asphalt. In Washington, D. C., such a pavement costs approximately \$1.80 per square yard. a half inches. Bitulithic Pavements.

Bituilithic pavement is similar to the sheet asphalt pavement except that could be sheet asphalt pavement except that could be sheet asphalt pavement except that could be sheet asphalt pavement except that road and covered with sharp, sand or stone chips and is again rolled. Same sun shot its beams through the ever stone chips and is again rolled. Same sand or stone chips and is again rolled. Same sand open spots when the sun shot its beams through the ever widening rifts in the storm clouds. pavement is laid on either a concrete consists of approximately four parts throughout the week the parks and take or on a base of broken stone. The stone screenings (that will go through rest places were animated with a conprice per square yard should not exceed a three-quarter inch screen), three parts that of an asphalt pavement, but it usually does because of the monopoly the sand. To this mixture of stone and

"Bifuminous macadam is laid according to the penetration method; the sizes and coated with a patented mix-Gladwell system and the mixing meth- ture. od, of which there are three patented proportions: Tar, 92.56 per cent by processes: Warrenite, Tarmac and Bi-weight; pitch, 5.79 per cent by weight;

"A bituminous macadam road is 1.24 per cent. broken stone macadam in which an to be applied is loosened up so that the bitumen can penetrate as far as three forms: Granitoid or blome pavepossible into the surface of the road. ment; hassam, a compressed concrete plied and the road is thoroughly rolled pavement, dolarway. The oil or tar is applied either from a sprinkler wagon or under pressure as by the English tar spraying machine. A second and sometimes a third coat nary concrete well tamped. On this, of the hot bitumen and sand is often before it has set, is placed a wearing

Poundation Course. "Under the Gladwell system Number of Park Workers Increased to Prepare for Awakening of Spring

Many Improvements Planned for Pleasure Spots; Children's Playgrounds Particularly to Be Made Better and More Extensive; Rose Bushes and Pansies Are Being Transplanted at Two Parks; First Straw Hat Puts in Appearance.



Scenes in Plaza blocks on first sunshiny days of spring, where homeless ones and others meet and enjoy newspapers and warm breaths of spring.

outers," crooning lovers, nurses with squalling infants and tired men and as the weather settles. At present 13, women, anxious for short respite from 000 rose bushes are being planted and

business grind sought the park benches next week 15,000 pansies, will be set

"The spring rush has hardly begun,

said Superintendent Mische yesterday

"The park employes, have their hands full, however, and with trimming, plant-

ing, transplanting and getting the parks

in order, they will be mighty busy for some time to come. Spring is upon

us and as the great majority of city

folk can enjoy it only in the parks we

want to be ready and have the parks beautified to add to the people's pleas-

it will become the strongest homogeneous party in the country; in Austria and Hungary it is spreading rapidly; in the

United States and England the masses

of the working classes are approaching

it is rapidly absorbing Liberalism. There

sands of them scattered here and there

"According to several of its most

but since the birth of Christianity it-

self no movement has grown steadily,

has spread so widely, has taken so deep

a hold on the people, has shown such

Socialism Is Compact Oragnization.
"In different countries its followers

marked characteristics of permanence.

may differ in details-they may be more

or less revolutionary, they may adopt different methods of propaganda, they

a temporary alliance with other parties

in the state, they may be more or less

ithough it possesses no central author-

e and more closely to it: in Relgium

Buds, sure harbingers of spring, have stant flow of humanity. "Down and derer plants from the green houses to put in an appearance already and the first lonesome straw hat has already appeared on the street. In other words, spring time is at hand!

Warmer weather and frequent bursts more heroic mold defied the grippe and "The spring rush has hardly begu of brilliant sunshine during the week picknicked on the damp sod. brought Portland's citizens to a realization that the time for nature's great annual awakening had come and thou-"After rolling this course a squeezee sands who hovered near stoves and force of 40 park workers to 80 and is coat of hot bitumen is slopped over the radiators since December, scurried for launching all manner of improvements.

sand. To this mixture of stone and sand heated there is added from 20 to surface is left. Expansion joints are left on both sides of the streets at the name.

Sand. To this mixture of stone and sand heated into small rectangular blocks. A comparatively smooth surface is left. Expansion joints are left on both sides of the streets at the left on both sides of the streets at the of No. 1 rock and two parts of sharp left on both sides of the streets at the "Tarmac is an English patented pave. curbs and across the street will not crack." laid in Spokane.

"Hassam, named after the patentee, is The patent states the following a compressed concrete. The broken stone is laid between eight and nine inches deep on a well rolled sub-grade, Portland cement, 0.41 per cent, and resin, similar to laying a macadam road. It is thoroughly rolled, but no binder is "Bitumas is a mixture of heated bituartificial binder has been used. This men and a min ral aggregate obtained used. This gives a mass of well conbinder is some form of either tar or by passing the earth, sand and gravel solidated broken stone six inches deep asphalt, or a combination of both. The excavated from the roadway through a with a minimum of voids. Over the penetration method is used in rebuild- heater, by which process all organic surface of the stone is flushed a grout heater, by which process all organic surface of one part each of cement and sand, ing an old macadam road and also in matter is destroyed. It is said to have of one part each of cement and sand, the construction of a new road. The given satisfactory results where it has having the consistency of rich cream.

Surface to which the hot bitumen is been used.

The road is then rolled and the cement grout pumped all through the mass of "Of concrete pavements there are stone. Another application of grout is given and the surface of the road is Sand or stone screenings are then ap- pavement, and tar surfaced concrete covered with a thin coating of pea gravel or stone chips and is thoroughly rolled. After it has thoroughly set for about 10 days travel is turned on. Many miles of this pavement have been laid

some do not. This pavement has been

in use for three years and has given

satisfaction. Great care has to be ex-

eroised in its construction. Its cheap-ness and the ease with which the wear-

of heavy residual oil equal to 10 per cent by weight of the cement in the

Befined Tar Coat. "Then, that a blanket coat of refined

second application of tar and sand may

least every 50 feet across the road.

street next to curbs are filled with tar

a 6 inch concrete base, with 2 inch sand cushion, joints between blocks being

"Modern wood block pavement is laid

on a 1/2-inch concrete base, with gushion

of tar, Portland cement mortar or some-times of sand. Sand is very bad on

grades, because if water gets under the

wood blocks it may wash the sand to the foot of the grads.

preservative, usually creosote or carbolineum. Expansion joints are filled with tar on both sides of the street next

Factory for Rent.

South Portland. Long lease, low ren-tal. Building is well lighted and will make an ideal location for manufactur-

A. L. FISH, care of Journal, \*

Two floors in new brick building just completed at Hood and Baker streets.

"Joints between the blocks are filled with a bituminous filler.
"Wood blocks are treated with some

filled with Portland cement mortar,

These are filled with the bitumen.

cipal features.

be applied.

and sand.

"The granitoid or blome concrete pavement consists of a base of ordiin Portland. Tar Burfaced Concrete. "Tar surfaced concrete pavement or course of rich concrete. This is struck off to the contour of the street surthe face and thoroughly troweled. The surby brooming so as to leave a rough-ened surface. Great care must be taken

course is made from two to three inches

"Under the mixing method come the

various tar and asphalt macadams, in

which the surface course is mixed with

heated bitumen. Warrenite is one form.

It is merely a cheaper class of bitulithic.

two and a half inches of their "hot

stuff." This is rolled thoroughly, giv-

ing a wearing surface of about one and

Hot Bitumen Used.

Granitoid, or Blome Concrete.

foundation course of No. 1 rock is

roadway.

At present the children's playgrounds at the City Park are being improved, wading ponds are being added and part of the grounds are being resurfaced. The work of transplanting the ten- ure."

In preparation for the spring and summer work Superintendent of Parks

E. T. Mische has increased the winter

is no country, not even excepting Tur-key, which has not been affected by it. Nor can we guage its strength from its forces in the various legislaturesin all countries have been unable to obtain legislative representation. Semi-Official Paper of Vatican authoritive spokesman, socialism is fundamentally opposed to Christianity,

Sees Danger in the Rapid Spread of Socialistic Doc-

By Henry Wood. (United Press Lessed Wire.) Rome, March 30 .- That Socialism is fast becoming a serious rival of the may be more or less disposed to form Catholis church is the admission that has practically been made by the Vatiolarway consists of a concrete base of can itself.

The rapid spread of Socialsim during us wearing surface. The concrete is the past few years has forced the church The rapid spread of Socialsim during

disturbed by factional strife. But the great outstanding fact is that Socialism. thoroughly tamped and the surface to consider methods for preventing Soity and no universally recognized intertroweled thoroughly or rolled with a cialism from encroaching on its own national leaders, is a united movement, hand roller until the cement mortar is field of influence, brought to the surface. It is finished The situation is

The situation has really become so serious that it has found its way into ened surface. Great care must be taken the Catholic papers of Italy, and to leave the surface of the concrete even and uniform, corresponding to the finished surface of the street. The con-crete is kept wet for seven to 10 days. ing with the Vatican, the sentiments ex-It is then allowed to thoroughly dry pressed by "Rome" may be regarded as and a blanket coat of hot bitumen is the actual sentiment at the present applied. From one-third to one-half time of the Pope and the church in gengallon per square yard. This is covered eral on the subject of Socialism. The with torpedo sand or fine stone chips. review of the situation by "Rome" is Some engineers roll this course and in part as follows:

"Socialism is increasing steadily all over the world; in Germany and France it has almost gained control of the

ing coat can be renewed are its prin-For Sheriff "L. W. Page, director office public roads, U. S. A., recommends that in mixing the surface layer of concrete there be added to the batch a quantity

tar or asphalt be applied and covered with acreenings or sand. If desired a "Expansion joints are left on both sides of the street at the curbs and at "Brick pavement is laid with a 6 inch concrete base and 2 inch sand cushion, and the bricks (24x4x8) are laid on Joints between the bricks are filled with Portland cement grout. Expansion joints on both sides of the "Stone block pavements include sandstone block and granite block, laid over

Willis Fisher

REPUBLICAN

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I Will Make Good Mr. Voter, it is up to you. (Paid Advt.)

EIGHTEEN LOTS SOLD AVERAGE PRICE \$500

The German Realty Trust compan eports the sale of 18 lots in Altamend ast week for an average price of \$500 a lot the total consideration aggregat-

ings little above \$9000.

When Altamead was put on the market last fall there was a total of 352 lots in the tract and there now remains less than 60 unsold. Six new homes are under construction in the tract and lot owners in the addition are making preparations to build a large number of dwellings this spring and summer. Co-ment sidewalks and curbing are being laid throughout the tract.

philosophy is absurd. All right-but the people do not vote for it on account of its philosophy. It destroys the natural and supernatural conceptions of family life. Very good—but the crude fact is that Socialists, in flesh and blood, taking them in the mass, have about as much (and as little) respect for the marriage bond and for the ties of family as most people outside the Cathelic church who are not Socialists. "There can be no question that great numbers of Socialists are anti-Christian -but it is also well to remember that some Socialist leaders proclaim, that the question of religion does not enter es-sentially into Socialism, and it is highly doubtful if any large proportion of Socialists in Germany or in English speaking countries have been drawn into

that. But it may be found that 90 per cent of Socialists are Socialists not be-cause but in spite of the theology. Its

ciples. "What is drawing them? Putting it broadly it seems to us that the multitudes are being influenced chiefly by social development. two sentiments; one of discontent with "Nor is it confined to the proletariat the present economic structure of soas many suppose—it is making con- ciety, the other of a desire for a pracquests in all grades of society. We have tical recognition of the brotherhood of to come to this: In the modern world man and for the abolition of barriers today there are two and only two forces which prevent this recognition."

In the closing part of the review

the movement by its anti-religious prin-

and these are the Catholic church and which is devoted to a statement of the "Such is the situation. That we are triumph over Socialism, it is suggested ecoming and more awake to it is evi- that it would be far better instead of dent from the extraordinary attention opposing Socialism, for the church to which is being devoted to the topic of work more strongly for the same ends that are common both to the church and thought.

"The 'theology' of Socialism is hopelessly wrong. It is easy enough to prove stronger of the two.

### A LITTLE DANDERINE WILL MAKE YOUR HAIR LUSTROUS, SOFT, FLUFFY, ABUNDANT

Get a 25 Cent Bottle Now and Forever Stop Falling Hair, Itching Scalp and Dandruff

socialism by exponents of Catholic

If you Wish to Double the Beauty of your Hair in Ten Minutes surely

Try a Danderine Hair Cleanse

Your hair becomes light, wavy, fluffy, abundant and appears as soft, lustrous and beautiful as a young girl's after a Danderine hair cleanse. Just try this-moisten a cloth with a little Danderine and carefully draw it through your hair, taking one small strand at a time. This will cleanse the hair of dust, dirt and excessive oil and in just a few

many Socialists are indifferent about moments you have doubled the beauty of parliaments, many hundreds of thou- wour hair. A delightful surprise awaits particularly

Socialism.

those who have been careless, whose hair has been neglected or is scraggy, faded, dry, brittle or thin. Besides beautifying the hair at once, Danderine dissolves every particle of dandruff; cleanses, purifies and invigor-ates the scalp, forever stopping itching and falling hair.

Try as you will, after one application of Danderine you cannot find any dandruff or a loose or falling hair, and your scalp will never itch, but what will please you most will be after a few weeks' use when you will actually see new hair-fine and downy at first-yes-but really new hair sprouting all over the scalp. Danderine makes the hair grow long, heavy and luxuriant and we can prove it. If you care for pretty, soft hair and lots of it surely get a 25 cent bottle of Knowlton's Danderine from any druggist thoroughly international, independent of or toilet counter, and just try it.



### For County Assessor



I will give personal attention to the office. You will find me on the job all the time.

Expenses of the Assessor's office have increased 272 per cent since 1903. I will separate the office from politics, and that will save the saxpayers' will not permit deputy assessors to pass out election cards and campaign

literature inclosed in assessment blanks. I will conduct the assessor's office according to law. No juggling with

the assessment rolls, I will make the assessor's office an open book to the taxpayers. No star chamber proceedings go with me,

Multnomah County assessments have been increased at the rate of nearly thirty per cent a year since 1904. The tax rate was \$1.48 per \$100 of assessed value in 1905, and this year it is \$2.44. Assessments climb year after year, and the tax rate climbs with them. The tax burden alls heavily upon all classes of people, but heaviest upon the little homeowner. I think the time has come to investigate these heavy increases and see what justifies them. What do you think?

I believe in economy in public expenses, but not in parsimony. We can-not tax ourselves rich, but we can tax ourselves poor. Therefore, I am opposed to excessive increases in assessments and excessive taxes. If you believe as I do, vote for me in the primaries on April 19: Multnomah County has been my home for forty-one years. I pay taxes

REPUBLICAN CANDIDATE

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