

## Halley's Comet Preparing for Exhibition

A great deal has appeared in public print during the last six months about Halley's Comet, yet it is probably true that a great many people have even yet no very definite idea of what it is, why it is famous, and especially when it should be looked for. The editors of the Index have asked President Ferrin to write a brief article treating of these matters for benefit of our readers. He has prepared the following:

Halley's Comet is perhaps the most celebrated celestial body in all the history of Astronomy. Its prominence is due to two facts in regard to it. Not only has it been in the past one of the largest and most brilliant of comets, at times fairly rivaling the sun in brightness, but more than that, it was the first of the large comets which was proved to have a definite orbit, moving about the sun in a definite period of years. The man who established this fact was Sir Edmund Halley, astronomer-royal of England. Previous to his time, comets were supposed to be erratic wanderers, moving here and there throughout the universe; subject to no law. They were regarded as mysterious heavenly bodies whose movements could not be foretold, and whose occasional visits to the earth were supposed to be accompanied by the most direful and dreadful calamities. Wars, pestilence, famine, earthquakes and all sorts of fearful disasters were ascribed to the influence of comets. Ever since Halley proved that the large comet which appeared in the year 1682 was governed in its movements by the same laws which control the motions of the earth and the moon and other celestial bodies, so that it was possible to foretell its coming with a good degree of accuracy, the mystery attending the movements of comets has largely disappeared.

True, there are questions in regard to them, that astronomers are not able to answer; but they are no longer regarded with dread, as harbingers of evil, bringing all sorts of disaster to the people of the earth. They are simply bodies in the universe, extremely light, composed in considerable part of exceedingly rare gases, but controlled in their motions absolutely by the same laws of motion and gravitation which we recognize on the earth. Halley's comet appears every 76 years. Its return to the region of the earth this year was foretold many years ago. It has been visible through the telescopes since October, and is getting nearer and becoming brighter every day. Just how soon it can be seen by the naked eye cannot be stated with certainty, but as it is rapidly approaching its perihelion—the point where it is nearest the sun—which it will reach on April 19, it should be visible within a very few days now. It rises about 4 o'clock in the morning during this week and should be looked for just before dawn in the east a few degrees north of the east point of the horizon.—Index.

### What It Was Like.

"Goodness!" exclaimed a gentleman, coming into a restaurant and even then holding on his hat from habit because of the gale blowing outside. "I never saw such a wind in my life!"

"Never saw such a wind?" said another. "What a stupid remark! Who ever saw a wind? Pray what is it like?"

"Like?" replied the first speaker. "Like to have blown my hat off!"

## HIGHWAYS OF BRICK.

### Method For Constructing a Road of This Material.

#### GRADING IMPORTANT FACTOR

For Satisfactory Results the Bed Must Be Entirely Free From Depressions. Proper and Economical Way of Laying the Brick.

In an address before a recent engineering convention in Indiana on the construction of brick highways W. L. Blair said: A brick highway to be entirely satisfactory must be entirely free from depressions, every part conforming to the grade. This result must be anticipated in the preparation of the sand cushion, first spread at the estimated depth of two inches and these depressions avoided by the use of a hand roller weighing from 300 to 400 pounds, additional sand applied, rolled and screeded again at least three times. At the last screeding it will be found that the uncompacted sand will not be over one-quarter inch in depth at any one point.

It is certain also that in ironing out what few depressions remain and compacting the brick into the cushion but very little sand will be pushed into the interstices by the final rolling.

The brick should be dropped in straight lines upon the sand cushion, with the best edge of the brick uppermost. Economy for the contractor would require that the brick be brought to and deposited within reach of the person who actually lays the brick in a way that will accommodate his method of dropping them in place, insuring the best edge uppermost. But previous to dropping the brick in the street attention must be given to the necessary provision for the expansion cushion next to the curb.

The board should be prepared by beveling a joist eight inches in width, the thickness determined largely by the width of the street. Even in a narrow street the expansion cushion



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should not be less than one inch, one and one-quarter inches for a thirty foot street and one and one-half inches for a width exceeding thirty feet. This board should be placed next to the curb, worked slightly into the cushion before the brick are laid and remain until the street is finished in all other respects, after which it should be removed within twenty-four hours following the application of the cement filler.

After the brick are dropped into the street the surface should be swept, precaution theretofore exercised that no brick go into the street which are dirty, or, after in, that they are not made so by use, as it is impossible for the cement filler to adhere to a dirty surfacing. After the sweeping thorough rolling must take place by the use of a roller not weighing over five tons.

The filler shall be composed of one part each of clean, sharp sand and portland cement. The sand should be dry. The mixture, not exceeding one-third bushel of the sand, together with a like amount of cement, shall be placed in the box and mixed dry until the mass assumes an even and unbroken shade. Then water shall be added, forming a liquid mixture of the consistency of thin cream.

From the time the water is applied until the last drop is removed and floated into the joints of the brick pavement the mixture must be kept in constant motion.

To avoid the possibility of thickening at any point there should be a man with a sprinkling can, the head perforated with small holes, sprinkling the surface ahead of the sweepers.

Within one-half to three-quarters of an hour after this last coat is applied and the grout between the joints has fully subsided and the initial set is taking place the whole surface must be slightly sprinkled and all surplus mixture left on the tops of the brick swept into the joints.

After the joints are thus filled flush with the top of the brick and sufficient time for hardening has elapsed, so

that the coating of sand will not absorb any moisture from the cement mixture, one-half inch of sand shall be spread over the whole surface, and in case the work is subjected to a hot summer sun an occasional sprinkling, sufficient to dampen the sand, should be followed for two or three days.

The last steps upon which depend the highest possibilities of the brick street are the proper rolling of the brick after they are in the street and the ironing out of any slight depressions found to exist.

## SCHOOL NOTES

The Sixth grade will soon take their final examination in Physiology.

The attendance is good and only a few tardy marks so far this month.

Next Friday is class day in the High School. Something will be doing all day.

Mrs. Gardner was absent two days this week and Mrs. Bogges taught in her place.

Our Botany class will soon be ready to analyze flowers and go on specimen excursions.

Forest Grove and Hillsboro High Schools will have a contest debate at Hillsboro May 21.

Our school will soon close and preparations are being made for fitting exercises for the last day.

As we now have a full High School and are only doing three years work this year, there will be no commencement at our close.

Miss Todd who was absent two days on account of the illness of her sister returned Wednesday. Miss Inez Luce taught for her on Tuesday.

Six of our teachers attended a local institute held at Tualatin last Saturday. Miss Scroggs took a class of four girls to demonstrate a painting lesson in water colors.

The Parents and Teachers' club will meet at the High School building next Friday evening at 8 p. m. The following is the program: Music by the High School; The noon lunch, Miss Swanson; Our children's associates, Mrs. M. S. Allen; Music; Question box.

### Subscribe for the Press

#### CARE OF ROADSIDES.

Remove All Rubbish and Preserve Trees to Make Highways Attractive.

No matter how smooth and well constructed the traveled road may be, if roadsides are not cared for the highway as a whole will not give a good impression. All rubbish should be removed, the excavations should be filled and embankments smoothed and planted with grass wherever it will grow. Unsightly brush should be cut and grubbed out. Sometimes, however, the brush and small trees if suitably trimmed add to the attractiveness of the roadside.

All trees which are ornamental or which have value as shade trees should be preserved and protected unless they grow so close together as to make a dense shade. In hot, dry climates particularly and indeed in most places trees are a considerable factor in reducing the cost of maintenance since they lessen the evaporation of the moisture from the macadam. In exposed places, where the sweep of the wind would be otherwise unbroken, they serve to prevent in a measure the blowing away of the binder from the road surface. Unfortunately in such places it is often difficult to make trees grow. Care in the selection of the kinds of trees best suited to the locality is important.

A good arrangement along roadsides for trees with large tops is to set them about fifty feet apart on each side, but alternating, so that there will be a tree every twenty-five feet along the road.

Use of a Drag on Gravelly Roads.

In soils full of loose stones or even small bowlders the drag has done good service. The loose stones are drawn into a windrow down the center of the road, while the earth is deposited around the bowlders in such a way that the surface is leveled. The loose stones in the center of the road should of course be removed. Where there is a large proportion of small stones or gravel the drag will keep down the inequalities in the surface.

## ROY HAPPENINGS

Chroniced by the Field Reporter of the Press

Fred Mills is driving the milk wagon again for Mr. Killin.

The rain the past week put a stop to the farmers plowing.

Earl Ryals was having some dental work done in Forest Grove last week.

Mr. and Mrs. B. Q. Killin spent Saturday with Will Thornburgh of Banks.

Mr. and Mrs. Moore of Hillsboro are the guests of their son this week.

Miss Helen Chalmers of Forest Grove spent Sunday with her parents at Roy.

Mr. and Mrs. Darity of Glencoe are visiting at the Rieling home this week.

Mr. and Mrs. W. W. Ryals were the guests of O. W. Humphrey's Sunday.

Louis Roy whitewashed his orchard last week, which certainly gives it a fine appearance.

Mr. and Mrs. Chas. Rieling are the proud parents of a fine boy that came to their home Sunday evening.

Considerable work has been done on the roads lately in this vicinity, but still there is lots of room for improvement.

Hops in this vicinity are making wonderful progress, despite the unfavorable weather. John Parsons can hardly find sufficient help to train his vines as rapidly as their growth demands.

The Ladies' Aid society met at the home of Mrs. W. W. Phillipp on Wednesday, the 6th inst. There were 17 present and a very interesting meeting was held. Delicious refreshments were served.

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C. E. Dixon

Forest Grove, Ore.