

To protect the traveller, guard-rails are placed on embankments and at culvert ends. There the cost is not much increased, embankments are given a slope of four horizontal to one vertical, and the rail is omitted. The guard-rail is three and a-half feet high, and is built of cedar posts eight feet apart, a 4 x 4 inch top rail and a 2 x 8 inch side-rail. The posts are shaved, the rails are planed, and all the exposed surfaces are given two coats of light-colored paint, easily seen at night.

While the roadway is of first importance, the commission has not lost sight of the educational effect of a well-kept roadside. The space on both sides, between the roadway and the boundaries of the right of way, or location, have been cleared of debris and generally smoothed up, and left so as to be easily cleared of weeds and brush. Trees that would make shade or add beauty have been carefully preserved, and the planting of shade trees by municipal officers, local improvement societies or abutters have been encouraged and even urged.

Tar-Concrete Foot Walk.

There have been many failures in the use of tar concrete walks, largely owing to careless workmanship and the use of inferior material. Where reasonable care has been exercised, and they have been laid by men who are experienced in this class of work, they have been very successful. In the city of Hamilton, where tar-macadam roadways are laid to a great extent, foot walks constructed on similar principles are being adopted.

These walks have been in use at Richmond Hill for fifteen years. Those at first laid were not a success, but after some experience better results were obtained. For the past twelve years nothing but tar concrete has been used, and the plank walks are being replaced with it as fast as they require renewal. In laying these walks a curb of 1½ x 4 inch pine is placed on each side of an excavation made to receive the walk. Between the curbs is then placed a gravel foundation, which is thoroughly consolidated and about three inches in thickness. Upon this foundation is then placed a two and a-half inch layer of the tar concrete. This tar concrete is simply a mixture of coal tar and clean, coarse, sharp sand, or fine gravel. The proportion of tar used will vary according to the quality of the sand, the finer the sand the more tar being required. An exact rule cannot be laid down, but about one measure of tar to eight or nine of sand will meet most conditions. Experienced men can lay this walk for forty cents, or even less, per square yard.

These walks do not present so good an appearance as cement concrete, nor are they so durable. They can be easily repaired where minor defects occur, and for use in villages and on the less important streets of towns and cities, if properly

made, they will be found very much better and cheaper than plank.

The walks in Richmond Hill, which have been down for twelve years, are still in good condition. They show little sign of wear, and have no appearance of decay, so that their actual life cannot be determined from their twelve years of wear.

Parks.

When a municipality is about to locate or establish a park, the various sites which may be offered for the purpose should be well considered, not only as to the eligibility of the ground itself, but as to its environment, present and prospective.

The site chosen should not be low, wet land; for it must be drained, and is expensive to make attractive. High, rolling land, rugged in places, traversed by a deep ravine or a hill-torrent, is far more desirable; or a tract of land which will embrace both characteristics can be made into a park which is first-class in every respect. The ravine or torrent can be readily bridged, and a pond can be excavated on the low land, which will serve to drain the remaining portion of it. An unfailing source of water is so very essential to the beauty of a park that this feature should not be lost sight of for a moment when the site or sites are under consideration.

When the land is finally selected, then determine the sort of a park you will have; and when doing so, consider Charles Elliott's definition of a park. He says:—"Lands intended and appropriated for the recreation of the people, by means of their rural and natural scenery and character." If this definition is continuously held in view, the park will always be for the people, and fully appreciated by the people.

It has been found by those who have had charge of public parks that no urban park is safe from spoliation by permitting the grounds to be used for purposes utterly foreign to the original design and intention, until a community is educated to the controlling idea of a park in all its essential features; that if we would maintain mental, moral and physical health in large cities, we must have a breathing-space which is not only attractive to the masses, but is also easily accessible.

To preserve and maintain a rural park of quiet, sylvan beauty, we must exclude town-like things, omit from them decorative gardening, monuments and statuary; rigidly exclude all catchpenny devices, trivial amusements, and not afford opportunities that can be found at a county fair for spending money. Make it a place for recreation or rest; furnish good facilities for drinking-water, a reasonable number of seats, boats on the pond, if there be one, and a place for rendering good music, and the public will supply all other needfuls which are necessary for their enjoyment. Even speed-roads are objectionable in a public park, because of the crowd they gather, not to enjoy the park, but to see

the driving and bet upon the horses driven; the youth who frequent the park are thus brought into contact with the manners and language of the race-track. The drivers of the horses may be prominent citizens, very true, but not public-spirited ones, or they would not sanction the use of a park drive for such a purpose. All that they care for is the driving and the opportunity to exhibit their thoroughbreds; they do not seek the park with the same intention or purpose that the business man does who takes an evening drive therein with his family, or the man who goes there with his wife and children for a pleasant stroll.

While it is better to keep all buildings out of a park that is possible, yet in parks of large area, fifty acres or more, it is quite necessary that there should be a pavilion or two, under which visitors may seek shelter when sudden rainfalls occur; and there should be one substantial building, of low-roof, cottage design, for the convenience of women and children. All other buildings are unnecessary.

A park should always be perfected according to its natural features and conditions, not imitating an English park, with its grass and trees; nor should we give it that neat prettiness of the grounds about a villa. Be as original in the design of the park, so far as it relates to the landscape, as we are in the design of buildings and the improvements of our cities. Originality of design is what has made the noted parks of the world famous. Cultivate those trees and shrubbery which are indigenous to the land itself, adding such as grow well in that particular latitude. We should not attempt to create hills where they exist; and avoid the practice of levelling grounds. Use the spare earth to increase the height of undulations, and let the depressions exist. The moisture which they collect will give growth to certain kinds of trees and shrubbery which will not exist without it. John Ruskin said: "The simple uncombined landscape, if wrought out with due attention to ideal beauty of the features it includes, will always be most gratifying in its appeal to the heart."

Pennsylvania's Roads.

A new road bill has just passed the Pennsylvania legislature. This amendment provides for raising \$2,000,000 a year for road improvement by tax of one mill on the personal property and capital stock of corporations and the receipts of banks and foreign insurance companies.

In advocating the bill it was shown that considerable corporate property escaped paying a share of tax equal to that paid by other corporate property of the same class. A search of the records of the state shows that the Carnegie company has paid but \$1,117 taxes. While corporations are paying less than three mills on the dollar of their investment, real estate owners are paying 16½ mills. Official records show that the taxes re-