

Commutation By-Laws.

Among the municipalities in which, at the coming January elections, a by-law will be submitted to the people, to bring about a better system of road construction and maintenance, is the township of Artemesia, in the county of Grey. A meeting to discuss the question in the interests of good roads, will be addressed at Flesherton, on the eleventh of this month, by A. W. Campbell, Provincial Highway Commissioner. In the meantime the council is not idle, and the following concise summary of their proposals has been issued:

To the Electors of the Township of Artemesia:

LADIES AND GENTLEMEN:

By instructions from the council I beg to address to you, the following:

For several years the question of commuting statute labor at a small per diem payment has been talked of, and it is thought at the next municipal elections to submit the question to the electors by ballot as follows: Are you in favor of commuting the statute labor at the rate of fifty cents per day? Yes, or no.

Following is the proposed scheme if the commutation is made:

Repeal all by-laws respecting statute labor, pass a by-law to commute the statute labor at fifty cents per day, the money to be expended in the road division by the overseer appointed by the council, he to give preference to the persons in the division, of working and receiving the moneys. A day's work to consist of ten hours' labor and the rate per day to be fixed by council. The overseer to direct the work in accordance with rules given him by the council. The duties of the overseer shall be to make himself acquainted with the best and most modern methods of constructing and maintaining good roads; to employ, direct and discharge all men and teams he may require to carry on the work; to begin work as early in the spring of each year as conditions will permit; to keep the bridges and ditches in his jurisdiction open and in repair, and the highways free from obstructions at all times, properly protect by railings all bridges and other places dangerous to travel, see that the Act to prevent noxious weeds upon highways is carried out; to cause the roads in his division that are used by the public in winter to be made and kept open during the season of sleighing in each year, and perform such other duties as may be required of him from time to time under written instructions of the council.

By Order,

W. J. BELLAMY,
Township Clerk.

It will be seen that the plan suggested by the council is thoroughly business-like; that it is decidedly in the interest of better roads, and therefore in the best interests

of the people. There is little reason for us to suppose that the statute labor system is now being operated more successfully in Artemesia than elsewhere in the province and the proposed changes will remedy many of the present weaknesses of the old methods.

Every man's quota of labor will be paid at an equal rate and there will no longer be the inequality existing between the lazy man and the energetic man; the man who talks and the man who works; the man who believes that the time required for statute labor is a holiday, and the man who believes that road-work is as necessary and useful as work performed on his own farm. One road division will not be able to idle away its time under a weak pathmaster while the adjoining division performs its work faithfully and well, under a pathmaster who plans and carries out his duties with good judgment.

Statute labor is weak at many points, and it has been discussed so frequently in these columns, that to do so further seems like unnecessary repetition. On the other hand, that it has done good service in the past, there is no attempt to deny. In pioneer days, when men understood the difficulties of forest life, and stood shoulder to shoulder in overcoming them, statute labor was a means of constructing roads, in every way suitable to requirements. But to-day better roads are required, improved machinery is available, but the people of most districts instead of performing their road-work with the old time zeal are growing more and more indifferent. To retain statute labor beyond the period of its usefulness is an injustice to that time-honored system, and is but a short sighted economy on the part of its people.

Artemesia, King, East Williams and those other townships which are preparing by-laws for the coming elections, are acting wisely in so doing. Whatever amount is provided in money, will, under a proper system, be able to co-operate with the amounts now appropriated, in such a way that durable and complete results will be achieved, in place of the present temporary patching.

These by-laws, however, should be fully explained to the people before the day of voting, otherwise the sanction of the ratepayers cannot safely be predicted.

The city of St. Thomas has passed a by-law respecting hawkers and peddlers, providing that for every two-horse wagon, an annual license of \$50 shall be charged; \$30 for every one-horse wagon; \$15 for every push-cart, and \$1 for every person carrying a basket.

It is stated that Count Zeppelin, a retired German general, has succeeded in inventing a flying machine which will fly, and that practical aerial navigation is to be added to the achievements of the 19th century. This will not do away with the necessity for good roads.

Placing the Stone.

The quantity of stone required to form the surface covering will vary with the strength of foundation obtainable and the nature of the traffic to which the road will be subjected. If, because of moisture or the nature of the soil, the foundation is lacking in strength, or if the traffic is to be very heavy, the Telford system may be employed, whereby a layer of large stones is first placed by hand over the road, and this is then covered with broken stone. When a Telford system is laid, the principal matter to observe is to place the stones on edge, either at a uniform height or graded from the centre to the side, the highest at the centre. They should be given an even bearing, projecting tops should be chipped off, and spalls wedged into the interstices. If the stones are laid flat, they do not retain as firm a bearing, and are apt to rock, when uneven settlement will occur.

The depth of broken stone to be placed over a Telford foundation need rarely exceed six inches in thickness, the foundation itself having a thickness of eight or nine inches. Without the Telford foundation, the thickness of stone may range from six to twelve inches, according to circumstances. Less than six inches has been used successfully, but in such cases the foundation must be of unusual strength, such as a very gravelly soil would produce. When there is reason for the depth of the stone reaching or exceeding twelve inches, it generally indicates the necessity for a Telford foundation.

The broken stone should be placed on the road in layers of from two to four inches in thickness, according to the size of the stone, and each layer thoroughly rolled before the next is placed above it. The stone, too, should be first graded according to size, and the coarser placed in the bottom. When fine and large stones are intermixed, the surface will wear less uniformly, the smaller stones wearing more rapidly than the larger; and large stones, too, obtain a less firm bearing and are apt to work loose; so that, unless the finer stones are placed on top, the surface is apt to become rough, particularly in dry weather.

The preliminary earthwork, in providing for the reception of the large stone, will vary greatly in extent. A cheap form of country road can be built by first crowning the earth sub-soil, by the use of a grading machine; then reversing the process and instead of bringing the earth in, cutting off the crown, turning it outward to form shoulders for confining the narrow bed of metal. From this method, the extent of earthwork will increase until the widest and most elaborate form of macadam road is reached, necessitating the removal of much earth to receive the stone.

An electric railway line is being projected between Leamington and Windsor, by United States capitalists.