

The Public School.

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II.

FORMATION OF SCHOOL SECTIONS

Since the year 1841, the school section has been the unit of territory for raising, by assessment, the sums necessary for the establishment and maintenance of the public school, over and above the Government and municipal grants. In that year the district councils were authorized to divide the townships in the districts into school sections with definite boundaries. In 1849 this duty devolved upon the township councils, then first established.

It was no easy problem the councils had to work out when they undertook to form school sections. There were schools already established. Each community had its school house, which generally was the only place for holding religious and other public meetings, and when the time came for a general formation of school sections each community made a vigorous stand to be left by itself as a section, unless some addition might be made to it.

The wonder is that with their desire to recognize and preserve existing interests the councils should have been as successful as they were. They succeeded ultimately in forming, in general, sections satisfactory in size and shape. The ratepayers were not overburdened with taxes for school purposes, and school houses were placed comparatively within easy reach of all.

IN DISTRICTS UNSURVEYED.

No community in the province need be without a public school. In any portion of the province, not surveyed into townships, the inhabitants may form a school section, and, at a public meeting called for the purpose, elect three of their number to serve as trustees. These trustees have the same power as trustees in sections in unorganized townships. On receipt of notice at the Education Department that a school has been established, and suitable accommodation has been provided, the minister may pay over to the trustees for the maintenance of the school such sum as may be approved by the Lieutenant-Governor-in-Council.

IN UNORGANIZED TOWNSHIPS.

In an unorganized township in any county or district five heads of resident families may petition the public school inspector for the county or district to form a school section for the community. On receipt of the petition the inspector may form a portion of a township or portions of two or more adjoining townships into a school section. No section thus formed shall exceed five miles in length or breadth in a straight line, and subject to this restriction the inspector may from time to time

alter the boundaries of the section, as the circumstances seem to require. Any person, whose residence is more than three miles in a direct line from the school house, shall be exempt from all rates for school purposes, unless a child of such person attends the school, but all lands owned by such person, lying within the three-mile limit, shall be liable for school rates.

IN ORGANIZED TOWNSHIPS.

When municipal government has been established it is the duty of the council to divide the township into school sections. As far as possible, interests in schools already established are to be respected, but the principle of equalization must not be lost sight of. The sections are to be distinguished by numbers, and no section, formed after 1896, shall include any territory distant more than three miles in a direct line from the school house. No section shall be formed which contains less than fifty children, unless the area contains more than four square miles, except in cases where such area cannot be obtained because of lakes or other natural obstacles.

ALTERATIONS OF BOUNDARIES.

Where it is considered desirable to alter the boundaries of a school section the ratepayers make application for such change to the township council. If the sections concerned lie wholly within the township, the council has power to pass a by-law making the desired alteration, in case it appears that all the ratepayers interested have had sufficient notice of the proposal in the application and of the time and place of the council meeting at which the proposed change is to be considered. Any such by-law may not be passed later than the first day of June, and the change made shall not take effect till the 25th of December next following. The by-law shall remain in force for five years, and shall thereafter continue in force until changed by the township council, unless set aside on appeal to the county council made by a majority of the trustees or five ratepayers of any one or more of the sections concerned. On receipt of the appeal the county council may appoint arbitrators, who shall determine all matters complained of.

UNION SCHOOL SECTIONS.

When the formation, alteration or dissolution of a union school section is considered desirable, five ratepayers from each of the municipalities concerned may petition their respective municipal councils, asking for such formation, alteration or dissolution. Each council so petitioned may appoint an arbitrator. The arbitrators so appointed and the inspector or inspectors shall be a Board of Arbitration to determine the matters referred to them.

If the territory lies wholly within one county the trustees or five ratepayers within the territory or the inspector or

inspectors may within one month appeal to the county council against the award of the arbitrators or against the neglect or refusal of the township council to appoint an arbitrator. On the receipt of the appeal the county council may appoint not more than three persons, who shall finally determine the matter complained of.

When the territory lies partly within two or more counties, the appeal must be made to the Minister of Education, who shall have power to alter, determine or confirm the award, or in case no award has been made, to appoint not more than three arbitrators who shall have full power to make an award, finally and conclusively disposing of all matters referred to them.

Purification of Sewage.

There continues to be a great and increasing attention paid to the discoveries made and established in actual practice, within the past year or two, that the purification of sewage, whether by land treatment or artificial filters, is dependent upon bacterial or, as it is also termed, biological action, and that it is only in a very minor degree chemical and mechanical. The systems which have been simultaneously developed at (1) Sutton, Surrey, England, of purifying sewage by passing it in its crude state through bacteria tanks constructed of coarse ballast, where the sludge is absorbed by bacterial action without cost in chemicals and sludge pressing, and (2) at Exeter on the septic tank system, where the crude sewage is passed through hermetically-sealed sewage tanks and the sludge is absorbed by bacteria in a manner akin to the Sutton process, except that in the latter case the purification is effected by aerobic bacteria, while at Exeter it is effected by anaerobic bacteria, apparently attract the notice of local authorities who are desirous of a solution of the sewage disposal difficulty to an extraordinary degree.

In a recent issue of the *Sanitary Record* it is announced that the government of Great Britain has decided to appoint a royal commission to inquire into the bacterial treatment of sewage. This important decision has been arrived at on account of the pressure brought to bear by influential sanitary authorities. The remarkable success of the experiments at Exeter, Leeds, Sutton and other towns has also moved the government to action.

Sterilization in Water.

Professor Bilsluk says that water may be sterilized in five minutes and made both harmless and palatable by the use of bromine and ammonia, as follows: To a gallon of water add three drops of the following solution: Water, 100 parts; bromine, 20 parts; potassium bromine, 20 parts, and then after five minutes add three drops of a 9 per cent. solution of ammonia. This process is recommended as a rapid, cheap and effective way to sterilize drinking water.