

Specimens are easily obtained and may be in the hands of all. One sunflower in the hands of the teacher may be seen from all parts of the room. Each scholar should have an aster. The teacher, after a general lesson on the structure of the sunflower as a whole, should make a section down through the centre, and direct the pupils to do the same with the aster. The teacher should then distribute two or more centre flowers and a ray-flower of the sunflower to each of the class and ask the pupils to place these side by side with centre and ray-flowers of the aster. Compare the centre flowers first. The difference mainly will be in size. Both will have the ovary below, the outer covering of which may be called the calyx tube. At the top of the ovary will be found the limb of the calyx, which in the sunflower consists of two small awns, each arising from an angle of the ovary, and in the aster of a circle of bristles (pappus). Within and above the awns and pappus the tubular five-lobed corolla is seen rising straight up, peering out of which at the top is the two-lobed style, the inner surface of each lobe being roughened (stigmatic). Slitting the gamopetalous corolla and spreading it out the stamens will be found occupying a circle inside and united by their anthers (syngenesious).

Compare the ray-flowers. What is the difference? The ray-flower of the aster has a small ovary at the base, from which rises a two-lobed style. The flower is pistillate. The ray-flower of the sunflower has no ovary and therefore no style. It is neutral.

[For the REVIEW.]

New Brunswick Schools of the Olden Time.

By W. O. RAYMOND, M. A.

(Continued.)

EARLY LEGISLATION IN NEW BRUNSWICK FOR THE ADVANCEMENT OF EDUCATION.

As has already been pointed out, the first provisions made by law for the education of youth in the Province, were contained in the Royal Instructions to Governor Thomas Carleton, issued at the Court of St. James, August 18th, 1784. This valuable historic document should certainly be printed at an early day for the information of all who take an interest in our Provincial history. Section 78 of the Royal Instructions, contains the following paragraph: "It is our further will and pleasure, that you recommend to the Assembly, to enter upon proper methods for the erecting and maintenance of schools, in order to the training up of the youth to reading and to a necessary knowledge of the principles of religion."

The legislators of the newly created province lost little time in turning their attention to the subject of education. Even before the first meeting of the

General Assembly at St. John, February 3, 1786, attention had been directed to the matter. Dr. William Paine * and others on December 13, 1785, presented a memorial to the Governor in Council, praying that a charter of incorporation be granted for the institution of a Provincial Academy of Arts and sciences. The memorial pleads "the situation in which the Loyalist adventurers here find themselves, many of whom on removing here had sons whose time of life and former hopes call for an immediate attention to their education."

Many of the founders of the province had enjoyed the advantages of university training in their youth. An interesting article in a late number of the *Atlantic Monthly* by an American writer strikingly illustrates this point. Speaking of the effects of the Loyalist emigration upon the State of Massachusetts, he says:

Among the exiles were nearly one hundred graduates of Harvard College, and they must have been no small loss to the infant state. They and their sons filled for more than half a century the chief offices in the Nova Scotia and New Brunswick judiciary, and they must have contributed in a degree not easily estimated to the elevation and progress of those provinces. Cambridge lost by the American revolution nearly all her men of mark and high standing, except those immediately connected with the college.

Accompanying the memorial submitted to the Governor and Council by Dr. Paine and his associates was another memorial signed by the principal officers of the disbanded loyal regiments and other leading inhabitants of the County of York praying that part of the reserved lands around Fredericton might be appropriated to the use of the proposed academy.

After due consideration it was ordered that the Attorney General and Solicitor General be directed with all convenient speed to prepare the draft charter for the establishment of the said institution.

Such was the initial step in the direction of higher education in New Brunswick. The proposed institution was described as "The Academy or Free School maintained, and always hereafter to be maintained, in our town of Fredericton, for the education of youth." The words in this elaborate title whereby the academy was to be permanently located at Fredericton, did not prove acceptable to some of the early legislators, and subsequently formed the ground of controversy. Had it not been for difference of opinion as regards the site, there is every reason to suppose the College of New Brunswick would have been endowed and have received its charter about the year 1792. Local jealousies deprived the province of the means of providing a collegiate education within its own borders for more than a quarter of a century.

* Dr. William Paine was a member for the County of Charlotte and first Clerk of the House of Assembly.