

(4) Divide a straight line AB into two parts at C, such that the rectangle contained by BC and another line X may be equal to the square on AC.

Draw the rectangle ABDH, contained by AB and X. Produce HA to F so that

$HF.FA = AB.X$ (II, 14 and Ex. 40 preceding).

On FA describe a square AFGC as in II, 11.

Produce GC to meet HD at K.

Then figure FK = figure AD

Take from these equals the common figure AK,

Then figure FC = figure CD
or $AC^2 = BC.X$.

(5) PQ and XY are two parallel chords in a circle; show that the points of intersection of PX and QY, and of PY.QX, lie on the straight line which passes through the middle points of the given chords.

Bisect PQ in R and XY in Z. Let PY.QX, intersect in O. Join OR.OZ. Then triangle PXY = triangle QXY: and triangle XOZ = triangle YOX. Therefore triangle PXO = triangle QYO. Also triangle POR = triangle QOR. Therefore triangles POQ, PXO, XOZ together equal triangles QOR, QYO, YOZ: that is, the lines OR.OZ bisect the trapezium PXYQ. Therefore the straight line RZ coincides with the straight lines OR.OZ: that is, O lies on RZ, similarly, if PX.QY intersect in O; O lies on RZ.

SCHOOL AND COLLEGE.

The meeting of the National Educational Association will be held at Milwaukee, Wis., July 6-9.

The teachers of Westfield and Greenwich, Kings Co., being now members of the St. John County Institute, are entitled to go with them to St. Stephen.

The trustees of Grand Harbor, Grand Manan, have added about thirty dollars' worth to their apparatus, consisting of Webster's dictionary, chemical apparatus and maps. Mineral specimens from Ottawa have also been received

There is a good prospect of steps being taken at an early date toward building a new school-house at Castalia, Grand Manan, and it cannot be done too soon for the health and comfort of the pupils.

The herbarium of plants owned by the late Prof. Lawson, of Dalhousie College, has been purchased by Mt. Allison University. This is no doubt the largest and most representative private collection of plants in Canada, and its acquisition by Mt. Allison is most important.

In most of the country districts of P. E. Island the schools are just re-opening after a three weeks holiday. The children, we presume, got some practical lessons in agriculture, not, we fear, in the most attractive features of it. But really it would be more in the interests of the children educationally if they had mid-summer holidays as in the other provinces.

The many friends of Miss Sadie Cronk, a teacher well known in Charlotte County, will regret to learn of her death early in May.

Miss Lillian Ingraham, teacher at Head Harbor, Campobello, has by means of a concert secured for her school some excellent apparatus.

The final examinations for license began on June 8th; they were held in St. John, N. B., in the Centennial building, as usual. The preliminary examinations begin on Tuesday, July 6th, at 9 a. m. Unless notice to the contrary is given, they will be held in the Victoria school, corner Duke and Sydney streets, as in the past.

While in St. Stephen recently Inspector Carter and members of the Charlotte County executive met in Calais some of the Washington Co., Maine, teachers. Many details of the approaching institute were arranged, and great interest was manifested by all who attended in the success of the meeting.

There seems to be a revival of interest in spelling, and the old-fashioned match is once more coming to the front. Such contests are probably far from accurate measures of relative spelling ability, but they are nevertheless very exciting to the contestants and very amusing to the spectators. In matches held in Fredericton and St. Stephen it is at least satisfactory to learn that teachers in the public schools have come off victorious against all comers, Mr. John Brittain being the victor at the former place and Misses Mary Caswell and Jessie Whitlock at the latter. If our pupils are not able to spell, it is not owing evidently to lack of ability on the part of some of their instructors to teach them.

The closing exercises of the N. B. Normal School, Fredericton, took place June 4th. The total number of students in attendance at the beginning of the year was 260. Of these eighty had gone out at Christmas with third-class licenses. Principal Mullin announced that the governor-general's medal, awarded to the student showing the greatest proficiency in the senior class, had been won by Miss Eleanor J. Fletcher of Forest Glen, Westmorland County, and his excellency's medal for the junior division had been awarded to Miss Grace Brown of Petitcodiac. Addresses were delivered by Judge Landry, Dr. Inch and Dr. Harrison.

The closing exercises of the N. S. Normal School will take place at Truro on the 18th of June. Dr. Rand will be present and deliver an address on the occasion.

In its account of the reception held in the assembly rooms, Mechanics' Institute, St. John, on Wednesday evening, May 19th, by the members of Branch No. 134, Catholic Mutual Benefit Association, *Progress* of May 22nd says, "A delightful number was the recitation by Miss Katie Buckley, a popular member of St. Peter's school staff."

There is to be no meeting of the N. B. Provincial Institute this year.