

to all the privileges of the Society. Lady members to be admitted free.

Art. IV.—Election of Honorary Members.—Any person who has rendered distinguished services in the cause of education, being duly proposed and seconded, may be elected an honorary member, at any regular meeting of the Society, by a two-third vote of the members present.

Art. V.—Rights of Honorary Members.—Honorary members shall be entitled to all the privileges of active membership, other than that of voting.

Art. VI.—Officers.—The officers of the Society shall be a President, three Vice-Presidents, Recording and Corresponding Secretary, a Treasurer and seven Directors, two of whom shall be *ex-officio* members.

Art. VII.—Nominations of Officers.—Nominations for office must be made by one member and seconded by another, immediately before the ballot for each officer is taken.

Art. VIII.—Election of Officers.—Officers shall be elected by ballot at the annual meetings of the Society.

Art. IX.—Balloting.—Immediately after the nominations for each office, the presiding officer shall order a ballot to be taken, and a majority of votes shall constitute an election; but in case no candidate receives a majority of the votes cast, the name of the candidate receiving the smallest number of votes shall be dropped, and a new ballot taken on the remaining names, and so on until an election is secured. In the event of there being but one nomination for an office, the candidate shall be declared elected by acclamation.

Art. X.—Regular Meetings.—Regular meetings of the Society shall be held at such time and place as may be determined by the Society at a previous meeting.

Art. XI.—Special meetings.—Special meetings may be called at any time by the Board of Directors, provided always that due notice of such meeting be given to the members.

Art. XII.—By-Laws.—By-laws, not inconsistent with the constitution, may be made, altered or amended by a two-third vote of the members present at any regular meeting; provided also, that notice of the proposed By-law, alteration or amendment shall have been given at a previous session.

Art. XIII.—Alteration or amendment of Constitution.—This constitution shall not be altered or amended except at a regular meeting, and then only by a two-third vote of the members present. In all cases, notice of the proposed alteration or amendment must have been given at a previous session.

It was then resolved to proceed with the election of officers for the year. Messrs McMillan, MacCabe, Slack, Thorburn and May were nominated, and the first named elected by a large vote. Mr. Slack was, on a second ballot, elected 1st Vice-President. He may be considered to represent the Public School Inspectors. Mr. P. A. McGregor, Head Master of the Almonte High School, was unanimously elected 2nd Vice-President, and Mr. A. Smirle, Head Master of the Ottawa Central School East, 3rd Vice-President. Mr. Parlow, Head Master of Central School East, was elected Recording Secretary, and Mr. Riddell, Mathematical Master of the Normal School, Corresponding Secretary. For the office of Treasurer two nominations were made—Rev. T. D. Philipps and Mr. Thorburn. The former was elected on ballot. There then remained five directors to be appointed. Messrs. Steele (P. S. I. for Prescott County), MacCabe and R. Dawson (Belleville High School), were elected by acclamation. To fill the two remaining vacancies Mr. Thorburn and Rev. J. May were elected on ballot. It was then resolved that Mr. MacCabe should be Convener of the Board of Directors.

The President elect took the chair, and thanked the Society for the honour done him. He also stated his conviction that the standard of the teacher's qualification was susceptible of still greater elevation, and, to this end, he advocated an increase in the number of Normal Schools for the training of teachers. The future of the new organization depended on their own exertions, and he relied confidently on the aid and consideration of the members in the endeavour to perform the arduous duties of his office.

Rev. J. May pointed out that a very large proportion of the new Directorate were men from Ottawa, and in the interests of the Society, and to enable the meeting to rectify what he considered a mistake by appointing another director from the outlying counties, he hoped the Society would accept his resignation. No action being taken in the matter, the President called upon Mr. Philipps, who read an interesting address. At a subsequent meeting, Mr. May's resignation was accepted, and his suggestion that Mr. Bigg, P.S.I. for Leeds, should be appointed as a director, was unanimously adopted. The by-laws of the Society were then introduced and passed. A prolonged discussion on the propriety of withdrawing the power to grant 2nd class Public School teachers' certificates

from the County Boards, resulted in the passing of a resolution affirming the principle that such powers should be in the hands of the Central Committee. After the usual complimentary resolutions to the Principal of the Normal School for his considerate attention to the wants of the members, to the railway companies for their reduction of rates, the Society adjourned to meet on the 8th, 9th and 10th of August, in the Town of Brockville.—*Citizen*.

III. Communications to the Journal.

1. TEACHERS' EXAMINATIONS.

LONDON, 8th Nov., 1876.

To the Editor of the Journal of Education.

SIR,—In view of the many failures at the recent examination, I take the liberty of recommending candidates for future examinations to read carefully, Hamblin Smith's Arithmetic (published by Rivington), by way of preparation in this important branch. Candidates failed, not because the papers were extremely difficult, but for want of power in independent analysis, a want of familiarity with the *Unitary Method*. This method to which the Central Committee have given prominence during the past five years, is explained and illustrated by Mr. Hamblin Smith; and if intending candidates apply the method to solve the questions given in Mr. Smith's work as well as those given from time to time by the Central Committee, I venture to predict that there will be fewer failures at the next examination, and little or no clamour about the difficulty of the papers.

(Signed) J. A. McLELLAN.

2. TEACHERS' ASSOCIATION.

To the Editor of the Journal of Education.

DEAR SIR,—With a view to making the next meeting of the Provincial Teachers' Association a "live" one, allow me to make a suggestion through your Journal.

Hitherto the programme for the annual meeting, has been solely arranged by the General Executive Committee, at a meeting held during the Christmas holidays. Now, I do not wish to change the method of arranging the programme, but rather to improve it. If the Secretaries of the various local Associations throughout the Province, will forward to me, at Newmarket, before Christmas, the names of any subjects they think suitable for discussion at the annual meeting, I will lay the list before the "Executive" at their next meeting, and I am convinced the Committee will be only too willing to receive such assistance, and the programme thereby be greatly improved.

Yours truly,

H. DICKENSON,
Sec. P. S. Sec. O. A. A. E.

Newmarket, Nov. 1st, 1876.

IV. Mathematical Department.

1. SOLUTIONS OF PROBLEMS IN THE APRIL NUMBER OF THE JOURNAL OF EDUCATION.

1. Let ABC be a triangle, P a point within it; $AP=37$, $CP=54$, and $BP=63$. Assume a line ac any length at pleasure, say 80, and on it describe a $\triangle abc$, similar to ABC . In $\triangle abc$, we have the base and angles; hence the other sides are known. Divide a in E in the ratio of $AP : PC$ or $37 : 54$; and ab in F in the ratio of $AP : PB$ or $37 : 63$; then $aE=32.5275$, and $Ec=47.4725$; $aF=30.672$, and $bF=52.253$. Now, the radius is a fourth proportional between the diff. of the segts. of the base, the least segt. and greater segt.; $\therefore Ec - aE : aE :: Ec : EK = 103.323$; the point K is in ca produced. $Fb - Fa : Fa :: Fb : FG = 74.321$. Then there are given the radii EK and FG of two circles intersecting in p , such that ap and cp , and ap and bp of the triangles apc apb will have the ratio of $AP : CP$, and $AP : PB$. Join Kp and Gp . Then by trigonometry, $KG=57.311$, $ak=70.7955$, and $aG=43.649$; $aKG=38^\circ 2' 10''.6$, and $pKG=44^\circ 34' 18''$; $\therefore aKp=6^\circ 32' 16''$, and $aPK=13^\circ 34' 23''$; $\therefore ap=33.938$. The triangles apb and APB , apc and APC , bpc and BPC , are similar, and we obtain the following results: $AC=87.218$, $AB=90.376$, and $BC=80.677$. The diagram is easily drawn, and the entire calculation may be performed.

2. When the $\triangle$ is isosceles, the least whole numbers that answer the conditions of a right angled $\triangle$ are 3, 4, and 5; $\therefore$ the sides are 5, 5,