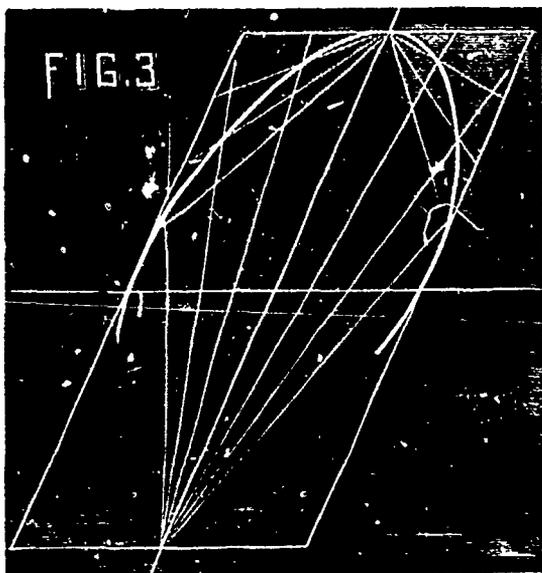


is that it is equally applicable to an oblique ellipse, as is shown in Fig. 3. The chief difficulty in obtaining a correct drawing of this figure lies in getting the pupils to recognize the true shape of the curve; if they are shown one drawn correctly, and better still if they draw some correctly themselves by one of the above modes, there will be far less difficulty in obtaining them afterwards by freehand, although in every case it is better to have the axes drawn, and generally if unequal in length, to lightly outline the circumscribing rectangle or parallelogram. A plan frequently adopted is to describe four arcs of circles through the four extremities of the axes, using the semi-major axis to draw those on the semi-minor, and the semi-minor to draw those on the semi-major, then completing the ellipse by a curved line between these circular arcs. This plan is evidently false, because no portion of an ellipse can possibly be a circular arc.



An oval is properly made up of a semi-ellipse and a semi-circle. This is shown in Fig. 2, where, in place of completing the ellipse in the same mode, we have drawn the semi-circle on the minor axis, thus producing an oval form.

We have given these figures thus carefully drawn, not that it is necessary for junior pupils to draw them quite so elaborately, but in order to assist the teacher in getting a correct form by which he may illustrate the true shape required, when, as before remarked, the class will much more readily comprehend the end in view. Still we have found but little difficulty in getting the pupils to draw them by these methods after a little careful explanation, and the correctness of eye attained is well worth the time spent upon it.

#### EXERCISES.

1. Draw two lines at right angles, 3 inches and  $1\frac{1}{2}$  inches long respectively, and bisecting each other. On these two as axes draw an ellipse.
2. On same two lines draw an oval, so that the upper end of oval is  $1\frac{1}{2}$  inches in width.
3. Draw an oblique ellipse of same size.

After these have been drawn thus mechanically, let them be drawn by freehand, using only the axes as guiding lines.

"What is a lake?" asked the teacher. A bright little Irish boy raised his hand. "Well, Mickey, what is it?" "Sure, it's a hole in the kettle, mum."

#### Educational Notes and News.

Chesterville Public School has a fifth class of ten.

There are 78 teachers in training in Stratford Model School.

Mr. A. C. Smith, assistant in Morrisburgh school, was successful at the first class examinations, having secured grade C.

Dundas Teachers' Association will meet at Morrisburg on Thursday and Friday, October 29th and 30th.

Mr. Butchart has been engaged to take charge of New Sarum school next year.

Mr. Marton, B.A., of Exeter, has been engaged as principal of the Watford schools, at \$600 a year.

Mr. R. Henderson has resigned the principalship of the Blyth Public School to begin ministerial studies at Knox College, Toronto.

Miss Minnie Baskott, teacher of S. S. No. 21, Southwold, has been appointed to succeed Mrs. Wallace, in Fingal, at the beginning of 1886.

Mr. McCabe, late teacher of the Separate School, Amherstburg, has entered the Medical College, Toronto, and Mr. Geo. Famolart has succeeded him.

Mr. John A. McPhail, late headmaster of the Fanning School, Bedeque, P.E.I., is attending McGill College, Montreal, for a university course.

A local teachers' association has been started at Wellesley village. The teachers in the vicinity are determined to make the exercises interesting and profitable.

There will be a convention of the East Victoria teachers held in Lindsay, on Friday and Saturday, 6th and 7th of November, at which subjects of an instructive nature will be discussed.

Mr. Rogers has resigned the headmastership of Cambray school. He intends to prepare for a university degree. Mr. D. McMillan has been engaged as teacher for the ensuing year.

Mr. O. T. Mother, Lynn Valley, Oxford county, has given up his school to attend the Ingersoll High School, to study for a first-class certificate. We hope he will be rewarded with success.

Mr. John Campbell has been re-engaged as Principal of the Public School in the village of Gorrie. He has been eight years in that position.

Mr. Chas. B. Rao has resigned the principalship of the Cass Bridge school. Mr. Casey Smith, a newly-fledged Normalite, takes his place.

Mr. Arthur Whitney, a son of W. A. Whitney, M.A. headmaster, Iroquois High School, is succeeded in the Boyne School, Winchester, by Miss J. M. Gardiner.

Messrs. J. G. Harkness and Jno. Stuart Carstairs were successful at the recent examinations in Toronto University. The former is in his first year, the latter in his second.

Mr. Jameson, brother of Headmaster Jameson of Morrisburgh High School, has been engaged as a third class teacher in that institution.

Mr. D. C. Smith has resigned the mastership of Islay School for the ensuing year. Although offered an increase in salary he could not be induced to remain, having decided to attend the Collingwood Collegiate Institute, to study for a higher grade of certificate.

J. Houston, B.A., formerly teacher in the London Collegiate Institute, and recently Principal of the Collegiate department, Portage La Prairie, has been offered the position of English teacher in the Winnipeg Collegiate Institute.

Mr. Jas. Crawford, formerly teacher in S. S. No. 9, Mosa, has given up charge of his school and gone to Toronto to study Medicine. The vacancy occasioned by his departure is filled by Mr. Foy, a former head master of the Glencoe Public School.

The Dominion Business College, Kingston, of which Messrs. McKay and Wood are the principals, is meeting with laudatory remarks from the local press, and a large number of students are now in attendance, many of whom are from the United States.

The High School buildings, Lindsay, are reported by the H. S. Inspector as unsuitable. It is quite time that a better building should be erected, worthy of such a town as Lindsay, for the present structure is more like a barn than a school.