Mathematics and Physics.

It is customary for a teacher, on being asked to contribute to an educational magazine, to laud his own teaching specialty. We shall be but following custom if we say a few words on mathematics and physics, but not with the intention of unduly praising them.

The study of mathematics is commonly said to be dry, uninviting and uninteresting. To the uninitiated it may be so, but to him who has passed beyond the portal of the study it is not so. It is composed of branches of knowledge the pursuit of which becomes captivating in the extreme. When, as the result of a stern endeavor to solve a difficult problem, taxing all a student's powers of attention and concentration, a solution has been obtained, what exhilaration of success! what consciousness of power!

It is commonly stated that those who pursue a course in mathematics receive a narrow education. That may be so. We doubt it. We believe that the honor graduate in mathematics has but laid broad and deep the granitic foundations of knowledge upon which he is to rear the superstructure of his palace of wisdom.

The student of mathematics is said to have small appreciation of good literature. We think the opposite to be the case. The students of the Ontario Normal College have not far to go to seek an illustration of our statement. To the student of mathematics good literature comes as a relaxation from the severe strain of continued appli- on to difficult problems.

Before leaving the subject of mathematics we wish to give a few of the values set down to its credit in an American journal of education:

1. An associative value that cannot

be spared in a liberal education, particularly in science training.

2. A *disciplinarian* value because of the special seriousness of its drafts on the mind's power of attention, concentration and persistence of effort.

3. A *unique* value in the facilities it offers for bringing things to a head and finish, and giving that consciousness of power and spurs to higher endeavor.

Let the student who has followed the study of pure mathematics to the end of his third year take the optional physics of the fourth. He will then overcome any (if any) tendency to A new vista will be narrowness. opened up to him in the wonders of sound, light, heat, magnetism and electricity. He will apply much of his mathematical theory to the solution of problems on the correlation of the forces of nature. He will have his mind directed to the study of natural phenomena in their different forms. He will find the subject of physics as captivating as that of mathematics. He will not wonder that such devotees of science as Faraday, Huxley and Lord Kelvin have revelled in it for the love of it. While we would not place science first, science last, science midst and without end, as Spencer does, still we think that it is coming more to the front as a course of study, and the humanities are stepping down somewhat from the high pedestal they have so long occupied.

We would not eulogize mathematics, we would not eulogize classics, or science, or English literature, but we would eulogize that person who, having spent many years as a student of some one particular branch of knowledge, has now the desire (and acts upon it) of adding to his knowledge a knowledge of other branches, so that he may become more fully an educated man.

JAMES GILL.