four hundred and sixty-four. In 1885 twenty three acres were devoted to experiments, and during the present year about fifty-eight acres have been used for similar work. The live stock tests which have been conducted since 1886 have much increased in both number and complexity; there being five distinct experiments going on at the present time.

In 1883 chemical analyses were commenced, and since the new laboratory has been erected and the conveniences greatly increased for this very important branch of the Station work, all the waters, milks, soils, fertilizers, roots, grains and plants, that time would allow, have been analysed.

When the Professor of Dairying was appointed, the dairy experiments were put under his direct supervision. The creamery was continued, a silo erected and numerous experiments with corn and dairy stock conducted.

Not only has there been a direct line of experimental work carried on at the College for the past fourteen years, but we are proud to say there is a noble work being performed over this Province by members of the Ontario Agricultural and Experimental Union, an association of O. A. C. ex-students, students, and professors. Grains and fertilizers with full instructions as to conducting the experiments have been sent out from the College for the past four years. In 1886, there were twelve members engaged in the work, in 1887, sixty, and in 1888 about one hundred, besides others, who were conducting experiments in horticulture and in bee-keeping. Results of the tests of 1889 are now being received at the College. From the increased enthusiasm by which members of the Union have taken hold of this work, and by the encouraging remarks received from Experiment Stations of the United States on the reports, we feel that the active part taken by the Experimental Department of the College for the a lyancement of this field of labor has been work accomplished in the right direction.



## The Need of a Gymnasium at the O. A. C.

There is no one employed by the Government at the O. A. C. who knows the wants of a gymnasium for the use of the students more than I do. It is now nearly ten years since I commenced to give instructions in drill at the College and all that time I have had to put up with whatever place I could find amongst the farm buildings to give the students a little gymnastic work. I worked hard with the idea that a suitable building would be put up for the students, as promised by the different Ministers of Agriculture for the past nine years, and it was with that understanding that I stuck to my post and worked on, but yet no gymnasium; and if there is one thing needed more than another at the Ontario Agricultural College, that thing is a good gymnasium, where the young men could be properly trained in gymnastic work; and more especially is it needed at our College which is situated so far from the city, and where the students find it impossible to get down to the city for any amusement during the long winter evenings. I feel certain that there are very few institutions situated as

our College is, without having a gymnasium, and I think that the physical education of our young men deserves the greatest attention; but I am sorry to say that there are a great many people who are anxious to cultivate the mind at the expense of the body, but this is a great mistake. There are others who, by an absurd infatuation, look at their own constitution as a measure of those of their sons, and because they themselves in advanced life can support confinement and intense application with little injury to health, they conclude that their sons can do the same. vantages of a sound hody are incalculable for the individuals themselves, their friends, a. I their posterity. Body and mind ought to be cultivated in harmony, and neither of them at the ex-Health should be the basis of early educapense of the other. tion, and the development of the body will assist the manifestations of the mind. Gymnatic exercises may be established for all ages and for all classes of society. It may, perhaps, be unnecessary to remark that hygiene and physical training are concurrent subjects, and that one is incomplete without the other; in fact the students who take an active interest in physical exercises will become alive to the importance of developing all the faculties of the body and mind to the highest standard, when they find that the subject of physical exercises covers a vast field, including much more than is generally understood by the term; that it means more than making the muscles hard and strong; more than depth of lung; more than capacity for endurance, that it is the adapting of the human body for all its possibilities, they will naturally and of their own accord turn their attention to hygiene, which will then become to them a living fact of vital importance. Heretofore the physical training at the College has been of very little use to the students owing to the absence of a gymnasium, and it it is to be hoped that the Government will see its way clear this coming spring to erect a suitable building where the students can have a thorough course of physical training.

The building should be 150 x So. The windows in the building should be placed as high as possible and as many as can be put in. There should also be one large window at one end of the building the other end being a dead wall. They should all work on pivots.

The building should be properly heated and ventilated, and should contain the undermentioned apparatus, viz.:-

Horizontal ...ars, Parallel Ilars, Trapeze, Flying Rings, Row of side Rings, Ropes and Ladders, Chest Machines, Rowing Machines, Vaulting Bars, Indian Clubs, Dumb Bells, Bar Bells, Single Sticks, Foils, Masks, Vaulting Horses. There should also be a large bath placed in the basement of the building with lockers all around for the students to place their gymnastic suits in. A building such as I have spoken of could be erected for about \$3,000.

W. CLARK, Drill Instructor O. A. C.

## Robert Murray Soule, B. S. A.

A deep long shadow fell upon the College when tidings came on the evening of December 9th, announcing the death of Robert Murray Soule, who took his degree of B. S. A. only a few months ago, as all the students of the second and third years will very well remember.

far from the city, and where the students find it impossible to get down to the city for any amusement during the long winter evenings. I feel certain that there are very few institutions situated as 1881. He entered the College in 1886, completed his course as