

nary surgeons. The course extends over three years, and there are thirty students this year—ten for each year's course. The other departments are respectively for original research work, the preparation, testing, and distribution of vaccines (for which purpose many kinds of animals are kept on the place), and the administration department. The vaccines for anthrax, redwater, gall-sickness, blue-tongue, and black-quarter (blackleg) were shown, also a powder which has been proved to be a very effective remedy for wire-worms in sheep. After seeing many features of the microscopic work carried out in the different laboratories and also numbers of the animals on which new vaccines were being tested, I was not surprised when told by Dr. E. V. Cowdray, of the Rockefeller Research Institute, New York, who had been engaged in research work for six months at Onderstepoort, that he did not think there was any college, even in America, which was doing greater service for the farming community of the country. Large quantities of the vaccines and powders are despatched every week for distribution to farmers at very small cost, each remedy being accompanied by printed matter giving very complete instructions and advice as to treatment.

MANURIAL EXPERIMENTS.

A visit to the Government Experimental Farm and School of Agriculture in the Transvaal revealed that institution to be somewhat like a combination of our Ruakura Farm of Instruction and Lincoln College. Mr. Thomas D. Hall, of the Experimental Division, showed me results of fertilizer experiments on maize, tefi, and potatoes. The general conclusions drawn from these were that, although light applications of some nitrogenous fertilizer are occasionally beneficial in the early stages of growth, the phosphatic constituent of any mixture of fertilizers is the only one that pays with certainty, and that in almost every experiment the application of superphosphate, 300 lb. to the acre, without any other fertilizer, had produced the best results. The success of this fertilizer was especially noticeable in the potato crops, the size and cooking-qualities of the potatoes from the plot receiving superphosphate at the rate mentioned being the best. Moreover, the value of superphosphate was apparent on crops of maize and clovers not treated with fertilizers that year, but where other crops on the same ground had received an application in the preceding season. Indeed, growth on those plots where superphosphate had been applied for the previous crop was better than on any of the others.

CLOSE SETTLEMENT.

Close settlement is being developed in the Transvaal by the sale of Government sections of from 50 to 80 acres situated along the bank of a river, each owner of a section having grazing-rights on the "common land," situated adjacent to the sections at a farther distance from the stream. A visit was paid to one of these settlements near the Mooi River, and also to a similar settlement in the Potchefstroom district, provided with water by means of irrigation canals leading away from the Klipdrift Dam, built by the Government at a cost of £80,000, each canal being five miles long. There are eighty families located at this particular settlement.