

Mr. Campbell did a faithful but somewhat discouraging work of addressing meetings and giving instruction against both active opposition and stolid indifference. The real merit of the cause, however, in time appealed to thinking men, until during the last few years there has been an increasing demand for Mr. Campbell's services in addressing meetings of fruit-growers, dairymen and other classes of farmers, who realize that a better system of roadmaking is much needed, and that Mr. Campbell is the proper man to impart the instruction. In all, Mr. Campbell has addressed over 500 public meetings, with one result that fully 300 municipalities have purchased roadmaking machinery, whereas only a few years ago such a machine was not thought of in Ontario, except the plow, pick, shovel and scraper. The town of Woodstock prides itself on owning a road roller, stone crusher, and machine grader. The town of Windsor has appropriated \$200,000 for street improvement. These and many other centers are realizing that good roads mean profit, while bad roads mean ruinous loss. Mr. Patullo claimed to be able to see the abandonment of all roads on correct principles. The speaker recommended the plan of having properly-qualified road engineers appointed over certain townships, districts or areas, and maintaining his services so long as he does his work properly. When such a system becomes general, with proper financial support in the form of taxation, our roads will gradually improve along permanent lines.

How to Obtain Good Roads was the subject assigned to Mr. A. W. Campbell, Provincial Road Commissioner, who contended that less talking and more action was necessary. What was left for the Congress to do was to resolve themselves into an organization for work. Most of people have become convinced that good roads are better than bad ones. The change from poor to good roads must be gradual, without attempting to bring about a sudden transformation. In Ontario, for years has been spent annually \$4,000,000 in money and labor without system, organization or management. Such an extensive expenditure for such an important work should be made under the best and uniform direction. In order to secure good roads the old system of many pathmasters, with as many ideas of doing the work, must be done away with. What is needed is organization and a conclusion as to the best system to follow. It is not desirable that a rule be made to apply to the construction of all roads, but rather that the correct principles of road-making be applied in the making of roads to fill their desired purpose and with the material at hand and the finances at command. The object should be to have all work done with a united and definite purpose.

Following Mr. Campbell, the meeting was addressed by W. H. Moore, St. Louis, Mo., who contended that every voter should be able to write his name and own \$150 on which he pays a tax. What is needed is organization, education, agitation and legislation. Mr. Moore advocated State aid for road building. It was pointed out that in the United States there was spent last year for improvements in rivers and harbors \$20,000,000 of public money, whereas the 3,500,000 miles of country roads received \$8,000 all told. In order that country roads get their due share of appropriation, thorough organization is needed, such organization as is common in election campaigns. The efforts of such organization should be directed towards gaining the sympathy and support of the two great political parties. Then and not till then will the matter of improved roads receive its due attention.

Good Roads—Why? How? What? When? was spoken to by H. S. Earle, Chief Consul, Michigan Division L. A. W. As the time of the Congress had been nearly exhausted when Mr. Earle was called upon, he was compelled to abbreviate his remarks. In answer to why? it was claimed that because we should. This is to be accomplished by taxing every property into a general road fund. The farmer will put in his dollar along with the city man's dollar, which goes to the improvement opposite his farm. The other farmers put in their dollar in the same way, with the result that each man has not only the good road opposite his own property to drive over, but he has a good road all the way to his market town. Mr. Earle recommended the use of convict labor and unemployed men, properly directed under a correct system. He contended that it was not true that the world owes every man a living, but it does owe every man an opportunity to make a living.

Resolutions Adopted. 1. Whereas the United States Government in the earlier days of the Republic espoused the cause of road improvement by building and maintaining national roads, and whereas aid has been given to the Western railroads both by land grants and bonds, and whereas it is the well-established and long established practice of the general government to aid in transportation over water by deepening the rivers and har-

bors and the water communication between the great lakes, therefore be it resolved: That the same liberal policy be extended to the overland transportation upon the common highways of the people, and that every reasonable aid should be extended by the United States Government and State Government to reduce the cost of transportation upon these highways.

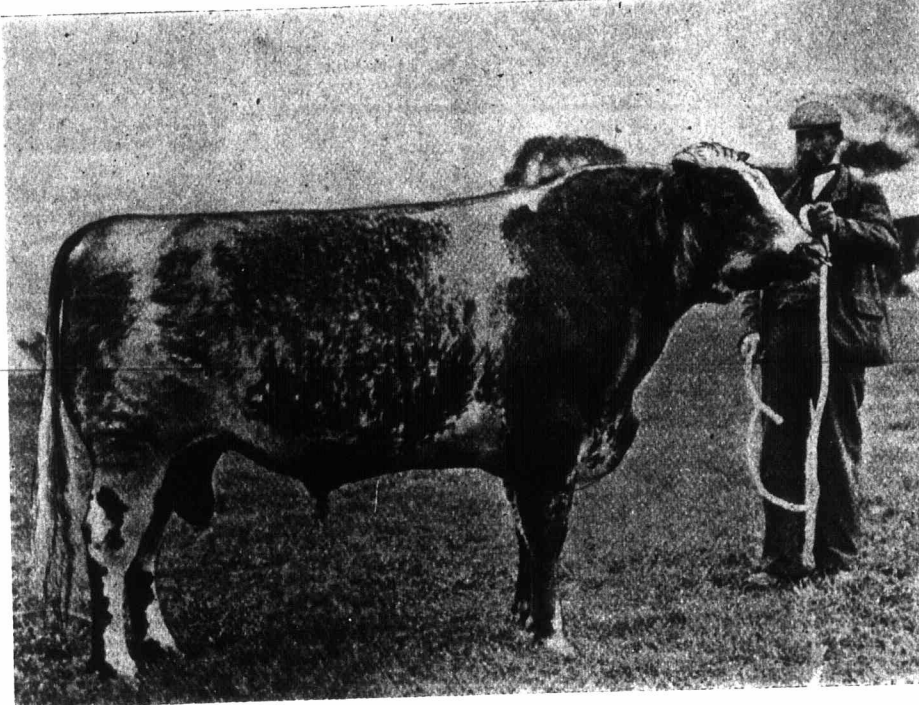
RESOLVED.—That the good work heretofore accomplished by the Office of Public Road Enquiries of the United States Department of Agriculture should be extended as rapidly as possible, and that every State in the Union should be reached not only by the literature published by that office, but by public addresses and object-lesson roads, produced by the most skillful experts in the most economic and scientific manner.

RESOLVED.—That State and local associations for the encouragement of road improvement should be formed in all parts of the country, and that members of Congress should be requested and urged to further increase the annual appropriation to be devoted to this purpose.

2. Whereas, one of the great questions of the present day is how to improve our public highways, and in its discussion we are confronted by another, to wit: What is the best way of utilizing our prison labor so as not to come violently in contact and in competition with honest and free labor in any of the several branches of industrial pursuits; now therefore be it

RESOLVED.—That we, the first International Good Roads Congress, do wish to declare that we are in favor of utilizing to the utmost possible extent prison and convict labor in preparing road material and placing same on the highways, so far as it can be done without interfering with good government and honest labor.

3. **RESOLVED.**—That we recognize the deep interest manifested by the Southern Railway Co. and



ROYAL DUKE.

First prize and champion at the Royal Show, 1900.
PROPERTY OF HER MAJESTY THE QUEEN.

other railway interests in sending representatives to this convention, and we most earnestly indorse the importance of their suggestions in having the leading highways of the State constructed and improved so that they will run at right angles to railways, and thus facilitate most cheaply the means of communication between the railways and the common roads of the country.

A committee consisting of Hon. Martin Dodge, Director Office Road Enquiry; Andrew Patullo, President Ontario Good Roads Association; and Col. Carl Moore, of St. Louis, Mo., was named for the purpose of conferring with the Executive Committee of the Inter-State Good Roads Association with a view to effecting a permanent national or international organization in the interests of better roads.

The Congress closed with a hearty vote of thanks to Mr. H. S. Earle, chief consul, Mich. Division L. A. W., for his efficient and faithful work in bringing together the convention.

A Pin-Driving Punch.

Sir, The following is a description of a handy little tool called a pin driver, used for driving the pins out of any old building when tearing them down. It is made as follows: Take a piece of iron or steel about one foot long and 1 in. in diameter, and make a hole in the one end to fit over the pointed end of the pin and drive with a hammer.

Ontario Co., Ont.

WM. WILLIAMS.

When you get older,
My son, you won't let
On a thing you have tried it,
For Nature is coy.
And she likes to upset
Your scheme when you think you've applied it.
—*Rural New Yorker.*

More Biographical Notes of O. A. College Graduates.

Since we were not able to give biographical notes of all the members of the 1900 O. A. C. graduating class in our last issue, we continue the list herewith:

A. J. WAGG, B. S. A.

was born at Goodwood, Ontario Co., in 1876. The following spring his parents and family moved to



C. M. READE, B. S. A.

Manitoulin Island and bought a farm. Mr. Wagg resided there until the opening of College in 1896. He took two years at College, passing all examinations and obtaining his diploma at the close of the second year. He then went to work in a cheese factory in Norfolk Co., remaining there until the Guelph Dairy School opened in Jan., '99. He took the full Dairy Course, passing all examinations with first-class honors and obtaining second place in the Proficiency list. In May of the same year Mr. Wagg took charge of a cheese factory at Bar River, in Algoma District, until the College opened in the fall of '99, when he returned to complete his course. In the final exams. for B. S. A. degree he took first place in special subject, taking first-class honors in the honor subject, "Dairying," and in "Bacteriology." Mr. Wagg is now running a creamery at Mindemoya, Manitoulin Island.

C. MOORE READE, B. S. A.

was born at Markham, Ontario, December 17th, 1877. Toronto, however, very soon became his home, and there he received his early training in the Wellesley public school. Ever since his early youth he has had a liking for nature-study and country life. In 1893 he made an agreement with a farmer at Leamington, Ontario, and was initiated into farming through the straight and narrow gate. In October, 1895, he entered the College, and received the Associate diploma in June, 1897. In September, 1899, Mr. Reade joined the present graduate class and took the Biological option. It is his intention to further improve himself in biological work. He has accepted an assistantship in zoology, under Professor Reighard, of the University of Michigan, and will begin work with him in September, but at present is assisting at the Guelph College in bacteriology.

G. A. MacINTYRE, B. S. A.

was born in Renfrew, Jan. 26th, 1879, of Scotch parentage. His grandparents were among the earliest settlers in this part. Previous to going to Guelph, Mr. MacIntyre spent one year in Renfrew High School, taking English and Science. He has always worked at home on the farm, with the exception of last summer, which was spent in the Renfrew creamery, that he might be qualified to make dairy-keeping his specialty in the graduating year. At present Mr. MacIntyre intends to pursue dairy farming. His father is a breeder of Holstein cattle, and he intends devoting his attention along that line.

To Build up Old Land.

A sure way to bring up a farm is to start a 4-year rotation, growing clover and other crops that may seem best. Keep stock to eat the products. Save all the manure. Sell wheat and buy bran to feed with corn, and soon you will have to tear down your barns and build them bigger. Pursue the opposite plan from the one that has run the farm down somewhat—put back more than you take off. Clover growing, cement floors, purchased feed, etc., will enable you to do this, and you can make it pay while you are doing it, and better later. I should try harrowing the low permanent pasture thoroughly and sowing seed and rolling it in. Do not overstock after grass gets started. —T. B. Terry, in *Practical Farmer.*