

be given of the salient points brought out in the addresses and discussions. To the Deputy-Minister of Agriculture for Ontario, C. C. James, who shared in the closing session, the magnificent success of the convention must have been a cheering revelation.

Enthusiastic votes of thanks were passed to Prof. Klink and Mr. McKenney, for their efforts in promoting the success of the convention.

#### OFFICERS ELECTED.

President, J. O. Duke, Ruthven, Ont.; 1st Vice-President, Harrison Smith, Ruthven; 2nd Vice-President, Patrick Mareintette, Walkerville; Secretary, A. McKenney, B.S.A., Essex; Treasurer, Harry Coatsworth, Ruthven.

#### THE PRIZE-LIST.

Prof. L. S. Klink made the awards as follows, 10 ears being shown in each class:

1. Best 10 ears Bailey, Butler and Howey—1, R. Rogers, Kingsville; 2, Geo. Arton, Olinda; 3, Jas. Martin, Amherstburg.
2. Leaming, Pride of the North, King of the West, Yellow Gourd Seed—1, A. L. Arner, Arner; 2, Jas. Martin; 3, P. J. Wigle, Kingsville.
3. Reed's Yellow Dent, Iowa Gold Mine—1, A. H. Woodbridge, Kingsville; 2, Wm. Woodbridge, Kingsville; 3, P. J. Wigle, Kingsville.
4. Any other distinct variety, Yellow or Red Dent, not mentioned in this list—1, J. H. Coatsworth, Ruthven; 2, P. J. Wigle, Kingsville; 3, S. Gunning, Ruthven.
5. White-cap Yellow Dent (large)—1, George Coeghill, Kingsville; 2, E. E. Wismer, Essex; 3, A. E. Wismer, Essex.
6. White-cap Yellow Dent (small)—1, A. E. Wismer; 2, E. E. Wismer; 3, P. Fox, Leamington.
7. White Gourd Seed, Silver Mine, any other distinct variety of White Dent—1, C. J. Neville,

Ruthven; 2, J. O. Duke, Ruthven; 3, B. Cohoe, South Woodslee.

8. Eight-rowed Flint, White, Yellow or Red—1, John Jones, Leamington; 2, M. G. Bruner, Olinda; 3, Walter Thompson, Dresden.

9. Twelve-rowed Flint, Yellow or White—1, Ed. Smith, Ridgetown; 2, Wm. Copeland, Kingsville; 3, Harry Matthew, Kingsville.

10. Best single ear of corn in the show, any dent variety—1, J. H. Coatsworth, Ruthven.

Corn-judging competition, open to farmers and farmers' sons—1, Alvin Bunn, Ruthven; 2, Fred Ure, North Pelton; 3, J. H. Coatsworth, Ruthven.

#### Forthcoming Events.

Winnipeg Industrial Exhibition—July 10th to 17th, 1909.

## Instructive Sessions at Poultry Institute.

The importance of a thorough knowledge of the poultry industry was made clear at the Poultry Institute, held at Ontario Agricultural College, Guelph, last week. The programme comprised scientific men and practical poultrymen. The talent was highly expert, and the long lists of questions asked at the various sessions brought answers that left no doubt as to a genuine knowledge of the subject.

All that was wanting to make this one of the most valuable meetings in the interests of poultry-raising was a large audience of those who could make larger profits than they are making, if they but had a wider knowledge of their business. Space does not permit of a complete report in this issue of "The Farmer's Advocate." Future issues will contain a more lengthy digest of addresses, and the accompanying discussions.

To those who are acquainted with expert exponents of poultry lore, the value of the sessions is made evident on mention of the names of those who took part. The list included Miss M. Yates, of the O. A. C., an adept at fitting birds for market, as well as trussing and packing; Dr. George Morse, one of the leading men in America on animal diseases, now connected with the Bureau of Animal Husbandry, Washington, D. C.; T. F. McGrew, a successful poultryman, of Scranton, Pa.; Prof. Chas. K. Graham, brother of the O. A. C. Professor, and in charge of the Poultry Department at Hampton Agricultural Institute, Hampton, Va.; Victor Fortier, of the Poultry Department at the Central Experimental Farm, Ottawa, Ont.; Geo. A. Putnam, Superintendent of Farmers' Institutes, Toronto, Ont.; and such practical men as Wm. McNeil and Richard Oke, of London, Ont., and Wilbur Bennett, of Peterboro. L. H. Baldwin, of Toronto, made an acceptable chairman, while Prof. W. R. Graham was always on hand to ask pertinent questions of interest to those engaged in raising poultry, or to enlighten those who wished to know of the results of investigations carried on at the O. A. C. The evening meetings were made exceedingly interesting by the free use of lantern slides, while, at the morning and afternoon sessions, specimens and demonstrations made the problems dealt with as clear as is within human reach.

However, despite the presence of scientists and experienced practical men and women, the problem of white diarrhea in chicks is still unsolved. All were forced to admit it was commonly found, and few doubted that the damage was done by coccidiosis germs, but no satisfactory explanation was offered as to the differences in loss of chickens from similar eggs when hatched under different conditions. Speaking from a scientific standpoint, Dr. Morse maintained that there was no possibility of artificial incubation giving a greater percentage of loss than was found in hen-hatched eggs, though practical poultrymen averred that such was the case.

Attention to poultry, with the object of high average egg production, at the expense of quality for table purposes, was pronounced by Miss Yates as one of the hindrances to greater profits from poultry-raising in Canada. Culls and uncommonly inferior birds composed the bulk of the marketed stock. It seemed to be forgotten that all birds did not make good eating. Just as there are dairy and beef breeds of cattle, so are there nervous and lean birds, and others of a plumper form, and more easily fattened. In Canada there was a growing market for such table delicacies, at high prices. In order to meet this demand, it was necessary to have a meat variety, and to study methods that gave profitable returns. In outlining how excellent birds could be reared for market at low cost, Miss Yates recommended free use of crumbs and waste from the table and kitchen. Too many farmers gave the feed to the hogs. She advised inducing a neighborhood to take up a particular breed, and by subsidizing the kind the high-class trade developed, and being able to meet an order sent by telegraph on short notice, to make the district famous for the production of such birds. Co-

operation was as essential in raising chicks as in other branches of the farming industry.

Q.—How are these table breeds as layers?

A.—Some of the very best table fowls make a very poor showing in egg production. A flock averaging 125 or 140 is good, but many have to be satisfied with 100 eggs in a year, or less.

Demonstrations in killing, plucking, shaping, trussing and carving were given by Miss Yates. While the work was done in comparatively short time, the prevailing opinion was that, for the average individual, such methods would be inadvisable. When the Canadian demand for neatly-dressed poultry becomes keen, and prices are increased accordingly, no doubt poulterers will rise to the occasion.

Q.—Do chickens, after being killed, improve with age, the same as a leg of lamb or a ham?

A.—Yes, probably for a week. I would not want to eat them too soon after being killed.

Mr. McGrew.—Our rule is to eat fowl within twenty-four hours after killing, or not for three days or more.

Diseases of poultry, with special reference to liver diseases and what is generally known as white diarrhea, were dealt with by Dr. Morse. It was pointed out that there were two ways of disposing of such subject: One, the diplomatic, which he was not capable of adopting; and the other, a square discussion from practical and scientific knowledge. He did not hesitate to charge poultrymen who worked on the theory that overfeeding and improper feeding were the cause of the increasing mortality from liver diseases in poultry as being obstructionists. Scientific men had located the germ that caused these diseases, and, as long as practical men refused to recognize the fact, so long would the diseases continue to increase. Any disease which affected the liver increased the whole body, because, in addition to producing bile, that organ manufactured enzymes, the purposes of which were the dissolution, transformation, precipitation and destruction of toxins brought by the blood largely from the intestines to the liver.

Q.—What are toxins?

A.—Chemical poisons that result from life-changes in organisms. They have the same effect as if poison were introduced into the system.

The importance of keeping the liver strong and the birds healthy, in order to combat disease and germs, was discussed, and diseased livers of various natures displayed in alcohol. The co-founding of diseases in poultry was deplored. No man could diagnose from data ordinarily supplied. It was necessary to make a microscopic examination of tissue and germs. Among the disease germs that might be found were tuberculosis, coccidiosis (white diarrhea), cercomonadosis, leukemia, sarcomatosis, carcinomatosis, aspergillosis, and the non-infectious disease, gout. All of these are necrotic liver ailments.

The condition of the poultry industry in Quebec was outlined by Mr. Fortier, who urged early hatching and special attention to selection, and who gave the results of experiments conducted at Ottawa.

By means of lantern slides, Mr. McGrew traced out the origin of our common fowls, claiming that, instead of all varieties springing from Galus Bankiva, as Darwin maintained, there were three races intermixed. The vast improvement of common breeds during recent years was shown.

Less expensive poultry houses than were commonly advised by poultry experts, and the absence of the dropping-boards, and daily cleaning of pens, was the trend of remarks by Prof. C. K. Graham. Many people erred in having too much cash locked up in buildings and equipment. He was not sure that winter egg production was the most profitable. "You have to hatch in March," said Prof. Graham, "to catch the best market. Then, why hatch an egg because you hope to make double profits in a few months, when you can sell immediately at double what it has cost to produce the egg." It was claimed that, on the average, it took four eggs to produce one chick.

Ideal pens of cheap construction, and on the fresh-air system, were shown on canvas, and instructions given as to the building of houses that would meet the requirements of the average farmer or a man on a small piece of land.

G. A. Putnam, Superintendent of Farmers' Institutes, Toronto, dealt with the development of poultry-raising on the farms throughout the Province. Until recently the Farmers' Institutes had not paid much attention to the discussion of poultry questions; in fact, prominent members of institutes had at times expressed a distinct aversion to the discussion of such trivial subjects. Recently, however, the poultry spirit has developed among the farmers. Many of them have become enthusiastic poultry-raisers, and now many institutes have special poultry meetings, at which expert poultrymen or women lecture on some phase or phases of the poultry industry. This has caused a rapid improvement of the farm poultry business, but still greater improvement may be looked forward to in the near future. Through the Women's Institutes already organized, and the local Farmers' Clubs, which are being organized in different parts of the Province, the best methods of housing, breeding, feeding, marketing, etc., are kept before the people. It is doubtful if poultry-raising as an exclusive business would be a success on most of the Ontario farms, but each farmer should receive a large profit from a flock of 100 or 150 hens treated as a side line. The work of caring for poultry is light, and can be performed by children who oftentimes have no other regular employment, and who will nearly always develop a love for the work if they are given sufficient interest in it. The profits from farm poultry may be greatly increased by co-operation in buying and selling stock and products.

A most encouraging address was delivered by Wilbur Bennett, of Peterboro, Ont. Mr. Bennett is but a young man, working on his father's farm, but he has achieved success with poultry. His conditions are similar to those on the average Ontario farm, and his success should be an inspiration to the farm boys of Ontario. After attending the short course in poultry at the O. A. C. three years ago, he decided to go more extensively into poultry-raising at home. When he returned home he took with him some pure-bred Buff Orpington eggs. He utilized his home stock and buildings, which were but ordinary, and raised some pure-bred stock of high quality. The next year he built some cheap new houses, installed some incubators and made some brooders, gradually increasing his stock as his means permitted, until last year he kept 350 birds, and made a profit of \$450. He spends about three hours a day caring for his poultry, and the rest of his time at general farm work. He aims to have his hatching all done by the first of May. He hatches a sufficient number of fowls to obtain enough pullets to replenish his stock. The cockerels are sold at Montreal as broilers and roasters. The latter he crate-fattens and sells in the late fall and early winter, receiving 10c. to 12c. per pound, live weight, f.o.b. Peterboro. He receives enough from the sale of all his cockerels to pay the cost of rearing his pullets. Eggs are shipped regularly to Montreal, this winter bringing as high as 50c. per dozen.

The poultry occupies only five acres of land, and is producing more than the other 95 acres of his father's farm, while most of his time is spent at farm work. This is an experience which should attract the attention of the average farm boy, and an example which is worth copying by boys in similar situations throughout the Province.

T. F. McGrew, from Scranton, Pa., gave some timely hints to poultrymen in an address entitled, "How to Succeed with Poultry." To succeed in any business a man must obtain as much education as possible along the line he intends to follow, and the poultry business is no exception. Perhaps the most valuable asset which can be possessed by a poultryman is a liberal amount of what is known as "common sense." A poultry-