

scientific terms with an ease that makes his meaning clear and inspires confidence in his knowledge. Messrs. House, Hershiser and Clark, of New York State, also added much to the helpfulness of the sessions.

STRICTER LEGAL DEFINITION OF HONEY RECOMMENDED.

Of the many valuable addresses, one of the most important was on the adulteration of honey, by Prof. A. McGill, Chief Analyst of the Inland Revenue Department, at Ottawa. With some simple laboratory apparatus, he demonstrated to the convention chemical tests for the purity of honey. He mentioned some of the more common adulterants, and advised that this association recommend a much more complete legal definition of honey than at present exists. Adulteration is rare among producers, but there are certain manufacturers who are putting upon the market imitations, labelled dishonestly, though not illegally. The stricter definition might get at these fellows; and, as A. C. Miller suggested, we might apply the rule they have in the United States—not allow them to use the word "honey" at all on their label. The resolution passed by the convention is as follows:

"Recognizing the importance of legal definition in the case of honey, this Association respectfully recommends the adoption of the following definition, as embodying the present state of our knowledge regarding Canadian honey. Honey is the product of the work of bees operating on the nectar of flowers and other saccharine exudations of plants, and contains not more than 25 per cent. of water, or more than 10 per cent. of sucrose (cane sugar) nor less than 60 per cent. of invert sugar. It does not give a blue color with iodine (absence of starch syrup), nor a red color with aniline acetate (absence of artificial invert sugar), nor a dark color with Ley's reagent (ammoniacal sugar), nor a marked precipitate of dextrin on adding large excess of alcohol (absence of glucose syrup)."

FOUL BROOD AND OTHER BEE DISEASES.

Of equally vital importance, from the other end of the business, is the matter of bee diseases, particularly foul brood. All the inspectors of Apiaries reported quite a lot of the disease scattered through the country, but they seem to be doing good work, not only in stamping out disease, but in educating the smaller producers by this contact with live men. The convention expressed its appreciation of the help the Ontario Department of Agriculture is giving this most important industry, and thought that, like the Thanksgiving turkey, it suggested "more." Every person who owns bees should know the symptoms of foul brood and its treatment, both of which have been frequently described, and should constantly watch for it. Now comes black brood, whose progress through an apiary is so rapid that it may be undetected in the fall, and have 100 colonies practically wiped out before next June. It is said to be more easily treated than American foul brood, but it is so fearfully rapid when once started that prevention is far more important than cure. That, also, is easy, according to Mr. House. Simply requeen all black bees with Italians. While black bees are an easy mark for the disease, Italians fight it, and clean up their own combs.

SIDE-LIGHTS ON MARKETING.

That one is farthest from the market who has nothing salable, said Mr. Miller, on the above subject, to show that a profitable article must be of extra quality and cheaply produced. Uniformity of flavor, package and label are much to be desired to hold a retail trade. Blending flavors is practiced to a considerable extent, but with our fine Canadian flavors, that is hardly necessary. Salesmen are born, not made, yet much can be done by every man to increase the sale of honey in his own neighborhood. Jobbers are not a reliable source of information regarding prices. The price committee in this Province has done much for the beemen in that line. They get crop reports as early as they can, then advise as to the probable price; and in the several years they have done this, have seldom missed. In this connection, R. F. Holtermann read a paper on the increase of importation of honey into Canada. He showed some alarming figures as to the tremendous increase of this importation in the last few years, and pointed out that, at the price at which so-called British honey was being sold, there must be something shady about the way in which it is got through the customs.

IMPROVED MACHINERY.

The best in this line is the gasoline engine for the extractor, and the uncapping machine. Re the former, Mr. D. Nolan said he would as soon go back to the nonreversible extractor as go back to the hand-turned extractor. A one-horse engine can be procured from some of our Canadian manufacturers at a cost of from \$65 up. The uncapping machine is recommended by those who have tried it as being not only a saving of time, but a means of keeping combs perfectly straight.

System, said Mr. Miller, is one of the bee-

keeper's assets. Every man must have his system, and whatever ideas he gets at conventions or elsewhere must be fitted into that system. It pays to have special clothing cool and airy, yet closed at wrists and ankles to keep out bees. Then, there are clipping scissors, smoker and hive-tool. To get supers, etc., from the yard to the house, he recommended the litter-carrier principle, with overhead track. Hives should not sit close to the ground in spring; the damp air that settles close to the ground is injurious.

OFFICERS ELECTED.

President, Wm. Couse, Streetsville; First Vice-President, W. J. Craig, Brantford; Second Vice-President, Dennis Nolan, Newton-Robinson; Secretary, P. W. Hodgetts, Dept. of Agriculture, Toronto; Treasurer, Martin Emigh, Holbrook; Auditor, J. H. Thomson. Directors.—District No. 1, A. Dickson, Lancaster; No. 2, A. A. Ferrier, Renfrew; No. 3, A. M. McLachlin; No. 4, R. Lowey, Cherry Valley; No. 5, Jas. Storer, Lindsay; No. 6, Wm. Couse, Streetsville; No. 7, J. M. Switzer, Orangeville; No. 8, Jas. Armstrong, Cheapside; No. 9, W. J. Craig, Brantford; No. 10, D. Chalmers, Poole; No. 11, W. A. Chrysler, Chatham; No. 12, D. Nolan, Newton Robinson; O. A. C., T. D. Jarvis, Guelph.

In a paper on "Measures to Prevent Swarming," Mr. O. L. Hershiser, of New York State, applies the principle that a colony having a queen of the present season's rearing will not swarm, and requeens all stock at the opening of the season by queens reared from his best stocks in fruit bloom. He says: "None will doubt that these young, vigorous queens will more than repay all the trouble and expense of their rearing in the additional strength and productiveness of the colony. We have here a practical and effective plan of swarm control—one that requires no extra devices or special hives, with not much work, and that done out of the busiest season."

Some members doubted the sureness of the rule laid down, that the presence of a young queen prevents swarming.

REVISION OF AMERICAN STANDARD OF PERFECTION.

The American Poultry Association has issued a general invitation to every fancier who has at any time bought a Standard of Perfection, to offer criticisms of said Standard, and make suggestions for its improvement. Communications may be sent to Fred L. Kimmey, Morgan, Park, Ill., and will be by him referred to the Revision Committee of 1910, which meets in April, 1909, and suggestions and criticism should reach the Secretary by that time, or earlier.

U. S. CROP REPORT.

The Bureau of Statistics of the United States Department of Agriculture has made preliminary estimates of the production of the principal crops of the United States, a summary of which, with comparisons, is as follows:

Crop.	1908.	Av. 5 Yrs.
Corn, bush.	2,642,687	2,574,143
Winter Wheat, bush.	425,940	413,188
Spring Wheat, bush.	234,080	244,517
Total Wheat	660,020	657,705
Oats, bush.	789,161	916,931
Barley, bush.	167,482	144,426
Rye, bush.	30,921	30,419
Buckwheat, bush.	15,648	14,602
Flaxseed, bush.	25,717	26,808
Rice (rough), bush.	22,718	
Potatoes, bush.	274,660	286,674
Hay, tons	67,743	59,907
Tobacco, pounds	629,634	722,744

The above crops, which represent approximately 70 per cent. of the value of all farm crops, are this year, in the aggregate, about 3 per cent. greater than in 1907, and 2.4 per cent. greater than the average of the preceding five years.

Statistical data relating to other crops on November 1st, with comparisons, are as follows:

Crops and Nature of Data.	1908	1907	1906
Apples production, per cent.	43.4	32.1	69.1
Grapes	82.2	78.4	83.3
Pears	73.3	41.3	74.3
Cranberries	55.1	78.2	84.8
Sugar Beets	86.0	90.4	95.5
Oats, av. weight, measured bush.	29.8	29.4	32.0

VICTOR H. OLMSTEAD,
Chief of Bureau.

Ontario is being represented at the annual meeting of the American Association of Farmers' Institute Workers, in Washington, D. C., by President Creelman and Prof. C. A. Zavitz, of the Ontario Agricultural College. The President also will attend the convention of the Association of American Agricultural Colleges and Experiment Stations, and Professor Zavitz the annual meeting of the American Society of Agronomy. Prof. B. Harcourt, of the Department of Chemistry, is in attendance at the meeting of the American Association of Agricultural Chemists, also at Washington.

GROWING ATTENDANCE AT N. S. AGRICULTURAL COLLEGE.

The fourth session of the Nova Scotia Agricultural College, at Truro, commenced on November 3rd. At the time of writing there were enrolled forty students, most of whom are from Nova Scotia, but also a few representatives from New Brunswick, Prince Edward Island, and Great Britain. Three years ago, the College opened with an attendance of 15, which, considering the fact that the agricultural constituency is not large, was thought to be a good beginning. As the present enrollment of forty promises, in the course of the term, to be increased beyond fifty, it is evident that the College is making a healthy growth. The Maritime Provinces are not so essentially agricultural as are the Western Provinces, and, moreover, the young men have strongly tended towards other callings than agriculture. Considering this, it must be regarded that the present enrollment at the Agricultural College is a most satisfactory one.

The most difficult matter to overcome in securing an attendance at the College is the labor problem. In consequence of scarcity and high price of labor, many a student who would otherwise enroll has to remain at home.

The Short Course, held in January, in a large measure meets the needs of this class of men. Last year, one hundred and seventy-five students enrolled in this course; and, for the next course, which begins on January 5th, the enrollment promises to exceed the two-hundred mark.

SITUATION WITH CANNERS.

Are Canadian canning companies dealing fairly with producers of the raw product, with the retailers and with the consumers? For years past complaint has been raised by retailers that canned goods were not supplied them at reasonable cost. At the same time, vegetable-growers were being paid starvation prices, the companies advancing their figures per bushel of tomatoes little, if any, on the plea that increased running expenses would not permit it.

In this connection, the results of the investigations into the canning industry, conducted at Ontario Agricultural College, Guelph, during the season just closed, are interesting. With man-labor at \$1.50 per day, and tomatoes charged at 25c. a bushel, the College men have been able to can at a cost of approximately 16 cents a gallon can. It has also been found possible to average six one-gallon cans from one bushel of tomatoes.

Large canning companies, with extensive plants, and with woman-labor, should be in a position to can tomatoes as cheaply as it can be done at Guelph. But what is the situation? Wholesale quotations run from 26 cents up above 30 cents. Three-pound cans are supplied retailers at from \$1.00 to as high as \$1.27½ a dozen. Under these circumstances, consumption is restricted, and the grower of vegetables given a limited market, without increased returns to make up for increased cost of labor and capital on hand of higher value.

SPEAKERS FOR ANNUAL CHEESE-FACTORY MEETINGS.

The Ontario Department of Agriculture and the Dairymen's Associations of Eastern and Western Ontario have been much gratified at the results following the attendance of special speakers at annual meetings of cheese factories during the winter of 1907-08. Dairymen have been more particular this year in following cleanly methods in the production of milk, and have used greater care in cooling and delivering it to the factories. The Department is prepared to continue the assistance offered to dairymen last year, by again sending special speakers to the annual meetings upon certain very reasonable and easy conditions. Applications for assistance at meetings in Eastern Ontario should be sent to G. G. Publow, Chief Dairy Instructor, Kingston; and for Western Ontario to Frank Hens, Bank of Toronto Chambers, London, Ont.

FAIR DATES FIXED.

Nov. 28th to Dec. 10th.—International Live-Stock Exposition, Chicago.
Nov. 30th to Dec. 3rd.—Maritime Winter Fair, Amherst, N. S.
Dec. 2nd to 10th.—National Dairy Show, Chicago.
Dec. 7th to 11th.—Ontario Provincial Winter Fair, Guelph.
Jan. 18th to 22nd.—Eastern Ontario Live-stock and Poultry Show, at Ottawa.

E. H. Reed, B. S. A., who has represented the Ontario Department of Agriculture in Victoria County, with headquarters at Lindsay, has resigned, to go to Regina, as representative for Saskatchewan of the Dominion Seed Branch. He succeeds Harris McFarlan, B. S. A., who has cast his lot with the Garton Seed Co., to represent them in that Province. E. D. Eddy, B. S. A., of the Seed Branch, Ottawa, will attend to the duties in Saskatchewan until Mr. Reed can arrange to go West.