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Bees as Hive-ventilators.

The following item comes nearer the mark than do most fugitive paragraphs concerning bees

It is not generally known, but most beekeepers will inform you that such is the case, that each beehive has a corps of what could properly be termed "ventilating During the hot season these ventilators station themselves at the entrance to the hive and fan the interior with the incessant motion of their wings. These ventilating corps are usually in relays of from four to a half-dozen, and they are relieved at short intervals by fresh workers, who keep up the fanning process. They are kept at work by a sort of patrol of bees, which insures incessant activity on the part of the fanners during the time they are at work. This story may sound gtrange to those who know but little concerning the onderful intelligence of bees, but it is a scientific fact hat has often be authenticated.

It might be said, further, that not only may ventilators be found at the entrance, but also throughout the hive. To "fan the interior" sounds as though the ventilating bees at the entrance were blowing air into the entrance. Instead of that, one can easily tell by holding the back of the hand near the entrance that a stream of air is being forced outward. Instead of only "four to a half-dozen" being seen at the entrance, a much larger number may often be seen .-[American Bee Journal.

THE FARM BULLETIN.

Permanency of Land Values.

An observer, interested in the development of Western Canada, asked us bluntly, says "The Farmer's Advocate," Winnipeg, if the rise in land values during the past five years was permanent, and on being answered in the affirmative, asked how permanent and to what extent permanent. This meant an analysis of the whole real-estate situation. Land is valuable only to the extent to which it produces in response to artificial or man-made conditions. In its wild state the standard of the value of land is its potentialities. Wildranch land is valuable in proportion to the amount of stock it will carry when placed upon it by man, and wheat land is valued in the same manner, substituting wheat for stock. It naturally follows, therefore, that the extent and permanency of the value of lands will depend upon the nature of the artificial conditions and the extent to which they operate upon it. When we classify these conditions and note what are already operating, and what may yet be expected to operate, we are better able to give a reason for our faith in the ultimate increase in value of our farms. These conditions may be enumerated as follows: Improved markets (including transportation facilities), speculators' advertising and investments, a series of good crop years, and the readiness of money to invest in farm lands. These are what might be said to have a temporary effect upon prices, for it is easily conceivable how these all might become non-effective. So far in our development these conditions have had most effect in fixing values, but each year sees the further establishing of conditions that give greater permanency to values, and it is upon these that we build our confidence. These may be enumerated as follows: The increase of population and the diminishing quantity of free land, increased markets, and improving transportation facilities (including country roads), more careful cultural methods, resulting in the maintaining of the fertility of the soil; the addition of valuable work upon the land, such as fencing, building, tree planting, etc. And among those influences that are destined in the near future to operate are the electrical railroad, rural delivery of mails, telephones, and the caused by these influences may be said to be permanent, and in proportion to the extent to which they are responsible for the rise in land values, these values will be permanent.

Dr. Judson F. Clark's Resignation.

Dr. Judson F. Clark, Ph. D., has resigned his position as Provincial Forester for Ontario, to undertake the management of a lumbering concern in British Columbia, with headquarters in Vancouver, where he will make his home after Dec. 1st. For some time Dr. Clark has been officially serving in the Department of Agriculture, to which he was transferred from the Department of Lands, Forests and Mines, which has to do with the public forest domain. It was understood last spring that he declined the Chair of Forestry at Yale University in order to be available for the proposed Chair of Forestry in the Provincial University. However, so far as we can learn, the Ontario School of Forestry proposal seems to be still very much "in the air," pending the inception of a policy of utilizing technically-trained forestry experts in the administration of the public forest domain. Dr. Clark is a native of Prince Edward Island, and a graduate of the Ontario Agricultural College, subsequently taking the degree of Ph. D. at Cornell, where he also was lecturer on forestry. He afterwards joined the United States Bureau of Forestry, where he remained until he accepted appointment under the Ontario Government. His resignation will take effect on Nov. 15th.

Farmers' Institute Conference.

Mr. Geo. A. Putnam, Supt. of Farmers' Institutes for Ontario, has instituted a new feature for the special equipment of speakers in that work, viz., a conference of Farmers' Institute lecturers and officers, to he held at the Ontario Agricultural College, Guelph, Nov. 20-23. It is also designed to afford men who are to attend Institute meetings as Departmental delegates for the first time, an opportunity to properly prepare themselves, and to start the work with a clear understanding as to the duties before them. Officers and members of Institutes, and farmers generally throughout the Province, are cordially invited. It is expected a large number will take advantage of the course. The greatest benefit will be derived by attendance at all sessions, but those who can remain for only one or two days will be made welcome. The programme allows sufficient time for a discussion, after the addresses, by speakers and officers. All Institute lecturers should come prepared to take part in the discussions of those topics in which they are specially interested. presiding officers will be: Hon. Nelson Monteith, Minister of Agriculture, Toronto; C. C. James, Deputy-Minister of Agriculture, Toronto; G. C. Creelman, President, Agricultural College, Guelph.

On Tuesday there will be an address of welcome in Massey Hall by President Creelman, and a reply by Geo. A. Putnam. The programme will include visiting Departments of the College, and "Preparation of Material for Institute Lectures and Method of Presenting Same," by Prof. G. E. Day and Prof. J. B. Reynolds; discussion by delegates.

On Wednesday, (1) "The Beef Animal," by Prof. G. E. Day, and Jno. Gardhouse, Highfield, Ont. (2) "The Building up of the Dairy Herd," by Prof. H. H. Dean, and C. F. Whitley, Dominion Department of Agriculture, Ottawa. (3) "The Spraying of Fruit Trees," by Prof. H. L. Hutt, and D. Johnson, Forest, Ont. " Model Judging Class," by H. S. Arkell, O. A. C., and John Campbell, Woodville, Ont. (1) "Heavy and Light Horses," by Dr. J. Hugo Reed, and Dr. J. F. Lavery, Sunderland, Ont. (2) "The Dairy Animal," by Prof. G. E. Day, and R. S. Stevenson, Ancaster, Ont. Fungous Diseases and Insects Affecting Fruit," by T. D. Jarvis, O. A. C., and J. O. Orr, Fruitland. Grain: Production and Selection," by J. Buchanan, O. A. C., and J. S. Pearce, London, Ont. tive Material for Institute Speakers," by Prof. A. M. Soule, Blacksburg, Virginia.

On Thursday, "Co-operation in Agriculture: The Fruit Industry," by Robt. Thompson, St. Catharines, and E. Lick, Oshawa. Farmers' Institute Clubs, Superintendent and Institute Officers. "Co-operation," W L. Smith, Toronto. "Beautifying Home Grounds, and Farm Forestry," E. J. Zavity, O. A. C., and H. Glendinning, Manilla, Ont. "Noxious Weeds and Weed Seeds," T. G. Raynor, Dominion Department of Agriculture, Ottawa, and W. S. Fraser, Bradford, Ont. Method of Conducting Discussions at Institute Meetings," T. McMillan, Seaforth, and Maj. Jas. Sheppard, Queenston, Ont.

On Friday, "The Feeding of Live Stock," Prof. G. E. Day, and Dr. H. G. Reed, Georgetown. Production and Handling of Milk," G. H. Barr, London; G. G. Publow, Kingston, and J. N. Paget, Can-"The Utilization of Samples of Grain, Roots, Fruit, etc., Brought to the Regular Meetings," Prof. H. L. Hutt, O. A. C., Guelph; J. Buchanan, and A. E. Sherrington, Walkerton, Ont. "Principles of Cultivation and Rotation," W. H. Day, O. A. C., Guelph, and E. C. Drury, Crown Hill, Ont.

Please notify the Superintendent if you expect to attend the Convention. This is necessary, in order that to get certificate from railroad agent at the point or growth of the cities and towns. The rise in values points at which you purchase transportation. If 50 or more are in attendance, return fare will be only onethird of regular fare; if less than that number, the regular two-thirds fare will be charged.

Temiskaming District.

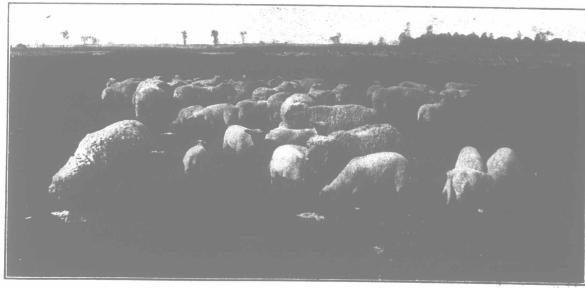
A lovely fall makes a fitting conclusion to a most glorious summer. The dry and sunny weather, with but short intervals, has continued all along, and we are enjoying sun and warmth even yet, although a little more rain is falling than we have been used to. On October 10th, however, we, in common with the rest of the Province, experienced somewhat of a shock. A very sharp frost and a couple of inches of snow came very hard after such hot weather. It did no damage, however, all crops, except turnips, being safely gathered in by most of us. The fall fair this year passed of successfully, so far as finances were concerned, but as an exhibition it was much below the standard of previous years. Several things operated against its success, including the mining craze, and the exceptional dryness of the season. It lacked advertising, too. The live stock was very fair, and the directors were fortunate enough to secure Mr. Thos. Southworth as judge. I hear that a new agricultural society is in process of formation farther north, taking one of the villages as a center. The settlers have several objections to New Liskeard, such as distance, and will therefore support the new organization. However it may be, it is certain that Liskeard must look to its laurels, if it would remain the district headquarters in such matters. As I estimated some time back, the potato crop was poor. No rain came, and the fall was as dry as the summer, and a poor yield is the consequence. Scab seems to be pretty common, and size is somewhat lacking; otherwise, quality is little complained of. There is less rot than anticipated. There were several lamentable failures on wet, spring-plowed land, the seed potatoes being plowed in. Result: Less dug than were planted.

With the increasing number of shipping mines, Cobalt is going ahead again. This time, however, the real boom is coming. That in the spring was but a preliminary flutter, and was based on prospects, rather than on actual production. In the spring one saw prospectors and mines wholesale, with the investor and capitalist chiefly minus. In the fall one sees special coaches and cars containing parties of smart, welldressed New York, Buffalo, Chicago and Toronto speculators, brokers, bankers and other prominent business men. A leading local broker said to me the other day, We shan't hear of Cobalt stock up here soon; Cobalt and neighboring properties will all be down on Wall The speaker added, "If Toronto and other Canadian cities had men in 'em, these stocks would be handled in Canada and England, not in the States." It certainly at present appears that most of the riches of this district will be in American hands before long, and it's ten times a pity. However, it's not all over the line yet, and Canadians may make up in time. doubt if there's a man in a hundred up here without either shares or some interest in a claim. Many have every available cent in shares, and buy more as fast as they can get money. The recent T. & H. B. dividend has made a big stir here. This naturally has roused both interest and confidence in other mining concerns, and nearly every stock is slowly rising.

G. W. W.

Gunn's New Packing-house.

The firm of Gunn Co., Ltd., for over thirty years has been doing a large business in pork products, and, to meet the needs of their growing trade, have just about completed one of the most modern and up-todate, as well as one of the largest, packing plants in Canada. The location was well chosen, being alongside the Union Stock-yards, at Toronto Junction, regarded as the coming Chicago of Canada, as far as the live-stock and packing industries are concerned. The plant embraces a group of structures, including the main building, slaughter-house, smoke-houses, fertilizer building, carpenter and repair shop, ice-house, suitable hotel accommodation may be secured. Be sure room, stock-sheds, and stables-all of which have been erected in the most modern and up-to-date manner. The capacity of the plant is 6,000 hogs per week and 1,000 cattle, besides sheep and calves. The company expect to have the plant fully completed and in operation by the 1st of December, at the latest.



Money Makers and Farm Fertilizers.