

morning the new swarm, thousands strong, creep from the hive and begin their flight, with the regular complement of workers, drones, and one queen. They soar in the air, hovering in an irregular body about the queen, and often travel miles if no provision for welcoming them is made nearer home. As a rule, the careful bee man watches his hives closely, listening for the premonitory buzzing which tells of an addition to his apiary. A new hive is provided, and when the swarm appears it is induced to settle, and is then gently placed in its new home.

The white clover is the first flower to yield honey in the spring, and if the weather be fair, bees will swarm over the blossoms and roll in its sweets, carrying first to the hive the material of which the comb is to be made. The wax is deposited and built up in the walls wherever a worker can find a place to put it, so that bees are hod-carriers and masons as well.

A centre board of the wax is made sufficiently strong to support the weight of the honey, and with their dexterous limbs this wax is drawn out in thin walled cells, each six-sided and absolutely perfect. When finished the cells are filled with honey and capped over with the same sort of wax as that of which the walls are made. This manufacture of wax for walls is the chief handicap of the bee, and to assist him in his toil and also to get about twice as much work out of him as nature ever intended he should render, bee men have contrived a ready-made comb of pure beeswax, as a rule, though it is sometimes adulterated with paraffine. This is made in sheets as thin as cardboard, and is run between a pair of rollers, the surfaces of which have an imprint exactly like the base of cells. The card is cut into a size to fit the box in which the bees are expected to work, and is soon appropriated by the honey-gatherers. They, finding this much of their task performed, proceed to draw out the wax into cells and fill them. No machinery, so far as known, will make completed honey-comb, as the thin walls would melt. The production of honey has progressed so far that the beekeeper grows flowers that will yield the sort of honey he wants. From one kind of blossom a dark honey will be made; from another a lighter. And bees can be much helped by providing for them this natural material. In addition, some keepers place near the hives vessels containing sweets, which the bees convert into honey, but they much prefer the flowers. However, in seasons when little natural honey can be found, bees may be starved onto taking anything, even glucose, for their work. This produces a greater quantity, but a poorer quality of the goods. When a section of the comb is filled and capped it may be taken from the hive, the covering removed with a sharp knife and the liquid honey extracted by whirling it swiftly in a machine made for that purpose. The comb is then replaced in the hive, and, as the walls and cells are intact, they are again filled with honey. With care, honey-comb can be used five years, and in that period will be filled and emptied perhaps a score of times.

Oyster Shells and Exile.

For some 200 years a curious custom prevailed in ancient Athens whereby a citizen might, although not a criminal, and perhaps indeed an upright man, be banished from the state for a period fixed at first at ten years, but later reduced to five. Every year the people were asked whether they wished to exercise this power. If they wished to do so they had to write the name of the man whom they wanted to exile upon an oyster shell or piece of earthenware, and if 6,000 "votes" were given to any one person he had to leave Athens forthwith. This custom, which was known as "ostracism," from the Greek word ostrakon (a piece of earthenware), was abolished about 500 years before Christ. That the power was open to abuse was proved by the famous case of Aristides the Just, who was thus ostracized at the

instigation of Themistocles, who regarded him as a dangerous rival. The story goes that a poor man who could not write, meeting Aristides, asked him to write the name of Aristides upon his shell. "But," asked Aristides, "what wrong has he done you?" "I know nothing about him," was the reply, "but I'm sick of hearing him called the Just." When the Persians threatened Athens Aristides returned from exile to fight for his country.

In the Heart of Africa.

A MONUMENT HAS BEEN ERECTED TO LIVINGSTONE'S MEMORY.

Dr. Livingstone died near the southern shore of Lake Bangweolo in May, 1873. The chief, Chitambo, to whose village the dying explorer's servants had brought him, was very kind to the little party, and after the death of the great man, supplied them with food, permitted them to embalm the body, and then to remove it from his country. Dr. Livingstone's heart was buried under a large tree in the village.

In January, 1889, the Royal Geographical Society of London voted a sum of money to buy presents for Chief Chitambo in recognition of his kindness and the ready permission he gave for the removal of the great traveller's body.

The presents for Chief Chitambo were intrusted to Dr. F. S. Arnot, an English missionary in charge of a Central African station. To him was given also a memorial tablet in bronze, which was sent by Mr. and Mrs. A. L. Bruce, of Edinburgh, son-in-law and daughter of Dr. Livingstone. It was to be fastened upon the tree under which the explorer's heart is buried. Two copies of this tablet was sent to reduce the risk of loss.

Mr. Arnot took the presents and tablet to Bihe, in Southwest Africa. When he was about half way between Bihe and Lake Bangweolo his colleague, H. B. Thompson, went on to the Garenganze country with the presents and memorial.

The articles were now very far on the way to their destination. He found it, however, impossible to go further, and so he delivered his charge over to Captain Bia's expedition, who very kindly agreed to alter his route in order to give the presents to the chief. He sent Lieut. Franqui of his expedition forward with the presents. Upon his arrival at Lake Bangweolo that officer learned that Chitambo was dead. He therefore gave the presents to the chief who succeeded him, who carried out Chitambo's injunctions with regard to the tree, which was still thriving and under which no grass was permitted to grow.

The bronze plate was fastened to Livingstone's tree. Upon the plate is simply inscribed:

LIVINGSTONE

Died Here.

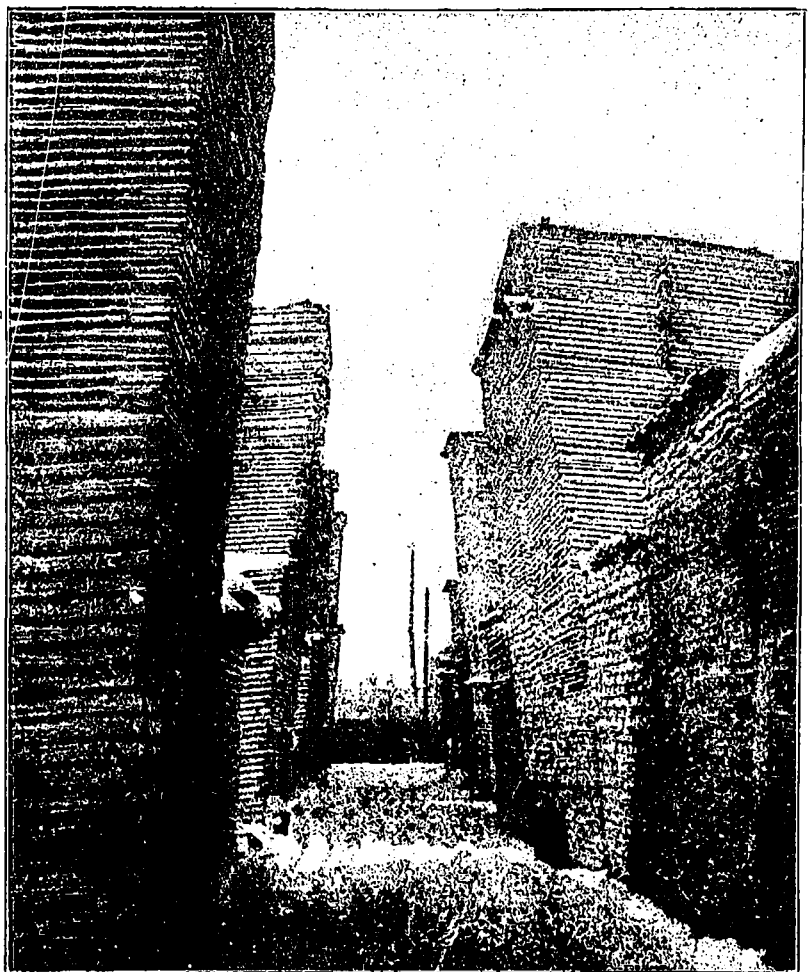
Ilala, May 1, 1873.

Five and One-Half Million Feet!

Canadian lumber is known the world over to be the best in existence for the manufacture of agricultural implements. Notwithstanding the fact that steel is so largely used in modern implements, certain parts are necessarily still made of wood and are likely to be.

Canadian white ash, oak, hickory and maple are unexcelled for durability, strength, toughness and wearing qualities; each being particularly adapted to specific purposes. Though only a comparatively few pieces enter into the construction of any one of the machines of latest design, so great is the annual output of Massey-Harris Co., Ltd., that they use up every year the enormous quantity of lumber intimated above. A very considerable quantity of lumber is used in packing the finished machines, particularly those sent to foreign countries, since, for ocean shipment, the goods have all to be put in heavy strong cases.

Five and one-half million feet of lumber is an immense quantity to be cut up by one company in a single season. As the lumber has to be "seasoned" it means that considerable more than this quantity must always be standing in the Company's yards or held to their order at the mills. The Company's great lumber yards are carefully laid out and provided with drains and good roadways, having capacity for many million feet. The drive-ways or alleys between the piles are as well made as a village road, affording every facility for easy handling; and the amount of handling to be done can be more easily appreciated by our readers when we say that 5,500,000 ft. means about five hundred car loads per annum. Our picture conveys a very good idea of one of the "alleys."



AN ALLEY IN ONE OF THE MASSEY-HARRIS CO'S. GREAT LUMBER YARDS.

(5,500,000 feet used annually.)