

Shippers are, however, hoping for a turn before the steamers arrive. The first steamer to sail from Montreal was the *Montezuma*, for London, with 658 head of cattle and 180 head of horses.

Canadian Live Stock Export.

The following are the live stock reports for the week ending Wednesday, May 12th, as prepared by R. Bickerdike, of the Live Stock Exchange, Montreal:

May 7 - Montezuma.....	London	658 cattle.
" 11 - Fremona.....	"	470 "
" 11 - Brazilian.....	"	419 "
" 3 - Numidian.....	Liverpool	523 "
" 9 - Scotman.....	"	885 "
" 9 - Lake Superior.....	"	623 "
" 11 - Ashland.....	Bristol	375 "
" 8 - Manitoba.....	Glasgow	379 "
" 9 - Tritonia.....	"	413 "
" 11 - Cynthia.....	Manchester	520 "
Total.....		5,245 cattle. 890 sheep.

Chatty Stock Letter from Chicago.

(BY OUR SPECIAL CORRESPONDENT.)

Following are the current and comparative prices for the various grades of live stock:

CATTLE.	Range of Prices.	Top prices	
		Present	Two weeks ago.
1600 lbs. up.....	\$ 4.35 to 5.40	\$ 5.35	\$ 4.45
1500 @ 1600.....	4.15 to 5.25	5.00	4.50
1200 @ 1350.....	3.95 to 5.20	5.25	4.50
1050 @ 1200.....	3.85 to 4.90	5.00	4.35
900 @ 1050.....	3.75 to 4.75	4.85	4.25
Stilts.....	4.40 to 4.80	4.90	4.35
Sticks and F.....	3.25 to 4.50	4.50	4.00
Fat cows and heifers.....	3.40 to 4.50	4.50	4.10
Canning cows.....	1.50 to 2.50	2.70	2.30
Bulls.....	2.10 to 4.05	4.10	3.25
Calves.....	2.75 to 5.30	5.00	4.75
Texas steers.....	3.20 to 4.60	4.60	4.10
Texas C. & H.....	2.70 to 3.85	3.40	3.10
Hogs.....			
Mixed.....	3.75 to 4.65	4.22	3.65
Heavy.....	3.40 to 4.25	4.22	3.60
Light.....	3.75 to 4.05	4.25	3.75
Pigs.....	2.50 to 4.00	4.15	3.80
Sheep.....			
Natives.....	2.00 to 5.00	5.00	3.90
Western.....	3.60 to 5.10	5.25	3.80
Texas.....	3.60 to 4.25	4.50	3.75
Lambs.....	2.60 to 5.50	5.90	5.10

Receipts of cattle and sheep are lighter than last year so far, while hogs show an increase.

G. B. Wilson, of Creston, Iowa, passed through here with eight cars of young Canadian stock cattle. Iowa is long on corn and short on cattle, and men are gathering up calves here to sell to farmers in that State. It is said the large number of States buyers for Canadian cattle advanced prices \$3 to \$5 per head in the past few weeks.

Mexican and Canadian stock cattle are being hurried in ahead of the new tariff bill.

It is thought cattlemen who are looking for a corner in prices are not taking in the whole range of the situation. The supplies are surely short, but the demand is not yet what it should be.

Last month 16,044 cattle were sent from Omaha for fattening purposes, against 6,193 the corresponding month last year. More than half the 16,044 were shipped to Nebraska points.

The cattle being sent to market are not as heavy in average weight nor as well fattened as a year ago, but they are quite as good as the average for a number of years past.

The Standard Cattle Company, of Ames, Neb., marketed 72 Western steers, 1,350 lbs., at \$4.70; 18 steers, 1,450 lbs., \$4.85, and 125 heifers, 1,255 lbs., at \$4.50.

The Western Union Beef Company sold 50 head of 1,275 lbs. fed Western steers at \$4.55 and 14 heifers at \$4.

T. B. Ford marketed from Nebraska 97 Western heifers, 940 lbs., \$4.15, and 123 steers, 1,112 lbs., at \$4.55.

A Montana man says: "There is a continued activity in both cattle and sheep with us. Prices rule firm and business is good."

Exporters of bulls are beginning to discriminate a little against the big heavy bulls. The advent of warm weather is one of the reasons given.

A cattleman just back from Dickinson, North Dakota, says that the winter was the longest ever known there, and early estimates of losses of range cattle were very heavy, but since men have been able to ride the range these estimates have been reduced to 25 per cent, or less, and stockmen generally are feeling good because it is no worse. Some of the smaller ranchmen who feed hay got out of it, and lost a large percentage of their stock, but the majority of them managed to pull through with a light loss.

The past was a busy week for cattle exporters. They sent out 7,022 cattle, divided as follows: Schwartzschild, 397; Lehman, 728; A. McIntosh, 105; Gordon & L., 75; Blackshire, 133; United D. B. Co., 211; Shamburg, 1,285; Morris, 1,187; Swift, 1,015; Reeder, 708; Duff, 238; Hathaway, 432. Of these 2,496 were shipped from New York, 2,333 from Boston, 917 from Newport News, 861 from Baltimore, 400 from Philadelphia and 75 from Portland.

W. F. Fleming, of Dinsdale, Iowa, marketed here during March and April 458 head of cattle, including 55 cows, 23 stags and 15 bulls, which averaged 1,155 lbs., and averaged \$4.21, with a net average of \$3.92, cost of shipping and all other charges being 29 cents per 100 lbs. The range of prices on the steers was \$4.10 to \$4.75. The cattle were mostly of his own feeding.

There is considerable inquiry about red polled cattle. There have not been enough of them on the markets here to make much of a practical test.

In New York last week 45,000 lbs. of fall Texas wools sold at 11c. per lb., and in Boston 50,000 lbs. of spring Texas wool sold at 10c. to 12c. per lb.

Texas lately has been monopolizing the sheep markets, selling thousands and thousands of 80 and 90 lb. sheep here at \$3.70 to \$4.00. The supplies of fed Western sheep and lambs have been pretty well exhausted.

Average weight of hogs last month, 235 lbs.; the second lightest month's average since October, 1895. Last March the average was only 230 lbs.; April, 1896, 243 lbs., and April, 1895, 226 lbs.

Hog buyers look for liberal hog receipts during May and June and a big demand for them.

The packers continue to buy hogs freely regardless of the fact that they are compelled to depend on the fresh meat and the bacon and ham trade to give them profit.

The hog receipts and average weight of same at three of the principal markets during the first third of the year will be found interesting.

Receipts.	January.	February.	March.	April.
Chicago.....	763,904	709,538	576,018	542,387
Kansas City.....	302,586	275,470	229,038	259,908
Omaha.....	113,506	112,294	110,443	108,850
Aver. weight.	January.	February.	March.	April.
Chicago.....	247	238	230	235
Kansas City.....	224	225	216	216
Omaha.....	275	269	260	269

At the spring sale of speed horses at the Union Stock Yards, H. W. Marks bought for \$15,000 the famous Joe Patchen, 2:03. The bay stallion Lee Simmons sold to D. McPhee, Doblin, Austria, on a bid of \$1,600, and will be exported for both breeding and racing purposes. Other sales included Chapple, b. g. 5, by Directory, dam Pride of Girard, by Magna Charta;

P. J. Sexton, Chicago, \$725. Allanzo, b. g. 7, by Allendorf, dam Mimic Merrill, by Young Jim; L. Newgass, \$600. On the closing day of the sale Benegro, with a record of 2:35, sold at \$625, the highest of the day. Most of the other offerings sold at \$100 to \$250, with a few at \$305 to \$410.

THE BOOK TABLE.

Valuable New Literature.

One of the most encouraging signs of the times in connection with the pursuit of farming is the increasing circulation of good agricultural papers and the demand for books on agriculture. Once men begin to study their business as they ought, and to industriously apply sound principle in their work, then is there success in store. So it has been in the past, is to-day, and will be in the future. With the demand comes the supply. Sometimes, indeed, it precedes the demand, though not the actual need, which enterprising publishers recognize and prepare to meet. The latest noteworthy contribution to agricultural literature are two admirable series called "The Rural Science" and "The Garden Craft," published by the Macmillans, of New York and London (Eng.). Seven of these volumes we have already received for examination, and can, without hesitation, commend them to our readers, not only because of the value of their contents, but their mechanical get-up. Publishers and authors are alike to be congratulated on the useful contribution they have made to the literature of the day. They combine the results of the latest scientific research with the best practice, each one being written by a specialist. Not only are they up-to-date, but written in language that can be read and understood at the fireside. We might say that Prof. L. H. Bailey, the eminent authority under whose editorial supervision these series were prepared and who wrote several of them, has such a particularly happy faculty of expressing himself that even a "dry" subject becomes intensely interesting. The binding is substantial, paper and typography excellent, and most of the volumes are copiously illustrated, the engravings for the most part being of a practical nature. In order to bring these works within access of the farmers of Canada we have effected arrangements with Messrs. Macmillan whereby they can be secured through this office on very reasonable terms. Below will be found short reviews giving an idea of the nature and value of the volumes, which we have carefully examined:—

SPRAYING OF PLANTS.—By Prof. E. G. Lodeman, Cornell. New York: Macmillan & Co.; pages, xvii., + 399. Price, \$1.00; or for two new paid-up subscribers (at \$1 each) to the FARMER'S ADVOCATE.

This timely book in the Rural Science series, issuing from the press of the Macmillans, is, in its binding, typography and illustration, quite worthy of the high reputation of the publishers. Its author, Prof. Lodeman, is instructor in horticulture in Cornell University. A cursory glance over its pages and foot-note references shows what an extensive literature he has laid under contribution, and a careful reading discloses how well he has systematized his labors and formulated conclusions with a judgment ripened by much actual experience.

Spraying as a means of combating the injury done to farm, garden and orchard crops by fungi and insects is a recent art. The resistless march of the potato beetle, which reached Ontario in 1870, having taken only about ten years to extend itself from its native feeding-ground in the Rocky Mountains, educated the people of the United States and Canada to look to spraying with poisonous solutions, especially the arsenious ones, as a protection against insect ravages. About the same time the grape mildew was causing a panic among the vinegrowers of France and preparing the way for the immediate and general use of copper solutions as fungicides. In a comparatively short time almost every farmer, gardener and fruit-grower became acquainted to some extent with the use of Paris green and Bordeaux mixture, as the principal insecticide and fungicide were respectively called. Many careful observations upon numerous and extensive experiments were made to discover the best means of compounding these chemical mixtures and the best times and means of applying them to the various crops. Experiment stations all over the civilized world have been busy in this field; a stream of bulletins has issued from their printing presses; a host of modified or quite distinct preparations have been proposed and tested. Our author has made a comprehensive survey of the field. He has given us a readable history of the art of spraying and an intelligible relationship between cause and effect; he has summarized the results of a host of experiments in a chapter of 65 pages on materials and formulas; in another of 43 pages, profusely illustrated, he discusses the merits of the numerous spraying devices, and concludes with specific instructions for spraying the apple, currant, rose, cabbage, wheat, potato, and over sixty other kinds of plants, trees and flowers. In the chapter on the action of these poisonous mixtures he discusses the healthfulness of sprayed fruit and of the forage under sprayed trees. He cites a case of poisoning from eating sprayed foliage, but he holds that eating grass under sprayed trees will not poison stock. He fed clover carefully cut from under a sprayed tree to a horse, and repeated the experiment time and again with sheep, without any noticeable effect.

This useful manual will answer almost everything you will think of asking about spraying, and suggest many other useful hints you might not think of.

PLANT-BREEDING.—By Prof. L. H. Bailey, Cornell University. New York: Macmillan & Co.; pages, 298. Price, \$1.00; or for two new paid-up subscribers (at \$1 each) to the FARMER'S ADVOCATE.

In a discussion on "change of seed," which took place last year in these columns, the ADVOCATE insisted on the importance of selecting the very best of one's own growing

rather than depending on a mere change of seed, which has often introduced a strain inferior to the home-grown and therefore rejected one. In the book before us, while Prof. Bailey maintains, with reasons well set forth, the advantages that may come with a change of seed, he emphasizes again and again in different connections the necessity of selecting the best plants for seed, of being alert to discover and preserve favorable individual differences and variations. He seems to agree with Darwin that mixing, or planting in alternate rows, seeds of the same variety grown under conditions of climate, soil, etc., as different as possible is greatly preferable to a simple change of seed. "All permanent progress lies in continued selection. This," says he, "is the one eternal and fundamental principle which underlies the improvement of plants under the touch of man."

The possibilities of improvement and variation of plants by intelligent selection are shown by accounts of experiments related by the author. A seedsman wrote out the specifications of a bean that he believed would commend itself to his customers, and sent the description with the name of the proposed bean to a certain seed-grower, and asked him: "Can you make it for me?" "Yes, I will make you that bean," replied the grower, and in three years fulfilled his promise. Another seedsman asked this same grower to produce a round-podded, stringless, green-podded bean. In five years he had fifteen acres of the seedsman's ideal.

Prof. Bailey's contention cannot be too strongly emphasized, that "We need not so much varieties with new names as we do a general increase in productiveness and efficiency of the types which we already possess; and this augmentation must come chiefly in the form of a gradual evolution under the stimulus of selective care."

The philosophic arguments of Darwin, Wallace, Herbert Spencer and others are laid under tribute to show why feeding, selection, crossing, etc., produce certain pretty definite results. These thoughts prepare the reader for the intelligent use of the plain directions for hand pollination and hybridizing given in the last chapter. Anyone desirous of improving the seed he uses will derive much encouragement and instruction from a perusal of this book.

MILK AND ITS PRODUCTS.—By Prof. H. H. Wing, Cornell. New York: Macmillan & Co.; pages, 280. Price, \$1.00; or for two new paid-up subscribers (at \$1 each) to the FARMER'S ADVOCATE.

In Canada during the past ten years no branch of agriculture has received anything like as much public attention as dairying, nor to any other has so much study been devoted. From the management and feeding of the cow to the care and testing of milk and the manufacture of cheese and butter the highest intelligence and skill is necessary, so that the reason for all this study is at once apparent. The opening of our various dairy schools has stimulated study, and to the students of these as well as the dairy farmer the above volume by Prof. Wing of the Dairy Department of Cornell University, will be welcome. While not as technically exhaustive in some respects as Fleischmann's (Prussia) more bulky Book of the Dairy, it is better adapted to present-day needs in America. It is, in short, a complete treatise upon the nature and qualities of dairy milk and the manufacture of butter and cheese by modern methods, which are the result of the revolution brought about by centrifugal cream separation and the Babcock test. An idea of its completeness may be given by quoting its chapters: i. Secretion of milk; ii. Composition of milk; iii. Testing of milk; iv. Ferments and fermentations of milk, and their control; v. Market milk; vi. Separation of cream; vii. Ripening of cream; viii. Churning; ix. Finishing and marketing butter; x. Milk for cheesemaking; xi. Cheddar cheese making; xii. Varieties of cheese; xiii. By-products of the dairy; xiv. Butter and cheese factories; xv. Statistics and economics of the dairy industry, together with an appendix of rules and tests, metric system of weights and measures, legal standards and laws (U. S.) against bogus dairy products. One good feature of this work that especially commends itself is the way in which the practical application of the ascertained principles follows the statement of them, such, for example, as milk secretion and milking; the effect of feeding, etc., on the quality of milk, fat globules and cream separation and churning; the origin of butter flavors and the keeping and other qualities of butter. On one or two points there might be room for debate. Prof. Wing admits that there are points still unsettled where it may be difficult to distinguish fact from conjecture, but his aim has been to give the present state of knowledge having the support of the preponderance of the best evidence. Where he deals with the development of the factory system, the economical status of the industry and dairy legislation, Prof. Wing might have with advantage included some Canadian data, thus making the work more cosmopolitan in that respect. In cheese dairying leading American dairy authorities frequently bemoan the fact that in several particulars they have departed from the good example set by Canada, to their very great detriment.

THE NURSERY BOOK.—By Prof. L. H. Bailey, Cornell University. New York: Macmillan & Co.; 365 pages, 153 illustrations. Price, \$1.00; or for two new paid-up subscribers (at \$1 each) to the FARMER'S ADVOCATE.

This book is just what it claims to be, a complete guide to the multiplication of plants, treating the subject in six chapters, and dealing in minute detail with the several branches of orchard, garden and lawn work, under the headings of seedage separation, layerage, cuttage and graftage, with full directions for propagating, planting and training for the best results. The chapter on budding and grafting, giving full instructions for the practical work, illustrated with engravings, is well worth the price of the book, as this, we believe, is destined to play a very important part in the improvement of fruit in all parts of the Dominion. Aside from this the nursery list is an alphabetical catalogue of about 1,500 plants and trees of fruit, kitchen garden and ornamental varieties, with directions for their propagation, culture and care. The book is most complete of its kind and should be in the home of every farmer and fruit-grower and of all who love flowers or ornamental plants, for it treats of those as well as of food plants.