

Conservation of Experience.

of every province must present the newest and efficiency in the contribution of products from the land. The following of sized production on land limiting of interests to a type of activity. The st know and practice the be known and practiced n of the soil. He must ce the best that is to be iced in the production of f feed in suitable variety eculent and concentrated. He must make care- stock from a breeder's l as from the standpoint. He must know the and management of his e of the buttermaker, he ranks of the manufac- tness side of dairying ess in buying and selling g and firing. It is quite a multiplicity of duties e dairyman has every on land backed off the no land enterprise that tax on the resource and individual or that der extent on the applica- principles established or ascertained from ation than the dairy

of the Modern Farm Enterprise.

of our agriculture in marked by three distinct of these is the simple home-making stage or ere it has been con- nation rather than ranch- type of farm enter- of a more or less self- marketing and ex- commonly enter largely the pioneer. Family wn to a minimum, and the simple necessities greatest extent possible. The next stage is the ge. Some have called ing stage, but it is not is business of grain- n parts of the province heme just now, but the econd stage of agricul- of excessive and more cropping. Every new ough this stage. The e between this and the ne addition of marketing assumption of produce. mercial business emerges y, but with respect to a rm commodities. is the scientific. Always of growing the greater m soil or of mining ecessary to build on a of conservation of soil r farm activities tend the expression or appli- s that have relation to enduring interest and last and highest type t an extremely complex the features of both hat have preceded it. mode of living at all a business and occupa- es of farm enterprise ned with utilizing the farm to the fullest produce home-grown, cheaply produced foods. modern farm enterprise rtially sufficient source likewise involve active plus produced, that is, mercial agriculture, and have the aspect of a n earth from which are amental and necessary

Inclusive Word.

st class and phase of t the modern dairy ave called this phase e the scientific type, tions are based on



More Milk Profits

Feed and labor are too costly to devote to "robber cows." If you are to make a profit, each animal in your herd must pay her keep and earn something.

Pratt's COW REMEDY

makes good cows better—puts many "robbers" in the profit-paying class. It is a specific for cows, a tonic and conditioner which tones up the entire system and induces maximum production. It overcomes the effects of heavy feeding, improves digestion, regulates the bowels and increases the milk flow.

Mr. W. Fellows, of Taber, Alta., writes us: "I have tried other goods, but they are not in it with Pratt's."

At your dealer's in 2-lb. and 4½-lb. cans, also in 12-lb. and 25-lb. pails.

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328 L. Carlaw Ave.,
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CR-29

Cedar Dale Farm—The Home of Lakeview Johanna Lestrang, the \$15,000 sire—chief sire in service. He is a son of the 33,06-lb. cow, Lakeview Lestrang, and is our sire. We are offering a few females bred to him, and also have a few bull calves sired by him, at right prices. Other older bulls, sired by our former herd sire, Prince Segis Walker, son of King Segis Walker. A. J. TAMBLYN, Cedar Dale Holsteins (C. N. R. station one mile) Orono, Ontario.

Silver Stream Holsteins—Choice Bulls—We have six from 7 to 14 months old, sired by King Lyons Colantha, the records of his six nearest dams average 30.10 lbs. butter in 7 days, and by King Lyons Hengerveld, 5 nearest dams average 31.31, and from R.O.P. tested dams. Individually as good as their breeding. If interested, write for particulars and prices, or better come and see them.

JACOB MOCK & SON, R. R. 1, Tavistock Ont.

scientific principles and established practice. The successful practice and operation of the best kind of dairy farm is essentially the expression and application of the principles of science such as are involved in soil treatment, plant growth, balanced feeding, and in the manufacturing operations of the dairy, but under modern conditions the conduct of business on the special farm is essentially scientific likewise. Science does not relate alone to ponderable things such as the elements in nature, or to chemical reactions or bacterial activity exclusively or generally. All phenomena of human interest such as its institutional and economic life and social habits may be made the subject of scientific survey or investigation and may be presented in the order, classification, system or organization and progression that pertain to material phenomena. Science is a method not a subject or interest, and in this view we are justified or indeed compelled to include the interests of business as it relates to the farm in the category of general agricultural science, and to still say that the dominant note in our best agricultural thinking and doing is the scientific note.

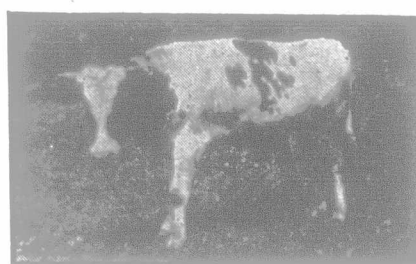
Practice Supported on Science.

It may be the case that even the experienced man may, by reason of the close grind of work, be disposed to overlook the importance of science or may practically fail to realize that he is doing the bidding of science. A man may break prairie in June because experience dictates it, but it gives intelligence to his work to know that in the production of a ton of dry matter, such as hay, over 400 tons of water travel up through the crop, and it is an advantage to turn the sod before the moisture has all been pumped out of the subsoil by the crop.

If he fills the furrow seams with the disk, he might as well know that the moisture saved is a necessary condition to bacterial decomposition of the organic matter in sod. If he cultivates his rape, turnips, mangels, corn or alfalfa after rain, he should know that he is defeating capillary waste. The big problem of fertility is nitrogen supply. The farmer should know the loss caused by denitrifying bacteria in the heating of manure, and he should know about the fixing of sup-



DON-ALDA FARMS, Todmorden, Ont.



Young herd sire, Don-Alda Pontiac Artis for sale; calved April 5, 1918.

Sired by King Pontiac Artis Sylvia. [Dam Gipsy Wayne, 29 lbs. butter in seven days.

Also a few younger bulls by our herd sire, Sylvia Segis Raymondale, from high-record dams. Our herd sire is grandson of May Echo Sylvia. His dam, De Kol Plus Segis Dixie, made over 32 lbs. as a senior 4-year-old.

Call or write

MR. COWIE, Resident Foreman

Hospital For Insane, Hamilton, Ontario

We have yearling grandson of King Segis Alcartra Spofford—a splendid individual. Also fine bulls of younger age, prices reasonable Apply to Superintendent.

Manor Farm Holstein-Friesians

If it's a herd sire you want, write me. I have sons of both my senior and junior sires, King Segis Pontiac Posch and King Kornidye Sadie Keyes. All from good record dams. Choice bull calves at present to offer—average for two nearest dams, up to 34.71 lbs. butter to seven days. Correspondence solicited. Visitors welcome.

GORDON S. GOODERHAM, Clarkson, Ont.

Stations: Clarkson and Oakville.

Farm on Toronto and Hamilton Highway



Raymondale Holstein-Friesians

A herd sire of our breeding will improve your herd. We have sons of our present sire, Pontiac Kornidye of Het Loo (sire of \$12,750 Het Loo Pieterje), and also sons of our former sire, Avondale Pontiac Echo. Several of these are of serviceable age, and all are from good record dams. Quality considered, our prices are lower than anywhere else on the continent. These youngsters should not remain long. Write to-day.

RAYMONDALE FARM
Vaudreuil, Que.

D. RAYMOND, Owner
Queen's Hotel, Montreal

29 Pounds Butter—103 Pounds Milk

This is the seven day butter record and the one day milk record of the dam of my last bull of serviceable age—an exceptional bred youngster and a choice individual. Also have a month old bull whose dam and sire's average 34.36 lbs. of butter in 7 days, 135.07 lbs. of butter in 30 days and 111 lbs. of milk in 1 day. If you want bulls of this breeding I can save you money.

D. B. TRACY HAMILTON HOUSE HOLSTEINS OF QUALITY Cobourg, Ontario.

WALNUT GROVE HOLSTEINS

I am offering a choice lot of bull calves sired by May Echo Champion who is a full brother of world's champion May Echo Sylvia; also a few cows just fresh. (Take Radial Car from Toronto to Thornhill) C.R. James, Richmond Hill, R.R. No. 1, Ont.

RIVERSIDE HOLSTEINS—CHOICE BULLS

We have several 10 months old, from dams with official records up to 100 lbs. of milk per day and 32.32 lbs. of butter in 7 days. These are well marked and straight individuals. Inspection invited. J. W. Richardson, Caledonia, Ontario

9 HOLSTEIN BULLS

Any age up to 14 months. From high record and untested dams. Sired by May Echo Prince and Gipsy Pontiac Cornucopia; both 30 lb. bulls. Price right. JOS. PEEL, Port Perry, Ontario.

For Quick Sale—One Bull Eight Months Old—His dam gave 16,388 lbs. milk, and his sister 20,400 lbs. milk. He is a son of Judge Hengerveld De Kol 8th, who is a 32.92-lb. grandson of De Kol 2nd Butter Boy. Write at once for price, or, better, come and see him. Take Kingston Rd. cars from Toronto. Stop 37. ARCHIE MUIR, Scarborough P.O., Ont.

PIONEER FARM HOLSTEINS

My present sales' list includes only bull calves born after Jan. 1st, 1919. These are priced right. WALBURN RIVERS & SONS R.R. No. 2, Ingersoll, Ontario

Holstein Bulls

A few ready for service, one from a 32.7-lb. dam. He has a 33.94-lb. maternal sister. Baby bulls by "Ormsby Jane Burke" and "Ormsby Jane Hengerveld King," grandsons of the 46-lb. cow, "Ormsby Jane Segis Aggie," the only twice 40-lb. cow of the breed. Also females.

R. M. HOLTBY, R.R. 4, Port Perry, Ont.

plies of free nitrogen in the soil by the bacteria in the nodules of the legumes. It is worth while knowing that in selling butter or cream instead of whole milk, the farmer is saving back nearly all of the nitrogen of his milk product. It is scarcely necessary to mention to the dairyman the influence of good and bad bacteria in all the dairy manufacturing processes, and in influencing the keeping qualities of milk and milk products.

Science in Breeding and Business.

In relation to stock selection itself, the work of stock judging may reasonably be called a science. It is not an exact science such as mathematics, but it is rather what might be called a descriptive science. It is a poor dairyman who does not know and appreciate such fundamentals in the dairy cow as angular conformation, wide and deep food chamber, clean well-defined spine and open ribs, good udder, milk wells and veins, and a good constitution.

In the matter of the business side of dairying, especially the marketing of products, there is a distinct choice open as between what we may call haphazard and scientific marketing. In one case, we have poor preparation and presentation of the product and a hit or miss selection of the time for marketing. In the other we have regulated quality, co-operative consignment, as distribution of output nearly to demand so as to save gluts or scarcity, and a careful distribution of rewards on a quality basis. The handling of the product in bulk or in considerable quantities puts the producer in a position to dicker with the dealer instead of having to suffer exploitation.

The aim of this discussion is to establish that there is a scientific way of conducting business, based largely on the consolidation of the interests of the great producing class and resulting in a condition of economic democracy. The dairyman should have full realization of the importance of the type of agriculture they stand for in the evolution of land enterprises, and likewise to a realization of the value of a knowledge of the science underlying their work. It was not so recently the case that the man who talked science in relation to agriculture was scoffed at as a theorist. It now appears that the man without the scientific knowledge is the