Farmers' Elevators in Minnesota

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When one travels thru Minnesota he cannot help being impressed by the large number of country elevators located at intervals of but a few miles on all the railroads of the state. It is not unusual to see four or five elevators at a single station. These elevators are of three types: line houses, independent houses, and farmers' houses.

Altho line elevators still outnumber farmers' elevators, the former have been steadily decreasing in number, while the latter have been gaining. In fact many grain men believe that the line elevator company is a pioneer institution, necessary only in a new country where capital is scarce and where farmers have neither time nor money to engage in the business themselves. The following table issued by Henry Feig, supervising inspector of country elevators, of the state of Minnesota, shows the number of elevators of each type from 1906 to 1910:

Style of

Style of Elevator 1906 1907 1908 1909 1910 Line houses 1199 1171 1007 971 871

 Independent houses
 381
 377
 430
 405
 363

 Farmers' houses
 151
 168
 178
 205
 224

Total. 1731 1716 1615 1581 1458

The Minnesota railroad and warehouse list showed 300 farmers' elevators in 1913, but an investigation carried on by the Division of Agricultural Economies of the Minnesota College of Agriculture shows that about thirty of these houses are owned principally by bankers and business men, and that they should not

be called farmers' elevators. This leaves approximately 270 farmers' elevators in Minnesota at the present time, and altho some have failed each year, the number is steadily increasing because from there were a few formed before that date. The line elevator companies controlled the situation at that time and their rapacious and unprincipled practices with the farmers in the early days are too well



A busy day at the Farmers' Elevator at Alden, Iowa, when 110 loads of grain and 2 cars of hogs were handled.

ten to twenty new companies are formed

Monument to Perseverance

The farmers' elevator movement may be said to have begun about 1890, altho known to require description in this place. The farmers' elevators have had a hard fight in overcoming the obstacles placed in their way by the line companies and also by the railroads who always favored the established interests. The

inexperience of the farmers in business affairs and the resulting poor management of their elevators made it doubly hard to overcome these obstacles and the success of the farmers' elevators today and the important part they play in marketing the grain crop stand as a monument to the perseverance and ability of the farmers of Minnesota.

The 270 farmers' elevators in Minnesota have an aggregate membership of approximately 34,500, an average of 128 members to a company. One farmer out of every five in the state belongs to a farmers' elevator company. The aggregate volume of business for the year following the growing of the 1912 crop reached the enormous total of approximately \$24,000,000, of which about \$22,000,000 and \$2,000,000 the value of grain marketed and \$2,000,000 the value of coal, flour, twine and other supplies purchased for members. These elevators now handle about thirty per cent. of the grain marketed by Minnesota farmers.

Are They Co-operative?

The question has been raised as to how many of these so-called farmers' elevators may be considered co-operative companies. The main facts bearing on this question have been determined by the investigation made by the College of Agriculture. In the first place farmers own at least a majority of the stock in all of the 270 farmers' elevators in the state, and in at least ninety per cent. of them they own all of the stock. The par value of shares is low, and is twenty-five dollars or less in at least three-fourths

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Buying a Dairy Cow

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In buying a grade dairy cow it is seldom possible to secure any accurate information respecting her record, or that of any of her ancestry, consequently it is necessary to rely upon the indications of milking qualities as revealed in the conformation of the cow.

A glance over the records of the dairy cows at the Alberta Demonstration Farms cannot fail to convince one that the profit from a dairy herd depends very largely upon the selection of the cows in the herd. One of the grade cows gave 14,332 pounds of milk in nine months and ten days. Another cow in the same herd gave only 6,286 pounds in nine months, which, reduced to dollars and cents means that, one cow made a gross revenue of \$286.64, while the other made \$125.72, that is, taking the price of milk at \$2.00 per hundred. The first cow cost \$125.00 in Ontario, and the second \$65,00. In examining the records further it is found that the average production for 60 cows during the milking period of 1913 is 9,300 6 pounds, and the average for ten others for the same period is 4,174.35 pounds. With these facts in view the selection of cows for the herd should receive most careful consideration, and in setting out to buy, one should not be governed so much by the price which it is necessary to pay, as by the kind of individual which it is possible to secure, provided, of course, that the price is not unreasonably high. With the present price of milk and cream a good cow will soon make the difference between her cost and that of an ordinary

Points to Consider

There are many important points to be considered, but perhaps the first and most important is that of constitution. The strain upon the constitution incident to heavy milking soon begins to make itself felt unless the animal is possessed of that rugged form which enables her to withstand the heavy strain without lessening vitality. In order to get this rugged

conformation the animal must possess plenty of scale and substance combined with a full heart girth, and deep chest. Any depression immediately behind the shoulder or behind the fore-arm refuces the room for the vital organs, and consequently weakens the constitution.

Another important point to be looked for in choosing a dairy cow is capacity to consume feed, as indicated by the depth and length of barrel. In addition to this it will be found in cows that are heavy feeders, that they have large, clearly defined muzzles and large mouths.

Having secured constitution and capacity to consume feed, then look for quality in the cow. Coarse, rough conformation is generally accompanied by a coarse, heavy hide, and this kind of cow is invariably a light milker. The skin should be pliable and elastic, the hair fine and silky, the bone smooth and

clean, and the whole animal should have a sweet, feminine appearance.

The Mammary System

Our next consideration should be the milk vessels. The udder in the first place, when full, must be large and evenly balanced. While it is possible to have cows with large udders that are indifferent milkers, yet a heavy milker seldom has a small udder. The udder should be as deep and wide and long as it is possible to get it, extending well forward, and well up behind, free from fleshiness, and when milked out, the skin should be loose and pliable, of fine texture, and, as the dairyman would say: "plenty of leather behind." Along with this, of course, there must be four good-sized teats, evenly placed. Passing from the udder, it is wise to examine the milk veins to see that they are large, as numerous, as tortuous, and as long as it is possible to

get them, ending in two or more milk wells.

Many animals will give a very heavy
flow of milk for a short period, drying up

rather abruptly at five or six months after freshening. Other animals keep up a heavy flow thruout a long milking period, even under unfavorable conditions of housing and feeding. In order to build up a profitable herd, it is necessary to look for the type of animal that will prove herself to be a persistent milker. Our experience goes to show that the majority of the persistent milkers possess milk veins which extend well forward, and in the case of a couple of cows, which are outstanding in this respect, the milk veins extend forward to, and enter the milk well just behind the fore-leg.

A point sometimes overlooked, and one

A point sometimes overlooked, and one which is very important in the dairy cow, is openness of conformation, in other words, an entire absence of compactness of form. In the heaviest milkers the spaces between the vertebrae are open, and the ribs correspondingly far apart. The tightly built, compact cow will be found to lay on flesh instead of giving returns at the pail.

Lastly, let us look for cows with a breedy appearance, indicating that they have sprung from ancestors that have been carefully selected. A clean cut head, showing strength, yet sweetness, the lines of the body symmetrical and true, and in cases of broken color or spotted cows, the lines of demarkation between the colors distinct and clearly defined, are all indications of good breeding.

In purchasing a herd of cows it will be necessary to sacrifice some, or perhaps a number, of the above mentioned points. There are three points, however, which will count for much if found uniformly thruout the herd, namely: constitution, conseits and quality.

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(Ed. Note.—The above is one of many excellent articles covering nearly every phase of farm work, contained in the report of the Demonstration Farms and Schools of the Province of



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