



AGRICULTURE

A Trick in Seed Selling.
The Grain Dealers' National Association, recently in session in Milwaukee, passed the following resolutions:

Whereas, Seed houses do a large business in the sale of seed grains and thereby may materially affect the general business of the crops of grain thus produced, either for better or worse; and,

Whereas, It is known that seed thus sold by seed houses does not always possess the merit of type and breeding sufficient to meet the expectations of the purchaser, and in fact often does not tend to raise the standard of the general crops produced. For example it has been too common a practice for seedmen to purchase ordinary corn from farmers' cribs and sell the same under special brands when in fact it possessed no special merit whatever, with respect to type and breeding, and the same is true in regard to other grains; therefore,

Resolved, That the Grain Dealers' National Association, now in convention assembled in Milwaukee this 23d day of June, 1904, does hereby urge and request all firms engaged in the selling of seed grain to adopt a line of business policy that will result in giving more attention to the questions of type and breeding and adaptability and thereby assist in improving the quality and yield of general crops produced.

Resolved, That the secretary be instructed to send a copy of this resolution to all the principal firms engaged in the business of selling seed grains in the grain producing states, and also to all the leading agricultural papers in the country.

The practice against which the resolution is directed is one that has long been condemned by conscientious dealers. It not only injures the farmers, but injures the firms that are trying to do an honest business. It is gratifying to see a great association take the stand that this one has taken. The agitation is sure to bear fruit.—Farmers' Review.

Spelt (Triticum Spelta).

Spelt is a cereal which in appearance is intermediate between wheat and barley, but, in reality, is one of the types into which wheat is divided. It is a native of the countries near the Mediterranean sea. At the present time it is grown principally on the poorer soils in Switzerland, southern Germany and northern Spain. It is also grown at an elevation in Switzerland where the common wheat (Triticum vulgare) will not thrive. For general cultivation it is considered much inferior to the finer varieties of wheat. The head is open, narrow, bearded or bald, and is usually very long. When the grain is threshed the head breaks in pieces at the different joints, or nodes, leaving the grain still clasped firmly by the chaff. In order to make a separation of the chaff from the seed, special machinery is required. The grain is medium hard, and somewhat compressed at the sides. The grain in Ontario frequently called Spelt belongs to the Emmer class, and is, therefore, improperly named. To find out the value of Spelt for growing in Ontario, we have imported at different times no less than ten varieties from Switzerland, Russia, Germany, the Argentine Republic and the United States. Two of these varieties proved entire failures, two others gave poor results, and the other six varieties yielded moderately well. As the grain is enclosed by a chaff somewhat similar to oats, and weighs less than 40 pounds per measured bushel, the results here presented are given in pounds, instead of bushels of grain per acre. One of the best varieties of Spelt has now been grown in the experimental plots for five years, and has given an average yield of 1,623 pounds of grain per acre.—Ontario Station.

Loss in Over-Ripe Wheat.

In 1879, Dr. R. C. Kedzie, in an exhaustive study of the ripening of wheat, pointed out that there was a slight loss in weight between complete ripeness and the stage generally designated as dead ripe. Subsequent experiment at this college, and elsewhere have given like results. There is not only a loss by shelling when the grain becomes over-ripe, but a given number of bushels of grain, kept in the ordinary manner, will weigh less if taken from an over-ripe field than if taken from a field cut at the proper time. Moreover, the amount and quality of the flour produced and the germinating vigor of the grain itself are less if the wheat is allowed to become over-ripe than if cut at an early period. These facts are now well recognized by farmers, and ordinary practice is regulated by this knowledge. The loss in shelling is undoubtedly the most important one, and fortunately it can be controlled in a large measure by a proper selection of varieties combined with harvesting at the proper season.—Michigan Station.

Whitewash is good in the hog pens as well as in other parts of the building devoted to live stock. The application of this once or twice a year will go a long way towards keeping the floor out of the woodwork of the pens.

A weed is a plant out of place. Wheat may be a weed in a corn field, and corn a weed in a wheat field.



DAIRY

As Milk Grows Old.

In an experiment on the relation of temperature to the keeping property of milk, at the Connecticut Storrs station, the bacteria in milk multiplied fivefold in twenty-four hours when the temperature was 50 degrees, and 750 fold in the same time when the temperature was 70 degrees.

Milk kept at 95 curdled in eighteen hours, at 70 in forty-eight hours, and at 55 in 148 hours. So far as the keeping property of milk is concerned, low temperature is considered of more importance than cleanliness.

In milk kept at 95 the species developing most rapidly is the undesirable one known as Bacillus lactis aerogenes. At a temperature of 70 this species develops relatively less rapidly in the majority of cases than Bacillus lactis cili, which latter is very desirable as both cream and cheese ripening.

The bacteria in milk kept at 50 increase slowly, and later consist of very few lactic organisms, but of miscellaneous types, including many others that render the milk unwholesome.

These bacteria continue to grow slowly day after day, but the milk keeps sweet because the lactic organisms do not develop abundantly.

Such milk in the course of time becomes far more unwholesome than our milk, since it is filled with organisms that tend to produce putrefaction.

Although the temperature of 50 degrees is to be emphatically recommended to the dairyman for the purpose of keeping his milk sweet and in proper condition for market, he must especially be on his guard against the cooling that milk which is several days old is proper for market, even though it is still sweet and has not soured.

Quite the reverse is the case. Old milk is never wholesome, even though it has been kept at a temperature of 50 degrees and still remains sweet and unsoured.

This very considerably modifies some of our previous ideas concerning milk, for it has been generally believed that, so long as the milk remains sweet, it is in good condition for use. Quite the contrary in this case, if it has been kept at a temperature of 50 degrees or in this vicinity. It is not unlikely that it is this fact that leads to some of the cases of ice cream poisoning so common in summer.

The cream is kept at a low temperature for several days until a considerable quantity has accumulated or a demand has come for ice cream, and when made into ice cream, it is filled with bacteria in great numbers and of a suspicious character.—Prof. H. W. Conn.

When Salt Appears in Butter.

In the summer time it is quite common to see butter with salt standing on it. Agricultural papers frequently receive letters asking why the salt comes out on the butter. The explanation is simple and the butter can be easily kept in a normal condition. The salt comes out of the butter simply because the butter is kept in a dry atmosphere. This causes the moisture in the butter to move toward the surface of the butter and evaporate into the air. As it was salt water in the butter it is salt water when it gets to the surface of the butter. In evaporating it cannot take the salt with it, but has to leave it. At first the amount of salt deposited is so small that the residue of salt is not noticed. Later, however, the accumulations become so large that they are apparent to the eye. If the butter were weighed before the evaporation and afterward it would be found that the loss of weight had been considerable. Keeping the butter in a moist place will prevent the accumulation of salt. If the place where the butter is stored is opened several times a day it will be advisable to keep a crock of water in it, that the evaporation may regulate itself. But where butter is stored in a cool place that is not often opened there will be little trouble from this cause. The lower the temperature the less the evaporation. Places where the temperature is high and ventilation good dry out the butter quickly and leave it covered with salt.

New Zealand and Dairy Exports.

The general public does not, perhaps, realize how large a place New Zealand is filling in the production of butter and cheese for consumption in England. New Zealand is as yet but a thinly populated country, and the annual receipts of several million dollars for butter and cheese sold in the English market is a considerable item. The trade has largely been built up during the last ten years. It now amounts to about seven million dollars for butter and a million for cheese. For the year ending March 1895, New Zealand exported butter to the value of \$2,244,000 and cheese to the value of \$1,383,000. A pound is equal to \$1.55 in our money. By 1900 the exports of butter from New Zealand were worth \$32,700,000 and of cheese \$10,250,000. The development has been very steady, showing the healthy condition of the trade and the gradual increase in the cow population of New Zealand. For the year ending March 1904, the exports of butter were worth \$44,237,000 and of cheese \$17,340,000.



FARM SCIENCE

Soft Bacon.

If we are to maintain and develop our trade in bacon with Great Britain it is of the greatest importance that we pay strict attention to quality. Not only must our hogs be bred to give the desired conformation, but they must be fed and managed in such a way as to give the desired quality. One of the greatest defects in quality with which our packers have to contend is a tendency of some sides to turn soft during the process of curing. Softness has nothing to do with fatness; in fact, a thin side is more apt to develop softness than a fat one. In a soft side, the fat is soft and spongy; and sometimes even the lean is affected. There are all degrees of softness up to a mere slight tenderness; but any degree of tenderness detracts very much from the value of a side, and a really soft side is practically worthless. The percentage of soft sides is sometimes very high, even as high as 40 per cent of the total at certain seasons of the year. It will, therefore, be easily understood that such a condition represents an enormous shrinkage in value; and this loss is bound to be reflected in the prices paid the farmer for his hogs, to say nothing of the injury to the reputation of our bacon in Great Britain. This is not a matter, therefore, which affects merely the packer. It affects the bacon industry as a whole, and the farmer, sooner or later, must shoulder the loss. It is important, therefore, that the farmer should pay particular attention to the question of quality.—Ontario Station.

The Kerry Cow.

The Kerry cow is being written about quite extensively in our foreign exchanges, and it is not improbable that she is among the breeds that will some time be known in this country. Whether she possesses any points that would adapt her to some particular regions of this country is a matter of conjecture. Perhaps in some of our more mountainous districts in the south and in the far west she might supply a demand for a dairy cow that is poorly supplied at the present time. The cow has already assumed considerable importance in England on account of being small in size and being able to thrive on poor short pasture. Evidently she has been developed under hard conditions. Some of her English friends claim for her that she will give more milk and butter according to her weight and on poor pasture than any other breed of cattle on the same kind of pasture. On the other hand, the use of good pasture seems to be against the Kerry cow, as she at once begins to take on flesh and shrink in her milk. One man says that the Kerry will live and do well where a Jersey cow would starve. She is said to possess one quality that certainly is not common with cows and that is the ability to regain her milk flow when it has been shrunk for months from poor feed. This is a point in her favor, if it can be established. The Kerry is said to be very hardy and to be able to pass the Irish winter without shelter.

Society of Pure-Bred Hogs.

It is a great point in favor of pure-bred hogs that they are more docile than the others and less liable to run about. The fencing of them is a comparatively easy matter where the fencing of the others was a herculean task. This point should be of itself sufficient reason for the farmer to pay a little more money and get pure breeds when he has the choice of buying them or of purchasing others of the mongrel sort with roving and restless proclivities. It is not a pleasant thing to have hogs always breaking out of the yards and pastures and having to hunt them in the highway or the neighbors' vegetable garden. They are common sorts are hard to drive and it is no easy matter to return them to their pens and yards once they have broken out. The quieter animals are more valuable for food, as their muscles are tender. Moreover the quiet ones make better use of their food and will make more pounds of gain per hundred pound of feed than the others. The breeders of pure bred swine are constantly selecting, though unconsciously, in the direction of greater docility and tractability. The interests of the breeders of pure bred swine and of the farmers lie along the same line.

Dairy Associations.

Most of our agricultural associations are conducted on a high moral plane and the more this is the case the easier will it be to make them effective in the performance of the work they are organized to do. The dairy association, the association of creamery managers, the association of creamery buttermakers, and whatever the name of the association may be, will do well to see to it that a war is made on every form of dishonest dealing. Dishonest practices can be prevented almost entirely when associations of the kind named take a firm stand in regard to them, so far as these practices are found among their own members. There is nothing so potent as public opinion, and frequently this is enough when manifested to stop abuses.

The winter apple is still the great money-maker among fruits. Much less money is often on this kind of fruit than on any other, judging from quotations as they stand.



HORTICULTURE

Tree Growth on Sand Dunes.

In various parts of Illinois and neighboring states the sand dunes, formed by the winds in past centuries and not now blowing, are covered with a growth of trees, such as oaks and maples. The writer saw such dunes in Kankakee County, Illinois, last week. There is no better use to put these dunes to than to grow trees on them. But an improvement could be made by cutting off the present growth of trees and seeding to white pines. The latter would make a much more vigorous growth. Or, what is better, the pine seeds might be sown in the groves now standing, and the trees now standing on them cut off for firewood or various other purposes as fast as the pines push up. The oaks and maples do not make a large growth on such land. One man said that if the Almighty wanted pines to grow on such soil they would have been placed there. But this hardly settles the matter, in the minds of most people; as they realize that the Almighty has given us a few problems to work out. It is commonly believed that the natural growth of trees indicates the character of the soil, and that the kind of trees will grow on any soil that does best there. This is a safe rule to follow generally, but there are exceptions to this rule, and such exceptions are to be found on these isolated sand dunes. They are like islands in the sea. All around the surface of the earth bears trees suitable to a loamy soil rather than to sandy soil. If some birds had dropped the seeds of the pine cone on this land the pines would have taken the lead and crowded out the other trees, and the result would have been a stately forest of pines on each dune. But whence should the seeds come when the land was covered in all directions with trees of a nature differing from the pine? The natural thing happened, and these dunes became covered with a growth little suited to them. It will pay better to start upon them trees of the kind that find sandy soil the best medium in which to grow.

Fall Planting of Trees.

For a large part of the north fall planting is profitable, especially for that region lying south of central Illinois and east and west of it. In Michigan the line of territory in which fall planting is safe swings to the north, on account of the mildness of Michigan, due to the influence of the lakes. We have urged farmers in the past to be careful about tree planting as to season, and we still have to give this advice. Fall planting should not be followed in Wisconsin, northern Illinois, northern Iowa and above that as the trees are more likely to live if planted in the spring. But where the climate is milder, as in the region indicated, fall planting will be found to be preferable to the other for a number of reasons. There is more time to do the work in the fall than in the spring, for the farmer finds it necessary in the spring to use every fine day for the putting in of his regular farm crops. If they are put in in the fall, there is more time in which to prepare the ground. Then, too, there is a longer period in which to receive the consignments. The farmer that is fortunate enough to live near a nursery can visit it while the trees are still in leaf and pick out the ones he wants for planting. If any of them, when delivered, are not what he bargained for, it will be much easier for him to obtain new ones in time for planting than it would be in the spring.

Summer or Winter Apples.

The question is sometimes raised whether it is better to grow winter or summer apples. The answering of that must depend on the market for their disposal. It is generally regarded as a bad policy to plant largely of summer apples, because they must be disposed of in a hurry, and if there are numerous other farmers that have summer apples it makes it necessary for them to all be put into the market at practically the same time. They cannot generally be kept well in cold storage. The farmer that intends to grow summer apples must be able to look far ahead and determine for himself what will be the state of the market in his vicinity when his summer apple trees come into bearing. Most of us cannot do that with sufficient certainty to make it safe to do extensive planting. With the winter apple it is different. It has almost a world for its market. It can be kept in storage for half a year, and in some cases can be kept even longer. It can be shipped and reshipped, packed and repacked. The summer apple will not stand much handling. Here and there men have a market for summer apples if they produce them, but the market is not so good as it is in the winter. The summer apple has the late peach and the grape with which to compete as well as the banana. The winter apple has only the banana and the orange, and the latter can hardly be called a competitor on account of its high price and often indifferent quality. A safe proposition, we would say, put in the winter varieties for a commercial orchard.

Sweet cream butter is coming much too late in this country. This kind of butter is not made, as might be supposed from the name, from cream from sweet milk, but is generally made of ripened cream. It is called sweet cream because it is not salted.

THE LOCAL MARKET

Grain and Hay.

Quotations for carload lots delivered on tracks Beaumont or other points taking same rates. Dealers charge from store 5@10c per 100 pounds more on bran, 2@3c per bushel on oats and corn, 10@15c per 100 on hay.

Oats—Texas, 50@55c; No. 1 mixed, 49c; white, 51@53c.

Bran—Per 100 lbs. \$1.05@1.10.

Corn—Pure \$1.25@1.30.

Oats—Texas 48@49c.

Corn—70c.

Hay—Choice alfalfa, \$15.00; choice timothy, \$17.00; South Texas prairie, \$7.50@8.50; Johnson grass, \$9.50@10.00.

Feed products very stiff, with advancing tendency.

Market barely steady, with a declining tendency.

Hides and Wool.

Dry flint hide, under 16 pounds, 10 1-2c.

Dry salt hide, over 18 pounds, 10c; under 18 pounds, 9c.

W. S. hides, 1-2@7c.

Sheep pelts, 15 to 40c.

Goat skins, 10 to 15c.

Horse hair 15 to 18c.

Wool, free spring, 12 1-3 to 16c.

Wool, free fall, 10c.

Wool, hard burry, 8c.

Butter and Cheese.

Butter—Blue Star, 25c; dairy butter 18@20c; Elgin, 20@21c; Bernice Fancy Creamery, 25c; Meadow Gold, 30c; Fancy renovated creamery, 23@24c.

Allison's Pure pasteurized cream butter, single pound 35c; 2 pounds for 65c.

Cheese—Full cream flats, 14c; daisies 14c; prints, 15c; full cream Longhorns, 15c.

Flour and Breadstuffs.

Flour—Basis 48-lb. sacks. Fancy high patent \$5.60; fancy half patent \$5.30; third grade \$4.50; 24-lb. sacks 10 per barrel higher; flour in wood, 30 per barrel higher; lots 10c less.

Farinaceous Goods—Grits, hominy and cream meal, in 40-lb. sacks, per sack, 75c; pearl meal in 35-lb. sacks, \$1.95 per barrel of four sacks; Scotch oats \$2.95@3.00; Friends' oats \$2.95@3.00; Columbia oats, \$2.85; Hawk eye oats, 2.85; Hecker's buckwheat, 1-lb. packages, \$4.80.

Crackers—A B C soda bulk, boxes, 7c; 1-lb. cartons, per dozen, 100c; ginger snaps, 7c; creams, 8c; stage planks, 6c cakes and jumbles, 11c.

Canned Goods.

California Extra Standard (2-lb. cans)—Black cherries, \$2.25; white cherries, \$2.25; Y. C. peaches, \$1.75; L. C. peaches, \$1.85; apricots, \$1.60; Bartlett pears, \$1.85; grapes, \$1.50; standard, 10 per dozen less.

Eastern Canned Goods and Vegetables—No. 3 apples, 85c; sliced pineapples, \$1.15; E. and C. pineapples, \$1.60; ex-grated pineapples, \$1.75; pineapple chunks, 1-lb. cans, \$1.35; pineapple chunks, 1-lb. cans, \$1.60; Singapore ex-grated pineapples, \$1.85; 2-lb. pears, 75c; 2-lb. strawberry tins, 90c; 2-lb. blackberries, 85c; 2-lb. peaches, none; 2-lb. full-weight tomatoes, 75c@80c; 3-lb. full-weight tomatoes, 1.00; 2-lb. light-weight tomatoes, 80c@85c; 3-lb. light-weight, 95c; 3-lb. kraut 1.25; 2-lb. Petit Pois ex sifted June peas, 1.60; 2-lb. standard Marrowfat peas, 1.00; 2-lb. light-weight Marrowfat peas, 90c; 3-lb. pumpkin, 95c; 2-lb. B. & E. Ridge corn, 1.25; 2-lb. A. I. corn, 1.25@1.35; 3-lb. Cupid hulled corn, 90c.

Drugs and Chemicals.

Quinine, 34c@40c per ounce; bottle morphine, 2.50@2.60 per ounce; cocaine 4.25 per oz; borax 9-lb. per pound in 100-lb. packages; camphor 2.00 in barrels; castor oil, 1.20 per gallon in 5-gallon packages; epsom salts, 25c per 100 lbs. in barrels; alcohol, 2.70@3.00 per gallon; sulphur, 3.25 per 100 lbs. in barrels; alum 3c per lb. in barrels; calcium carbide, 4.00 per 100 lbs. salt-water, 7c; 1-lb. in barrels.

Canned Molasses.

Georgia Cane, gallons, 3.10, half gallons, 3.50, quarts 3.75; Cero de Batterie, gallons, 3.10, half gal. 3.50, quarts 3.75; Kaimomel Syrup, 10 lbs.

Dried Fruits and Nuts.

16 oz. cleaned currants, 30c in case, per lb. 8c; 12 oz. cleaned currants, 48c in case, per lb. 7c; 3 Crown Smyrna Imported figs, 10-lb. boxes, per pound, 12c; 2 Crown Smyrna Imported figs, 10 lb. boxes, per lb. 15c; 2 Crown California figs, 1-lb. bricks, 10 lb. boxes, per box, 1.15; 3 Crown California figs, 1-lb. cartons, 10-lb. boxes, per lb. 1.25; 12 oz. packages seeded raisins, 45c in case, per pkg. 9c; 10 oz. packages seeded raisins, 30c in case, per package, 8c; 2 Crown L. L. raisins, 20 lb. boxes, per box, 2.00; 3 Crown L. L. raisins, 20-lb. boxes, per box, 2.15; 2 Crown L. L. raisins, 5-lb. boxes, per box, 70c; Amer. Corsican citron, 10-lb. boxes, per lb. 16c; Amer. orange peel, 10 lb. boxes, per lb. 14c; Amer. lemon peel, 10 lb. boxes, per lb. 14c; No. 1 California almonds, soft shell, sacks containing about 80 pounds, per lb. 16c less quantities, per lb. 17c.

Peanut—5c@12c per lb.

Miscellaneous.

Rope—Sisal, 7-16 basis 9c, Manila cotton, XXX, 14 3-4c.

Salt—Rock, 9.00 per ton; Louisiana coarse, 85c; Texas and Kansas, per bbl. 60-55, \$2.60; 100-35, \$2.75; 140-2, \$2.85.

Pickles—Pinto, 95c; quarts, \$1.65; 4; allon, \$3.25; 1-gallon, \$4; 5-gallon 8.00; \$2; 10-gallon logs, \$3.50; Gross and Blackwell's pickles, \$3.65.

Candy—Stick, wrapped, standard 6c@7c; fancy mixed, in pairs, 6c@8c; fancy in cases, 11c@12c; rose 11c@12c.

Starch—Pearl, 40-lb. boxes, 4c; glass bulk, 4c; Nickel, \$3.00; 1 to 3 pound packages, 5c@6c.

Molasses—Centrifugal, fair, 23c; prime, 25c; choice 23c@30c.

Doubled Up on Work.

The late Wilhelm Jordan used to claim that his ability to write as easily with the left hand as the right was one of the reasons why he was able to do such a vast amount of literary and journalistic work.

Old Fashion Meat.

A Massachusetts man was fined the other day for killing a cat. This would make it appear that the old lawbook is still the best weapon with which to get even with a feline of feline.

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