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The Agriculturist.

A WEEKLY JOURNAL DEVOTED TO AGRICULTURE, LITERATURE, AND NEWS.

ANDREW LIPSETT, Publisher.

"AGRICULTURE THE TRUE BASIS OF A NATION'S WEALTH."

ANDREW ARCHER, Editor

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Agriculture

PRIZE LIST.

We commence publishing this week the list of prizes awarded at the Provincial Exhibition, copied from the special record, but omit the amounts giving for prizes. We shall give the remaining portion next week.

S. L. Alward, Stallion, 1st prize. J. D. Andrews, Hoes, assortment, 1st prize. A. C. Atkinson, Track Sulky 2nd prize. Mrs. B. Atherton, Cloth Linen, 1st prize. Harris Allen, Brass Castings and assortment of Castings, 1st prize. Allen Bros., Ship Captains, 1st prize. James Adams, Jig Saw work, 1st prize; Wood Carving, 1st prize; Fancy Wood, 1st prize. John Amos, Model of Ship, 1st prize. E. F. Bridges, Stallion, 3 years old, 1st prize. H. C. Burpee, Mare and Foal, 1st prize. J. W. Barker, Filly 3 years old, 2nd prize; Crosses and Grades Sows, 1st prize; Ladies' Hose, 1st prize; Knit Shirt, 1st prize. Robert Brown, Filly 3 years old, 3rd prize; Bull Calf under 1 year, 1st prize; Short Horn Cow, 1st prize; Grade Heifer Calf, 1st prize. G. G. Brown, Stallion 3 years old, 1st prize. Y. F. Barker, Short Horn Bull 1 year old, 1st prize. A. M. Broderick, Horse Shoes, 1st prize. Broad & Sons, new land Hoes, 2nd prize; Axes, etc., 1st prize; Edge Tools, all kinds, 2nd prize. Thomas Boulter, Grade Bull, 1st prize. Mrs. W. S. Burton, Braid work, machine, 1st prize; Shirts, machine. L. W. Baily, Minerals of N. B., 1st prize. N. & W. A. Burpee, Leicester Ram, 2nd prize; Leicester Ewe Lamb, 1st prize; Leicester pen of 5 ewes, 1st prize; Berkshire Boars (pure), 1st and 2nd prize; Mangel Wurtzel, 1st prize; Mangel Beet Seed, 1st prize; Parsnip Seed, 1st prize; Beans, 2nd prize; Pole Beans, 1st prize; Cheese, factory, 3rd prize. Robert Brown, Northampton White Beans, 2nd prize; Mangel Wurtzels, red and yellow, 2nd and 3rd prize. George Burt, Fancy Flannel, 2nd prize. B. J. Barnes, Bedroom Set, 1st prize. C. E. Burnham, Library Furniture, 1st prize; School Furniture, 1st prize. Bradley Bros., Ship's Blocks, 1st prize. E. A. Barbare, Wooden Pump, 1st prize. W. J. Bridges, Fat Steer, 1st prize. Mrs. J. P. Burnham, Darned Netting, 1st prize. George S. Bass, Rustic Work, 1st prize; Rustic Seats, 1st prize; Biscuit, assortment of, 1st prize. Robert Briggs, Timothy Seed, 1st prize; Woolen Mitts, 2nd prize. H. D. Burpee, Mangel Wurtzel 1st prize; Beet Seed, 3d; Parsnip Seed, 1st prize; Late Cabbage, 1st prize; Pole Beans, 2d prize; Cheese, Factory, 1st prize. John Bebbington, White Celery, 2nd prize; Verbena, 1st prize; Geraniums, 1st prize; Bedding Plants, 1st prize; Ferns, 1st prize; Bouquet Cut Flowers, 2nd prize; Cut Flowers, 1st prize; Green House, 1st prize; display of Plants in Flower, 2nd prize; Foliage, 2nd prize. James Bridges, packed Butter, 5th prize. Louisa Burpee, Braid Work, 1st prize; Muslin Embroidery, 2nd prize. Geo. N. Babbitt & Sons, Fansies, 2nd prize. James Berry, Intermediate and Altringham Carrots, 1st prize; Parsnips, 1st prize; Hub Squash, 2nd prize; Turnip Squash, 2nd prize; Cucumber, 1st prize; Mangel Wurtzel, 1st prize; Danver Onions, 1st prize; White Celery, 1st prize; Red Celery, 1st prize; Salsify, 1st prize; Peppers, 1st prize; Yellow Tomatoes, 2nd prize; Sweet Corn, 1st prize; Cucumber, 1st prize; Parsnips, 1st prize; Grapes, 1st prize; Parsnips, 1st prize; Sweet Shoots, 1st prize; Perennial Floxes, 1st prize; Display of Flowers in Plant, 1st prize. Adeline Burpee, Late Cabbage, 2nd prize. Mrs. Charles Brown, Heath Rug, 1st prize. Mrs. Doretha Brown, Wollen Quilt, 1st prize. Emily J. Bourne, Mexican Work, 1st prize. Mrs. Blair, Berlin Work, 1st prize. W. J. Coy, Stallion, 3 years old, 2nd prize. G. H. Clements, Filly, 1 year old, 2nd prize; Fair Steers, 1st prize; Summer Wheat, 1st prize; White Beans, 2nd prize. Carleton Co. Agricultural Society, Stallion, 4 years old, 3rd prize; Blanket, 3rd prize; Carpet, 2nd prize; Wove Quilt, 1st and 2nd prize; Thrasher and Separator, 1st prize; Horse Power Engine, 1st prize; Horse Shoes, 1st prize; Indian Corn, 1st prize; White Peas, 2nd prize. G. W. Christie, Stallion 2 years old, 3rd prize; Wollen Gloves, 2nd prize; Shawl, 3rd prize. Geo. Campbell, Filly 3 years old, 1st prize. W. A. Coburn, Short Horn Bull 2 years old, 1st prize. Joseph Currie, Crosses and Grades Sows, 2nd prize.

Geo. W. Currie, Crosses and Grades Sows, 1st and 3rd prize. Stephen Carrille, Fat Pigs, 1st and 2nd prize. Connel Bros., Wood and Iron Plough 1st prize; assortment Cylinder Stoves, 2nd prize. Lovelers, Henderson & Wilson, Top Buggy, 1st prize; Track Buggy, 1st prize; Single Sleigh, 1st prize. W. J. Currie, Mammoth Squash, 2nd prize. F. S. Climo, Collection of Photos, 2nd prize. N. A. Cliff, Hair Work, 1st prize. Campbell & Fowler, Axes, etc., 2nd prize; Carriage Springs, 1st prize; Hair Patent Axes, 1st prize. Jas. Clark & Sons, Shoemakers' Lasts, 1st prize. James Clark, Hubban Squash, 1st prize; Turnip Squash, 1st prize; Cucumber 2nd prize; Bush Beans, 2nd prize; Sweetstake garden Produce 2nd prize; Mammoth Squash, 1st prize. H. P. Calhoun, Paintings, Water Colors, 2nd prize. Benjamin Campbell, Jacksonville, Barclay, 3rd prize. James E. Camber, Compton Sur prise, 1st prize; Gilly Flowers, 1st prize; Apples, variety, 1st prize; Apples, 2nd prize; Butter in Crocks; John Camber, Silver Dollars, 1st prize; Sashes, 1st prize; Bush Beans, 1st prize; Apples, 1st prize. Carrol Bros., Wheat Flour 1st prize. Miss Camber, Cotton Quilt, 1st prize; Camber, Cotton Quilt, 1st prize; Leicester Ewe 2 sheep, 1st; Leicester Shearing, 1st; Pen 5 Ewes, 1st; Carrots, 1st; Parsnips, 1st; Mangel Wurtzel, Glob, 1st; Purple Top Turnips, 2nd; Early Horn Carrots 2nd; Intermediate Carrots, 1st; Parsnips, 2nd; Markery's, 1st. Mrs. James Harrison, Knit Drawers, 2nd. Miss Ellen Hunt, Berlin Work, 2nd. J. A. Haller, Indian Corn, 2nd. William Harper, packed Butter, 3rd. A. D. Hartly, Wollen Quilt, 2nd. Mathew Hutchinson, Cotton Cloth, 1st. Mrs. G. L. Hatheway, Citron Melons, 1st; Honey in Boxes, 1st; Cloth, not tatted, 2nd. Mrs. E. M. Hazen, Landscape in Oil, original, 1st; Paintings in Oil, 1st; Paintings in Water, 2nd; Pencil Crayon, 1st. James Johnston, Grade Bull, 2nd; Crosses and Grades, 2nd. E. S. Jarvis, White Oats, 1st; Black Oats, 2nd; Rough Buckwheat, 2nd; White Buckwheat Meal, 2nd. W. A. Johnson, Bees Wax, 1st. Misses Jack, Crochet Cotton, 1st. Miss Jacoby, Illuminated Texts, 1st. Crayon Drawing, 1st. Mrs. Annie E. Jack, original Pen Drawing, 1st. Wm. E. Kerr, Grade Bull Calf, 1st; Candles, 2nd; White Peas, 3rd; Root Potatoes, 1st. Mrs. Kilner, Coop for Hens, 1st; Wool Socks, machine, 1st; Cotton Socks, machine, 1st; Point Lace, 1st; Knit Shirt, 1st. Kelly & Murphy, Open Waggon, one seat, 1st; Open Waggon, two seats, 2nd; Single Sleigh, 2nd; Double Sleigh, 2nd; Trotting Sleigh, 2nd. S. N. Knowles, Leather Covered Trunk, 1st; Wood Trunk, other cover, 1st; Hand Valises, 1st. General Kilner, English Squash, 1st. James Kilpatrick, fancy Knitting, 2nd; Knit Garibaldi, 1st. Mrs. Celia Kony, Double Zeinnes, 1st; Bouquet, 1st; Hand Bouquet Flowers, 2nd. Alfred Letts, Stallion, 3 yrs., 2nd. Jas. Lister, Stallion, 2 years, 2nd. John L. Leighton, Grade Bull, 3d; Grade Bore, 1st. J. S. Loane, Open Waggon, 2nd. J. F. Lawton, Mill Saws, 1st. Geo. Leok, Carrots, 1st. Edmund Love, Patchwork Quilt, 3d. Lemont & Sons, Indian Work, 1st. Daniel Murray, Stallion, 2 yrs., 1st. Robert Mackin, Filly, 3 yrs., 2nd. Murray Bros., Short Horn Bull 3 yrs., 1st; Chinese Goose, 1st; Common Ducks, 1st; Aylesbury do, 1st; Indian Corn, 2nd; Onions, 1st; Markery's, 1st; White Carrots, 1st; Carrots, 1st; Beets, 1st. David Morrow, Ayrshire Bull, 3rd; Cow, Calf, 3rd. Miller & Gaynot, Canned Lobsters 1st. Wm. Segoe, Leicester Ewe, 2nd; Pen 5 Ewes 3rd; Yorkshire Hog 1st; Boar, 1st. J. B. & A. M. McGee, Cochon Partridge, 1st; Game Bantams, 1st. John McTear, Jersey Heifer, 2nd. Robert Miller, Cotton Cloth, 2nd. John Mealey, Tinware, head, 2nd. J. C. Manzer, Winter Wheat, 1st; packed Butter, 1st. John C. Murray, Carrot Seed, 1st. G. J. Mansell, Potatoes, latest variety, 1st. Mrs. G. J. Mansell, Limerick Lace, 1st. W. Miles, Turnips, 1st. Mrs. W. S. Marvin, Grewel Work, 1st; Scotch Needle, 1st. Daniel McVeary, Stallion, 4 years, 3rd. J. C. McDevitt, Mare and Foal, 3rd; Grade Heifer, 2nd; Belgian Carrots, 2nd. Thomas McGarrigle, Filly, 2 years old, 1st. Hugh McMonagle, Ayrshire Bull, 1st and 2nd; do. Calf, 2nd; do. Cow, 2nd and 3rd; do. Heifer, 1st and 3rd. James McKay, Berkshire Sow, 1st; (pure), 1st. Robert McLean, Gr. do. Bull, 3 yrs., 1st. Kays McBrine, grade Bull, 3 years, 2nd; grade Calf, 2 years, 2nd; Blankets, 1st; Black Oats, 3rd; Buckwheat, 3rd; Barley, 1st. Alexander McFarlane, Ram, Crosses and Grades, 2 years, 1st; Blankets, 2nd; Wollen Shawl, 1st. Thomas McKenzie, pair Game Fowls, 1st; Bolton Grays, 1st.

George F. Gunter, Yorkshire Boar, 2nd; Crosses and Grade Sow with litter, 1st. J. C. Gilman, E-sex Boar, 1st; Mangel Wurtzel, Yellow, 1st; Pumpkins, 1st. Frank Goodine, Oxon and Yoke 1st, Cotton Quilt, 3rd. James Good, Cheese, Factory, 2nd. Alex. Gibson, Wheat Flour, 3rd; Buckwheat, 1st. W. J. Gibson, Brahma Fowls, 1st and 2nd; Guinea Fowls, 1st. Gibson Leather Co., Top Carriage, 1st; Waxed Calf, 1st. John C. Gibson, pair to Carriage, 1st. Luther Goodspeed, Cheese, 2nd; Corn Meal, 1st; Cotton Quilt, 2nd. James Good, Work in Linen, 1st. John Harper, Short Horn Bull, 3 years old, 1st. S. S. Hall, Jersey Bull, 3 years old, 3rd. John Harvey, Grade Heifer Calf, 2nd; packed Butter, 4th; Cloth, 2nd. Wm. Hazehurst, Iron Plough, 1st; Cooking Stove, 2nd; Hollow Ware, 1st; Ornamental Iron Work, 2nd. Joseph Hawkins, Double Mould Plough, 1st; Harrow, Wood and Iron, 1st; Cultivator, Iron, 1st; Roller of Wood and Iron, 1st. Miss Kate Hudson, Silk Embroidery, 1st. Jas. D. Hurley, Ladies' Boots and Shoes, 1st; Mens' Boot and Shoes, 1st. Geo. Hildebrand, four oared Shell, 1st. James Henry, Timothy, Seed, 3rd; Hooked Mat, 2nd; Wool Mitts, 3rd. C. B. Harrison, Leicester Ram Lamb, 2nd; Leicester Ewe Lamb, 2nd; Leicester Ewe 2 sheep, 1st; Leicester Shearing, 1st; Pen 5 Ewes, 1st; Carrots, 1st; Parsnips, 1st; Mangel Wurtzel, Glob, 1st; Purple Top Turnips, 2nd; Early Horn Carrots 2nd; Intermediate Carrots, 1st; Parsnips, 2nd; Markery's, 1st. Mrs. James Harrison, Knit Drawers, 2nd. Miss Ellen Hunt, Berlin Work, 2nd. J. A. Haller, Indian Corn, 2nd. William Harper, packed Butter, 3rd. A. D. Hartly, Wollen Quilt, 2nd. Mathew Hutchinson, Cotton Cloth, 1st. Mrs. G. L. Hatheway, Citron Melons, 1st; Honey in Boxes, 1st; Cloth, not tatted, 2nd. Mrs. E. M. Hazen, Landscape in Oil, original, 1st; Paintings in Oil, 1st; Paintings in Water, 2nd; Pencil Crayon, 1st. James Johnston, Grade Bull, 2nd; Crosses and Grades, 2nd. E. S. Jarvis, White Oats, 1st; Black Oats, 2nd; Rough Buckwheat, 2nd; White Buckwheat Meal, 2nd. W. A. Johnson, Bees Wax, 1st. Misses Jack, Crochet Cotton, 1st. Miss Jacoby, Illuminated Texts, 1st. Crayon Drawing, 1st. Mrs. Annie E. Jack, original Pen Drawing, 1st. Wm. E. Kerr, Grade Bull Calf, 1st; Candles, 2nd; White Peas, 3rd; Root Potatoes, 1st. Mrs. Kilner, Coop for Hens, 1st; Wool Socks, machine, 1st; Cotton Socks, machine, 1st; Point Lace, 1st; Knit Shirt, 1st. Kelly & Murphy, Open Waggon, one seat, 1st; Open Waggon, two seats, 2nd; Single Sleigh, 2nd; Double Sleigh, 2nd; Trotting Sleigh, 2nd. S. N. Knowles, Leather Covered Trunk, 1st; Wood Trunk, other cover, 1st; Hand Valises, 1st. General Kilner, English Squash, 1st. James Kilpatrick, fancy Knitting, 2nd; Knit Garibaldi, 1st. Mrs. Celia Kony, Double Zeinnes, 1st; Bouquet, 1st; Hand Bouquet Flowers, 2nd. Alfred Letts, Stallion, 3 yrs., 2nd. Jas. Lister, Stallion, 2 years, 2nd. John L. Leighton, Grade Bull, 3d; Grade Bore, 1st. J. S. Loane, Open Waggon, 2nd. J. F. Lawton, Mill Saws, 1st. Geo. Leok, Carrots, 1st. Edmund Love, Patchwork Quilt, 3d. Lemont & Sons, Indian Work, 1st. Daniel Murray, Stallion, 2 yrs., 1st. Robert Mackin, Filly, 3 yrs., 2nd. Murray Bros., Short Horn Bull 3 yrs., 1st; Chinese Goose, 1st; Common Ducks, 1st; Aylesbury do, 1st; Indian Corn, 2nd; Onions, 1st; Markery's, 1st; White Carrots, 1st; Carrots, 1st; Beets, 1st. David Morrow, Ayrshire Bull, 3rd; Cow, Calf, 3rd. Miller & Gaynot, Canned Lobsters 1st. Wm. Segoe, Leicester Ewe, 2nd; Pen 5 Ewes 3rd; Yorkshire Hog 1st; Boar, 1st. J. B. & A. M. McGee, Cochon Partridge, 1st; Game Bantams, 1st. John McTear, Jersey Heifer, 2nd. Robert Miller, Cotton Cloth, 2nd. John Mealey, Tinware, head, 2nd. J. C. Manzer, Winter Wheat, 1st; packed Butter, 1st. John C. Murray, Carrot Seed, 1st. G. J. Mansell, Potatoes, latest variety, 1st. Mrs. G. J. Mansell, Limerick Lace, 1st. W. Miles, Turnips, 1st. Mrs. W. S. Marvin, Grewel Work, 1st; Scotch Needle, 1st. Daniel McVeary, Stallion, 4 years, 3rd. J. C. McDevitt, Mare and Foal, 3rd; Grade Heifer, 2nd; Belgian Carrots, 2nd. Thomas McGarrigle, Filly, 2 years old, 1st. Hugh McMonagle, Ayrshire Bull, 1st and 2nd; do. Calf, 2nd; do. Cow, 2nd and 3rd; do. Heifer, 1st and 3rd. James McKay, Berkshire Sow, 1st; (pure), 1st. Robert McLean, Gr. do. Bull, 3 yrs., 1st. Kays McBrine, grade Bull, 3 years, 2nd; grade Calf, 2 years, 2nd; Blankets, 1st; Black Oats, 3rd; Buckwheat, 3rd; Barley, 1st. Alexander McFarlane, Ram, Crosses and Grades, 2 years, 1st; Blankets, 2nd; Wollen Shawl, 1st. Thomas McKenzie, pair Game Fowls, 1st; Bolton Grays, 1st.

VITALITY IN SEEDS.

A seed is composed of three parts—the germ or embryo, the albumen or nutriment laid up in the seed to nourish the young plant till it is able to procure it from the soil and air, and the seed-coat. This last is often double. It is sometimes coriaceous or leathery, and at others it is hard and bony. The nutriment or plant-food is often laid up in the seed leaves of the embryo, as in the apple, squash, etc., and in others it surrounds it or is stored up in immediate contact with it, as in the cereal grains, the horse-chestnut, etc. The material of which this plant food is composed is quite various. A large portion of it is starch, some is albumen, oil, etc. The length of time seeds will retain their vitality depends somewhat on the nature of this material. Seeds containing much oil are supposed not to keep well, for the reason that their oleaginous contents soon become rancid. The manner in which they are put up, and the conditions under which they are kept, have probably more to do with the keeping qualities of seeds than the contents of the seeds themselves. Many reports that have gained extensive credence, if true, go to prove that under favorable conditions seeds will retain their vitality indefinitely. Some years ago it was reported that some peas had been found in an Egyptian tomb, one of which was successfully grown, thus introducing a new and very superior variety of pea. An excellent variety of wheat was also said to have been found in the same way. Though these supposed facts have been reported on very respectable authority, they have been called in question, and even positively denied by equally good if not better authority. Though such a fact, if it be a fact, should be certainly susceptible of undoubted proof, it does not seem that the proof is forthcoming, even under the stimulus of the above-mentioned denials.

Similar to the above are the reports of the sudden springing up of a heavy growth of forest trees on land that had been lately cleared the new growth being of an entirely different species from any that had grown within many miles of the spot in the history of the country. The sudden appearance of weeds, new to the locality, that have in some cases appeared on the soil thrown from wells and ditches, has led many to believe that the seeds from which they sprang had lain buried in the soil for many ages. The frequency of these reports seems to impress the mind with the idea that there must be some truth in them; but it is true that none of these observations have been made with that critical care that would exclude all probability, not to say possibility, of the seeds being conveyed to the place in very recent times. What we need is such an investigation of these facts as will exclude all probability of error. If some of this soil were taken from a depth of several feet, and placed under circumstances that would prevent the possibility of seed reaching it from any extraneous source, and then if the plants appeared, it would amount to a demonstration that the seed had lain dormant for many years. But until such demonstration is furnished, there will be doubters, and among the most intelligent persons on such subjects, the fact of it, there seems to be little positive knowledge on this subject, even among the best informed men of the country. Exceptions to what seem to be established laws in regard to the vitality of certain species of seeds are appearing so frequently as to almost shake our confidence in all teaching on the subject. Some kinds of seeds, as the magnolia, that are supposed to retain their vitality only a very limited time indeed, have, under certain circumstances, grown well after several years, thus proving our knowledge of their nature to be no knowledge at all. The prolongation of the vitality of seeds depends on the nature of the constituents and the state of perfect ripeness when gathered, and the conditions under which they have been preserved. In order that seeds may have the best possible keeping qualities, they should be well grown and thoroughly ripened upon the plant. When gathered, they should be placed in a cool, dry situation, till thoroughly air-dried. They should then be placed where they may be as near as possible free from the influence of heat, moisture and atmospheric air. These, together with insects, are the great agencies for the deterioration of the vitality of seeds. The limits of the vitality of common field and garden seeds are pretty well known; yet carefully conducted experiments that each variety of seed will do under all the various circumstances under which they are likely to be placed by nature, or under which they

FEEDING HORSES.

Owing to the small size of the horse's stomach, this animal should never be allowed to fast for any long period if it can be avoided, since experience teaches that at the end of a few hours his stomach is empty, and the whole frame become exhausted, while the appetite is frequently so impaired, if he is kept fasting for a long period, that when food is presented to him, it will not be taken. If a horse is required to travel a long distance, and the journey must be accomplished without stopping to bait, it exhausts the horse less to increase the pace up to his best average gait than to permit a slow gait, consuming a much longer time in going over the ground and on an empty stomach. In other words, if two horses are driven fifty or sixty miles under similar conditions as to the weight they have to draw, and the one is taken at the rate of six miles an hour, which will keep him fasting from eight to ten hours, while the other has travelled fast enough to do it in six or seven hours, the latter will be less exhausted than the former; though, even in this latter case, the horse would be all the better for a feed in the middle of the journey, the time devoted to such baiting being easily made up by the increased energy that would be supplied by the grain.

The human stomach will bear hunger far better than that of the horse, and if the driver feels his appetite pretty keen, he may rest assured that the animal before him is still more in want of food. The proper feeding of horses necessitates the careful study of the peculiar constitution of each animal, to ascertain whether the average quantity and quality of food, which will suit the majority of horses doing similar work, will be enough or too much for him. As in the human subject, no inflexible rule can be followed in all cases. The requirements of horses vary not only in constitutional differences, but also in the work for which they are designed. Again, some washy animals pass their food through them so quickly that they do not absorb from it one-half the nutritive elements contained in it. Such horses, however, must be fed largely, if they are kept at work, while those articles of food must be selected for them which have a tendency rather to confine the bowels, than to relax them. Care and watchfulness are absolutely necessary in the economical management of horses, and to the acquirement of such remunerative results as will make them their ownership profitable. The shrewd, keen owner of horses, who depends upon his own investigations, soon learns that some animals will perform an amount of labor far greater than others, while thriving under a far less quantity of food; hence he soon determines which to retain, and which to dispose of, leaving to the careless and indifferent individual the ownership and feeding of the unprofitable specimens.—New England Cultivator.

RAISING TURKEYS.

Twenty-five years ago, almost every large farmer living not too near to neighbors, was in the habit of keeping turkeys. They were a great help in the way of destroying grasshoppers, crickets, and other injurious insects which prey upon the crops of the garden and field. They usually roosted on trees near the farm buildings, and after the first few weeks from hatching, gave very little trouble to the feeder, and afforded a good bunch of bank notes for paying off debts which, might come due about Thanksgiving, Christmas or New Years. Of late years, however, the profits from turkey raising have been very much diminished by a disease which attacks the birds at all ages, from the time they are as large as quails till they are fully grown. The symptoms are dizziness, pale skin on the face and down the neck, an inclination to sit on the ground, or to lag behind when feeding with the flock in the fields, and a yellowish watery discharge from the bowels. The birds usually live but a few days after these symptoms are observed. They lose their appetites and grow rapidly weaker till they are found dead on the ground, near their usual haunts. If they are opened, the liver will be found very much enlarged, and with numerous tubercles scattered over the surface.

DISEASED LIVERS.

It seems to be purely a disease of the liver, as the other organs in most cases, present a normal appearance. We have lost three fine flocks in years past, by this disease, without knowing any cure or preventative, and many others have had a similar experience, and have consequently abandoned the raising of these choice birds. Charcoal and sulphur, we believe, have been recommended to be mixed with the food, but by the time the disease shows itself, it is not an easy matter to administer medicines in this way, as the birds have little or no appetite. While looking at some fine, large and healthy looking turkeys at the Vermont State Fair, and discussing methods of raising, with Mr. Charles Morse, of Plainfield, he stated that he had been very successful in treating this disease by giving red pepper, cinnamon, and rhubarb, in the form of pills, which can be easily given to the fowls, whether they have an appetite or not. The rhubarb is physicking in its effect on the bowels, while the pepper and cinnamon warm up the birds and stimulate action in the digestive organs. We have had no experience with this treatment, but give it wholly on the authority of Mr. Morse. Since turkeys have become so scarce upon our New England farms, grasshoppers and crickets have increased to an alarming extent in many localities. Whole fields of grass are sometimes eaten by grasshoppers, especially the second crops of clover, of which they are particularly fond. If any of our readers have been successful in treating the above described disease among turkeys, we should be glad to hear from them through the columns of the AGRICULTURIST, for it would certainly be a serious calamity to have these indispensable court pieces banished from our Thanksgiving and Christmas gatherings.—New England Farmer.

HARVESTING POTATOES.

A correspondent of the Country Gentleman makes the following excellent observations on the process of harvesting potatoes:—The potato crop this year is light. Buds and blight, in many parts of the country, destroyed the tops before the tubers were half grown. Hence the greater need of securing this crop in the best possible manner. It may seem a very simple thing to dig and store potatoes, but there is a knowledge to this, as to every other operation on the farm. I have often been pained to notice the wasteful manner in which not only young, but old and experienced farmers handle their potatoes. Many still dig with a hoe, and cut and slash the tubers as they were fighting an enemy, instead of harvesting one of the most precious articles of food; a thing of life too, and sensitive to every wound. A few suggestions, therefore, on harvesting potatoes may be timely. In the first place, the crop should not be touched till the weather is cool and the land dry. Potatoes are better off in the ground so long as the mercury runs up to 70° or 80° during the day. They keep best in a cool and uniform temperature, and this they do not get in the cellar, if dry, before the last of September. Indeed, we often have a week or ten days in the fore part of October so warm as to damage potatoes when piled in a light and airy cellar. I have seen them stored on the barn floor or in an open shed at this time of year, the farmer waiting for a convenient season to carry them off to market. I would not pay half price for potatoes that had been thus exposed to the sun and air for a week. This tubar was made to grow in the earth and remain covered with earth till wanted for use. By leaving the crop in the ground till the weather is cool, we avoid all danger of rot. If there is any tendency to decomposition, it is sure to be hastened by exposure to air, and by being piled in large quantities. If the rot must come, I prefer to have the decomposition take place in the field rather than in the cellar. The contamination of the air is bad enough in either place, but in the house it is intolerable. I have known many a bin of potatoes to rot from being stored too early. This involves not only a loss of the crop, but a loss of labor. To make the harvest of this crop easy and economical, the planting should be done in drills rather than hills. Both planting and harvesting can thus be accomplished by horse power. A potato digger, rightly handled, brings up the tubers so easily and so safely that I wonder that this instrument is not more common use. If the digging must be done by hand power, by all means use a sharp pointed shovel, or a broad-tined fork rather than a hoe. An Irishman

EARLY BREEDING.

A farmer of Vermont, who had read a communication in the Country Gentleman from a certain Dr. Salmon on the subject of breeding dairy cows, which corresponded with his own ideas on the subject, gives his experience to the same journal:—Dr. Salmon contends that early maturity develops the milk producing organs, and that breeding young has no injurious effect on the size of the future cow. Last year, being strongly of that opinion, I selected my two best heifer calves—dropped on March 19th and 30th—from my valuable full-blood Jersey cows. I determined to have them served at about six months old, notwithstanding the protest of older and more experienced neighbors. These calves were fed on fresh milk for three months, and then were kept on pasture, and fed skimmed milk and oatmeal for two months more. They were ready for service at four months. In October last I sent them to bull. With the same fair winter keeping they did fully as well as others (not served), and early in July, both came in and did well, and are now giving from five to seven quarts of rich milk—a fair quantity for any Jersey with first calf. Their udders are beautifully developed, and I am confident they will both make superior cows. I thus save the extra cost of one year's unremunerative carrying. As far as size goes, these are certainly as large and perfect as most two-year-olds of the same breed. I think it advisable to construct a dark hut, made of boards of trees, in the pasture, to which cows can resort to avoid flies during the heat of the day. Or better yet, stable them in the morning after milking (thus economizing manure), and give one good feed of mowed grass—Hungarian or clover—or corn fodder at noon, and return them to the pasture after milking in the afternoon. A little such humanity is more than repaid by the increased flow of milk, and the better condition of the animals. I have observed Jersey giving ten to twelve quarts daily, more than seven months after calving. Their food is pasture only, but I think their treatment has much to do with this long-continued and steady yield.

FALL IN THE VALUE OF LAND.

The ordinary newspaper reader says the North British Agriculturist can scarcely have failed, to observe how frequently, during the last year or two, landed property coming into the market did not find a purchaser at the upset price. Several years ago, as a rule the upset price was not only speedily realized, but often considerably exceeded. That has not been a case for two or three years back, notably for the last twelve months. Numerous properties, after being fully advertised, found no bidders at the upset price, which in not a few cases had to be reduced materially before a sale could be effected. In fact, the market value of landed property in England and Scotland, has, during the last two years, principally the last twelve months, fallen three or four years' purchase. We have heard some people say that the fall has been about five years' purchase. This does not show a prosperous or cheering state of matters. The decline in the price of land need not have been quite so great. There has been not much reduction of rent; but the steady increase has undoubtedly sustained a check. That has, doubtless, not escaped the notice of intending purchasers of land, who may have possibly calculated on a considerable fall of land rents by and by. Be that as it may, there has not lately been one applicant for landed property in the market for six that used to be. A similar remark applies to the tenancy of land. Farms have not been so easily let as they formerly were, and where rents were high before, previous rates have not been obtained; while interior farms are now very little sought after, even at less money. Where the holdings, however, were not over-rented previously and are good workable subjects, fully former rents are still got.

MILK AND BEEF COMBINED.

The following excellent observations on the above subjects, are made by a correspondent to a United States agricultural paper:—Combined milk and beef properties in a cow may be attained, but are they of as much importance as one would suppose from the discussions about them? Even with the two properties present in the highest degree, the one (beef) is of no use during the life of the animal while a milkier; as well have only a milk breed during that time. When the animal is aged and no more fit for the dairy—that is, the powers of nature failing—how much is she worth after that for beef? She cannot lay on the fat as in earlier days, and at the best, the profit in producing it, even if she rounds up well in flesh, is small. Are we not over-estimating the importance of the cow? Beef, at the end of the milking period, is the only advantage in the case, for when the animal is raised for beef alone, the dairy element loses its force, not being required. It is only the dairy cow, with beef in view at the end, that can be considered in the discussion. How, the union of these two elements—beef and milk—can be secured in its highest degree only by increased digestion. This requires a greater life of the animal while a milkier, it is possible perhaps to secure short of a period of time that would make it impracticable, if indeed it is reached at all. And were it accomplished, what would be the result of so arduous and expensive an undertaking? There is no necessity to have a fat milk cow when the same amount of milk can be obtained without. And to feed to get the greatest quantity of milk, would necessarily include this fat condition, unless it could be put off at the option of the feeder—a point which no one will expect can ever be reached. I think our efforts can best be employed in pushing the milk improvement, say by a union of the qualities of the Ayrshire and the Jersey—rich

