STUDY IN DAIRY FORM.

Heard's Dairyman Gives Two Very Fine Examples of Eminent Dairy Cattle With Appropriate Remarks.

We present this week, says Hoard's Dairyman, illustrations of one of the noted Jersey bulls of America, Recorder 29239, a son of the World's Fair cow Brown Bessie; also of a most typical Jersey mother, Teasel 75358, the only living daughter of Brown Bessie—and both from the herd of H. C. Taylor, Orfordville, Wisconsin.

Recorder presents many clear and decided points of excellence. First of all, it will be seen that he has a

RECORDER, A. J. C. C. 29239.

strong backbone. Note how full it rises just back of the withers, and continues strong and full (but not straight) to the point of the rump. This indicates a full flow of nervous force to all of the organs. The same predominance will be seen in the cow Teasel. The mammary organs require a constant and powerful flow of nerve force from the brain and spinal marrow, and the first thing we look for in dairy animals, is to see how well they are fortified in this particular.

From the joining of the neck on the shoulders, to the tip of his tail, Recorder is a thorough dairy bull. His head is also fine, but the neck is too short, although it bears a fine under outline. He has a strong belly and vigorous vitality, as is shown by the pendant navel: a high arching flank, and well incurved thigh at the rear line, indicate his descent from dairy ancestors.

He is the getter of talented cows, with records ranging from 15 pounds 3 ounces to 20 pounds 10 ounces, and by the character of his stock demonstrates the value of long, persistent breeding in a selected line from a clear fountain of dairy blood, tracing in this case through his dam to Combination, and from him to old Mercury, whom he greatly resembles.

The cow Teasel, as can be seen at a glance, is a dairy cow all over. She is not only a typical Jersey, but is more—a thorough exponent of dairy performance and capacity. The head and neck are decidedly feminine; the lean shoulder, a strong backbone

TEASEL, A. J. C. C. 75358

not imbedded in fleshy muscle, the strong, deep barrel, the rising pelvic arch, the thin incurving thighs, and the whole rear part of the cow show plainly a conformation made especially for the splendid udder. In short, this cow in her entirety presents a symphony of dairy harmony. The dairy temperament shines out in every lineament. There need be no fears of her taking feed and turning it into flesh.

Pure Breeds and Profit.

It is a fact well recognized that no branch of the live stock business suits the masses of people better than fowl-raising. It is a paying vocation, and is adapted to the young as well as the old, and to all sections of the country. Prime poultry is desirable in every poulterer's beginning. The wisest methods are those learned by experience and with small flocks at the start. Pure-bred stocks cost more at the start, but once established in the breeder's yard its beauty, prolificacy, and the consequent value of all the specimens produced from the original breeding-birds more than make up for the extra outlay spent in the outset in producing the very best stock that money can buy.

How to Keep Seed Potatoes.

To save potatoes for seed one should store them where they will be kept as cool as possible without freezing. One who has only a cellar in which they will wilt, grow soft and flabby, and sprout long before planting, will do better to store them in a pit out of doors, if he needs many, and if he plants but few, buy them of some one who can keep them in better condition. We have thought that a part of the advantages of sending north for seed every year was due to the potatoes being kept cooler there until shipped in the spring than they are kept in the ordinary house cellar, rather than to the necessity for a change of soil, or any running out of the potato when planted many years on the same soil.

Meat and Grain for Hens.

When meat is given it is not necessary to allow much grain. For instance, if meat is fed at noon it will only be necessary to scatter a few handfuls of oats in each pen to keep the inmates at work. When a hen becomes too fat she will lay soft-shelled eggs. When plenty of meat is to be had as one of the cheapest articles of food a greater quantity of oats may be given. Wheat is the best all-round food, and with the waste of the farm, in conjunction with meat and the hot morning meal, and exercise, will bring an abundance of eggs.

Lew Wallace a Trout Breeder.

General Lew Wallace has purchased a tract of land near Crawfordville, Ind., and will make a fish preserve of it. The land is watered by a number of excellent creeks and springs, which will be dammed for the purpose of trout breeding.

VALUABLE LECTURE.

Management of Live Stock in Health and Disease.

At the recent West York Farmers' Institute at Weston Mr. J. G. Davidson gave his lecture on "The Management of Live Stock in Health and Disease," and gave some new and well-tried remedies for various ailments. Sulphate of iron, he said, should be in every stable and was of incalculable benefit for all forms of vermin, and mixed with milk was a sure remedy for white worms in the throat. For horses or cows, as a sure death to the gadfly he suggested a spray made of sulphide of potassium, 1 oz. to 10 oz. of water. This would prevent the flies from bothering the cattle and should there be any in the larval state under the skin, a small application of this remedy would soon kill them. In the matter of feeding, water, the great solvent, is of prime importance and should be given freely. Mangels were not good food and, unless well matured, contained a bud oil, whilst on the other hand beets contained more sugar and were ready to fed when only four inches through.

Mr. John Bryans of Summerville asked for an opinion upon feeding carrots, and said that he had been very successful on his farm in Etobicoke in raising and feeding them. His crop ran 25 tons to the acre.

Mr. Davidson, in reply, said that he looked upon the carrot as a dangerous food. Fed indiscriminately to horses it was always their ruin.

Even for a man in its raw state it was unhealthy, whilst no vegetable was better when cooked. The carrot is a peculiar root, for whilst alcohol can be made from nearly all roots, the carrot is the only one from which it can not be made, and science has never been able to explain the reason why.

A discussion on killing weeds followed, led by Mr. R. L. Crawford. He suggested sulphide of potassium, 20 lbs. to the acre, as a remedy against wild mustard; but Mr. Davidson said that a cheaper remedy was sulphide of iron, sprayed over the field about the time the mustard is beginning to bloom, in the ratio of 10 lbs. to the acre. The spray was death to thistles and mustard, whilst in no other way injuring wheat. On the question of killing wild oats, no conclusion appeared to be arrived at. Mr. Grubbe said the last few dry seasons had almost killed it out, but the president thought that the seed in the ground would come up in future years under favorable conditions.

Measuring Cattle.

An old stockman says the following is a rule of determining approximately the weight of cattle by measurement; but the weight will vary much with animals of the same girth, according to build and degree of fatness. Cattle girthing five feet ordinarily weigh from 650 to 750 pounds; for each additional inch in girth add 25 pounds up to six feet, and for each inch after six feet add 50 pounds. This is the simplest rule known and is probably as good as any; but of course the only reliable test is that of the scales. Strange as it may seem, the English have not yet got fully in the habit of determining the weight of cattle by scales. They kicked against it vigorously at first as impuging their judgment of weights, calling the platform scales "nothing but a Yankee weigh bridge." Many years ago I edited the memoirs of an octogenarian cattle dealer who had bought cattle in Ohio and drove them to Syracuse, N.Y., before the Erie canal was constructed. He paid for the cattle in salt when he could. He took the salt from Syracuse where it was made, down the Oswego River to Lake Ontario, thence shipped it by sailboat. His standard for an animal was one that girthed six feet, for every inch over that he allowed $1, and for every inch short of that he deducted $1. He paid two barrels of salt worth $20 for a standard animal. He bought a small bunch of cattle of a judge who had to pay the purchaser a dollar for taking one of the cattle away. It was a long, slim steer that girthed 21 inches short of six feet. The judge said he could "hardly see through that, but supposed it was all right."

A Barrel Carrier.

The cut shows a very handy device for carrying barrels of apples, vegetables or of any farm produce. When barrels must be handled carefully, two men must take hold of each barrel, for it is an unhandy

BARREL CARRIER.

thing to get hold of. The holder is made of iron rods by a blacksmith, with handles and straps. It can be opened wide and slipped down over a barrel, then brought together under it, as shown in the figure. It can then be picked up and carried away with ease. Where there are large numbers of barrels to be handled such a device will prove very effective. To keep the iron rods from slipping on the bottom of the barrel the upper part of the rods can be flattened to an edge.

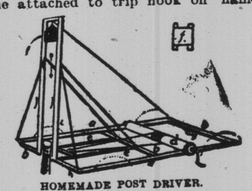
Progress in Horse Breeding.

A man need not be very old to remember when a 1,400 or 1,500 pound horse was a heavy draft horse, or a three-minute trotter a speedy roadster. Times have changed, however, and the heavy draft horse must weigh 300 to 500 pounds more and the roadster go a good many seconds faster to be classed as good ones of their kind. It takes a better horse to be a good one nowadays than it did ten or twenty or thirty years ago. The ideals of those days will not serve. The breeder must aim to get the kind that ranks high to-day, and this is the only kind that is going to pay for his oats hereafter.

RELIABLE POST DRIVER.

A Homemade Contrivance That Is Easily Operated by a Team, One Man and a Boy.

By the aid of a home-made post driving machine, as illustrated, posts can be driven nearly as fast as a team can walk on light soils, and each stop, even on a heavy soil, will not be greatly prolonged, says Peter R. Miller. The only difficulty will be in driving on a rock. The two side pieces (a a) are 4x6 inches by 10 feet; cross pieces (b b) are as long as the wagon is wide and of 4x6 inches. Pieces (e e) are 4x6 inches and 5 feet long, being let into cross piece (b) one-half. Cross piece (c) is of 2x4-inch and 1½ feet long, mortised into e e 2 inches. Windlass (d) is operated by a crank on side. Hammer (f) is operated by a crank; a line attached to trip hook on ham-



HOMEMADE POST DRIVER.

mer passes through pulley at g and through block at c to Windlass (d).

For my wagon pieces h h are each 1x6 inches and 1½ feet long, fastened to ends of a and c, leaving space for hammer to work in. Wagon wheels are shown at i i. The two centerpieces (j j) the runners for hammer (f) to work up and down in and are placed upright on end of e e, being braced, as shown, with four pieces. A strip of 1x2 inches and 10 feet long is fastened on the inner face of j j, leaving 1 inch space on each side of the runner. A corresponding groove is made in each side of hammer (f) (shown more clearly in the small figure), which is 2 inches wide and 1 inch deep, and slides up and down on j j. About 30 feet of small rope for hoisting the hammer is required. A line may be attached to trip hook on hammer and by simply pulling on it the hammer may be dropped at any desired height. Fifty pounds is weight enough for hammer. Two blows of hammer, under ordinary conditions, will drive a post. A team, one man and a boy can operate it.

THE WEANLING COLTS.

How to Develop Them Into Horses That Will Command Good Prices.

The time is at hand when the colts dropped last spring will, as a rule, be weaned, and as the latter-day demand for work horses lays great stress on weight the management of the colts from now until grass comes again is of the highest importance, because the desired weights cannot be made without feed nor by allowing the colt to rough it through the winter as best it may on frosted grass, poor hay, cornstucks and strawstacks. Given the start of the right kind of breeding, and something more is wanted during the colt's first winter to produce a horse that will bring money on the market, for if left to shift for itself even the best bred colt will in this way sustain an injury from which no after care will enable it to recover. The colt ought to be brought up to weaning time with such training as to self-feeding that it will miss the milk of the dam as little as possible. Indeed, to grow a colt as it should be grown, the mother's milk is not sufficient for the colt longer than for the first three months of its life; supplementing the milk with meals or grain should begin then or even earlier, so that by weaning time it will be about ready to wean itself without any interruption of thrift. After that feed grain pretty well up to the maximum of its power to clean up, and let it consist largely of oats. Good, well-bred hogs and cattle give the farmer a higher price for his corn than he can obtain for it in any other way, and there is no way by which he can get a better price for his oats than to feed it to a well-bred draught colt. There is something about oats that makes it fill the bill as a horse feed as no other grain does, and three or four quarts a day is none too much during the first winter and until the youngster can go on grass in the spring. There ought to be plenty of opportunity for and encouragement to exercise, too, if it is a well-muscled animal that is to be raised. At the same time, without coddling the colt, it should be made comfortable and not exposed to the storms that occur every winter. There is a happy mean between the hothouse product on the one hand and the gaunt, wish-I-were-dead-looking colt on the other, and the owner of a good colt ought to find it and work for it.

How to Build Grain Bins.

Considerable labor may be saved by proper construction of grain bins. No work is more disagreeable than that of shoveling grain out of a bin, frequently the work being done by getting into the bin when the grain is low. This labor can be saved by attaching a spout to the lower portion of the bin, or the front boards may be made removable. The removable boards should be preferred if bins are used for the storage of roots. It is much easier to take roots from bins than from pits in the open air, and by properly packing the roots in the bins they can be kept in good condition until spring.

The Live Stock Industry.

According to the report of the U.S. Commissioner of Labor the value of the annual products of the slaughtering and meat packing was next in value to that of the textile manufacturers in 1890, textiles of all kinds amounting to $722,000,000 and meats or meat products being $565,000,000, while flour and milling products were $514,000,000. These figures will probably be much increased in the next census report, or were increased last year, when that country exported $156,000,000 worth of meat besides the live animals. Truly the live stock interest is a large one.

WINTERING THE BEES.

Temperature Required Is That Which Will Keep Potatoes Successfully.

The problem of wintering is one of vital importance, says E. Whitcomb, a noted bee-keeper. To leave a colony on the summer stand, exposed to the sudden changes and bleak storms of winter, is not conducive to success, in the beginning. The careful, successful bee-keeper would as soon think of wintering his cow in this manner as his bees, which under proper care would yield under the investment equally as much profit.

There are two means of successful wintering. First, packed, on the summer stand; second, in a well-ventilated cellar. The first is by far the most laborious, yet it has some advantages. Cellar wintering is the least expensive; it is only necessary to keep them in Egyptian darkness and as quiet as possible, carrying them out on two or three bright days for a fly during the entire winter. The temperature required is about that which will keep potatoes successfully. They remain in a semi-dormant state and consume but little.

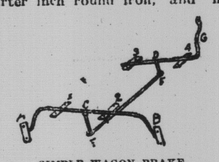
Most everyone has his or her favorite location for the apiary. Some choose the most shaded point possible. After experimenting for several years, we have determined that, in my locality, at least, the most exposed place possible is prolific of the best results. In the country between the Missouri river and the mountains the nights are usually cool, and we find that the mercury falls two or three degrees lower in the shade than on the open ground; that it requires a much longer time to warm up the hive in the shade in the morning than those not shaded; and, besides this, the sun comes out so warm in the morning that often before the colonies in the shade are warmed up, the sun has evaporated a great porfion of the bectar.

It is with the bee as with the farmhand; the fellow who gets out early in the morning is the one who usually accomplishes the greatest day's work. In experimenting with the matter of location, we find that the colony located nearest the shade gathers the least stores, while those located on the most exposed ground gather most. One case in particular was a colony shaded by a small plum tree. As the tree grew, the colony produced less stores, until it barely gathered sufficient to winter itself. We moved this colony out into the sunlight and it went back into its old record in honey-making.

BRAKE FOR WAGONS.

By Following This Plan Any Country Blacksmith Can Make One.

Few farm wagons are supplied with brakes for the wheels, and yet no class of vehicles is in more need of them. We cannot help the team in hauling a load up a hill or incline, but we can help it in going down. Where one's farm is hilly or the highways about it are hilly, a brake is an absolute necessity to save wear on the horses. Any blacksmith can make one according to the plan given in the cut. Use three-quarter inch round iron, and make



SIMPLE WAGON BRAKE.

the upright rod (CE) seven inches long, and the upright (DF) four inches long. The plates (B and A) have holes in them, by which a block of wood is screwed to the iron. A thick piece of leather can also be used. Save the team all unnecessary wear and it will do more work for you, and in this connection it may be said that a brake is useful on a wagon or cart when the team is drawing a load up a hill as when going down, for nowhere should a team be favored more than in drawing a load uphill. With a brake one can stop at any point and rest the horses, taking the weight of the load entirely off their shoulders. The brake rod (G) should have either a loop at the top or a round knob of wood or metal, that the hand may grasp the rod easily and firmly.

Fertilizing Grass Land.

As an experiment one-half of a grass field that appeared to be failing was given a spring dressing of nitrate of soda and boneblack, 100 pounds each, and potash, 50 pounds, to the acre. The other half was not fertilized. At the close of the first season the fertilized plot had produced nearly half a ton to the acre more than the fertilized plot, and in the second year, without further attention, it produced nearly as well. The reader, knowing the cost of his fertilizer, and the price of hay, can reckon whether this application paid or not.

It Pays to Be Regular.

Regular hours for milking and feeding are more important than almost any other point in successful feeding of dairy cows. The cows will get restless and uneasy if obliged to wait for their food, and the fretting does almost as much harm as the food will do good. They lose flesh and shrink in milk production to an extent that would scarcely be believed by those who have not weighed or measured the product daily for years, as we have, if they have to wait an hour.

Fattening Sheep for Market.

From a very small beginning, some 20 years ago, the business of fattening sheep for the butchers has become a gigantic enterprise. The most important point in starting to feed is to buy the right kind and at the right price. The three important things in feeding sheep are a dry feed lot, pure water and plenty of good feed; and, as a fourth essential I would add regularity and common sense. With these anybody can make sheep fat.

RHUBARB IN CELLARS.

A System of Forcing That Is Said to Produce Wonderful and Profitable Results.

Horticulturist Fred W. Card, of the Rhode Island Station, in summing up his experience in forcing rhubarb, expresses a desire to impress upon every one who has a garden with rhubarb in it the fact that he and his family may be enjoying in February and March of next year a more beautiful product than ever grows in the open ground. To do it he will need to transfer a few roots to a dark corner of the cellar after they have frozen in the fall, packing a little fine mellow earth abour them, tle mellow earth about them, and

A CORNER IN RHUBARB.

then simply see that the plants are kept moist. Whoever owns a garden with no rhubarb in it should see that same is planted there forthwith.

A warm cellar will hasten the crop, but a moderately cool one will give a finer product and probably a better yield. The length of time between planting and harvesting varies from less than three weeks to more than two months, depending chiefly upon the temperature. Allowing the roots to freeze in the field will greatly facilitate forcing. Large roots should yield five to ten pounds per plant, and every ten ounces of that yield will make a delicious pie. The color of the cooked plant will be much brighter if it is placed upon the stove in cold water, and it will be sweeter if the sugar is added just before it is eaten.

Irrigation on a Great Scale.

England is preparing to spend $800,000 a year for 30 years for a great lake for irrigating purposes, to be made by damming the Nile. Of the results of this dam-building, Mr. C. F. Penfield speaks thus in The Century:

The Egypt of the map shows more than 400,000 square miles, an expanse nearly seven times as great as New England; but the practical Egypt—that which produces crops and sustains life—is barely as large as the States of Vermont and Rhode Island taken together. This is the ribbon-like strip of alluvial land bordering the Nile, a few miles wide on each side, and containing 26[illegible] more than 10,500 square miles. The extension planned, and to be completed in the next six or eight years, wholly by irrigation, is no less magnificent in conception than the rescuing from the Libyan and Arabian deserts of 2,500 square miles, or twice the area of Rhode Island. This will be exploitation in its truest sense, and its accomplishment will be a verification of the ancient saying that, "Egypt is the Nile, and the Nile is Egypt."

As an object-lesson this Egyptian enterprise should have no more interested observers than in America, especially in Colorado, Nevada, California, and other States of the West, where the irrigation expert is succeeding the railway-builder as a developer.

Silage for Fattening Stock.

At the Ontario Agricultural College they fed three lots of two steers each as follows: Lot 1 had 57 pounds of ensilage each, lot 2, 31 pounds of silage and 9 pounds of hay, lot 3, 43 pounds of roots and 11 pounds of hay. Each had about 12 pounds a day of grain, consisting of ground peas, barley and oats. Lot 1 weighed 2,789 pounds at the beginning, and in 146 days gained 555 pounds, or 1.9 pounds each per day. Lot 2 weighed 2,735 pounds at first and gained in same time 448 pounds, or 1.53 pounds each per day. Lot 3 weighed 2,672 pounds, and in the time gained 537 pounds, or 1.84 pounds a day. The gain by feeding only ensilage and grain was not much larger than that on roots and hay with grain, but all estimates indicate that the silage is much more easily and cheaply produced, the 57 pounds requiring less land and less labor than the 43 pounds of roots, to say nothing of cost of the hay.

Eggs Are Cheap Food.

Like milk, an egg is complete food. If fed on eggs alone, young animals are furnished with all necessary elements for growing bone, muscle and all that goes to make a perfect animal of its kind. A hen may lay 240 eggs per year, but ought certainly to produce 120. Eight eggs will weigh a pound, and 120 will weigh about 15 pounds, at the cost of about one bushel of corn, worth on an average about 50 cents; at this rate the eggs cost, so far as food is concerned, about 3½ cents per pound, or 4.16 cents per dozen. They usually sell for 12 to 15 cents per dozen, and are better for food at that than beef, pork or mutton.

How to Winter Farm Stock.

The most important point in wintering farm stock is to see to it that at the beginning the stock is thrifty, and not so old that it will be more apt to depreciate than to increase in price by keeping through. Stock young enough not to have made its full growth pays best to keep of all. It is far better to kill or sell in fall the stock that has passed its best than to try to winter it. If it is kept over the food it eats will be wasted. If the cost of food fed to stock that gains nothing from it was spent in better feeding of young and thrifty stock it would make stock keeping in winter always profitable, instead of being as now the cause of greater loss than gain.

Horses in Russia.

Russia is a country extremely rich in horses, the number of which has been estimated at 20,000,000, of which at least 1,000,000 are saddle horses fit for the purpose of war.

MILK FOR POULTRY.

It Is One of the Cheapest Foods That the Farmer Can Secure.

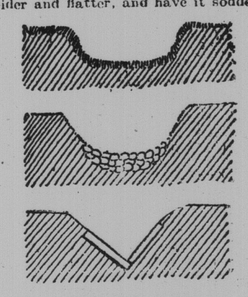
Milk is an excellent poultry food, fed in any way. It is the cheapest animal food that you can buy if you can get it for one cent a gallon, says Farm Poultry. Recent experiments have proved it to be one of the best hot weather animal foods for chicks or laying fowls. It is, however, considered necessary to supply some additional meat food to get the best results in eggs. The milk could be fed daily, and the meat twice a week, and good results follow. Beef plucks are an exceptionally good and cheap meat food. They are much cheaper than bone. We should feed milk and beef pluck, and would consider that we were getting our animal food very cheap.

You can feel the plucks to best advantage by varying the manner of preparing. Probably they will be best when cooked. The best way to ptepare plucks to have them keep sweet will be to run them through a meat cutter or sausage machine and then boil the minced meat. Skim off all the fat and strain the soup after cooking meat thoroughly. Use the liquor for mixing mash. The cooked meat, after being well drained, should be well dried in a moderate oven. If properly prepared, it will keep some time. It should be kept in a cool, dry place and out of the way of insects. We would not prepare a very large quantity, as it is liable to "heat." We have had no trouble keeping meat so prepared for a month, even in hot weather. It must be thoroughly dried, or it will spoil.

PERMANENT DITCHES.

The Only Way of Carrying Off Water During a Heavy Rain.

One must have more or less of open drains about the farm to carry off the sudden rush of water during a heavy shower or a spring freshet. A narrow ditch that is not sodded is sure to be badly washed. Make it wider and flatter, and have it sodded



PERMANENT DITCHES.

over, as shown in Fig. 1, and there will be no washing. In places where the water runs violently for a short distance the plan shown in Fig. 2 is excellent, small stones forming the bottom of the ditch. A similar result is attained by using two boards, as shown in Fig. 3. Such open ditches about the farmhouse and the farm buildings keep the soil dry and save much unpleasant walking during wet weather. There are many situations subject to a sudden rush of water, where ridges of earth or stones need to be put across the open ditches at frequent intervals to check in part the swift flow of the water that otherwise would wash the earth seriously, even when sodded over.

Docking Horses.

Docking horses, says Blackwood's Magazine, took its rise in the dark days when bull and bear baiting were honored by a place in the category of sport, rightly now relegated by law to the catalogue of outrage. This custom of docking was once generally applied to English roadsters, hunters and harness horses. The only useful purpose it ever served was in the peninsular war, when British dragoons could be most easily distinguished from French by their cocktails. It fell into disuse with the decline of road coaches, and we owe its unwelcome revival to their partial restoration. It is senseless, barbarous and disfiguring. It inflicts needless suffering upon brood mares and horses turned out to grass, depriving them of their natural defense against flies, besides the severe pain and shock caused by the operation itself. It should be discouraged in every possible way by influential persons, by those who lead the fashion in such things, and agricultural societies should be moved to refuse prizes to exhibits which have undergone this mutilation.

Too Much Drone Comb.

Bees left to themselves are likely to build too much drone comb, says The Farmers' Voice. This is not built for the purpose by the bees, as they build it for storing honey in, but if not filled the queen will fill it next spring with drone eggs and the hive will be over-stocked with the idlers. The way to prevent this is to use all foundation comb worker size and then the queen will fill it with worker eggs, and the colony will be built up when hatching begins in the spring. If there is too much drone comb in the hive remove it and replace with worker comb. By doing this the supply of drones is easily regulated by the apiarist, and the bees become more profitable than they would be if left to their own devices.

Estimating Grain in Bin.

It is often convenient to know the number of bushels of grain in bins, says The Practical Farmer. A short way is to mark a scale on the inside of each bin denoting the number of bushels, commencing at bottom to mark for each inch or two in depth. Thus a bin 10x10 feet, each inch in depth will hold 6.7 bushels nearly (144,400 divided 2,150.2 cubic inches in bushel), 2 in 13.4 and so on; with this marked on each bin, level down the grain and you have it. If bins are of uniform size, scale may be on a stick of sufficient length for the depth of bins, and this may be used for all of them.