

The Farmer's Advocate AND HOME MAGAZINE.

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DOMINION.

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the unwise, and all are swept along together in the mad rush of post-war extravagance. Amusement houses are crowded to the doors, and the accommodation is being expanded as rapidly as possible. The manufacturers of luxuries are reaping a harvest, and every inducement is being put before the public to spend and think not of the morrow.

Anyone urging conservation and thrift can well be likened to one crying in the wilderness, but what we need to-day is a thrift campaign conducted by an organization such as that which made our Victory Loans a success. Financiers, commercial interests, agricultural organizations, the press, and all influential individuals or groups should join with the Government in conducting a campaign that will touch the minds of the people and show them the folly of their way. Thrift clubs should be formed, a demand for sensible staples should be created, and all public-spirited citizens ought to set an example of saving and sane living that will restore the equilibrium and help everyone to keep his feet on the ground. We cannot go on this way much longer and squander the labor and wealth of the nation on luxuries and non-essentials. We have been living in an atmosphere of artificial prosperity, and any day the curtain may be drawn back revealing the cold, stern realities of the future.

The Happy Medium.

BY ALLAN MCDIARMID.

Once upon a time, as the story goes, there was a young man who lived on a farm with his uncle. This uncle was getting along in years and had begun to think of retiring to the nearby town and taking a rest during the years of his life that might still be remaining to him. The young man, his nephew, was quite willing that he should, for he felt very capable of running the "old man's" farm and of taking charge of the live-stock, of which there were about forty head, including horses and cows.

So matters were soon arranged and the prospective farmer started in to make his fortune—and get his experience. His first move was to buy some calves from a neighbor who was getting rid of his grade herd and going into pure-breeds. He hadn't much idea of the type of animal he wanted or anything like that, but the

thought in the back of his head was urging him towards something better and it expressed itself in this way, getting something that he fancied was an improvement on what he already had. It's not a bad plan either, for if one doesn't gain in wealth by transactions of this kind he will in experience. It's better to be doing something even if it's making a mistake.

But the trouble with our young farmer was that he hadn't learned to feed the stock he already had before buying that which was more expensive. It has been said that Experience keeps a dear school but it's a fact that some men pay out a good deal more in tuition fees for their training than do others. A little caution isn't a bad thing until one is sure he is on the right track. But caution and youth don't very often travel in company and this young man was in a hurry for results. He needed money to pay for the stock he was buying, as well as for the other apparently endless expenses of the average farm, so he sold his grain and some of his hay and fed his cows on straw and corn-stalks, with a few turnips thrown in occasionally by way of quieting his own conscience, for he had an uneasy feeling, sometimes, that he was not doing exactly the square thing by the cows that he expected to make money for him.

Anyway, the natural result followed, as was to have been expected. He lost as many as four of his cows in one spring, all due to underfeeding. In other words, they died of starvation. And among them were some of the grade heifers that he had bought to improve his herd.

This happened for three or four years in succession. The cause of his misfortunes did not seem to dawn upon him for some time. However, it finally struck him that he would have to make some change in his methods or he would shortly land on the rocks. He resolved to feed whatever grain he had, instead of selling it and, if necessary, to buy more so that his milking stock, at least might have everything in the way of feed that they needed.

By this time he had purchased a few pure-breeds and was beginning to congratulate himself that the worst was over and the end of his troubles in sight. He began to keep records of the performances of his best cows and started in to feed them as heavily as he thought they could stand. He was something of an extremist, all right. He hadn't mastered all the lessons that were being taught in the school he had entered. One morning, on coming to the stable he found a pure-bred cow, that he had been particularly good to, stretched out, stiff and cold, the result of an extra heavy feed of grain the night before.

Later on one of his heaviest milkers showed signs of inflammation of the udder and it became very difficult to get the milk from one quarter. So he got a milk tube from the local "Vet." and drew the milk away by that means. He did not reduce the cows feed any, however, as he was working for a record and wanted to keep her up to her limit.

The inflammation spread and the whole of the cow's udder became infected through the use of the milk-tube. The cow didn't die but she gave him no more milk that year.

Having been told that, if he wanted to have his cows do their best in a yearly, or even a seven-day test, he should have them all "rolling fat", he bought a large amount of commercial feeds and started in to get them ready. That spring three of his best cows lost a quarter through inflammation of the udder and another died outright from a further development of the same trouble.

This was about as bad as having them die of starvation. There isn't much choice between extremes. Our farmer hadn't yet found the "happy medium" that graduates one from the School of Experience.

One of the cattle Judges that we have had in this country from England lately said: "I view with the deepest concern the overfeeding that is apparent in the breeding stock of this country, especially among the females. In the whole course of my experience I have never seen animals fed so excessively. Such feeding must destroy fecundity."

But this expert opinion wasn't available to our erratic friend at the time he was taking his medicine. He was getting his knowledge first-hand, at the time. He will probably agree very heartily with the words of the Judge, however, if he should happen to see them as given in the papers.

Things have been going somewhat better with our friend lately. He buys very sparingly of certain feeds, such as oil-cake or cotton-seed meal, but feeds most of what he raises on his own farm, which includes oats, barley, wheat and clover and mixed hay, and, of course silage. His stock seem healthier and there have been no funerals from his stables during the past two years.

To my way of thinking there isn't a better job on the face of the earth than dairying when it is carried on as it should be and as it can be when the necessary knowledge has been acquired by study and practical experience. It's an all-the-year round occupation, it's profitable and it's interesting. And, if you like, it's a character developer. Self control and a good many of the other virtues are learned in the cowstable.

There's a good deal of hard work in connection with it. There's no use trying to deny that. But if you make any line of farming easy you take the real good out of it, in a way. Earning one's living by the "sweat of the brow" isn't pleasant to think about, but it is the way a lot of good men developed all the

But the question that nine out of every ten men, who are thinking of taking up this line of farming, will ask is, does it pay?

Sure it does, just as soon as you know how to handle your cow and the material she produces. The farmer is richer, his farm is richer, and the world is richer because of the dairy cow. All that is needed is to get a thorough knowledge of her limitations and possibilities.

Nature's Diary.

BY A. BROOKER KLUGH, M.A.

THE ORIGIN OF CULTIVATED PLANTS. I.

We make use to-day of a very large number of cultivated plants, growing a good many ourselves and importing the products of a great many others. Seeing how intimately connected with our every-day life these plants are, it is but natural that we should be interested in their origin, in knowing in what country, and by what people, they were first brought under cultivation.

Our knowledge of the origin of cultivated plants is derived from four sources—botany, archaeology, history and philology. By the study of botany we seek to ascertain in what country the species exist to-day in the wild state, and when carefully prosecuted the evidence thus derived is of the soundest character. The chief difficulty in this method of investigation naturally lies in distinguishing between plants which are native to the region under consideration and those which have been introduced, and with the increase in transportation facilities this difficulty becomes more pronounced, since an introduced plant, if well adapted to the conditions of its new home, spreads with great rapidity and soon takes on the appearance of a native species. Archaeology, the study of ancient races and civilizations, furnishes us with very direct proof as to the origin of cultivated plants, since it often brings to light remains of these plants in old buildings, graves and waste-heaps. History throws some light on the origin of cultivated species, but the evidence from this source requires very careful scrutiny and sifting, because historical writers have rarely been men of scientific training, and have consequently been prone to reflect generally accepted impressions instead of facts which have been established by critical investigation. Philology, the study of languages, likewise sometimes aids us in our enquiry, but is almost as often likely to mislead us because of the erroneous and frequently absurd names adopted for cultivated plants. As examples of this we can quote the name *ble de Turquie*, applied in France to Maize, a plant which is not a wheat and which came from America and not Turkey, and *Jerusalem Artichoke* for a plant which came from North America and is not an artichoke. In the case of any given species the conclusion as to its origin is usually reached through data derived from a combination of these sources of information.

Wheat, *Triticum vulgare*, is one of the most important, if not the most important, plant to a great many nations. The cultivation of wheat is prehistoric as is proved by very ancient Egyptian monuments which show its cultivation as already established. When the Egyptians or the Greeks write of its origin they attribute it to such mythical personages as *Isis* or *Ceres*, and it is from the name of the latter goddess that our word *cereal* is derived. This habit of attributing the most important food plants to some deity, to some great emperor or culture hero, is common to many peoples. In some cases there is some basis for this belief in the fact that some ruler has urged the more extensive cultivation of the plant in question, or has imported it from some other country, but the real transition from the wild to the cultivated state has been accomplished by the gradual but persistent efforts of a whole people. A small-grained form of wheat has been found in the ancient lake-dwellings of Western Switzerland, and also in Hungary in deposits dating back to the early stone age. The Chinese grew wheat in 2700 B.C., and the Egyptians in 3359 B.C. Wheat as we know it to-day has not been found anywhere as a native plant, and archaeological, botanical and historical evidence seem to point to Mesopotamia as the home of the ancestor of this plant.

Oats were not cultivated by either the Egyptians, Hebrews, Greeks or Romans, though wild plants of the same genus were known to the Greeks as *bromos* and to the Romans as *avena*. The Romans found oats in cultivation when they entered Gaul, and they have been found among the remains of the Swiss lake-dwellings of the bronze age, and these facts, together with evidence derived from philology, show that oats were first cultivated in north-eastern Europe.

Of the three kinds of barley, the six-rowed, *Hordeum hexastichon*, was the species most commonly cultivated in antiquity. It has been found in the earliest Egyptian monuments, and in the Swiss lake-dwellings of the stone-age. We have no record of it as a wild plant, and the same is true of common barley, *H. vulgare*, the form with four rows, which is mentioned by the Greeks. Two-rowed barley has been found wild in western Asia, Arabia, in the Caucasus and in Turcomania. It has also been found in the Swiss lake-dwellings of the stone-age. In view of these facts it seems extremely probable that the two-rowed barley is the ancestor of the other two forms.

Rye, *Secale cereale*, has not been very long in cultivation. The Greeks do not mention it, and Pliny is the first Roman writer to do so. It appears to have been cultivated from about the year 100 B.C. in Russia, and was probably taken into cultivation in Tartary. It was subsequently widely distributed as a cultivated plant in northern Europe, as shown by the resemblance of the Anglo-Saxon name *ryge*, Scandinavian *rugr*, Old German *roggo*, and ancient Slav *roji*.

(To be continued.)