

THE TEST OF THE NATIONAL WELFARE IS THE INTELLIGENCE AND PROSPERITY OF THE FARMER.

Every farmer in his annual experience discovers something of value. Write it and send it to the "Agricultural Editor of the Democrat, Belleville, Penn'a," that other farmers may have the benefit of it. Let communications be timely, and be sure that they are brief and well pointed.

We understand that a petition asking for some new fence law is being circulated for signatures through the county. As yet, we have not seen a copy of either petition or bill.

W. W. HALE, agent for the "Messenger" Stock Farm, Philipsburg, Centre county Pa., has just returned from Kentucky bringing with him from A. J. Alexander's farm, Woodburn, Ky., (with a view to the improvement of stock), a four-year-old dark bay stallion, sire Harold, sire of Maud S., record 2:17 1/2. Dam Lady Bell by Ethan Allen. Lady Bell has a record of 2:32, private trial 2:26.

INVESTIGATIONS and experiments made by the Department of Agriculture during the past year demonstrate that sugar and syrup can be obtained from cornstalks at the rate of one hundred pounds to every ton of green stalks. Professor Stillman, in a letter to the World, reviving those sugar researches, and alluding to the tea experiments, significantly concludes by saying, "We shall probably have more sugar from maize and sorghum than will be required for a good while to sweeten our own domestic green tea."

Obituary.

We are called upon this week to chronicle the death of two men who have occupied prominent positions in American agriculture:

Mr. MICHAEL SULLIVAN, the largest cultivator of land ever known, died in his chair on the steamer, while on his way to Louisville, Ky. The extent of Mr. SULLIVAN'S farming operations was enormous, he having at one time owned as much as 80,000 acres of land in Illinois, and his corn crop has reached 18,000 acres in a single year with wheat, oats and hay in proportion.

Mr. JOSEPH N. STURTEVANT, one of the "Sturtevant Bros.," who have made Waushakum Farm, in Massachusetts, famous, died at his residence January 19. Although but thirty-five years of age, Mr. STURTEVANT had won reputation as an agricultural writer, and as one of the widely known "Sturtevant Bros." His early demise will be mourned by the many who have learned much, and hope to learn more, of progressive, practical farming through Waushakum Farm and the Scientific Farmer.

What Breed of Fowls Shall we Keep?

This is a question which would, perhaps, be answered by a dozen different persons by naming a dozen different breeds, as their fancy, prejudices or experience might dictate. Our own answer, after an experience of half a short life time, and embracing a large number of the most popular and fashionable breeds, would be unhesitatingly in favor of the American Rose-comb Dominique. Those who breed thorough-bred fowls for pleasure and for sale at high prices, and who have time to care for them with the same assiduity that they would care for thorough-bred cattle or horses, may, of course, let their fancy dictate largely in making choice; but the farmer, who finds all his time and that of his family and the people about him, fully taken up, demands a fowl that, with the minimum of care and attention will give him the maximum of eggs and meat, for sale or for home consumption. This, after having bred them exclusively for three years we think we have found in the American Dominique. They have proven themselves with us to be extremely hardy and free from disease, fully large enough for table use, prolific layers, both winter and summer, the best of molters, and with that happy medium of activity which makes them much better foragers than the clumsy, dependent Asiatics, and much more docile and quiet than the restless, nervous non-

setters. With a little pains-taking in selecting the best to breed from, and in introducing fresh blood every two or three years, they breed with great uniformity in style and color, and thus furnish a beautiful, slightly flock, instead of the multi-colored and multi-formed dung-hill, with all its good qualifications added. One of their most admirable characteristics is their extreme hardiness and freedom from disease. "Long John Wentworth," of Chicago, who keeps no other sort on his celebrated stock farm, says that the true test of a Dominique is its ability to roost on an apple tree all winter and yet produce at least one egg every other day. We do not advocate the application of this test, but hold that with reasonable care, such as can be given by any farmer, they will give better returns than any other brood we know of.

Profits of Thorough Culture.

The following paragraph holds as true in regard to any and all farm crops, as it does with tobacco, and we give it as another answer to our query, How can we make farming pay?

Thorough culture is the great secret of the Connecticut Valley tobacco-growers' success in producing heavy crops of extra tobacco which have hitherto well paid the producer. Time was when their tobacco was a drug in the market at two or three cents per pound, and no more than 800 to 1,000 pounds per acre were grown; later years I have known 2,900 pounds grown on a single acre, and the crop from one acre to be sold in market for \$1,000 to \$1,200. This resulted from a combination of causes, but would not have been had the old methods of careless culture been continued. Much experience has taught us that the only road to success is in doing all the work, &c., connected with the producing of the crop in a most thorough and careful manner, and he who uses the most care and cultivates the most thoroughly receives the greater reward in the shape of price for his tobacco.

Agricultural Editor's Table.

THE Rural New Yorker, now in its thirty-eighth volume, is one of the "old reliables" among agricultural weeklies. Like good wine, it improves with age, and is now equal to the best. A feature peculiar to it is the free seed distribution. It publishes a list of nineteen varieties of seeds, a small package of any ten of which will be sent free to every subscriber to the paper who sends in his subscription before May 1st.

In these days of cheap and beautiful picture-making, it is not unusual for proprietors of trashy papers, and indeed of some good ones too, to offer presents of chromos to each subscriber. While many of these gifts have been comparatively worthless, some have been really meritorious as works of art, and desirable as ornaments to the house; but it has been left to the Poultry World to achieve the greatest success in this direction, by publishing with each monthly number a really beautiful and artistic picture. True, these are not quite "given away," but the small additional price charged for the "chromo edition"—seventy-five cents—makes them cost but a fraction over six cents each, and every one of them is well worth a dollar, even in these hard times, to any lover of poultry. They are not small, cheap dubs, but portraits of the finest specimens of prominent breeds of fowls, drawn and colored from life-subjects, by an artist employed exclusively for the purpose. The larger size of them, nine by eleven inches, gives opportunity for the correct delineation of the splendid feathering of the largest birds, and the study of a set of them will do more to give a novice a knowledge of the appearance of the different broods of fowls than he can learn from books in a week. We have great faith in the possibilities of poultry raising for the wives and daughters of farmers, and shall be glad if we can say anything to induce him to take an increased interest in the matter. We wish we could see the Poultry World and its beautiful chromos in the houses of very many of Centre county's farmers.

Stock need close attention this cold weather. Warm shelter will save one-third the food. A few nibs of corn or a little meal daily is necessary to keep them in heart.

How Can We Make Farming Pay?

A letter from F. P. Root to the agricultural editor of the World, under the title of "Count Costs and Plan for Profits," is so appropos to our query that we quote from it at length in continuation of the subject:

We have not learned to bring our production up to pay profits on expenses. The cost of cultivating lands cannot be profitably reduced below present rates, but returns may be largely increased at trifling expense which will make a large difference in the margin of profit. To illustrate this principle, let us look at what it now costs to grow grain in the State of New York and what it ought to cost under a wise and better system of cultivation. Grain growing, we know, is not the chief interest of our State, but as my acquaintance with this branch of husbandry assures me of the truth of my estimate I choose this, and will take the cost of wheat-growing as in the past and compare with what it may and must be in the future to return any degree of profit to the grower. I have made repeated estimates and accurate accounts of the cost of an acre of winter wheat in labor, seed, &c., and found it to average about \$10 per acre, and on the average of farms and present cost of labor it will exceed rather than fall below that figure. Then to this add the interest on capital, which cannot be less than \$7; for the average farm worth \$75 per acre, after deducting woodland, rock, fences, &c., would bring the tillage land at least at \$90; add \$10, the cost of cultivating crop, and it makes a capital of \$100. Then if we allow the cost of fertilization, which must be supplied now or at a future time to keep the soil good, it cannot be less than \$3 to keep good the capital in motion. We then find the cost of an acre of wheat to be as follows:

Table with 2 columns: Item, Cost. Labor and seed account \$10, Interest on capital \$7, Fertilizer extracted or supplied the crop \$3, Aggregate cost of an acre of wheat \$23.

The statistical reports of the yield of wheat in this State vary from eleven to sixteen or seventeen bushels per acre in different seasons. Now, if we allow sixteen bushels as the yield, which is above the average for any term of years past, we find the cost of every bushel to the grower to be \$1.25; or if we allow fifteen bushels to be the average yield, which is nearer the truth, it will cost \$1.33 1/3 per bushel. Farmers are not accustomed to reckon interest on capital and loss of fertility of every crop, but it is as legitimate a charge as the interest on capital and the wear of machinery is for the manufacturer. We then see that there is a loss to the average farmer of our State of from 25 to 33 cents on every bushel of wheat he sells at this season's prices. This, if continued, will make hard times still harder. But it is not so to continue. There is a spirit of improvement now stirring the minds of our farmers and they will not long continue to farm their lands with no profits or gain, for capital and American skill have enabled us to excel all Europe in the excellence of agricultural tools and labor-saving machinery, and why can we not excel also in the cultivation of the soil? We have equal advantages of soil and climate, and there is now a necessity resting upon us for improvement in the art of cultivation, for the old ways have failed. European agriculture has more than doubled its former returns by the use of chemical fertilizers and a more thorough system of cultivation, and it will not be many years before our American farmers, having caught the spirit of progress, will vie with them in agriculture as we now do in art and manufactures. The report that over five thousand bushels of wheat and considerable amounts of other crops are produced in one season on a farm of 262 acres in France looks to our farmers an extravagant statement. When we learn that the yield was from forty to sixty bushels per acre we see it might be attainable, and we know that such yields are possible, for they have been produced in our own country. Now let us look at the cost of growing wheat in our State, under a better system of husbandry. We will assume that it will cost no more labor to cultivate land when rich and clean of foul stuff than it does now under our less thorough system—it would really require less labor, for a fertile soil is easier cultivated than a sterile soil. We will estimate as at the present time:

Table with 2 columns: Item, Cost. For labor and seed \$10.00, For interest on capital \$7.00, Then for fertilizer to keep the land good or increasing, either phosphate or compost manure 7.00, Total cost per acre wheat \$24.00.

We will estimate the return per acre no more than many thorough farmers have harvested in years past, and occasional crops have far exceeded—that is, thirty bushels per acre—which will make the grain cost 8 cents per bushel. Thus we see the difference in the cost of growing a bushel of wheat under the new system as compared with the old. Wheat can be grown for 80 cents which now costs \$1.25 or \$1.33. In the above estimate I make no account of threshing and marketing of grain nor of the value of straw, but allow the latter to be worth the former cost. I know that many farmers

will say that a yield of thirty bushels per acre cannot be realized for a term of years. We do not aver that it can be on all lands, for all are not well adapted to winter wheat, but may be equally profitable for other branches of farming; but we do know that good wheat lands can be made to yield that amount and more under best cultivation. My own crop has averaged about that yield for several years past and others have exceeded it, and what has been attained by a few may be gained by all under like circumstances and under like means.

Fundamental Principles.

[From the Farm Journal.] A good deal is said about the "Fundamental Principles of Agriculture," in the agricultural press. Now, if there are any fundamental principles of agriculture they consist in thorough tillage and plenty of rich barn-yard manure. Whoever gives practical endorsement to these principles will succeed at farming.

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