THE PROGRESSIVE FARMER.

THE INDUSTRIAL AND EDUCATIONAL INTERESTS OF OUR PEOPLE PARAMOUNT TO ALL OTHER CONSIDERATIONS OF STATE POLICY.

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WAKE COUNTY FARMERS' INSTITUTE.

RALEIGH, May 12, 1887.

At 3:15 p. m., Metropolitan Hall was well filled with farmers and spectators. The Black Diamond Quartette appeared on the stage and sang in the familiar strains of the old time, "Away down on the Swanee River."

Dr. W. C. Dabney, introduced Rev W. C. Norman, who opened the Institute with prayer.

Dr. Dabney then introduced the "handsome but bashful" Mayor of the city, Hon. A. Thompson, who extended a hearty welcome to the farmers present to the hospitalities of the city and did it very handsomely.

Dr. Dabney introduced Dr. D. R. Parker as chairman of the Institute, who proceeded by the shortest cut to his business, and gave a plain and lively talk to the farmers, impressing his hearers with the important truth that they must rely on themselves and on their own exertion. The Dr. said that after the magnificent display of cattle which we had seen today it was a fitting introduction to the exercises to hear a talk on "The Profits of the Cow," and he would call on Dr. R. H. Lewis, of Raleigh, to speak to the subject. Dr. Lewis, although called on unexpectedly, came forward and argued that stock of some kind was an absolutely and imperative necessity in successful farming. He viewed the subject from the standpoint of the ordinary farmer and he thought when accessible that dairy cattle pay better than beef cattle. He went into figures based on his own experience and showed that the product of a good grade cow ought to reach $55 per year. One of the practical difficulties in dairying on a small scale is a supply of cool water, but when the herd of dairy cows number as many as twenty-five it will pay to use a recent invention for separating the milk from the cream while it is yet warm. After all, much depends on the care and feed of stock. Ensilage *is the thing.* It is far better than grass. Grass gives two tons, a fair yield; I have made fifteen tons of ensilage on an acre of land which would not make a bale of cotton. Three tons of ensilage is equal in feeding qualities to one ton of hay. I, therefore, made an equivalent of *five tons* of hay per acre, and on the same land which, in grass, would not have made me more than two tons of grass. I have tried many crops for it, but I have come to use corn as best of all. Of pea vines I got 27 tons on seven acres, when I could have raised 140 tons of corn.

Stewart's book on feeding stock, I would commend to all farmers interested in stock. My dairyman, who came from England, says corn makes the best ensilage. Sow it in rows six to eight inches apart. Cultivation is very simply. The silo is equally simple. It is a box on or under the ground, and with a large diagram which he had prepared, showed how to build one.

The "after-talks" were lively and interesting and question on question was piled on to the Dr. and he gave ready and quick answers.

Dr. Dabney gave some figures to show that every well fed cow, yields in manure a value equivalent to a ton of guano. Dr. Lewis said that his cattle preferred ensilage to any other food. Capt. B. P. Williamson, of Wake, furnished an essay on

THE GRASSES,

which will be given to our readers in these columns. It is so thoroughly practical and plain, and withal such a valuable contribution to the discussion of this most important subject that we feel all our readers will be interested and profited.

Mr. Whitney, Superintendent of the Experiment Farm, came forward and exhibited about twenty varieties of grasses from the farm. The Italian rye grass is one of the earliest seeded in Sebtember and high enough to give good grazing in February. Cut two weeks ago and yielded at the rate of two tons per acre, and is now about twenty inches high. It is perennial and will last many years.

The English rye grass makes first-class hay, grows about 18 to 20 inches, is a true perennial grass.

The tall meadow oat grass is one of the most valuable of the recently introduced varieties. This combined with clover and orchard grass is makes a valuable mixture.

The meadow fescue in England is considered one of the most valuable.

The Kentucky blue grass stands among the foremost of the grazing grasses. Also the Texas blue grass, which he thought might be successfully cultivated in the eastern part of the State.

He discussed the merits of these grasses as well as lucerne, the yellow oat grass, the sweet vernal, the crimson clover, the tree foil, the alsike clover, the white clover and other varieties, good specimens of which he exhibited to the institute. He recommends "The Farmers' Book on Grasses, by Pharis."

Short after-talks were made by several others.

On motion, the Institute adjourned to meet again at 8 p. m.

EVENING SESSION.

Chairman Parker called the meeting to order, and said that Prof. Ville, of France, had said that there are 100 essentials in successful farming, and that nature had supplied 93 of these and that man had only to find and apply the other seven. Science had evolved and developed many auxiliary agencies as aids in man's work. Among these, stands out prominently the science of chemistry. We have been receiving bulletins from our department setting forth something of the work done, but we had no idea of the vim and push and splendid common sense that was behind it all. Now I want you to hear from Dr. Dabney, our State Chemist, on how to make and

HOW TO MANAGE MANURES.

One thing he had learned, even with his short experience with Dr. Parker as the Manager of our Institute, and that is that he *manages* it. Hence when he assigned him a duty, he had nothing to do but to make an honest effort to perform it.

He gave the changes which food undergoes—the percentage of loss in certain ingredients in the process of digestion, and gave the analysis of the excrement of different animals, showing that the manurial value depended largely on the kind of food given the animal. He discussed various methods for handling the manure, and made a most interesting talk, which elicited several sprightly after-talks. Dr. Dabney thought if the money expended for commercial fertilizers was spent for the right kind of food for cattle, the manure that would result from it would pay better. The need for a simple, cheap machine for pulverizing horse stable manure, was discussed.

On motion, adjourned to meet tomorrow at 9:30 a. m.

Friday, a. m., May 13, '87.

The Institute was called to order by the chairman, who made a spicy and entertaining talk on the defects in our industrial and social systems, and especially on the indifferent methods practiced among our farmers. He then introduced Mr. J. Van Lindley, who took a young peach tree and trimmed it and pruned it and mutilated it, until it resembled a negro's walking stick. He gave full instructions for transplanting the peach tree, from the digging of the hole to the complete trimming of the tree. The after-talks brought out the facts that the land should be thoroughly underdrained and subsoiled—the trees should be slightly inclined towards the southwest—no stable manure should be put in contact with the roots, the hole should not be scooped out like a hen's nest, but should be about two feet square and the centre of the hole where the tree is to rest should be a little higher than any other part of the bottom.

The chairman said the farmer was entitled to the good things of this earth and among them none would contribute more to the health and pleasure of a farmer's family than the luscious grapes which grow so profusely and luxuriantly in our land. He wanted Mr. S. Otho Wilson, who had made the grape a special study, to tell us something about the grape.

Mr. Wilson first exhibited plums and peaches which had been stung by the Curculio, and handed around specimens of the little beetle to be examined. He gave its habits and told how he gnarded against its popagation and ravages. He then took from a lot of grape vines at hand, a specimen of a young vine, and showed how to prune the roots and top, and how to put it in the ground; then a vine of the second year, then one of the third year, attached to the stake and trimmed it, so as to show the whole process. It was an exceedingly interesting object lesson. The pruning should be done at any time, from the falling of the leaf in the fall, to the beginning of the growing season. For Central Carolina he recommends the Concord, the Ivis, the Martha, Perkins and Champion.

He puts the vines seven feet apart each way. Last year on land that would not produce more three-fourths of a bale of cotton he produced 4,000 pounds of grapes. The expense of cultivating the grape per acre does not exceed that of cotton. Cultivates thoroughly and rapidly until about three weeks before ripening.

Mr. Shellman gave, in reply to an inquiry, his earnings in grape culture, which were $537, on four acres.

Dr. Dabney was called on to show what are the remedies for black-rot or mildew in grapes. He said that happily for grape growers a remedy which is almost a specific had been found and its base is sulphate of copper. He had the latest improved apparatus for spraying the vines with the solution and showed how it operated. This is the second machine of the kind in the United States; the other one is owned by the Department of Agriculture at Washington. He gave the formula for making the solution and many other important and interesting facts to show that grape growers can now protect their vines from a class of casualties which have puzzled the grape growers for centuries.

Mr. Wilson brought forward strawberry plants and showed how to manage them. Said if a man had no land he could still have strawberries. He could fill a barrel or hogshead with good rich earth and bore 1 1-2 or 2 inch auger holes in the sides; in these holes plant the strawberry plants and water them from the top. They will grow and bear luxuriantly.

The chairman then referred in very handsome terms to our Governor, whom he was proud to see present, and was glad, in the name of the farmers of the State, to welcome him and to introduce him to the audience.

Gov. Scales, congratulated Dr. Parker, and through him, the farmers of the State, on the auspicious outlook for the agricultural interests of the State. I am proud, he said, to see so many evidences of an awakening among the farmers of the State, and glad to see these Institutes so encouraged and patronized by the farmers. It is a movement in the right direction. He was not a practical farmer but he owned farms, which had brought him at least ten per cent. on his investment, and he did not believe that there is a farm in the State which would not yield ten per cent., if well worked. But the great trouble is that the farm does not have that attention and thought that other interests do. He appealed to the young men to take farming as a vocation, and study it, and work it faithfully and intelligently. How many of you advise your sons to pull off their coats and go to the farm? Teach that work; work is the foundation of success in all departments of life. He was proud to see the inauguration of a movement which must and will revolutionize public sentiment among the young and old farmers, and which he fondly hoped would show the young men that agriculture opens the most inviting fields for usefulness and happiness. He hoped to see THE PROGRESSIVE FARMER and its editor aided, encouraged and sustained by the farmers in his honest, earnest effort to advance and build up their interests.

The Governor spoke earnestly and enthusiastically, and his speech was warmly received and applauded.

Dr. Parker, at the conclusion of the Governor's speech, referred to the exposition as the beginning of the new era in our State, and that we had a man present to whom we were as much indebted for that exposition as to any man in the State. He knew we would all enjoy a talk from Mr. W. S. Primrose on the outlook for our Agricultural College.

Mr. Primrose, after referring to the great good which must come of the Farmers' Institute, in most encouraging words, very naturally and pleasantly drifted into the important matter of a proper training and education among our youth. If there be any one thing that we should study, it is the laws of nature. We must have a due regard for our geographical position, both as to those laws of nature which must show those products best adapted to our location, and as to those laws of trade which control our prices.

Although not a practical farmer, there are few men who evince a more thorough knowledge of the defects of our system, and who can make better and more practical suggestions as to those methods which must aid us in our work. He spoke of the Michigan Agricultural College and the work it is doing in aiding the farmers' institutes of that State. The teachers and professors of that college go out among the farmers and hold institutes, and not unfrequently they have as many as 3,000 farmers present. He spoke of the college also in Mississippi. Of the 74 counties of that State, 63 of them have boys in that school. They begin at the bottom and go up through all the courses until they teach the boys to make all their tools of wood, iron and steel, as good as you can buy in our hardware stores. They have the theory taught in the school room, and they bring it into practice in the workshop and on the farm, so that when the boy leaves that school, he goes out among his fellows inspired with a high and exalted appreciation of the dignity of honest labor, as nothing else can do. One of the chief duties of our college, under the law, is to encourage and build up farmers' institutes, and he saw nothing that could aid and stimulate the farmers of our State more than these farmers' institutes.

The only possible objection that the Institute could find to the speech was that it was entirely too short.

Dr. Parker announced that he had a paper from Mr. Ransom Hinton, of Wake county, prepared at the solicitation of the management, on

HOW TO PRODUCE COTTON CHEAPLY.

The paper will appear in THE PROGRESSIVE FARMER, and in advance, we commend his figures and suggestions to the careful study of our cotton farmers, for they contain food for earnest thought.

Mr. Barry, an accredited representative of the Texas Farmers' Alliance, was introduced. He presented a sketch of that organization and came to ask the farmers of North Carolina to co-operate with them in establishing a national organization of farmers. The movement in Texas run itself; it moved and developed without any pressure, until now it numbers in Texas and Louisiana 300,000 members, and we ask you to join us in establishing an organization not to make war on any man or legitimate interest, but we do declare open and unremitting war on *class legislation.* He had not the time to explain in detail the objects and purposes of the Alliance, but he would ask the papers of the State to publish our Constitution, and we ask that you read it carefully and study it. He said he was a native of Onslow county, this State, and appealed to the farmers of his old State to stand by their farmer brethren and secure a recognition of our rights in our State and National Legislatures, and this cannot be done without organization.

At the conclusion of Mr. Barry's speech, Dr. Reid, after a short, spirited and encouraging talk, declared the Institute adjourned *sine die.* And here we take occasson, in behalf of the farmers of North Carolina, to thank Dr. Parker, to whom the honor of being the founder of the Institute in North Carolina belongs, for the effective services he has rendered, all the men appreciated because purely a labor of love by him, and inspired only by the deep and abiding interest he takes in the welfare of the tillers of the soil.

[FOR THE PROGRESSIVE FARMER.

ENSILAGE.

Facts and Figures that Speak for Themselves.

DEAR SIR:—As you asked me for some facts about ensilage I will give you my experience to the best of my ability. I have now tried it for three years and the more I use it the better I like it. Last year I put up over three hundred tons and am sowing for four hundred and fifty tons this year—mostly corn and some peas. My whole crop of corn averaged twelve and one-half tons per acre and peas about three and one-half. This year, if seasonable, I expect a larger yield per acre as I am sowing on better soil. Pea vines makes the best ensilage and the most milk, but as corn yields so much more per acre we plant mostly of it.

In regard to what effect ensilage has upon the butter, I would say, it has had none with us for we have fed entirely upon it for the last three winters, and our customers say they like our butter as well, if not better, than butter made by dry feed and by dairymen with much finer herds than we have, for we have but four thoroughbred Guernseys, balance graded Jerseys and natives.

As to the cost of ensilage it can be made and put away (cut) in silo for less than $1.50 per ton, provided, it is raised conveniently to the silo and on ordinary soil. Below is the exact cost of 40 tons of pea vine ensilage put in a silo below ground (uncut) last September.

Plowing seven acres, at $1.75 per acre, $8.75.

Fourteen barrels of black peas, at 90 cents per bushel, $12.60.

Harrowing seven arces of peas broadcast, $1.50.

Labor of sowing peas, 75 cents.

Rolling, $1.

Hauling 100 two-horse loads, mowing, filling, covering and weighing silo, $27.25.

Total cost of 40 tons pea vine ensilage, $51.85.

There were two cuttings of fine clover mowed from this same seven acres before the peas were sowed in July. Farm hands, mules, &c., are all charged in the above at the above rates paid, all extra labor hired.

The peas were sowed July 8th, and mowed September 16th. I opened this silo May 1st, 1887, and found it just as good as any of my cut ensilage.

There is no excuse for any man able to keep two or three cows not to have a silo on account of the cost of building, &c., for the last one I had dug for Dr. Lewis, all done by hired labor, cost, completed, including shelter and sufficient lumber to extend the walls above ground three feet, less than 75 cents per ton capacity. Even if it were possible to cure the amount of corn fodder that this one silo alone holds (225 tons), we would not have barn room enough on the farm to hold it. So much has already been said and proven in favor of ensilage that I am surprised at any man keeping a herd of cattle without a silo. If you think these few facts worth the space in your valuable paper you are welcome to use them.

Yours truly,

JEFF. DAVIS,

Manager for Dr. R. H. Lewis.