

bleeding, but still more so when this meeting is for the purpose of comparing notes upon their occupation.

It would surprise a body of farmers, who had never tried it, to find how much knowledge could be gained upon almost any subject connected with agriculture, from twenty-five average farmers, who should each contribute the facts he knew relating to it. Perhaps no one of the twenty-five would be able to give more than a few facts concerning the topic, yet when each had contributed what he knew, the subject might be thoroughly elucidated and easily understood. When they come together no one fully understands the subject, but when the discussion is over every one might carry away a full knowledge of it.

And this leads us to speak of the proper method of conducting these *Farmers' Clubs*. First, there should be as little formality and as few rules as possible, consistent with good order. Select a man of prompt decision and a few words as chairman, and the most ready writer for secretary. Avoid set speeches and prepared dissertations. You come together to communicate facts and not to display rhetoric. And one who has a fact to give should be welcome. It should be a meeting for a free and informal interchange of ideas in the conversational way. This will be found much better and more profitable than debate. You cannot well debate a question without the disputants becoming interested for triumph in argument—for the success of a side—and this is not the object of discussion. The object should be to gain knowledge, to accumulate facts on which to base right decision, and not to display ability in argument, triumph in disputation. Suppose the question were the "best time to cut wheat?" It is obvious that well-attested experiments bearing upon this subject would be necessary to determine it. Every one who could give any fact showing the effect of cutting wheat at a particular stage of growth would assist in elucidating it. One could perhaps give the effect upon rust, of cutting wheat while green, showing the quality of the grain to be little injured by it; another cut it when ripe, and the rust had ruined the grain; another states that he cut before ripe, when no rust appeared, and found the berry plump and got a larger proportion of flour per bushel, then when he had cut on full ripening. And thus one after another gives his experience upon all sides of this question, until the facts render the solution clear. Now, a learned dissertation upon the wheat plant, with an ingenious theory, unaccompanied by facts, might lead to a different conclusion, and gain applause to the speaker, but not being based upon a true foundation, would only lead those astray who acted upon it. There can be no objection to an occasional essay upon some subject by one who understands it practically. This should be a feature by itself, and would be an important source of improvement; but the discussions should be conducted in the freest and most informal manner. Besides, this method of conducting the discussion would have the advantage of making every one a participator in the proceedings, and thus interest him.

Every farmer can find language to state a fact in reference to a subject, who most likely, would

not feel competent to make a speech maintaining a theory, and, in fact, all theoretical discussions should be avoided, except as they grow out of well-established facts. Theories sometimes cause experiments which lead to important discoveries, and in this way tend to increase knowledge, but too often theory is advanced as known truth, and when acted upon as such may lead to disappointment and disastrous failure. Theories are already too abundant, but for well-ascertained facts, very great need. These club meetings excite the minds of farmers to greater activity, stimulate them to read upon the subjects to be discussed, learn them to sift evidence, to give facts and experiments their true weight, to value order and methodical arrangement. In short, for farmers now on the stage, who have passed all opportunity for an elementary education in agriculture, the farmers' club offers the greatest practical advantages. And the effect would soon be seen in the improvement of their implements—the bringing into use their waste fields—the saving and use of all their manures—improving the breed and condition of their animals, and in the whole order and arrangement of their farming operations. —E. W. S., in *Moore's Rural New Yorker*.

Mr. J. W. Smyth who presents the \$5 cash prize is a marble cutter of this city. He is doing a large business, and has been very successful as a prize-taker, whenever he has exhibited.

Any person can act as agent in getting up clubs, and they are the best canvassers that act in their own neighborhoods. To those that pay their money to strangers, we would say examine the date of the agent's papers, and see our signature and envelope to him, as we only appoint agents to act for a short time. Some person has been acting as agents that we know nothing about. Appointed agents can furnish receipts. You want no receipt from a person that you are acquainted with.

THE CAROLINA FARMER.—We hail with pleasure the arrival of the second number of this live *Agricultural Magazine*. It is a marvel of beautiful typography, and is edited with marked ability. It is a vast storehouse of information for the farmers of the Southern States, and is destined to occupy a prominent position among the agricultural journals of the continent. Friend Bernard, we wish you success, and may the Old North State appreciate your labors for its welfare.

HARDENING THE MOLDBOARD OF PLOWS.—A new method has been discovered for the manufacture of the moldboard of plows, which gives them all the hardness and temper of steel, in combination with the toughness of iron. The moldboard (good iron) is heated and dipped into molten iron. It remains there ten seconds, when the two surfaces become heated to a white heat, while the center is not heated through. It is then immediately dipped into water; the surface comes out harder than the highest tempered steel, while the interior is still iron and retains all the toughness and strength of the iron. The advantages claimed for this invention is, that the plows made by this process will take the finest and hardest polish, while they will be tough enough to endure any reasonable knocking about in stony soils.

WINTERING BEES.

No one need attempt to winter bees out of doors on their summer stands, without some thought and care for their proper protection. Cold will not injure a colony of bees of proper strength. We have seen bees, in an old battered hive with the top warped and a crack through its whole length, come safely through a most severe winter, while those in good, tight hives near them "froze to death," the owner said. He could not understand it, but we do, perfectly well. The bees in his nice hives, although he found them frozen into a solid ball, did not perish of cold; there was no outlet at the top for the moisture of their breath to pass off—this accumulated, causing dampness of the hive and about the cluster of bees, which formed into ice when severe cold came. The cracks in the old hive secured the necessary upward ventilation. All moisture could pass off freely from them, and when cold weather occurred, it did not harm them.

Our rules for the safe wintering of bees are: 1. Allow every colony that is to be wintered out of doors at least 25 lbs. of honey in hive 1st of November. 2. A cluster of bees sufficiently large to extend at least through two-thirds of the comb in any ordinary hive. One or two inch holes to be left open in the top of the hive under the cap or cover. 4. If the hive be shallow winter passages or holes through all the combs, to enable the bees to reach their stores by a "short cut" in very cold weather without passing over frosty combs. Honey will not benefit bees if it is where they cannot get it, without freezing. 5. Some protection for the hives, sufficient to prevent the sun striking them in warm days—which excites the bees and draws them out of the hive, when many perish. A few boards set up in front, or a little corn fodder placed around them, answers a very good purpose—the idea being not to protect from the cold but the sun.

Entrances should be nearly closed, but not entirely so, for confinement of any kind bees do not like.

When bees can be put in a dry, dark cellar, not too warm, they consume much less honey than when left out doors. In the cellar they should have upward ventilation and be undisturbed. When in box hives or gums, the hive should be inverted. They should not be carried to the cellar until it is quite cold, and be brought out again some warm day in March.

All who use moveable comb hives will find it well, in preparing their bees for winter, to take from the hive one comb, (choosing one as near empty of honey as possible,) then move all the frames slightly, so as to give more room between the combs for the bees to cluster. We have done this for seven winters and find it a great help. The comb thus removed should be carefully preserved and put back in the spring, and the others restored to their original positions. If bees have been fed in the fall and are still short of stores, the Feeder may be safely kept on still, and refilled when the bees go into winter quarters. It can be used on either box or moveable comb hives, and put so near the cluster of bees that they can reach it in the coldest weather safely.—[Rural Gentleman.]

THE Olympia Transcript (Washington Territory,) tells of oat stalks fully eight feet tall, an average sample of a field of seven acres.