

to have moneys granted nominally for the advancement of the agricultural interest, really expended for that purpose.

Mrs. Twitchell, a farmer's daughter, an elderly lady, spoke very strongly and impressively of beneficial home influences on the farm—the moral and industrial home education of farmers' daughters, showing that it must be to them that the nation must look for the most ennobling statesmen—men who must save the country from disruption and ruin, if it is to be so saved. She strongly deprecated the injurious results that follow the gild and show of the farmers' daughters who rush to the cities. She cautioned farmers' wives against abandoning butter making and leaving it to factories. She said that she well knew what butter was, and that factory-made butter was not equal to home-made, family butter, when properly attended to. It would not keep as well; neither was it of as high quality. This was now known among the best families.

It was stated that republican government and slavery could not possibly exist together—that the nation was verging to slavery worse than it existed in the South. The President said that more light and more truth were needed in the country, and a stronger bond of unity among the agricultural classes; that much good had already been done by this Association, which was yet in its infancy; that the meeting was not large in numbers, but mighty in the material of which it consisted. He gave a fair hearing, and allowed as fair discussion on different questions as time would permit of. Invitations were received to hold the next meeting at St. Paul and other places. The place of the next meeting is left with the Executive Committee. The President introduced your humble servant as the editor and proprietor of the FARMER'S ADVOCATE, which paper he said he had carefully read for many years, and there was but one agricultural publication that stood as high in his estimation, the *Country Gentleman*. He could commend it to all who were interested in the welfare of the agriculturists.

Mr. A. S. Cadwalader, of Yardley, Penn., exhibited some nice specimens of ivory, a new and valuable substance made from cocaine or skimmed milk. This useful material is very hard, almost as strong as iron, and capable of receiving the finest coloring and polish. It has been made into jewelry and fine furniture, but its great use appears probably to be for electric purposes, as from accounts it appears to be the best non-conductor yet discovered. Mr. Cadwalader invited us to his farm; he keeps a large dairy, and sends his cocaine to the factory after taking the cream from it. We had not time to see the farm, but visited the ivory factory in Brooklyn with him, and have brought home some of the ivory, which may be seen in our office.

We hope to furnish fuller accounts of the proceedings of this Association from the official reports. The only Canadians we met there were Mr. Ward, of Montreal, and Mr. Pitnam, of Annapolis, Nova Scotia.

The meeting was very harmonious; all appeared to be convinced that improvements are needed, and seemed desirous of advancing the interests of agriculturists in every proper manner.

The American Publishers' Association met at the Power House, Rochester, N. Y., on the 16th and 17th February. Representatives of the lead-

ing American papers were there, the object being to suppress fraudulent, deceptive and injurious practices, and the demoralization of the press through improper modes of advertising. We believe this will tend to improvement. Mr. L. Cameron, of the *London Advertiser*, was the only Canadian we met there, the Toronto papers coinciding in the undertaking by communication.

When in Rochester we had an interview with Mr. Hiram Selby, one of the American millionaires. He is about 80 years of age, and yet perhaps one of the most extensive farmers of the States. He owns an immense quantity of land both in New York and in the Western States. "How many acres of corn did you have this year?" we asked. "Only a small piece this year; ten thousand acres. I have grown eighteen thousand acres. The crop was good this year, but the price is low. Farming is not as profitable now as it used to be. I grew 190 acres of the best variety of soiling corn ever grown; that paid well. I am receiving orders for it from the seedsmen and others from all over the States. That customs barrier between us is injurious to us and to you. You raise better peas than we can, and we want them, and you want our corn, but the trade is almost prohibited. We have a lot of fools at Washington; we are not going to be dragged into a war by them for a mess of fish. I would go to Washington if I felt well enough. We want peace; had enough of war. This country ought to be one people."

When in conversation with numerous gentlemen in New York and Rochester, expressions were made regarding annexation. The advantages accruing to both countries were discussed. We coincided in the feeling by saying we should be pleased to see the mother and child embrace each other, and believe such would be best for both nations and the world, if it could be amicably accomplished. We were highly pleased to hear the numerous expressions of satisfaction expressed on the condemnation of their boodle officials to Sing Sing. Many of their cities have been mulcted of enormous sums by these men. The feeling of the masses—that is all those that have not been partisans in these nefarious practices—is awakened, and investigations and convictions will follow. Canada generally follows the U. S., both in depression of business and in prosperity. We trust this wave of anti-boodleism will shortly strike some of our cities and legislators, and the manipulators of the sums of moneys granted annually for the benefit of agriculturists and the poor Indians, etc., etc.

The elections just closed have been more a contest for the boodle bags than for the elevation of our nation. The increasing demands for boodle and the devices for granting it have not yet been exposed as much as they will be. We believe in the proverb, namely, that "righteousness exalteth a nation." Without light and without truth, right cannot be maintained. What must follow? The party plank to carry an election will be anti-boodleism, both in the Local and Dominion elections. The sooner any party takes up this plank the sooner they are to take or hold positions after the next elections. All boodlers will object to these remarks, but they are only few in comparison to those that only want what is right. This may not be strictly agricultural, but it is for the benefit of agriculture we state this. We now deem it necessary for your advancement to step on the planks that may be most beneficial to you.

Fertility Leaching through the Soil.

The spring is the best season in the year for making observations as to the effects of drainage, and as to the quantity of fertility lost in the soil and in the manure heap. Observations should be made as to whether the water passes away mainly through the soil or over the surface; in either case a good deal of fertilizing material may be wasted, depending upon the character of the soil, and the substances so wasted should be restored in some form. Sir J. B. Lawes' experiments in this direction have led to valuable conclusions, and his observations are thus summed up in the *Rural New Yorker*:

Some substances are held mechanically, some chemically, some are decomposed, one portion is retained, another portion is washed out. Clay has a strong affinity for various vegetable substances, many of which are highly colored; the black water from dung heaps will therefore pass through a soil and become clear. Sulphate and muriate of ammonia and potash are decomposed in the soil, and the acids form soluble compounds with lime, which are washed away. So completely has the lime been washed away on one of our pasture experiments where very large quantities of these salts have been applied for 30 years in succession, that the crop which used to cut four or five tons of hay per acre is now reduced to almost nothing. If we apply chalk or lime the crop will be as good as ever. Common salt passes through the soil unchanged. In our three drain gauges of 20, 40, and 60 inches deep of soil, the amount of salt found in the drainage water every year is the same in quantity as that found in the surface gauge. Our annual rainfall contains very considerable quantities of salt; if our drain gauges were covered with vegetation a portion of this salt would be used by the plants, but as we have no vegetation, and common salt does not enter into combination with the soil, it all passes through in the water. All the salts of nitric acid are soluble in water and do not combine with the soil, but they are taken up greedily by vegetation. The amount which leaches through the soil varies greatly. Nitrates are formed in the soil; they are also under certain circumstances destroyed in the soil. From 40 to 50 pounds of nitrogen pass through our drain gauges annually per acre. The annual amount varies with the rainfall, but we have no clear indication that the amount is becoming less from exhaustion of the nitrogen compounds in the soil. Some recent experiments appear to show that soils fix the nitrogen of the air. As the rain does not furnish more than five or six pounds of the 45 pounds of nitrogen found in the drainage water, our soils must have lost 500 or 600 pounds of nitrogen per acre since they were under experiment, and we must before long expect to find some reduction in the annual quantity removed unless the fixation of nitrogen by the soil furnishes a portion of that removed.

We never solicit an advertisement from a known dishonorable breeder, grower or manufacturer, and refuse lots that are offered; yet, despite our endeavors, we cannot always be right, and do not hold ourselves responsible for what advertisers may say. You must use your own judgment. If you want trees or seeds, do not be led away by every tempter that calls at your house. Some ought to be in jail, and would be there if the head Government officials looked after the interest of agriculturists as they ought to, and receive their salaries for. Do not be humbugged by those who are selling oats, peas and wheat at fraudulent prices; put the dogs on them. See the catalogues of the best nurserymen and seedsmen. Every vendor of an implement tells you he has the best; do not believe half what they tell you. Write to headquarters. The best manufacturers', breeders' and seedsmen's advertisements will be found in our columns. If you wish to procure the best animals, always look over our advertising columns; you will find the best breeders' addresses, and when surplus stock are to be sold and bargains obtained under the auctioneer's hammer, you know where to go.