

pear evident, I think, to those who have the welfare of the subject at heart.

#### EXPERIMENTS TO BE CONDUCTED.

In compliance with the act granting the money, a chemist will be appointed early in the season, who will devote his whole time to the subject during the summer. It is expected that small works will be erected, and the operation of syrup and sugar making conducted experimentally. The attempt will be made to obtain a method for removing impurities from the juice which will admit of application by such workmen, as follow the vocation of syrup and sugar boiling. This is now the great problem and its solution is not easy. A study will also be made to determine the best means for reducing the juice to a sugar-syrup, without inverting the cane sugar. Since in the end the success in manufacturing sugar will depend upon the percentage of cane sugar in the juice, and the yield per acre, these subjects will receive due attention, and samples from various districts in the state will be analyzed to ascertain the per cent. of sucrose in the cane.

The improvement of the Amber Cane, if that be possible, by selecting seed from stalks rich in sugar, and by cross-fertilization is proper work for our farm, as well as testing new varieties and attempting to acclimatize varieties which now only ripen in latitudes south of Wisconsin.

The influence of soils on the quality of the syrup is one which, though much discussed, is far from settlement. The same is true in regard to fertilizers. Experiments to solve questions of this character can hardly be carried out on a single farm, and the attention of our farmers is earnestly directed to what is mentioned farther on in regard to this important topic.

#### AMBER CANE IN WISCONSIN.

Unfortunately the present law does not require statistics in regard to Amber Cane as with the other farm crops, and

consequently much valuable information is lacking relative to this new industry. It is certain however, that Wisconsin has grown a much larger quantity of cane than is generally supposed. Minnesota, where the Amber Cane excitement originated, has generally been considered as far in advance of the neighboring states, yet I believe our state nearly equaled it in the amount of syrup produced in 1880.

The area planted to cane in that state in 1880, was 7,317 acres, which if the average yield per acre was the same as in 1879, would amount to 546,383 gallons of syrup. The banner county was Le Sueur, where 580 acres were grown. Mr. George Pabodie, of Fairfield, Sauk county, Wisconsin, carefully ascertained the amount of syrup produced in his county by addressing letters to the various syrup manufacturers, and found by adding the sums reported that Sauk county produced 51,500 gallons of Amber Cane syrup in 1880. Allowing 100 gallons as the yield per acre, which is higher than the average in Minnesota, there were 515 acres of Amber Cane grown in that one county. There are several counties in the state which have produced nearly if not quite as much syrup as Sauk; among such may be named Fond du Lac, Jefferson, La Crosse, etc. Charles Eustis, of Jefferson county, grew forty acres of cane on his farm, manufacturing it with his own machinery. A. J. Russel & Co., of Janesville, grew and manufactured seventy acres, and other large planters could be named if necessary.

The wide spread interest is shown in the fact that there are now three cane-growers' conventions organized in the state. These are the Southern Wisconsin Cane-Growers' Association, which held its third annual meeting at Palmyra, February 18th and 19th; the Fox River Valley Association, which met at Appleton, March 2d, and the Wisconsin State Cane-Growers' Association, which met at Fond du Lac January 5th and 6th.

Although the rainy weather of last fall came on just at the time when the cane was ripening, and the season must be recorded as unfavorable for cane, those who manufactured for syrup are, on the whole, satisfied with the result.

#### THE OUTLOOK.

What are the prospects for the coming season is a question which elicits far more interest than any enumeration of past advancements. Many persons are about to invest considerable sums of money for machinery, buildings, and in planting a large acreage of cane. Will it pay the coming season as well as last is the question they would like to have answered. It is a curious coincident that just at the time when the creamery system is being adopted in the West, and the opportunity offers for the manufacture of a first-class quality of butter in unlimited quantities, that all sorts of imitation products as oleomargarine, suine, etc., should be put on the market and the trade demoralized. Now, almost in the same way, just as a means appears by which syrup of a good quality can be made, not only for home use, but for foreign trade, the manufacture of glucose assumes unthought of proportions, and it is affecting the trade in all classes of saccharine products.

Those forecasting the prices for Amber syrup should consider the peculiar condition of the market for such goods just at this time. Up to within two or three years, the demand for syrup was filled by the southern product. This, of course, will yet force itself upon the trade in some quarter if driven from our section and tend to weaken the market. Glucose is appearing everywhere and nearly always as an adulteration; with the large number of manufactories for the product which are now being put in operation, the price will be cheapened and the inclination to mix it with other syrups greatly increased. The effect of this can hardly be calculated, but in my opinion can not easily be