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Wisconsin State Cranberry Growers Association
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WISCONSIN STATE
CRANBERRY GROWERS'
ASSOCIATION.



**SIXTEENTH ANNUAL
MEETING**

Grand Rapids, Wis., January 13, 1903.

KRUGER & WARNER

Men's, Boys' and Children's

CLOTHING

Leaders in Furnishings.

GRAND RAPIDS, WIS.

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The representative paper of the Fruit and Produce trade. Gives accurate market reports, prices, and all other news of the trade from the principal cities of the United States, Canada and Foreign Countries. Subscription price **THREE DOLLARS** per year. Sample copy on application.

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76 Park Place

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Have you tried the Manomet Patent Cranberry Comb and Sickle Blade Vine Pruner.

The sale of these tools has increased each season, being the best of proof that they are a profitable investment. First bring your vines in condition with the pruner, then the harvesting in a rapid and inexpensive manner is assured. Four years we have been improving these tools and feel sure they will give the best of satisfaction for the season of 1903. Their success has caused to appear cheap imitations. We aim to produce the best at as low a price as **GOOD WORK** will permit. A word to the wise is sufficient.

Sold Direct From the Factory
Saving Agents' Profits.

W. B. WATERS, Manomet, Mass.

Extra copies can be had on application to secretary's office, Cranmoor, Wis.,
Price 10 cents (10c) stamps.

PROCEEDINGS

Of the Sixteenth Annual Meeting of the Wisconsin State Cranberry Growers Association.

The sixteenth annual meeting of the Wisconsin State Cranberry Growers Association was held on Tuesday January, 13th, 1903, in Council room, Grand Rapids, Wis. and following order of exercises carried out:

Proceedings of previous gathering having appeared in printed form their reading was dispensed with.

The following were in attendance:

Henry Gross, Wausau; Henry H. Gebhardt, Black River Falls; Girard H. Bacon, C. M. Stevens, F. W. Hoffman, E. K. Tuttle, John N. King, Mather; E. P. Sandsten, Madison, LeRoy Bartholomew, Chicago; Fred W. Gebhardt, S. A. Warner, Warrens; Johnathan G. Smith, Tomah; Ed L. Peet, Grantsburg; Joe Bissig, City Point; C. E. Lester, S. N. Whittlesey, Chas. S. Whittlesey, Ed Kruger, Ralph Smith, James Gaynor, Cranmoor; J. J. Emmerick, M. H. Lynn, Nekoosa; Geo. W. Paulus, M. O. Potter, John A. Gaynor, A. E. Bennett, Chas. F. Kruger, Chas. Briere, J. B. Arpin, H. Wipperman, J. Cooley, W. A. Drumb, Grand Rapids, B. H. Porter, Peycke Bros., Kansas City, Mo., and a number of others more or less interested in the exploitation of the Wisconsin cranberry.

PRESIDENT'S ADDRESS.

GENTLEMEN: I congratulate you on the good crop of cranberries you had during the past season and also on the

fact that you received such good prices for them. It seems that every one of us is nearly satisfied and the prospects for the future were never better. We had plenty of rain last fall, and are now in the middle of January with a good fall of snow, and all the bogs must be in first rate condition, so that the chances are bright for a good average crop the coming season.

We have this year a dozen or more varieties of some of the best vines in the world for distribution among the growers. I think they should be distributed early in the spring as soon as the ground is ready to plant. These vines are the result of our good work done on the experiment station, and I hope that the work to be done in the future will be continued on the same line.

There will be a resolution introduced by Judge Gaynor regarding the grading of cranberries. The idea is to have a bill introduced and passed by our legislature making it compulsory to grade the cranberries into different sizes and to call the different sizes by different names. I think such a law would be beneficial to growers and buyers. The resolution will be introduced here and is subject to amendment, approval or rejection by you.

The financial condition of the association is above par. After all the debts are paid we will have about \$40 in the treasury on the right side of the

ledger. Along this line I would recommend that Mr. Fitch, our present secretary, be re-elected and his salary raised so that it will be a fair compensation. He does a large amount of work along the line of getting memberships and advertisements, and devotes much of his time to the work, and being a good financier, the association has made money with him as secretary, as you will notice by the report.

Along the line of grading berries I would say that Mr. James Gaynor has promised to have built a dozen of his patent graders this year, which will be sold at a reasonable price. Last fall some of the wholesale dealers wanted the berries to be graded to three or four sizes and were willing to pay ten or fifteen cents per barrel for the extra work. The James Gaynor grader is doing excellent work. It grades to perfection any size and is very easy to run.

The windmill at the experimental station was sold for \$31, this being the highest bid received, and the rejected vines or vines not marked for propagation we sold for \$10, this also being the highest bid received for them after having advertised them.

The statistics of the cranberry crop last season were received by our secretary from the east and west and bulletines were sent to the growers of the condition of the crop. The estimate this year was the most correct that we have ever had. We have always had trouble in getting the eastern crop correct, but we got it this year. I think that the western growers give us more correct estimates than they formerly did of their whole crop.

In conclusion, I wish to ask the members not to elect me to the office of president. I have been president now for the past three years and consider that I have discharged my duty in this respect.

I thank you for your kind attention.

CHARLES BRIERE.

Statistician:—From most reliable information at command the output of 1902 was about in bushels as follows:—

New England, 525,000; The West, 135,000; New Jersey, 120,000; total 780,000, showing a shortage as compared with last year of 420,000 or 35 percent.

Report of Treasurer.

Receipts.

March 12, 1902. State money.....	\$250.00
May 2, 1902. Deposit.....	.26
Ordinary membership fees.....	93.00
Life roll.....	50.00
Advertisements, mailing list and reports	97.88
Experiment Station per Gaynor-Blackstone Co.—	
15 bbls. standard at \$3.35.....	\$95.25
1½ bbls. standard pie at \$5.00.....	\$ 7.50

Total.....	\$102.75
Less expense picking, etc.....	\$43.35
Rent station.....	12.00
Labor and repairs.....	21.35 \$ 76.70 26.00
Sale of vines.....	11.00
Sale of windmill.....	31.00

Total.....\$559.19

Disbursements.

Order No. 69. Chas. Briere, president, supplies for convention.....	\$ 34.93
Order No. 71. W. H. Fitch, salary 9 mo.....	30.00
Order No. 74. Balance due secy. for salary and cash expended.....	83.31
Order No. 75. James Gaynor, services, rent, expense Ex. station.....	79.65
Order No. 76. Drumb & Sutor, account January report.....	19.00
Interest on order.....	3.37
Order No. 84. W. H. Fitch, secy. for dep. O. 26, Printing and postage, \$204.77; stationery and revising mailing list, express charges, reports bulletin, circulars, \$103.90.....	308.93

Total.....\$559.19

Report of Keeper of Experimental Station

The accompanying statement has been received and in acknowledging the same occasion was taken to express the belief that the showing would be highly appreciated and applauded by the association.

Experimental Station No. 1.

15 bbls. standard berries at \$3.35.....	\$95.25
1½ bbls. pie berries at \$5.00.....	7.50
	\$102.75

Picking 52 boxes berries at 60c.....	\$31.20
Hauling and crating same.....	1.75
Milling hands & hauling to station.....	4.62
16½ bbls. at 35c.....	5.78

Total harvesting expense.....	\$43.35
Rent of station 1902.....	12.00
Labor and repair station 1902.....	21.35 76.70

Gaynor & Blackstone check for bal.....	\$ 26.05
Note: Average price received, \$6.22 7-10; expense, \$2.77 3-10; net, \$3.45 4-10.	

Experiment Station No. 2 (Nursery).

Scalping, cross cutting about ¼ acre.....	\$ 5.00
Use plow and cutter.....	1.00
Harrowing ground after scalping removed	3.00
Removing scalping into roadway, ditching scalped ground into sections one rod square (ditches 2½ feet wide, 1½ ft. deep, material uniformly broken up and spread over surface of section)	57.75
Overseeing work.....	5.25

Order No. 83 issued to James Gaynor.....\$72.00

Account of Financial Secretary.
Year ending Dec 31, 1902.

Receipts.

State money due.....	\$250.00
Ordinary membership dues.....	92.00
Life roll.....	50.00
Advertisements, mailing lists, reports..	97.88
Gaynor-Blackstone Co. check for net proceeds berries less bill.....	26.05
Sale of vines.....	11.00
Sale of windmill.....	31.00
Total.....	\$556.93

Disbursements.

January. Bill John Graither, notices, stamps.....	\$ 19.26
February. Printing and stamped envelopes.....	13.21
March. Bill W. L. Scott, testing buds, postal cards.....	1.70
April. Circulars, newspaper wrapper..	14.42
May. Stationery, stamps and deposit..	15.13
June. Revising mailing lists, printing, stamped envelopes.....	18.61
July. Notices of convention, stamps, revising mailing lists.....	71.86
August. Crop estimate, express charges stamped envelopes.....	29.87
September. Reports, newspaper wrappers, stationery.....	17.49
October. Bulletin, stationery, postage	25.24
November. Revising mailing list, stationery, stamped envelopes.....	19.16
December. Stationery, stamped envelopes, printing, postal cards.....	62.99
Total.....	\$308.93

Outstanding Orders.

No. 77. Wisconsin Valley Leader, crop report and notices.....	\$14.75
No. 78. W. H. Fitch, secretary, 8 months salary.....	26.67
No. 79. Chas. Briere, president, supplies August convention and work on Exp. station.....	52.00
No. 80. P. H. Davis, livery to experiment station.....	3.00
No. 81. A. L. Fontaine, notices, circulars.....	12.50
No. 82. J. A. Gaynor, Exp. station bill equipment weather bereau	3.55
No. 83. James Gaynor, Exp. station for labor and services, nursery.....	72.00
Total.....	\$184.47
Total.....	\$493.40

Cranberry Journal: It was moved seconded and carried that it was the sense of the members of the Association that the time was ripe for the establishment of a journal devoted to the interest of those engaged in the industry and the Committee on Printing and Publication designated, The Cranberry Grower as the official organ of the organization.

SECRETARY'S REPORT.

Quite a number have remarked that one of the best features of our last gathering was the succinctness of the articles and addresses. Assuming same to have been a complimentary point of view—multum in parvo without further ado,

the speaker will submit the annual report either seriatum or in sections, as you may desire and direct.

Financial Account:—According to accompanying statement, receipts were \$558.93; disbursements, \$493.40; available balance, \$65.53.

A new feature has been introduced, namely, that of a Life Roll. The innovation has been favorably received, and I will read one letter as typical of others.

Prairie, Wash., Dec. 16, 1902.—Mr. W. H. Fitch.—Dear Sir: Both your communications of recent date came duly to hand acknowledging receipt of \$5.00 as fee for life membership. With regard to business card, address, etc., I have considered the matter. I am raising cranberries only on a small scale, I have a ready market for all I am ever likely to grow and I do not see that, at this distance, it would do me any good. I think we had better drop business card, I will get value received without that. I hope you may be able to get a cranberry journal started. About all I know I owe to the Wisconsin State Cranberry Growers' association and I do not know it all yet. At one time the cleaning of berries was an awful job, but a few years ago Gaynor Bros. sent me a second hand mill that helps me out all right, taking out all the soft berries, and saves lots of trouble. I sorted my berries one year, the larger ones only brought a little more, the small ones almost unsalable. You will remember that a few years ago I had you folks discuss this flooding business, my vines were being ruined by all winter flooding. I now commence to raise water about 15th of February and let it off about the first of May, that is better.

Yours truly,

ALEXANDER BIRSS

Yield.

Whatever increase in western output there may have been is owing to the new acreage coming into bearing. As the older bogs, almost without exception, on account of August blight and September frosts, fell off, it is therefore believed a full crop would have been in the neighborhood of 60,000 bbl. (180,000 bushels) of which Wisconsin would have produced over 90 percent.

Saint Louis Fair: The matter of an exhibit at Louisiana Purchase Exposition, 1904, was referred to Committee on Legislature and if an adequate appropriation is made by the state a creditable display will be made.

Election of officers.

The election of officers resulted as follows: Charles Briere, president; S. N. Whittlesey, vice president; M. O. Potter, treasurer; W. H. Fitch, secretary; A. E. Bennett, member of executive committee.

National and State Co-operation.

The United States Department of Agriculture has set aside a sum anent diseases of the cranberry. The following letter from Prof. Shear shows amount inadequate beyond that of the east, but, it is believed, if the attention of our representatives in the Congress was called to the matter, we could feel assured the interests of Wisconsin would be in safe keeping.

Washington, D. C., Dec. 16, 1902. — Mr. W. H. Fitch, Secretary Wisconsin State Cranberry Growers' Association, Cranmoor, Wis.—Dear Sir: I am pleased to acknowledge receipt of your favor of the 12th inst. and I beg to thank you for your invitation to take part in the program of the meeting of the Wisconsin State Cranberry Growers' Association. I regret that I shall be unable to accept this invitation, as the funds at our disposal for cranberry work are insufficient to meet the demands of the work already planned for the remainder of this fiscal year. I had hoped to visit Wisconsin the past picking season, but was unable to do so on account of lack of funds. In case our appropriations for the coming year are sufficient, we hope to be able to extend the work to Wisconsin and visit your region to make a study of the conditions and whatever disease may occur there. Thanking you again I remain, very truly yours,

C. L. SHEAR, Asst. Pathologist.

In conclusion, while judged solely from bulk of output or number engaged, our avocation cannot lay claim to a pre-eminent or predominating position as compared with other products of the earth; yet, mindful of the scriptural similitude of the mustard seed, and under the inspiration and incitement of the motto of our state with "Forward" quest for establishing the standard excellences of Fine

Quality, Full Quantity and Fair Quotations, may the view or vista be altogether unsound or unsubstantial that, not only will the cranberry—and especially the Wisconsin cranberry—become a familiar food in every American family, but also be found and favored in many a foreign field.

W. H. FITCH, Secy.

Winter Flooding.

BY HORACE MINER.

Berlin, Wis., Jan. 10, 1903:—As our most worthy secretary, Mr. Fitch, has put me down to say something on winter flooding of cranberry bog, what I know, or all I can say will be the experience we have had on our own bog, and when I say we I mean The Metallic Bell Cranberry Co., located in Juneau county, Wis. We would not know how to raise a continuous crop of cranberries without a winter flood. One might pass through a winter with but little damage, but you could not bet on it. If one has a winter flood they are almost sure to have a spring flood, which is as essential, or perhaps more so than a winter flood, as the three months of spring, April, May and June, are the most trying months of the year. One may pass over a winter now and then with but little damage without a flood and then be cut off by severe weather in the spring months, whereas if they had procured a winter flood, ten chances to one they would have been able to carry their crop through the severe spring months. We have not for the past twelve years failed to have our bog covered with water so that the vines would be all under, and we have not lost a crop by winter freezing in that time, so we would advise "where one can" covering the bog and vines just as soon as possible after Nov. 1st.

No doubt that you are aware that many a crop is lost during the summer months when you are not looking for it, just as the tender bud is setting for the next year's crop. One of those sly frosts drops in upon you and nips the very, very tender bud, and you can hardly believe that your crop has been disturbed, and I believe that many a crop is lost at this time by not being able to protect it by flooding at this time of year. Of course a winter flood will not help in this case, so one can see that it is necessary to prepare for these emergencies at all seasons, and we find that the only safe thing to

rely upon is water, and plenty of it, both winter and summer, so I would say prepare for the winter flooding by all means.

Yours with regards. Am sorry I can't be with you but my health will not admit it. HORACE MINER,

Sec. and Treas. The Metallic Bell Cranberry Co.

Small Packages from a Retailer's Point of View.

BY CHAS. F. KRUGER.

Recently, while in the lobby of the hotel, several cranberry growers and myself entered into a debate as to whether it would be profitable to pack cranberries in cartons or packages smaller than bushel crates. Without giving the matter any consideration, I said it would be a good scheme; but after debating the question in my mind I came to the conclusion that I had made a statement to those cranberry men entirely different from my views. I found, after investigating the question, that it would advance the price of the berry to the consumer from 5 to 10 per cent when put up in cartons. While I have been told that berries could be put up in cartons nearly as cheap as barrels, I wish to beg to differ from the men with those views. Supposing you were to furnish me about five barrels of cranberries put up in three quart cartons. We will figure about 115 quarts to the barrel, or making a total of 576 quarts. I want them put up in cases, twenty-four packages to the case, or making in all for the five barrels eight cases and 192 3-qt. cartons. The cost of the cartons will depend entirely upon the label. A nice, showy package will require a lithographed label and I have a doubt whether they can be put up for less than 1c per quart advance above the barrel price. You see the crates or cases that the cartons are packed in for shipment will cost nearly as much as the barrels; that is, to hold the same quantity of berries. Then comes the expense of the carton, the filling and packing in cases ready for shipment and probably at an advanced freight rate. My experience in selling the berry is, first, by buying the graded berries, the larger berries are the best sellers. What I mean is that the average customer that comes to our store and sees the different grades of berries

displayed, prefers to purchase the ones that are the most pleasing to the eye and if the same berry was put up in a carton, the customer would want to see them before he or she would purchase, because you never can tell by the label what the quality is unless it's a standard brand, and quality always the same and a long time established. I think that the smaller berries are as good as the large ones and will make equally as good sauce and pies, but, as I have said before, the appearance of larger berries is so much better that the average customer will pay an advance of 2c per quart and purchase the larger ones. On the other hand, large consumers of the berry will buy the standards with as much satisfaction as the small consumer finds in buying the fancy ones. My experience in selling cranberries is to display them in a neat basket in the front part of the store so a customer will see them, and anything that pleases the eye in the way of eatables many times will cause a craving for them. Therefore, I think there are and will be more berries sold in bulk than in any other way.

Frank W. Stanley.

The Wisconsin Cranberry Growers' Association.—Ladies and Gentlemen: I am asked and authorized by the firm, H. P. Stanley Co. of Chicago, to extend to all members of this association their congratulations upon the close of a season that has been eminently satisfactory both to growers and handlers of Wisconsin cranberries, and to express their hope for you that the coming year may be even more favorable and encouraging. I feel also that the sad duty is incumbent upon me to announce the death, on November 16th last, of Mr. Frank W. Stanley, president of the firm of H. P. Stanley Co. For the past 25 or 30 years Mr. Stanley has been more extensively interested in both growing and handling of cranberries than any other man or firm west of New York. The firm H. P. Stanley Co., of which he was president, has been during more than 30 years the principal buyer and distributor of the Wisconsin cranberry product, and while the surviving member of this illustrious firm will continue the business in the same full, fair and faithful fashion, yet we cannot but pause to pay our tribute of honor to the memory of one in whose death we each of us feel a great personal loss. Very truly,

S. N. WHITTLESEY.

This resolution unanimously adopted: That this association and each individual member

thereof recognize in the life of Mr. Frank W. Stanley, president of the firm of H. P. Stanley Co. of Chicago, a great promoter of the cranberry industry, an honorable dealer of integrity and responsibility, and in his death we sustain a great loss and mourn with his bereaved family and friends, to whom we extend our sincere sympathy.

S. N. WHITTLESEY.
F. J. HOFFMAN.

The State and the Cranberry.

Prof. E. P. Sandsten, Horticulturist University of Wisconsin, said he had not come to do any talking but for the purpose of learning. He touched on different kinds of plant life and how the weaker, if not artificially aided, would have to succumb and go out of existence. He said Judge Gaynor had covered the main points in his address, and that he could add but little along that line. He thought the cranberry would be better where the soil was well aerated and warmed up, so as to have a chance to develop. He was here to listen and learn, as he had no personal experience, but came to view this matter from an interested standpoint of science and welfare of the state, oftentimes when the practical man was at his wits end science could step in and help him and this was the disposition and desire of Dean Henry. To do this state aid was required and he thought the amount of \$5000 annually asked for was not only reasonable but rational, to accomplish what ought to be done. To the question as to whether cranberries could be grown on high land as well as on low, he replied that he thought they could, and by breeding and development a gradual change could be made from one type to another, but the swamp land was the natural home. He also said while he did not wish to be quoted as authority, that to divert these cranberry districts to other purposes would be a mistake in his judgment. Dean Henry was very anxious to take hold of the matter, if it could be done thoroughly. The use of the federal fund could not be diverted outside, so that the state would have to be looked to. A series of years would be required to get satisfactory results. In the event of funds being forthcoming the University would do whatever it could in the way of furnishing men and equipment and the direction of the work would be free. Whatever the

association would do would have a bearing on the matter and he thought it was fair that something should be done for the cranberry the same as for tobacco industry et al. While engaged in surveying for a wire grass company he had given the cranberry some thought and felt sure the matter could be profitably worked out on a scientific basis. A station should be established right on the spot, so that natural condition could be studied. Mr. Peet of Grantsburg thought his district might also be covered, but it was the opinion of the Professor, as long as there were some questions as to proper disposition of the state lands in that locality they had better not be included until their value for cranberry purposes had been demonstrated. Judge Gaynor also thought it might complicate and confuse.

With regard to the starting of growth in the spring, the scientist can tell how far the bud had advanced, and they are trying to find a constant temperature, and by keeping on experimenting can ultimately find out.

The remarks of the Professor were to the point every time and the members of the association felt the state had been most fortunate in securing for itself his labor and learning.

The Dealers Point of View

Mr. B. H. Porter of Peck Bros. Kansas City, Mo., in response to many questions put to him favored the convention with much information.

With regard to a cranberry journal he had felt the pulse of the Cape Cod and New Jersey growers and they favored it, provided it was run in the interests of the cranberry industry. That now there was too much prominence given to the profit side of the avocation and that the loss side was rarely heard of. This he thought would and in fact has in some cases stimulated investments that will, if carried on and continued result in over-production and resultant disaster. That the factors of fires, floods, frosts, worms to say nothing of cheapening process of harvesting, should be given due weight and prominence, to which should be added the running out of acres, for this reason he thought the paper should be in the nature of a specialist, in which view S. N. Whittlesey and Judge Gaynor coincided with

the result that the convention pledged its moral support to a journal edited along this line indicated.

As to sanding he decidedly favored it. Little of it used in New Jersey consequently gain weeds but dont get berries. He advised thinning out the vines, and keep them. Plant in hills they will then start out runners and keep watching and weeding. In 4 years rake it out, work is easy with a pruner. The berries can then be gathered at a cost of 70 to 80 cts a barrel. It will grow a better and bigger grade of fruit.

As to best stage for sanding advised pruning first and then sand on ice if could, and keep on resanding, according to varying conditions as things come up in different ways.

Official Inspection and Branding.

E. K. Tuttle gave his experience in marketing strawberries, which clearly demonstrated the advisability of having our fruit well known. He said his shipments were always disposed of the day before arrival and when other stock was left over, his had been disposed of. He thought it would be a good idea to have slips of growers name in barrels, would be of great benefit in making a market demand. Always have a clear conscience in filling a barrel full. Put in all that could be, and there will be big interest on what was put in.

The Relation of the Press to Producer and Purchaser

BY W. J. HARRIS.

Chicago, Ill., Jan. 12, 1903.—W. H. Fitch, Secy., Grand Rapids, Wis.—Dear Sir: This will introduce to you Mr. LeRoy Bartholomew of the "Packer" staff. It was the intention of the writer to be present at your meeting and personally address your association. Until today it did not occur to me that the meeting of the N. L. C. M. of U. S. met in annual convention here 14th, 15th and 16th, most of the delegates arriving on the 13th. This makes it impossible for me to leave. I am, however, sending our Mr. Bartholomew whom I am sure you will find as capable and efficient as myself and who has full authority to make any arrangements agreeable to your association on behalf of the Packer.

I have written a little something,

which if you think of value enough to pay for the time expended in reading it, you may use.

Hoping Mr. Bartholomew may establish mutual relations that may be agreeable and beneficial to you, and that I may have the pleasure of a personal meeting with your association sometime in the future, I am, yours most cordially,
W. J. HARRIS.

In a vague way everyone has an idea of the relation of the press to the producer and purchaser. The close, intimate and indispensable relation, is, perhaps, not always clearly discerned by the casual observer. The relationship on the part of the press is a helpful one to the other parties in question. Publicity through the press is always beneficial to every legitimate enterprise. Very few successful enterprises can be pointed to that have not been exploited, more or less, by the public press, and owes its successful termination as much to that means as any other.

As the world becomes more civilized and enlightened, and the general average of intelligence among the people as a whole is raised, the potency of the press is correspondingly augmented. Both producer and purchaser are more largely indebted to the press than they realize.

That famines, which in former ages ravaged and depleted large portions of humanity in different sections of the world, are now less frequent, and less acute, is due as much to the publicity given such matters through the press as to the ability to quickly distribute between remote sections food supplies which are abundantly produced in one section to where it is being clamored for to sustain life in other sections.

The press is a balance wheel that keeps conditions nicely adjusted between three elements; the producer, purveyor and purchaser. Were it not for its equalizing influence, the whole fabric of business transactions between these three classes, which comprise the inhabitants of the earth, would be a series of tumultuous upheavings, beneficial in the long run to no one, but full of worry, nervous strain and unsatisfactory results.

The press is like an octopus, in the sense that it has one directing head, but many arms. It goes out to the producer on one hand and tells him

where and how he can profitably market his crops. In fact, by virtue of its intelligent presentation to the producer of the actual market conditions in all portions of the world, it practically effects or makes a market for him. It really (more practically than theoretically) takes from him the burden and responsibility of marketing his crops after he has produced them, and leaves him free to go on utilizing his time and energies where he has trained them to be most effective, in producing another crop. It also comes in and helps him with information so that he is able to grow more, and of better quality, on the same areas, and in less time. If the producer were compelled to divide his energies between the growing and harvesting of his crops and the business of going out himself and endeavoring to secure the proper returns for his labor, the result financially of that labor would be much less profitable than under the present arrangement, and often disastrous.

On the other hand if the business man was compelled to spend so much of his time trying to learn conditions of crops and where to obtain supplies and the comparative profitableness of purchases in different markets, he would have so little time to attend to his proper and legitimate end of the deal as to make his vocation a more or less unprofitable one.

The purveyor, and finally the consumer, are equally indebted to the services of the press. Had either of them to do without its services they would be in a like position, as the purchaser, the purchaser here being understood as the man who buys at first hands from the producer. None of these realize how far reaching are the effects of the press, nor how much they are indebted to its publicity for their own convenience, comfort and welfare in a personal way.

If the consumer was compelled to depend upon his personal efforts, unsupplemented by the intelligence conveyed to him through the press, to supply what he needed from the producer, so much of his time would be taken up that the advancement of the world in intelligence would be small indeed. It is the belief of the writer that were the press, with its intelligence, eliminated from all these classes which comprise the world, that not only would arts,

science, inventions, and progress of the world in general be hampered, but that civilization itself would obtain a set back and relapse more or less toward savagery, simply from inability of the different classes to do much more than supply their needs for actual existence.

It is to the leisure time from skurrying after the actual necessities of existence, that the enlightened work of the press gives to these people, that the advancement of the world in general is due.

The value of the press to both producer and purchaser is the unbiased, impartial information it conveys to both, its effort being always to ascertain and give publicity to actual conditions. The press, especially market publications of enterprise, with the courage of their convictions and an adherence to principles of right and justice, may do much to better market conditions by bringing producer and purchaser to a better understanding and appreciation of each other's right.

Coming down to the specific relations of the press to particular interests, much may be done beneficial not only for the producer but ultimately the consumer and the interested purveyor and purchaser between by properly exploiting a deserving food product, such as the wholesomeness, healthfulness and desirability of the cranberry. Proper use of the press in this regard will result in an increased demand with much benefit and profit to both the enlightened user and the intelligent and deserving producer.

Sound Berries.

H. H. Gebhart said that while there might be a difference of opinion as to what was strictly a sound berry as a rule growers can readily tell by feeling. He would favor a generous limit, say 6 percent of "defectiveness." If limit was placed too small would be likely to make trouble, and growers would be the parties who would have to suffer.

Packing.

J. B. Arpin thought as long as can sell in barrels no use trying to sell in any other way, and as this seemed to be the consensus of those present no further discussion was indulged in.

Grading.

In the absence of Edward Kruger to whom had been assigned the special treatment of the subject, the question of sizing berries took a general range. To arrive at a conservative and judicial conclusion, the cumulative system was introduced, but was not put into effect, as the majority of those present seemed to think any change in existing standards would be untoward, but it was very evident that the minority, while defeated, were not conquered, and are not disposed to abandon the field or surrender unconditionally.

Concerning State Aid.

The matter of state aid for the cranberry was brought up, and took form in the following memorial which is to be presented to the legislature for action during current session:

To the Members of the Wisconsin Legislature.

Your memorialist, the Wisconsin Cranberry association, would respectfully call the attention of your Honorable Body, to the fact that there are, in the northern half of Wisconsin, several hundred thousand acres of marsh lands, upon which wild cranberries, of a superior quality, prior to the great forest fires of 1893 and 1894, that more than 95 percent of these wild vines have been destroyed by those fires.

In the year 1890, there was gathered and marketed from these wild marshes, nearly 100,000 barrels of cranberries that sold for \$5.00 a barrel and upwards. The land upon which they grew is now covered with sphagnum moss and wild coarse grasses, sedges and are practically worthless for any of the general purposes of agriculture. That it has been demonstrated in this state that these lands can be utilized for the purpose of growing cultivated cranberries, and that an acre of these lands planted to vines, where a proper supply of water for irrigation can be controlled will yield from \$200 to \$500 worth of cranberries a year, that it has been practically demonstrated that cultivated cranberries can be grown successfully where the wild cranberries were found naturally.

The cultivation of cranberries in Wisconsin is an industry that is still in its infancy, and very little has been done to demonstrate, by experiment,

the best methods of cultivation, or the best varieties of this fruit for general cultivation. The industry is very much in need of this class of scientific, experimental work, and under scientific guidance, can be made one of the greatest industries of Northern Wisconsin, and a large quantity of comparative worthless lands can be made the source of large incomes.

We would therefore respectfully ask that you appropriate the sum of \$5,000 annually to the Agricultural department of our state university to be used by it to promote the development of this industry in Wisconsin, and your memorialist will ever pray.

Dated at the city of Grand Rapids this 13th day of Jan., 1903.

CHAS BRIERE, president.

W. H. FITCH, secretary.

Review of the Fruit Growing Organization of California.

De Funiak Springs, Florida, Dec. 19, 1802.—The fruit growing organization of California has been the outgrowth of absolute necessity.

In the first place no fruit of any kind was found growing in that state. Around the old Spanish and Mexican Mission buildings, now in ruins, we find the earliest planted orange and other fruit trees.

When the gold fever subsided many enamoured with the delightful climate took up fruit growing for a living with disastrous results, on account of the limited home market, and the center of population being two thousand miles to the east of them, and no railroad facilities for reaching them.

When railroads came they ran over the mountains, above the clouds into the regions of severe cold, and across the desert for days where the thermometer in the passenger car I rode in registered one hundred and three degrees in March, all day long. To ship perishable fruit over such railroads without experience was sure to bring the producer to poverty and bankruptcy. Icing of cars was resorted to with additional expense added to the exorbitant railroad freights, and the fruit so shipped when put on the market had to be sold at once or it went to decay, as such chilled fruit always does, entailing still greater loss to the producer. The fruit being consigned almost entirely to commission men, resulted in

still further losses until there was no remedy except in organization. In a personal conversation with the secretary of the southern California fruit exchange at Los Angeles, he told me that to handle a citrus fruit crop of California, then on the trees would require them to sell a car load every twenty minutes during the entire year, working 10 hours a day, yet I saw by their report at the close of the year, that all their sales had been made without the loss of a single dollar.

With every train load of fruit there goes an experienced man to regulate the ventilation over the mountains and across the desert to their destination, where each car load is delivered to their own paid agent instead of a commission man, he alone is held responsible to the company, and is obliged to give sufficient bonds to cover the value entrusted to him. I saw their agent at Minneapolis, Salt Lake City, Kansas City, San Francisco and other cities and was satisfied that they were all good business men.

To secure uniform packing and sorting of the fruit, packing houses are established all over the southern part of the state, at the railroad stations, where the fruit is brought by the producer in boxes, and kept separate. A receipt is given for each load as it is weighed. In these packing houses the fruit is all graded by machinery run by electricity, and carefully packed by hand by women. The grower gets credit for the amount of the different grades that the machine separates from his crop. It is not left to the individual growers judgment, nor to his honesty.

This machine works on the same principle as the Gaynor grader except that the movement of the oranges is produced by two endless ropes of raw hide, one propelled faster than the other, which causes the orange to whirl around as it passes along the grader. The oranges roll down padded troughs, each grade by itself, so that a certain number of each grade fills a box, so that the buyer knows exactly what he is getting, though thousand of miles away.

This packing of fruit by disinterested parties and grading by machinery so perfectly is the foundation on which their success depends. Lumber for the boxes is bought by the car load, sawed

up by machinery and nailed together by machinery, thus reducing the cost to the minimum. The cars are loaded direct from the packing houses by men who understand that business, and so arranged that they do not crush each other, nor come in contact with the sides of the car. During the packing season the overseers of these packing houses meet once a week to learn all they can from each other. I think from the presidents of these packing houses, the board of directors, of the southern California fruit exchange are selected, and meet once a month.

I had business with one of them and went to their meeting, but was not permitted to enter their private room in the exchange. They keep a chemist constantly employed to examine diseased fruit, and to suggest any improvements for prevention, or to enhance the quality of the fruit, or to prevent loss in shipment. I had a letter of introduction to him, and made him frequent visits, ventilating my theories, which he pronounced correct, and in return received from him some new ideas regarding cross fertilization, and fruit preservation. During transportation on this point alone his services to the association have been worth many times his salary.

The California state experiment station at Birley, Cal., also aids the fruit grower in every way possible.

The larger cities have chambers of commerce buildings, which are permanent exhibitions almost equaling the California building at the world's fair. The state agricultural department also lend their aid, and the United States government listen to their complaints, and send their agent to protect the mountain forests, and the interstate commerce commissioners hasten to that state to relieve them of unjust railroad rulings, and discriminations, and it has also sent an agent there to instruct them by field tests, how to prevent frost. I had the pleasure of seeing and hearing him speak and later to read of his success in field work.

Without organization this immense fruit production would perish like a soap bubble.

This association does not seek to fix a definite market price on their fruit, but through the medium of the telegraph and their agents, they are able

to ship to such points, as are at that time paying the highest price. There are many other fruit organizations and independent packing houses, which often contend against each other, but all unite against their unjust rulings of transportation. Companies better disturb a hornets nest than to tread on their rights. A. C. BENNETT.

Conditions that favor Growth of Cranberry Vines.

BY JOHN A. GAYNOR.

It is of the first importance that the grower should know and concentrate his attention upon important conditions that he can control, and to do this he should free his mind from such as are unimportant or are beyond his control.

He can do very little for that part of the plant that is above ground beyond that of pruning and rolling or occasionally tempering the air by flooding to protect the fruit from frost. The part of the vine that is mainly under the control of man, is the root, and it is to this the grower should direct his attention, and supply, as far as he can, the conditions and elements it requires.

Our modern scientists tell us that there are in nature over 70 elements; the Ancients recognized only four viz;—earth, water fire and air, and for the purposes of the cranberry grower and the man who has to deal with plant life, the ancient classification is much to be preferred, and I will here speak of these as the elements under the soil, moisture, heat and air, and these are the elements upon which the cranberry grower should concentrate his attention, and he will reach better results if he refuses to recognize those that the modern chemist would give him.

I have seen cranberries growing thriftily with their roots in a bed of living moss, I have seen them growing on a hard gravel soil, upon a black muck soil, and on white sand. In origin and chemical composition, what could be more unlike than black muck and white sand. We are thus lead to believe both as to the cranberry vine and many other plants, that the chemical composition and origin of the soil in which it is of very little importance, but that the mechanical structure, especially as relates to porosity is of much greater importance than the chemical elements of which the soil is

composed.

There are many species of plants in damp climates that grow well, whose roots do not come in contact with soil of any kind, but there is no plant known that can grow without having all of the other three elements, to wit,—moisture, heat and air. These elements are required not only for the green parts of the plant, but without all of them the roots will perish, and as it is the root that is mainly under our control, it behooves us to study the amount of moisture, heat and air required by the root to secure the best development of the plant, and to study the means by which these may be supplied.

The soil in which the root of the cranberry thrives whether the half decayed fiber of sphagnum moss and other vegetable fiber, or sand or gravel or muck, must in all cases be a porous soil. The little hair roots follow the open spaces between the particles of the material that forms the soil, but do not penetrate these particles. It is through these pores or small spaces that all of the air and moisture and much of the heat is carried to the root. It is doubtful if a root could be made to grow or even live in the waxy, fine grained, black muck that we call "Gumbo" to be found in lower layers of our deep muck marshes, because it is ungranulated and so compact as to exclude the circulation of air. The alleged bad effects of clay is probably due to the same cause.

The well known merits of sand on the surface of a cranberry bog is probably largely due to the fact that it is porous and furnishes the little spaces between the grains for the air and moisture to circulate and reach rootlets, carrying to them, not only these two elements, but also, some heat, and most largely to the fact that the sand is itself an excellent conductor of heat, and will carry the heat of the sun's rays downward better than any other material usually found in soils, while moss muck and peat are among the poorest conductors of heat.

It will be readily seen that if the air and moisture in any way nourishes the root, they must circulate. That is they must keep on the move to furnish a fresh supply of such material as the plants need just as a fresh supply of water for our stomachs, and the air

for our lungs is constantly required. We absorb these elements from within, the plant absorbs them from without.

How much heat, moisture and air does the root require to give the best results? It is easier to ask this question than to answer it. By analogy and observation the temperature required for the root to grow is probably above 64 degrees, but I would not even dare to guess at what temperature the root would do its best or how high the temperature would be to destroy it

Judging from the habits of the cranberry plant, and in analogy with other woody plants growing on wet marshes, the roots struggle to keep above the level of the ordinary ground water. This is doubtless due to the fact that they can not get as much air as they require when covered by water. Although there is air in water it seems not to be sufficient for their wants. And although the cranberry will stand to have its roots under water during growing season, quite as well as any woody plant I know of, I am not sure just how long it would stand it if submerged. I know that it would endure the water a long time at a low growing temperature because the quantity of air it would require would be less.

It may be safely alleged that the root requires a temperature above 64 degrees, that it requires a moisture and a saturated air. The problem is, what kind of soil is best adapted to carry to the root sufficient heat, either by conduction, as is mainly the case on a sanded marsh, or by convection as brought about by the circulation of saturated air in the porous or warm surface water percolating among or just below the rootlets, or descending from above as the result of warm summer rains? We know that the cold water drawn from below by capillary action on our muck soils retards greatly the growth that we ought to get from warm days in the early part of summer. Black muck is a very poor conductor, and it refuses to carry the sun's heat downward to the roots.

What degree of porosity should the soil have to admit of the best degree of air circulation? As already stated, without air, the root cannot contribute to the growth of the plant, and with too much porosity circulation of air might be so great that it would carry away the capillary moisture too fast,

and leave the root in an air that was not saturated, and in such an air it would not only furnish no nourishment to the plant, but it would soon wither and die.

What I have stated suggests a great many problems,—problems that literally lie at the very root of successful cranberry growing. Problems that cannot be solved by speculation or guessing, problems that can be solved only by careful scientific observation. The average cranberry grower has not studied the laws that control the distribution of heat in the soil, nor does he understand the laws of the movement of air or capillary water in the pores of the soil.

To solve these problems we need trained scientific observers, and we should look to the Agricultural department of our university, to do the work. If it has not the means, the state could well afford to furnish them. It would result in developing a fruit industry in Wisconsin that would exceed in wealth producing power the orange industry of California.

Drainage.

Good drainage is a very important part of the cultivation of the cranberry. It is safe to say that all marshes used for raising cranberries should be drained so that the water in the ditches will stand at least one foot below the surface, and many marshes will stand more than that, two and even three feet. But that depends upon the conditions or composition of the muck or peat.

It has been noticed that vines will grow on the sides of dams, and even on the top of dams that are two and three feet above the water in the ditches, and these vines are the most thrifty, have the most perfect buds, bear the most and largest berries.

It has also been noticed that vines along the ditches are most thrifty, and as you go away from the ditch the vines are thinner, with less buds and less berries. This simply shows that there is not enough drainage in the center of the bog.

The remedy is to ditch or sand,—ditch anyway. All marshes which contain much peat should have a ditch a foot wide and twenty inches deep divided across the fall of the marsh

every two rods. Drainage ditches should be wider and deeper, so as to carry off the water quickly.

It does not seem to make any difference as to how quickly a marsh is flooded or drained, especially when flooded for frost. In the spring the water should be taken off gradually, as early as possible in April, or by the first of May at the latest, before the water gets warm, and the vines allowed to have the air and sunlight.

RALPH SMITH.

Best Method of Handling Water.

CHAS. S. WHITTLESEY.

In the old days when cranberries grew wild and the idea of cultivation had not fully entered men's minds, the handling of water was very simple, it passed directly from one marsh to the next below.

Then if by any chance the water was stopped, or floods occurred at critical times when the surface of the marshes had a happy way of floating up with the rise of water, thus keeping the vines exposed and avoiding disaster to the growing crop,

With cultivation, scalping, ditching, planting of vines, etc., the surface became firmly fixed and no longer floated with the rise and fall of the water.

Reservoirs were used to conserve the water, that used on the marshes passing away through outlet ditches. But some times trouble arises. The water in a pond backs up upon the marsh above, or the man below is unable to handle the water as fast as it comes.

Evils we all can appreciate

To my mind the greatest evil with our present system is that every drop of water coming to us must pass directly through, and over our bearing marshes. This occasions no trouble in dry or even in ordinary times, but in time of floods it is sometimes almost impossible to get rid of water fast enough to keep the vines exposed. Probably each one of us has experienced that difficulty to a greater or less degree.

As a remedy for these evils, first have large solid dams around the bearing areas, dams large enough to keep out any quantity of water. Second reservoir dams heavy enough to hold

all water practicable with waste ways of a fixed height, and large enough to carry off any flood, to which we may be liable. Build these reservoirs in series so that waste or flood water will pass from one to the next below, and so on in natural sequence, thus carrying all water not actually used or needed, around instead of over the planted areas. Third all uncultivated lands possible should be included in these reservoirs. This will insure a greater volume of water stored, full ponds for a longer time, and also lessens the danger from frosts and fires.

Water to be taken from the marsh itself may be carried through what will be termed low water outlets, on the opposite side from which the high or surplus water passes. In this way, turning surplus water around our marshes, one way and carrying off the low water in another, will I believe, benefit all parties interested, working in harmony, obviate many of the difficulties that confront us.

There being no further business the convention adjourned.

W. H. FITCH, Sec.

A. L. RIDGMAN,

Physician and Surgeon,

Grand Rapids, Wis.

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W. H. FITCH, Secretary, Cranmoor.
M. O. POTTER, Treasurer, Centralia.
A. E. BENNETT, Member Executive Committee, Grand Rapids.

OBJECTS.

IMPROVED VARIETIES.—At the experimental station located between Elm Lake and Cranmoor, there are being tested and propagated over 100 different kinds of the best known and proved species. Cuttings from these vines will be disposed of under rules and regulations of the Executive Committee.

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MAILING LISTS.—A roll of leading growers et al in United States and Canada, revised to date of purchase, can be had of Secretary, Cranmoor, Wis. Price Two Dollars (\$2.00.) Names of Wisconsin growers, One Dollar (\$1.00.)

MEMBERSHIP.

ORDINARY.—Annual fee, fifty cents (50c) which may be sent in stamps. A prompt remittance by those in arrears, and others desiring to join the association will be appreciated.

AUXILIARY.—Besides growers the association makes eligible and welcomes to membership those who more or less connected with the industry, recognize a mutual good and gain in the aims and accomplishments of the organization.

LIFE.—From consideration of convenience and that the usefulness of organization may be more immediately enlarged and extended a LIFE ROLL has been established the fee for which five dollars (\$5.00) will cover all future dues. The names of such members will be published in annual reports of association together with postoffice address, shipping station and business card, the latter feature of which it is believed will be found of co-service and benefit.

To Correspondents.—Requests for special information should be accompanied by self addressed stamped envelope.

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EDITOR W. H. FITCH,

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