

Minnesota State Horticultural Society Records.

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Badge Book

ANNUAL MEETING DEC. 3 TO 6, 1912

MINNESOTA STATE HORTICULTURAL SOCIETY

DIRECTIONS:---We ar conspicuously the badge and numbered button accompanying this book. The following list, alphabetically arranged, contains the names of all members, delegates or visitors in attendance at the meeting who are wearing numbered badges. By consulting this list, any one of them can be identified at once by the number on the badge.

A

- I Aamodt, Arne, St. Paul.
- 2 Adams, Mrs. Louisa J., Minneapolis.
- 3 Anderson, A., Excelsior.
- 4 Anderson, G. A., Renville.
- 5 Anderson, Mrs. G. A., Renville.
- 6 Andrews, C. H., Faribault.
- 7 Andrews, J. P., Faribault.
- 8 Arrowwood, Jas., Nevis.
- 9 Averill, F. A., Excelsior.
- 10 Averill, Mrs. F. A., Excelsior.

B

- 11 Baalson, A. E., Brooten.
- 12 Backus, Mrs. C. J., St. Paul.
- 13 Bailiff, R. L., Bloomington.
- 14 Baldwin, Miss L. O., Minneapolis.
- 15 Ballard, E. O., Minneapolis.
- 16 Bartram, Mrs. C. S., St. Paul.
- 17 Beckstrom, John A., St. Paul.
- 18 Beebe, H. U., Lake City.
- 19 Beckstrom, Mrs. John A., St. Paul.
- 20 Benjamin, J. F., Hutchinson.
- 21 Benjamin, Mrs. J. F., Hutchinson.
- 22 Bingham, D. E., Pres. Wis. State Hort. Society, Sturgeon Bay, Wis.
- 23 Bisbee, John, Madelia.
- 24 Blain, H. J., Maple Plain.
- 25 Blain, Mrs. H. J., Maple Plain.
- 26 Boardman, Mrs. H. A., St. Paul.
- 27 Born, Otto G., St., Paul.

- 28 Born, Mrs. Otto G., St. Paul.
- 29 Boyington, Mrs. R. P., Duluth.
- 30 Brackett, A., Excelsior.
- 31 Brackett, Mrs. A., Excelsior.
- 32 Brady, T. D., Medford.
- 33 Brady, Mrs. T. D., Medford.
- 94 Briggs, Geo. A., Traverse.
- 35 Brown, Frank, Paynesville.
- 36 Bruns, Henry, Excelsior.
- 37 Bruns, Mrs. Henry, Excelsior.
- 38 Bubak, Chas., Olivia.
- 39 Bugbie, A. E., Paynesville.
- 40 Bugbie, Mrs. A. E. Paynesville.
- 41 Bull, Prof. C. P., St. Paul.
- 42 Bull, Mrs. C. P., St. Paul. 43 Bunnell, M. C., Newport

C

- 44 Cady, Prof. LeRoy, St. Paul.
- 45 Cady, Mrs. LeRoy, St. Paul.
- 46 Cashman, Thos. E., Owatonna.
- 47 Catlin, T. J., M. D., Palisade.
- 48 Chandonnet, Rev. Z. L., Perham.
- 49 Cheney, W. H., Olivia.
- 50 Cheyney, Prof. E. G., St. Paul.
- 51 Clausen, P., Albert Lea.
- 52 Collins, P. V., Minneapelis.
- 53 Collins, Mrs. P. V., Minneapolis.
- 54 Cook, Dewain, Jeffers.
- 55 Coombs, Joseph L., Minneapolis.
- 66 Coombs, Mrs. Joseph L., Minneapolis.

- 57 Cowles, Fred, West Concord.
- 58 Cox, W. T., St. Paul.
- 59 Cramer, Fred, Mapleton.60 Cutting, F. E., Byron.

D

- 61 Davis, L. O., Minneapolis.
- 62 Deline, W. F., Cannon Falls.
- 63 DeSmidt, A. A., Battle Lake.
- 64 Dickenson, W. C., Osseo.
- 65 Dickenson, Mrs. W. C., Osseo.
- 6 Dille, Peter O., Dassel.
- 67 Dixon, J. K., North St. Paul.
- 68 Dixon, Mrs. J. K., North St. Paul.
- 69 Dobbin, W. J., Excelsior. 70 Dorsey, Prof. J. M., St. P.
- 70 Dorsey, Prof. J. M., St. Paul.
- 71 Drum, S. H., Owatonna.
- 72 Dunsmore, Henry, Olivia.73 Dunsmore, Mrs. Henry, Olivia.
- 74 Durand, Albert, Waseca.
- 75 Dysinger, S. D., St. Paul.

E

- 76 Eddy, W. H., Howard Lake.
- 77 Effertz, Peter, Norwood.
- 78 Effertz, Mrs. Peter, Norwood.
- 79 Eliason, M. A., Artichoke Lake.
- 80 Eliason, Mrs. M. A., Artichoke Lake.
- 81 Elliot, W. J., Buffalo.
- 82 Elliot, Wyman, Minneapolis.

- 83 Erickson, A. G., Excelsior.
- 84 Erwin, Prof. A. T., Delegate Ia. State Hort. Society, Ames, Ia.

F

- 85 Fletcher, Frank F., Minneapolis.
- 86 Fletcher, Mrs. Frank F., Minneapolis.
- 87 Foss, Miss Elizabeth H., Minneapoiis.
- 88 Fournelle, Peter, White Bear.
- 89 Fournelle, Mrs. Peter, White Bear.
- 90 Freeman, Prof. E. M., St. Paul.
- 91 Fryer, W. E., Mantorville.
- 92 Fuller, E. D., Minneapolis.
- 93 Fuller, Mrs. E. D., Minneapolis.

G

- 94 Gardner, Chas F., Osage, Ia.
- 95 Gibbs, F. H., St. Anthony Park.
- 96 Gibbs, Mrs. F. H., St. Anthony Park.
- 97 Gilman, Mrs., Minneapolis.
- 98 Gunderman, Henry, Wabasha.

H

- 99 Haecker, Prof. T. L., St. Paul.
- 100 Halbert, Geo. T., Minneapolis.
- 101 Halbert, Mrs. Geo. T., Minneapolis.
- 102 Hansen, Prof. N. E., Brookings, S. D.
- 103 Haralson, Chas., Excelsior.
- 104 Haralson, Mrs. Chas., Excelsior.
- 105 Harris, F. I., La Crescent.
- 106 Harrison, C. S., York, Nebr.

- 107 Harrison, J. F., Excelsior.
- 108 Haseltine, E. W., Minneapolis.
- 109 Hathaway, C. E., Northfield.
- 110 Hathaway, Mrs. C. E., Northfield.111 Hawkes, Gertrude, Excelsior.
- 112 Haynes, Arthur E., Minneapolis.
- 113 Hendryx, S. V. R., Austin.
- 114 Hendryx, Mrs. S. V. R., Austin.
- 115 Hermanson, Herman, Hopkins.
- 116 Herrick, U. G., Minneapolis.
- 117 Henrikson, N., Audubon.
- 118 Henrikson, Mrs. N. Audubon.
- 119 Highby, L. P. H., Albert Lea.
- 120 Hilborn, E. C., Valley City, N. D.
- 121 Hilborn, Mrs. E. C., Valley City, N. D.
- 122 Hofman, E. L., Janesville.
- 123 Holloway, E., Excelsior,
- 124 Hopkins, W. J., Sta. F., Minneapolis.
- 125 Hostetter, A. B., Duluth,
- 126 Howard, Geo. F., St. Paul.
- 127 Hoyt, B. Terrell, St. Paul.
- 128 Hoyt, Mrs. B. Terrell, St. Paul.
- 129 Huestis, Dr. O. M., Minneapolis.
- 130 Huestis, Mrs. O. M., Minneapolis.131 Hummel, Prof. John A., St. Anthony
- Park.

 132 Hummel, Mrs. John A., St. Anthony
 Park.
- 133 Hunter, C. C., Minneapolis.
- 134 Huss, Geo. M., Reserve, Wis.
- 135 Huss, Mrs. Geo. M., Reserve, Wis.
- 136 Husser, Henry, Minneiska.

J

- 137 Jager, Rev. Francis, St. Bonifa
- 138 Jager, John, Minneaoplis.
- 139 Jager, Mrs. John, Minneapolis.
- 140 Jardine, J. B., Wayzata.
- 141 Jerabek, J. S., Hutchinson.
- 142 Jewell, Mrs. B., Dalbo.
- 143 Jewell, Clifford, Dalbo.
- 144 Jewell, Geo., Dalbo.
- 145 Johnson, A. A., Winnebago.
- 146 Johnson, Gust, Minneapolis.
- 147 Johnson, P. G., Minneapolis.
- 148 Johnson, Mrs. P. G., Minneapolis,
- 149 Jorris, F. E., Minneapolis.

K

- 150 Kalbakken, Theo., St. Joseph, Wis.
- 151 Keller, Paul G., Excelsior.
- 152 Kellogg, Geo. J., Lake Mills, Wis.
- 153 Kenney, Dr. D. J., Minneapolis.
- 154 Kenney, Seth H., Waterville.
- 155 Ketchum, C. S., Brookpark.
- 156 Kilby, Wm., St. Paul.
- 157 Kirk, Loren O., Minneapolis.
- 158 Kirkpatrick, Prof. K. A., St. Pa
- 159 Knoblauch, Wm., Excelsior.
- 160 Knoblauch, Mrs. Wm., Excelsio
- 161 Knowles, Mrs. M. A., Excelsio
- 162 Kohler, Prof. A. R., St. Paul.

- 163 Kolisch, Aug., St. Louis Park.
- 164 Kolisch, Mrs. Aug., St. Louis Park.
- 165 Krier, A. N., Farmer, S. D.

I

- 166 La Mont, Scott, Park Rapids.
- 167 Lang, O. T., Minneapolis.
- 168 Larson, J. F., Stillwater.
- 169 Larson, Mrs. J. F., Stillwater.
- 170 Latham, A. W., Minneapolis.
- 171 Libby, F. M., Robbinsdale.
- 172 Lien, Thos. J., Delavan.
- 173 Longyear, E. J., Excelsior.
- 174 Longyear, Mrs. E. J., Excelsior.
- 175 Loring, Chas. M., Minneapolis.
- 176 Loring, Mrs. Chas. M., Minneapolis.
- 177 Loyhed, Mrs. E. H., Faribault.
- 178 Ludescher, J. L., Rockford.
- 179 Ludescher, Mrs. J. L., Rockford.
- 180 Ludlow, H. J., Worthington.
- 181 Ludwig, F. B., Merriam Park.
- 182 Ludwig, Mrs. F. B., Merriam Park.
- 183 Lundgren, Mrs. E. E., St. Paul.
- 184 Lyman, A. B., Excelsior.
- 185 Lyman, Mrs. A. B., Excelsior.

M

- 186 Mackintosh, R. S., Caledonia.
- 187 Maher, J. W., Devils Lake, N. D.
- 188 Marsh, F. L., Champlin.

- 189 Marshall, G. E., St. Paul.
- 190 Matzke, Sil, So. St. Paul.
- 191 Mense, F. G., Minneapolis.
- 192 Miks, Rev. A., St. Michael.
- 193 Miller, Uri, Brookpark.
- 194 Miller, Warren, Lake Benton.
- 195 Miller, Mrs. Warren, Lake Benton.
- 196 Modlin, E. L., Excelsior.
- 198 Moore, O. W., Spring Valley.
- 199 Morey, Geo. W., Minneapolis,
- 200 Moris, Mrs. Frank, Lake Elmo.
- 201 Moris, Frank, Lake Elmo.
- 202 Moyer, L. R., Montevideo.
- 203 Murray, J. W., Excelsior.

Mc

- 204 McCall, Prof. Th. M., Crookston,
- 205 McCully, Preston, Maple Plain.
- 206 McDonald, W. M., Excelsior.

N

- 207 Neil, Victor A., Mound.
- 208 Nelson, Anton, Grasston.
- 209 Nelson, Mrs. Anton, Grasston.
- 210 Nelson, C. G., Lindstrom.
- 211 Nelson, Mrs. C. G., Lindstron
- 212 Nelson, Elmer, Austin.
- 213 Nelson, John A., Maynard.
- 214 Nichols, S. S., Minneapolis.

0

- 215 Older, C. E., Luverne.
- 216 Olmstead, Rev. Rett E., Excelsior.
- 217 Osborn, John, Dassel.
- 218 Oslund, N. N., Cambridge.

P

- 219 Pabody, E. F., Minneapolis.
- 220 Palmer, A. T., Minneapolis.
- 221 Palmer, C. A., St. Paul.
- 222 Palmer, Phebe L., Minneapolis.
 - 23 Patten, J. W., Long Lake.
- 224 Penney, John, Cushing, Wis.
- 225 Penning, M., New Ulm.
- 226 Perkins, T. E., Red Wing.
- 227 Perry, P. H., Excelsior.
- 29 Peter, Justus, West St. Paul.
- 230 Peterson, Geo. A., Canby.
- 231 Peterson, R. M., St. Paul.
- 232 Peterson, Mrs. R. M., St. Paul.
- 233 Peterson, P. H., Atwater.
- 234 Peterson, Mrs. P. H. Atwater.
- 235 Pfaender, Max, Mitchell, Nebr.
- 236 Pfaender, Mrs. Max, Mitchell, Nebr.
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282 Scott, Z. D., St. Paul. Seifert, Frank L., New Ulm. 283

284 Selvig, C. C., Willmar.

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Simmons, Harold, Howard Lake.

287 Skaar, N. O., Zumbrota.

288 Skotterud, E. O., Dawson. Skotterud, Mrs. E. O., Dawson. 289

290 Slocum, A. M., Excelsior.

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292 Smith, Mrs. E. A., Lake City.

293 Smith, E. K., Minneapolis.

294 Snyder, Harry, St. Paul.

295 Scholt, M., Madison.

296 Solem, O. A. Th., Halstad.

297 Spates, Mrs. S. R., Wayzata.

298 Stager, Mrs. Jennie, Sauk Rapids.

299 Stakman, E. C., St. Paul.

300 Stanchfield, H. L., Excelsior.

301 Stevens, S. Geo., Duluth.

302 Stevers, Mrs. F. W., Minneapolis.

303 Stork, W. E., St. Paul.

304 Stork, Mrs. W. E., St. Paul.

305 Strand, Geo. W., Taylors Falls.

306 Strobeck, F. E., Litchfield.

T

307 Terry, Alfred, Slayton.

308 Terry, L. W., Jordan.

309 Thorp, Col. Freeman, Hubert.

310 Tillotson, Mrs. H. B., Minneapolis.

311 Tingley, W. J., Forest Lake.

312 True, Fred O., Mankato.

U

- 313 Underwood, J. M., Lake City.
- 314 Underwood, Mrs. Anna B., Lake City.
- 315 Underwood, Roy, Lake City.
- 316 Undlin, Iver C., Madison.

V

317 Voight, Louis H., Hastings.

W

318 Waldron, Prof. C. B., Fargo, N. D.

319 Wampler, A. J., White Bear.

320 Wanlass, Jos., Jr., Mindora, Wis.

321 Wanlass, Mrs. Jos., Mindora, Wis.

322 Ward, F. A., Fairmont.

323 Warren, T., Woodstock.

324 Washburn, Prof. F. L., St. Paul.

325 Webb, E. A., St. Paul.

326 Webster, D. C., LaCrescent

327 Webster, Mrs. D. C., LaCrescent.

328 Wedge, Clarence, Albert Lea.

329 Wedge, Mrs. Clarence, Albert Lea.

330 Wedge, Robt., Albert Lea.

331 Wentzel, Louis, Crookston.

332 Wheaton, D. T., Morris.

333 Wheaton, Mrs. D. T., Morris.

334 Wheeler, Miss Gerda, Sandstone.

335 White, Miss Emma V., Minneapolis. 336 Whiting Geo. H., Vankton S. D.

336 Whiting, Geo. H., Yankton, S. D. 337 Whiting, Mrs. Geo. H., Yankton, S. D.

Wiesen, W. M., St. Paul.

339 Wilder, Mark L., Mankato.

340 Wildhagen, F. O., Delegate N. E. Ia. Hort. Society, Waterloo, Ia.

341 Williams, M. M., Little Falls.

342 Willis, Rev. F., Excelsior.

343 Wilson, A. D., St. Paul.

344 Winter, Douglas, Long Lake.

345 Wintersteen, C. B., Minneapolis.

346 Wirth, Theo. Supt. Parks, Minneapolis.

347 Woods, A. F., St. Paul.

348 Wright, R. A., Excelsior. 349 Wright, Mrs. R. A., Excelsior.

349 Wright, Mrs. R. A., Excelsion 350 Wyman, Phelps, Minneapolis.

351 Wyman, Mrs. Phelps, Minneapolis.

Y

352 Yanish, E., St. Paul.

Z

353 Zuercher, F., Excelsior.

ADDENDA

354 Mayo, E. D., Minneapolis.

355 Kimball, F. W., Waltham.

356 Luce, Clint, Albert Lea.

357 Drew, Prof. J. M., St. Paul.

358 Black, G. D., Independence, Ia.

359 Cranefield, Frederic, Secy. Wis. State Hort. Socy., Madison, Wis.

360 Mayo, Dr. Chas. D., Rochester.

361 Hartmann, M. B., St. Paul.

362 Snyder, R. V., Hopkins.

363 Snyder, Mrs. R. V., Hopkins.

364 Barclay, J. M., Madison Lake.

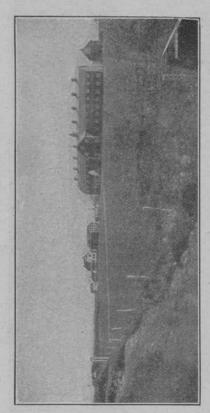
FACTS ABOUT MINNESOTA







A Northern Minnesota Road.



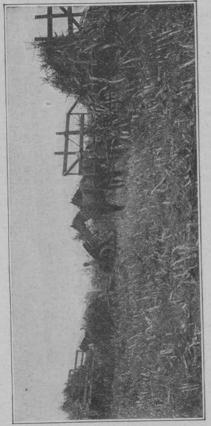
This Farm Produced \$1200 Worth of Celery Per Acre in 1908.



A Northern Minnesota Tobacco Field.

MINNESOTA'S 1910 CROPS.

Total acreage	53,943,378.24
Number of farms	155,759
Acres of farms	27,623,000
Acres improved	19,609,000
Corn	\$25,369,000.00
Wheat	93,139,200.00
Oate	25,127,000.00
Oats	20,508,600.00
Barley	
Rye	- 1,476,025.00
Flax	8,973,900.00
Hay	
Potatoes	6,442,000.00
Buckwheat	46,000.00
Live Stock, estimated	125,000,000.00
Dairy Products, estimated	55,000,000.00
Poultry, estimated	27,000,000.00
Miscellaneous (grass seeds, truck	10-010-010-0
gardening, fruits, etc.)	35,000,000.00
Total	\$431,344,725.00



Harvesting Corn in Minnesota.

Facts About Minnesota

As Published by the Minneapolis Tribune March 5th to April 6th, 1910, Inclusive.

No. 1. Her Lakes.

With a water area of more than 6.000 square miles, divided into over 10,000 lakes, ranging in size up to 30 miles in diameter. Minnesota may easily be designated the "State of Lakes." The name itself means "land of sky-tinted water." These lakes are well distributed throughout the state and in them rare sport is found, pike and bass abounding in large numbers, the state maintaining hatcheries from which to supply fry for stocking them. Much could be written of the beautiful lakes of Minnesota, the shady shores of which present alluring pictures to the enthusiastic fisherman, hundreds of whom journey here every summer from all parts of the country.

No. 2. Her Soil.

Minnesota soil is the best in the world, the result of decomposition of rock waste, which impart excellent chemical consistency. Underlaid with a bed of clay, close to the surface, it has incomparable fertility and strong producing power, all the elements of plant foods, mineral and otherwise

being found in it. At least 90 per cent of Minnesota land is arable. The soil lends itself to a greater diversity of crops than that of any other state. It is capable of, and does, produce heavier yields, in a shorter period, of a more superior quality of seeds, crops and potatoes than the soil of any other section of the country. Statistics prove this to be true.

No. 3. Her Minerals.

More than \$100,000,000 worth of iron ore was shipped out of the state of Minnesota last year, amounting to about 30,000,000 tons. Minnesota supplies over two-thirds of the iron mined in the United States. At Duluth alone there is one plant that cost \$10,000,000 to erect, and which gives employment to thousands of men. The state owns upwards of 50 mines. These are leased on a royalty of 25 cents on every ton of ore taken out. Immense deposits are also found of granite, limestone and sandstone that are practically inexhaustible and of great value commercially. There are traces of gold, silver and nickel. More than 300,000 people in the state of Minnesota derive their support from the mining industry.

No. 4. Her Schools.

Minnesota stands foremost in educational work on account of her laws which are rigidly enforced, compelling attendance between the ages of six and sixteen years,

a state with a University ranking among the best in the United States and enrolling over 4,000 students, a state with five Normal schools, 206 High schools, 365 graded schools, 360 semi-graded schools, and 7814 rural schools, three agricultural schools of High school rank, and ten High schools in which agricultural and domestic science instruction is established under state supervision, schools for the deaf and dumb, for the blind and for the feeble minded.

A state with a permanent school fund of \$25,000,000 which will according to the State Auditor, ultimately amount to \$100,000,000. A state which allows mileage and per diem enabling her educators to attend educational conventions. Free text books are furnished in ninety per cent of the district schools and free school libraries are maintained.

No. 5. Her Manufacturing Industries.

Minnesota is one of the greatest manufacturing states, the increase in this direction alone having been 40 per cent during the last five years. There are about 11,114 manufacturing establishments of all kinds in the state, including about 250 lumber mills, 104 sash and door plants, 30 packing house establishments, 860 creameries, 74 cheese factories, 26 boot and shoe factories, 200 machine and repair shops, and several large steel works. Furniture, boots and shoes, woolen goods, wagons, carriages, cigars and tobacco, pianos, wood specialties, trunks, butter, cheese, automo-

biles, farming implements of many kinds, lumber, flour, linseed meal and oil, clothing, hats and caps, finished building material and many other articles are made and shipped by the state every year to all sections of the United States.

No. 6. Her Climate.

No more healthful or more invigorating climate than that of Minnesota can be found anywhere. The opinion seems to prevail among those outside the state that it is too cold in Minnesota in the winter. This is far from true. While it is true that the winters are usually cold, the dry character of the atmosphere is such that 20 degrees below zero in Minnesota is felt less than zero in Tennessee. There is little rain or slush found in Minnesota during the winter months, from November to March. The state is conceded to have the best climate for those who prefer health, happiness and out of door exercise.

No. 7. Her Corn.

Minnesota is rapidly becoming one of the banner corn producing states of the Union, the acreage at the present time being about 1,700,000. From 25 to 100 bushels of shelled corn to the acre is gathered, a record that means much to the planter. There is no county in Minnesota in which corn is not one of the products. The sand-clay mixture in the soil insures an early and profitable yield. In many parts

of Minnesota sweet corn is raised for canning purposes, the percentage grown becoming larger and larger every year. Several large canning factories are located in the state and their demand for the product is what has occasioned the increase in production.

No. 8. Her Butter.

A better grade of butter than that made in Minnesota would be hard to find. Of nine premium banners offered by the National Creamery & Butter Maker's Association for competition in the United States, Minnesota has won seven. At least 100,000,000 pounds of high grade creamery butter is manufactured annually, valued at \$27,000,000, which together with butter made upon the farm brings a total of not less than \$55,000,000 annually. More Minnesota butter is shipped to New York City, than to any other locality, and records show that it commands a price of from one and one-half to three cents per pound above the New York market. The cattle of Minnesota graze on nutritious grasses and this, together with the splendid climatic conditions, accounts for the superiority of the butter of this state.

No. 9. Her Railroads.

Twenty-six great railways traverse the state of Minnesota, covering it with a network of nearly 10,000 miles of trackage and making every section easily accessible.

The facilities are of the best and the products of the state are rapidly transported to the leading markets of the country. Freight rates in general are reasonable. The 2-cent passenger rate prevails. Millions of tons of lumber, iron ore, grain, flour, etc., are carried annually by the railroads of Minnesota and every advantage commensurate with modern day traffic is offered the many thousands who journey in and through the state each year.

No. 10. Her Wheat.

Minnesota is the largest wheat producing commonwealth in the United States, the acreage for 1910 being 5,880,000. Last y ar's yield was approximately 94,080,000 bushels. Wheat is recognized as the main crop of the state, and the acreage is steadily increasing. So heavy has the outside demand for Minnesota wheat become that it taxes the farmers to supply it. Consequently more is being sown yearly. Many farmers from the South and East have located in the state within the last five years and have made money in wheat growing. The hard spring wheat makes the highest grade of flour known, and millions of dollars are invested in its milling.

No. 11. Her Flour.

More high grade flour is milled in Minnesota than in any other state in the Union, its reputation being world-wide. The number of barrels milled annually is

enormous, each year showing a gradual increase. Minneapolis alone has 23 flour mills, with an aggregate daily capacity of 88,000 barrels. Throughout the state there are 370 mills, in which capital to the extent of about \$40,000,000 is invested. The annual production of these mills is valued at \$125,000,000. Minnesota flour is shipped to all parts of the United States, and thousands of barrels are exported annually to many foreign countries. Few realize the enormous total the country mills of the state make, running close to that of the larger cities. Thousands of people find steady and remunerative employment in the flour milling industry.

No. 12. Her Potatoes.

All over the state of Minnesota potatoes are grown with profit. The value of last year's crop was approximately \$6,-470,000; the yield was 18,400,000 bushels. Minnesota potatoes are practically free from attacks of bugs. In many parts of the state land is available that will produce potatoes in such quantities as completely to pay for the ground in a single crop. Farmers think nothing of getting 200bushel yields to the acre, and in one section farmers have produced as high as 465 bushels on a single acre. Early, medium and late varieties grow equally well, and a better market than the three larger cities of Minnesota could not be desired.

No. 13. Her Oats.

Minnesota feels her oats. The state ranks third in the Union in oats production, the acreage last year having been about 2,736,000. The average yield per acre is 33 bushels. The total yield for 1910 was 78.523.000 bushels. Throughout the summer the nights are cool, and this causes the filling of the grain in a way to produce unusually large yields of oats. As a fattener oats has no equal. Also, oats produce more milk, more butter, more cheese, pound for pound, than any other grain. This is one of the reasons why Minnesota stands on a high vantage ground in producing live stock.

A Northern Minnesota county won the grand sweepstakes premium at the National Corn Exposition held at Omaha, Neb., in December, 1909, for the best sample of oats in the world.

No. 14. Her Markets.

With a network of railways covering the state and the greatest waterway in the country, the markets for Minnesota's crops are never embarrassed for an outlet for the surplus. The wheat of the entire commonwealth is in demand, due to its superior bread-making qualities. The East uses thousands of dollars worth of Minnesota's hay and grain, and trainloads of potatoes are shipped for planting purposes to many sections of the United States annually. Minneapolis, St. Paul and Duluth are splen-

did centers for the state's products of all kinds, and in these three cities alone, from one or the other of which no part of the state is more than 250 miles distant, these products may be sold at any season of the year.

No. 15. Her Timber.

Minnesota has thirty-two varieties of timber, cedar, birch, poplar, basswood, pine, spruce and oak being among the principal kinds. Some of the largest forests in the country grow in Minnesota, and groves planted only twenty-five years ago are today having timber cut from them. Many carloads of building material are shipped from the state annually.

Aside from the heavier timber there is an immense quantity of pulpwood, material used in the manufacture of egg and fruit cases, butter and lard trays, and all packages where wood of very light weight is essential. The entire supply of material used by many of the largest manufacturers of this class of goods in the world is furnished by Minnesota.

No. 16. Her Beef.

The best beef cattle are to be had in Minnesota. In the International Live Stock exposition, held in Chicago last year, Minnesota bred beef cattle were awarded both the senior and junior prizes as well as the grand champion prize. The state also took first prizes for female and short horn beef cattle. At the Live Stock show in Min-

neapolis in 1905, Minnesota beef cattle won two first and three second prizes. At the same stock show in 1907, Minnesota won four first and two second prizes. In 1908 Minnesota cattle won the grand champion prize, besides several second and third prizes. There are many pure breeds of cattle in all parts of the commonwealth and great improvement along these lines is reported.

No. 17. Her University.

The University of Minnesota at Minneapolis, quartered in magnificent buildings and surrounded by beautifully kept and spacious grounds, is the pride of Minnesotans. Over 4,000 students were enrolled the last year. The university embraces many colleges, departments and schools. Among these are the graduate school, college of sciences, literature and the arts, the college of engineering and mechanical arts, the school of mines, the school of analytical and applied chemistry, the college of education, the department of agriculture, the college of agriculture, the school of agriculture, the short course for farmers, the dairy school, the Crookston school of agriculture, the college of law, the college of medicine and surgery, the college of homeopathic medicine and surgery, the college of dentistry and the college of pharmacy. The regents of the university are also intrusted with charge of the experimental stations

as follows: Main station at St. Anthony Park, substation at Crookston, substation at Grand Rapids and the geological and natural historical survey.

No. 18. Her Public Lands.

Minnesota has 3,000,000 acres of public lands. Much of this is heavily timbered. Last year fully 30,000 acres were sold to residents from neighboring states, the total amount derived from these sales being \$280,000. When the state sells land, if it has serviceable timber on it, the purchaser must pay extra for it. Land sales that will take place in May each year are now being widely advertised by the state, it being the intention of the officials to dispose of from 40,000 to 50,000 acres at least. The prices secured for untimbered land range from \$5 to \$8 per acre, and the demand for it has been much greater within the last three years than heretofore. More people are settling in various parts of the state and many of the newcomers are buying this property. The best crops raised can be grown on it, it being as tillable as that found elsewhere.

No. 19. Her Farmers.

The farmers of Minnesota are nearly all land owners. Many are men of considerable means. About 47 per cent of Minnesota's population is on the farms, the movement being towards the farm instead of the cities. It is easy to understand these

conditions. Minnesota is the garden spot of the country. Its fertile fields of waving grain have long ago caused it to be dubbed the granary of the world. The world's markets each harvest time look for the rich products from Minnesota's farms. The valuation of last year's farm products was \$431,344,725.00.

No. 20. Her Jobbing.

Minnesota has some of the largest jobbing houses in the country. Every avenue of trade is well taken care of and representatives of these houses cover many neighboring states. The Twin Cities and Duluth are regarded as among the largest jobbing centers in the Union. There is scarcely any part of the country where Minnesota-made goods are not handled, annual sales climbing into the millions. Wholesale groceries, hardware, clothing, produce, in fact every line is represented by the jobbing interests of the banner state of the great Northwest.

No. 21. Her Hay and Forage.

The hay and forage crops of Minnesota last year were valued at more than \$8,263,000. The best quality of hay raised in any part of the world is grown in Minnesota. Timothy, red top, bromus, Kentucky blue grass, and in fact all grasses and clover, grow in great abundance, and the result is the best live stock found anywhere, regardless of price, breeding or purpose for which

intended. It is a very common occurrence for farmers to receive from \$40 to \$60 an acre for clover seed. A larger acreage is being used each year, the demand having steadily increased. Fodder corn, sorghum and such forage crops yield 10 to 20 tons to the acre. Millet, field peas and other forage crops average all the way from 3,000 to 10,000 pounds an acre.

No. 22. Her Fishing and Hunting.

No other commonwealth of the Union is so blessed as is Minnesota, when it comes to opportunities for hunting and fishing. Thousands of lakes scattered over the state furnish and abundant supply of fish of many kinds. Many of the lakes are being replenished with game fish from the state hatcheries, and as the game laws are rather stringent there is always good sport to be had. In the magnificent forests and on the wide prairies, as well as on the water courses of the state, game is found that sportsmen often travel miles to hunt. Deer, moose, bear, wolf, partridge, grouse, prairie chicken and other game abound. No hunter from another state has yet visited Minnesota without planning a return visit.

No. 23. Her Seed.

In Minnesota many kinds of seed, from the light garden variety to the field seed, are grown, and seeds are shipped annually to all parts of the country. The superiority of Minnesota crops has attained such widespread reputation that farmers want the seed, and the demand has been steadily increasing every year, until today there are large farms in various parts of the commonwealth devoted to the growing of crops for seed purposes exclusively. Trainloads of Minnesota potatoes are used for seed every year in Colorado, California, Oklahoma and other states. The corn belt makes as heavy demand for oats, and the Eastern markets clamor for hay and grain seed.

No. 24. Her Linseed Oil.

There are eight fully equipped linseed oil mills operating in Minnesota. These mills manufacture annually more than 800,000 barrels of pure linseed oil. In addition, they turn out nearly 6,000,000 pounds of linseed cake. This requires about 15,000,000 bushels of flax, grown all over the state. The valuation of the crop of last year was \$8,000,000. The products of the linseed oil mills of Minnesota are widely shipped and are considered of an exceptionally high quality. Owing to the increased demand farmers are growing more flax than ever before, the acreage last year being considerably in excess of that of the preceding vear.

No. 25. Her Cities.

The leading cities of Minnesota are Minneapolis, St. Paul and Duluth. Minneapolis, the metropolis, has a population estimated at 310,000. St. Paul, the capital, has

an estimated population of 275,000. Duluth has a population placed at 80,000, and taking into consideration its area clears a greater tonnage than any shipping point in American. In addition to the three cities named, there are many others ranging in population from 3,000 to 25,000. Their interests are agricultural, manufacturing, mining, etc., though most of them depend on agricultural activities for their growth and prosperity.

No. 26. Her Fruits.

The valuation placed on the fruit and vegetable crops of Minnesota for 1910 is \$25,000,000. Many kinds of fruit are grown in the state, although the small fruits do better as a rule. Plums, berries, pears, apples, currants, grapes and other varieties are shipped in great abundance annually. From Fillmore county alone last year 80 carloads of apples were shipped. The various diseases to which fruits are susceptible, are rarely experienced in Minnesota. The state maintains a department whose duties are to look after such matters. Hundreds of thousands of dollars are being made in the state every year by fruit growers, and the industry is becoming larger and larger each year. The demand for Minnesota fruits is better today than ever before.

No. 27. Her Sheep.

The estimated number of sheep in Minnesota today approaches 500,000, and the wonderful adaptability of the state for sheep

growing, due to the variety of its grasses. will steadily increase this number. Minnesota affords more provender for sheep raising than any other state, coarse grains, enormous yields of field roots, together with extensive rape plant, all having direct bearing on the successful handling of the industry. More farmers are engaging in sheep growing every year. A larger amount of capital is invested in the industry today in Minnesota than ever before and the advantages offered those who wish to engage in it are many. The state fair board aims to encourage the wool growing industry of Minnesota by special features at the coming fall exposition.

No. 28. Her Summer Resorts.

Occupying the most elevated plateau between the Mexican gulf and Hudson Bay, studded with thousands of silvery lakes and forests affording an abundance of game, possessed of modern hotels everywhere easy of access, Minnesota is the real summer resort of the country. The climate is ideal. Summer days are not excessively warm, and summer nights are refreshingly cool. Minnesota offers more charm to visitors from distant states than any other section, and a vacation within her borders gives health and pleasure and a determination to come again.

No. 29. Her Poultry.

The valuation of poultry raised in Minnesota last year was approximately \$27,000,000. Eggs are shipped annually by the mil-

lions. They are in great demand, especially in New York, Boston, Chicago and other large centers. Spring chickens are ready for the market early in the year and command top notch prices. The average price per dozen at beginning of the season is about \$6, and towards the close of the season about \$4. Every farmer has his poultry yard, and in hundreds of instances it pays the running expenses of the year. There is never a scarcity of poultry on the Minnesota markets.

No. 30. Minnesota Herself.

Minnesota-land of the sky-tinted waters -spreading thy expanse of fertile, verdant beauty under the bluest skies in the world; reflecting their azure in ten thousand dimpling lakes and shattering their sunshine into diamonds in as many sparkling streams! Nothing that thy children ask of thee is asked in vain. Deep in the foundations of thy rocky north the ancient fires melted and poured the metals, more precious than gold or silver, to be molded into mobile forms wherein the modern fires have breathed the breadth of power and life; or to be spun by cunning hands into glistening gossamer webs to carry the harnessed lightnings. Here Nature hewed and carved the pine shafts of vast, shadowy, whispering temples that thy sons and daughters might have dwellings. Thy prairies were spread in the young centuries of the world to await and to reward the sowers who should fertilize the granary of the earth. The southern, manywatered pastures feed the uncounted cattle of an empire. There is fruit upon thy hillsides, and thy valleys our-pour with richness. Mighty cities have been born of thee, and the smokes of unnumbered happy hearthstones rise like a pillar of cloud to guide men to the promised land. Thy boundaries are the walls of a plenteous store house; the margins of a page that is a rubric in America's liturgy of praise!

Minnesota

As per the St. Paul Pioneer Press April 24, 1910

As early an explorer as Lieutenant Jonathan Carver declared in 1767 upon reaching that portion of the upper stretches of the Mississippi river valley embraced within the boundaries of the State of Minnesota, that his eye had never rested upon a fairer scene and prophesied that the time would come when mighty kingdoms would merge from these wildernesses and stately palaces and solemn temples with gilded spires reaching to the skies supplant the Indian huts whose only decorations were the barbarous trophies of their vanquished enemies.

One hundred and fifty-three years have passed since his visit to the spot which brought forth his declaration, where now stand two mighty cities of 600,000 population, centrally located in one of the great commonwealths of the Union, with 84,000 square miles within its boundaries and with a thriving and prosperous population of 2,075,000 people.

In 1840 the great French traveler, De Tocqeville, declared that nowhere else upon the globe were such beauteous and fertile lands as those drained by the Misissippi river, and in the half century since, this conviction has become a part of the settled

belief of every man who has had opportunity of obtaining personal knowledge of those districts, especially, which are adjacent to the head waters of the great arterial waterway of this continent.

What Minnesota Has.

They constitute an empire endowed with the richest of soils, with the greatest treasure houses of iron ore wealth in all the world, with vast quarries of the finest of building stone, with tremendous resources of such varieties of timber as are found in the temperate zone, with marvelous stores of absolutely pure water evenly distributed over the length and breadth of its enormous area, with an even summer temperature averaging 70 degrees, and with a dry, pure air, preventing oppressive heat and

insuring cool summer nights.

Minnesota seems veritably to have drawn upon the treasures of nature for her physical characteristics. Situated at the geographical center of North America, our home state occupies the westward entrance to the Great Lakes, it commands the northernmost navigable waters of the great Mississippi, it is in touch on its northern boundaries of the richest provinces of the neighboring Dominion of Canada, and borders upon the richest areas of the entire United States-the Northwest States. Minnesota has been equally favored in all of the natural conditions which tend to the development of commercial wealth and prestige.

Great waterways exercise a regulating tendency upon our rail transportation, which in itself is marvelously complete, comprising as it does the arterial lines of all the great railway systems of the West which radiate from Minnesota commercial centers. aggregating a total of 56,000 miles of trackage, which affords direct and expeditious communication with each of the important commercial centers of this country.

What It Offers.

Upon our western border the wonderful Red River Valley has been known for a quarter of a century as the granary of the world. Through central and western Minnesota the richest of our farming lands are attracting the admiration and envy of large agriculturists in every section of this country. Our southern counties have long been settled and are rich and prosperous almost beyond belief, having developed within themselves a dairy industry of such proportions that it has become famous throughout the entire civilized world. Northern Minnesota, with its enormous wealth of resources, affords immense tracts of government and state lands, together with immense areas of surpassing fertility, which, although under private ownership, are obtainable at exceedingly moderate values.

Administrative Excellence.

With a state government singularly free from corruption, and with excellent safeguards thrown about the administration of the several state departments, Minnesota has been well and ably ruled and has experienced a wonderful internal development. Its university has become one of the best in the United States, and its public school system one of the finest in the world, with a guaranty in the state university and public school funds of \$25,000,000-or double the school trust funds of the states of Iowa, Michigan and Wisconsin combined-that their efficiency will not only be maintained. but will gradually increase in future years. Minnesota's institutional system is second to none, and is well and economically administered. The state supports splendid hospitals and schools for the physically and mentally unfortunate.

In the Largest Cities.

In our three great cities are all the attractions of metropolitan life. Excellent theaters afford the best current attractions, splendid orchestras, maintained by public subscription, stimulate the musical life of our people; public and private schools of high standing and efficiency, with numerous academies and many well established colleges, afford to all who are willing to put forth the effort, the opportunity for comprehensive and thorough education. The religious life of our people is strengthened by the churches of all denominations, scattered over the length and breadth of our state.

A Look at Our Big Industries.

Enormous wholesale and manufacturing marts exercise a stimulating influence upon all classes of trade and industry and supply the wants of millions of people living beyond our borders. There is under construction in our state one of the greatest steel plants in the United States, which will establish for the first time in Minnesota the beginning of an immense iron and steel industry. Upon our northern boundary will shortly be opened one of the greatest paper mills in the world, giving employment to 5,000 hands and enormously increasing Minnesota's importance in the already well-developed paper, paper pulp, and sulphite trades.

In the Smaller Cities.

Scattered over our entire territory are hundreds of thriving cities drawing upon a rich surrounding country for the factors which insure the permanency and stability of their industries and merchandising. In these, as well as the great central cities of our state, residential as well as business advantages are unsurpassed, and have attracted in very recent years many thousands of the most desirable class of people to this state.

\$431,344,725 a Year From Products of the Farm.

In agricultural products, despite the fact that in the 20-year period ending in 1900, the shrinkage in farm values in nine Eastern states was six hundred and forty-nine million dollars, Minnesota has been advancing at a marvelous rate, the value of her farm products in 35 years rising from fifty millions to four hundred and thirty-one mil-

lions, which was the aggregate value of her products in 1910. Minnesota butter has no superior upon the markets of the world. The adaptability of this state for the raising of fat cattle, hogs and sheep is universally recognized and has resulted in the building within our borders of one of the greatest stock markets of the United States, providing at all times a convenient, sure and stable outlet for the producer.

Apples.

Where twenty-five years ago the raising of apples was considered a doubtful venture, dozens of varieties of the finest quality are now successfully grown, rapidly bringing this state to the front as one of the apple districts of the United States. The reports of the United States Department of Agriculture for 1909 show that in apple production Minnesota surpasses Ohio, Indiana, Illinois, Michigan, Wisconsin, Iowa, North Dakota, South Dakota and Nebraska, obtaining 78 per cent of the full crop, estimated on a basis of 100 per cent for the full crop.

In small fruits and garden products Minnesota is unsurpassed while the potatoes grown within this commonwealth in 1909 show the highest average yield of any of the central and western states, or 115 bushels to the acre, and are eagerly sought over the entire country for seed purposes.

More Corn Per Acre Than Iowa.

Where a quarter of a century ago it was thought impossible to grow corn, our state

is now producing 60,000,000 bushels annually, surpassing with a yield of 348-10 bushels per acre in 1909, the states of Wisconsin, Iowa, South Dakota and Nebraska, and coming within 11-10 bushels of the per acre yield of Illinois.

With a per acre yield of 168-10 bushels of wheat, 33 bushels of oats, 236-10 bushels of barley, 19 bushels of rye, 10 bushels of flax, 152-10 bushels of buckwheat, Minnesota takes high rank among the agricultural states of the Union, and in her per acre production of 175-100 tons of hay, far exceeds the average of the United States of 1 and 42-100 tons and leads all the states with their high average. Minnesota in that year (which is the latest for which crop statistics are available) surpassed the high yield of the United States in her per acre returns on wheat, oats, rye, hay, corn, flax, potatoes and apples.

All Lands Are Relatively Cheap.

The argument in behalf of Minnesota that the returns even by ordinary farming methods are greater for the capital invested in this state than upon the high-priced lands of other states, is sound, justified by the facts and fully substantiated by the practical experience of our farming population. All lands in Minnesota are relatively cheap, even the finest and best improved farms holding to values which, quality for quality and average conditions for average conditions, are very considerably lower than those in other states which are admittedly stronger in agricultural wealth.

The Lands Held by the State.

Lands held by the state are surprisingly cheap and are obtainable at a fraction of the value which will be placed upon them when adequate settlement has decreased the marketable acreage of land and when, as in other states, the lessened area of unoccupied land has more emphatically brought to the attention of the general public its genuine richness and value.

How to Buy Them for Little.

Enormous areas of state land are obtainable at public sale at prices ranging from \$5 per acre up, of which but 15 per cent is exacted as a cash payment, the balance being payable in forty years and drawing interest at 4 per cent. Minnesota is a treasure house of natural wealth. During fifty years of statehood great progress has been made in the development of her resources, but this has afforded only time enough to prove more clearly and emphatically how great her advantages and opportunities are.

Only Twenty-five People to Each Square Mile Now.

New England, largely a rugged and forbidding country, with 65,465 square miles of territory, has 6,500,000 people, or about 100 to the square mile. The Empire State of New York, with 45,170 square miles, supports 8,700,000 people, or 176 to the square mile. Pennsylvania supports a population

of 167 to the square mile. Minnesota, with 83,365 square miles of the richest territory upon the continent of North America, has but 2,075,000 people, or only 25 to the square mile.

New England, laid upon the area of Minnesota, would lack 16,900 square miles of covering this state; New York and Pennsylvania combined have but little more than the territory of Minnesota, yet Minnesota has greater natural resources by far than New York and all of New England, and in agricultural possibilities is vastly richer than Pennsylvania.

Belgium with one-eighth of Minnesota's area support three times her population, or 6,744,000 people.

England and Wales with five-eighths of Minnesota's territory support fifteen times her population, or 33,763,000 people. Switzerland with its enormous areas of most rugged and mountainous country and with but one-sixth of Minnesota's territory, supports a population one-half greater than that of our home state, or 3,315,000.

30,000,000 Virgin Acres.

A total of 27,623,000 acres of Minnesota's land is in farms, yet but a fraction of this is actually used for the purpose of production, only 19,609,000 acres of land under ownership as farms having been turned to the plow. Our home state still affords a total of 30,000,000 acres of land which still is in its virgin state, having never yet been broken and representing no agricultural production

FACTS ABOUT MINNESOTA

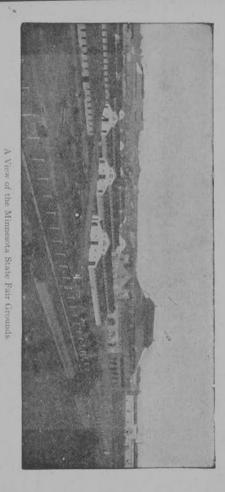
whatever, although of this enormous acreage, expert examination shows 90 per cent to be available as tillable land.

With an average of 177 acres per farm and with 125 acres per farm actually tilled, but 36.3 per cent of the area of Minnesota is utilized for agricultural purposes and the state has a total of 155,759 farms.

When the remaining valuable and unused tillable lands of the state have received the same average development which has occurred upon the portions of tilled land, Minnesota will have added to these lands already devoted to agricultural production a total of 152,542 new farms.

Prospective Buyers Don't Know.

It is the maxim of merchandising that the sale of goods cannot be consummated until the value and merits of the commodity have been impressed upon the minds of prospective buyers. Minnesota has stood for half a century a treasure house of industrial, commercial and agricultural opportunities of incalculable value, yet only recently has the state shown the slightest interest in the adoption of methods for her own internal improvement, without the adoption of which no commercial venture could succeed.



FACTS

ABOUT MINNESOTA

Published by

MINNESOTA STATE BOARD OF IMMIGRATION

Adolph O. Eberhart	Governor
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A. E. Nelson	Minneapolis
George B. Barnes, Jr.	Campbell
George Welsh	Comm. of Immigration

ROGRAM OF THE

THIRTIETH ANNUAL MEETING OF THE ***

Minnesota

STATE HORTICULTURAL SOCIETY,

To be held in the offices of the County Commissioners in the Court House, at Minneapolis, Minn., Tuesday, Wednesday and Thursday, December 1, 2

LADIES ARE ESPECIALLY INVITED.

Send or Bring Questions for the Question Box.

ANNOUNCEMENT.

The society has been so fortunate as to secure for its use during this meeting the same commodious rooms, the offices of the County Commissioners of Hennepin County, in which the annual meeting of 1895 was held. These rooms are on the first floor of the new court-house, first door to the left as you mount the east stairway. We anticipate the usual profitable gathering, and if you are interested in any branch of horticulture you should not fail in attendance, as these meetings are always an inspiration.

Special features of this occasion are: a "departure" in the method of treatment of two subjects, strawberries and apples; the last session, Thursday evening, the program for which is to be entirely by the young people from the University Farm School, under direction of Prof. S. B. Green; and the exhibit of fruit, which will be undoubtedly the best we have ever made in the winter.

It is probable that Prof. B. E. Fernow, Chief of Division of Forestry, Department of Agriculture, and other visitors of note from abroad, will be in attendance.

Arrangements have been made for a special hotel rates as follows:

Pauly House, next Union Depot, room and board—one in a room—\$1.25 per day; two in a room—\$1.00 per day. Hyser Hotel. corner Third St. and Second Av. S., room without board—one in a room—75 cts. per daytwo in a room—50 cts.—per day.

per day.
NOTICE TO MEMBERS OF COMMITTEES.

Please come prepared to make reports on the special topics assigned you, and as far as possible such reports will be called for and read, but on account of the shortness of the session, many may be called for and filed for publication without reading. Those who cannot be present are urgently requested to send reports to the secretary before the date of the meeting.

The officers of the Minnesota Bee-Keepers Association announce that the annual meeting of that society will convene Wednesday and Thursday in the same building with the Horticultural Society. Purchase ticket to the Horticultural Society meeting to get the reduced rates.

REDUCED RAILROAD RATES. READ CAREFULLY.

A reduction to one-third railroad fare for the return trip has been secured on condition that one hundred certificates, showing that full fare has been paid coming to this meeting, are presented to the railroad agent at Minneapolis. It is certain that this reduction can be secured if each person attending obtains such a certificate from the railroad agent at the time of purchasing the ticket. Do not fail also to get a similar certificate at each transfer point where you have to purchase a ticket on the way to the meeting. The certificate secured with the last ticket bought before reaching Minneapolis is the most important and the only one that will be counted in the required "one hundred."

N. B.-On reaching Minneapolis turn these certificates over to Secretary Latham at once.

All the railroads in the state south of Minneapolis, also the Great Northern and Northern Pacific railways, offer this reduced fare.

DO NOT FAIL TO GET CERTIFICATES.

Come, every body interested in any branch of horticulture! It is your loss if you stay away.

Will the papers of the state please give wide circulation to this notice.

For further particulars, address

J. M. UNDERWOOD, President,

Lake City.

A. W. LATHAM, Secretary, 207 Kasota Blk., Minneapolis.

PROGRAM.

TUESDAY MORNING SESSION.

10 o'clock.

General Subject-Small Fruits.

Organization.

Appointment of committee on credentials.

Report of committee on small fruits.

C. B. Crandall, Red Wing. G. H. Prescott, Albert Lea. F. W. Kimball, Austin. F. F. Pratt, Crookston. Alton M. Shepherd, Minneapolis.

Berry Bushes—Success or Failure in Growing Heavy Crops, C. F. Gardner, Osage, Ia.

Manitoba Fruit Notes, T. Frankland, Stonewall, Man.

The Wonderful Possibilities of Fruit Growing Pursued Scientifically, Hon. Thos. Harrison, Blanchard, N. D.

South Dakota Fruit Culture, Prof. N. E. Hansen, Brookings, S. D.

Announce renewal of membership. Annual fee, \$1.00. Pay to the secretary.

Don't forget to prepare questions for the Question Box.

TUESDAY AFTERNOON SESSION.

2 o'clock.

General Subject-Strawberries.

The "Nimble Sixpence," and how to Corral Him in a Strawberry Bed,
Mrs. Anna B. Underwood, Lake City.

TWELVE FIVE MINUTE PAPERS.

 Best Three Varieties of Strawberries for Market,

W.S. Widmoyer, Dresbach.

2. Best Three Varieties of Strawberries
for Home Use.

Martin Penning, Sleepy Eye. 3. Soils Adapted to the Culture of the

Strawberry, O. M. Lord, Minnesota City.

4. Preparation of Soil for Planting Strawberries, J. A. Sampson, Excelsior.

5. Planting Strawberries,

A. M. Shepherd, Minneapolis.

6. Cultivation of the Strawberry, C. B. Crandall, Red Wing.

7. Irrigation of Strawberries, M. W. Cook, Rochester.

8. Mulching Strawberries, M. Pearce.

9. Gathering and Selling the Strawberry Crop, C. W. Sampson, Eureka.

Care of Strawberry Vines after Harvest, Wm. Sandrock, Rushford.
 Second Year's Treatment of Straw-

berry Vines, E. J. Cutts, Howard Lake.

12. Winter Protection of Strawberries, O. C. Gregg, Lynd.

Appointment of committees on award of premiums, president's address, obituaries and final resolutions.

TUESDAY EVENING SESSION.

7:30 o'clock.

General Subject—Addresses and Annual Reports.

President's annual address, J. M. Underwood, Lake City.

Annual report of the executive committee,
Wyman Elliot, Chair'n, Mpls.

Annual report of secretary, A. W. Latham, Minneapolis.

Annual report of treasurer, A. H. Brackett, Long Lake.

Annual report of librarian,
(The library is at No. 207 Kasota Block, Minneapolis.)

A. W. Latham, Librarian.

E. A. Cuzner, Assistant Librarian. (The assistant has charge of the reports stored at Pillsbury Hall, State University.)

An Ideal Farmer's Home, Mrs. O. C. Gregg, Lynd.

Medicine for Tree Sharks, J. P. Andrews, Faribault.

The State Press and its Relation to Horticulture, E. A. Webb, Ed. Northwestern Farmer.

'Ninety-Six as a Schoolmaster, F. W. Kimball, Austin.

WEDNESDAY MORNING SESSION.

9 o'clock.

General Subject-Apples.

Report of committee on apples,
Prof. N. E. Hansen, Brookings, S. D.
E. H. S. Dartt, Owatonna.
C. L. Blair, St. Charles.
Sidney Corp, Hammond.
W. L. Parker, Farmington.

Solid Comfort in a Minnesota Orchard, Clarence Wedge, Albert Lea.

FOURTEEN FIVE MINUTE PAPERS.

1. The Common Apple, the Crab and the Hybrid; Difference between Them, Characteristics, etc.,

Prof. S. B. Green, St. Anthony Pk.
2. Minnesota Seedling Apples. What are They, and Their Value?

J. S. Harris, LaCrescent.
3. Russian Apples that are Worthy of Propagating,

Wm. Somerville, Viola.

4. Pruning Apple Trees; Why, When and How.

S. D. Richardson, Winnebago City.
5. Productiveness of Hardy Varieties
Compared,

D. F. Akin, Farmington.
6. Top-Working Apple Trees; Purpose,
Methods and Results.

J. P. Andrews, Faribault.
7. Setting a Minnesota Orchard; How,
When and Where,

A. K. Bush, Dover.

WEDNESDAY MORNING SESSION— Continued.

Location of an Orchard,
 F. M. Kilbourne, Lakeville.
 How to Plant an Orchard,
 J. A. Howard, Hammond.
 Cultivation of an Orchard,
 J. M. Underwood, Lake City.
 Mulching and Irrigation in the Orchard,
 D. R. McGinnis, St. Paul.
 Protection of the Orchard from

Wind, from Winter's Cold and from Summer's Heat, W. L. Parker, Farmington. 13. Gathering, Storing and Marketing

the Apple Crop, E. H. S. Dartt, Owatonna.

14. Uses of Apples in the Home,
Mrs. C. Wedge, Albert Lea.
The Present Status of the Hardier Russians,

Prof. J. L. Budd, Ames, Ia.

LIFE MEMBERSHIP FEE, \$10.00.

This may be paid in two equal annual installments,

Life Members are entitled to a file of back reports, a library in itself.

WEDNESDAY AFTERNOON SESSION.

2 o'clock.

General Subjects—Experiment Stations, Plums, Grapes and Peaches.

2 rollin, Grapes aris 1 caches.
Superintendents of Trial Stations, 1896. Prof. S. B. Green (Central Station)
E. H. S. Dartt Owatoma Dewain Cook Windom Clarence Wedge Albert Lea Chas. W. Sampson (grapes) Eureka O. M. Lord (plums and small fruits)
H. M. Lyman (apples) Excelsior J. S. Harris La Crescent L. R. Moyer Montevideo Mrs. Jennie Stager Sauk Rapids Wm. Somerville Viola
Suggestions on the Work of the Trial Stations, Prof. S. B. Green, St. Anthony Park,
Report of committee on plums and cher-
ries. W. S. Widmoyer, Dresbach. Clarence Wedge, Albert Lea. Martin Penning, Sleepy Eye.
The Farmer's Plum Grove, O. C. Gregg, Lynd.
Some Thoughts on Northern Plums and Cherries,

Hort. Soc., Marcus, Ia. Report of committee on peaches.

J. T. Furber, Madelia.
M. Pearce, Chowen.
G. F. Flatin, Spring Grove.
Report of committee on grapes,

M. E. Hinkley, Pres. N. W. Ia.

W. W. Crandall, Sumter.
J. W. Murray, Excelsior.
Roy Underwood, Lake City.

The Future of Minnesota Vineyarding,
A. A. Bost, Excelsior.
How to Make a Minnesota Vineyard Pay.

How to Make a Minnesota Vineyard Pay, Walter P. Rogers, Excelsior.

WEDNESDAY EVENING SESSION.

7:30 o'clock.

General Subject—Floriculture and Arboriculture.

Report of committee on out-door herbaceous plants.

M. Windmiller, Mankato, A. S. Swanson, St. Paul.

Report of committee on house and greenhouse plants.

Satisfactory Plants:

Mrs. Wm. Lyons 2924 Clinton Av., Minneapolis.

Mrs. D. Morrison, Villa Rosa, Minneapolis. E. A. Cuzner, Essex and 27th Av. S. E., Minneapolis.

Some Hardy Perennials, Mrs. Anna B. Underwood, Lake City.

Flower Culture Among the Children, Mrs. Mildred M. Barnard, Chairman Flower Committee, Minneapolis Improvement League.

Desirable Annuals,
Miss Emma V. White, Minneapolis.

Report of committee on forestry.

C. L. Smith, Minneapolis. Alfred Terry, Slayton. S. M. Owen, Minneapolis.

The Growth of Hardwood, Fred H. Gilman, Ed. Miss. Valley Lumberman.

WEDNESDAY EVENING SESSION— Continued.

Forestry and the Water Problem, J. O. Barrett, Sec'y Minn. Forestry Ass'n.

Report of committee on deciduous trees and shrubs.

S. D. Richardson, Winnebago City. Thos. Harrison, Blanchard, N. D. F. H. Nutter, 701 Sykes Blk., Minneapolis.

Practical Thoughts on Growing Shade Trees, Wyman Elliot, Minneapolis.

Nut Culture in Minnesota, H. S. Fairchild, St. Paul.

Report of committee on evergreens.

Mrs. J. W. Blackwell, Fort Totten, N. D.
A. K. Bush, Dover.

To double our membership only requires that each member secure just *one* new member. Will you do your part?

THURSDAY MORNING SESSION.

9 o'clock.

General Subject-Fruit List.

Report of committee on fruit list,
Clarence Wedge. Albert Lea.
J. P. Andrews, Faribault.
Prof. S. B. Green, St. Anthony Park.
Report of committee on seedling fruits,
J. S. Harris, LaCrescent.

Girdling to Promote Fruitfulness, E H. S. Dartt, Owatonna.

Windbreaks for Orchards, S. D. Richardson, Winnebago City. The Preparation and Use of Manure for

Horticultural Purposes, Prof. Harry Snyder, Univ. Farm School

Reports of vice-presidents,

E. H. S. Dartt, First Congressional District, Owatonna.

S. D. Richardson, Second Cong'l District, Winnebago City. Mrs. A. A. Kennedy, Third Cong'l District,

R. S. Mackintosh, Fourth Cong'l District, St. Anthony Park.

Col. J. H. Stevens, Fifth Cong'l District, Minneapolis. J. O. Barrett, Sixth Cong'l District.

Brown's Valley.

Mrs. Jennie Stager, Seventh Cong'l District,
Sauk Rapids.

Present Stage of the Sorghum Industry, S. H. Kenney, Morristown.

Report of committee on fruit blossoms, R. S. Mackintosh, St. Anthony Park. L. R. Moyer, Montevideo.

Announce election for the afternoon and renewal of membership.

THURSDAY AFTERNOON SESSION.

2 o'clock.

General Subject—Election of Officers, Irrigation and Vegetables.

Report of committee on irrigation, O. H. Thompson, New London, P. M. Woodman, Minneapolis. Prof. W. M. Hays, St. Anthony Park.

Irrigation in Minnesota, Prof. W. M. Hays, St. Anthony Park.

How to Run a Nursery, J. Cole Doughty, Lake City.

3:30 o'clock-Annual Election of Officers.

Horticulture at the State Fair, E. W. Randall, Sec'y State Agri. Society.

The State Horticultural Society and the District School,
Prof. Wm. Robertson,
University Farm School.

Is it Practicable to Teach Horticulture in the Common Schools and How? Prof. W. W. Pendergast, State Supt. of Schools.

Report of committee on nomenclature and catalogue, J. S. Harris, LaCrescent. Prof. S. B. Green, St. Anthony Park.

Report of committee on vegetables, H. L. F. Witte, Minneapolis. Wyman Elliot, Minneapolis.

THURSDAY EVENING SESSION.

7:30 o'clock.

General Subject—Committee Reports and Program by the University Farm School.

Report of committee on apiculture.

Rearing Queen Bees:

Wm. Urie, Minneapolis.

E. K. Jaques, Crystal. A. S. Lovett, 1311 1st av. S., Minneapolis.

Report of committee on cooking and pantry stores.

Mrs. J. W. Kennedy, Lake City. Mrs. Wm. Danforth, Red Wing. Mrs. P. A. Thayer, Sauk Rapids.

Report of committee on ornithology.

Prof. Otto Lugger, St. Anthony Park.
J. S. Harris, La Crescent.

Report of committee on entomology.

Chas. L. Hill, Albert Lea.

Dewain Cook, Windom.

Program by the University Farm School.

Root-Grafting the Apple, Chas. A. Andrews.

Marketing Vegetables and Fruit. J. V. Bailey.

Horticulture and Industrial Employment at the St. Cloud Reformatory, S. R. Houlton.

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THURSDAY EVENING SESSION— Continued.

Gardening in the Jersey Islands, E. W. Major.

Forestry as an Employment, A. E Stene.

Orchard Practices in Washington as Applicable to Minnesota,
H. E. Burnley, Zillah, Wash.

Buying and Selling Nursery Stock, Wm. Newman, Albert Lea.

How to Cross Plants—Illustrated by stereoptican,

Prof. S. B. Green's Picture Gallery.

Unfinished business.

Report of committee on obituaries and final resolutions.

9:30 P. M.—Two minute speeches by the members.

9:45 P. M.—Closing remarks by the president.

Invite your friends to take advantage of the reduced rate and attend the annual meeting.

PREMIUM LIST.

All exhibits must be entered with the secretary and in place the first day of the meeting to be

entitled to compete for premiums.

Exhibitors competing must be members of this society and the growers or makers of the articles exhibited. The articles exhibited must have been grown in Minnesota or manufactured from Minnesota grown products.

Each exhibit of fruit must consist of four speci-

mens, except when otherwise noted.

No premium will be awarded on unworthy exhibits.

APPLES AND CRABS.

Prem.		Prem
Collection	\$8.00	\$5.00
Each variety exhibited not included	1.00	.50
in above mentioned list Seedling apple never before exhib-	.50	.25
ited GRAPES.	3.00	2.00
Collection Each variety exhibited included in	5.00	3.00
the fruit list of this society for 1896 Each variety exhibited not included	1.00	.50
in the above mentioned list	.50	.25
PLANTS IN POTS.		
Collection of ornamental and flowering plants Single rose in bloom Single geranium in bloom Single begonia in bloom Single carnation in bloom Single carnation in bloom	5.00 1.00 1.00 1.00 1.00	3.00 .50 .50 .50
CUT FLOWERS.		
Floral design Collection of cut roses. Collection of cut carnations. Table bouquet Basket of flowers.	5 00 2.00 2 00 2.00 2.00 2.00	3.00 1.00 1.00 1.00 1.00
HONEY.		
Collection of comb honey, ad libitum Collection of extracted honey "	2 5 00 3.00	3.00

Dealers in horticultural implements and appliances are invited to place them on exhibition.

One Beta grapte to the first 100. Three King raspberry to the first 200. Three Columbian raspberry plants. (Purple) 2. 3. Four Patten's greening apple root grafts. 5. Four Hibernal apple root grafts. Three Golden Willow cuttings. 6. Four seedling Buckthorn plants. Six seedlings of genuine Pyrus Baccata, for budding or grafting. 8. Six apple seedlings, mailing size, grown from seed of Malinda, topworked on Duchess and supposed to be crossed with it. 10. Six plum seedlings, from choice sorts, 2-1/2 to 4 feet. / to 2 feet 11. Four Acer ginnala / 5000.
12. Two Vibernum tomentos to the first 100.

LIST OF FRUITS FOR MINNESOTA PLANTING.

Adopted by the Minnesota State Horticultural Society, Dec. 7, 1905.

For the Guidance of Planters in Minnesota.

APPLES.

Of the first degree of hardiness: Duchess, Hibernal, Charlamoff, Patten's Greening, Okabena. Of the second degree of hardiness: Wealthy, Tetof-

sky, Malinda, Peerless, Northwestern Greening. Most profitable varieties for commercial planting

Most profitable varieties for commercial planting in Minnesota: Wealthy, Duchess, Patten's Greening, Okabena, Northwestern Greening, Varieties for trial: Repka Malenka, Anisim, Yellow Sweet, Brett, University, Newell's, Lowland Raspberry, Iowa Beauty, Jewell's Winter, Yahnke, Gilbert, Valuable in some locations: Wolf River, McMahon,

CRABS AND HYBRIDS.

For general cultivation: Florence Whitney, Early Strawberry, Minnesota, Sweet Russet, Gideon No. 6. Virginia, Transcendent.

Varieties for trial; Lyman's Prolific, Faribault, Shields.

PLUMS.

For general cultivation: DeSoto, Surprise, Forest Garden, Cheney, Wolf (freestone), Rollingstone, Wy-

Most promising for trial: Ocheeda, New Ulm, Stoddard, Mankato, Aitkin, Brittlewood, Compass Cherry Terry.

GRAPES.

In order of ripening: Beta, Moore's Early, Janesville, Brighton, Delaware, Worden, Agawam Concord, RASPBERRIES.

Red varieties. Turner. Marlborough. Cuthbert. Brandywine, Loudon, King.

Black and purple varieties: Otto, Palmer, Nemaha, Gregg, Older, Columbian, Kansas.

BLACKBERRIES.

Ancient Briton Snyder, Badger,

Yellow Transparent, Longfield.

CURRANTS.

Red Dutch, White Grape, Victoria, Stewart, Long Bunch Holland, North Star, Pomona, Red Cross.

GOOSEBERRIES.

Houghton, Downing, Champion, Pearl.

STRAWBERRIES.

Perfect varieties: Bederwood, Enhance, Lovett, Splendid, Mary, Clyde, Senator Dunlap. Imperfect varieties: Crescent, Warfield, Haverland.

NATIVE FRUITS.

Valuable for trial: Dwarf Juneberry, Sand Cherry, Buffalo Berry, High Bush Cranberry.

PREMIUM BOOKS.

List of Premium Books given to members for securing new members.

An easy way to get a horticultural library. Fifty cents is allowed for each new member secured, to be applied as payment on any of the following books; the balance, if any, can be paid in cash or hy securing other members. All books sent by mail

Amateur Fruit Growing, 138 pages, 50 cents, Vegetable Gardening, 240 pages, paper bound, 50 cents: cloth bound, \$1.00.

Forestry of Minnesota, 401 pages, 50 cents.

Principles of American Forestry, 334 pages, \$1.50. The above four books were written by Prof. Samuel B. Green, horticulturist of the Minnesota State Experiment Station, and are especially adapted to Northwestern conditions. They should be in the library of every Minnesotan interested in these subieets)

American Horticultural Manual, 2 volumes, Profs. J. L. Budd and N. E. Hanson. \$3.00.

Principles of Plant Culture, Prof. E. S. Goff, 287 pages. \$1.00.

The Horticulturist's Rule Book, by L. H. Bailey, professor of horticulture, Cornell University, 312 pages. 75 cents.

The Nursery Book, by L. H. Bailey, 365 pages, \$1. Plant Breeding, by L. H. Bailey, 293 pages, \$1.50. The Forcing Book, by L. H. Bailey, 266 pages. \$1. The Pruning Book, by L. H. Bailey, 545 pages. \$1.50. Garden Making, by L. H. Bailey aided by L. R.

Taft, F. A. Waugh and Ernest Walker. 417 pages.

The Amateur Practical Garden Book, by C. E. Hunn and L. H. Bailey. 250 pages. \$1.00. The Principles of Fruit Growing, by L. H. Balley,

516 pages. \$1.25. Bush Fruits, by Fred W. Card, 537 pages. \$1.50.

Irrigation and Drainage, by F. H. King., 502 pages.

Plums and Plum Culture, by Prof. F. A. Waugh. 371 pages, \$1.50.

ONE THOUSAND DOLLARS, is offered as a Premium by this Society for A SEEDLING APPLE TREE "as hardy and prolific as the Duchess," with fruit equal to "the Wealthy in size, quality and appearance, and that will keep as well as the Malinda."

ONE HUNDRED DOLLARS is offered (contributed by Chas. M. Loring) for a Plum Seedling.

ONE HUNDRED DOLLARS is offered annually for five years, beginning in 1912, for best Late Winter Seedling Apple.

For particulars as to these premiums address the Secretary.

Physician 6

PLEASE READ CAREFULLY

And hand to some one else interested in Horticulture in the Northwest.

1906.

Minnesota State Horticultural Society

(ORGANIZED 1866.)

MEMBERSHIP IN 1905. 1975.

OFFICERS:

PRESIDENT. Clarence WedgeAlbert Lea

VICE-PRESIDENTS.	
First Cong. Dist., M. R. Cashman Second Cong. Dist., C. E. Older	Luverne
Third Cong. Dist., H. J. Baldwin	. NorthHeld
Fifth Cong. Dist., Henry Haggard	Excelsior
Sixth Cong. Dist., Rev. J. B. Katzner Seventh Cong. Dist., P. G. Jacobson	Madison
Eighth Cong. Dist., H. G. Westman Ninth Cong. Dist., Ole J. Hagen	Sandstone

TREASURER.

A. B. LymanExcelsior

EXECUTIVE BOARD.

The president and secretary are members ex-officio.
Wyman Elliot, Chairman, 1 year Minneapolis
Frank Yahnke, 1 year
John P. Andrews, 2 yearsFaribault
Lycurgus R. Mover. 2 years
Prof. Samuel B. Green, 3 yearsSt. Anthony Park
J. M. Underwood, 3 yearsLake City

Secretary, A. W. LATHAM,

Office and Library, 207 Kasota Block, Minneapolis,

Address Business Communications and all Remittances to the Secretary.

OBJECT OF THE SOCIETY.

This society, incorporated under the laws of the state, has for its work the gathering and dissemination of knewledge pertaining to forestry, fruit and vegetable gawing, the culture of flowers, etc., adapted to the soil and climate of Minnesota. It is purely an educational institution and has no other purpose than as defined above.

The present working membership of the society consists of nearly 2,000 of the most active and wideawake professional and amateur horticulturists throughout the Northwest.

The society holds annual summer and winter meetings, at which fruits, vegetables, flowers, etc. are exhibited, papers and reports on horticultural topics are read, and the personal opinions of the members secured in the discussions which follow.

Committees, selected from the members, have special charge of investigations in various branches of horticulture, and a number of trial stations in different parts of the state, under the charge of members, are making practical tests of things new and desirable. The reports made by these committees and by the superintendents of the trial stations, along with the papers and discussions, with other information of value, are compiled by the secretary and printed at the expense of the state. The society receives also from the same source a small annual appropriation to assist in carrying on its work.

MEMBERSHIP.

Annual Members.—Any person may become a member of this society for the year 1306, by payment of the annual fee of \$1.00, which pays for the magazine for that year (except such numbers as were issued prior to the date of membership, and the issue is exhausted), a handsome cloth-bound copy of the Annual Report of the society for the year 1905 (537 pages), sent postpaid, and all the other privileges of membership for the year. Each annual member re-ceives a handsome card lithograph membership ticket.

Life Members.—The life membership fee is \$10.00, payable in two annual installments of \$5.00 each, if preferred. Life members receive a handsome lithograph certificate of membership suitable for framing. They are entitled to all the privileges of the society. including its publications, during life; and to a file of the back reports, as complete as possible, some twenty volumes, constituting an invaluable horticultural library.

PUBLICATION

Assues a monthly manazine of forty The society essues a monthly magazin pages, edited by the secretary, and entitled

"THE MINNESOTA HORTICULTURIST."

These magazines contain the material previously referred to and other parter of timely interest.

At the close of the year the twelve magazines, with the journal of the society's meetings, list of members, index, etc., are bound together, making the annual report of the society, and entitled "Trees, Fruits and Flowers of Minnesota."

It is understood in receiving this annual report, which is really a gift to the members, that the magazines received during the preceding year will be dis-tributed amongst those interested in hortfoulture, and especially those who would be likely to become mem-bers of the society, and that effort will be made in connection with this distribution to seture such persons as new members.

THE LIBRARY.

Contains at present about 1,600 volumes not including in this number any of our own reports. It includes reports of similar associations, standard works on horticulture and bound horticultural periodicals, A large number of horticultural journals and all

the State Experiment Station reports of the country come to the library regularly,

The library is open to all, but is especially the home of the members.

PLANT PREMIUMS.

All members, new or old, making application prior to April 1st, are entitled to two plant premiums. They will be sent post-paid in the spring.

Select two premiums by number from the follow-

- 1. One Beta Grape, to the first 100.
- Two Russian Olive (Fleagnus) Three Columbian raspberry plants. (Purple.)
- Four Patten's Greening apple root grafts.
- Four Hibernal apple root grafts. Three Golden Willow cuttings.
- Four seedling Buckthorn plants. Four seedling Buffalo Berry plants.
- Six seedlings of genuine Pyrus Baccata, for budding or grafting.
- 10. Six apple seedlings, mailing size, grown from seed of the choicest Ferkins seedlings. To secure this premium send 15 cents to pay for packing and postage.
- 11. Six apple seedlings, 2½ to 3 ft., grown from seed of choice varieties. Send 15 cents to pay for packing. By express at expense of
- 12. Six plum seedlings, from choice sorts, 21/2 to 4 feet. Send 15 cents for handling and packing.

By express at expense of members cuttings of Pomona current,

malinda top mother on Duchers

ORNAMENTAL SHRUBS.

Adapted to Park and Lawn Planting in Minnesota. Scarlet Thorn Common Lilac, White Lil. Charles X Lliac Tree Lilac Persian Lilac White Persian Lilac North China Lilac Lady Josika's Lilac Mock Orange Gordon's Mock Orange Large Flowered Mock Showy Mock Orange Russian Mock Orange Wild Black Current Cranberry Tree Snowball Sheepberry Wayfaring Tree Pink Bush Honeysuckle Splendid Honeysuckle Albert's Honeysuckle Shining Honeysuckle Common Elder Red-Berried Elder Shad Rush Northwestern Juneberry

Ninebark Van Houtii's Spiraea St. Peter's Wreath Ash-Leaved Spiraea Willow-Leaved Spiraea Douglas Spiraea Bessarabian Cherry Bird Cherry Sand Cherry Buffalo Berry Silverberry Russian Olive European Barberry Amur Barberry Rosemary Willow Siberian Pea Tree Small-Leaved Pea Shrub Chinese Pea Shrub Siberian Pea Shrub Dwarf Pea Shrub Smooth Sumac Staghorn Sumae Buckthorn Red Osier Dogwood' Kinnikinick Amur Tamarix Snowberry Matrimony Vine Manchurian Maple Burning Bush

Shrubs with Colored Foliage. Golden Elder Variegated Elder. Golden Mock Orange

Success Juneberry

Japanese Rose

Rosa Rugosa

Golden Spiraea Golden Ninebark

Climbing Vines.

Sullivan's Honeysuckle Russian Honeysuckle Virginia Creeper Wild Grape Clematis, Virginiana

Clematis, Jackmani Clematis, Pariculata Bittersweet Ampelopsis Engelmanni

WOMAN'S AUXILIARY

To the Minnesota State Horticultural Society. President-Miss Emma V. White, 3010 Aldrich Ave. So., Minneapolis.

Secretary-Mrs. Anna B. Underwood, Lake City. The object of this society is to awaken and foster an active interest in horticulture among the women of the state.

Annual fee, 25 cents, but members of the State Horticultural Society become members upon application, without further expense. For further information address the secretary.

PLANT AND SEED PREMIUMS, 1922

All members for 1922, old or new, making application prior to April 1, are entitled to select two lots of plant premiums sent postpaid except as noted.

Requests received after April I cannot be filled.

Right of substitution is reserved in case the premium selected cannot be furnished.

Packet, Table Queen squash (small, early).

Packet, Banana squash (early, productive, keeps fairly well).
 Packet, Delicious squash (for fall use, quality very good), selected by C. H. Smith, Faribault.

4. Packet, American Beauty muskmelon (popular on Minne-apolis market), selected by C. J. Lindholm, Minne-

The following tomato and squash strains have been selected by the Vegetable Section, Division of Horticulture, at University Farm. They are offered for trial. Reports are desired next autumn of the value of these special strains:

Packet, Kitchenette Hubbard squash (No. 20) (small, early). Packet, large sized Hubbard squash (No. 3) (late, quality excellent).

Packet, Burbank tomato (early).

Packet, Bonny Best tomato (mid-season),

Packet, annual flower seeds, six varieties in separate packets. Packet, zinnias and petunias. Large flowering, separate

Ten rooted cuttings of desirable house plants.

Ten rooted cuttings of chrysanthemums.

Two dahlia roots.

14. Two canna roots. Three iris roots.

o 16. Four gladiolus bulbs, choice varieties.

The following premiums are New Fruits from the Minnesota State Fruit Breeding Farm

They give promise of being valuable, but the full measure of their value is yet to be determined. Members receiving these new fruits do so with the understanding that they are receiving them for trial and that their success or failure is to be reported on later.

All scions should be kept in a cool place where they will not dry out. Should be asked for early so they can be grafted early in the spring. Do not ask for these unless you have trees on which they can be grafted. Read illustrated article in February (1921). Horticulturist.

17. Six scions of some of the new unnamed apple seedlings.

Six scions of some of the new unnamed plum seedlings. Six scions of Zumbra, plum-cherry hybrid. (This is the last time this variety will be sent out for trial.)

20. Six plants of Deephaven (Minn, No. 41) everbearing straw-

21. Six plants of seedling raspberries Nos. 10 and 11.

The following two lots are limited to life members and all members paying the regular \$1 fee. Trees to be sent by express collect. Auxiliary society members must send twenty-five cents additional to pay for packing.

22. One unnamed plum tree.
23. One unnamed apple tree.

24. SPECIAL: Plum trees for securing new members. The first 100 members sending in the names of two new members. at \$1 each, are entitled to one small sized tree of the named plum varieties. Selections booked in order received. This is an excentional chance for the members to get one or more of these new varieties of plums. This offer is limited to members living in the First, Second or Third postal zones from St. Paul. To those outside these zones, the trees will be sent by express collect.

FRUIT LIST FOR MINNESOTA

Revised and adopted by the Minnesota State Horticultural Society, December 16, 1921.

Varieties arranged approximately in order of ripening.

APPLES

Explanation of characters: C, commercial; HO, Home Orchard; *. Leading variety; ?, Favorable locations only; T. Trial.

	Fruit Districts (See Map of State					
	1	2	3	4	5	6
Yellow Transparent	но	но	но	но	но	
Blush Calville		200	200000		HO	но
Charlamoff	HO	HO	HO	HO	HO	
Oldenberg (Duchess)	C*	C*	C*	C*	C	HO
Iowa Beauty	HO	HO	HO	HO	HO	
Okabena	HO	HO	HO	но	HO	
University	HO	HO	HO	1000		
Anisim	HO	HO	C	C	HO	
Wolf River	HO	HO	327			
Superb	HO	HO	HO			
Brett	HO	HO	HO	HO	HO	
Hibernal		HO	HO	C	C	HO
Pattens Greening	C*	C*	C*	C*	C	HO
Wealthy	C*	C*	C*	C*	HO	
Eastman	HO	HO	HO	HO	HO	
McIntosh	C?		000-4	2000	-	
Grimes	HO					
Ionathan	HO		1000			
Fameuse	HO			1000		
King David	HO					
Delicious	HO					
Milwaukee	HO	HO	HO	HO		
Windsor Chief	HO		HO	HO		-
Salome	C	C	HO	-	Mr.	0000
Northwestern Greening	C*	C.S	C3	- Turana	The same of	
Malinda	HO	HO	C	HO	HO	1

Varieties For Trial

Folwell (Minn. No. 237). Red Wing, Minnehaha (Minn. No. 300), Red Warrior, Wedge (Minn. No. 207), Erickson, Perkins, except Districts 4, 5 and 6.

CRAB APPLES, (All Districts)

Early Strawberry, Whitney (Except No. 6), Florence, Dartt, Transcendent, Success, Hyslop, Virginia, Faribault.

STRAWBERRIES (Protect by mulching)

Perfect flowers: (June Bearing) Bederwood, Senator Dunlap, Chaska (Minn. No. 801), Nokomis (Minn. No. 489), Minnehaha (Minn. No. 935).

Imperfect flowers: Warfield, Easypicker (Minn, 775). Everbearing: (all perfect flowers) Progressive, Superb, Deephaven (Minn. No. 41), Duluth (Minn. No. 1017).

ORNAMENTAL FRUITING SHRUBS (All districts) Dwarf Juneberry, Sand Cherry, Buffalo Berry, High Bush Cranberry.

NUT FRUITS (All districts) Shellbark Hickory, Black Walnut, Butternut.

FRUIT LIST-continued

PLUMS AND HYBRID PLUMS

Explanation of characters: *, Leading variety; ?, Favorable tocations only; T. Trial.

	1	2	3	4	5	0
Onata		*	*	*	*?	T
Opata	*	*	*	*	T	
Assiniboine					*	*
		24.7		1	*	*
Winnipeg Wolf (Freestone)	*	*	*	*	*	*
Sana	*	*	*	*	T	
Sapa Tonka (Minn. No. 21)	*	*	*	T	T	
Compass				100	*	*
Wyant	*	*	*	*	*	*
Waneta	183	*	*	*	*7	T
Stella	*	*	*	*	T	
Loring	*	*	*	T	T	
Red Wing (Minn. No. 12)	*	*	*	T	T	
Zumbra	*	*	*	*	*2	T
Mound	*	*	*	T	Т	T?
Monitor (Minn. No. 70)	- 14	*	*	T	T T *? T T	-
Terry	*	*	*	*	*	*
De Sota.	*	*	*	*		
Elliot (Minn. No. 8)	*	*	*	*	*?	made.
Anoka (Minn. No. 118)	*	*	*	T	T?	100
Winona (Minn. No. 30)	*	*	*	T	T	MALE

RASPBERRIES AND BLACKBERRIES

Explanation of characters: Same as for grapes.

Raspberries	1	2	3	4	9	0	
Cing (Red)	*	*?	cov	cov	cov	cov	
Outhbert (Red)	*	cov	cov	cov	cov	cov	
Herbert (Red)	*	*	*?	cov *	cov *	cov *	
Ohta (Red)		1 000	11.00	*5	*?	cov	
atham (Red)	*	*	*	*?	*?	cov	
Columbia (Purple)	cov	cov	COV	cov	COV	cov	
Cumberland (Black)	cov	cov	cov	cov	cov	COV	
Plum Farmer (Black)	cov	cov	cov	COV	cov	COV	
Gregg (Black)	cov	cov	cov	cov	cov	cov	
Blackberries	- 11						
Eldorado	cov	cov	cov	COV	cov	cov	
Ancient Briton	cov	cov	cov	COV	cov	cov	
Snyder	cov	cov	cov	cov	cov	cov	

CURRANTS (All districts, no protection required)

Red: Pomona, Red Cross, Perfection, Long Bunch Holland, Wilder.

Black: Black Naples. White: White Grape.

GOOSEBERRIES (All districts, no protection required) Champion, Carrie, Como (Minn. No. 43), Pearl, Downing.

FRUIT LIST-continued

GRAPES

Explanation of characters: *, Leading variety; cov, covering or protection required; ?, Favorable locations only.

	1	2	3	4	5	0
Campbells Early	*	cov	cov	cov	cov	
Moores Early	*	cov	COV	cov	COV	
Worden	ok:	cov	cov	cov	cov	10.00
Alpha	28	*	*	*	*	*?
Beta	*	*	*	*	*	*!
Hungarian	*	*	*	*	*	82
Brighton	*	cov	COV	cov	cov?	
Delaware	*	cov	cov	cov		
Diamond	*	cov	cov	cov?		
Concord	*	cov	cov	cov?		
Niagara	*	cov	cov	cov	100	
Agawam	*	cov	cov		The same	



Minnesota Fruit Districts

Minnesota State Horticultural Society 1922

MORE THAN 3,000 MEMBERS

This circular is issued to assist in the dissemination of horticultural information and to describe the work of the society. You are cordially invited to become a member.

CONTENTS

Best varieties of fruits to plant in Minnesota Best shrubs to plant to adorn your home Rest varieties of vegetables for your home garden What to use in spraying fruit trees All about the Society---its ideals and objects

YOU GET FOR \$1.10

The Minnesota Horticulturist for 12 months Membership in Horticultural Society Annual Report-paper bound-for 1921, while the limited supply lasts Two Plant or Seed Premiums (See Page 7) Use of Library

President-Frank H. Gibbs, Como Station, St. Paul. Secretary-R. S. Mackintosh, University Farm. St. Paul.

> Office and Library Horticultural Building, University Farm, St. Paul.

OBJECTS OF THE SOCIETY

This society, supported in part by the state, has for its work the securing and dissemination of knowledge pertaining to tree, fruit, flower, and vegetable growing, and related topics.

The society holds regular summer and winter meetings, at which fruits, vegetables and flowers are exhibited, papers and reports on horticultural topics are read, and the personal opinions of the members secured in the discussions which follow.

A number of Trial Stations in different parts of the state, operated by members, are making practical tests of things new and desirable. The reports made by the superintendents and the papers and addresses presented at the meeting of the society, with other information of value, are compiled by the secretary and published monthly in the Minnesota Horticulturist.

IDEALS.

The Society believes in and is working toward the following ideals: For every home-

A vegetable garden to supply the family.

A small fruit garden.

A small apple and plum orchard.

Plantings of trees, shrubs and flowers to make it attractive.

A shelter belt of deciduous and evergreen trees to protect the farmstead.

For every school-

Grounds adorned with trees, shrubs and flowers.

The study of gardening in the public schools for all boys and girls.

For Minnesota-

The suitable planting of trees and shrubs on all highways.

Public parks and playgrounds for every village and city. The commercial production of vegetables, fruits, nursery stock, seeds and flowers.

The origination of better varieties of fruits by the planting of

The eradication of injurious insects and plant diseases.

MEMBERSHIP

Annual Members.-Any person may become a member of this society for the year 1922 by payment of the annual fee of \$1, which pays for the society monthly for a full year from the date of membership, selections of new fruits and all the other privileges of membership for the year.

All annual memberships expire the first day of the annual winter

Life Members.—The life membership fee is \$10, payable in two annual installments of \$5 each if preferred. A life member is entitled to all the privileges of an annual member and also, if desired, a file of the back reports, as complete as possible, some twenty volumes, constituting a very valuable horticultural library.

[Owing to the high cost of printing and binding all annual and life members must send ten cents additional for paper bound, or thirty cents for cloth bound report.]

THE SOCIETY LIBRARY

Contains about 3,000 volumes and is open to all, but especially to the members. Books are loaned to members for two weeks under certain simple restrictions.

PUBLICATIONS

The society issues a monthly magazine of thirty-two pages.

THE MINNESOTA HORTICULTURIST (Samples free on application)

At the close of the year the twelve magazines are indexed and bound together, making the annual report of the society, and

"Trees, Fruits, Flowers, and Vegetables of Minnesota."

PRIZES OFFERED BY THE SOCIETY

- 1. ONE THOUSAND DOLLARS for a Seedling Apple Tree "as hardy and prolific as the Duchess," with fruit equal to "the Wealthy in size, quality and appearance, and that will keep as well as the Malinda."
- 2 ONE HUNDRED DOLLARS for a new plum. Fund contributed by J. H. Fiebing. Must be an attractive plum equal to Surprise in quality, at least one and one-half inches in diameter. Tree hardy, productive, an early and regular bearer.

PREMIUM BOOKS

Given to Members for Securing New Members

Fifty cents is allowed each new member, or to each member securing a new member, to be applied as payment on any book, the balance, if any, to be paid in cash or by securing other members, Encourage your neighbors and friends to join-it helps them and helps you.

Good books supplement the work of this society. Prices of books are changing, consequently it is difficult to quote exact prices. Fill your library with good horticultural books and bulletins.

A list of books may be secured by writing to the secretary.

We hope you have enjoyed reading this circular and will make good use of the information it contains. The society is organized to promote the horticultural interests of the state. If you are not a member you are most cordially invited to join. The annual membership fee is \$1. Send this amount, or better \$1.10, to the Secretary at once. For the extra 10 cents you get the magazines issued in 1921. (Post office money orders cheapest and safest.)

If sent before April 1 you are entitled to select two premiums from the twenty-three listed on page 7.

Try for special premium No. 24.

SPRAY PROGRAM FOR MINNESOTA

The spray mixture for apples and plums best suited to Minnesota conditions is made by adding 5 quarts of liquid commercial limesulphur and 11/2 pounds of powdered arsenate of lead to 50 gallons of water. Spraying should always be done under high pressure, 200 nounds or more is better than a lower pressure. Cover every tree thoroughly, and above all be sure to do the spraying at the proper time, as a delay of a few days will greatly reduce the effectiveness of the work.

APPLES

First Spray: When first flower buds show pink. Pests controlled-Early stages of leaf eating caterpillars, curculio,

scab and codling moth caterpillars. Second Spray: As soon as petals drop from flowers and before calvx cup closes.

Pests controlled-same as listed under first spray. Third Spray: Last week of June or first week of July.

Pests controlled-Scab, apple maggot (railroad worm) and leaf

Fourth Spray: About July 20.

Pests controlled—Scab, apple maggot (railroad worm), plum curculio and leaf eating insects.

PLUMS

First Spray: Just before blossoms open. Pests controlled-Curculios, plum pocket, blossom blight, twig

Second Spray: When plums are the size of small peas.

Pests controlled—Curculios and brown rot.

Third Spray: About July 1.

Pest controlled: Plant lice.

Pests controlled—Curculios and brown rot.

Fourth Spray: When fruit first starts to color.

Pests controlled—Curculios and brown rot.

Special for Plant Lice: If plant lice are noticed on apples, plums or other plants in early spring, spray with nicotine sulfate, 1/2 pint of 40 per cent nicotine sulfate and 2 or 3 pounds of soap in 50 gallons of water, as soon as discovered. The first lice usually appear just as the buds are bursting. If very numerous when applying regular sprays, nicotine sulfate may be added to regular mixtures. It is more effective when used alone.

CURRANTS AND GOOSEBERRIES

Spray: Just before buds open. Lime sulphur, one part to nine parts of water. This is a strong solution which is used to destroy the eggs of plant lice, and must not be used after leaves are out.

Current Worm

Spray: Use arsenate of lead at the rate of 11/2 pounds in 50 gallons of water and 4-5-50 Bordeaux mixture as soon as caterpillars are seen. Look for them soon after the leaves are out. If the second brood comes out when the fruit is nearly mature it is safer to use hellebore. May be dusted on leaves in early morning.

Currant Borer

Prune out infested canes before June 1, and burn. Borers usually attack the canes that are two or more years old. It is well to remember in pruning that most of the fruit is borne on the canes that are two years old or older. Do not prune out all old canes each season.

SLOGAN-Spray Every Fruit Tree in 1922

VARIETIES OF VEGETABLES RECOMMENDED FOR MINNESOTA HOME GARDENS

Asparagus-Washington, Palmetto, Reading Giant.

Bush Beans, Wax-Wardwell, Pencil Pod, Golden Wax. Bush Beans, Green-Bountiful, Refugee, Stringless Green Pod.

Pole Beans, Green-Kentucky Wonder. Pole Beans, Shell-Horticultural.

Beans, Lima-Dwarf preferred, except in favored locations. Beets-Detroit, Eclipse, Egyptian,

Cabbages, Early-Wakefield, Copenhagen, Cabbages, Late-All Seasons, Danish Ball or Holland.

Carrots-Chantenay, Danvers Half Long. Cauliflower-Erfurt, Snowball.

Celery, Early-Golden, White Plume. Celery, Late-Winter Queen, Giant Pascal.

Celeriac-Erfurt.

Corn, Sweet-Golden Bantam, Crosby, Stowells Evergreen. Cucumbers-Boston and Chicago Pickling, White Spine.

Egg Plant-New York Spineless, Black Beauty. Endive-White and Green Curled.

Horse Radish.

Kale-Dwarf and Tall Curled Scotch. Kohl-Rahi-Vienna.

Lettuce, Leaf-Grand Rapids, Black Seeded Simpson, Iceberg. Lettuce, Head-Big Boston, Hanson.

Muskmelon-Gem, Osage, Irondequoit, American Beauty.

Onion-Red, Yellow and White Globe. Onion Sets-Any color or kind.

Parsnip-Hollow Crown, Guernsey.

Parsley-Moss Curled.

Peas, Early-Alaska, Thomas Laxton, Marvel (Dwarf), Suttons Excelsion. Peas, Late-Telephone, Champion of England, Senator, Profusion.

Peppers-Bell, Ruby King, Cavenne, Potatoes-Early Ohio, Irish Cobbler, Triumph, Burbank, Russet,

Green Mountain, Rural New-Yorker. Pumpkins-Long or Round Pie.

Radish-Scarlet Globe, Icicle.

Radishes, Winter-Half-Long and Round Black Spanish. Rhubarb-Victoria, Linnaeus.

Rutabaga-Purple Top, Yellow-Swede.

Salsify-Sandwich Island. Spinach-Long Standing, Bloomsdale.

Squash, Summer-Scallop, Crookneck. Squash, Winter-Hubbard, Delicious, Table Queen.

Swiss Chard—Lucullus. Tomatoes, Early-Earliana, Bonny Best, Chalks Early Jewell.

Tomatoes, Late-Stone, Golden Queen (Yellow). Turnips-Purple Top, Egg.

Watermelons-Kleckley Sweet, Dark Icing,

Food From The Garden

Fresh, palatable, full of vitamines, calories, minerals, and bulk. All needed to keep the body active and in health and working at maximum efficiency.

Save buying such food by growing it in the garden.

EAT MORE VEGETABLES-EAT MORE FRUITS

HARDY SHRURS RECOMMENDED FOR MINNESOTA PLANTING

Common Name Thunberg's Barberry Siberian Pea Tree Silver Berry Eleagnus argenta Strawberry Tree Sea Buckthorn Large Flowered Hydrangea Hydrangea, Hills of Snow Tartarian Honeysuckle Mock Orange Golden Mock Orange Shrubbery Cinque Foil Pontentilla fruticosa Missouri Flowering Current Rose Acacia Tapanese Rose Rosa rugosa Golden Elder Buffalo Berry Bumalda Spiraea Spiraea Bumalda var. Anthony Waterer Spiraea Billard's Spiraea Douglas' Spiraea Japanese Spiraea

Meadow Sweet Spiraea

Van Houttei's Spiraea

Persian Lilac

Common Lilac

Wayfaring Tree

Wahoo

Ninebark

Staghorn Sumac

Dwarf Sumac

Dockmackie

Prickly Ash

Highbush Cranberry

Scientific Name Berberis Thunbergii Caragana arborescens

Euonymus Europaeus Hippophae rhamnoides Hydrangea paniculata grandiflora Hydrangea arborescens grandiflora Lonicera Tartarica

Philadelphus coronarius Philadelphus coronarius var. aurea

Ribes aureum Robinia hispida

Sambucus nigra var. aurea Shepherdia argenta Spiraea Bumalda

Spiraea Billardii Spiraea Douglassi Spiraea Japonica Spiraea salicifolia

Spiraea Van Houttei Syringa Persica Syringa vulgaris

Syringa Japonica Japanese Lilac Snowball Viburnum Opulus var. sterile

Viburnum lantana

SHRUBS NATIVE TO THE STATE DESIRABLE FOR PLANTING Ceanothus Americanus New Jersey Tea

Red Osier Dogwood Cornus stolonifera Dirca palustris Leatherwood (Wickopy) Euonymus atropurpureus Physocarpos opulifolia Rhus Typhina Rhus Glabra

Smooth Sumac Rhus copalina Rosa lucida Wild Rose (tall) Wild Rose (dwarf) Rosa blanda Sambucus Canadensis

Common Elder Symphoricarpus racemosus Snowberry Coral Berry, Indian Currant Symphoricarpus vulgaris Viburnum lentago Black Haw

Viburnum dentatum Viburnum acerifolium Viburnum opulus Xantoxylum Americanum

HARDY PERENNIAL VINES

Ampelopsis Engelmani or American Ivy, Wild Grape, Beta Grape, Lycium Chinense or Matrimony Vine, Bitter Sweet.

HARDY HEDGE PLANTS

Buckthorn, Alpine Currant, Cotoneaster acutifolia, Thunberg's Barberry, Dogwood, Willow.

SIX HARDY HERBACEOUS PERENNIALS

Phlox, Peony, Larkspur, Bleeding Heart, Lily of the Valley, Day Lily, Iris.

for below cents Chird listed premium of name.) 927 \$1 ents of embership full-Write Plainly d. (Giv annual an the in -In punoq enclos ADDRESS--First

HARDY TREES AND SHRUBS Recommended for Minnesota

EVERGREEN TREES

Colorado Blue Spruce (Picea pungens glauca) White Spruce (Picea canadensis) Mugho Pine (Pinus montana mughus) Creeping Juniper (Juniperus horizontalis) American Arborvitae (Thuja occidentalis). DECIDUOUS TREES

American Elm (Ulmus americana) Basswood (Tilia americana) Hackberry (Celtis occidentalis) Sugar Maple (Acer saccharum) White Ash (Fraxinus americana)

SHRUBS Japanese Barberry (Berberis thunbergi) Siberian Pea-Tree (Caragana arborescens) Golden Currant (Ribes odoratum) Tartarian Honevsuckle (Lonicera tartarica) Peegee Hydrangea (Hydrangea paniculata grandiflora) Snowhill Hydrangea (Hydrangea arborescens) Common Lilacs (Syringa vulgaris) Persian Lilac (Syringa persica) Japanese Tree Lilac (Syringa Japonica)
Sweet Mockorange (Philedelphus coronarious)
Lemoine Mockorange (Philedelphus lemoine) Rugosa Rose (Rosa rugosa) Common Snowball (Viburnum opulus sterile) Anthony Waterer Spirea (Spirea bumulda var. A. W.) Ash Leaved Spirea (Sorbaria sorbifolia)

SHRUBS (Native) American Cranberrybush (Viburnum americanum) Common Snowberry (Symphoricarpos racemosus) Coralberry (Symphoricarpos vulgaris) Blackhaw (Viburnum prunifolium) Arrowwood (Virburnum dentatum) American Elder (Sambucus canadensis) Common Buttonbush (Cephalanthus occidentalis) Red-osier Dogwood (Cornus stolonifera) Smooth Sumac (Rhus glabra) Staghorn Sumac (Rhus typhina) Silver Buffaloberry (Shepherdia argentea) Russet Buffaloberry (Sheperdia canadensis) Jersey-tea (Ceanothus americanus) Wahoo Burningbush (Euonymus atropurpureus)

VINES

Virginia Creeper, Engelmanni Ivy, Beta Grape, Matrimony-Vine, Bittersweet, Clematis paniculata, Scarlet-trumpet Honeysuckle. Dutchmans-pipe.

HEDGES Buckthorn, Alpine Currant, Cotoneaster, Japanese Barberry, Tartarian Honeysuckle, Red-osier Dogwood.

HARDY HERBACEOUS PERENNIALS Lily of the Valley, Bleeding Heart, Iris, Peony, Larkspur, Phlox, Day Lily.

(Most of the names have been corrected to agree with those in Standardized Plant Names.)

VEGETABLES RECOMMENDED FOR PLANTING IN THE HOME GARDENS

Asparagus-Mary Washington. Bush Beans, Wax-Wardwell, Pencil Pod, Golden Wax. Bush Beans, Green-Bountiful, Refugee, Stringless Green Pod. Pole Beans, Green-Kentucky Wonder. Pole Beans, Shell-Horticultural. Beans, Lima-Dwarf preferred, except in favored locations. Beets-Detroit, Eclipse, Egyptian. Cabbages, Early-Golden Acre, Wakefield, Copenhagen. Cabbages, Late-All Season, Danish Ball or Holland. Carrots-Chantenay, Danvers Half Long. Cauliflower—Erfurt, Snowball.
Celery, Early—Golden Self Blanching, Golden Plume.
Celery, Late—Winter Queen, Giant Pascal. Celeriac—Erfurt.
Corn, Sweet—Golden Bantam, Crosby, Stowells Evergreen. Cucumbers-Chicago Pickling, White Spine, Windermoor Won-Egg Plant-New York Spineless, Black Beauty.

Endive-White and Green Curled. Horse Radish-Maliner Kren. Kale-Dwarf and Tall Curled Scotch. Kohl-Rabi-Vienna.

Lettuce, Leaf-Grand Rapids, Black Seeded Simpson. Lettuce, Head-Big Boston, Hanson, New York. Muskmelon-Golden Osage, American Beauty, Milwaukee Market.

Onion-Red. Yellow and White Globe, Ebenezer. Onion Sets-Any color or kind.

Parsnip-Hollow Crown, Guernsey, Parsley-Moss Curled.

Peas, Early-Alaska, Thomas Laxton, Marvel, Excelsior. Peas, Late-Telephone, Champion of England, Senator, Profusion.

Peppers-Bell, Ruby King, Cayenne. Potatoes-Early Ohio, Irish Cobbler, Triumph, Burbank, Russet Burbank, Green Mountain, Rural New-Yorker.

Pumpkins-Long or Round Pie. Radish-Scarlet Globe, Icicle. Radishes, Winter-Half-Long and Round Black Spanish,

Rhubarb-Victoria, Linnaeus. Rutabaga—Purple Top, Yellow-Swede. Salsify—Sandwich Island.

Spinach-Long Standing, Bloomsdale, New Zealand. Squash, Summer-Scallop, Crookneck.

Squash, Winter-Kitchenette Hubbard, Delicious, Table Queen. Swiss Chard-Lucullus.

Tomatoes, Early-Red River, Earliana, Bonny Best, Chalks Early Jewell. Tomatoes, Late-Stone, Golden Oueen (Yellow).

Turnips—Purple Top, Egg. Watermelons—Kleckley Sweet, Dark Icing.

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Fresh, palatable, full of vitamins, calories, minerals, and bulk. All needed to keep the body active and in health and working at

maximum efficiency. Save buying such food by growing it in the garden.

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SPRAY PROGRAM FOR MINNESOTA, 1927

Arsenate of Lead and Lime-Sulfur

Arsenate of lead, powdered... ..11/2 pounds [Lime-sulfur, commercial, liquid. .5 quarts or Lime-sulfur, commercial dry... .4 pounds 50 gallons Water.... Nicotine Sulfate Nicotine sulfate, 40 per cent....½ pint Soap, any kind 2-3 pounds

Water .50 gallons General Notes: Spraying should be done under high pressure, 200 pounds or more is better than a lower pressure. Cover every tree and plant thoroughly, and above all, be sure to do the spraying at the proper time, as a delay of a few days will reduce its effectiveness.

Scale Insects and Eggs of Plant Lice: Spray with liquid lime-sulfur, one part to 9 parts of water, or powdered lime-sulfur,

15 pounds to 50 gallons of water, before buds open.

Plant Lice: If lice are noticed on apples, plums, or other plants in early spring, just as the buds are bursting, spray with nicotine sulfate No. 2. Follow with same material later if plant lice appear. The nicotine sulfate, without soap, may be added to the regular spray No. 1.

Sprays for Apples

First Spray: When first flower buds show pink, use No. 1. Pests controlled-Early stages of leaf eating caterpillars, curculio, and scab.

Second Spray: As soon as petals drop from flowers and before calvx closes, use No. 1.

Pests controlled-Codling moth caterpillars and those listed under first spray. Third Spray: Last week of June or first week of July, use No. 1. Pests controlled-Codling moth caterpillars and those listed

under first spray. Note-If apple maggot is very troublesome, give other sprays about

July 20 and August 1. Sprays for Plums

First Spray: Just before blossoms open, use No. 1. Pests controlled-Curculio, plum pocket, blossom and twig

Second Spray: Just after petals fall, use No. 1.

Pests controlled-Curculio and brown rot. Third Spray: When plums are the size of small peas, use No. 1, Pests controlled-Curculio and brown rot.

Fourth Spray: When fruit first starts to color. If washed off by rain repeat immediately, use No. 1. Pests controlled-Curculio and brown rot.

Sprays for Currants and Gooseberries Plant Lice Eggs: Just before buds open, liquid lime-sulfur, 6 gallons (or powdered, 15 pounds) to 50 gallons of water.

Currant Worm: Arsenate of lead, 1½ pounds to 50 gallons of water as soon as caterpillars are seen. If the second brood appears when the fruit is nearly mature it is safer to use hellebore, which may be dusted on leaves in early morning.

Currant Borer: Prune out and burn infested canes before June 1. Borers usually attack the canes that are two or more years old. Infested canes can be detected readily by their sickly appearance. In pruning it is well to remember that the fruit is borne on the canes that are two or three years old.

Minnesota State Horticultural Society

Office and Library, University Farm, St. Paul.

3,277 ANNUAL MEMBERS IN 1926 AND MORE THAN 500 LIFE MEMBERS

This circular is issued to describe the work of the society-its purpose, publications, varieties of fruits, vegetables, and ornamentals to plant, and how to

Every person in Minnesota, interested in fruits, flowers, ornamentals, trees, and vegetables should be a member. You are most cordially invited to join.

CONTENTS

The Society-objects, ideals, membership and library... Best varieties of fruits to plant in Minnesota. Best shrubs to plant to adorn your home Best varieties of vegetables for your home garden 9 What to use in spraying

\$1.45

YOU GET FOR

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President-R. A. Wright, Excelsior. Secretary-R. S. Mackintosh, University Farm, St. Paul

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The study of gardening in the public schools for all boys and girls.

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PUBLICATIONS

The reports, papers and addresses presented at the meetings with other information of value are compiled by the secretary and published monthly in the

THE MINNESOTA HORTICULTURIST

(Samples free on application)

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3. THREE HUNDRED FIFTY DOLLARS for the best plum orchards set in 1924. To be judged in 1928.

FRUIT LIST FOR MINNESOTA

Revised and adopted by the Minnesota State Horticultural Society. Varieties arranged approximately in order of ripening.



The state has been divided into six fruit districts. The most favorable is district No. 1, a narrow area bordering the Mississippi river south of St. Paul. The characters opposite the apples, grapes. plums, and raspberries, and in the column number of fruit districts, give an idea of the value of the varieties in that district. No fruit list can be absolutely perfect because of variations in sites, soils, and other conditions.

EXPLANATION OF CHARACTERS

(C) commercial as well as for home orchards, (HO) home orchard. (*) leading variety, (?) favorable locations only, (T) trial, (cov) covering or protection required.

NUT FRUITS (All districts) Shellbark Hickory, Black Walnut, Butternut,

APPLES

	Fruit Districts					
	1	2	3	4	5	6
Yellow Transparent	НО	но	но	НО	НО	но
Charlamoff	НО	НО	НО	но	HO	HO
Oldenberg (Duchess)	C*	C*	C*	C*	C	HO
Iowa Beauty	HO	HO	HO	НО	НО	-
Okabena	HO	HO	HO	HO	HO	
AnisimHibernal	НО	HO	НО	C	HO	но
Pattens Greening	C*	C*	C*	C*	č	HO
Wealthy	C*	C*	C*	C*	HO	4450
McIntosh, for top-working	C?	C?	C?	-	****	1000
Grimes " "	HO	4/3/6	130000			
Jonathan,	HO	HO	HO			- 2
rameuse,	HO	НО	HO			
King David,	HO	HO	HO			
Delicious,	C?	HO	HO	TTO		
Milwaukee Windsor Chief	HO	HO	HO	НО		
Salome	HO	HO	но	no		
Northwestern Greening		C?	C3	100		
Malinda	НО	НО	НО	НО	НО	

APPLES FOR TRIAL

Folwell (Minn. No. 237), Red Wing, Minnehaha (Minn. No. 300), Red Warrior, Wedge (Minn. No. 207), Erickson, Perkins, except Districts 4, 5, and 6, Haralson (Minn, No. 90).

CRAB APPLES (All Districts)

Early Strawberry*, Whitney*, (Except No. 6), Florence*, Dartt, Transcendent, Success, Hyslop, Virginia*, Faribault.

CURRANTS (All districts, no protection required) Red: Pomona, Red Cross, Perfection, Long Bunch Holland, London Market, Wilder,

White: White Grape. Black: None recommended on account of susceptibility to white pine blister rust.

GOOSEBERRIES (All districts, no protection required) Champion, Carrie*, Como (Minn. No. 43), Pearl, Downing.

GRAPES

1	Fruit Districts									
	1	2	3	4	5	6				
Campbells										
Early	cov	cov	cov	cov	cov					
Moores Early	cov	COA	cov	cov	cov					
Worden	cov	cov	cov	cov	cov					
Alpha	*	*			*	cov				
Beta	*	- 4	*	*		cov				
Hungarian	- 8	*	*	*	*	cov				
Brighton	cov	cov	cov	cov	cov?					
Lucile	cov	covT	covT	77.0						
Delaware	cov	cov	cov	cov						
Diamond	cov	cov	cov	cov?						
Concord	cov	cov	cov	cov?						
Niagara	cov	COV	cov	COV						
Agawam	cov	cov	cov	1						

PLUMS AND HYBRID PLUMS

	Fruit	Distri	cts (See M	ab of 2	state)
	1	2	3	4	5	6
Radisson (Minn. No. 157) Opata. La Crescent (Minn. No. 109) Underwood (Minn. No. 131) Hennepin (Minn. No. 132) Assiniboine Wolf (Preestone) Sapa Tonka (Minn. No. 21) Compass Cherry Wyant	HO HO C*	C* HO C* HO C	C* HO HO C* HO C	C* HO HO C* HO HO C* HO HO C*	THO HO C* TC CHO C* HO C*	THO HO C*
Loring. Red Wing (Minn. No. 12) Zumbra (Minn.). Nicollet (Minn. No. 144) Waconia (Minn. No. 10). St. Anthony (Minn. No. 15) Mound (Minn. No. 5) Mound (Minn. No. 5) Mound (Minn. No. 120) Anoka (Minn. No. 118) Monitor (Minn. No. 70) Terry De Soto Elliot (Minn. No. 8) Winona (Minn. No. 8) Winona (Minn. No. 30)	C* C* C* C* C* C*	CC************************************	CT************************************	C* C C C C C C C C C C C C C C C C C C	C* CTTTTTCTTTHO C*	C? CTTTTCTTTHO C*

RASPBERRIES AND BLACKBERRIES

1 1 2 3 4 5 6

				Diff.		
* cov	*?	cov	cov	cov	cov cov	
	*	*	*?	*?	cov	
cov	COV	COV	cov	cov	cov	
*	COV	COV	COV	cov	COV	
36	coy	cov	cov	COV	cov	
COV	cov	cov	COV	cov	cov	
cov	cov	cov	COV	cov	cov	
cov	cov	cov	COV	cov	cov	
cov	cov	cov	cov	cov	cov	
	cov cov * cov cov cov	cov cov * * cov cov * cov cov cov cov cov cov cov	COV COV COV * * * COY COV COV * COV	COV	COV	COV

STRAWBERRIES (PROTECT BY MULCHING) Perfect flowers: (June Bearing) Premier, Senator Dunlap,

Chaska. (Minn, No. 801), Nokomis (Minn, No. 489), Minnehaha (Minn, No. 935).

Imperfect flowers: Easypicker (Minn. No. 775). Everbearing (all perfect flowers): Progressive, Superb. Deep-

haven (Minn. No. 41), Duluth (Minn. No. 1017). For trial: Champion, Ideal, Kosata, Lucky Boy, Neverfail, Peerless. ORNAMENTAL FRUITING SHRUBS (All districts.)

Dwarf Juneberry, Sandcherry, Buffaloberry, American Cranberrybush (Highbush), Elderberry, and ornamental plum hybrids-Newport (Minn. No. 116), Manitou (Minn. No. 107) Cistena, Stanapa.

PLANT AND SEED PREMIUMS

All members, making application before March 15, are entitled to select one plant or seed premium under these conditions: In addition to membership fee each member must send 20 cents additional for all premiums numbered below 50, or 10 cents for those numbered above 50.

Members sending in the names of new members at \$1 each, if sent direct to this society, may select an additional premium for each new name sent in, except as noted.

The right of substitution is reserved. The members are requested to make selections early before supply is exhausted. Also mention more than one premium, in order of preference, so that we may know the ones you would like. This will reduce confusion. especially at the close of shipping season when late requests come n. Order by number.

New Fruits from the Minnesota Fruit Breeding Farm.

Members receiving these new fruits are expected to report on their success or failure some time during the next few

This is only a partial list. If interested, send for a full list.

Twenty-cent Group

 One Haralson (Minn. No. 90). A late red apple.
 One Dolgo crab. Originated by Dr. N. E. Hansen. Fruit conical, intensely bright red; fine for jelly,

5. One Radisson (Minn, 157). Large, early, high quality.

6. One Underwood (Minn. No. 91). Red, early, hardy, good. One Tonka (Minn. No. 21). Large freestone, good.

8. One Red Wing (Minn. No. 12). Red, freestone, very large. 9. One Mendota (Minn. No. 5). Red. large, midseason.

11. One Nicollet (Minn. No. 144). For pies and canning.

12. One Zumbra. Very popular

15. One Seedling Minnesota No. 2. Similar to Red Wing, large, freestone, good quality. Tree hardy and vigorous.

16. One Seedling Minnesota No. 194. Very large, attractive, medium late, good quality, tree vigorous. Promises to be a good shipper.

23. One Couronne d'Or peony. White, fragrant, 24. One Grandiflora Nivea Plena Peony. White, and salmon

20. Twenty-five Latham plants.

22. Eighteen roots of Mary Washington Asparagus.

Ten-cent Group

60. Six scions of Haralson (Minn, No. 90) apple. 68. Six scions of Radisson, Tonka, and Elliot plums.

69. Six scions of Mendota, Red Wing and Underwood plums.

72. One Amaryallis bulb. Salmon red.

73. Two Beta grape vines. Hardy in most parts of the state. 74. Two Vanhoutte spirea. One of the best spring flowering

shrubs.

77. Ten Gladiolus bulbs. Mixed colors.

79. One Hymenocallis bulb (Ismene). Blooms in summer. 81. Two Galtonia bulbs (Summer Hyacinth).

86. One pkt. Sunshine Sweet Corn. Earlier than Bantam.

87. One Regale lily bulb.

If you do not find what you want - please ask for complete list.

Program

Forty-Fifth Annual Meeting

Minnesota State Horticultural Society

To be held in the audience room of the First Unitarian Church, corner 8th St. and Mary Place.

Minneapolis

Tuesday, Wednesday, Thursday, Friday, Dec. 5, 6, 7, 8, 1911

The fruit show will be in the hasement and may be reached from the audience room or directly from the Mary Place entrance.

ALL ARE CORDIALLY INVITED, Ladies and young people especially.

The Minnesota State Forestry Association, the Minnesota Rose Society, the Plant Breeders' Auxiliary, the Woman's Auxiliary and the Minnesota State Bee-Keepers' Society meet with us and will be found to have some part on the program.

Bring this program with you to the meeting-and be sure to come!

6555555555555555555555555555555555555

Each person in attendance at the meeting is requested to sign the Register to be found on the table in the entrance hall.

Place of Meeting.

The annual meeting is to occupy the same accommodations in the First Unitarian Church, corner Eighth St. and Mary Place, that have been used now so acceptably for a number of years, the society meeting in the audience room, the fruit exhibit being displayed in the large basement room immediately beneath, with a roomy cloak room situated immediately between the two.

Fruit Exhibit.

A large fruit exhibit is assured, including over 100 boxes of apples shown without offer of premiums by members of the society in lots of five boxes and upwards. Competition in seedling apples and top-worked apples is open to western Wisconsin, northern Iowa, North and South Dakota and Manitoba. Be sure to bring something as a contribution to this fruit display. See list of premiums on last pages of this program.

Program.

Look at the program, and you will have some idea of what is in store for you. None we have ever issued has contained a greater diversity of topics, interspersed with unusual features of special interest.

QUESTION AND ANSWER EXERCISES. To give opportunity for free discussion of topics of general interest to the members, a half-hour has been set aside just preceding the opening of each session of this meeting except the first. These exercises are led by members versed in the various topics considered and give opportunity for the securing of desired information. It is suggested that members send questions beforehand to the secretary. A question box will also be provided at the meeting that can be used for a similar purpose, or questions can be asked orally of the leader during the exercise. Come early and get the full benefit!

Extend Invitation.

Don't forget to invite your friends to this meeting. Neither forget the wife, who will enjoy an outing and meeting of this kind as well or better than you—nor the son or daughter, who is to follow you in this work

Reduced Railroad Rates.

We are unlikely to secure reduced rates to the meeting—as the program goes to press we have not yet succeeded. In purchasing your ticket to the meeting get a certificate from the agent of whom it is purchased, showing you have paid full fare to the meeting. These will be needed if the rate is secured.

HOTEL ANDREWS IS SOCIETY HEAD-QUARTERS.

This new six-story, solid concrete hotel is conveniently located diagonally opposite the office of the society, on the corner of 4th Street and Hennepin Avenue. There is a good cafe in the building, and a number of other good restaurants and hotels adjoin. Rates to members are \$1.00 per day, one in a room, or seventy-five cents per day each for two in a room. Rooms with bath, for one \$1.50, for two in the room \$1.25 each. When asking for room state the price you wish to pay and that you are attending the Horticultural meeting. Should accommodations at satisfactory rates prove insufficient, Hotel Vendome, with similar rates, is only a few doors away.

A large room (M12) will be provided as headquarters of the society, to be used by the members for social purposes. The location of this room can be learned from the clerk at the

hotel.

It would be well for members to address the hotel directly and make reservation of rooms as long a time beforehand as possible, to make sure of accommodations—always stating when you will arrive and depart and the price you wish to pay, as there are higher priced rooms in the house.

PRUNING, GRAFTING AND CROSS-POL-LINATION, PACKING OF APPLES AND SPRAYING.

Each day of the annual meeting, from 1:00 to 2:00 o'clock p. m., the arts of grafting, packing of apples, cross-pollination, spraying and pruning will be taught as regular class exercises in the fruit room, and members can avail themselves of these opportunities to become proficient in these various arts. The demonstration in grafting will be led by Mr. W. D. Valleau, that in cross-pollination by Mr. Arne Aamodt, the packing of fruit by Prof. A. R. Kohler, spraying by Prof. A. G. Ruggles, and pruning by Prof. K. A. Kirkpatrick—all of these demonstrators being connected with the State Experiment Station at St. Anthony Park. Look for the signs in the fruit room directing to these various exercises.

Discussion following each topic.

No persons are selected to open the discussion which may follow the presentation of each topic. Discussions "free for all," whether members or not. Ask questions or express opinions freely.

For further information address the officers of the society. See last page of this program. THOS. E. CASHMAN, Pres.,

A. W. LATHAM, Secy.,
207 Kasota Block,
Minneapolis, Minn.

NOTICE:-A bell will be rung in the Fruit Room five minutes before the exercises begin in the Audience Room.

A TEN MINUTE LIMIT ON ALL PAPERS.

On account of the fullness of the program and to allow plenty of time for discussion, those presenting topics are requested to limit themselves to ten minutes, or 1,000 words, except as noted. A call bell will be struck at the expiration of the time limit.

TUESDAY MORNING SESSION.

9:30 o'clock.

. Every member attending should not fail to be in his seat promptly when this session opens. Organ Solo, ending at 9:30 o'clock.

Invocation....Rev. Rett E. Olmstead, Excelsior Song......Mr. Trafford N. Jayne, Minneapolis President's Annual Greeting

...... Thos. E. Cashman, Owatonna

- 1. Evolution of the Everbearing Strawberry. Geo. J. Kellogg, Veteran Berry Grower and Nurseryman, Lake Mills, Wis.
- 2. My Top-Worked Orchard. E. G. E. Reel, Fruit Grower, Excelsior.
- 3. Sorting and Packing Apples. C. E. Snyder, Orchardist, Preston.
- 4. Timely Horticultural Notes. E. A. Smith, Vice-Pres. Jewell Nursery Co., Lake City.
- 5. Incidents and Anecdotes in Developing Irrigation with Lake Muck.

C. R. Sandvig, Amateur Horticulturist. Belgrade. 15 mins.

Appointment of committees on credentials and award of premiums.

N. B .- Speak of Demonstrations in Fruit Room.

Announce exercise at 1:30 p. m.

This session will close promptly at 11:30 o'clock.

All annual memberships expire on the first day of the annual meeting. Renew or become a member by paying the Secretary \$1.00.

Membership fees will be paid to the Assistant Secretary in the Hallway.

TUESDAY AFTERNOON SESSION.

1:30 o'clock.

Discussions open to everybody.

The Question and Answer Exercise to occupy this half-hour will be on "Small Fruit Growing," and led by one of our most successful gardeners, Mr. E. B. Miller, of Bloomington,

2:00 o'clock.

President Cashman in the Chair. Reception of Delegates.

Small Fruits and Other Things.

- 1. The Strawberry Field. Preston McCully, Fruit Grower, Maple Plain.
- 2. My Way With Strawberries. F. L. Marsh, Fruit Grower and Architect, Champlain.
- 3. The Beta Grape and Its Origin. Wm. Pfaender, Jr., Nurseryman, New Ulm. 4. The House Fly a Nuisance and How to
- Abate It-showing a new fly catcher. Prof. F. L. Washburn, Entomologist, University of Minn., St. Anthony Park.
- 5. How a Farmer Raises Melons.
- Knute Swennes, Farmer, Minneota.
 6. Landscape Gardening on the Farm. Illustrated with designs.
- E. C. Hilborn, Nurseryman and Institute Lecturer, Valley City, N. D. 7. Harvesting and Storing Seed Corn for Both
 - Field and Garden Uses.
 Chas. W. Hendricks, Director of Agricultural School, Spring Valley.
- 8. The Raspberry Field. Oscar Seamons, Small Fruit Grower, Ex-
- 9. Minnesota as a Fruit State and Its Possibilities Compared With Other States. E. W. Reid, with Holm & Olson, Florists,

4:15 o'clock.

St. Paul.

A Lantern Talk by Prof. N. E. Hanson, "Views at Home and Abroad." Accompanying which he will recite some of his interesting experiences in search of new things in horticulture.

Are you a member of the Plant Breeders' Auxiliary? If you are growing seedlings and are a member of the Horticultural Society, you should join it at once. No expense. Consult the secretary.

WEDNESDAY FORENOON SESSION.

9:00 o'clock.

Discuss each topic freely.

A half hour question and answer exercise on "Growing Flowers," led by that expert flower grower, Mrs. H. B. Tillotson, Minneapolis. Give her strong support in this exercise for your own good.

9:30 o'clock.

President Cashman in the Chair.

Prize paper on Horticultural Topic by student in Minnesota College of Agriculture awarded first premium from "Gideon Memorial Fund."

Orchard Fruits.

1. An Outdoor Storage Cellar. F. L. Marsh, Fruit Grower and Builder, Champlin.

2. My Experience with a Carload of Apples and a Commission House. F. W. Kimball, Orchardist, Austin.

3. Packing and Marketing.
A. R. Kohler, Asst. Hort., Minn. Agri.
College, St. Anthony Park.
4. Co-operation, not Competition, the Secret of
Horticultural Success. Roy D. Underwood, Secy. Jewell Nursery

Co., Lake City. The Prospects of Commercial Apple Grow-

ing in the Middle West. Jas. G. Moore, Prof. Hort, Wis. College of Agri. and Delegate Wis. State Hort. Society, Madison, Wis. 15 mins.

11:00 o'clock.

Minnesota State Rose Society.

Mrs. H. A. Boardman, President, in the Chair.

1. My Summer in a Garden. Miss Sabra M. Ellison, Amateur Flower Grower, Minneapolis.

Three Hardy Perennials. J. P. Brown, Flower and Plant Grower, Excelsior.

3. Ornamental Planting for Winter Effects. Chas. H. Ramsdell, Landscape Architect, Minneapolis.

4. Combating Aster Disease. Mrs. Robt. Odell, Minneapolis.

You can become a life member of the State

Horticultural Society by payment of \$10.00, in two annual payments of \$5.00 each if you prefer. This will entitle you to a file of our bound reports, a library in Itself.

WEDNESDAY AFTERNOON SESSION.

1:30 o'clock.

Discussions Open to All.

A half hour "Question and Answer Exercise" on "The Vegetable Garden," led by H. J. Baldwin, of Northfield, a grower of vegetables for market of long experience.

2:00 o'clock.

President Cashman in the Chair.

Give notice of business meeting of Woman's Auxiliary at once in adjoining room. All ladies present invited to attend.

Plums and Other Trees.

1. Hybrid Plums and What We May Expect from Them. Dewain Cook, Fruit Grower and Gardener,

Comparative Value of Japanese Hybrid and Americana Plums for Minnesota Planting. W. J. Tingley, Orchardist, Forest Lake.

3. Is the Catalpa Worth Planting in Minnesota? Clarence Wedge, Nurseryman, Albert Lea. 4. Evergreens in the Dryer Sections of Minne-

Peter Siverts, Canby. 5. Evergreen and Deciduous Windbreaks for the Western Prairies. John W. Maher, Nurseryman, Devils Lake,

3:15 o'clock.

Woman's Auxiliary.

Miss Emma V. White, President, in the Chair.

 From the City to the Country. Mrs. E. E. Lundgren, St. Paul and Cannon Falls.

2. Interesting the Children in Horticulture. S. H. Drum, Retired Farmer and Fruit Grower, Owatonna.

3. Some Native Wild Flowers Suitable for Cultivation.

Miss Eloise Butler, Supt. Wild Flower Dept., Minneapolis Parks, Minneapolis. 4. Seventh Year in Civic Improvement Work

in Lake City. Mrs. Anna B. Underwood, Lake City.

4:30 o'clock.

An illustrated address by Prof. D. Lange, Principal Humboldt High School, St. Paul, on "Our Vanishing Wild Flowers," a subject of interest to us all-many lantern slides.

Are you taking part in the apple seedling contest? See page 13.

THURSDAY FORENOON SESSION.

9:00 o'clock.

Secure Your Banquet Ticket.

A thirty-minute "Question and Answer" exercise on "Spraying," led by H. U. Beebe, Field Manager, Jewell Nursey Co., Lake City.

9:30 o'clock.

President Cashman in the Chair.

1. Report of Committee on Fruit List. J. P. Andrews, G. W. Strand, T. E. Cash-

. Adoption of Fruit List.

Annual Reports.

Report of Executive Board, Wyman Elliot. Report of Secretary, A. W. Latham. Report of Treasurer, Geo. W. Strand.

On account of the very full program the annual reports of the vice-presidents and supperintendents of Trial Stations will be filed with the secretary for publication without reading.

Reports of Auxiliary Societies, 1911. Five-minute Reports.

Minnesota State Bee-Keepers' Society, Minnesota Rose Society, Woman's Auxiliary, Southern Minnesota Horticultural Society, North Dakota Horticultural Society, Kandiyohi County Horticultural Society, Red River Valley Horticultural Society, Minnesota State Forestry As-sociation, Lac qui Parle County Horticultural Society, Northeastern Minnesota Horticultural Society.

Top-Working.

1. A Visit to A. J. Philips' Top-Worked Or-LeRoy Cady, Prof. Hort., Minn. Agri. Col-

lege, St. Anthony Park.
2. Possibilities for Minnesota in Apple Raising by Top-Grafting—exhibiting twenty-four varieties of apples grown in his own or-chard top-worked on Virginia crab. A. J. Philips, Veteran Orchardist, West

Salem, Wis. 3. Winter Apples on Top-Worked Trees. Seth H. Kenney, Orchardist and Original Hort. Experimenter, Waterville.

4. My Top-Working Experience.

Henry Dunsmore, Farmer and Orchardist,

Present Status of Top-Working-made up from reports of members sent to the sec-

W. D. Valleau, Instructor, Minn. Farm School, St. Anthony Park.

S. D. Richardson, Nurseryman, Winnebago.

6. Attitude of the Nurseryman Towards Top-

THURSDAY AFTERNOON SESSION.

1:30 o'clock.

Don't Miss the Banquet.

"Developing the Commercial Orchard" will be the subject of the half hour "Question and Answer Exercise," led by Harold Simmons, orchardist, at Howard Lake, one of the largest and most successful apple growers in the Northwest.

2:00 o'clock.

President Cashman in the Chair.

A message from C. S. Harrison, York, Neb.

- 1. Tile Drainage in the Orchard. Prof. John T. Stewart, Professor of Engineering, State Agri, College, St. Anthony
- 2. Beauty and Utility of Trees by the Road-

Chas. M. Loring, Minneapolis.

3. Orchard Management. An exercise conducted by S. A. Beach, Professor of Horticulture, Iowa State Agri. College, Ames, Ia. 30 mins.

3:15 o'clock.

Annual Election of Officers.

Minnesota State Forestry Association. President J. E. Rhodes in the Chair.

1. President's Address. J. E. Rhodes, St. Paul.

- 2. Address by Henry C. Oldenburg, Carlton, Minn., representing the State Forestry Board.
- 3. The State Forest Service. W. T. Cox. State Forester, St. Paul.

4. The Duties of a Forest Ranger. W. L. Eisenach, Deer River.

- 5. The Duties of a Forest Patrolman.
- The Forest School in Itasca State Park. Robt. Wilson, Stillwater.

5:00 o'clock.

An illustrated lecture by Rev. Rett E. Olmsted, Excelsior, "The Birds of Orchard and Garden—What They Are Doing for Us. Instructive and entertaining.

At 6:00 o'clock we go in a body to the banqueting hall to dine together in the usual way.

NOTICE OF BEE-KEEPERS' MEETING.

The Minnesota State Bee-Keepers' Society will hold its annual meeting in the same building as the Horticultural Society on Thursday and Friday, Dec. 7 and 8, 1911.

THURSDAY EVENING 6:30 O'CLOCK

THE ANNUAL SOCIETY BANQUET

A Most Entertaining Program

"TOP NOTCH"

Will be held at the "Radisson."

Tickets will be for sale during the meeting by the secretary and assistants, also by the assistants in the fruit room.

TICKETS \$1.00

Notice.—Remain at the place of meeting and we will all go in a body to the banquet hall at 6 o'clock.

Secure a new member in 1912, and receive one of the valuable and practical works on horticulture given by the society as a premium. For list see "Society Folder."

We are working for 3,500 membership in 1912.

FRIDAY FORENOON SESSION.

All Discussions Open to Every One.

9:00 o'clock.

A thirty-minute "Question and Answer exercise" on the general subject of "Growing New Fruits," to be led by Chas. Haralson, Supt. Minn. State Fruit-Breeding Farm, Excelsior.

9:30 o'clock,

President in the Chair.

Fruits.

- The Farmer's Fruit Garden and Orchard. Henry Husser, Farmer and Fruit Grower, Minneiska.
- 2. No Hardy Trees without Hardy Roots. A. Brackett, Fruit Grower, etc., Excelsion.
- Apples on the Dryest Soil in Minnesota. Col. Freeman Thorp, Artist and Amateur Horticulturist, Hubert.
- Practical Orchard Pruning. Illustrated. K. A. Kirkpatrick, Horticulturist State Exp. Sta., St. Anthony Park.

10:30 o'clock. Plant Breeders' Auxiliary. (Wear the Button.)

J. M. Underwood, President, in the Chair.

- 1. The Plant Breeders' Auxiliary in 1911.
- Clarence Wedge, Secy., Albert Lea.
 The State Fruit-Breeding Farm for 1911.
 Chas. Haralson, Supt., Excelsior.
 Report of Committee on Examination of the
- 3. Report of Committee on Examination of the Minnesota State Fruit-Breeding Farm. Ed. Yanish, St. Paul; E. A. Smith, Lake
- My Malinda Seedling Orchard in 1911.
 T. E. Perkins, Farmer and Orchardist, Red Wins.
- 6. How We Can Aid the Fruit-Breeding Movement.
- M. J. Dorsey, Asst. in Plant Breeding, State Exp. Station, St. Anthony Park. 7. Experience Notes of the Season in Fruit-
- Breeding.
 Prof. N. E. Hansen, Horticulturist and
 Fruit Breeder, S. D. State Agri. College,
 Brookings, S. D.

Election of Officers.

Are there any good seedling apples, etc., in your neighborhood? Get them and the owner of the trees to the annual meeting. Do your neighbors a favor by urging them to attend.

FRIDAY AFTERNOON SESSION.

1:30 o'clock.

The "Question and Answer" half hour will be occupied with this subject: "Handling the Apple Crop," led by Wm. M. McDonald, Manager, Excelsior Fruit Growers' Association, Excelsior.

2:00 o'clock.

President in the Chair.

Spraying and Marketing.

- Spraying Materials and Foliage Injury. H. M. Ashby, Supt. Insecticide Dept., Sherwin & Williams, Chicago.
- Spraying in 1911.
 Prof. A. G. Ruggles, Asst. Entomologist, Minn. State Agri. College, St. Anthony Park.
- Needed Changes in the Horticultural Inspection Law.
 H. B. Scammell, Asst. Nursery Inspector, St. Anthony Park.
- Marketing Apples From a Commercial Orchard.
 S. G. Kinney, Nurseryman and Orchardist, Faribault.
- Providing a Market for Fruit.
 D. M. Mitchell, Nurseryman, Owatonna.

3:30 o'clock.

Two-minute speeches by members.

4:00 o'clock.

Closing remarks by the President. Adjournment.

PRIZES FOR SEEDLING FRUITS.

Offered by the Society.

1. ONE THOUSAND DOLLARS is offered as a Premium by this Society for a Seedling Apple Tree "as hardy and prolific as the Duchess, with fruit equal to the Wealthy in size, quality and appearance, and that will keep as well as the Malinda."

2. ONE HUNDRED DOLLARS (contributed by Chas. M. Loring, of Minneapolis), is offered for a seedling plum.

CHINKING.

The following subjects will be called up at any point in the program where opportunity offers. Experience shows that there will be such openings, when we may expect to hear from these friends. But to be sure of getting this you must be on hand both early and late.

- Drouth Resistance in Trees Suitable for Shelter Belts.
 C. B. Waldron, Prof. Hort., N. D. Agri. College, Fargo, N. D.
- Varieties of Apples for Commercial Orchard
 —Their Planting and Care.
- G. A. Anderson, Fruit Grower, Renville.

 3. Trees and Tree Planting.

 Col W A Burnan Delegate N E Jowa
- Col. W. A. Burnap, Delegate N. E. Iowa Hort. Society.

 4. Promoting and Arranging Fruit Exhibits at
- the County Fair.
 C. M. Jenson, Supt. Hort., Freeborn County Fair, Albert Lea.
- What to Do with the Unsalable Apple. Emil Sahler, Farmer and Fruit Grower, Wassea.

NOTES.

SPECIAL PRIZES OFFERED BY THE SO-CIETY FOR SEEDLING APPLES.

ONE HUNDRED DOLLARS is offered annually (total \$700) for seven years for the best Late Winter Seedling Apple. Under this offer the first prize of \$100 will be awarded at the annual meeting of the Society to be held in 1912. A similar prize of the same amount will be awarded at the annual meeting each year thereafter until seven such prizes have been awarded. These prizes are to be given for seedling apples grown from seed planted not earlier than the spring of 1906, under prescribed conditions.

Fuller Information will be furnished by the secretary upon application as to this prize contest. Open to all. The fruits you grow from selected seed are likely to be of value. You may win a prize!

Membership in 1911.

Annual	(up	to	Nov. 1	, 1911)	2587
Life					278
Total					2865

OFFICERS:

President.

Thos. E. CashmanO

Vice-Presidents.

C. I	ry Husser1st Cong. Dist., Minneiska E. Older2nd Cong. Dist., Luverne
L. Y	
Har J. I	old Simmons6th Cong. Dist., Howard Lake Lake Teigland7th Cong. Dist., Minneota
	L. Ketchum8th Cong. Dist., Brookpark A. DeSmidt9th Cong. Dist., Battle Lake

Treasurer.

	Geo.	W. Strand	Taylors	Falls
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Executive Board.

The president	and	secretary	are	members	éx-
officio.	ent.	and the second second second			

		Chairman,		
				polis
Prof. Le	Roy Ca	dy, term ex	Anthony	Donl-

John P. Andrews, term expires 1913Faribault
Lycurgus R. Moyer, term expires 1913
Montevided

Clarence Wedge, term expires 1911...Albert Lea J. M. Underwood, term expires 1911...Lake City

Secretary.

A. W. Latham......Minneapolis Office and Library, 207 Kasota Block.

Superintendents of Trial Stations.

Prof. LeRoy Cady, State Experiment Station; Thos. E. Cashman, Owatonna; Dewain Cook, Windom; A. B. Lyman, Excelsior; F. I. Harris, La Crescent; L. R. Moyer, Montevideo; Mrs. Jennie Stager, Sauk Rapids; F. J. Cowles, West Concord; A. B. Hostetter, Duluth; A. H. Reed, Glencoe; Rev. John B. Katzner, Collegeville; Seth H. Kenney, Waterville; Frank Brown, Paynesville; M. Soholt, Madison; Jas. Arrowood, Nevis.

Program

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Forty-Fifth Annual Meeting

Minnesota State Horticultural Society

To be held in the audience room of the First Unitarian Church, corner 8th St. and Mary Place.

Minneapolis

Tuesday, Wednesday, Thursday, Friday, Dec. 5, 6, 7, 8, 1911

The fruit show will be in the basement and may be reached from the audience room or directly from the Mary Place entrance.

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The Minnesota State Forestry Association, the Minnesota Rose Society, the Plant Breeders' Auxiliary, the Woman's Auxiliary and the Minnesota State Bee-Keepers' Society meet with us and will be found to have some part on the program.

Bring this program with you to the meeting—and be sure to come!

PLEASE REGISTER.

Each person in attendance at the meeting is requested to sign the Register to be found on ' the table in the entrance hall.

Place of Meeting.

The annual meeting is to occupy the same accommodations in the First Unitarian Church, corner Eighth St. and Mary Place, that have been used now so acceptably for a number of years, the society meeting in the audience room, the fruit exhibit being displayed in the large basement room immediately beneath, with a roomy cloak room situated immediately between the two.

Fruit Exhibit.

A large fruit exhibit is assured, including over 100 boxes of apples shown without offer of premiums by members of the society in lots of five boxes and upwards. Competition in seedling apples and top-worked apples is open to western Wisconsin, northern Iowa, North and South Dakota and Manitoba. Be sure to bring something as a contribution to this fruit display. See list of premiums on last pages of this program.

Program.

Look at the program, and you will have some idea of what is in store for you. None we have ever issued has contained a greater diversity of topics, interspersed with unusual features of special interest.

QUESTION AND ANSWER EXERCISES. To give opportunity for free discussion of topics of general interest to the members, a half-hour has been set aside just preceding the opening of each session of this meeting except the first. These exercises are led by members versed in the various topics considered and give opportunity for the securing of desired information. It is suggested that members send questions beforehand to the secretary. A question box will also be provided at the meeting that can be used for a similar purpose, or questions can be asked orally of the leader during the exercise. Come early and get the full benefit!

Extend Invitation. Don't forget to invite your friends to this meeting. Neither forget the wife, who will enjoy an outing and meeting of this kind as well or better than you—nor the son or daughter, who is to follow you in this work.

Reduced Railroad Rates.

We are unlikely to secure reduced rates to the meeting—as the program goes to press we have not yet succeeded. In purchasing your ticket to the meeting get a certificate from the agent of whom it is purchased, showing you have paid full fare to the meeting. These will be needed if the rate is secured.

HOTEL ANDREWS IS SOCIETY HEAD-QUARTERS.

This new six-story, solid concrete hotel is conveniently located diagonally opposite the office of the society, on the corner of 4th Street and Hennepin Avenue. There is a good cafe in the building, and a number of other good restaurants and hotels adjoin. Rates to members are \$1.00 per day, one in a room, or seventy-five cents per day each for two in a room. Rooms with bath, for one \$1.50, for two in the room \$1.25 each. When asking for room state the price you wish to pay and that you are attending the Horticultural meeting. Should accommodations at satisfactory rates prove in-sufficient, Hotel Vendome, with similar rates, is only a few doors away.

A large room (M12) will be provided as headquarters of the society, to be used by the members for social purposes. The location of this room can be learned from the clerk at the

hotel.

It would be well for members to address the hotel directly and make reservation of rooms as long a time beforehand as possible, to make sure of accommodations-always stating when you will arrive and depart and the price you wish to pay, as there are higher priced rooms in the house.

PRUNING, GRAFTING AND CROSS-POL-LINATION, PACKING OF APPLES AND SPRAYING.

Each day of the annual meeting, from 1:00 to 2:00 o'clock p. m., the arts of grafting, packing of apples, cross-pollination, spraying and pruning will be taught as regular class exercises in the fruit room, and members can avail themselves of these opportunities to become proficient in these various arts. demonstration in grafting will be led by Mr. W. D. Valleau, that in cross-pollination by Mr. Arne Aamodt, the packing of fruit by Prof. A. R. Kohler, spraying by Prof. A. G. Ruggles, and pruning by Prof. K. A. Kirkpatrick—all of these demonstrators being connected with the State Experiment Station at St. Anthony Park. Look for the signs in the fruit room directing to these various exercises.

Discussion following each topic.

No persons are selected to open the discussion which may follow the presentation of each topic. Discussions "free for all," whether members or not. Ask questions or express opinions

For further information address the officers of the society. See last page of this program. THOS. E. CASHMAN. Pres.

Owatonna.

A. W. LATHAM, Secv. 207 Kasota Block. Minneapolis, Minn.

NOTICE:-A bell will be rung in the Fruit Room five minutes before the exercises begin in the Audience Room.

A TEN MINUTE LIMIT ON ALL PAPERS.

On account of the fullness of the program and to allow plenty of time for discussion, those presenting topics are requested to limit themselves to ten minutes, or 1,000 words, except as noted. A call bell will be struck at the expiration of the time limit.

TUESDAY MORNING SESSION.

9:30 o'clock.

Every member attending should not fail to be in his seat promptly when this session opens. Organ Solo, ending at 9:30 o'clock,

Invocation....Rev. Rett E. Olmstead, Excelsior Song......Mr. Trafford N. Jayne, Minneapolis President's Annual Greeting Thos. E. Cashman, Owatonna

- 1. Evolution of the Everbearing Strawberry. Geo. J. Kellogg, Veteran Berry Grower and Nurseryman, Lake Mills, Wis.
- 2. My Top-Worked Orchard. E. G. E. Reel, Fruit Grower, Excelsior.
- 3. Sorting and Packing Apples. C. E. Snyder, Orchardist, Preston.
- 4. Timely Horticultural Notes. E. A. Smith, Vice-Pres. Jewell Nursery Co., Lake City.
- 5. Incidents and Anecdotes in Developing Irrigation with Lake Muck.
 - C. R. Sandvig, Amateur Horticulturist, Belgrade, 15 mins.

Appointment of committees on credentials and award of premiums.

N. B .- Speak of Demonstrations in Fruit Room.

Announce exercise at 1:30 p. m.

This session will close promptly at 11:30 o'clock.

All annual memberships expire on the first day of the annual meeting. Renew or become a member by paying the Secretary \$1.00.

Membership fees will be paid to the Assistant Secretary in the Hallway.

TUESDAY AFTERNOON SESSION.

1:30 o'clock.

Discussions open to everybody.

The Question and Answer Exercise to occupy this half-hour will be on "Small Fruit Growing," and led by one of our most successful gardeners, Mr. E. B. Miller, of Bloomington.

2:00 o'clock.

President Cashman in the Chair. Reception of Delegates.

Small Fruits and Other Things.

- 1. The Strawberry Field. Preston McCully, Fruit Grower, Maple Plain.
- 2. My Way With Strawberries. F. L. Marsh, Fruit Grower and Architect, Champlain,
- 3. The Beta Grape and Its Origin.
- Wm. Pfaender, Jr., Nurseryman, New Ulm. 4. The House Fly a Nuisance and How to Abate It-showing a new fly catcher. Prof. F. L. Washburn, Entomologist, University of Minn., St. Anthony Park.
- 5. How a Farmer Raises Melons. Knute Swennes, Farmer, Minneota.
- 6. Landscape Gardening on the Farm. Illustrated with designs.
- E. C. Hilborn, Nurseryman and Institute Lecturer, Valley City, N. D. 7. Harvesting and Storing Seed Corn for Both
- Field and Garden Uses. Chas, W. Hendricks, Director of Agricultural School, Spring Valley.
- 8. The Raspberry Field. Oscar Seamons, Small Fruit Grower, Ex-
- 9. Minnesota as a Fruit State and Its Possibilities Compared With Other States. E. W. Reid, with Holm & Olson, Florists,

St. Paul.

4:15 o'clock.

A Lantern Talk by Prof. N. E. Hanson, "Views at Home and Abroad." Accompanying which he will recite some of his interesting experiences in search of new things in horticulture.

Are you a member of the Plant Breeders' Auxiliary? If you are growing seedlings and are a member of the Horticultural Society, you should join it at once. No expense. Consult the secretary.

WEDNESDAY FORENOON SESSION.

9:00 o'clock.

Discuss each topic freely.

A half hour question and answer exercise on "Growing Flowers," led by that expert flower grower, Mrs. H. B. Tillotson, Minneapolis. Give her strong support in this exercise for your own good.

9:30 o'clock.

President Cashman in the Chair.

Prize paper on Horticultural Topic by student in Minnesota College of Agriculture awarded first premium from "Gideon Memorial Fund."

Orchard Fruits.

1. An Outdoor Storage Cellar. F. L. Marsh, Fruit Grower and Builder, Champlin.

2. My Experience with a Carload of Apples and a Commission House.

F. W. Kimball, Orchardist, Austin. 3. Packing and Marketing.

A. R. Kohler, Asst. Hort., Minn. Agri.
College, St. Anthony Park.
Co-operation, not Competition, the Secret of
Horticultural Success. Roy D. Underwood, Secy. Jewell Nursery

Co., Lake City.
5. The Prospects of Commercial Apple Grow-

ing in the Middle West.

Jas. G. Moore, Prof. Hort. Wis. College of Agri. and Delegate Wis. State Hort. Society, Madison, Wis. 15 mins.

11:00 o'clock.

Minnesota State Rose Society.

Mrs. H. A. Boardman, President, in the Chair.

1. My Summer in a Garden.

Miss Sabra M. Ellison, Amateur Flower

Grower, Minneapolis. 2. Three Hardy Perennials.

J. P. Brown, Flower and Plant Grower, Excelsior.

3. Ornamental Planting for Winter Effects. Chas, H. Ramsdell, Landscape Architect, Minneapolis.

4. Combating Aster Disease. Mrs. Robt. Odell, Minneapolis.

You can become a life member of the State Horticultural Society by payment of \$10.00, in two annual payments of \$5.00 each if you prefer. This will entitle you to a file of our bound reports, a library in itself.

WEDNESDAY AFTERNOON SESSION.

1:30 o'clock.

Discussions Open to All.

A half hour "Question and Answer Exercise" on "The Vegetable Garden," led by H. J. Baldwin, of Northfield, a grower of vegetables for market of long experience.

2:00 o'clock.

President Cashman in the Chair.

Give notice of business meeting of Woman's Auxiliary at once in adjoining room. All ladies present invited to attend.

Plums and Other Trees.

- 1. Hybrid Plums and What We May Expect from Them.
 - Dewain Cook, Fruit Grower and Gardener,
- 2. Comparative Value of Japanese Hybrid and Americana Plums for Minnesota Planting. W. J. Tingley, Orchardist, Forest Lake.
- 3. Is the Catalpa Worth Planting in Minnesota?
- Clarence Wedge, Nurseryman, Albert Lea. 4. Evergreens in the Dryer Sections of Minne-
- Peter Siverts, Canby. 5. Evergreen and Deciduous Windbreaks for the Western Prairies.
 - John W. Maher, Nurseryman, Devils Lake, N. D.

3:15 o'clock.

Woman's Auxiliary.

Miss Emma V. White, President, in the Chair.

- 1. From the City to the Country. Mrs. E. E. Lundgren, St. Paul and Cannon
- 2. Interesting the Children in Horticulture. S. H. Drum, Retired Farmer and Fruit
- Grower, Owatonna. 3. Some Native Wild Flowers Suitable for Cultivation.
 - Miss Eloise Butler, Supt. Wild Flower Dept., Minneapolis Parks, Minneapolis. 4. Seventh Year in Civic Improvement Work
 - in Lake City. Mrs. Anna B. Underwood, Lake City.

4:30 o'clock.

An illustrated address by Prof. D. Lange, Principal Humboldt High School, St. Paul, on "Our Vanishing Wild Flowers," a subject of Interest to us all—many lantern slides.

Are you taking part in the apple seedling contest? See page 13.

THURSDAY FORENOON SESSION.

9:00 o'clock.

Secure Your Banquet Ticket.

A thirty-minute "Question and Answer" exercise on "Spraying," led by H. U. Beebe, Field Manager, Jewell Nursey Co., Lake City.

9:30 o'clock.

President Cashman in the Chair.

 Report of Committee on Fruit List. J. P. Andrews, G. W. Strand, T. E. Cashman.

. Adoption of Fruit List.

Annual Reports.

Report of Executive Board, Wyman Elliot. Report of Secretary, A. W. Latham. Report of Treasurer, Geo. W. Strand.

On account of the very full program the annual reports of the vice-presidents and supperintendents of Trial Stations will be filed with the secretary for publication without reading.

Reports of Auxiliary Societies, 1911.

Five-minute Reports.

Minnesota State Bee-Keepers' Society, Minnesota Rose Society, Woman's Auxiliary, Southern Minnesota Horticultural Society, North Dakota Horticultural Society, Kandiyohi County Horticultural Society, Red River Valley Horticultural Society, Minnesota State Forestry Association, Lac qui Parle County Horticultural Society, Northeastern Minnesota Horticultural Society,

Top-Working.

 A Visit to A. J. Philips' Top-Worked Orchard. LeRoy Cady, Prof. Hort., Minn. Agri. College, St. Anthony Park.

 Possibilities for Minnesota in Apple Raising by Top-Grafting—exhibiting twenty-four varieties of apples grown in his own orchard top-worked on Virginia crab.
 A. J. Philips, Veteran Orchardist, West

Salem, Wis.
3. Winter Apples on Top-Worked Trees.
Seth H. Kenney, Orchardist and Original
Hort. Experimenter, Waterville.

 My Top-Working Experience. Henry Dunsmore, Farmer and Orchardist,

 Present Status of Top-Working—made up from reports of members sent to the secretary.

W. D. Valleau, Instructor, Minn. Farm School, St. Anthony Park.

 Attitude of the Nurseryman Towards Top-Working.
 D. Richardson, Nurseryman, Winnebago.

THURSDAY AFTERNOON SESSION.

1:30 o'clock.

Don't Miss the Banquet.

"Developing the Commercial Orchard" will be the subject of the half hour "Question and Answer Exercise," led by Harold Simmons, orchardist, at Howard Lake, one of the largest and most successful apple growers in the Northwest.

2:00 o'clock.

President Cashman in the Chair.

A message from C. S. Harrison, York, Neb.

- Tile Drainage in the Orchard. Prof. John T. Stewart, Professor of Engineering, State Agri. College, St. Anthony Park.
- Beauty and Utility of Trees by the Roadside. Chas. M. Loring, Minneapolis.
- Orchard Management.
 An exercise conducted by S. A. Beach, Professor of Horticulture, Iowa State Agri, College, Ames, Ia. 30 mins.

3:15 o'clock.

Annual Election of Officers.

Minnesota State Forestry Association.

President J. E. Rhodes in the Chair.

- President's Address.
 J. E. Rhodes, St. Paul.
- 2. Address by Henry C. Oldenburg, Carlton, Minn., representing the State Forestry Board.
- 3. The State Forest Service. W. T. Cox, State Forester, St. Paul.
- 4. The Duties of a Forest Ranger. W. L. Eisenach, Deer River.
- 5. The Duties of a Forest Patrolman.
- 6. The Forest School in Itasca State Park. Robt. Wilson, Stillwater.

5:00 o'clock.

An illustrated lecture by Rev. Rett E. Olmsted, Excelsior, "The Birds of Orchard and Garden—What They Are Doing for Us. Instructive and entertaining.

At 6:00 o'clock we go in a body to the banqueting hall to dine together in the usual way.

NOTICE OF BEE-KEEPERS' MEETING.

The Minnesota State Bee-Keepers' Society will hold its annual meeting in the same building as the Horticultural Society on Thursday and Friday, Dec. 7 and 8, 1911.

THURSDAY EVENING 6:30 O'CLOCK

THE ANNUAL SOCIETY BANQUET

A Most Entertaining Program

"TOP NOTCH"

Will be held at the "Radisson."

Tickets will be for sale during the meeting by the secretary and assistants, also by the assistants in the fruit room.

TICKETS \$1.00

Notice.—Remain at the place of meeting and we will all go in a body to the banquet hall at 6 o'clock.

Secure a new member in 1912, and receive one of the valuable and practical works on horticulture given by the society as a premium. For list see "Society Folder."

We are working for 3,500 membership in 1912.

FRIDAY FORENOON SESSION.

All Discussions Open to Every One.

9:00 o'clock.

A thirty-minute "Question and Answer exercise" on the general subject of "Growing New Fruits," to be led by Chas. Haralson, Supt. Minn. State Fruit-Breeding Farm, Excelsior.

9:30 o'clock.

President in the Chair.

Fruits.

- The Farmer's Fruit Garden and Orchard. Henry Husser, Farmer and Fruit Grower, Minnelska.
- Minneiska,
 2. No Hardy Trees without Hardy Roots.
 A. Brackett, Fruit Grower, etc., Excelsior.
- 3. Apples on the Dryest Soil in Minnesota.
 Col. Freeman Thorp, Artist and Amateur
 Horticulturist, Hubert.
- Practical Orchard Pruning. Illustrated. K. A. Kirkpatrick, Horticulturist State Exp. Sta., St. Anthony Park.

10:30 o'clock.

Plant Breeders' Auxiliary. (Wear the Button.)

J. M. Underwood, President, in the Chair.

- 1. The Plant Breeders' Auxiliary in 1911.
- Clarence Wedge, Secy., Albert Lea.
 2. The State Fruit-Breeding Farm for 1911.
- Chas, Haralson, Supt., Excelsior.
 3. Report of Committee on Examination of the Minnesota State Fruit-Breeding Farm.
 Ed. Yanish, St. Paul; E. A. Smith, Lake
- 5. My Malinda Seedling Orchard in 1911. T. E. Perkins, Farmer and Orchardist,
- Red Wing.
 6. How We Can Aid the Fruit-Breeding Move-
 - M. J. Dorsey, Asst. in Plant Breeding,
- State Exp. Station, St. Anthony Park.

 7. Experience Notes of the Season in Fruit-Breeding.
 - Prof. N. E. Hansen, Horticulturist and Fruit Breeder, S. D. State Agri. College, Brookings, S. D.

Election of Officers.

Are there any good seedling apples, etc., in your neighborhood? Get them and the owner of the trees to the annual meeting. Do your neighbors a favor by urging them to attend.

FRIDAY AFTERNOON SESSION.

1:30 o'clock.

The "Question and Answer" half hour will be occupied with this subject: "Handling the Apple Crop," led by Wm. M. McDonald, Manager, Excelsior Fruit Growers' Association, Excelsior.

2:00 o'clock,

President in the Chair.

Spraying and Marketing.

- Spraying Materials and Foliage Injury.
 H. M. Ashby, Supt. Insecticide Dept., Sherwin & Williams, Chicago.
- Spraying in 1911.
 Prof. A. G. Ruggles. Asst. Entomologist, Minn. State Agri. College, St. Anthony Park.
- Needed Changes in the Horticultural Inspection Law.
 H. B. Scammell, Asst. Nursery Inspector, St. Anthony Park.
- Marketing Apples From a Commercial Orchard.
 S. G. Kinney, Nurseryman and Orchardist, Faribault.
- Providing a Market for Fruit.
 D. M. Mitchell, Nurseryman, Owatonna.

3:30 o'clock.

Two-minute speeches by members.

4:00 o'clock,

Closing remarks by the President. Adjournment.

PRIZES FOR SEEDLING FRUITS.

Offered by the Society.

- 1. ONE THOUSAND DOLLARS is offered as a Premium by this Society for a Seedling Apple Tree "as hardy and prolific as the Duchess, with fruit equal to the Wealthy in size, quality and appearance, and that will keep as well as the Malinda."
- 2. ONE HUNDRED DOLLARS (contributed by Chas. M. Loring, of Minneapolis), is offered for a seedling plum.

CHINKING.

The following subjects will be called up at any point in the program where opportunity offers. Experience shows that there will be such openings, when we may expect to hear from these friends. But to be sure of getting this you must be on hand both early and late.

- Drouth Resistance in Trees Suitable for Shelter Belts.
 B. Waldron, Prof. Hort., N. D. Agri. College, Fargo, N. D.
- Varieties of Apples for Commercial Orchard
 —Their Planting and Care.
 G. A. Anderson, Fruit Grower. Renville.
- Trees and Tree Planting.
 Col. W. A. Burnap, Delegate N. E. Iowa Hort. Society.
- Promoting and Arranging Fruit Exhibits at the County Fair.
 M. Jenson, Supt. Hort., Freeborn County Fair. Albert Lea.
- 5. What to Do with the Unsalable Apple. Emil Sahler, Farmer and Fruit Grower, Waseca.

NOTES.

SPECIAL PRIZES OFFERED BY THE SO-CIETY FOR SEEDLING APPLES.

ONE HUNDRED DOLLARS is offered annually (total \$700) for seven years for the best Late Winter Seedling Apple. Under this offer the first prize of \$100 will be awarded at the annual meeting of the Society to be held in 1912. A similar prize of the same amount will be awarded at the annual meeting each year thereafter until seven such prizes have been awarded. These prizes are to be given for seedling apples grown from seed planted not earlier than the spring of 1906, under prescribed conditions.

Fuller information will be furnished by the secretary upon application as to this prize contest. Open to all. The fruits you grow from selected seed are likely to be of value. You may win a prize!

PREMIUM LIST, ANNUAL MEETING, 1911.

Thos. Redpath, Supt. Fruit Room. Frank I. Harris. Assistant. Geo. W. Strand. Entry Clerk.

All entries must be made with the Secretary at least one week before the date of the annual meeting, and blanks may be secured of the Secretary for this purpose.

All exhibits must be in place by 9 o'clock A. M. of the first day of the meeting to be en-

titled to compete for premiums.

Exhibitors competing must be members of this society and growers of the articles exhibited.

The rules governing the horticultural department of the Minnesota State Fair will be applied except where they conflict with this list.

Grapes.

Each variety shown.... .75 .50 .25 APPLES (not including crabs).

Each variety (may or may not have been in cold storage) included in the 1911 fruit list of the society, or in the 1911 premium list of the Minnesota .30 .40 Collection, not to exceed ten nor less than six varieties\$20.00, to be divided pro rata.

Pecks of Apples.

Peck of any variety of apples, the fruit exhibited to be at the disposal of the society. An exhibitor may enter a peck each of as many different kinds as he pleases. \$25.00 to be divided pro rata.

Top-Worked Apples.

Collection of named varieties grown on scions top-grafted on other trees. Accompanying the name of each variety, shown on the same label (to be furnished by the management), must be noted the name of the variety on which it is top-worked. \$25.00 to be divided pro rata. Competition in "top-worked apples" is open

SEEDLING APPLES.

Five specimens (not less than 21/4 inches in diameter) must be furnished of each variety

Entries of seedling apples can be made only by owner of the original tree or his sole authorized agent. Competition is open to all except on such varieties as are being propagated for sale by some person other than the originator.

to same territory as for seedling apples.

Competition in seedling apples is open also to

PREMIUM LIST-Continued.

the western half of Wisconsin, the northern third of Iowa, and all of North Dakota, South Dakota and Manitoba.

Premiums will be divided pro rata among all entries commended by the judges according to the comparative merit of each as a commercial

Before payment of premiums awarded on seedling apples, a history and description of the tree and its fruit, with samples of one and two year old wood from the tree, may be required.

N. B. The judges will at their discretion change entries of seedling apples from either class to the other.

EARLY WINTER SEEDLING-The fruit shown must not have been kept in cold storage. Premium \$40.00, to be divided pro rata.

LATE WINTER SEEDLING-Same conditions as for early winter seedlings except that if found necessary the fruit shown may be retained and final decision reserved till later in the winter.

Premiums \$60.00, to be divided pro rata. In each of the above two classes the varieties receiving the three highest awards will be designated as having received the first, second and third premium respectively.

BUSHEL BOXES OF APPLES.

Only one variety can be shown in a box. Bushel boxes of the standard size must be used. Awards will be based on the quality of the fruit, packing, etc.

BUSHEL BOX of any variety of apples, in-

cluding seedlings. \$30.00 to be divided pro rata. In addition to the above, the best box of apples will receive a Special Premium of Ten

Dollars.

NUTS.

Each variety of edible nuts, one quart.....\$1.00 .75 .50 .25

Have you planted any apple seed for the seedling contest referred to at the bottom of page 13-or perhaps you would like to make a further planting this year? We wish that every member of the society might take part in this interesting contest, which is almost sure to bring results of some value to each contestant, at least the experience will be of value in itself. Arrangements have been made to secure a moderate quantity of seed, which can be sent out to members for this purpose. Applications should be mailed at an early date to the secretary accompanied by the usual remittance of 10 cents for twenty-five seeds, which amount is intended to cover the cost of the seed to the society. For this purpose address the secretary.

Membership in 1911.

	(up	to	Nov.	1, 1911)	2587
Life		***			278
Total					2865

OFFICERS:

President.

Thos.	E.	CashmanOwatonna

Vice-Presidents.

Henry Husser1st Cong. Dist., Minner C. E. Older2nd Cong. Dist., Luve	erne
L. W. Smith4th Cong. Dist., Gler H. H. Pond5th Cong. Dist., Blooming	Paul
Harold Simmons. 6th Cong. Dist., Howard L. J. L. Teigland7th Cong. Dist., Minne	ake
C. L. Ketchum8th Cong. Dist., Brooks A. A. DeSmidt9th Cong. Dist., Battle L	ake

Treasurer.

Geo. W. S	Strand	. Taylors	Falls
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Executive Board.

	ident and	secretar	y are	members	ex-
officio.					

Wyman	Elliot.	Chairman,	term	expires
1912 .				Minneapolis

Prof. LeRoy Cady, term	expires 1912
	St. Anthony Park
John P. Andrews, term	
Lyenreus R. Mover, terr	

				Montey	video
Clarence W	edge, term	expires	1911	.Albert	Lea
J. M. Under					

Secretary.

Superintendents of Trial Stations.

Prof. LeRoy Cady, State Experiment Station; Thos. E. Cashman, Owatonna; Dewain Cook, Windom; A. B. Lyman, Excelsior; F. I. Harris, La Crescent; L. R. Moyer, Montevideo; Mrs. Jennie Stager, Sauk Rapids; F. J. Cowles, West Concord; A. B. Hostetter, Duluth; A. H. Reed, Glencoe; Rev. John B. Katzner, Collegeville; Seth H. Kenney, Waterville; Frank Brown, Paynesville; M. Soholt, Madison; Jas. Arrowood, Nevis.

Program

Forty-Sixth Annual Meeting

Minnesota State Horticultural Society

To be held in Assembly Hall, on the ground floor of the Court House,

(Come in at the 4th Street entrance)

Minneapolis

Tuesday, Wednesday, Thursday, Friday, December 3, 4, 5, 6, 1912

Our fruit show will be made in the main corridor opposite the 4th Street entrance to the Court House, where thousands will pass it daily.

All Are Cordially Invited—Ladies and Young People Especially

The Minnesota State Forestry Association, the Minnesota Rose Society, the Plant Breeders' Auxiliary, the Woman's Auxiliary and the Bee Keepers meet with us and will be found to have some part on the program.

AT Bring this program with you to the meeting—and be sure to come!

PLEASE REGISTER.

Each person in attendance at the meeting is requested to sign the Register to be found on the table in the entrance hall.

Place of Meeting.

The annual meeting is to be held in Assembly Hall, on the ground floor of the Court House, in Minneapolis, with the fruit display in the open corridor directly between the 4th Street entrance and Assembly Hall. A commodious cloak room will be found conveniently located at the right of the fruit exhibit.

Fruit Exhibit.

Notwithstanding the light apple crop of the past season, a large fruit exhibit is assured. Competition in seedling and topworked apples is open to include also western Wisconsin, northern Iowa, North and South Dakota and Manitoba. Be sure to bring something as a contribution to this fruit display. See list of premiums on last pages of this program.

Program.

Look at the program, and you will have some idea of what is in store for you. None we have ever issued has contained a greater diversity of topics, interspersed with unusual features of special interest.

Reduced Railroad Rates.

Each person attending either the Minnesota Forestry Association, the Bee-Keepers' Association or the Minnesota State Horticultural Society should secure a certificate from the railroad agent where the ticket is purchased (not prior to Nov. 29th or later than Dec. 5th) stating that fare has been paid from that point to Minneapolis.

This certificate properly signed at the meeting will enable the holder upon presentation, not later than Dec. 7, 1912, to the railroad agent in Minneapolis to purchase a return ticket for one-third the regular fare.

These certificates should all be handed to Secretary A. W. Latham, of the Horticultural Society, at the earliest opportunity after reaching Minneapolis, and they will be returned by the rallroad agent to each holder in person on the afternoon of Dec. 6th (not before). The agent will be in attendance to sign these certificates on Dec. 6th provided one hundred are secured. A fee of 25 cents will be collected by him for each certificate returned.

HOTEL VENDOME IS SOCIETY HEAD-QUARTERS.

This hotel is conveniently located one-half block from the office of the society, at No. 19 South Fourth Street, midway between Nicollet and Hennepin Avenues. There is a cafe in the bullding, and a number of other good restaurants and hotels adjoin. Rates to members are \$1.00 per room, one in room, or seventy-five cents per day each for two in a room. Room with bath, for one, \$1.50, for two in the room, \$1.25 each. Every room is provided with hot and cold water, electric lights, Tri-State telephone, etc.

A large room will be provided as headquarters of the society, to be used by the members for social purposes. The location of this room can be learned from the clerk at the hotel.

It would be well for members to address the hotel directly and make reservation for rooms as long a time beforehand as possible, to make sure of accommodations—always stating when you will arrive and depart.

PRUNING, GRAFTING, PACKING OF APPLES AND SPRAYING.

Each day of the annual meeting, from 1:00 to 2:00 o'clock p. m., the arts of top-grafting, packing of apples, propagation, spraying and pruning will be taught as regular class exercises in the audience room, and members can avail themselves of these opportunities to become proficient on these various arts. The demonstration in top-grafting will be led by Mr. R. M. Peterson, that in propagation by Mr. Arne Aamodt, the packing of fruit by Prof. A. R. Kohler, spraying by Prof. K. A. Kirkpatrick—all of these demonstrators being connected with the State Experiment Station at St. Anthony Park. Look for the signs in the audience room directing to these various exercises.

Discussion following each topic.

No persons are selected to open the discussion which may follow the presentation of each topic. Discussions "free for all," whether members or not. Ask questions or express opinions freely.

Extend Invitation.

Don't forget to invite your friends to this meeting. Neither forget the wile, who will enjoy an outing and meeting of this kind as well or better than you—nor the son or daughter, who is to follow you in this work.

For further information address the officers of the society. (See last page of this program.) THOS. E. CASHMAN, Pres.,

A. W. LATHAM, Sec'y... 207 Kasota Block, Minneapolis, Minn.

NOTICE:-A bell will be rung at the Fruit Exhibit five minutes before the exercises begin in the Audience Room.

A TEN MINUTE LIMIT ON PAPERS.

On account of the fullness of the program and to allow plenty of time for discussion. those presenting topics are requested to limit themselves to ten minutes, or 1,000 words. except as noted.

THESDAY MORNING SESSION.

9:30 o'elock.

Every member attending should not fail to be in his seat promptly when this session opens.

Invocation....Rev. C. S. Harrison, York, Neb. Song....Mr. Trafford N. Jayne, Minneapolis President's Annual Greeting Thos. E. Cashman, Owatonna

- The Mission of the Nurseryman.
 C. S. Harrison, Delegate Neb. State Horticultural Society, York, Neb.
- 2. The Farm Home Beautiful. E. C. Hilborn, Hort. Lecturer, N. D. Farmers' Institute, Valley City, N. D.
- 3. Irrigation in the Strawberry Field. Wm. Saunders, Gardener, Robbinsdale.
- 4. Double Cropping the Orchard. G. W. Strand, Nurseryman, Taylor's
- 5. Birds the Natural Friends of the Horticulturist. Rev. Rett E. Olmstead, Naturalist, Excelsior.

Appointment of committees on credentials and award of premiums.

N. B .- Speak of Demonstrations.

Announce exercise at 1:30 p. m.

This session will close promptly at 11:30 o'clock.

All annual memberships expire on the first day of the annual meeting. Renew or become a member by paying the Secretary \$1. Anyone may become a member by paying the annual fee of \$1.00.

Membership fees will be paid to the Assistant Secretary in the Hallway.

NOTICE:—The annual meeting of the Minnesota Fruit Association will be held Wednesday evening at 8 o'clock, at a place to be announced.

TUESDAY AFTERNOON SESSION.

1:30 o'elock.

Discussions open to everybody.

The Question and Answer Exercise to occupy this half-hour will be on "Winter Protection of Fruits," and led by J. M. Underwood, Pres. Jewell Nursery Co., Lake City.

2:00 o'clock.

President Cashman in the Chair. Reception of Delegates.

Small Fruits and Other Things.

- 1. A Minnetonka Raspberry Field. Preston McCully, Fruit Grower, Maple Plain.
- Growing Fancy Strawberries.
 Uri Miller, Berry Grower, Brookpark.
 Strawberry Culture.
 F. O. Wildhagen, Del. N. E. Ia. Hort.
- Society, Waterloo, Ia. 4. The Everbearing Strawberry as a Com-
- mercial Proposition. Chas. F. Gardner, Nurseryman, Osage,
- 5. The Cultivation of the Everbearing Strawberry. Geo. J. Kellogg, Retired Nurseryman, Lake Mills, Wis.
- 6. Grapes for the Home Garden. F. I. Harris, Fruit Grower, LaCrescent.

3:15 o'clock.

Minn. Garden Flower Association. Mrs. H. B. Tillotson, President.

- 1. The Rose in History. Mrs. R. B. Boyington, Duluth.
- The Shasta Daisy.
- C. C. Hunter, Minneapolis.
 3. Two Minute Talks on New or Uncommon Flowers as Grown by Members of the Minnesota Garden Flower Society.

Question Box.

The program will close with a stereopticon talk on "Ornamenting Home Grounds," by Phelps Wyman, Landscape Architect, Minneapolis.

Are you a member of the Plant Breeders' Auxiliary? If you are growing seedlings and a member of the Horticultural Society, you should join it at once. No expense. Consult the secretary.

WEDNESDAY FORENOON SESSION.

9:00 o'clock.

Discuss each topic freely.

A half hour question and answer exercise on "The Farmer's Orchard," led by Henry Husser, a successful farmer, of Minneiska.

9:30 o'clock.

Orchard Fruits.

Platform Demonstration in Pruning Orchard Trees, by Prof. K. A. Kirkpatrick. Horticulturist, Extension Division, State University.

- The Horticultural Needs of State as Viewed from Institute Platform.
 A. D. Wilson, Supt. Farmers' Institutes, St. Paul.
- 7. The Minnesota Fruit Association.
- K. A. Kirkpatrick, its first manager.
 Cedar Rust in the Orchard.
- Fred O. True, Mankato.
- Crown Grafting Apple Trees in the Nursery Row.
 - E. A. Smith, Vice Pres. Jewell Nursery Co., Lake City.
- 5. Growing an Orchard in the Red River Valley.
 - O. A. Th. Solem, Nurseryman, Halstad.
- Diseases of the Oak in Minnesota.
 Prof. E. M. Freeman, Prof. Botany and Pathology, State Agricultural College, St. Paul.
- Scope and Value of State Inspection.
 Prof. F. L. Washburn, State Inspector of Nurseries.
- Ginseng Growing No Pipe Dream.
 A. Brackett, Fruit Grower, Excelsior.

You can become a life member of the State Horticultural Society by payment of \$10.00, in two annual payments of \$5.00 each if you prefer. This will entitle you to a file of our bound reports, a library in itself.

WEDNESDAY AFTERNOON SESSION.

1:30 o'clock.

Secure your banquet ticket now.

A half hour "Question and Answer Exercise" on "The Windbreak and the Orchard," led by E. G. Cheynney, Professor of Forestry, State University.

2:00 o'clock.

President Cashman in the Chair.

The Establishment of Orchards on the Principle of Natural Selection to Obtain Inherent Qualities in the Propagation of Trees. Geo. T. Powell, Pres. Agri. Expert Association, Ghent, N. Y. 30 minutes. Ask questions of the speaker.

2:30 o'clock.

Minnesota State Forestry Association, Vice-President Prof. T. L. Haecker in the Chair,

President's Greeting.

Prof. T. L. Haecker, State Agri. College, St. Paul.

- 1. The Origin of the Hot Winds and How to Prevent Them.
 - Prevent Them.
 J. W. Maher, Devil's Lake, N. D.

2. The Forest Home.

Mrs. Gilman, Minneapolis.

- The Hardwood Forests of Southern Minnesota.
 P. C. Records, Ranger, State Forest
- Service.
 4. The Forests and the Big Game.
- W. T. Cox, State Forester, St. Paul.
- 5. The Need for State Forests. Mrs. C. J. Backus, St. Paul.
- 3. The Work of the Forest Ranger. Wm. Kilby, Ranger, State Forest Ser-
- vice.
 7. Why Minnesota Forests Should Not Be Reduced.
 - G. E. Marshall, Supervisor, Minnesota Natural Forests.
- 8. Our Second Industry and Its Future. Z. D. Scott, Pres. State Forestry Board.

4:15 o'clock.

The afternoon program to conclude with a lantern lecture on the subject of "Forests and Forest Industries," by Prof. E. G. Cheyney. Stay and enjoy this.

The Forestry Association will also hold a meeting on Wednesday evening, beginning at 8:00 o'clock.

THURSDAY FORENOON SESSION.

9:00 o'elock.

Have you a Banquet Ticket?

A thirty-minute "Question and Answer" exercise on "The Top-Worked Orchard," led by O. W. Moore, Spring Valley.

9:30 o'clock.

President Cashman in the Chair.

1. Report of Committee on Fruit List. J. P. Andrews, G. W. Strand, T. E. Cashman. Adoption of Fruit List.

Annual Reports.

Report of Executive Board, Wyman Elliot, Chairman, Minneapolis. Report of Secretary, A. W. Latham. Report of Treasurer, Geo. W. Strand, Tay-

On account of the very full program the annual reports of the vice-presidents and superintendents of Trial Stations will be filed

with the secretary for publication without reading. (See list on page 16.)

Reports of Auxiliary Societies, 1911.

Two-Minute Reports

Minnesota State Bee-Keepers' Society, Minmesota Garden Flower Society, Minnesota Garden Flower Society, Southern Minnesota Horticultural Society, North Dakota Horticultural Society, Kandiyohi County Horticultural Society, Red River Valley Horticultural Society, Minnesota State Forestry Association, Lac qui Parle County Horticultural Society, Northeastern Minnesota Horticultural Society, State Florists' Society.

10:45 o'elock.

"Some Problems in the Extension of Apple Orchards. Is Production Going to Overtake Future Demand?" Geo. T. Powell, Horticultural Expert, Ghent, N. Y. 30 minutes.

Demonstration in Top-Working Orchard Trees. Prof. K. A. Kirkpatrick, Extension Division, State University.

1. Increasing Hardiness in Orchard Trees. Henry Dunsmore, Farmer-Orchardist, Olivia.

Failures and Successes in Orcharding and H. J. Ludlow, Farmer-Orchardist, Wor-

thington.

3. Dewberries for the Farm Garden. W. J. Hopkins, Small Fruit Grower, Station F, Minneapolis.

THURSDAY AFTENOOON SESSION.

1:30 o'elock.

Discuss these subjects.

"Fighting Insects in the Garden and Orchard," will be the subject of the half hour "Question and Answer Exercise," led by Prof. F. L. Washburn, State Entomologist.

2:00 o'elock.

President Cashman in the Chair.

1. New and Old Plums in 1912. Dewain Cook, Gardener and Fruit Grower, Jeffers.

2. Late Developments in the Plum.
M. Penning, Retired Farmer, New Ulm.
3. Plums for the Northwest.
Col. Freeman Thorp, Artist and Agri.
Experimenter, Hubert.

4. Judging Fruit.

A. R. Kohler, Asst. Horticulturist, State Agricultural College, St. Paul.

5. The Bee a Benefit to the Horticulturist.
E. L. Hofman, Bee-Keeper, Janesville.
6. The Causes of Failure in Fruit Growing. Gust Johnson, Fruit Grower, Minneapolis.

3:15 o'elock.

Annual Election of Officers.

3:45 o'elock.

Woman's Auxiliary.

Miss Emma V. White, President, in the Chair. From the City to the Farm.

Mrs. E. E. Lundgren, Cannon Falls. Demonstration Work in Horticulture for Public Schools.

Miss Elizabeth H. Foss, Teacher Mpls. Public Schools.

A Plea for the Birds from the Fruit Grower's Point of View.

S. H. Drum, Retired Farmer, Owatonna. A Message to the Women of the Rural Districts.

Mrs. E. H. Loyhed, Faribault. 20 min. Public Parks in Prairie Towns.

L. R. Moyer, Montevideo.

5:00 o'clock.

"Mimiery of Insects," a Lantern Talk by Prof. F. L. Washburn, State Entomologist.

At 6:00 o'clock we go in a body to the annual society banquet. Service at 6:30 o'clock. Don't stay away!

NOTICE OF BEE-KEEPERS' MEETING.

The Minnesota State Bee-Keepers' Society will hold its annual meeting in the same building as the Horticultural Society (in the Mayor's Reception Room) on Thursday and Friday, Dec. 5 and 6, 1912.

THURSDAY EVENING 6:30 O'CLOCK

THE ANNUAL SOCIETY BANQUET

A Most Entertaining Progam

"WAY IIP"

Will be held at Donaldson's

Tickets will be for sale during the meeting by the assistant secretary, also by the assistants with the fruit exhibit.

TICKETS \$1.00

Notice.-Remain at the place of meeting. and we will all go in a body to the banquet hall at 6 o'clock.

Secure a new member in 1913, and receive one of the valuable and practical works on horticulture given by the society as a premium. For list see "Society Folder."

We are working for 3,500 membership.

FRIDAY FORENOON SESSION.

All Discussions Open to Every One.

9:00 o'clock.

A thirty-minute "Question and Answer exercise" on the general subject of "The Market Garden," to be led by F. M. Libby, Market Gardener, Minneapolis,

9:30 o'clock.

President in the Chair.

Vegetables, Etc.

- 1. Marketing Garden Produce. A Talk. E. O. Ballard, Produce Merchant, Minneapolis.
- The Canning of Truck Crops. (Recital of a successful experiment with an outfit costing \$150, good for 1,000 cans a day.) Prof. A. T. Erwin, Del. Ia. Hort. Society,

Ames, Iowa.
"Orchard Cultural Methods. Pruning with Reference to Control of Insects and Yield of Fruit." Geo. T. Powell, Ghent, N. Y. 30 min.

10:30 o'clock.

Plant Breeders' Auxiliary. (Wear the Button.)

- Clarence Wedge, President, in the Chair.

 1. The Plant Breeders' Auxiliary in 1912.
 J. M. Underwood, Seey., Lake City.

 2. The State Fruit-Breeding Farm for 1911.
 Chas. Haralson, Supt., Excelsior.

 3. Report of Committee on Examination of
- of the Minnesota State Fruit-Breeding Farm.
- Dr. C. H. Mayo, Rochester, J. M. Underwood, Lake City, Comittee. 4. Scientific Principles Underlying the Art
- of Fruit Breeding. Dean A. F. Woods, State Agri. College,
- St. Paul. 5. Address.
 - Prof. N. E. Hansen, Horticulturist and Fruit Breeder, Brookings, S. D.
- 6. What is Hardiness? Prof. M. J. Dorsey, Expert in Plant Breeding, State Agricultural College, St. Paul.

Election of Officers, Plant Breeders' Auxiliary

Are there any good seedling apples, etc., in your neighborhood? Get them and the owner of the trees to the annual meeting. Do your neighbors a favor by urging them to attend.

FRIDAY AFTERNOON.

1:30 o'elock.

The "Question and Answer" half hour will be occupied with this subject, "Increasing and Maintaining Fertility," led by Harry Snyder, Mpls., late Professor of Chemistry, State Agri. College.

2:00 o'clock.

President in the Chair.

Pruning, Spraying and Marketing.

 Apple Conditions in the United States. Harold Simmons, Fruit Grower, Howard Lake.

Cultivation of the Orchard, with or without Cover Crops. Three 5 minute papers.

1. a. Jas. K. Dixon, N. St. Paul. b. Rev. F. Willis, Excelsior.

c. John Osborn, Dassel.

Lessons from a Spraying Experience.
D. E. Bingham, Pres. Wis. State Hort.
Society, Sturgeon Bay, Wis.

Spraying Under Minnesota Conditions.

 Spraying Under Minnesota Conditions.
 E. C. Stakman, Assistant Pathologist, State Agricultural Colelge, St. Paul.

 Packing Apples.
 W. M. McDonald, Manager, Excelsior Fruit Growers' Association.

3:30 o'clock.

Two-minute speeches by members.

4:00 o'elock.

Closing remarks by the President. Song.
Adjournment.

PRIZES FOR SEEDLING FRUITS.

Offered by the Society.

1. ONE THOUSAND DOLLARS is offered as Premium by this Society for a Seedling Apple Tree "as hardy and prolific as the Duchess, with fruit equal to the Wealthy in size, quality and appearance, and that will keep as well as the Malinda."

2. ONE HUNDRED DOLLARS (contributed by Chas. M. Loring, of Minneapolis), is offered for a seedling plum.

CHINKING.

The following subjects will be called up at any point in the program where opportunity offers. Experience shows that there will be such openings, when we may expect to hear from these friends. But to be sure of getting this you must be on hand both early and late.

 The Mole as a Garden Accessory. Dr. D. J. Kenney, Minneapolis.

 Pedigreed Nursery Stock. Prof. C. B. Waldron, Professor of Horticulture, Fargo, N. D.

 Observations in the Orchards of the the Northwest.

 J. F. Harrison, Farmer-Orchardist, Excelsior.

4. The Farmer's Apple Orchard. Fred Cramer, Farmer, Mapleton.

 Red Bark Native Rose as a Hedge Plant. F. E. Schotzko, Springfield.

 Paper winning first prize in 1913, Gideon Memorial Contest.

 A Top-Working and Seedling Experience. John Bisbee, Farmer and Orchard Experimenter, Madelia.

NOTES.

SPECIAL PRIZES OFFERED BY THE SO-CIETY FOR SEEDLING APPLES.

ONE HUNDRED DOLLARS is offered annually (total \$700) for seven years for the best Late Winter Seedling Apple. Under this offer the first prize of \$100 will be awarded at the annual meeting of the Society to be held in 1912. A similar prize of the same amount will be awarded at the annual meeting each year thereafter until seven such prizes have been awarded. This prize is to be given for the best late winter seedling apple grown from seed planted not earlier than the spring of 1906, "keeping at least till March 1st under ordinary cellar conditions."

Fuller information will be furnished by the secretary upon application as to this prize contest. Open to all. The fruits you grow from selected seed are likely to be of value. You may win a prize!

PREMIUM LIST, ANNUAL MEETING, 1912.

Thos. Redpath, Supt. Fruit Room.

Frank I. Harris, Assistant. Geo. W. Strand, Entry Clerk.

All entries must be made with the Secretary at least one week before the date of the annual meeting, and blanks may be secured of the Secretary for this purpose.

All exhibits must be in place by 9 o'clock A. M. of the first day of the meeting to be

entitled to compete for premiums.

Exhibitors competing must be members of this society and growers of the articles ex-

hibited.

The rules governing the horticultural department of the Minnesota State Fair will be applied except where they conflict with this list.

SEEDLING APPLES.

Five specimens (not less than 21/2 inches in diameter) must be furnished of each variety

exhibited.

Entries of seedling apples can be made only by owner of the original tree or his sole authorized agent. Competition is open to all except on such varieties as are being propagated for sale by some person other than the originator.

Competition in seedling apples is open also to the western half of Wisconsin, the northern third of Iowa, and all of North Dakota, South Dakota and Manitoba.

Premiums will be divided pro rata among all entries commended by the judges according to the comparative merit of each as a

commercial fruit.

Before payment of premiums awarded on seeding apples, a history and description of the tree and its fruit, with samples of one and two year old wood from the tree, may be required.

N. B. The judges will at their discretion change entries of seedling apples from either

class to the other.

EARLY WINTER SEEDLING-The fruit shown must not have been kept in cold storage.

Premium \$30.00, to be divided pro rata. LATE WINTER SEEDLING-Same conditions as for early winter seedlings except that if found necessary the fruit shown may be retained and final decision reserved until later in the winter.

Premium \$50.00, to be divided pro rata. In each of the above two classes the varieties receiving the three highest awards will be designated as having received the first. second and third premium respectively.

Grapes.

Each variety shown75 .50 .25 ... APPLES (not including crabs).

Each variety (may or may not have been in cold storage) included in the 1912 fruit list of the society, or in the 1912 premium list of the Minne-

sota State Fair50 .40 .30 Collection, not to exceed ten nor less than six

varieties\$20.00, to be divided pro rata

Pecks of Apples. Peck of any variety of apples, the fruit exhibited to be at the disposal of the society. An exhibitor may enter a peck each of as many different kinds as he pleases. \$25.00, to be divided pro rata.

Top-Worked Apples. Collection of named varieties grown on scions top-grafted on other trees. Accompanying the name of each variety shown on the same label (to be furnished by the management), must be noted the name of the variety on which it is top-worked, \$25.00, to be divided pro rata.

Competition in "top-worked apples" is open to same territory as for seedling apples.

Only one variety (not less than 2% in. in diameter) can be shown in a box. Bushel boxes of the standard size must be used. Awards will be based on the quality of the fruit, packing, etc.
SINGLE BOX of any variety of apples, in-

cluding seedlings, \$25.00, to be divided pro

In addition to the above, the best box of apples will receive a Special Premium of Five

Dollars.

Sweepstakes Exhibit of Apples in Boxes-Exhibitors in this class must show in lots of five boxes or some multiple thereof, that is, 5, 10, 15 or 20 boxes. Boxes of apples for this exhibit will be held in cold storage and delivered at the place of meeting without cost to the exhibitors, and a sum of money amounting to seventy-five cents for each box of apples shown will be divided among the exhibitors pro rata according to the merit and size of the exhibit. For instance, if there are 100 boxes shown altogether in this exhibit, \$75.00 will be divided pro rata among the exhibitors. If 150 boxes are shown, \$112.50 will be divided pro rata. The exhibitors of this fruit will retain the fruit and may sell it for delivery at the close of the exhibition.

NUTS. Each variety of edible nuts, one quart\$1.00 .75 .50 .25

Membership in 1912.

Annual	(up	to	Nov. 1,	1912)	 2743
Life					 291
Total	150.00				 3034

OFFICERS.

President.

Thos	Te	CashmanOwate	onna

Vice Presidents.

* **	H. Highby, 1st Cong. Dist Alber	+ T.oo
L. P	H. Highby, 1st Cong. Dist Aiber	hama
A. A	Johnson, 2nd Cong. Dist Winne	bago
J. S.	Jerabek, 3rd Cong. Dist Hutch	inson
A. J.	Wampler, 4th Cong. Dist White	Bear
F. L	Marsh, 5th Cong. DistChar	mplin
W	Elliot, 6th Cong. DistBr	iffalo
Chas	Bubak, 7th Cong. Dist	Olivia
N. N	Oslund, 8th Cong. DistCamb	ridge
Prof	Th. H. McCall. 9th Cong. Dist	· miliano
-	Crool	eston

Treasurer.

	Geo	W.	Strand	Taylors	Falls
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Executive Board.

The president and	secretary	are	mempers	ex-
officio.				

Wyman	Elliot,	Chairman,	term	expires
1912				Minneapolis

Prot.	Tie	ROY	Cauy,	reim	CYDIL	D TOTAL.	The sale
					St.	Anthony	Park
Tohn	P	And	rews.	term	expire	s 1913	
OCTIVE	20.0	2225				The	Ilanas 14

Lycurgus	R. Moyer,	term	expires 1913

Clarence Wedge, term expires 1914.... J. M. Underwood, term expires 1914 Lake City

Secretary.

Superintendents of Trial Stations.

Prof. LeRoy Cady, State Experiment Station; Thos. E. Cashman, Owatonna; Dewain Cook, Windom; A. B. Lyman, Excelsior; F. I. Harris, La Crescent; L. R. Moyer, Montevideo; Mrs. Jennie Stager, Sauk Rapids; F. J. Cowles, West Concord; A. B. Hostetter, Duluth; A. H. Reed, Glencoe; Rev. John B. Katzner, Collegeville; Seth H. Kenney, Waterville; Frank Brown, Paynesville; M. Soholt, Madison; Jas. Arrowwood, Nevis.

OFFICERS FOR 1900

PRESIDENT.

F. W. KIMBALL. First Congressional District
S. D. RICHARDSON, Second Winnebago City
Mrs. A. A. KENNEDY, Third Mrs. A. Kenned Mrs. J. Kenned Mr

SECRETARY (AND LIBRARIAN Ex-Officio.)

A. W. LATHAM,

Office and Library, 207 Kasota Block, Minneapolis, Minn.

TREASURER

A. B. LYMAN Excelsior.

EXECUTIVE BOARD.

(The president and secretary are members ex-officio,)
WYMAN ELLIOT, Chairman, 1 year , Minneapolis,
J. S. HARRIS, 1 year , La Crescent,
J. P. ANDREWS, 2 years , Faribault,
L. R. Moyen, 2 years , Montevideo,
PROF, S. B. GREEN, 3 years , S. Anthony Park,
CLARENCE WEDGE, 3 years , Albert Lea.

ASSISTANT LIBRARIAN.

E. A. CUZNER, Essex and 27th Ave. S. E. . . . Minneapolis.

Women's Auxiliary

OF THE

Minnesota State Horticultural Society.

PRESIDENT.

Miss Enha V. White, 818 Nicollet Avenue, Minneapolis, Minn.

SECRETARY.

MRS. ANNA B. UNDERWOOD, Lake City, Minn.

The object of this Society is to awaken and foster an active interest in Horticulture among the women of the state. It wishes to encourage the formation of Improvement Clubs in the country and small yillages. At its last annual meeting it was decided to have a simple form of constitution and by laws printed, together with suggestions for a program for the first meeting. This will be sent to all inquirers upon application. The object of these local clubs will be to take up some practical work that will bring out the beautiful possibilities of country life.

The Auxiliary will be glad to receive letters, both of in-

quiry and suggestion.

Annual fee, 25 cents, but members of the State Society become members upon application without further expense. For further information and literature address the Secretary.

LIST OF FRUITS

FOR THE GUIDANCE OF PLANTERS IN MINNESOTA.

Adopted by the Minnesota State Horticultural Society, December 7, 1899.

APPLES.

Of the first degree of hardiness for planting in Minnesota; buchess, Hibernal, Peterson's Charlamoff, Patten's Greening. Of the second degree of hardiness: Wealthy [1], Longfield [1] [3], Tetofsky, Malinda [1] [2],

Promising varieties for trial: Okabena, Peerless, Repka Melenka, Anisim, Yellow Sweet [2], Kaump [3], Gilbert, Brett, Christmas [2], Blushed Calville, Cross 413, White Pigeon [3].

CRABS AND HYBRIDS.

Best for general cultivation: Virginia, Martha, Whitney, Early Strawberry, Minnesota [2], Sweet Russet Gideon's No. 6, Briar's Sweet.

Promising varieties for trial: Dartt, Pride of Minneapolis, Crampton's No. 3, Lyman's Prolific, Faribault.

PLUMS.

Best for general cultivation: De Soto, Forest Garden, Weaver, Cheney, Wolf, Rollingstone, Wyant,

Most promising varieties for trial: Rockford, Ocheeda, New Ulm, Stoddard, Surprise, Mankato, Aitkin.

GRAPES.

Moore's Early, Worden, Janesville, (For severe situations), Agawam, Concord. Brighton, Delaware,

RASPBERRIES.

Red varieties: Turner, Marlborough, Cuthbert, Brandy-wine, Loudon,

Black and purple varieties: Ohio, Palmer Nemaha, Gregg, Schaffer, Older, Souhegan, Columbian, Kansas.

BLACKBERRIES.

Ancient Briton, Snyder, Badger.

CURRANTS.

Red Dutch, White Grape, Victoria, Stewart, Long Bunch Holland, North Star,

GOOSEBERRIES.

Houghton, Downing, Champion. Varieties for trial: Red Jaczet, Triumph, Pearl, Columbus.

STRAWBERRIES.

Pistillate: Crescent, Warfield, Haverland, Staminate: Bederwood, Capt. Jack, Wilson, Enhance, Lovett, Splendid, Mary.

NATIVE FRUITS'

Valuable for trial: Dwarf Juneberry, Sand Cherry, Buffalo Berry.

[1]. Does best top-worked. [2]. Tardy bearer, [3]. Early bearer,

PLEASE READ CAREFULLY

And hand to some one else interested in Horticulture.

1900.

Minnesota State Horticultural Society.

(Organized 1866.)

MEMBERSHIP IN 1899

...774...

N N N

President, W. W. PENDERGAST, Hutchinson, Minn

S 20 20

Secretary, A. W. LATHAM,

Office and Library, 207 Kasota Block,
Minneapolis, Minn.
(Office hours of the Secretary from 9 to 12 a, m. on Tuesdays,
Thursdays and Saturdays.)
Address Business Communications and all Remittan
ces to the Secretary.

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WHO SHOULD BECOME MEMBERS?

This society should include in its membership roll the names of every one in the state in any way interested in horticulture. The expense is small compared to the benefits received, and every person who buys or plants flowers, fruits, trees or vegetables in Minnesota would be immensely the gainer by becoming a member.

THE OBJECT OF THE SOCIETY

This Society, incorporated under the laws of the state, has for its work the gathering and dissemination of knowledge pertaining to forestry, fruit and vegetable growing, the culture of flowers, etc., adapted to the soil and climate of Minnesota. IT IS PURELY AN ED-UCATIONAL INSTITUTION and has no other purpose than as defined above.

The present working membership of the society consists of about eight hundred of the most active and wide-awake professional and amateur horticulturists throughout the Northwest.

The society holds annual summer and winter meetings, at which fruits, vegetables, flowers, etc., are exhibited, papers and reports on horticultural topics are read, and the personal opinions of the members secured in the discussions which follow.

Committees, selected from the members, have special charge of investigations in various branches of horticulture, and a number of trial stations in different parts of the state, under the charge of members, are making practical tests of things new and desirable. The reports made by these committees and by the superintendents of the trial stations, along with the papers and discussions and other information of value, are compiled by the secretary and PRINTED AT THE EXPENSE OF THE STATE.

The society receives also from the same source a mall annual appropriation to assist in carrying on its work.

MEMBERS

ANNUAL MEMBERS.-Any person may become a member of this society for the current year by payment of the annual fee of \$1.00, which pays for the magazine for that year, a handsome cloth bound copy of the Annual Report of the Society | 516 pages | for the preceding year, sent postpaid, and all the other privileges of membership for the year. Each annual member receives a handsome card lithograph membership ticket.

LIFE MEMBERS.-THE LIFE MEMBERSHIP FEE is \$10.00, payable in two annual installments of \$5.00 each, if preferred. Life members will receive a handsome lithograph certificate of membership, suitable for framing. They are entitled to ALL THE PRIVILEGES OF THE SOCIETY, including its publications, DURING LIFE; and to a file of the back reports, as complete as possible, some twenty volumes, constituting an invaluable horticultural library.

PREMIUMS FOR ALL MEMBERS. NEW AND OLD

NEW MEMBERS, AND ALL OLD MEMBERS WHO RENEW THEIR MEMBERSHIP FOR 1900 PRIOR TO FEB'Y, 1ST, are entitled to Two Premiums, provided the selection is made and the secretary notified at the time of sending the annual fee.

They will be sent POST-PAID.

Select one premium by number from the following list:

No. 1. One Rubus Zanthocarpus plant, to first 25.

- One Beta grape vine, to each of the first 30 who apply.
- 3. One Campbell's Early grape vine, to first 10.
 4. Three Nemaha raspberry plants (black), to first 100.
 5. Three Loudon raspberry plants (red), to first 100.
 6. Three King raspberry plants (red), to first 200.
- Two Columbus gooseberry plant, to first 25.
- 8. One Pearl gooseberry plant, to first 50. 9. One Red Jacket gooseberry plant, to first 50.
- " 10. Four Hibernal apple root grafts, to first 100.
- " 11. Four Anisim apple root grafts, to first 100. " 15. Two oxalis lutea bulbs, to first 100.
- " 13. Two Alternanthera plants (red and golden.)
- " 14. Four seedling buckthorn plants.
- 15. Four seedling hackberry plants.
 16. Four seedling red cedar plants.

Besides the above selection each member is entitled to TWO SEEDLING APPLE TREES, MAILING SIZE

raised from selected seed by the late PETER M. GIDEON, originator of the Wealthy and other noted varieties,

These trees are considered of special value and promise and are sent out only with the understanding that they shall be well cared for until they come into bearing and the results reported to the secretary. The trees, however, become the full property of those receiving them. We hope each member will recognize the high worth of this experiment work and secure two of these trees. (Offer limited to 1,200 trees.)

Any preferring can select a second premium from the above list instead of the Gideon Seedlings.

Right of substitution reserved.

PREMIUMS FOR SECURING NEW MEMBERS

To increase our membership the following PREMIUMS ARE OFFERED TO OLD MEMBERS, postpaid.

FOR ONE NEW MEMBER:-A handsome cloth bound copy of either "Amateur Fruit Growing," or "Forestry in Minue-

Sota," your choice.
For Two New Members (or one new member and 75 cts):-

A cloth copy of "Vegetable Gardening,"

The above three books were written by Prof. S. B. Green. horticulturist at the Minnesota State Experiment Station, expressly for use in this state, and are used as class books at the State Agricultural School. They are of great practical value in the northwest and should be in the library of every progressive horticulturist in the state.

PUBLICATIONS OF THE SOCIETY

The society issues a MONTHLY MAGAZINE of forty pages, edited by the secretary and entitled,

"THE MINNESOTA HORTICULTURIST."

These magazines contain the material previously referred to and other matter of timely interest to mem-

[A special feature of this magazine in 1900 will be a series of ILLUSTRATED ARTICLES BY PROF. S. B. GREEN, a part of which will pertain to horticulture in Europe, where he will spend the coming summer.]

At the close of the year the twelve magazines, with the journal of the Society's meetings, list of members index, etc., are bound together, making the annual report of the Society, and entitled, "Trees, Fruits and Flowers of Minnesota."

A PAPER BOUND copy of this report will be sent to any one upon receipt of the postage, 15 cents; CLOTH BOUND copies are reserved for members of the Society.

THE LIBRARY OF THE SOCIETY

Contains at present about 1,000 volumes, not including in this number any of our own reports. It includes reports of similar associations, standard works on horticulture and bound horticultural periodicals.

A large number of horticultural journals and all the Experiment Station reports of the United States come to the library regularly.

This accumulation is the work of some five years, and bids fair before long to force the office into larger

The library is open to all, but is especially the home of the members.

One Thousand Dollar Premium

offered by this Society for A SEEDLING APPLE TREE

"As hardy and prolific as the Duchess," with fruit equal to "the Wealthy in size, quality and appearance, and that will keep as well as the Malinda.'

COMPETITION OPEN TO ALL.

For further particulars address the secretary

0:15-10:05

Recent Development in Insect Control

S. A. GRAHAM, University Farm

Possibilities of Organization

E. M. FREEMAN, University Farm

Difficulties in Growing Squash

J. W. BUSHNELL, University Farm

Should the Market Gardener Save Some of His Own Seed?

C. H. SMITH, Faribault

Celery Yellows and Spinach Mosaic in Minnesota

R. C. Rose, University Farm Vegetables in the Meadowlands District of Northern

Minnesota (with Stereopticon Slides)

MR. ASHBY, Duluth

Appointment of Committees

11:15-12:05

Group Session, Assembly Room, Administration Building The States Program for Marketing, F. W. Peck, Presiding The University Department of Agricultural Extension

F. W. PECK, University Farm

The State Department of Agriculture

H. J. HUGHES, St. Paul

The Farmer

A. D. WILSON, Guthrie

1:00-1:50

General Meeting, Assembly Room, Administration Building 2:00-3:20

The Vegetable Grower and the Experiment Station W. C. COFFEY, University Farm

Report of the Delegate to the National Vegetable Growers'
Convention at Albany, New York

W. T. TAPLEY, University Farm Frost Resistance in Vegetables

R. B. HARVEY, University Farm

The Seedsman's Source of Seed

RALPH WEDGE, Albert Lea

3:30-5:20

Minnesota State Vegetable Growers' Association

SATURDAY, JANUARY 7

8:15-12:05

Pruning, Budding, Grafting, and Plant Propagation— Demonstration and Individual Practice

HORTICULTURAL PROGRAM

during

FARMERS' AND HOMEMAKERS' WEEK

University Farm, St. Paul January 2-7, 1922 Horticultural Building

-0--0-

FEATURE DAYS

Tuesday Home Gardeners' Day
Wednesday Fruit Growers' Conference
Thursday Garden Flower Society
Friday Market Gardeners' Day

-0-0-

Plan your winter vacation for this week

Other programs covering the entire field of Home Economics and Agriculture will be running continuously throughout the week

MONDAY, JANUARY 2

1:30-4:20

Pruning, Budding, and Grafting—Demonstration and Individual Practice

TUESDAY, JANUARY 3

Conference on Home Gardening 8:15-0:05

Demonstration of the Best Garden Tools

R. S. Mackintosh, University Farm 9:15-11:05

Flowers for Twelve Months of the Year

LEROY CADY, University Farm

Spraying: Why, How, When

S. A. Graham, University Farm

Berry Growing
F. P. Daniels, University Farm

Vegetable Varieties the Home Gardener Should Grow W. T. Tapley, University Farm 11:15-12:05

Farm Bureau Program, Assembly Room, Administration Building

1:15-4:30

Farm Bureau Program, Assembly Room, Administration Building

WEDNESDAY, JANUARY 4

Conference on Fruit Growing

8:15-10:05

Individual Practice in Bridge Grafting, Top Working, and Fruit Tree Propagation

10:15-11:05

Causes of Setting and Dropping of Fruits

J. H. BEAUMONT, University Farm

The Trouble with Our Method of Pruning

W. G. BRIERLEY, University Farm

Group Session, Assembly Room Administration Building, E. M. Freeman, Presiding

Field Crop Varieties that Minnesota Farmers Ought to Grow

Andrew Boss, University Farm

Fruit Crop Varieties that Minnesota Farmers Ought to Grow

W. H. Alderman, University Farm 1:00-2:20

General Meeting, Assembly Room, Administration Building 2:30-4:20

Grapes and How to Grow Them
E. G. E. Reel. Excelsion

Will Fertilizing Orchards Pay?

W. H. ALDERMAN, University Farm

Dusting vs. Spraying

R. C. Rose, University Farm

Protecting the Orchard from Rodents

F. L. WASHBURN, University Farm 4:30-5:20

Group Session, Assembly Room Administration Building, W. C. Coffey, Presiding

Marketing Costs—How They can be Reduced H. B. PRICE. University Farm

How Coöperation can Reduce Marketing Costs
J. D. BLACK, University Farm

THURSDAY, JANUARY 5 Conference on Garden Flower Growing 8:15-10:05

Demonstration—Individual Practice in the Propagation of House and Garden Plants by Cuttings, Layerings, etc.

10:15-11:05

Birds. Illustrated by Moving Pictures
Dr. T. S. Roberts, University of Minnesota
11:15-12:05

Group Session, 102 Horticultural Building, Andrew Boss, Presiding

What Minnesota Soils Need

F. J. ALWAY, University Farm

General Meeting, Assembly Room, Administration Building

Shrubs for Home Grounds

CLARENCE CAREY, Rose Hill

Hardy Flowers and Their Use in Landscape C. A. Mathes, St. Paul

Vines for Home Grounds

Mrs. E. W. Gould, Minneapolis

What Seeds Will I Plant in 1922?

Mrs. L. S. Remington, St. Paul

Arranging Flowers in the Home. Talk and Demonstration O. J. Olson, St. Paul

> FRIDAY, JANUARY 6 Conference on Vegetable Growing 8:15-9:05

Seed Treatment. Demonstration of Methods and Materials

R. C. Rose, University Farm

Silver Ainiversary Vanquet

---given by----

Minnesota State Florists Association

—at the——

West Hotel---Minneapolis

November 12, 1914

Menu

Cream of Tomato with Whipped Cream
Celery Olives

Planked Jumbo Whitefish
Potato Dauphine

let of Beef larded Mushroom Sauce
Potatoes au gratin
Green Peas

Lettuce and Tomato Salad

Vanilla Ice Cream Assorted Cake

Coffee

Qualifications of Teachers

A Letter

Friends and Fellow Workers:

About a year ago, the Venice Union High School Board requested the undersigned to prepare a letter setting forth in brief the qualifications which should characterize the teacher and the teacher's work in our school. The following outline was submitted and was adopted by the Board as their expression of the standard desired and expected. It is here published, being respectfully submitted to all who are directly or indirectly interested.

Sincerely,

Cree T. Work,
Principal Venice Union Polytechnic
High School.

Venice, California, May 15, 1913.

The Teachers We Want

To Those Who Would Teach in the

Venice Union Polytechnic High School:

By way of suggestion, and as a guide to future action, you will permit us to mention items which we believe should characterize the men and women who undertake to assist in conducting and building up our school.

I. In the character and disposition of teachers, we believe the following indicated elements are of especial importance: Teachers should have,

1. High ideals of life and character.

Exemplary life-habits, consistent with the highest ideals and the teaching profession, holding themselves above all suspicion and all questionable actions.

 Faith— "the substance of things hoped for, the evidence of things not seen"—in self, in others, in God.

- 4. Optimism in all things. Learning comes by hope, and hope by a cheerful spirit; those who lack this cannot teach most successfully.
- 5. Good health and energy, which should be applied primarily to the work of the school and not to outside interests that sap vitality. Personal neatness and due observance of the social proprieties — in school as well as out of school.
- 6. Candor and sincerity; frankness and good nature in discussing differences with fellow workers or those in authority, when diverse opinions exist.
- 7. Loyality to the school, to fellow teachers, to superiors in authority, to the community; faithfulness and cheerfulness in carrying out regulations, rulings, and suggestions; freedom from unnecessary, unjust or malicious criticism of pupils, school, teachers, parents, officials or the community, as well as freedom from flattery, partiality, jealousy, nervousness, pettishness and pessimism.
- 8. Public spirit which feels a freedom and willingness to take part in community interests, but which refrains from inexpedient and pernicious political activity; a willingness and purpose to reside in the community, thus assuring closer contact with conditions and securing the confidence that comes from acquaintanceship. Teaching is a social vocation, a community service, and not a selfish pastime.

 Democratic social spirit and activity, especially as these qualities are manifest in cultivating acquaintance with parents, in entering into the social life of the school, and in encouraging and directing students in the best social enjoyments.

10. Willingness to assist in all approved extra-school efforts that may be undertaken by the school, in which the ser-

vices of the teachers are needed.

11. A self-sacrificing spirit—ready to give of self to benefit pupils and to serve the school.

12. Quietness and persistency in working. Patient perseverance is one of the largest assets of the successful teacher.

II. Professional ability and method require special attention and active cultivation. Among the important items in this connection are,

- A definite, clear-cut, thorough and special knowledge of the subject to be taught; a definite aim and plan for each lesson.
- 2. Ambition to grow and to keep abreast of the times. The only way whereby a teacher may become and remain bigger than the work in hand is to grow as that work advances. We have no place for teachers who know everything, and have nothing to learn; they must be energetic and growing; they must make use of experience, teachers' meetings, and professional literature.
- 3. Adaptability to the conditions and aims of the school. A polytechnic high school, while having a wholesome regard for traditions and text-books, must rise above them and go ahead of them. New conditions require more frequent, and perhaps more radical, re-adjustments of the workers than do old established orders. Teachers must respond to the plans, purposes and spirit of the new order.
- 4. The spirit of co-operation with others, especially in new movements that may be undertaken for the good of the school; willingness to take part in public programs and general exercises, as opportunity and the good of the cause may demand.
- 5. Willingness to correlate work with that of other teachers and departments, and with the home life of pupils, in practical ways; ability in giving practical point to each lesson. In the application of theories to present interests is found the essence of vital thinking. Pupils should also be encouraged in outside applications, in initiative, in individuality, in originality.

- 6. Teaching power; ability to conduct recitations; skill in organizing and presenting work in a systematic manner, in natural relations, in simple terms, and, when possible, by visual and manual means as by outlines, diagrams, experiments, concrete examples. Most pupils are visual-minded. "We learn to do by doing." Much depends upon the teacher's faculty for system, organization and, realistic presentation.
- 7. Discernment in judging human nature in general, and individual cases in particular both for disciplinary and educational ends.
- 8. Tact and diplomacy in dealing with others. Human beings are not all alike, and different means and measures may be needed in handling different cases yet, all without partiality.
- 9. Constructive power in character building through daily work and by precept and example. Character development in the pupil is a first consideration; conformity to artificial standards of learning comes second.
- 10. Power to lead pupils to work in the right spirit, to inspire them to work hard and unceasingly within reasonable limits. Example counts here.
- 11. Ability to make fits where there are misfits in classification of pupils, in the selection of subject matter to suit classes and individual cases, etc. The teacher must often sacrifice forms, patterns, precedent and traditions for the benefit of the pupil. This school is not a machine; it is a living, growing, organism.

We believe and expect that teachers in this school should possess in large degree to good qualities indicated above, and that they will continue to develop along these lines as they work.

Respectfully submitted,

V. T. Reuter, President, D. Braunberger, Clerk.

By order of the Venice Union High School Board, Venice, California, May 6, 1912.

Polytechnic Press

Silver Anniversary Vanquet

---given by---

Minnesota State Florists Association

—at the——

West Hotel---Minneapolis

November 12, 1914

Menu

Cream of Tomato with Whipped Cream
Celery Olives

Planked Jumbo Whitefish
Potato Dauphine

et of Beef larded Mushroom Sauce
Potatoes au gratin
Green Peas

ttuce and Tomato Salad

Vanilla Ice Cream Assorted Cake

Coffee

Sinopsis of Report on personal Experience in fruit growing in Minn Jan 2nd, 1873

A.W. McKinstry Sec. Min. Hort. Society-

In complyance with resolutions adopted at the last annual meeting of the Hort Society I have prepared the following statement of my experience in fruit growing. I have been engaged in experimenting in growing fruit in Minnesota 15 years. My location is in Houston Co. 2 miles from the Mississippi River & upon an elevation about 150 feet above the same--being at the head of a small valley or Cooley & somewhat protected from unfavorable winds as the Exposure is East South East. I have tried every class of fruit that is grown in this latitude & have met with a Satisfactory degree of Success. Strawberrys Rhasberrys & Currants I grow in considerable quantitys for market & find them a pretty Sure crop very easily grown & generally profitable. The Hilson Strawberry has proved the best for all purposes Doolittle Black cap Philadelphia (Red) Rhasberrus have proved the safest & best of this class of fruits & I get the best returns from the red dutch current. I have been very Successful with Grapes raise about 15 varieties. Find the Concord the best Deliver Iona Issabela & Salem all good

Plums & Cherrys can be raised but are not very Shure. Generally loose Plum trees as soon as they get to bearing Size. With Pears I have met with many losses but there is much to encourage further trial. The Flemish has proved hardy enough to stand the Severity of the winters but great numbers have gone mostly by the blight of the past season. I have tried nearly 100 varieties of Apples. Have found more than 1/2 worthless & not more than 1/4 that promise any thing like well, among these the Duchess of Oldenburg, Tetofsky & Bendaris & little Romanitic appear to be the safest. The Red Astrachan, Haas, Fameuse, Prices Sweet, Sops of Wine, Sweet Pear, Tallman Sweet, Fall Wine, St. Lawrence, Early Sweet, Seeknofarther, Jonathan, Golden Russet & Saxton are hardy except under very unfavorable circumstances. The Northern Spy has done very well with me. Not more than 20 per cent have died before coming to bearing age are inclined to overbear after they get started but are very shy while young.

The light pruning I do in June. Heavy pruning late in the fall do not belieive it necessary to mulch after the first year if the trees are planted close & headed low.

Dec 7th 1865

Col. D.A. Robertson

Dr. Sir through the American Agriculturist I learn that you are endeavoring to collect the fruit statistics of this State. I have been experimenting for a No of years & the result is at your service. My place is located in the town of La Crescent Houston Co Minnesota two miles from the Mississippi river at an elevation of from one to two hundred feet above the river bottom & is protected from the North & West winds by bluffs. I have no level land but it all sloping to the south & East on an average 1 foot in 6. The Soil varys in depth from 6 inches to 6 feet & from Sandy to Strong Clayey loam & a rich black mucky wash from the bluffs. I settled here late in the fall of '56 & commenced improvements 57. In June of this year I purchased a small bundle of trees at LaCrosse from Danelson's nurserys Rochester NY They were in bad condition. I dug the holes & set them on land that was not broken up The Apple trees in a good Sand loam & the pear trees in the deep black soil The Pear trees proved to be all dead but two. Those made a fine growth for two years then blossomed full & died immediately after, two grape vines 1 Clinton & 1 Isabella lived & bear good crops nearly every year.

Of the apple trees 9 lived. 1 Rhode Island Greening died at the same time with the pear trees 2 Early Harvest have borne three years but the trees are not hardy being injured on the South west side by the Sun in winter. 1 Golden pippin bears good crops but the tree should be protected on the South side during the spring. 2 Baily's Sweet are hardy as an Oak Healthy vigorous grower & produce liberal crops of Magnificent fruit. 2 St. Laurence hardy erect good growers. Moderate bearers I Vandiver doing well 1 Early Joe good great bearer.

These trees have never been mowed about but the grass was killed by mulching & they get dug about twice each year. In the Spring of 59 I ordered 50 apple trees through an agent from a nursery in northern III; They came badly taken up & packed, with instructions to set them as they grew in the nursery the dark side to the north. I set them to suit my self & found that one side of nearly all of them was dead from root to branch. I dug most of them up in the spring of 61 & filled their place with trees from Ashleys nursery near Milwaukee Wis. They are doing well & a number of them bear fruit this year of a very superior quality. I have planted trees every spring since from Rochester NY They all live to stand our winters well.

Pruning grapes

Some of the earlier varieties of grapes can be successfuly grown in almost every part of this state if planted on a warm Southern exposure and given a little more care than is required to enshure a good crop of corn and given winter protection by laying the vines down and covering them with earth or a mulching of straw mulch hay or evergreen boughs. The best varieties are Moors Early, Campbells Early, Early Victor Worden and where they will ripenbefore frost injures the foliage the Concord Brighton & Moors Drummond. If they are started right, pruned and laid down every fall, taken up and tied to trellis in the spring and weeds and grass kept out they will flourish and bring annual crops of fruit for a great number of years.

The earlist pruning done after the foliage has been killed by front and all danger of buds starting again is past which usualy toward the last of October invariably brings the best results. As the vines are pruned they may be (brot/laid?) down to the ground ready for covering but should not be covered until winter is almost to set in.

For the benefit of novices in G.C. we will say that two year old roots are the best for planting and that plants set last spring should not have been allowed to produce but one cane and that cane is to be cut back to 3 or 4. Plants set a year ago last spring grown and properly pruned the first year shold have been allowed to produce only two canes this year giving preference to the lower ones that start and keeping all others rubbed off. The process of pruning such vines this year consists in cuting one of the canes back to three or four feet to form an arm to tie to the lower wire of trellis and the the other to two or three good buds along the union with older vines.

[no date]

Article/ draft written in pencil no date

Budded versus root grafted trees

Agents continue to offer budded trees to our people charging more for them and claiming that they are hardier and that they will live longer and bear sooner than root grafted trees. The ordinary budded apple tree of commerce differs from the root grafted in that the budded one is made by setting a bud in a seedling standing the nursery row. The seedling has the advantage over the root graft in that the stock is usually one year older and has all the roots intact. It starts off to growing vigorusly and will make as large a tree at two years as the root grafted at three but is in no respect any better than if it had been grafted instead of budded at the same point. The objections are that the seedling stocks are not reliable for hardiness being generally grown from seed imported from France or secured from cider mills in this country and no pains are taken to select the seeds from the most hardy varieties. A portion of the stock remains above ground and is very shure to be injured between bud & root in some [of] our more severe winters. The best tree for our use is a strong vigorous tree made by rising [sic] the upper six inches of a good seedling root and a healthy Scion. In this case the more tender parts are below ground and partialy protected by soil in those portions of the winter when there is no snow covering on the ground. Root killing which often occurs in winters when the ground freezes up very dry and does not afterward have a good [unclear word] covering of snow is more liable to destroy the budded tree than the root grafted for the reason first that many of the varieties are hardier than the seedlings and second because the root grafted tree often throws out a good system of roots above this joint where grafted and often if the original root is killed will recover from the injury and make a joint. We recently experimented [in] an orchard that last winter suffered badly from root killing. The varieties were Virginia Crab and Hibernia top worked to Wealthy and Longfield. The tops did not show any marks of serious injury from the winter. Neither did the trunks down to the point where they were grafted but every root below the graft was dead as was every tree that had not thrown out roots from the scion or stem above the graft. Ordinary budded trees will not help us over this difficulty until some seedling is found that is proof against it. If our nursery men would use only stocks raised from selected seeds of some of the very hardiest varieties for their root grafting we would have much less of this trouble.

(second letter written in ink/ no date)

I have now about 200 trees Apple Cherry & plumb nearly all doing well. I am fully satisfied that this will prove to be a good fruit growing state that one great drawback heretofore has been the unsound trees sold to us & another the carelessness of the purchacers. Experience has taught me that the Aspect of the ground is of but little account that Sandy loam is the best soil that the black soil in the very worst, but that it will do after a few years of cultivation. For planting trees the holes should not be any deeper that the ground has been plowed. They should not be planted deeper than they grew in the nursery should lean slightly to the south west & the tops should start within 30 inches of the ground. I would not set a tree that had been pruned in the nursery to exceed 3 feet. The common red cherry & the blue Damson plumb promise well.

I am raising strawberryes & currants extensively they do well. The Clinton Concord & Delaware Grapes endure the winter & promise well with me. The Black Cap & Yellow Rhasberry Bring abundant crops with us.

Before I close permit me to say a word for the Transcendent Crab. The tree is hardy handsome and vigorous a great & sure bearer & the fruit when ripe is good to eat from the hand & for pies & sauce has no superior one or more of them should be on every farm & in every garden in the state.

The people in this vicinity have generally ridiculed the Idea of raising apples in this State but they are now changing their minds & trees sell like hot cakes.

Please use the above imperfect statement if you think that it will be of any benefit to my fellow citizens of this State.

Yours John S. Harris
Sunny Side Gardens
La Crescent
Houston Co Minn

La Crescent Minn Jan 23/66

J.W. Harkness Cor. Sec. Minn Fruit Growers Association, Dear Sir

I find that I shall be unable to attend the proposed meeting on the 30th & therefore write the following which you will please to read to the members or use in any other way if you consider it of any importance.

Our Association was organized at a time when the hope of growing fruit in this State had nearly died out. Repeated & almost total failures had so discouraged our people that scarcely a dozen men could be found in the whole State that dared boldly assert that even Apples would ever succeed well enough to give the people a taste of the home grown article. This small number of men were so Scattered over the State that they could seldom meet to council together exchange views & tell of Successes & failures that they organized this Association into which is to be gathered the experience observation & knowledge of its members to be discussed digested & sent back to them & through them to the people. No one can deny that there are many obsticles & discouragements to overcome before Success is sure, but with the aid to be derived from the experience & discusion of the Successful the man is set forward to the place that without this aid it might take years of toil and a fortune of money to reach. I certainly believe that this Association may yet become the power that shall gladden the hearts of the tens of thousands as they lift them up to God in gratitude for the comfort & Luxury of fruit. Thus far we have accomplished but little but do not be discouraged & in a few years you may witness hundreds competing for the first prize & honors for fruits. I last year raised apples suficient for my family of Six persons & some for market. What I sold brought more than 50 dollars. What I have done a thousand other men can do in less time & at less expense if aided with the information which a well sustained fruit Society may give it at a trifling cost.

A few years more & we may wield a vast influence for good.

Already are the people asking what kind of trees shall we plant. I answer join the Fruit Growers Association attend its meetings as often as possible, help place funds in its treasury to be used in deseminating information & then plant the varietys others have been the most successful with at the same time trying a few more if you are able. What shall we do to them to make them live & bear fruit? Do as the most Successful growers have done. Where shall we get the trees? First learn what a good tree is, & then purchase wherever you can find such. It matters very little where the tree

has been raised. I would rather plant a good tree that was raised in Georgia than a poor one raised in Greenland.

The growing of fruit is as important as any other branch of husbandry. It is pleasant healthful & profitable & I believe that no country can attain to the highest degree of prosperity where Fruit is not one of its Staple productions. A half million of dollars would not furnish the people of our State with a liberal Suply for a Single Year. If then this interst is of so much importance & has such a bearing upon the prosperity of our Country ought we not to have assistance from the treasury of the State to enable enterprizing & reliable men to experiment & investigate the causes of failure they being in duty bound to give to the public the result of the Same? And if we have not American trees that will endure the rigors of our winters would it not be expedient & add to our wealth to import a Stock from Russian & Siberia at the expense of the State. Let us make an effort to get help from the present Legislature & if we cannot get it perhaps some wealthy & generous man will immortalize his name by donating the needful aid.

I sugest that a part of the business of this meeting be to urge upon the present legislature the importance of appropriating to the Fruit Growers Association \$_____ for aid in purchacing rees making experiments & collecting publishing & circulating information.

Also that a careful analasis of all the substances (both organic & inorganic) that enter into the formation of the wood of hardy fruit trees be furnished to every member of the association. If we knew what trees are made of & how many of the Substances were deficient in our Soil it would open to us the door of Success.



Send to the Secretary for folder describing the Society and its work and copy of its Magazine. Minnesota

"The Minnesota Horticulturist."

Subscription, \$1.00 per annum, including membership.

State Horticultural Society.

President, W. W. PENDERGAST, Hutchinson.

Office (and Library) of

A. W. LATHAM, Secretary.

207 KASOTA BLOCK.

Minneapolis, Minn., Feb. 15, 1899.

Important-Read at Once.

DEAR FELLOW MEMBER:

You may not be aware of the fact that the enactment of a new printing law by our state legislature two years since incidentally left our society with a special law providing for our printing but no appropriation with which to pay for it. Being at the very close of the session, it was too late to rectify the mistake till the present session of the legislature. In the meantime the printers who held the contract for printing the reports in 1896 have gone on and printed them as usual during 1897 and 1898, relying on the present legislature making an appropriation to reimburse them.

A bill has now been introduced into both branches of the legislature appropriating \$2,750 for each of the two years, 1897 and 1898, for this purpose, and \$3,000 annually thereafter, the latter sum being made larger to pay for an increase of 1,000 in the number of copies to be printed, the additional 1,000 to be placed in the public school libraries.

It goes without saying that the continuance of the important work of this society, which is now by far the largest (and, as we believe, correspondingly useful) of its kind in the United States, depends on the passage of this or some similar appropriation bill. Under these grave circumstances it has been thought best to invite and *urge* members to write to the senators and representatives from their districts, or any others with whom they are acquainted (directing to the Capitol, St. Paul), setting forth briefly the facts in the case, and speaking of the useful work of the society and requesting them to give an *active support* to the bill.

As the measure will come up very soon for action in both houses it is *vital* that this be done at once. Will you please notify the secretary at same time of those to whom you have written?

Being assured that as an interested member of our society you will give this matter the prompt attention its urgency demands, I remain

Yours fraternally,

aw. Lathan, Secif.



Minnesota

Statesso Horticultural Society.

PUBLISHES A MONTHLY MAGAZINE,

President, J. M. UNDERWOOD, Lake City.

"The Minnesota Horticulturist"

.x.x.x.x

Subscription, \$1.00 per annual including membership.

OFFICE OF

A. W. LATHAM, Secretary, 207 KASOTA BLOCK.

Minneapolis, Minn., December 26th, 1896.

aw. Larham, Secif.

SPECIAL.

FELLOW MEMBERS OF THE STATE HORTICULTURAL SOCIETY,

DEAR FRIENDS:-

The necessities of the horticultural department of the University Farm School, at St. Anthony Park, have so far outgrown the present accommodations that it has become imperative to ask the legislature for an appropriation of \$15,000 for such a building, with fixtures and greenhouse attachments, as will furnish the educational and experiment facilities required. The state of Wisconsin has lately completed a building for the joint accommodation of Horticulture and Agricultural Physics, at a cost of \$40,000. We understand the Board of Regents of the State University have decided to ask for this appropriation, and no opposition is expected to this request except such as naturally arises from a lack of acquaintance with the situation.

The executive board of this society heartily endorses this project. As a member of our association, we are sure that you are interested in any improvement which looks to the advancement of the cause of horticulture in our state and will do what you can to aid in its accomplishment. You can materially assist in this instance by communicating with the members of the legislature from your district on this subject and inviting their assistance in its furtherance. It will be better if you can do this before the legislature convenes, which is early in January. Will you please let me know at once with whom you communicate?

Yours fraternally,

INDIVIDUAL AGRICULTURAL STATEMENT, FOR THE YEARS 1886 AND 1887.

I HEREBY CERTIFY that the following, to the best of my knowledge and belief, is a true statement of the products grown, the number of cultivated acres producing the same, and the Live Stock of the specified in the years 1886 and 1887: classes kept, on my farm in the town of....

(Signed).

THE STATEMENT FOR THE YEAR 1886 IS AS FOLLOWS:

CULTIVATED ACREAGES AND THEIR PRODUCTS IN 1886, TO-WIT:			Raised, Kept or Growing on my said Farm, in 1886, of other Products, Stock, etc.	
	Acres Sown and Products Thereon in 1886		NAME OF PRODUCT, ETC., IN 1886	Quantity Produced, Number Kept, etc.
NAME OF PRODUCT	In this column write the Quantity Produced of each Product named in 1886	In this column write the Whole Number of Acres Sown of each Product in 1886	WILD HAY, tons	
VHEAT	buckels	acres	CLOVER SEED, bushels	
OATS	bushels	acres	APPLE TREES, number growing	
CORN	bushels	acres	APPLE TREES, number bearing	
BARLEY	bushels	acres	APPLES, bushels	
RYE	bushels	acres	GRAPE VINES, number bearing	
BUCKWHEAT	bushels	acres	GRAPES, pounds	
POTATOES	bushels	acres		
BEANS	bushels	acres	TOBACCO, pounds	
SUGAR CANE	gallons syrup pounds sugar	acres	SHEEP, number sheared in fall	
CULTIVATED HAY	tons	. acres	BUTTER, pounds made	
FLAX	bushels seed	. acres	CHEESE, pounds made	
Acres in all other products in 1886 acres			BEES, number of hives	
Whole number of acres cultivated in 1886 acres		HONEY, pounds		

THE STATEMENT FOR THE YEAR 1887 IS AS FOLLOWS:

NAME OF PRODUCT	Number of Acres in 1887	NAME OF PRODUCT OR ANIMALS	No. Kept or Quantity Produced in 1887
WHEAT		APPLE TREES, growing	
OATS		APPLE TREES, bearing	
CORN		GRAPE VINES, bearing	
BARLEY		MAPLE SYRUP, gallons	
RYE		MAPLE SUGAR, pounds	
BUCKWHEAT		MILCH COWS, number	
POTATOES		SHEEP, number sheared in spring	
BEANS		WOOL, pounds	
SUGAR CANE		CATTLE, under 3 years old, common breed of the	ne
CULTIVATED HAY		CATTLE, under 3 years old, thoroughbred or hig grade	gh
OTHER PRODUCTS		CATTLE, Cows, all ages, common breed	
		CATTLE, Cows, all ages, thoroughbred or high grad	
		CATTLE, all other 3 years old and over, commo	on
Whole number of acres in above product said farm in 1887		CATTLE, all other 3 years old and over, thoroug bred or high grade	h-
Said farill in 1001		HORSES, under 3 vears old common breed	

Janesville. west. Origin, Labrusea x Riparia Medium to stoong power vegorous and hardy - have the lendency to sucker long fointed, courts rather slender me. proportion their with leteral branches few, color light to dutte brown. flower Purpect -Light green deeply cert, dentate with Foliage Medium, somewhat shouldered moderate Bunches, compact prolifice-Medium, blowned black with about bloom Buris sking thick and tough very pulpy-colors of long time be for repening flow sweet, with a good deal of forg flower, fine of Ripmy, (Early about Supt 10th in ordinary seasons) Respung quality good -Derives - . True from

FOREST TREES PLANTED

No. of acres planted on Arbor Day, 1887,
No. acres planted during season of 1887
Whole number acres forest trees planted and growing
What varieties
What varieties succeed best in your locality?
How many rods have you planted on a public highway on your
farm
17 the information asked for on this sheet is wholly in the

All the information asked for on this sheet is wholly in the interest of the farmers themselves, and has no reference to taxation.

HORSES, under 3 years old, thoroughbred or high grade
HORSES, 3 years old and over, common breed
Horses, 3 years old and over, thoroughbred or high grade
HOGS, of all ages, common breed.
HOGS, of all ages, thoroughbred or high grade
MULES AND ASSES, all ages
SHEEP, common breed
SHEEP, thoroughbred or high grade

H. STOCKENSTROM,

Commissioner of Statistics of Minnesota.

General a very hardy varily will repe Remarks were in Minus but lack considerable in quality, and since have varieties " fust as early and of britis quality, there is not much object in cultivating, it,

(erbert-Rogus 1044) ougin. La trusea X Vinefira Emeral buy strong & vigorous groveer healthy and of good apperence discreption cons strong, moderate branched fru from suckers, but promunul tendril continuous; color of The wood- druck brown perhap the darked of Rogers hybrids. Lurye, midium thick, Sille downy on the under siste, moderate (ceit, sparly dentate, light quen Howers Surperpect. Bunches, Lunge findly shoulders moderate compach very large round get block evered Burio with a blue bloom, skin midium oflick, flesk sweet and fucy soulps, no fofy flower, but has inter a sweet Ruping quality, - Ford him of Repor (Sept, 20-28, rather tota for this locality I et ceft in late waron of in some (stop well favored locality -The amina is gheater quality.) a fine grape will suited to any Remark Climate when it will mature, profise of the black vaniles of Rogers Mybrio

Centermial augin alstivalis General Characters (Time is a moderate grower, comorather short, very closely fourted, with many Sateral branches, tendrial continuous. Tolingo. Midden in size but of a firm texture Colon) beetween dock & light green, moderate cut doubale to a point drowing on the underside, Juny leaves fully expanded al any ages. Midium prolifice have a tendency to over bear compact, conical, somewhat shalders. Burches Medium, round, white with a light Birries brownish pinks skade, and covered with a whitish bloom, flash very July and sweet, vionous, pulp melting, no acid flower, skin thin, Time of Repeny (Apout the same time as concerd, (Lovo, perhaps, a grape for wenter use, Respired qualitys Distance some what effected with meldew on the lower leaves, teulhvalis & buy little prinning messary, but con should be takes as not to allow the vine to overbear, and have an excelent grape for the toble but ruther late except in some favored Remarks grope growing well some become a favorit.

Concord Origin - Seedling Labrusca General appear (Shoong, healthy, vigorous grower, ance of the falleral branches many, buds prominent plant close fointed, tendrils contingos bolor of the wood - Wark brown to tighter brown, become durker by age Wark green, thick and of ferm tet time, the foliage underside downy, large dentate. somewhat ent Howers -Perfect Bruches large, mow or less compact, prolific, shouldend, stem short, the fruit Berries large, round, black, deeply lovered by a blue bloom, sweet, Jucy, pulpy, melting, excelent flavor, shine rather thick. Reeping quality _ Tovo Season of Reping Rather late, in ordinary seasons about september 25th, Series - free from X a good varily for the central and General Remarks · Eastern states, rather late for Minnesoto except in some favored locality, very hardy and productive, the best known, and perhaps most widely cultivated

Krighton Origin Labruseux burefina (Concord & drana-Humburg General Strong vigorous grower, hudy Description of midim forutes, wood dock brown Comes large, buds prome unt, tendril continuous. very productive. (Perfect Lorge dock green, dontate somewhat Foliage (lober thick, downy outh underide Burches Large compact, well shouldered. Berries, Mediums to longe round common red covered thickly with a whitish bloom adhere were to the pederrele fush melting tender pulp very small, sweet Jucy, slightly aromatic, very hughest quality skin thin to him of Riping about Sept 20, contin than concern by a work, Repany will in Municole mader in ordinary seasons Leeping quality grow desiares & Free from ? General Istrong to very hordy, The leading Remarks lable grape, of the lanter states Howabout theblossomes.

Lidley origin. Lablusen and binifira Survey (a very strong, healthy, vegorous I grower, moderate fourtes, lateral branche discription - I mong and of good size, wood light brown, buds promunent, tendril (continuous, prolifie, Bruches. Medium to large, long, shouldered, rather Survey Medium to Large oval round, maroon external flish sweet, melting, without pulp, rich, high aromatic flower, heighest quality Skin midim thick, lightly covered with bloom Longe almost entier, spurly describate, of Durk to tight green downy on the underside ticke thick, furny Time of Ripsing Cabout oct 1st rather late for Minne Kuping quality good decenies - [Fue from, in This locality ?] a grape of heighest qualities, good grower and productive Runack one of the standers varieties Acetent for both marke and table, But sony to suy too lote for our climate, Exceptación

Deleware origin & Unknown, puhaps a hybrid between Labrusea and Vinefua. General (Healthy, midien grower, branches stender of the Plant not prominent, close finited, lendrels en Clorofilowood - Dack brown to lighter brown on new words (Midium, light green, thin, somewhat deeply foliages { cut, very little dorony on the underside, dentate, (Burches midium, compact generally Shouldined very prolific stern stock home berries small plittle pulpy sweet and

melting, miey wethout acidity simi what Formalie & flaver, finest quality fortable use forme Shipmy - Repring about 7 to 10 daysbefor ancord Core - Requires good care, Desiares, Generally free from.

> Delevour is one of our finest grapes but requies more care full attention those Concord or any other vigorous vaneties. to has the tendency to overbear if two closely frunes, and it is then apt to be attact by rot and melder,

Free Public Library

Owatonna, Minn., Oct. 21, 1909.

Mr. A.W. Latham,

Secy. State Horticultural Society,

Dear Sir; -

Can you tell me where I can get volumes 35 and 36, the annual reports for 1907 and 1908 of the State Horticultural Society? We should like very much to fill in our set of the reports and have not received them for the last two years. Our reports for 1899 and 1903-04 are also missing.

I shall be greatly obliged if you can give me the desired

information.

03,04

Yours very truly,

Elisabeth H. Plumb Ribrarian. H. Plumb Girl meuro

Ampelopsis (quinquefolia) Virginia Creeper. Engelmans Doy. Celastins Scandens. Bittersweet. Clematis. Henryi.

" Jackmanni " Paniculata " Virginiana, Native Albanatis. Inicera. Honeysuckle. var. Scarlet Tumpet. Lycoun (chinensis) Matiunory Vine. Vitis (riparia) Wild Grape.

Herbaceons Pacomies. Festiva Maxince Whitleyi L'Esperance, Et Line Superba, Hunci Ferrae Leavere. Lacy Brannwere Pink Rich ardsonis Rubra Superba, Grandiflora Rubra, Francois City Red

White-Voi Lassburg, Pearl. andreas Hoffer, Pink-Pauthem, Virliere, Lunshine, Red - loquelist, Bratador, R.P. Struthers, Crimson - Im Hrchberg, Eclairen, Delphinium. Hardy Larkofue. Varieties, Chinensis, Formosum. Formosum evelestrimum. Vace Hybrids. Dus, Fleur de Les, Vaneties Japan, Gennau.

achillea, var. The Pearl. anemore Japanica. var, Mulwind. Lucen Charlotte. artenisia. Old Tuan or Inthemwood, Aquilegia. Orlinsbine. Althea, Hreeghock. Boeconia, Plume Poffy. Boltmice var-asteroides, lalisquama, Campanula, Carpatica, Persicifolia Pyramidalis. Edward VII. Strasta Daisy. Convallaria, Lely of the Valley. Clematis, var. Davidiana. Dicentra, Bleeding Heart. Dictansmus, Grazinella, White

Digitalie. Fot glove. var. Grandislore Glovinia flowered. White Gaillardia, Blanket Flower. var. Grandislore Helianthus, Sunflower. Hemerocallis, Gemon Lily. Muteusia (virginica) Blue Buce. Poppy. var. Oriental. Iceland. Platyeran. Ohniese Due Florder. Pyrethrum, Persian Dang. var. Rosenn Grandifloume. Uligin-Rudbeckia, Golden Glow. Herbaceoux Spireas, var. ulmana Filipindula. Palmata. Stokesia (syanea) Stokes aster, Valeriana (Tricinalis) Garden Helistrope

Shrubs.

Viburnum tomentosum Burning Bush Mayday Tree

Hedge Plants.

Buckthorn

Alpine Currant

Red Twig Dogwood

Common Lilac

Russian Golden Willow

Vines.

Ampelopsis (quinquefolia), Virginia Creeper,

" Engelman's Ivy,

Celastms Scandens, Bittersweet, Clematis H

- Jackmanni,
- " Paniculata,
- " Virginiana, Hative Clematis,
 Lonicera, Honeysuckle, var. Scarlet Trumpet,
 Lycium (Chinensis) Matrimony Vine,
 Vitis (riparia) Wild Grape.

Herbaceous Paconies.

White- Festiva Maxima
Whitteyi

Pink - L'Esperance Humei

Red - Richardson's Rubra superba

Grandiflora rubra, Francois Ostegat

Phlox.

White - Von Lassburg, Pearl - Andreas Hoffer

Pink- Pantheon, Moliere, Sunshine

Red - Coquelicot, Matador, R.P. Struthers

Crimson-Von Hochberg, Eclairem

Delphinium, Hardy Larkspur.

Varieties - Chinensis, Pormosum

Formosum coelestinum - tall

Hybrids

Iris, Flaur de Lis

varieties- Japan, German.

Achillea, var. The Pearl

Anemone, Japonica, var. Whirlwind

Queen Charlotte

Asterinsia, Old Man or Southern Wood

Aquilegia, Columbine

Althea, Hollyhock

Becconia, Plume Poppy

Boltonia, var. Asteroides, latisquama

Campanula, var. Caspatica Persicifolia

Pyramidalis

Chrysanthemum, var. Giant Dairy King

Edward VII., Shasta Daisy

Convallaria, Lily of the Valley

Clematis, var. Davidiana

Dianthus Barbatus, Sweet William

Dicentra, Bleeding Heart

Dictansuns, (flaxinella) White

Digitalis, Pox Glove, var. Grandiflora

Gloxinia.flowered, White

Gaillardia, Blanket Flower, var. Grandiflora

Helianthus, Sunflower

Hemerocallis, Lemon Lily

Mestensia (Virginica) Blue Bells

Poppy, var. Oriental, Iceland

Platycoden, Chinese Bell Flower

Pyrethrum, Persian Daisy, var. Roseum Grandiflorum, Uliginosum

Rudbeckia, Golder Glow

Herbaceous Spireas, var. Ulinaria, Filipindula palmata Stokesia (cyanea) Stokes Aster

Valeriana (officinalis) Garden Heliotrope

NOTICE OF

Summer Meeting, 1899,

OF THE

MINNESOTA STATE HORTICULTURAL SOCIETY.

The regular summer gathering of the society will be held as usual this year at the State Experiment Station, at St. Anthony Park, on Thursday, the 22d day of June. It is the purpose to set this date to accommodate the rose and strawberry growers in that part of the state most accessible to the place of meeting, and a liberal premium list has been prepared, which should draw out a very full exhibit.

The general order of exercises for the day will not differ materially from that of similar occasions in previous years. The forenoon will give ample opportunity to those so inclined to look over the experiment gardens and orchards and observe the changes and progress in this interesting and valuable work,

Prof. S. B. Green, in charge of the horticultural work at the station, and his assistants, will be in readiness at ten o'clock, and thereafter during the forenoon, to conduct parties over the grounds and supply any information as to the work of the station desired. If you are interested in the development of local horticulture, you should, by all means, take advantage of this opportunity to secure information under such favorable conditions, where the object being talked about is also displayed before you.

At 12:30 o'clock lunch will be spread in Armory Hall, and all are invited to contribute towards this festive occasion. The annual reunions, where we break bread together, go far to cement the tie which holds in fraternal sympathy those who are laboring together for the advancement of our beloved art of horticulture. Every one is welcome. If not a member, \$100 will make you such and give you all the publications of the society and a voice in its deliberations—but come anyway!

After lunch the regular summer session of the society will be held. The informal program will include "lessons to be drawn from the late severe winter," in five minute papers, by a number of the members, and opportunity for discussion as usual.

An election will be held for the purpose of selecting some one to be recommended to the governor of the state for appointment, to represent this society, as a member of the board to be created under the forest reserve law, passed at the last session of the legislature. This law was published in the May Horticulturist.

MEETING OF THE WOMEN'S AUXILIARY.—The regular summer meeting of this Auxiliary society, will be held at some convenient time during the day, to be announced.

HOW TO REACH THE GROUNDS.

Take the Como-Interurban electric car in either St. Paul or Minneapolis and get off at Dooley avenue, where carriages will be found in waiting to carry visitors to the grounds, one-half mile distant, from 9:30 a. m. to 1:30 p. m. Those who drive over in their own conveyances will find ample accommodations on the grounds for stabling.

Visitors should NOT take the Interurban car, but TAKE the Como-Interurban-Harriet car.

For further information address

W. W. PENDERGAST, President, Hutchinson.

A. W. LATHAM, Secretary, 207 Kasota block, Minneapolis.

PREMIUM LIST.

All exhibits must be entered with the secretary and in place by 12 M., to be entitled to compete for premiums.

Exhibitors competing must be members of this society and the growers or makers of the articles exhibited. The fruit and flowers exhibited must have been grown in Minnesota and must be correctly labelled.

No premiums will be awarded on unworthy articles.

FLOWERS.

(Six flowers of each variety.)

Collection of cut roses (outdoor grown)	1st prem. \$3.00	2d prem. \$2.00	3d prem. \$1.00
Each named variety of cut roses (outdoor grown).	.50	.25	****
Bouquet of mixed flowers	1.50	1.00	.50

FRUIT.

(One quart of each variety.)

Collection of strawberries	1st prem. \$1.00	2d prem. \$3.00	3d prem. \$2.00	
Each named and catalogued variety of straw- berries	.75	.50	.25	
Seedling strawberry never having received a premium from this society	3.00	2.00	****	
Each named and catalogued variety of currants Each named and catalogued variety of goose-	.75	.50	. 25	
berries	.75	.50	.25	
VEGETABLES.				
Collection of early vegetables	\$3 00	\$2.00	\$1.00	

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(Six flowers of each variety.)

	1st prem.	2d prem.	3d prem.
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Each named variety of cut roses (outdoor grown).	.50	.25	****
Bouquet of mixed flowers	1.50	1.00	.50

FRITT

(One quart of each variety.)

	200000000000000000000000000000000000000		
Collection of strawberries	1st prem. \$4.00	2d prem. \$3.00	3d prem. \$2.00
Each named and catalogued variety of straw- berries	.75	.50	.25
Seedling strawberry never having received a premium from this society	3.00	2.00	****
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VEGETABLES.			
Collection of early vegetables	\$3 00	\$2.00	\$1.00

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MEETING OF THE WOMEN'S AUXILIARY.—The regular summer meeting of this Auxiliary society, will be held at some convenient time during the day, to be announced.

HOW TO REACH THE GROUNDS.

Take the Como-Interurban electric car in either St. Paul or Minneapolis and get off at Dooley avenue, where carriages will be found in waiting to carry visitors to the grounds, one-half mile distant, from 9:30 a. m. to 1:30 p. m. Those who drive over in their own conveyances will find ample accommodations on the grounds for stabling.

Visitors should NOT take the Interurban car, but TAKE the Como-Interurban-Harriet car.

For further information address

W. W. PENDERGAST, President, Hutchinson.

A. W. LATHAM, Secretary, 207 Kasota block, Minneapolis.

PREMIUM LIST.

All exhibits must be entered with the secretary and in place by $12~\mathrm{M}$, to be entitled to compete for premiums.

Exhibitors competing must be members of this society and the growers or makers of the articles exhibited. The fruit and flowers exhibited must have been grown in Minnesota and must be correctly labelled.

No premiums will be awarded on unworthy articles.

FLOWERS.

(Six flowers of each variety.)

	1st prem.	2d prem.	3d prem.
Collection of cut roses (outdoor grown)	\$3.00	\$2.00	\$1.00
Each named variety of cut roses (outdoor grown).	.50	.25	****
Bouquet of mixed flowers	1.50	1.00	.50

FRUIT.

(One quart of each variety.)

		2d prem.	3d prem	
Collection of strawberries	\$4.00	\$3.00	\$2.00	
Each named and catalogued variety of straw-				
berries	.75	.50	.25	
Seedling strawberry never having received a				
premium from this society	3.00	2.00	****	
Each named and catalogued variety of currants	.75	.50	.25	
Each named and catalogued variety of goose-				
berries	.75	.50	.25	
VEGETABLES.				
Collection of early vegetables	\$3 00	\$2.00	\$1.00	

Ye HORTICULTURISTS DO DINE



MENU



CREAM OF TOMATO

CELERY

DILL PICKLES

MIGNON OF TENDERLOIN BEEF DIXIE SPECIAL BAKED POTATOES BROWNED CORN

HEART OF LETTUCE CREAM DRESSING

WHITE HOUSE ICE CREAM

CAKE

COFFEE

HORTICULTURAL BANQUET.

1 9 1 8.

Toastmaster, Prof. F. L. Washburn.

Gra	ce
	a. America, first and fourth stanzas, page 28. All standing and singing.
	b. SongTrafford N. Jayne
2.	John Nordine. 'Tis easy to go with the wind but dusty—face the other way.
3.	Reading Mrs. Wm. Willing
4.	Song. Trafford N. Jayne
5.	N. A. Rasmussen. "Why are we here? You tell."
6.	Rev. Francis Jager, "The Red Cross in Serbia."
7.	Battle Hymn of the Republic, page 29, verses 1, 4, 5. All standing and singing.
-81	Prof. N. E. Hansen, "In the days of Moses and subsequently."
9.	Reading
10.	Dean R. W. Thatcher. "Life is an opportunity—so is this toast."
11.	SongTrafford N. Jayne
12.	Miss Maria L. Sanford. "The making of an American."
13.	Song. "Auld Lang Syne." 1st verse, page 223. All standing and singing.

DROPPED FROM FACULIY

Agricultural College Troubles Lead to Requests for Resignations.

The lack of harmony that has been in existence for over a year at the agricultural college has resulted in the enforced resignation of four members of the faculty. They are Prof. F. D. Tucker, principal; Mrs. Virginia Mere-dith, preceptress of the girls' departdith, preceptress of the girls' depart-ment; Mr. Mahood, physical instructor, and Mrs. Mayhood, instructor in algebra

All has not been serene at the agricultural college for over a year, and Dean Ligget once before brought the matter to the consideration of the board of regents of the university. The relations between Professor Tucker and Dean Ligget were at times strained and the dean requested the board of regents to request Professor Tucker's resignation.

At that time the regents did not think it advisable to take any action, hoping that the friction would die out. The main trouble was apparently one of jurisdiction and authority, and instead of the trouble healing, it grew more serious.

When the matter was called to the All has not been serene at the agri-

stead of the trouble healing, it grew more serious.

When the matter was called to the attention of the board of regents at a recent meeting, the board, with one or two exceptions, voted to request the resignation of the four members of the faculty mentioned above. It was decided that this was the only method by which harmony could be established, as there would always be rankling as long as any of the principals remained. Previous to this decision the board of regents, on the invitation of Deard of regents, and the invitation of Deard investigate the matter. The action of the board was in conformity to the report of the special committee.

Senator J. T. Wyman, who was chairman of the special committee, last night gave the following statement to The Times:

"As the matter has come out in certain evening papers, regarding the more, se When

man of the special committee, last night gave the following statement to The Times:

"As the matter has come out in certain evening papers regarding the changes made by the board of regents, it is, perhaps, well to say, in order that the public may be correctly informed, that the regents have asked for the resignation of three teachers at the school of agriculture. This was done after an investigation by a committee consisting of J. T. Wyman, chairman; Gov. A. E. Rice of Willmar, and Dr. O. C. Stickler of New Ulm.

"The report of the committee was unanimous, and the action was determined upon in the interests of peace at that school, and if peace can not be had from this action, the regents will go further and use still more drastic measures. We made no charges against anyone, but people had taken indeas and we propose to stop the difficulty now.

"It is true we have discontinued certain departments at the university in the interest of economy, notably the department of art. As we have not enough money to carry on all the work, we dropped that work which the university could get along without and suffer the least inconvenience.

"It is also true that we cut certain salaries in order that we might keep within the limit of expenses. We do not think that it is wise to publish all these names, and thereby help to prevent the persons affected from getting other situations, and we know from experience that such publicity does a great injury to a teacher.

"The regents have done this work in

other sit

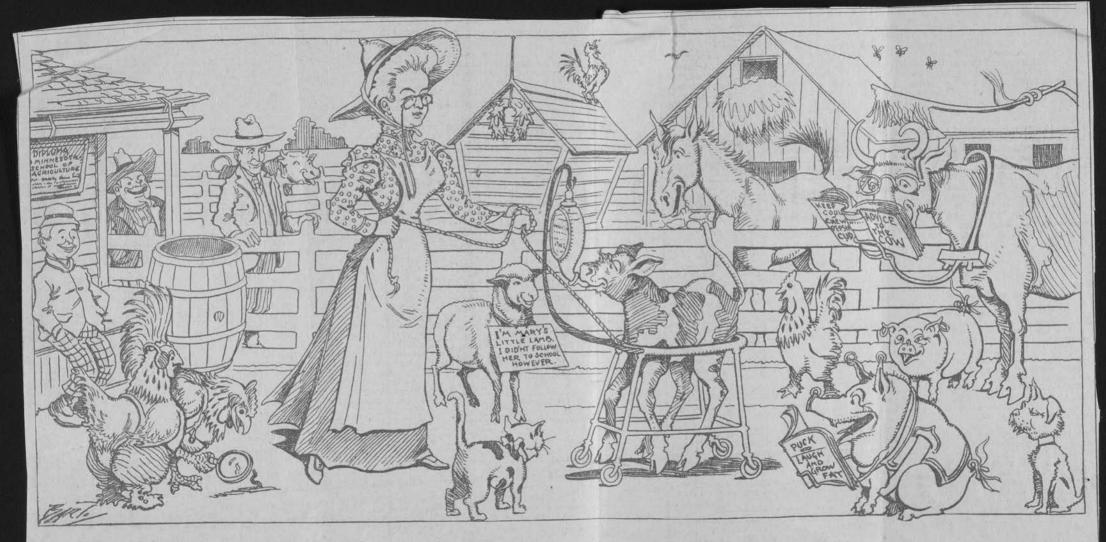
vent the persons affected from getting other situations, and we know from experience that such publicity does a great injury to a teacher.

"The regents have done this work in the interest of the university and the state of Minnesota, and the state will stand by them and so will the alumni. Out of 4,000 alumni, it is not surprising that some criticize sharply and do not understand the situation as well as the regents do.

"As to the 'star chamber' session of the board of regents, the sessions are 'star chamber' only when we are dealing with matters which affect the professional reputation of men and women who depend upon their profession for a livelihood. Their reputation is their best asset, and such discussion and action should be softened and tempered

best asset, and such discussion and action should be softened and tempered by saying as little as possible.

"Every one of the teachers involved in the action of the regents is worthy of employment in situations as good, or better than those they occupied in the University of Minnesota. As to psychology being of more importance than 'learning to stick a pig,' as one paper puts it. I know the board of regents think that our work in animal husbandry in 'he agricultural school is of more importance than teaching psychology, and I guess the state of Minnesota will sustain it upon that point, notwithstanding our critic who claims to be an alumnus."



SHE DIDN'T GRADUATE AT THE SCHOOL OF AGRICULTURE FOR NOTHING.

TUDENT DAYS ARE OVER TES RETURN TO THE FARM nnual Commencement Agricultural School Was sant Affi Ples The steady progress of the school of agriculture at St. Anthony Park, in connection with the state university, was again demonstrated yesterday in the tenth commencement exercises held in the spacious drill hall at the college. This progress was not only shown in the number mmencement exercises on the number of the nu ress was not or of graduates—thi ever before, but and tone of the one of the addresses encement speakers. week has been one of y at the weeke has been one of much pleasant wity at the school beginning with the salaurate address by the Rev. A. B. Frum of St. Paul on Sunday afternoon, wed by the alumni meeting on mesday, class day exercises on Thursand the formal graduation exercises erday. activity Meldrum of followed by Wednesday, llowed ednesday, c day, and the formal gratuum yesterday.

The opening music was by Danz' orchestra, which supplied the various numbers of the day. Prayer was offered by the Rev. E. S. Pressey. Miss Grace Bacon Andrews of Faribault was valedictorian, and as she was the first young woman to hald she took occasion to make The optra, which support the day. Pray of the day. Pray Miss drews of Faribault was visue was the first young tion, she took or wishom show ttend to Rev. E. S. Pressey. Miss Grace Bacon Andrews of Faribault was valedictorian, and as she was the first young woman to hold this position, she took occasion to make note of the wishom shown in permitting young women to attend the school after nine years of education for young men alone. There were three young women graduates, the first in the history of the school. She made emphatic the fact that the change in the curriculum, admitting young women to the course was bound to do much to elevate farm life and to place farming in its true relations to other occupations. farming in its apations.

A subject of much interest in Minnesota just now, "Sugar Beets as a Farm Crop," was the topic considered by the first regular speaker, J. F. Cross of Childs. The sharp distinction between the sugar beet and the ordinary beet was drawn, and the development of the sugar beat outlined. Breeding and selection as in cattle development have been followed in producing the sugar beet of commerce. Experience that the sugar beet may be raised according to the sugar beat a opment have been followed in properties of the sugar beet of commerce. Experience shows that the sugar beet may be raised to advantage in a zone of territory 100 miles wide on either side of a line extending from a little below St. Paul southeasterly, leaving the state at Browns Valley. The speaker not only gave many interesting facts in regard to the care of and cultivation of sugar beets, but demonstated how easily and naturally the sugar beet crop will fit in with the other work of the Minnesota farmer.

"Training for Farmers' Daughters' was discussed in the address by another young woman graduate, Miss Martha Denison, of Faribault. The household cares, knitting, spinning, weaving, with a little of the old fashioned district school, these were the portion of the farm girl in the good old times. In these progressive days, however, this is changed and the girl holds almost equal rank with her brother, and "sometimes," she maintained, "she is as competent as he is." The value of the various departments of instruction was competent as he is. he value instruction was competent as he is." The value of the various departments of instruction was something of agricultural chemistry; of the care of stock; of how to select the best cattle and sheep; how to understand aright vegetable gardening and fruit growing, zoology and entomology, will be better equipped for the duties of her life.

C. W. Hale, of Kedron, spoke on "The Benefits Derived from the School of Agriculture." The keynote of his oration was to be found in this: "What we learn here instead of diverting our attention from the farm, develops that charm for the occupation which enables us, as we go back to our homes, to make life more happy and propesrous." The many departments of the school life were taken up and considered to show their relation to the practical work of farm life. The social life of the college was also dwelt upon and from many points of view the speaker approached the work, showing with each something of importance to the future of the farmer. He looked for great good to come to the lives of the farmers of the state through the influences of the school. Decidedly different in character was the address of the next speaker, C. E. Memer.
ne farmer.
ome to the lives
nate through the in
ally different the school. er was the C. E. Mc-was "The

Decidedly different the Decidedly different the Decidedly different the Decidedly different the Decided Course of Stillwater. His topic was Life History of a Mosquito." Thistory of the mosquito was dwelt the Decided Course of the Decided Cour eaker, C. E. is topic was "The life on and

sald does s the not bite, simply be gan necessary for s ing into the details of the mosquito th simply l act. A.
life and haver asked, and earthly such an ac squito the speaker asked the question: "What e to learn all these things?" answered good is I It to became e thus of the it that answer was the pests the being number able to destroy the eggs, and to preven the mosquitoes nee of t development of the mosquitoes near ms and dwellings. By so simple a thing pouring a few tablespoonfuls of kero-te oil upon the water in a rain barrel water in a rain be, and pupae die of larvae, the eggs, District Schools' was the subject by S. P. Powell of Stillwater, the gular speaker on the program. He focation 'Our hosen

chosen by S.
last regular speaker on the sons daughters of Minnesota farmers red no other education than that of the dissection. Passing from this statement with the higher education at with the higher school of the or with the district the district school of he contrast with the high showed that the district s try places has, in com progress made by othe education, fallen far be He protested strenuously counprogress has education, fallen education, in sore need of paint, perched on a quarter acre let surrounded by weeds, unchecked in their magnificent growth, within sight of the well-kept homes of the arrounded of the education education education, at the education education, at the education education, at the education edu

thecked in their mag...
thecked in their mag...
the sight of the well-kept hoters of the neighborhood, for better styles in the archite county school building, better better heating, better lighting.
The valedictory address was S. Wilson of Davies. It was a stranger of the stranger of the same and the same as a stranger of the s The var. Wilson S. Wilson of Davies. It was a typical valedictory, earnest in tone and full of sympathy with the occasion. He gave as one of the important results of the college life, the knowledge of the outside world within these young map and women from the anowiedge of the outside the these young men and wome farms obtained. The deep-felt he graduating class were expre-to the president, the dean, the b nts, the principal and members lty, and hearty words of cong were spaken to fall-we are ch these young farms obtained. which women the 1. thanks expressed board him

nembers of the of congratula-w students on tive life of the regents, the aculty, a lon were d hearty spoken to fe

faculty, and hearty words of congratulation were spoken to fellow students on their entrance upon the active life of the farm and community.

After another selection by the orchestra President Northrop conferred certificates upon the following gaduates:

Eugene Kingsley Allard, Spring Valley, Grace Bacon Andrews, Faripault; Adam Carlyle, Lynd Robert Faulkner Cooley, Otsego; John Frederick Cross, Childs; Bertram Galen Clark, Hankinson, N. D.; Martha Denison, Faribault, Daniel Asher Gaumnitz, St. Cloud; Benlamin Asbury Gray, Lintonville: Francis Graham, Roberts, Wis.; Francis Burrell Guthrie, York, N.; Charles Villey Hale, Kedron; Bernard Halverson, Norwsy Lake, John George Howe, Kellogg; Henry Garfield Krum, Minneapolis; Edward Theodore Kamrud, Vin Bethuel Lund, Vining; Humbold; Lugger, St. Anthony Park; Frank Foskett Marshall, Crow River; Sidney John Malerg, Cannon Falls; Clinton Eugene McGuire, Stillwater; Oscar Edward Olson, Weion; Stephen Rutherford Powell, Stillwater; Edgar Eaton Ravill, Heron Lake; Wilson Clay Roberts, Roberts; Fred Martin Sick, Duluth: Christen Johan Taile, Kenyon; Forrest Oscar Tanner, Brownsdale; Lewis Ulland, Moscow; Leslie Rudolph Widmoyer, Dresbach; Archie Dell Wilson, Davles; Warren Ziegler, Minneapolis.

The commencement exercises closed with the benediction by the Rev. C. R. Stavan.

exercises cl osed

The commencement exercises the benediction by the Rev. (son, pastor of the Methodist (Anthony Park. DIED

C. R. f Ste

BICKNELL—GEORGE S., died at his resi-dence, 4245 Lyndale avenue S, this morn-ing after a long illness, in his 49th year. Funeral notice later dence, 422 ing after a long

EDUCATED FOR THE FARM

Peculiar interest centers in the commencement exercises of the Minnesota School of Agriculture, held to-day. For the first time in the history of the institution, now ten years old, the names of young women appear among the graduates.

The importance of the admission of young women to the advantages of this school is not to measured easily. The salutatorian of the class, in her address this afternoon—for the salutatorian is a young woman—asks the significant question: If the farmers' daughters are to be educated here in this school of agriculture, is it not safe to say that fewer girls will leave their farm homes to live in the city?

As in the case of the young men of this institution, some 98 per cent of whom go back to the farms after graduation, thereby taking to the farm life of the state an influence for the advancement of agriculture of immense value, so these young women, going back to the farm life with sensible education in farm affairs, will take with them a different but not less powerful influence.

The course of this institution has been as wisely planned for the young women as for the young men. The frills and furbelows have been left off. They are taught the fundamentals of an education, or strengthened in these fundamentals if their district school has not been adequate, and then they are given instruction in the many important features of farm life. They become skilled in agricultural chemistry; they learn the constituents of food; why one food is good and another bad: how to cook foods in order to get the best results for body and brain; how to make their own wardrobe; how to conduct the affairs of the home in the most attractive manner-they even gain a clear knowledge of stock raising, and the care of the garden and the fascinating secrets of floriculture and horticulture are opened to their eyes.

In a word, these young women become educated so that in the truest and highest sense they are fitted to be heads of the households of the farms of Minnesota. Then, if means are at hand and inclination prompts, they can go on from the school of agriculture to the regular agricultural college course of the university and take their degree along with the men.

There are but three young women grad-

uates this time, but the attendance is now so large and has increased so rapidly since the school was opened to them that they will no doubt soon be as numerous on the commencement platform as the young men. The School of Agriculture has done a great deal for the young farmers of this state, but nothing more important to the elevation of the rural life of the state than to give to them wives who have been educated with special reference to the duties of farm life, and who are in sympathy with it.

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HUNDRED AND FIGTY AT LUNCH—AN INCIDENT OF THE STATE HORTICULTURAL SOCIETY'S MEET-ING YESTERDAY—PHOTOGRAPHED FROM THE GALLERY.

SED AT

notes for Horticultural Prienic.

Used 2 gal, cream mixed with 12 milk.

Only about 2 lbs of butter used for sandwicks.

12 lbs. of bailed bacon, 9 Loanes bread.

Thelp. anderson. Buell Kamrud. Pr. Drew, Whele.

+ Machintol.

Siskes used. Mooden flatis (300): I fooms (200): sancers (200).

alfs. 100 besides the 100 belonging to Exp. Station.

20 toble cloths. — 10 cream + large fitchers

6 dg. lemons forly about 3 Dg used! 1/2 citie acid.

35 Logar. 4 can's coffee.

notes for Horticultural Pienic By P.S. Mackintosh

LOST!! \$32,000,000.00.

There are 160,000 farmers in this state. If one in every ten of them had one hundred

PEERLESS APPLE TREES

in heavy bearing, each tree would have produced ten bushels of Good Winter Apples this year, if the trees were cared for according to my plan. Each man would then have

ONE THOUSAND BUSHELS

from his one hundred trees. making a total of Sixteen Million Bushels, worth this year \$32,000,000.00, or more than the entire wheat crop of this state. The PEERLESS is the only tree you can depend on to do this.

O. F. BRAND,

Faribault, Minn.

Report From OWATONNA TREE STATION.

E. H. S. DARTT, Superintendent.

In surveying the field of experiment in Minnesota nothing presents to us such strong evidence of substantial and rapid progress as the varied results of fruit tree girdling as now practiced at this Station.

Previous to commencing in this line of experiment, we had no way to hurry up tardy bearers except by the tedious method of top grafting which is a modification of



Hotchkiss, 2 inches in diameter.

the same principle that is involved in girdling. We had no way to test the hardiness of a fruit tree except to wait indefinitely for the advent of a hard winter such as the present one promises to be.

Under these conditions it would likely take fifteen to twenty years to produce and

test a new seedling apple tree as to its hardiness and the kind of fruit it would bear. Now conditions are changed and we think we have the fruit tree under perfect control. By this simple, easy and practical process we can in a year's time cause the development of the young tree and soon bring out all its natural characteristics. If it is tender or predisposed to blight it will likely be killed, but if it is hardy it will accommodate itself to these little encroachments on nature's laws and will be ever ready to comply with all our reasonable requirements.

If we girdle a thrifty tree in May the wound is likely to heal over perfectly during the growing season and no effect is produced. But on July 1st the elements of growth are being taken in rapidly through the leaves and are being distributed to every part of the tree. If we girdle at this time, cutting through the cambrium layer, we stop the downward flow of these elements, which, being held in the top of the tree, naturally cause the formation of fruit buds to be developed the next season. Water sprouts frequently start below the girdle which should be removed.

The manner of girdling is not very essential and after trying various methods I have adopted the spiral method partially because it seems less shocking to the nerves of those sensitive people who believe that to girdle means to kill. Girdling by the spiral method is accomplished by

starting in with a saw just below the limbs and cutting down around the tree at an angle of forty-five degrees. If the cut extends a little more than once around no harm will result. If the saw is turned square around the tree the effect will be the same. On small trees and limbs a knife may be used instead of a saw, but the fact must be emphasized that unless the cut is deep enough to disturb the cambrium layer no results can be expected to follow.

About the first of July, 1897, a large amount of girdling was done by the spiral method in the orchard and nursery. A few trees were killed but I think not one having a good reputation for hardiness and freedom from blight. In the orchard alternate trees from two to four inches in diameter were girdled. In most cases girdled trees were well loaded with fine fruit the next season, while on ungirdled trees generally specimens were few and scattering. So far as girdling was extended it increased the crop fully four fold.

In the nursery trees were usually from an inch to two and one-half inches in diameter and from two to six feet apart, being nursery rows thinned out. Probably from three to five hundred of these trees scattered over about two acres of ground we egirdled. Many of them were heavily loaded with fruit and I think the crop amounted to about seventy-five bushels while I did not notice an apple on

an ungirdled tree. More than 100 varieties were thus brought into bearing, about fifty of which were exhibited at our last State Fair. Ten or fifteen varieties were new seedlings of great promise.

In very fruitful seasons if we remove fruit and girdle at the right time we can bridge over the off year and have fruit to sell or to keep in seasons of scarcity. In a climate like ours, where fruit trees are naturally short lived and where our choicest varieties must slip along between our hard winters which are often uncomfortably close together, none can fail to appreciate the great advantage of being able to bring our trees into very early bearing.

With more than fifty years of experience in orcharding in Wisconsin and Minnesota and this recently acquired knowledge I would plant Minnesota orchard trees eight feet apart in the row extending north and south with rows sixteen feet apart east and west. After two or three years I would girdle half my trees and the next season I would girdle the other half. After that I should attempt to control growth and productiveness by girdling.

If a cold winter like the present killed down my trees I would allow them to grow up again in bush form, branching from the ground, feeling very confident that with a little encouragement on my part they would very soon be found doing a prosperous business at the old stand.

Owatonna, Feb. 4, 1899.

REPORT FROM

OWATONNA TREE STATION.

FOR THE YEAR 1800.

E. H. S. DARTT, Superintendent.

At the beginning of the year there were growing on the station fully 1000 varieties of grafted apples and about the same number of varieties are growing at the present time. Of these about 200 are Russian varieties, about 300 are seedlings, contributed by growers of the cold Northwest from their hardiest stock, and the remainder have originated on the station being grown from seeds of our best apples and crabs.

It has been my custom to carefully survey the field each fall and select the most promising varieties for grafting the following winter. One hundred and fifty-six varieties were grafted last winter, and about the same number of varieties will

be grafted this winter.

Our last winter, though severely cold, was not a test winter. Very little harm was done except by root-killing and that only occurred where our light covering of snow was blown off. About 40 orchard trees were thus killed and the most of the root grafts set in the spring of 1898. By the side of the winter of 1884-5 our last winter was a tame affair. On the

former occasion 800 Wealthy trees in one orchard were killed to the ground. Last winter the Wealthy, Haas, Ben Davis, and many others of that grade of hardiness escaped material injury. We talk about hardy roots, but root-killing, when it has occurred on the station, has made a clean sweep taking

apples and crabs alike.

Far the most interesting and important experiment that I have tried is that of girdling fruit trees to produce early bearing and test hardiness. This I have practiced on a large scale, having girdled thousands of trees. Death is always the result of injury and the amount of injury that a tree or animal can receive and still live is the true test of hardiness or tenacity of life. Certain kinds of injury invites the attack of certain diseases and the interference with the free flow of sap, which is the great promoter and protector of plant life, makes the girdled tree especially susceptible to sun scald, bark blight and perhaps to many other diseases of which we know nothing. When the tree doctor knows half as much as the man doctor pretends to know we may have a long list of tree diseases with remedies as infallible as the patent medicines that cure all the diseases that flesh is heir to. Girdling makes the young tree prematurely old, brings out all its latent defects, and if persistently followed up only permits the survival of the fittest. It seems poison to some varieties while entirely harmless to others. Two trees of Tetofsky seed No 3 that have been girdled three years in succession are now in fine condition and well loaded with fruit buds while two trees of Tetofsky seed No. 4 standing near were both

killed—bark blight starting in at the wound and extending entirely around the tree. Okabena seed No. 1, which bears a small winter apple,—may get larger—has been girdled for four years in succession and is now in healthy condition, while Richland Winter always kills with once girdling. No variety having a good reputation for hardiness and not subject to bark blight has been permanently injured by a reasonable amount of season-

able girdling.

The manner of girdling is not very essential so long as the cambrium layer is cut through entirely around the tree. Girdling by the Spiral method, which seems least harmful, is accomplished by starting in with a saw just below the limb and cutting down around the tree at an angle of forty-five degrees. On small trees and limbs a knife may be used. I have used pruning shears to advantage. I now use the tree girdler made on the principal of shears. The blades are four or five inches long bent in a little at the ends to hook on to the tree. The handles are like those of blacksmith's tongs: the blades are sharp and if bent an inch or two apart at the ends trees may be girdled spirally in a very expedious manner. Since trees may be expected to bear the next season after the girdling is done it follows that if we remove the fruit from part of our orchard trees and girdle. we may reasonably expect the girdled trees to fruit the following season. May we not in this way bridge over the off year? Much girdling was done in 1898 and in 1899 in spite of tramps, hoodlums, the hard winter and the off year I was able to exhibit at our state fair over 150 varieties, several of which were new seedling apples of great promise. For this

latitude I think the first of July about the best time to girdle. If it is done too early the wounds heal over quickly without results, if too late, there will be greater danger of permanent injury. On young trees thus forced into bearing, the apples are likely to be considerably below the natural size. We have no way of distinguishing the apple from the crab except by size and I am pleased to note that some varieties that I placed in the crab list last year I am obliged to transfer to the apple list this year on account of increased size. If this increase shall be maintained we may reasonably expect many good sized apples to develop from our very large crab list. Mr. Gideon claimed that the Wealthy was the product of Cherry crab seed and I have some good sized apples growing where crab seed was planted. It has been my custom to regraft the most promising new varieties each year so that if any proved valuable I would have scions for distribution. And I am pleased to say that I have scions of this class now ready for our Minnesota experimentors and nurservmen.

Horticultural Banquet 1911



SECOND TO NONE.
FROM MINNEAPOLIS JOURNAL

MENU

CONSOMME PRINTANIERE
BREAD STICKS
CELERY OLIVES RADISHES
PINEAPPLE ICE

ROAST TENDERLOIN OF BEEF, JARDINIERE
PARISIENNE POTATOES
FRUIT SALAD

ROLLS BREAD AND BUTTER SANDWICHES
BISCUIT TORTONI CAKES
LARGE COFFEE

PROGRAM

TOASTMASTER ... A. J. PHILIPS, WEST SALEM, WIS.

Gra	ice				Mı	r. Cl	arence	e Wedge, Albert Lea
I,	Song				-		18.5	Minnesota Quarte.
2.	Hetero ticultur G. Lor	ral hi	erogl	phics	3W	ns at	ter tw does 1	enty years of hor- ne mean by that? A,
3.	Readin	ng				Mis	Erm	a Baker, Minneapolis
4.	Tis sai	yman	lis m	ore bl	essed tle of	to g	ive th	an to receive"the F. X. Ferodowill,
5.	Song,		10	-	12		9	Minnesota Quartet
6.	"Unea a thous ers' Ins	sand	state-	wide :	maste	ers.	A.D.	does the bidding of Wilson, Supt. Farm-
7.	Song,		-	5				Minnesota Quartet
8.	A Serr	non i	n Cha	alk by	y "Ba	rt",	of the	Minneapolis Journal
9.	Here's woman	lon may	g life vote	to t	he H Mrs.	ortic Cla	ultura rence	l Society where a Wedge, Albert Lea
10.	Song,			4.	14		-	Minnesota Quartet
11.	"Ever	beari erry?	ng''	-magi	c wo	rd!	But F. Ga	why stop with the ardner, Osage, Iowa
12.	Readi	ng,		-		Mis	Erm	a Baker, Minneapolis
13.	Song,			-		Traf	ord N	. Jayne, Minneapolis
14.	New a forso Minn.	are	some	ruits a	nd flo	ower	s are	well worth striving b. E. Vincent, Pres.
Clo	sing son	ng,	All jo	ining.				

Minnesota State Horticultural Society.

To all those in any way interested in Hosticulture:

A cordial invitation is extended to attend the twenty-fourth annual meeting of the Minnesota State Horticulturar Society in session at Guaranty Loan Building, Tuesday, Wednesday, Thursday and Friday of this week. Three sessions each day. Interesting, instructive and valuable papers and discussions will be presented.

A fine display of fruits and flowers will be on exhibition. Admittance free.

Wyman Elliott, Pres.

Samuel B. Green, Secy.