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THIRTIETH ANNUAL REPORT.

TRANSACTIONS

OF THE

HAMPSHIRE AGRICULTURAL SOCIETY

FOR THE YEAR 1879.—*80*

AMHERST, MASS. :

RECORD OFFICE; J. E. WILLIAMS, PRINTER.

1879.

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AMHERST, MASS. PUBLISHERS FOR 1879.

PRESIDENT,

W. L. WARNER, OF SUNDERLAND.

VICE PRESIDENT,

CHARLES S. SMITH, OF AMHERST.

SECRETARY,

W. L. BOUTWELL, OF LEVERETT.

TREASURER,

E. E. WEBSTER, OF AMHERST.

EXECUTIVE COMMITTEE :

E. F. COOK, OF AMHERST,

H. C. COMINS, OF HADLEY,

A. W. STACY, OF BELCHERTOWN,

E. H. JUDD, OF SOUTH HADLEY,

ASAHEL GATES, OF PELHAM.

AUDITOR,

D. W. PALMER, OF AMHERST.

DELEGATE TO THE STATE BOARD OF AGRICULTURE,

H. C. COMINS, OF HADLEY.

PRESIDENTS AND SECRETARIES
OF THE
HAMPSHIRE AGRICULTURAL SOCIETY.

PRESIDENTS :

- 1850-4, ALFRED BAKER,
1855-7, WILLIAM P. DICKINSON,
1858-9, N. A. SMITH,
1860-1, PRESIDENT W. S. CLARK,
1862-5, HON. LEVI STOCKBRIDGE,
1866, LUKE SWEETSER,
1867, AUSTIN EASTMAN,
1868, HON. LEVI STOCKBRIDGE,
1869-70, LEVI P. WARNER,
1871-2, PRESIDENT W. S. CLARK,
1873-5, H. C. COMINS,
1876-8, FLAVEL GAYLORD,
1879, W. L. WARNER.
-

SECRETARIES :

- 1850-8, J. W. BOYDEN,
1859-60, HON. L. M. BOLTWOOD,
1861-3, A. P. HOWE,
1864-7, M. N. SPEAR,
1868, O. G. COUCH,
1869-70, R. W. STRATTON,
1871-2, HON. E. A. THOMAS,
1873-6, J. L. SKINNER,
1877, E. E. WEBSTER,
1878, H. M. McCLOUD,
1879, W. L. BOUTWELL.

BY-LAWS

OF THE

HAMPSHIRE AGRICULTURAL SOCIETY.

ARTICLE 1. The officers of this Society shall be one President, a Vice President, a Secretary, a Treasurer, and an Executive Committee of five, to be chosen by ballot at the annual meeting, and to serve one year, or until others are chosen in their stead.

ART. 2. The President shall preside at all meetings of the Society, and in his absence, the Vice-President.

ART. 3. The Secretary shall keep a true record of all the doings of the Executive Committee and of the Society.

ART. 4. The Treasurer shall keep an account of all moneys received into and paid out of the Treasury. His accounts shall always be open for the inspection of any member of the Society, and he shall give bonds in such sum as shall be designated by the Executive Committee, for the faithful discharge of his duties, and he shall make an annual report, previously audited.

ART. 5. It shall be the duty of the Executive Committee to call special meetings of the Society, and upon the request of not less than ten members from each of four different towns, they shall call such meetings to designate the time and place of the annual exhibitions, make all necessary arrangements therefor; to appoint sub-committees for examination and to award premiums; and to have a general supervision over the funds and affairs of the Society. The President, Vice-President and Secretary shall be members of the Executive Committee.

ART. 6. The annual meeting of the Society shall be held on the last Wednesday of December, each year, and twenty members shall constitute a quorum to do business.

ART. 7. Notices for all meetings of the Society shall be signed by the President and Secretary, and published in some newspaper in the County, or circulated by hand-bills, or in any other manner that may be designated by the Executive Committee.

ART. 8. Any male person may become a life member by paying to the Treasurer the sum of five dollars, and any female by payment of two dollars and fifty cents.

ART. 9. All premiums not called for within six weeks after the same are awarded shall be paid into the Treasury and be considered as presented to the Society.

ART. 10. These By-Laws may be amended or altered by a majority of the members present at any legal meeting.

SECRETARY'S REPORT.

It was our good fortune this year to have two pleasant days for our Fair, and in consequence it was a decided success, the best fair we have ever held and a credit to the Society. It will be my aim in this brief report to point out some indications of advancement, as well as to make a few suggestions in regard to future improvements.

The report on stock in general is a correct index of our show in that department, and I will only mention a few facts in regard to it. There were forty-four cows exhibited this year against seven in 1851. This shows an increase in the dairy interest, and is certainly a step in the right direction. The number of calves exhibited shows that the farmers of this vicinity are raising their own stock, with the object of obtaining choice grades for dairy purposes. The great decrease in working cattle, which have been replaced by horses, shows that machine power is gradually taking the place of manual labor, and that our farms have been improved so as to be better adapted to horse than ox power. Every one entering milch cows for premium should give a written statement concerning them. I will give a copy of one handed me at our last fair, both as a sample statement and as the record of a good cow. Beauty, a grade Durham, owned by Mrs. O. S. Longley, is eight years old. She came in, Oct. 27, 1878, her greatest flow of milk was 54 lbs, 4oz per day, or 378 lbs per week. Her average of butter 16 lbs. 8 oz. per week; her flow of milk was as follows:

November,	54 lbs, 4 oz	per day
December,	52 "	" "
January,	48 "	" "
February,	46 "	" "
March,	42 "	" "
April,	40 "	" "
May,	38 "	" "
June,	40 "	" "
July,	8 "	of butter per week
August,	4 "	" " " "

She is now nearly dry and comes in again Oct. 13, 1879.

To make this statement complete it should tell just what food she consumed, whether she was fed on corn meal, oil cake or cotton seed meal, the amount given per day, and what kind of hay used, with their cash value, also the amount received for butter; so that farmers might gain information from it in regard to the best milk and butter producing food, as well as the profit from the time of coming in to the time of calving again.

The show in the hall was one of the best on record. There was a great improvement made by our president in the arrangement of one table, so placing it as to let the light from the side windows fall equally on all exhibits; it added greatly to the effect of the exhibition, as well as to the cheerfulness of the hall, and if the other table were similarly arranged it would be still better. I have not time or space here to mention any particular exhibits; the show of fruit was very good for the odd year, and the show of vegetables was unsurpassed. The numerous entries of bread, butter and cheese, on exhibition showed by their quality the good judgment and skill of the farmers' wives and daughters, while their taste and handiwork were shown to good advantage in the nearly two hundred entries of fancy articles and domestic manufactures. Our town merchants deserve much praise for their fine exhibitions; they add greatly to our show and we hope they will be as well represented in the future.

Agricultural societies were organized for interchange of thought and opinion, and each one of us should be able to learn from the exhibits of others, who have been successful in their particular departments. Crops can often be improved by a change of seed; while with stock there is unlimited room for improvement, not only in thoroughbreds, but particularly in the grades. Nearly three-fourths of the stock exhibited were of Shorthorn grades, which shows that the majority of our farmers consider it the best of any which have hitherto been introduced. It is at the agricultural fair that improved farm machinery should be exhibited and explained, that all may know what machines are best adapted to their particular farm. Every committee should make a report that contains, not only the fact that certain articles are entitled to a premium, but write at length on their department, in order that our annual pamphlet may contain articles replete with information.

In our fourth division, although liberal premiums have been offered, there seems to be a want of competitors. The departments of Orchards, Forests, Pear trees, Apple trees, and Vineyards, appear without an entry on our books. Peach trees were entered by John W. Clark, and took the first premium. There were several competitors but a large proportion of them failed to file their statements in time, thereby forfeiting their claim to a premium. There were three reports presented for premiums, of these the one on fruit by John W. Clark stands first; the report on Stock in general by Austin Eastman is second, while the third was awarded to L. P. Warner's report on Vegetables.

There have been some additions to our list of life members. The only list of old members is what have been from time to time printed in the transactions. As the old list was consumed in the late fire at Amherst, there should be some means devised by which all members may bring forward their certificates and have their names enrolled on the new list.

Our financial condition will appear from the treasurer's report; the indebtedness of the society is not large and need not concern us. If we can pay even a little every year it will not be long before we shall be free from debt and one of the most prosperous and thriving societies in the State.

Our yearly revenue might be considerably increased by preventing the digging of wood-chuck holes under the park fence, also by placing a few strands of barbed wire fence on top of the present fence, on that side adjacent to that renowned institution, "Amherst College."

Our thanks are due to all those who have contributed to the main object of the Fair, or in any way aided us, either at the show or in writing reports and essays for this our annual transactions, and above all to our able President, whose untiring effort and good management has placed the Society in so favorable a condition.

LIST OF PREMIUMS AWARDED.

CLASS 1—TOWN TEAMS. 2 ENTRIES.

Hadley,	\$15 00
Leverett,	17 00

CLASS 2—FAT OXEN. 4 ENTRIES.

Dwight Presho, Pelham,	\$4 00
Baxter Fales, “	2 00

CLASS 3—WORKING OXEN. 13 ENTRIES.

G. W. Morgan, Belchertown,	\$4 00
Chas. Thurber, Leverett,	3 00
R. H. Howard, Belchertown,	2 00
G. W. Morgan, “	1 00

CLASS 4—STEERS. 7 ENTRIES.

Asahel Gates, Pelham,	3 years old,	\$3 00
Josiah Rice & Son, Leverett,	“	2 00
P. West & Son, Hadley,	2 “	3 00
T. Dwight Morton, “	2 “	2 00
G. W. Morgan, Belchertown,	yearlings,	2 00
L. Cummings, Amherst,	“	1 00

CLASS 5—MILCH COWS. 8 ENTRIES.

F. D. Huntington, Hadley,	Jersey,	\$3 00
C. Gaskell, Amherst,	“	2 00
Mrs. O. S. Longley, “	Durham,	4 00
E. A. Munsell, “	“	3 00
E. A. Munsell, “	“	2 00

CLASS 6—HERDS OF COWS. 3 ENTRIES.

E. A. Munsell, Amherst,	\$4 00
Austin Eastman, No. Amherst,	3 00
P. West & Son, Hadley,	2 00

CLASS 7—HEIFERS. 15 ENTRIES.

Oren Williams, So. Amherst,	\$3 00
Proctor Gray, Amherst,	2 00
T. W. Smith, “	1 00

CLASS 8—BULLS. 5 ENTRIES.

F. L. Stone, Amherst,	Jersey,	\$4 00
M. F. Dickinson, “	Ayrshire,	4 00
A. W. Stacy, Belchertown,	Durham.	4 00
E. T. Sabiu, Amherst,	“	3 00

CLASS 9—CALVES. 9 ENTRIES.

L. Cummings, Amherst,	steer calves,	\$2 00
Austin Eastman, No. Amherst,	“	1 00
T. W. Smith, Amherst,	heifer calf,	2 00
Oren Williams, So. Amherst,	“	1 00
Austin Eastman, No. Amherst,	bull calf,	2 00
F. D. Huntington, Hadley,	“	1 00

CLASS 10—HERDS OF CATTLE. 4 ENTRIES.

P. West & Son, Hadley,	\$6 00
C. S. Smith, Amherst,	5 00
Austin Eastman, No. Amherst,	4 00

CLASS 11—SWINE. 13 ENTRIES.

W. Cleveland, Hardwick,	weaned pigs,	\$4 00
E. N. Smith, Sunderland,	“	3 00
P. West & Son, Hadley,	“	2 00
W. Cleveland, Hardwick,	boar,	4 00
D. F. Hagar, So. Deerfield,	“	3 00
F. H. Williams, Sunderland,	“	2 00
G. W. Fitch, Hatfield,	sow and pigs,	4 00
C. L. Russell, Sunderland,	“	3 00
J. W. Allen, Amherst,	“	2 00

CLASS 12—SHEEP. 14 ENTRIES.

T. D. Morton, Hadley,	buck,	\$4 00
W. Cleveland, Hardwick,	“	3 00
H. B. Dewitt, So. Hadley,	“	2 00
H. B. Dewitt, “	“ gratuity,	1 00

Geo. Green, Hadley,	buck, -	gratuity,	\$1 00
James Comins, No. Hadley,	"	"	1 00
T. Dwight Morton, Hadley,	ewes,		5 00
James Comins, No. Hadley,	"		4 00
Geo. Green, Hadley,	"		3 00
T. D. Morton, "	lambs,		3 00

CLASS 13—POULTRY. 57 ENTRIES.

E. C. Parker, So. Deerfield,	Collection,		3 00
Clark Bros., North Hadley,	"		2 00
M. B. Kingman, Amherst,	"		1 00
L. W. Allen, "	Pouter pigeons,		50
E. S. Blanchard, "	Golden Polish chicks,		50
J. Dickinson, "	Hamburgs,		1 00
B. Page, Pelham,	"		50
L. W. Allen, Amherst,	Light Bramahs,		2 00
M. B. Kingman, "	"		1 00
Wm. D. Crocker, Sunderland,	Brown Leghorns,		2 00
Clark Bros., North Hadley,	"		1 00
Clark Bros., "	Plymouth Rocks,		1 00
Clark Bros., "	Game,		2 00
Clark Bros., "	"		1 00
Clark Bros., "	Bantams,		1 00
Mrs. E. M. Williams, Sunderland,	"		50
B. Page, Pelham,	Geese,		2 00
James Irwin, Hadley,	"		1 00
E. S. Blanchard, Amherst,	Ducks,		1 00
B. Page, Pelham,	"		50

CLASS 14—MECHANIC ARTS AND FARM IMPLEMENTS. 25 ENTRIES.

E. H. Judd, South Hadley,	Clipper plow,	\$1 00
L. H. Allen, Amherst,	Wire goods,	1 00
C. O. Parmenter, "	Davis sewing machine,	50
J. S. Magoon, Northampton,	Wheeler & Wilson "	50
T. H. Hastings, Amherst,	Champion mowing machine,	1 00
T. H. Hastings, "	Tiger horse rake,	50
J. W. Congdon, "	Hay cutter and corn sheller,	1 50
G. L. Hobart, No. "	Oliver chilled plow,	1 00

L. P. Warner,	Sunderland,	Gale's chilled plow,	\$1 00
J. A. Rawson,	Amherst,	Clocks,	1 00
F. L. Stone,	"	Plows,	1 00

CLASS 15—MERCANTILE GOODS. 7 ENTRIES.

F. H. Howes,	Amherst,	Crockery,	\$10 00
J. A. Rawson,	"	Show case,	5 00

CLASS 16—DOMESTIC AND OTHER MANUFACTURES. 50 ENTRIES.

Mrs. S. V. Ball,	Sunderland,	Rag carpet,	\$1 25
Mrs. S. W. Boutwell,	Leverett,	"	1 00
Mrs. M. L. Hubbard,	Sunderland,	"	75
Mrs. S. H. Thayer,	Belchertown,	"	50
Mrs. L. H. Frary,	Leverett,	"	50
Mrs. C. Gallond,	Amherst,	Rug,	1 52
Mrs. McKenzie,	"	"	1 00
Mrs. W. H. Wilson,	Hadley,	"	75
Mrs. M. L. Hubbard,	Sunderland,	"	50
Mrs. A. Hobart,	No. Amherst,	Mittens,	75
Jennie Wilder,	Sunderland,	"	50
Mrs. M. L. Dickinson,	Amherst,	"	25
Mrs. E. S. Smith,	Belchertown,	Bed quilt,	75
Mrs. M. L. Dickinson,	Amherst,	"	50
Jennie Wilder,	Sunderland,	Hose,	1 25
Mrs. H. C. Comins,	Hadley,	"	1 00
Mrs. M. L. Hubbard,	Sunderland,	"	75
Belle Wrigley,	Amherst,	"	50
Almera Shaw,	"	Socks, mat, etc.,	1 00
Mrs. Henry Shaw,	"	Gent's scarf,	50
Mrs. K. P. Kingman,	"	Sofa pillow,	50
Mrs. Lucia Cowles,	"	Pin cushion,	50
Mrs. G. L. Cooley,	Sunderland,	Cradle quilt, etc.,	1 00
Mrs. N. A. Smith,	"	Afghan,	75

CLASS 17—FANCY ARTICLES. 138 ENTRIES.

Mrs. E. J. Leach,	Amherst,	Lounge spread,	\$ 50
Ellen Smith,	Holyoke,	Lace ends,	50
Willie C. Hastings,	Amherst,	Brush case,	50
Mrs. W. L. Warner,	Sunderland,	Sofa pillow,	2 00

Mrs. J. A. Rawson,	Amherst,	Sofa pillow,	\$1 00
Almera Shaw,	"	Toilet cushion,	50
Almera Shaw,	"	Hair receiver,	25
Almera Shaw,	"	Mat,	75
Mrs. Henry Shaw,	"	Baby's sack,	50
Mrs. Henry Shaw,	"	Wax work,	50
Mrs. Henry Shaw,	"	Nubia,	50
Mrs. Wm. Bangs,	"	Worsted wreath,	1 00
Mrs. J. J. Potwin,	"	Child's carriage blanket,	75
Mrs. W. M. Goodell,	Belchertown,	Toilet set,	1 00
Mrs. E. T. King,	Greenwich,	Tidies,	50
Mrs. H. Wales,	Amherst,	Sea mosses,	50
Eliza Mitchell,	"	Lace Tidy,	50
Belle Wrigley,	"	Stand spread,	50
Belle Wrigley,	"	Commode cover,	50
Henry Wilder,	"	Motto,	50
M. N. Spear,	"	Show case of goods,	2 50
Charles Deuel,	"	" " "	3 00
B. H. Averell,	"	Brackets, etc.,	1 00
Cora Church,	"	Duster,	50
Lucy Fish,	"	Crochet shawl,	1 00
Mrs. Charles Deuel,	"	Scrap bag,	50
Mrs. McMaster,	"	Table mats,	50
Mrs. Charles Wakefield,	"	Balloon,	50
Mrs. M. B. Smith,	"	Wax work,	1 00
Mrs. M. B. Smith,	"	Slipper case,	50
Mrs. W. H. Blanchard,	"	Flannel embroidery,	1 00
Mrs. C. H. Legro,	"	Slipper case,	50
Mrs. S. E. Dunlap,	"	Chair stripe,	1 00
Mrs. E. T. King,	Greenwich,	Hanging basket,	50
Mrs. E. T. King,	"	Knit sacque,	1 00
Mrs. Levi Stockbridge,	Amherst,	Kensington embroidery,	1 00
Mrs. M. B. Smith,	"	Lambrequin,	1 00
Mrs. O. S. Longley,	So. "	Fancy Table,	50
Amelia Pierce,	"	Scrap box,	50
Amelia Pierce,	"	Decorated stand,	50
Mrs. W. F. Ellis,	"	Chair back,	1 00
Mrs. S. W. Boutwell,	Leverett,	Case of stuffed birds,	
awarded, "Birds of New England," by Samuels.			

CLASS 18—FINE ARTS. 9 ENTRIES.

Jennie Pratt,	Amherst,	Crayon heads,	\$2 00
W. H. White,	“	Collection postal cards,	50
J. A. Rawson,	“	Painted panels, etc.,	2 00
J. L. Lovell & Co.,	“	Permanent photographs,	5 00

CLASS 19—BREAD, BUTTER AND CHEESE. 50 ENTRIES.

Mrs. S. W. Boutwell,	Leverett,	Brown bread,	2 00
Mrs. M. L. Hubbard,	Sunderland,	“	1 00
Mrs. W. H. Fales,	Pelham,	“	60
Mrs. M. L. Hubbard,	Sunderland,	Wheat Bread,	2 00
Belle Wrigley,	Amherst,	“	1 00
Nellie Baker,	“	“	50
Mrs. P. D. Hubbard,	Sunderland,	Rye bread,	2 00
Mrs. H. C. Comins,	Hadley,	“	1 00
Mrs. M. L. Hubbard,	Sunderland,	“	50
Mrs. Chas. Kellogg,	Amherst,	Graham bread,	2 00
Mrs. E. A. Davis,	“	“ ”	1 00
Mrs. P. D. Hubbard,	Sunderland,	Butter,	3 00
Mrs. E. W. Clark,	Amherst,	“	2 00
Mrs. F. Gaylord,	“	“	1 00
Mrs. A. W. Stacy,	Belchertown,	Cheese,	4 00
Mrs. Isaac King	Amherst,	“	2 50

CLASS 20—HONEY, WINES, JELLIES, CANNED AND DRIED FRUITS,
PICKLES, MAPLE SUGAR AND SYRUP. 15 ENTRIES.

Mrs. L. W. West,	Hadley,	Jellies,	1 25
Mrs. P. D. Hubbard,	Sunderland,	“	1 00
Mrs. H. C. Comins,	Hadley,	“	75
Mrs. P. D. Hubbard,	Sunderland,	Canned fruit,	1 25
Mrs. L. W. West,	Hadley,	“	1 00
Mrs. H. C. Comins,	“	“	75
“ “	“	Pickles,	1 25
Mrs. P. D. Hubbard,	Sunderland,	“	1 00
Mrs. L. W. West,	Hadley,	“	75
Mrs. P. D. Hubbard,	Sunderland,	Maple sugar,	50
Mrs. B. Page,	Pelham,	“	25
Jennie Wilder,	Sunderland,	Dried apples,	25

CLASS 21—FRUIT. 55 ENTRIES.

E. H. Judd,	So. Hadley,	Pears,	\$4 00
E. A. Munsell,	Amherst,	"	3 00
A. B. Howard,	Belchertown,	"	2 00
J. H. Demond,	Northampton,	"	1 00
W. A. King,	Amherst,	Apples,	4 00
H. C. Comins,	Hadley,	"	3 00
F. B. Page,	Pelham,	"	2 00
G. F. Eastman,	Amherst.	"	1 00
D. S. Cowles,	Hadley,	Grapes,	4 00
E. H. Judd,	So. Hadley,	"	3 00
E. A. Munsell,	Amherst,	"	2 00
F. B. Page,	Pelham,	"	1 00
A. B. Howard,	Belchertown,	Peaches,	2 00
S. W. Boutwell,	Leverett,	"	1 00
Chester Cowles,	Amherst,	Quinces,	1 00
Asahel Gates,	Pelham,	Cranberries,	1 00
E. A. Munsell,	Amherst,	Miscellaneous display,	4 00
A. B. Howard,	Belchertown,	"	3 00
F. B. Page,	Pelham,	"	2 00
E. H. Judd,	So. Hadley,	"	1 00
P. D. Hubbard,	Sunderland,	Fruit basket,	3 00
Abbie Stockbridge,	Amherst,	"	2 00
W. L. Boutwell,	Leverett,	"	1 00

CLASS 22— VEGETABLES. 90 ENTRIES.

W. I. Warner,	Sunderland,	Collection,	5 00
H. C. Comins,	Hadley,	"	3 00
B. Page,	Pelham,	"	2 00
S. W. Boutwell,	Leverett,	"	1 00
Robbie H. Smith,	Amherst,	Potatoes, collection,	2 00
W. L. Warner,	Sunderland,	" "	1 00
Geo. A. Beals,	"	" best peck,	1 00
A. D. Smith,	"	Onions, "	1 00
W. L. Warner,	"	Carrots,	1 00
Robbie H. Smith,	Amherst,	"	50
W. L. Warner,	Sunderland,	Parsnips,	1 00
P. West & Son,	Hadley,	"	50

W. L. Warner,	Sunderland,	Flat turnips,	\$1 00
B. Page,	Pelham,	“	50
B. Page,	“	Ruta-bagas,	50
W. L. Warner,	Sunderland,	Beets,	1 00
B. Page,	Pelham,	“	50
W. L. Warner,	Sunderland,	Tomatoes,	1 00
L. W. Goodell,	Belchertown,	“	50
W. L. Warner,	Sunderland,	Beans, collection,	1 00
L. C. Warner,	“	“ peck,	1 00
John S. Cowles,	Hadley,	“ “	50
W. E. Hawkes,	Amherst,	Squashes,	2 00
D. S. Cowles,	Hadley,	“	1 00
W. L. Warner,	Sunderland,	Cabbages,	2 00
H. C. Comins,	Hadley,	“	1 00
W. L. Warner,	Sunderland,	Sweet corn,	2 00
D. S. Cowles,	Hadley,	“	1 00
F. B. Page,	Pelham,	Pumpkins,	1 00
Asahel Gates,	“	Seed corn,	2 00
Hadley Town Farm,		“	1 00
S. D. Crocker,	Sunderland,	Spring wheat,	2 00
James Comins,	No. Hadley,	“	1 00
“ “	“	Winter wheat,	2 00
Geo. S. Cooley,	Sunderland,	“	1 00

CLASS 23—FLOWERS. 13 ENTRIES.

L. W. Goodell,	Belchertown,	Collection,	5 00
Mrs. S. W. Boutwell,	Leverett,	“	3 00
L. W. Goodell,	Belchertown,	Asters,	2 00
“ “	“	Gladioli,	2 00
“ “	“	Dahlias,	2 00
“ “	“	Verbenas.	2 00
A. B. Howard,	“	“	2 00
Mrs. L. W. Boutwell,	Leverett,	Dahlias,	1 00
“ “	“	Wild flowers,	2 00

CLASS 24—STALLIONS. 5 ENTRIES.

W. C. Owen,	Amherst,	8 00
A. A. Whitney,	Belchertown,	5 00
P. D. Hubbard,	Sunderland,	4 00

CLASS 25—MARES WITH COLTS. 5 ENTRIES.

Wm. H. Smith,	Leverett,	\$5 00
C. L. Russell,	Sunderland,	4 00
F. H. Graves,	“	3 00
E. A. Stanley,	Amherst,	2 00

CLASS 26—COLTS AND FILLIES. 14 ENTRIES.

E. Owen,	Greenfield,	Stallion, three years old,	3 00
Edmund Smith,	Hadley,	Filly,	“ 3 00
A. W. Stacy,	Belchertown,	“	“ 2 00
W. Cleveland,	Hardwick,	“	“ 1 00
James Comins,	No. Hadley,	Colt, two years old,	3 00
Edmund Smith,	Hadley,	“	“ 2 00
E. M. Ingram,	Leverett,	“	“ 1 00
F. H. Graves,	Sunderland,	“ yearling,	2 00
Edmund Smith,	Hadley,	“	“ 1 00

CLASS 27—FARM HORSES. 7 ENTRIES.

Pat. Shay,	Hadley,	Pair,	5 00
Munroe Keith,	Granby,	“	4 00
Flavel Gaylord,	Amherst,	“	3 00
P. West & Son,	Hadley,	Single,	4 00
W. H. H. Morgan,	Amherst,	“	3 00

CLASS 28—CARRIAGE HORSES. 13 ENTRIES.

Dr. Vincent,	Amherst,	Single,	6 00
Sam'l Boltwood,	“	“	4 00
Willie Comins,	Hadley,	“	2 00
J. S. Henry,	Amherst,	“	3 00
L. S. Dyer,	Hatfield,	Pairs,	5 00

CLASS 29—ROADSTERS. 7 ENTRIES.

Wm. B. Bagg,	Ludlow,	6 00
Sam'l Boltwood,	Amherst,	4 00
E. N. Smith,	Sunderland,	3 00

PURSES PAID.

THREE MINUTE CLASS. PURSE \$30.00. 3 ENTRIES.

C. A. Sweetser,	Holyoke,	“Jerry”	15 00
J. Spaulding,	“	“Honest Charlie”	10 00
Henry Cook,	Amherst,	“Wing”	5 00

2.34 CLASS. PURSE \$100.00. 6 ENTRIES.

C. A. Sweetser,	Holyoke,	"Jonnie"	50 00
Edward Everett,	Greenfield,	"Washington"	30 00
A. F. Wildes,	Chicopee Falls,	"Wild Dandy"	20 00

2.50 CLASS. PURSE \$90.00. 6 ENTRIES.

Samuel Richards,	West Brookfield,	"Harris"	40 00
C. A. Sweetser,	Holyoke,	"Jerry"	25 00
W. J. Haskell,	Greenfield,	"Florence"	15 00
B. W. Haskell,	New Salem,	"Nellie"	10 00

FIVE MILE FOOT RACE. PURSE \$30.00. 5 ENTRIES.

James Kelly,	Amherst,	15 00
Pat. Shay,	Northampton,	10 00
E. Chattell,	"	5 00

PLOWING MATCH. PURSE \$20.00. 8 ENTRIES.

Lewis Bartlett,	No. Amherst,	With Horse Team,	7 00
L. C. Warner,	Sunderland,	" " "	5 00
E. C. Parker,	So. Deerfield,	" " "	3 00
Geo. Hobart,	No. Amherst,	" " "	2 00
G. W. Morgan,	Belchertown,	With Ox Team,	3 00

REPORT

OF THE

COMMITTEE ON FRUITS.

The exhibition of fruits was much larger than usual and showed a great deal of effort on the part of the exhibitors as this is not the bearing year for our fruits. Of apples there were ten entries some of which contained very fine specimens; yet most of them were not as fair as usual a large proportion showing the attacks of the codling moth: but this should have been expected as the large crop of apples last year must have bred an immense number of these moths. If farmers would take the trouble to gather up all fruit that drops prematurely and feed it to the hogs at once, our apples would be much fairer the odd year than they are now. Some very peculiar looking apples were exhibited by Mr. Charles Eastman of South Hadley. They were said to be obtained by grafting a Baldwin on a Roxbury Russet. This fruit had the appearance of both a Baldwin and a Russet, and was said to keep much better than the Baldwin and not to wither like the Russet. If this fruit proves to be all that is claimed for it, it will be a valuable addition to our collection of apples. Of crab apples there were three entries and six varieties. Some remarkably fine specimens of the Hyslop were shown. This is a fine large crab of good color and makes a very showy jell. The show of pears was the best for several years. There were ten entries, and although all were good, the collection most worthy of notice was that of Edwin H. Judd, of South Hadley, which contained fine specimens of Souvenir du Congress, Duchess d'Angouleme, Beurre Clairegeau, and Bartletts. The Bartlett for general planting stands first, although there are several varieties of better flavor, but none have proved as profitable for a market fruit. Pear trees in this vicinity were the past season troubled by what is called leaf blight; this caused the leaves to fall before the fruit matured, and consequently much of it

was not so large as usual. As yet there is no remedy to prevent leaf and fire blight. If an effectual one could be found the profits of pear growing would be more than doubled.

There was a good show of peaches, (seven entries) yet most of them were seedlings with but very little budded fruit. It is here where a great mistake is made. Why not grow a first class peach as well as one that is second or third class? It costs very little to purchase a peach tree or to bud a seedling when it is young, and those who will take pains to get good varieties will be well aid fort heir trouble. Peaches seem to be doing better than they have for a few years past. If peaches are planted on high ground that is dry, where there is a good circulation of air, the tree well headed back every fall, taking care not to feed the tree too high and cause it to make a rank growth which will not ripen before frost, and a constant look-out for the borer is kept, I see no reason why we cannot raise our own peaches and not be obliged to depend upon the South for them. There was but one entry of plums. These were exhibited by J. B. Page, of Prescott. Of hardy fruits none are so scarce in our markets as the plum. The two great obstacles in the way of growing plums are the black warts and curculio. The former if taken in season is easy to control, but if it gets much of a hold on the tree, it is hard to overcome. The only way to prevent a tree from being ruined by them, is to cut the warts away as soon as they make their appearance and burn everything that is removed. The curculio begins its ravages when the tree comes in flower and continues throughout nearly the whole season. This insect lays its eggs either in the flower or in the fruit after it is formed. The worm as soon as hatched eats into the fruit and causes it to drop when partly grown or to rot before it is ripe. If one will examine a plum that has fallen prematurely an incision the shape of a half moon will probably be found on its side where the insect laid its egg. If one will begin as soon as the tree is in full blossom and shake the tree suddenly every day until the fruit is nearly grown, burning all fruit, insects and everything else that may be shaken off, a full crop will be the result. The most economical way of gathering up whatever may be shaken off, is to make the ground under the tree hard like a floor, removing the grass and sweeping up anything that may fall while jarring the tree and burn at once. Or spread a sheet under the tree and shake everything into it. If plum trees are planted in a yard where fowls are confined and the trees are shaken every day, the fowls will

gather up all insects that may fall. Or if a chicken coop is placed under a tree, the chickens will pick up the insects as they are shaken off. This may seem as if the expense of destroying the insects would be more than the fruit would come to, but at present prices for plums there will be left a handsome profit after paying for all the time spent in destroying the curculio and care of the trees: and any one who will plant out a plum orchard and give it the proper attention will find it a profitable investment. There were only three entries of quinces, but the fruit was not fully grown, quinces being later in coming to maturity this year than usual. If the fair had been two or three weeks later the show of this fruit would probably have been remarkably good, as there was a heavy crop the past season. Grapes were very much injured by the hail of last summer, but in spite of it some excellent fruit was shown. There were four entries for premium. The Agricultural College had the best collection, but these were not entered for premium. Among its collection were several canes both girdled and ungirdled from the same vines with the fruit attached. The fruit on the girdled canes was large and fully ripe, while that on the canes not girdled was much smaller and only beginning to ripen. The fruit on the girdled canes was not troubled with the species of fungus that causes the berries to turn red and become hard and prevents their ripening, while that on the canes not girdled taken from the same vine was badly effected with it. In girdling, a ring of bark is taken from the cane about one third of an inch in width: this prevents the sap from flowing below the girdled spot in its downward course, and as there is an upward flow of sap all the time, the cane girdled is crowded with nourishment which forces a more rapid growth of the fruit and causes it to ripen sooner. When girdling never girdle the main stem of the vine but only such canes as are to be cut away as soon as they have ripened their fruit, growing new canes for the next season's fruiting. If a cane is girdled the fore part of July and as soon as the new growth has covered the place where the bark was removed another rim is taken off, the fruit will ripen at least two weeks earlier than in canes not girdled, and be fully one third larger. There were only two entries of cranberries. There were five baskets of assorted fruits on exhibition, some of which showed much taste in the arrangement and contained some fine fruit.

One very essential thing was omitted by most of the exhibitors, and that was the naming of the fruit, only a few of the collections

were named. This is a more serious omission than may appear at first. The object of the Society in holding its yearly fair is to give information which shall be of use to its members. What can a person learn by looking at a general collection of fruit that is not named? Practically nothing. I would suggest that in the future premiums be given to those exhibitors who have their fruit rightly named as far as they know; and that all fruit entered for premium shall be grown by the exhibitor. Now, any one who will take the trouble to borrow or buy the choicest fruit he can find, can take the premium, although he may not grow a single fruit, while the one that grows the fruit he exhibits and who ought to be encouraged, receives nothing. The Society should encourage the growing of fruit rather than the collecting of it from others. If it should be feared that this would prevent there being as good a show of fruit, let one or more premiums be offered for the best collection, irrespective of the grower.

Respectfully submitted,

JOHN W. CLARK, *Chairman.*

REPORT

ON

STOCK IN GENERAL.

*To the Executive Committee of the Hampshire Agricultural Society,
Gentlemen :*

In compliance with your request I inspected the stock on exhibition, and submit the following report: Number of entries are as follows: Bulls 5, Cows 44, Heifers 13, Calves 22, Pairs of working oxen 47, Sheep 40, Swine 70, Coops of Poultry 60. Of the 178 head of cattle the grades of Shorthorn, Jersey, Ayrshire, Hereford and Dutch were on exhibition. There were a few thoroughbreds exhibited; seven Jerseys belonging to Bishop Huntington of Hadley, a fine four-years-old Shorthorn bull by A. W. Stacy of Belchertown, also a fine three-years old Ayrshire bull belonging to M. F. Dickinson of Amherst. The Agricultural College exhibited fourteen Ayrshires. They have disposed of all the other breeds, much to the regret of the farmers in this vicinity. Especially do they regret the loss of the Shorthorn. Comparing the stock on exhibition at the present day, both in numbers and in grades, with that in the early days of the Society we find facts interesting for the consideration of the farmer. In 1851, the second annual exhibition of the Society, we find 500 head of cattle were entered, namely, seven milch cows, sixteen fat cattle, sixty-three steers, and three hundred and ninety working oxen. From that day to the present we find on examination of the records a gradual diminution in working oxen, at the last fair only 94 being exhibited. The question naturally arises as to the cause of this. It is no doubt on account of the labor saving machines that have been introduced into the country. These machines call for horse power. We find on examining the records of Amherst that horses have gradually increased year by year, and what is true of Amherst is true of other towns in

the limits of this Society. While cattle have decreased, cows have increased. With regard to what breed of cattle is best for the farmer to raise in this vicinity is yet an open question. Some claim the Jersey is the best, others the Ayrshire, and some the Shorthorn. While it is admitted that the Jersey is superior as a milker, yet on account of its inferior size and build it is not as profitable as some other breeds. The Ayrshires have their admirers on account of their milking qualities and handsome build. Some thirty years ago Mr. Luke Sweetser of Amherst introduced a beautiful herd of slick, handsome Ayrshire cows into our Society which were admired by all visitors. He has retained them unto the present day and has been a firm advocate of that breed, taking much pains to introduce them into general use. The Dutch have been introduced to a limited extent by the Agricultural College and thus far have proved good milkers. Their large size and handsome build recommends them both for milk and beef. At our last fair three-fourths of all the stock entered was of the grade Shorthorn. We had twenty-two calves exhibited at the last fair; this is a step in the right direction, for the time has come when the farmers should raise their own stock rather than depend upon a supply from other localities. We were sorry to see so poor a show of sheep, only forty being exhibited; the number was far behind former exhibitions. This is a matter for the farmer to investigate. The exhibition of swine was one of the best we ever had, numbering seventy, of the breeds, Poland-China, Berkshire, Chester-white, and others. This is a little singular when pork is as low as it has ever been at any time for forty years, yet we find the farmer introducing new breeds and improving upon the swine of former years. Farmer Southwick of the Agricultural College exhibited six beautiful Berkshires which attracted considerable attention. The interest in poultry seems to be increasing, sixty coops of fine fowls being exhibited. On the whole we think the exhibition as good, and in some points superior, to other exhibitions.

Respectfully yours,

AUSTIN EASTMAN.

REPORT

OF THE

COMMITTEE ON VEGETABLES.

Your Committee beg leave to present the following report :

In making awards we were governed as far as possible by the schedules under which the entries had been made. Vegetables that were entered as the largest number of varieties, and the best exhibition, might perhaps rank as ten on number of varieties and but eight on exhibition, while another entry would rank but nine on the former and ten on the latter, so in all cases the largest number of varieties did not receive the award because they did not at the same time excel in quality. There were some few collections of garden vegetables where effort was made to increase the number of varieties by adding some inferior specimens ; aside from that the eighty entries of farm products in this department were of uniform good quality, a credit to the producer, and contributed largely to the great object of the fair.

A careful review of these collections carries one back in imagination to the time when Adam, our great progenitor, was gardener of Eden. His instructions were to dress the garden, which in time brought forth fruits of all kinds in abundance for the sustenance of himself and small family. But he was soon driven from the garden and ordained to "Till the earth from whence he was taken," and earn bread by the sweat of his brow. It was then agriculture had its origin, and down to the present time it has been an improving art. Unlike the arts of luxury, agriculture has never been subject to any retrograde revolutions ; being an occupation necessary for the existence of mankind in any degree of comfort, it has always received their first attention ; and no succeeding age has been more imperfect in the art than that which preceded it.

The lover of agricultural research delights to have its history down through these intervening ages and note improvements which have been made in farm products by cultivation.

One of the principal results of culture is the formation of varieties, which otherwise would have no existence in nature. Perhaps in some instances these new varieties are more delicate than the wild species; but many of those produced by culture and hybridizing are of a more hardy nature and may be introduced into localities where the original species would not have succeeded. Nearly all farm crops produce individual plants that are earlier than others, while we cannot perceive any difference in their organization or attribute the circumstance to the influence of culture. By carefully collecting the seeds or layers of such early varieties there has been obtained such agricultural sorts as possess more useful qualities. For example, by gathering the earliest ripe peas and repeating the same many times in succession may furnish the means for obtaining a variety which will invariably mature early. In this way the season when our vegetables have been in their prime has been extended; garden corn, beans, squashes and various other kinds are now available at almost any time in the year.

Again, plants have been acclimated and naturalized so as to flourish in localities other than whence they originated. The melon and peach were almost tropical fruits, but they are now grown to perfection in our own latitude; the orange, strictly tropical, grows well in Florida and the fruit is much larger and better than under the equator. Untiring efforts of the husbandman have given to many plants and vegetables a great extent of climate and latitude, while their products have been increased and improved. His care has made up for want of climate and his cultivation has multiplied varieties.

Nearly all of our farm crops have traveled with man from Mesopotamia far up the northern latitude, and potatoes, beans, turnips and a thousand of others seem to disregard climate and grow wherever man plants and cherishes them. In some instances drainage has prepared the way for a better class of vegetables; on the other hand irrigation has made the barren plain productive.

A judicious use of artificial fertilizers has caused the once sterile field to yield abundant harvests.

Every view that we can take of this subject goes to show that great improvements have been made upon our farm crops, and enough has been realized to encourage further efforts.

Respectfully,

L. P. WARNER.

MECHANIC ARTS AND FARM IMPLEMENTS.

Among the forces resulting in American prosperity, none have been more active than the inventive genius of our people.

Through all history, agriculture has been the criterion of civilization; and it is a truism equally important, that the first gleam of advancement in the mechanic arts has shone upon the pathway of the farmer, and ever afterwards the status of mechanical improvements is nowhere so plainly recorded as in the appliances for increasing the effectiveness of agricultural labor. The inference naturally suggested then, is, that Americans, the most ingenious of people, have distanced other nations in the production of implements devised for the exclusive use of the farmer. And the surmise is well founded, for with no other nation has agriculture received so large a share of the attention of inventors; no where else has there been brought into existence such a multiplicity of agricultural implements, and no where have they been of such importance, or have the changes wrought by their presence acquired such magnitude.

We have no space to devote to an enumeration of these innovations, or to eulogize on the importance to farmer and nation, of improved implements of cultivation. But the bare mention of the mower, the cotton gin, and the wonderful self-raking-and-binding reaper, will serve to bring before the mind a picture far more brilliant than pen can sketch.

The study of a people's agricultural machinery is not only of absorbing interest in itself, but is of great value as well; for it forms the true exponent of agricultural prosperity, on which all advancement depends. When the peculiarities of American farming are considered, the success that has always attended it, is almost enigmatical, and can be satisfactorily accounted for in but one manner. Our farmers give less heed to the details of their calling than do those of Europe's great powers. With us agricultural education is in its infancy, while across the Atlantic, farmers, for a hundred years, have had access to distinct professional schools adapted to their requirements, and conducted in their interests; and with them no vast

distance, with its attendant ills, intervenes between producer and consumer.

What element then does Europe lack, which has been conclusive to American success? Why does the cry of agricultural distress rise from the eastern, rather than from the western shores of the Atlantic?

The solution of the problem lies, I think, in the marvelous fertility, not of our prairie soils, but of our genius, and the assiduousness with which it has been directed toward devising means for lightening the labors of the farmer, and placing at his command innumerable implements for increasing his dominion over nature, and rendering his efforts in his chosen profession more effective.

The enormous advantages accruing from the application to the arts of labor saving machinery and methods, no words can describe; and when these means are devoted to the elevation of agriculture, from which all other arts receive life, and whose vigor, or languor is immediately manifest in the views of every industry, what wonder that the calling stands on vantage ground against its European compeers.

Recognizing the fact that only through the most approved labor saving appliances could the art of husbandry reach the highest success, the agricultural societies of our country have done everything in their power to stimulate the improvements of implements entering into the farmers' calling, and have sought to bring the cultivators of the soil in contact with the manufacturers of inventions, tending to add to the effectiveness of labor, either in the household or upon the farm. Carrying out this idea the Hampshire Agricultural Society has ever since its organization annually appropriated a sum of money to be divided among the most deserving exhibits of mechanic arts and farm implements. Though the purse has necessarily been small, it has inevitably been of great importance to our agriculture. Not that the premiums in themselves have been sufficient to attract increased attention to the subject by our inventors, but the authoritative recognition of merit has both induced manufacturers to enter their wares, and brought farmers into direct contact with the improvements, thus causing an increased demand and use of the implements, resulting in satisfactory remuneration to the producers of the article, and of invaluable aid to our agriculture.

Notwithstanding the vast importance of improved tools upon the farm, and the innovation wrought through their advent, there are

men so perverse or short sighted as to disparage their advantages, and lament their presence. They point with pride to the days before the place of the scythe was usurped by the mower, or the flail and winnowing basket were supplanted by the improved thresher. Let us hope the prejudice arises from chronic discontent rather than from conviction.

Suppose we glance for a moment at the arguments used by these defenders of the good old times. Their tenets are chiefly supported by the assertion that these implements instead of saving labor, make it, and rather than decreasing the cost of production, they increase it. We will ascertain if possible whether or not these statements are correct. How can a labor saving machine create a necessity for more labor? can these articles add to the cost of food production?

Our answer hinges on the fundamental principle of economics, that labor and capital are identical. Labor, as well as time, is money. If, therefore, an implement or process is labor saving, that is, renders a given amount of muscular force more effective, it cannot add to the cost of production, provided the value of the labor saved is in excess of the cost of the implement. And here is the key to the solution of the problem.

The individuals of whom we are speaking claim that the advent of a new implement to be made effective, necessitates the introduction of another, and that this must in turn be followed by others, will, instead of diminishing the expense of production, be largely increased thereby. The first part of the statement is axiomatic; on what foundation does the last clause rest? To render labor and capital remunerative upon the farm or elsewhere, there must be harmony between the various departments: a mower is comparatively useless unless its increased power of cutting grass be supplemented by greater facilities for curing, and hence the advent of a mowing machine is generally followed by the purchase of a horse rake and tedder; and so one malcontent declares that the mower adds to the cost of gathering his hay crop rather than detracts therefrom. Were he to avert to the principle already stated, he would be compelled to qualify his assertions. If the combined labor saving powers of *all three* implements is equal to their entire cost, the venture cannot prove a failure.

Where is the man who dares claim that the world has paid more for its cotton gins than the staple resulting solely from their existence has been worth? or that the long category of improved implements,

by means of which the bread of Europe is grown on our western plains, have not returned to our country the value of their cost? These cases are exactly parallel with that of the mowing machine, and he who proclaims against one, attacks all; and each illustrates equally well the magnitude of the interests centering in the improvement of agricultural machinery, and the importance of the successes already accomplished.

Our agricultural societies have therefore done well in encouraging the demand of the times, by lending their aid to the cause of advancement in the application of the mechanic arts to the farm. By so doing they have touched the mainspring of material prosperity.

The exhibit with which your committee had to deal was composed of twenty-three entries, and, though lacking in some respects, was on the whole most encouraging, and contained one feature deserving of particular commendation, namely, the collection of plows. This, the first implement of tillage, and the emblem of husbandry, has ever claimed a pre-eminent position in the attention of skillful agriculturists; no other is of such prime importance, or can be less readily dispensed with. Though it has been for a century the subject of study and improvement the last few years have witnessed a long stride toward the ideal plow. Hardly had a successful swivel plow been produced, than the so-called chilled implement made its appearance, combining the wearing and scouring qualities of steel with the cheapness of iron. And when it is remembered that men hardly yet past their prime have used the ancient wooden-mold-board plow, and knew of none better, then the revolution in these instruments is well nigh marvelous.

It is not my purpose to enter into the details of award, which can be found elsewhere, but to simply enter a protest against the spirit which prevents some farmers from availing themselves of every opportunity for enhancing the value of their labor, and give a brief expression of commendation to the agricultural societies in their efforts toward achieving this great end by encouraging every possible application of the mechanic arts to agriculture.

H. E. STOCKBRIDGE,

For the Committee.

THE APPLE.

Few persons have any idea of the value of the fruits grown in this country but look upon fruit trees not as a source of income from the farm but rather as a luxury, and are often considered a necessary evil of which the owners would gladly rid themselves, little thinking that fruit growing can be made one of the most profitable branches of farming.

Fruit trees must be taken care of as well as other crops if one would realize anything from them. One would not expect a crop of corn if he only planted the seed in the spring without giving it any manure or after cultivation; such an one would be called a shiftless farmer. There are many who are called good farmers who are shiftless fruit-growers, and the reason is this: they have been taught to look upon fruit as an expense rather than as a source of income from the farm. If one will only stop and figure he will find that there is not a crop grown on the farm which pays as well compared with the expense laid out on it as fruit. Take for example the apple, as that is the standard fruit of this latitude, and the one most generally grown.

It is well to speak of this fruit in particular as the past season has been one of such productiveness that many are on the point of cutting down their apple orchards to make room for some other crop, saying that they had better raise corn than to grow apples at the present prices. This is not so. A farmer can make more clear money by growing apples at seventy-five cents a barrel than he can on any other farm crop. To prove this let us see what it will cost to take care of an acre in orchard, and also one in corn. Admitting that corn can be grown for thirty-five cents per bushel, and forty bushels are raised on an acre, the cost of growing would be fourteen dollars; the price of corn we will take at sixty cents per bushel, which will amount to twenty-four dollars: this gives a profit of ten dollars from one acre. Now let us see what one will get if he plants an apple orchard. We will reckon the trees when planted at twenty cents each.

If they are set twenty-five feet apart each way it will take sixty-nine trees to the acre, costing thirteen dollars and eighty cents all planted. As it will be about six years before the trees begin to bear, the ground should be cultivated and kept well stirred. When the trees commence bearing, seed the land to grass, as apple orchards in bearing do better in grass. We will take the average yield per tree for the first three years at one peck or seven barrels a year, which would be worth at fifty cents per barrel on the tree, three dollars and fifty cents: the three years would give ten dollars and fifty cents. The next three years one gets three pecks from a tree or twenty-one barrels each year, worth ten dollars and fifty cents, or thirty-one dollars and fifty cents for the three years. The next three years one gets one and one half bushels from a tree, or forty-one barrels, worth at fifty cents a barrel twenty dollars and fifty cents per year, or sixty-one dollars and fifty cents for the three years. Now we have, over and above the use of the land and all labor, ten dollars and fifty cents, thirty-one dollars and fifty cents, and sixty-one dollars and fifty cents, or one hundred and three dollars and fifty cents: deducting twelve dollars and forty-two cents, interest at six per cent. on the cost of trees for the fifteen years they have been planted, we have over and above all expenses ninety-one dollars and eight cents, as the hay cut will pay for the use of the land.

Now if corn had been planted from the time the trees had begun bearing, we would have ten dollars profit each year, or ninety dollars for the nine years the trees have borne: this gives one dollar and eight cents in favor of the apples.

The orchard now having been planted fifteen years is just beginning its work, and for the next twenty-five years will average one and a half barrels per tree, worth at fifty cents per barrel on the tree, about fifty-two dollars per acre above all work and use of the land. Now let us take the actual yield of ten trees not above medium size, four Baldwins and six Greenings. These trees produced sixty-four barrels of picked apples, which at fifty cents per barrel on the tree, or to be exact, forty-seven and a half cents, the price for which they were sold, gives three dollars and four cents per tree, or two hundred and nine dollars and seventy-six cents to the acre. Reckoning a crop only every other year, we have one hundred and four dollars and eighty-eight cents every year. These ten trees bore two years ago over seventy barrels of picked apples. We have called apples worth

fifty cents a barrel, but this is much below their average value. The average price received for apples from an orchard of twelve hundred and fifty trees, of which six hundred were Baldwin, four hundred Roxbury Russets, the remaining two hundred and fifty were of different varieties, by a fruit grower near Rochester, N. Y., from 1871 to 1877 inclusive, was two dollars eighty-six and two-thirds cents per barrel. If by this it is shown that one can afford to grow apples, the first thing to be considered is the soil and location. An orchard of any kind does better on high ground than on low, for various reasons. The fruit buds are less liable to be injured in winter by thawing and freezing; they will be kept from starting as soon in Spring, so that there will be less danger of injury from late frosts. High ground is usually well underdrained, and this is important, for fruit trees of any kind will not do well where there is stagnant water in the soil. A wet soil is to be avoided; also one that is very sandy, for a tree cannot put on a healthy growth on a wet soil, and in a very sandy one if it grows at all it will be short lived. Land that will grow good corn will usually grow good apples. Now comes the question of variety, and here is where many make a great mistake. If one wants to raise apples for his own use, he should plant so that he will have them from the earliest to the latest; but if one intends to grow fruit for the market, he should select only those which bear large crops and will sell well. The best varieties to plant in this section where we have a poor market for early apples, (if one intends to raise fruit to sell), are Baldwins, Roxbury Russets and Rhode Island Greenings; these three varieties will produce more fruit than any other three varieties grown about here. The Baldwins will yield more fruit per acre than any other variety we grow: it has one advantage in the market over many other varieties on account of its color; for a red apple as a general rule sells better than one of any other color. If the soil is suited to the Roxbury Russet so that it will not grow knurly, (as the Russet to produce good fruit requires a stronger and richer soil than many other varieties), it is one of the very best apples to grow. It will keep until other apples are gone; it bears more or less every other year, and if kept till other kinds are gone it will bring a fair price every year.

The best varieties of early apples are Williams' Favorite, Red Astrachan and Early Harvest for sour; Golden Sweet and Sweet Bough for sweet. The Williams' Favorite is not as well known about here

as it should be: it is considered the best early apple grown in the eastern part of the State, and I would recommend it to all who have not already tried it as worthy their attention.

It costs no more to grow a good variety than it does a poor one. There are a great many good apples but it pays to grow very few of them, for a variety may be excellent in flavor but a shy bearer; this must give place to some more productive kinds (if one grows apples for dollars and cents) for no matter how fine a fruit may be, if it is not a bearer it is not a profitable kind to grow. Don't run any risks by planting out new varieties that have not been tested no matter how much the nurseryman or agent may recommend them for the chances are one hundred to one that they will not prove to be as profitable as some of our older kinds. My advice to all who cannot afford to raise fruit for pleasure, is to plant nothing but what they know to be good, and to let others experiment with new varieties. The ground on which an orchard is to be planted, should if possible be plowed, then it will make very little difference whether the holes dug to receive the trees are large or small, provided they are large enough to take in all of the roots without crowding them. If the ground is not plowed the holes for the trees should be much larger, not less than three feet in diameter, which space should be kept well stirred and free from weeds. As it pays to cultivate fruit trees, a tree that has been well taken care of will grow as much in six years, as one that has been neglected will in eight or ten. If the ground can be cultivated the cheapest way to take care of an orchard until it begins to bear, is to plant it each year with corn, potatoes, or some other hoed crop, but never sow grain of any kind in an orchard. If the trees have been properly pruned up to the time they commence bearing, they will need very little pruning afterwards except the cutting away of dead and broken branches. In shaping the head of an apple tree, see that it is well balanced and not too open, for a tree with an open head is continually throwing out suckers or water sprouts, and where one is cut away several are almost sure to grow. If the head has been formed as it should have been the branches will be so distributed that they take up all of the nourishment and there will be very little trouble from water sprouts. The limbs should not be left too near the ground, as the weight of the fruit will cause the branches to sink lower each year, and in a short time one will be bothered to work beneath the tree. It often happens that fruit trees blossom full in the Spring, but

when they are in full bloom, there comes a heavy shower, a thunder shower for instance, and we have little or no fruit that season. Many attribute it to the influence thunder and lightning has on the blossoms, saying that if there is thunder and lightning when the trees are in full bloom the crop will be ruined for that year. This is a mistaken idea; if one will examine and see how an apple blossom is formed, he will find that it is composed of stamens and pistil, or the male and female organs of the flower, and calyx and corolla, or what might be called the leaves of the flower. The stamens, or male organs of the flower, produce a yellow dust or powder called pollen, which comes in contact with the end of the pistil and fertilizes it: if there should be a dashing rain this yellow dust or pollen will be washed away and the pistil will go unfertilized, the flower drops off and the crop becomes a failure. The reason why people attribute the failure to thunder and lightning, is probably because a thunder shower is more of a dashing rain than our other showers, and more apt to wash away the pollen.

The great obstacle in the way of many farmers planting apple trees is that they bear only every other year, and the years they do bear apples are so plenty that one hardly knows what to do with them, while the next year they do not bear at all. There must be some reason why trees bear one year and not the next, and if we can find out the cause, is there not a chance of changing the bearing years of our apple trees, so that they will bear moderate crops every year, or large crops the odd years. The production of fruit tends to weaken the tree, and the larger crops a tree bears the more will it be weakened or exhausted, so that all the nourishment or plant food the tree can prepare is used in ripening its fruit, and there is none left to develop fruit buds for the coming season; the result is our trees bear only every other year.

In the rich prairies of the West apple trees bear more or less every year. I think this was the case when it was first settled about here, but continual cropping has so exhausted the soil and the trees, that they cannot obtain and prepare sufficient plant-food to ripen a crop of fruit and develop fruit buds the same season. If the bearing only every other year is due to over-bearing these years, exhaustion of the soil or trees, as it undoubtedly is to some or all of these causes, we have it in our power to change the bearing years of our fruit trees and make them bear the years we want them to bear. This is something worth giving particular attention to, for if trees can be made to bear

the odd years, as apples sold last year for four dollars and fifty cents a barrel, and this year from seventy-five cents to one dollar, it would make considerable difference in the returns from an orchard, whether the trees bear the even or odd years. I have in mind a man who has quite a large orchard that bears the odd years: he received for his fruit for the seasons of '77 and '75 from three dollars and seventy-five cents to four dollars per barrel; for '73, '71 and '69, from five to six dollars.

There are two ways by which the bearing years of an apple tree can be changed. One is by taking scions from trees bearing the odd years, and only the odd years, and grafting with them. I know two men who have practiced this method. One of them says they come true nearly every time, nearly eighty per cent.: the other says that sometimes they would come true nearly every time, then again very few would come true, but said that by manuring the trees well the even years, he believed they could be entirely changed. This would be worth trying, as many orchards scattered up and down this valley contain about as many varieties as they do trees, (perhaps more) and more than half of them are good for nothing but cider. If such trees were grafted over with Roxbury Russets or odd year Baldwins, they would become more profitable if they bore the even years than to let them remain as they now are. In top grafting a tree of any considerable size, all of the limbs should not be cut away, but enough left to shade the trunk and branches destined to remain; if not, the hot sun during summers will so scorch the south side of the trunk and upper sides of the branches that the bark will be killed, and large bare places will be seen without any bark. After the grafts have begun to grow the remaining limbs should be cut away from time to time sufficient to give the grafts room to grow without being crowded. Grafting consists of taking a branch or scion from one tree and putting it into another or the same so that it will grow. The principal things to be taken into account are these: The grafts should be of the last season's growth. In cutting the scion care should be taken to make the cut true and with a single stroke of the knife, as it will be much easier to fit the scion to the stock than if cut irregularly. In fitting the scion see that the inner bark of the scion comes in contact with the inner bark of the stock, as it is here that all growth takes place and also where the union is formed. A good grafting wax can be made from either of the following proportions: Beeswax three parts, resin three

parts and tallow two parts, by weight ; or, linseed oil one pint, resin six pounds and beeswax one pound. These should be melted together and well stirred. As soon as it is cooled it is ready for use. In putting on the wax, be sure that the entire wound made is covered by it, so that no air can get in. The only use of wax in grafting is to exclude the air. Apple trees can be grafted any time in spring before the leaves begin to grow, or even after if the scions have been kept in a dormant condition. The other way of changing the bearing year is by picking off all of the blossoms or fruit before it gets to be of any considerable size, that all the nourishment the tree is able to take up and prepare shall be used in making new growth and developing fruit buds. It is no more the nature of the apple tree to bear the even year than it is the odd year, its nature is to bear every year, but over-bearing exhaustion of the soil and tree or some outside cause, has so weakened or affected the tree that it bears enormous crops one year and not anything the next. Every fruit a tree bears robs the tree of that much nourishment ; this nourishment is obtained from the soil through the roots, and by absorption from the atmosphere by the leaves, which also digest and prepare the crude food thus taken up. The tree is a machine to transform the elements of the soil and air into fruit : this machine can do a certain amount of work, and not over-exert itself, but if it goes beyond this limit, the tree is over-taxed, and it either dies or is obliged to rest until it has made up for this extra work. It is a fact worth remembering, that every fruit a tree bears over a medium crop must be paid for from the next season's fruit. Most of our apple trees bear enormous crops the years they do bear, and by so doing exhaust the tree so that it is obliged to rest a year before producing another crop. The season the tree does not bear, all of the plant food prepared goes to form new growth and develop fruit buds. The tree is stored full of nourishment and bears another large crop the next year, and it will continue in this manner if no outside influence is brought to bear upon it. If we can keep trees from bearing the years they want to bear, which we can by picking off the blossoms, and by muzzing well these years cause the trees to put on a good growth, they will naturally develop fruit buds and bear the coming year. I do not say that picking the blossoms off for a single season will absolutely change the bearing years so that it will not bear at all the other years, as the tree has had two seasons in which to store up food, and there may be sufficient to ripen a large

crop and develop fruit buds for the next year ; but if one will follow this up for two or three years, I see no reason why the bearing years of any tree cannot be changed.

There are instances where trees have had their blossoms picked off for a single year ; this caused them to bear the next year, but in some cases they gradually worked back to their regular bearing years, in others they bore moderate crops every year. If these trees had been made to fix their bearing the odd year by picking off the blossoms for one or two years more, they would, in all probability, have remained permanently changed. Quite an interesting case of the bearing year of a large apple orchard being changed, and permanently changed in a single year, happened not far from Worcester. The year referred to was the bearing year : the trees blossomed full, but the canker worms were abundant that year and all the fruit-growers in the vicinity, with the exception of the one referred to, kept the worms from injuring their trees by putting printer's ink around them ; this man put nothing on his trees so that the worms had full play. The consequence was he had no fruit that year, while his neighbors had an abundance ; the next year he put ink on his trees, and kept the canker worm down ; the trees produced a large crop of fruit and have borne the odd year ever since.

Apples when first gathered should not be placed in the cellar immediately, but kept in as cool a place as possible and not freeze ; they can be put in barrels, in heaps under the trees, or if one has the room, in a building that can be well ventilated. Spread on the floor from one foot to a foot and a half in thickness ; here they should be allowed to remain until they have done sweating, when they should be barreled and kept cool until freezing weather approaches. The barrels should now be headed up, taking care not to fill so full that one will be obliged to press down to put the head in, as it will bruise the top layer and cause them to decay so that they will be worthless when opened in the winter to be re-packed for the market. Put in a cool, dry cellar ; the nearer apples can be kept to freezing and not freeze the better they will keep. Apples should never be wiped when barreling them for winter, as it rubs off the oily coating with which they are covered, that prevents and keeps them from withering. If the fruit is wet it should be exposed to the sun or wind until dry before barreling. Of the insects which prey upon our apple trees, and there are many, some of which do a great amount of damage,

destroying hundreds of thousands of dollars worth of fruit annually, I will only speak of the most destructive, beginning with the apple-tree borer. This is a nocturnal insect; the female deposits one egg in a place upon the trunk of the tree near the ground. When the borer hatches it feeds for a time on the bark; as it grows older, it burrows deeper into the tree, often to the heart, when it turns and comes to the surface, then re-enters again to undergo its transformation, and comes out in the spring a perfect insect. The best way to destroy this borer is to watch the trunk of the trees and if castings resembling saw dust are seen about the trunk, to search for the worm with a knife; if the borer is too deep to be reached with a knife take a piece of flexible wire and run into the hole and destroy the borer; this is the surest way to kill them. The Codlin Moth is also a night insect; the female deposits its eggs singly in the blossoms or in the blossom end of the fruit; through this opening the worm as soon as hatched makes its way to the center and eats the seed and pulp. In warm weather the worm attains its growth in about three weeks when it leaves the apple and secretes itself under anything it can find for shelter. A great many can be caught by placing chips about the trunks of the trees and burning the chips every few days. The female flies at night and large numbers can be destroyed by lighting lamps in an orchard at night during the month of June. All fruit that drops prematurely should be gathered up immediately and fed at once as the worm leaves the fruit as soon as it drops. If hogs are allowed to run in an orchard they will destroy a great many insects. The fall web worm is very destructive to the foliage of apple trees during the summer and early fall. They live in colonies and envelope the leaves and branches on which they feed with a web. The moth is milk white; its eggs, from two to three hundred in number, are deposited on the under side of the leaves near the end of a branch. These eggs soon hatch and the larvæ feeds on the tender portions of the leaves. These worms are most numerous in September. The remedy is, hand picking and crushing them beneath the foot. The Tent Caterpillar: The larvæ of this insect is so destructive to the foliage of apple trees that it is often called the apple tree worm. The moth selects a terminal shoot that has completed its growth and deposits its eggs, from two to three hundred in number, around the limb in the form of a sheath and covers them with a kind of varnish that protects them from the wet; very early in the spring

these eggs hatch and the caterpillar spins its web and begins its work of destruction. These caterpillars may be destroyed by either picking off the eggs in the fall or by cutting away the brush on which the nest is seen in spring, and crushing or burning the worms. The hand-maid moth: This is a brown, hairy thick bodied moth about an inch across its wings; it flies at night, and is very troublesome about lamps during the month of June. The female insect deposits its eggs on the under side of the leaves. The worms feed in colonies, and by lying side by side on the leaves they consume large quantities of leaves during their existence as caterpillars, which lasts about four weeks; they are striped with black and yellow. One peculiarity of this worm is that when at rest the head and tail are carried into the air above the body, which rests on six legs near the center; when disturbed it throws its head from side to side. A constant lookout should be kept for this pest during the months of August and September; they should be picked off and destroyed. The canker-worm is about the color of the bark of an apple tree. The female has no wings, but as soon as warm days come in winter or spring she leaves the ground and crawls up the trunk of the trees and lays her eggs, which hatch about the time apple trees are in bloom; trees affected with these worms look as if their foliage had been scorched by fire.

The best way to keep these worms from injuring trees is to tack strips of paper cloth or leather around the trunks and keep this band wet with coal tar to prevent the female from ascending the tree to lay her eggs. See that the tar does not get dry, if so, this insect will crawl over it and lay its egg in the tree and the mischief will be done. To be successful in the growing of fruits one must understand the nature of the fruit grown, what diseases it is subject to, the insects that prey upon the tree or fruit and how to battle with each. He must not starve his trees or leave them to take care of themselves, for fruit trees cannot support themselves and owners at the same time. Take care of your fruit trees and they will take care of you, but starve them and they will starve you.

ROOTS, THEIR NUTRITIVE VALUE.

FROM AN ESSAY READ BEFORE THE HAMPSHIRE FARMERS' INSTITUTE BY
H. E. STOCKBRIDGE, AT LEVERETT, FEB. 22, 1879.

Members of the Hampshire Farmers' Institute will not expect information from my own experience, concerning the best methods for growing, harvesting, and storing the important root and vegetable products of the farm, for most of you are better acquainted with the usual and successful methods of procedure.

I shall, therefore, briefly examine the subject by the light of a few scientific facts, and endeavor to draw such practical conclusions as are suggested. And if I devote space to the consideration of the so-called root crops, to the exclusion of vegetables, it is because the latter are grown principally for human consumption, to be sold from the farm, and for them there is a constant demand to which the farmer has simply to cater. While on the other hand roots are generally grown for consumption on the farm, and it is of vast importance that we ascertain, if possible, which of them can be most profitably converted into animal tissues, and animal products, or will in the greatest degree increase the power of the animal for taking nutriment from its other food. In considering the question, we must first fully understand the object, or objects of root growing. Writers on the subject have stated that the value of all food was solely in the nutrition it contained, and have endeavored to figure out its value in different articles of diet, simply from the amount of the nutritive elements found in them, yet every farmer, knows that during its winter confinement his stock is in an unnatural condition; that animals thrive best when fed upon green food containing more than 80 per cent. of water, and that the roots given them have two very important offices: First, to supply the nutrition contained in themselves, and second, to keep the animal in as natural a condition as possible, and thus enable it to extract more nutriment from its other food.

All root crops contain about the same quantity of water and therefore all answer equally well the second purpose for which they are fed. Therefore in determining which crop furnishes the most nutrition, in exchange for the cost of production, we have to deal only with the nutritive qualities, or flesh and fat producing properties of the various crops. And for the sake of convenience I have prepared a table showing the relative flesh and fat forming qualities of our most commonly cultivated roots. Though my results differ somewhat from quite generally received statements, I believe they are, so far as is at present possible, perfectly correct; for the calculations are original, and the analyses upon which they are based were derived from foreign sources, and have never before appeared in English.

The most reliable chemical analysis of the important root crops gives the following results:

Total amount of nitrogenous, or <i>flesh forming</i> material		
in 1000 lbs. of potatoes,		20.3 lbs.
" " mangels,		11.25 "
" " sugar beets,		10.00 "
" " turnips,		11.25 "
" " carrots,		13.12 "
Total amount of carbonaceous, or <i>fat producing</i> material		
in 1000 lbs of potatoes,		237.4 lbs.
" " mangels,		107.2 "
" " sugar beets,		174.4 "
" " turnips,		81.7 "
" " carrots,		139.1 "

By a comparison of these figures it will be seen that as a flesh producer, the potato stands first, while the sugar beet comes last, containing rather less than half the amount of nitrogenous matter found in the former. As producers of fat, potatoes stand first, closely followed by carrots and beets, while turnips and mangels are far in the rear. It therefore appears that were the nutritive qualities of roots the only basis for our decision, potatoes would be pre-eminently the best root food for all classes of animals, and that next to them stands the frequently despised carrot. But there is an item in guiding to the selection of the best root crop, if possible, of far more importance than the amount of beef and fat forming elements it contains; namely, the cost of production, and hence, the market value per pound of the nutriment they furnish. Experience has

fully demonstrated that, in regard to its yield, the ease with which it is cultivated, and its freedom from disease and insect pests, the sugar beet far surpasses all other roots; and when it is taken into consideration that in nutritive qualities it is only surpassed by the potato and carrot, both of which are greatly inferior to it as producers, and far exceed it in the cost of cultivation, it must be conceded that the sugar beet is, all in all, much the most profitable root we can grow, and is suitable alike for young growing animals, fat cattle, horses, milch cows, and even sheep and swine might advantageously be treated to an occasional meal of these palatable and nutritious vegetables.

Having stated what, to the best of my knowledge, is the most profitable root crop to grow, let me make a few suggestions with regard to the cultivation and use of roots. And first, bear in mind that 150 lbs. of beet tops are equal, for fall feeding, to 100 lbs. of the best meadow hay. There is a great difference between growing beets for sugar and beets for cattle; in the former case it is the chief aim of the producer to exclude all the nitrogen possible; while in the latter, it is desirable that the plant store up the largest possible amount of this element.

Therefore beets for feeding purposes should be grown on heavier land, or that containing more organic matter, and given all the nitrogenous food they will assimilate.

Notwithstanding opinions to the contrary I do not believe in cooking roots for horned cattle. The animals relish the raw vegetables best. The amount of woody fiber is so small and the elements of nutrition are all so soluble and readily taken up by the system, that the increased nutritive qualities of the food, if they exist, will not nearly compensate for the increased cost of feeding. An acre of land that will produce three tons of hay, will grow twenty tons of beets; and when it is remembered that three hundred pounds of sugar beets are the nutritive equivalent for one hundred pounds of meadow hay, it will be seen that an acre of beets furnishes more than twice as much nourishment as does an acre of hay, and that the nutriment furnished by them is in the cheapest possible form. But as it is not natural for the animal to take the bulk of its food in this condition, it thrives best when receiving a portion in the form of hay or fodder. Aside from the nutriment they contain, the effect of roots on the condition of the animal is so salutary, that this alone would repay the farmer for never attempting to winter his stock without roots sufficient to

supply his animals with frequent meals, of from one to three pecks of cut roots each. And if such an allowance was given them every day, their owner would be amply rewarded come spring.

Though I fear the statement conflicts with some generally received ideas, I am convinced that, if not carried to excess, roots are the most profitable winter food for cattle, that among them the sugar beet stands first; next to it comes the mangel wurzel; and for feeding purposes the potato, even were it not visited by blight, rot or Colorado beetle, could never be profitably grown. It is a fact beyond controversion that the most successful agricultural districts are those where the most attention is given to these products. Though our farmers are giving the subject more thought every year, I believe that a vastly increased acreage is essential to their greatest success, and that the cultivation of this crop is a necessary accompaniment to high and successful farming.

PREMIUMS AWARDED IN THE FOURTH DIVISION.

S. D. Crocker,	Potatoes,	\$5 00
L. O. Chittenden,	Sugar beets,	5 00
John W. Clark,	Report,	5 00
Austin Eastman,	“	4 00
Levi P. Warner,	“	3 00
John W. Clark,	Peach trees, “Samuels’ Birds of New England.”	
S. D. Crocker,	Corn,	5 00
P. West & Son,	“	3 00
Agricultural College.	Gratuity,	25 00

PROFITS OF SHEEP HUSBANDRY.

Is it profitable for a New England farmer to keep sheep? We say it is. Considering the size of our farms small flocks are more profitable than large ones. It has been suggested that a pasture capable of feeding twenty grown cattle, will also feed twenty sheep, without robbing the cattle, and the pasture will be in better condition than if the sheep were not kept.

In the year 1874 I kept twenty-five sheep and sold eighteen lambs for \$154.83, and six sheep for \$26.50, and wool for \$30.00. Income \$211.33; the expense for keeping and sheep purchased, \$138.56, the profit \$72.83, or about \$2.91 per head. In 1875 I kept thirty sheep at an expense of \$152.00: the income was \$243.00, profit \$91.00, or a little more than \$3.00 per head. In 1876 I kept twenty-five sheep at an expense of \$73.00, the income \$184.30, profit \$111.30, or nearly \$4.45 per head. In 1877 I kept twenty-five sheep at an expense of \$188.00, income \$209.04, profit \$21.04. I purchased fifteen sheep at \$105.00, which reduced the profit of this year. In 1878 I kept thirty-two sheep at an expense of \$82.00, income \$151.38, profit \$69.00, or \$2.15 per head.

Another reason why I consider it profitable to keep sheep, is, the renovating of old pastures. If a farmer having old rye fields or pastures, would let his sheep run in them, it would increase the value of the fields. They drop their manure around more evenly than other animals. Sheep eat and destroy many wild grasses and weeds which cattle will not eat, thereby improving the pasture. A naturalist once said that sheep would eat four hundred kinds of vegetables, which no other animal would do except the goat.

In regard to the breed of sheep, I would say a cross between a Southdown and Leicester, the former giving the more hardy constitution. It is admitted that a large flock of coarse woolled sheep cannot be kept two successive years without the sheep becoming diseased, while on the other hand Merino sheep can be kept with safety. One thing of importance that I have discovered by experience, is, that

sheep should be warmly housed and not allowed to run in yards, or open sheds, during the cold storms of fall and winter. Sheep that are exposed to all kinds of weather are liable to take cold, and have the disease called the snuffles. It takes much more food to keep up the animal heat to a proper temperature.

Sheep can be fed during the early part of winter on coarse hay, but during the time of having lambs they should be fed three times per day regularly on the best of hay, with the additional feed of grain or roots. The subject of raising and feeding early lambs is of great importance, as we shall have to look at the mutton for profit rather than wool at the present prices. It is admitted by men of experience, that fine-wool sheep will produce earlier lambs than coarse-wool sheep will.

How should lambs be fed? They should have a pen by themselves where they can go at pleasure, with a suitable trough and rack for hay, together with water. When they are two weeks old they will begin to eat meal, and from that time until they are three months old will eat from one half pint to one quart per day. During the first two or three weeks I feed a mixture of corn and oil meal, the remainder of the time with corn meal and roots, cut fine and mixed with the meal.

Respectfully,

No. Amherst.

AUSTIN EASTMAN.

ÉSSAY

ON

ROOTS AND VEGETABLES AND THEIR CULTURE.

DELIVERED BEFORE THE FARMERS' INSTITUTE, 1879, BY JESSE L. DELANO
OF SUNDERLAND.

Mr. President, and Gentlemen of the Institute :

In the days of primitive agriculture two brothers, whom most of you have read of and whose names are familiar to us all, commenced farming on their own account. One made a specialty of sheep husbandry, while the other tilled the soil. Our knowledge of their methods of labor and of their success and profits, is rather limited, but we know that while they both had good returns for their labor, so much rivalry and jealousy found place in the heart of the one who raised roots and vegetables, that he rose up and took the life of the other, who was quietly attending to his flocks, and then became a vagabond and fugitive himself. We hope that this lesson of Cain and Abel may restrain any unhallowed feeling that may rise in our bosoms towards those who have to-day pictured before us the pleasures and profits of sheep husbandry. Let us also remember that as great improvements have been made in the quality of roots and cereals and in the method of their production, as has been accomplished in relation to any class of the animal kingdom. For instance, the beet was originally a red-rooted weed, which we would try to get rid of as soon as possible, and which even the swine would not eat. The turnip came from the wild turnip of the woods, one taste of which will make a person's tongue smart for several hours. The onion descends from the leek, which will perfume a lady's breath for a fortnight with only one application. And the long golden ears of corn of the present day are entirely different from the little mubbins raised on these valleys and plains by the Indian squaw only two hundred years ago. And so on, through the whole catalogue of roots and vegetables, grain

and fruit, which the markets now demand. They are immeasurably superior to everything of their kind produced by our ancestors only a few hundred years ago.

So many things can be said in regard to raising and feeding of any crop, and yet not say anything but what has been said before, and with which you are all familiar, that I propose to give you nothing but facts and theories which have come to me in my practice, and the value of which I have confirmed by repeated trial. It is in this way alone that we shall benefit each other, rather than by rehearsing those common ways and methods which have been so largely discussed, and which we all know, are essential to the growth of vegetable life.

Fifty years ago the people of this section did not pay much attention to root crops, any farther than to supply a few edible varieties for the use of the family. The live stock in the barn scarcely ever got anything of the kind, from Thanksgiving till May, and the young stock and dry cows being kept almost exclusively on swamp hay and cornstalks, suffered accordingly, and came out in the spring poor, scrawny and hide-bound, with their bowels in the condition to justify the Vermont farmer when he says, "as tight as a yearling steer in the month of March." It is true, here and there would be found a farmer who would raise some English turnips, but most everybody got the idea that they poisoned the land, and in some way rendered it unfit for any other crop for a year or two afterwards. But during the last ten or twenty years a general revolution has taken place in regard to root crops, not only in our vicinity but all over our country, and those of our farmers who have learned to grow them with economy of land and labor, have long since abandoned all doubts with regard to their profit, and fully appreciate the benefits they confer on the animals which consume them, and they are now so generally grown in some parts of New England that it is evident that they are beginning to be appreciated somewhat according to their value. If the keeping and feeding of live stock upon our farms is the basis upon which successful agriculture must rest, and the health of animals and the capacity to digest other kinds of food, is largely promoted by the liberal use of roots, aside from the actual nourishment they contain, and the amount of other and more expensive food that may be saved, then the importance of root culture is firmly established. In this connection it is well to remember that three tons of roots are equal to one ton of hay, or in other words, one ton of hay and three tons of roots, are equiva-

lent to two tons of hay, when fed to milk cows. This fact has been demonstrated over and over again, and is accepted and acknowledged by many, who till lately were skeptics in regard to their worth. Then when we consider the enormous weight—say from twenty-five to fifty tons—that can be raised on an acre, compared to the weight of hay raised on the same acre of land, it is evident at once, that economy will soon follow, where science and health now lead the way.

I have had experience in cultivating only a few of the many kinds of roots, and therefore I will not go into any definite statements in regard to the mode of culture, or manner of handling only those few, leaving to others who have had experience *in* others, to give us their opinion in relation to each. And first, let me call your attention to

THE TURNIP.

This is the easiest and most generally grown root in New England. It is also one with which we have been acquainted from our boyhood, and who does not remember how he used to get his father's jack-knife and pare off the skin of a medium sized turnip, and then slice off the mouthfuls at leisure. One of my youthful recollections is that of taking a load of turnips and peddling them out, with the incredible statement posted on the side of the wagon by my grandfather, of "eighty bushels to the acre *among corn*."

The turnip will grow on all varieties of soil, from sand down through muck and clay, but the flat varieties succeed best on sandy or light loam, while the ruta bagas or Swedes like a heavy one. Two kinds only I would recommend. The ruta бага should be got in early, sowed thick in rows or in a bed, and transplanted, leaving a sufficient number growing where they originally stood, to cover the ground. The "purple top strap leaf" has given me the most satisfaction of any of the late kinds that I have tried, and I think it the best to sow after peas, early potatoes, or other first crops are off the ground. Some may question the idea of sowing the Swedish turnip in rows where it shall stand till it matures. I know it is more work to raise them this way than to transplant, but you get a great deal better article.

In regard to getting turnips too thick: If you use a machine to sow them with, and it invariably puts in about twice as much seed as you would wish to have grow, and so makes a great deal of labor in thinning, it is easy to take your seed and divide it into two equal parts,

and then scald one half of it so as to kill the germinating power, and then after thoroughly re-mixing it, sow as usual. It is cheaper to waste half of the seed than to get down on your knees and pull it out after it gets up. Turnips may be nearly all water, but there is something in them that is really beneficial to young stock, dry cows, colts and horses. I would not feed turnips to cows giving milk, for we can get something so much *better for them* at so slight advance in cost, that the balance goes over the other way.

CARROTS.

We raise carrots to color butter with and to feed to milch cows. For butter coloring raise the "Early Scarlet Horn." For stock raise the "Long Orange." Don't let your carrots stand too thick in the row. Five or six inches is near enough. I remember going into a neighbor's field of carrots last summer, and found them standing only two or three inches apart in the row, and in the fall he was ready with the remark that "it was a poor year for carrots." If we can raise carrots and sell them to the livery stable keepers for \$15 per ton, I think it would be a good crop, but I would not raise them to feed to my cows, or to the horses we work on our farms. It is an expensive crop to raise and they are actually no better for cows than beets, and not so good as turnips for working horses.

Carrot seed is one of the weakest germinating of all seeds, slow to sprout and hard to see or find after it gets above the surface of the ground. For this reason, a larger quantity of seed should be sown than is necessary for the crop, so that it may be strong enough to raise itself through the earth, and stand erect above it, and I have practiced for two years, sowing a little radish seed with the carrot seed, and then you don't have any difficulty in finding the rows, and it assists greatly in weeding, to be able to do this easily and readily.

RADISHES.

The earliest thing we get from our gardens is the radish. After several experiments on a small scale, I feel able to recommend the following method to my neighbors of growing the radish.

Prepare the bed as for onions, making the soil as smooth and fine as possible with your rake and fork. Then sow the radish seed broadcast, and rake and roll it in. After they get up two inches high attend to the thinning if necessary, and they will need no further care till they are ready to pull, about six or seven weeks from the time of

sowing. Some strong commercial fertilizer should be used for radishes instead of stable manure, but it must not be applied too plentifully. Radishes are very profitable when raised near market. A gentleman who raises for Springfield market told me that last spring's radish crop was the most profitable of any he raised during the vegetable season.

PARSNIPS.

Parsnips are excellent for the table, and are not valued as highly as they deserve for horses and cattle. They are much easier raised than carrots, because the tops get size sooner, and they will keep in the ground till spring—better than any other root grown, unless it is horse radish.

The Jersey cows in their native land were fed largely on parsnips, and many of the breeders attribute in a great degree the good qualities of the breed to judicious feeding of parsnips while the animals were young.

A loamy soil, highly manured, deeply plowed and rather moist, is most desirable, though I have seen in the deep muck bed of the famous Green Swamp, on yonder mountain, some of the largest and handsomest parsnips ever grown, some of which measured fourteen inches in circumference, and were over two feet in length.

ONIONS.

I don't know that I have anything new to offer in regard to onions, except that I am more and more decided that either *well fermented* manure or Stockbridge fertilizers should be used for the crop, on the same land year after year. And I was *surprised* to see some of our farmers last Spring, harrowing in coarse stable and hog manure for onions. It increased the labor of raking the ground over very much, and the late weeds, (which troubled everybody sadly last fall), were doubly troublesome in such pieces. If manure is used let it be well rotted, and fermented if possible, till the seeds of weeds, &c., are killed, and the manure well decomposed. Again: the fly and maggot which so seriously cuts down our onions, are identical with the fly and maggot we find with our unfermented manure, and I have a vague suspicion that in some way they are connected in their depredations on both manure and onions.

BETS.

Beets are attracting more attention than formerly, and justly too, for improvements have been made in their quality and productiveness.

The Early Bassano is considered the best for early marketing, or for the table: to be followed by the Egyptian and Long Blood, in their proper courses. The latter is preferable for winter use, because it keeps better and produces more in quantity. But for stock feeding, either mangolds or sugar beets are now preferred to all others. Personally I consider the sugar beet superior to the mangold, for while we get less in quantity it is much better in quality. It is sweeter and contains more nutrition. "Lane's American Improved Imperial" is largely raised in the Connecticut Valley, and is generally regarded as the best. The average weight is about six pounds, though it sometimes attains an enormous size. The originator of this variety has grown specimens that weighed twenty pounds each.

It has been currently reported in years gone by, that butter made from cows fed on roots, was never so firm and solid as that made from cows fed on corn meal. That is an error, however. The butter will be of just as good consistency, though perhaps not quite so much in quantity. I have here a sample of butter made from milk of a cow fed entirely on corn stalks and sugar beets, and it is as firm and substantial in texture as could be desired. Of course it may lack some of the qualities which are claimed for the gilt-edged butter, but it will bear examination, and fully disproves the error I have alluded to.

Beet seed for stock feeding should be sown about the middle of May. Plow in half of your manure. Put the rest in furrows two and a half feet apart, and cover it with a tobacco ridger. Then sow the seed at the rate of four pounds an acre. Thin the plants when the root is as large as your finger, leaving them eight or ten inches apart in the rows. Keep the weeds down, and run the cultivator often between the rows. If you should get short for green fodder for your cows in October, pull off the tops of the beets and feed *them*. The beets will do just as well, and sometimes seem to keep better in winter if this is done, for the crown of the beet will get somewhat healed over before it is put into the cellar, and it does not rot so soon. Cows that are in milk during the winter, eating one peck of roots a day, will eat no less hay, but will look better, although it is a small quantity to feed. When I have plenty of roots I feed from half a bushel to a bushel a day, and always with good results.

There are a great variety of vegetables from which the farmer should select a few at least, for his own family use. It is economical.

It is healthy. It is always convenient to have a good supply of vegetables on hand. I cannot speak of them all were I disposed so to do. But I cannot close without saying a few words in regard to

POTATOES.

Formerly we thought any piece of ground, at the end of the corn rows, or on some poor spot of land, where nothing else would succeed, was considered good enough for potatoes. But the Colorado potato bug has taught us to prize what before we despised. We must cultivate less ground in potatoes, but do better by them, both as regards fertilization and personal attention. The seed is of great importance. Some of the new varieties that have been produced within the last fifteen years are better than any of the old ones. Last year I obtained some seed of the Burbank potato, sent out by Gregory, and planted it side by side with the Brigham seedling, and it yielded, with exactly the same treatment, one third more, and of a better quality, taking the first premium at the show at Amherst. The Early Rose is a first rate potato. But don't stick to the Early Rose too long. Get the best seed, and *take some pains* to get the best. The Snowflake and Peerless are highly esteemed by many, and the seed of these two kinds can be obtained quite easily in this vicinity. Nearly every farmer has *his way* to plant potatoes. I furrow out my land three feet apart, put the manure in the furrow, cut my potatoes down to two eyes, drop the pieces of seed one foot apart in the rows, and cover deep with the ridger. When the sprouts get up, take a common square harrow and run it lengthwise in the rows. This kills all the weeds, and levels down the ridges somewhat, does not hurt the potato at all, and makes one hoeing less than by the old fashioned way.

Paris Green is the best remedy for the bugs. Hand picking is good, but it must be done every day, all the time, continually. But you can put on the Green and then go about your business; and then in a week or so when you see the bugs begin to appear again, put on another dose, and so on. The great difficulty, I believe, is, that we have neglected putting it on soon enough, and then putting on *too much*. As soon as you find a few bugs on your piece, apply the poison. Don't wait until they have got well at the vines, and you can see that they are actually injuring them, but attend to it in season. I found last summer that a quarter of a pound to a half acre, for each

application was just as good as a pound, and *better*, for the larger quantity is a damage to the vines, and causes them to look as though they were blasted.

I applied Paris Green to my early potatoes last year three times, and to my late ones six times. I mix the green with dry ashes finely sifted, and sprinkle it over the tops while the dew is on the vines in the morning and not a bug will dare to show his head in the afternoon of the same day, if it is done faithfully. Don't go to buying any of the patent water sprinklers that are being brought around for sale. It takes a large quantity of water to go over an acre, and water is heavy stuff to carry. Anybody can make for himself an apparatus that will answer the purpose.

Gentlemen, I thank you for your indulgence in listening to my disconnected and rambling dissertation. Allow me to add in conclusion, that while we may find it profitable to buy some corn and other grain from the West, yet in roots and vegetables, we have a chance to raise something which needs no grinding or expensive preparation to fit it for food, and which will help us to diminish the quantity of western produce which we have been obliged to purchase.

REPORT ON PEACH TREES.

The peach trees entered for premium are planted on the north side of Mt. Warner, and are on the lower side of the orchard, set out the year before. These trees, of which there are about one hundred, were planted this last spring ('79), all of them being Crawford's Early. They have made an average growth of about two feet.

The soil in which the trees are planted is a sandy loam. The past season potatoes have been grown between the trees.

In planting peach trees avoid a heavy soil, and if possible plant on high ground with a northern exposure where the trees will have free circulation of air. This will keep the buds from starting during the warm days of winter, and they will be less liable to be injured by late spring frosts than trees planted on low ground.

Avoid heavy manuring or the trees will make too rank a growth and be injured by the cold of winter. Do not cultivate the ground after midsummer, else the trees will not ripen their wood before frost.

Keep a good lookout for borers. Examine the trees in early fall and spring and kill all that are found.

Head the trees back every fall, cutting away from one-third to one-half of the past season's growth.

If these few rules are followed one may safely expect to grow as good peaches as were raised a few years ago in this vicinity.

Respectfully submitted,

JOHN W. CLARK.

STATEMENT OF SUGAR BEETS.

To the Committee on Crops, Gentlemen :

The land consisted of 1-4 of an acre of good sandy loam.

In the summer of 1875 it was mowed early, the turf turned under and cropped with tobacco, manured with Stockbridge fertilizer.

Last spring the turf was turned under, the soil thoroughly pulverized with wheel harrow, and manured lightly with barnyard manure and about 150 lbs. of Bradley's X L phosphate sown broad cast and harrowed in.

In this condition I think the land would bear about 40 bushels of corn per acre.

The beet seed used was from the last imported by Mr. Lincoln of Boston and sown on or about the 15th of May, in drills 18 inches apart. The plants were thinned to stand from 4 to 6 inches apart.

The field was kept clear of weeds, the soil being drawn up around the plants as much as possible.

The crop was harvested the 29th of October.

I took two rods, one on each side of the piece : on the first I had 432 lbs., on the second 373 lbs. of roots.

Taking the average of these it gives me 402 1-2 lbs. to the rod or 64,400 lbs per acre, equal to 32 1-10 tons.

The beets were analyzed at the Agricultural College laboratory and gave from 10.30 per cent. to 11.18 per cent. sugar.

Respectfully submitted,

L. O. CHITTENDEN.

Sunderland, November 1, 1879.

REPORTS ON CORN.

To the Committee on Crops, Gentlemen :

It was not my original intention to report on but one acre of the field of corn you have inspected, but finding it difficult to discriminate I have decided to put in the whole field, presuming that if there is any merit in raising one acre of good corn there is, to say the least, none the less in raising more than one acre. I find the whole piece as determined to-day by surveyor to contain 273 rods, and the entire yield to be 130 2-5 bushels, being at the rate of 76 2-5 bushels per acre. I determined the quantity of corn as follows: Special pains was taken to have the stooks of uniform size, laying three hills to the bundle and eight bundles to the stook, so that each stook except in very rare cases contained just twenty-four hills.

Ten of these stooks were selected in different portions of the field. I have shelled the corn to-day, and find the yield to be a small fraction of four lbs. less than five bushels of 56 lbs. each. In other words each stook yielded 27 6-10 lbs. The number of stooks being 265 it has not been a difficult thing to determine the quantity. The land was what might properly be called low land, a mixture of sand; clay and muck, and had been in grass some ten years; nothing had been applied during the last three years, and was inclining to sedgy bogs. The turf was very thick and strong, requiring about all the force of a heavy pair of horses to put the plough through. In the spring a wheel harrow was put on both ways, then a digger, with a man to ride, until it was mellow as an ash heap. The rows were laid out both ways, 3 1-2 feet each way. The manure used was stable manure. The amount used on the piece, near as I can determine, was sixteen two-horse loads, and was all applied in the hills. I am well aware that there have been larger yields of corn reported, brought about by special painstaking and high manuring, but have yet to learn of so large yield where no manure had been applied for three years, and none at the time of planting except in the hills. I attribute my success in part to thorough cultivation. The cultivator was run through both ways at each hoeing, leaving but little to do with the hoe.

I will only add that I have kept an account of labor expended up to the time of harvesting the corn, allowing \$1 per day for man, and the same for two-horse team, and found it to be \$25. I make no charge afterwards for the reason that the value of the corn stalks will nearly or quite cover the cost of harvesting the corn.

As to the cost of manure and rent of land I have come to no decided conclusion but will venture to set it down at \$35. Twenty dollars for the manure and fifteen dollars for rent of land.

I have assumed that but two-thirds of the value of the manure has gone to the corn crop.

Now let us see how the account stands :

Cost of labor to the time of harvesting corn,	\$25 00
Cost of manure,	20 00
Rent of land,	15 00

CREDIT.

By 130 2-5 bushels corn ; cost of corn per bushel,	46
--	----

Had I put the cost of manure at \$25, as perhaps I ought, the cost of corn would be 50 cents per bushel.

Very truly yours,

STOUGHTON D. CROCKER.

To the Committee on Crops, Gentlemen :

The acre of corn we present for premium was raised on land that has been pastured for twenty years. A portion of the piece was manured with one cord of light stable manure. (without grain). The rest had no fertilizer of any kind except the droppings of sheep and cattle when in pasture. Planted the last of May or first of June ; hoed twice ; weeds cut once ; thinned to three stalks in a hill at the first hoeing ; corn cut up the last of September.

Husked October 20th,	201 lb ears.
Husked November 3d,	4,831 "
Total.	5,032 "

Allowing 70 lbs. to the bushel gives 71 bush., 62 lbs.

P. WEST & SON.

REPORT ON POTATOES.

To the Committee on Crops, Gentlemen :

I have to report that I find the yield on the half acre of potatoes that I entered for premiums to be ninety-seven bushels. The yield was not as large as it would have been had not certain portions of the piece been affected with rot. In fitting the land in the spring I plowed under four or five loads of coarse manure and applied about the same amount to the surface after plowing, using a little compost in the hills in planting, making the rows 3 1-2 feet. and hills, near as I could guess, 2 1-2 feet. I think that nothing is gained, at least, unless the land is very rich, in setting the hills nearer than 2 1-2 feet, not but that a greater number of bushels may sometimes be obtained, but what is gained in number will be lost in size of potatoes.

Now a word about the kind of seed used. In 1878 my potatoes were almost a complete failure. They were "small potatoes and few in a hill," so that I was obliged either to plant such as I had or buy at an extravagant price, and remembering that I had some years ago experimented in this direction with good success, I decided to plant such as I had. The potatoes planted were quite too small for the market or even to appear on a farmer's table, except in a pressing emergency. The potatoes were cut lengthwise once or twice before planting, dropping but one piece in a hill. You can form some idea as to the size of the field planted when I inform you that I used but 1-2 bushel of seed for the half acre.

Now while I would by no means be understood as in favor of using the poorest of any crop for seed, I at the same time claim that my experiments thus far have gone to prove that it may be practised occasionally in the case of potatoes without apparent loss. I should have stated before this that the seed used was Early Rose.

Now a few words about the rot. I inspected the potatoes the last week in August and found no signs of rot. The next week I found they were rotting—I was afraid, badly. The third week revealed

no signs of progress, and when housed the fourth week they appeared no worse than when inspected the second week, all going to show that if they had been dug the last week in August there would have been no rot, and further, that I lost nothing after they commenced to rot by letting them remain until the fourth week.

Yours with much esteem,

STOUGHTON D. CROCKER.

NEW LIFE MEMBERS OF 1879.

W. L. Boutwell.	Leverett.
E. J. Clark,	North Hadley,
Willard Cleveland,	Hardwick,
Morris B. Kingman,	Amherst,
Dwight Presho,	Pelham,
C. L. Russell,	Sunderland,
E. T. Sabin,	Amherst,
A. A. Whitney.	Belchertown,
Euelid Owen,	Greenfield.
Charles O. Lovell,	Amherst,
Moody Harrington,	Amherst,
Mrs. A. W. Stacy,	Belchertown,
Fred'k H. Graves,	Sunderland.
John W. Clark,	Amherst,
F. H. Howes,	Amherst,
H. B. Dewitt,	South Hadley.
J. E. Williams,	Amherst,
Mrs. E. W. Clark,	“

TREASURER'S REPORT.

EDWARD E. WEBSTER, TREASURER, IN ACCOUNT WITH THE HAMPSHIRE AGRICULTURAL SOCIETY.

1879.	Dr.
To Balance on hand, Report of 1878,	\$116 34
“ Error of Report, 1878, on interest,	2 97
“ Gate money of J. J. Potwin,	481 61
“ Cash from peddlers, etc.,	85 90
“ “ Entrance fees for horses,	123 00
“ “ “ “ foot race,	15 00
“ “ For Life memberships,	75 00
“ “ Donations to Society,	73 05
“ “ From State Treasurer,	600 00
“ “ From Agricultural College tickets,	25 00
	1,597 87

1879.	Cr.
By paid McCloud & Williams, Bill,	\$ 3 75
“ R. A. Marsh, Bill,	16 00
“ Amherst Savings Bank, interest,	38 94
“ Special premiums,	250 00
“ G. B. Galloud, Bill,	43 50
“ A. J. Pervier, “	3 60
“ Asahel Gates, “	11 57
“ R. A. Marsh, “	14 75
“ Dickinson & Lee “	5 75
“ E. A. King, “	3 00
“ Wm. W. Smith, “	16 62
“ Chas. Mosher, “	3 25
“ J. J. Potwin, “	4 00
“ Samuel Hastings, “	3 00
“ W. L. Warner, “	13 43

“	J. H. Haskins, Bill,	22 46
“	J. E. Williams, “	5 00
“	“ “ “	7 50
“	Amherst Band, “	15 50
“	Asahel Dwight, “	2 50
“	T. H. Hastings, “	2 50
“	M. V. B. Brown, “	3 00
“	S. Holland & Son, “	4 94
“	Amherst Savings Bank, interest.	39 35
“	W. S. Westcott, Bill.	45 10
“	Secretary's Salary.	30 00
“	Treasurer's “	25 00
“	Premiums.	622 25
“	Postage.	48
“	Check book.	1 20
“	Cash on hand,	339 93
		<hr/>
		1,597 87

Respectfully submitted,

EDWARD E. WEBSTER, TREASURER.

I have examined the foregoing account with vouchers for the same, and find it correct.

D. W. PALMER, AUDITOR.

STATEMENT

SHOWING THE CONDITION OF THE SOCIETY.

Notes at Amherst Savings Bank,		\$1,100 00
<i>Bills which become due before the next Annual Fair.</i>		
Interest due January 1, 1880,	\$38 94	
Interest due July 1, 1880,	38 94	
Printing annual Report and advertising the Annual Meeting,	68 75	\$146 63
		<hr/>
		\$1,246 63
Cash on hand,		339 93
		<hr/>
Total indebtedness of the Society,		\$906 70

ERRATA.

On page 19, line 3, for "there" read there.

On page 28, line 3, for "conclusive" read conducive.

On same page, in the 17th line, for "views" read veins.

On page 29, in line 33, for "avert" read revert.

"The Apple," commencing on page 31, is an essay read by John W. Clark, before the Farmers' Institute, North Hadley, March 22, 1879.

THIRTY-FIRST ANNUAL REPORT.

TRANSACTIONS

OF THE

Hampshire Agricultural Society,

FOR 1880.

AMHERST, MASS. :
PRESS OF C. A. BANGS & Co.,
1880.

OFFICERS FOR 1880.

PRESIDENT,
W. L. WARNER,
OF SUNDERLAND.

VICE-PRESIDENT,
Dr. P. E. IRISH,
OF AMHERST.

SECRETARY,
W. L. BOUTWELL,
OF LEVERETT.

TREASURER,
E. D. BANGS,
OF AMHERST.

EXECUTIVE COMMITTEE,
E. F. COOK, OF AMHERST, A. W. STACY, OF BELCHERTOWN,
R. M. MONTAGUE, OF HADLEY, E. H. JUDD, OF SOUTH HADLEY,
C. W. THURBER, OF LEVERETT.

AUDITOR,
D. W. PALMER, OF AMHERST.

DELEGATE TO STATE BOARD OF AGRICULTURE, CHOSEN IN 1879,
FOR THREE YEARS,
FLAVEL GAYLORD, OF AMHERST.

SECRETARY'S REPORT.

Members of the Hampshire Agricultural Society:—

You are well aware that it has become a somewhat stereotyped routine for the Secretary to bestow extra praise upon each successive exhibition and call it the *best* ever held, etc. It is, however, without hesitation that we pronounce our Thirty-First Exhibition an improvement upon all former ones. The weather was favorable, and no pains were spared to present attractions by a liberal offer of premiums and purses. His Excellency Gov. Long consented to honor us with his presence the first day, while the announcements for the second day were the usual amount of "trotting." The morals of the community seem, however, to have undergone a vast improvement, for the attendance the second day was small compared with the multitude which assembled the first day, eager to see a real live governor.

We shall not comment upon any particular exhibits in this report, as it belongs to the committees in the several departments to do this; and, as members of the Society, they should interest themselves enough to make a condensed report for publication in this pamphlet. Suffice it to say, there were nearly double the entries of last year in some classes and deficiencies in none. All the stock and articles exhibited were of extra quality, and consequently nearly all the premiums were awarded. Seven fields of corn were entered, containing from one to seven acres, raised on various fertilizers, and yielding from

forty-five to one hundred and thirteen bushels per acre, at a cost of from twenty to fifty cents per bushel, according to the competitor's statements which are printed in this pamphlet. Every practical farmer should read them, as the matter is worthy of your careful consideration. The value of tobacco stalks for raising potatoes is demonstrated in that statement, while the statements for beets furnish food for thought. We have printed the four reports presented for premiums, and would recommend all interested in raising swine to read the one embracing that industry, while the others contain many interesting ideas.

It has become an acknowledged fact, that agricultural societies improve the community and *that improvement* becomes more and more manifest. Farmers mingle with each other, get new ideas, compare the best methods of farm improvement and the best farm machinery, each as demonstrated by some active farmer, and eventually they are able to bring their farms to the highest fertility by the cheapest methods and are able to produce larger crops at larger profits. Not only this, but they compare their products with those of others, select the best, and improve the varieties of their crops; they are also themselves improved, for people are gregarious, and by a constant social intercourse they necessarily reach a higher mental and moral capacity, and are enabled thereby to enjoy, to its fullest extent, the wonderful workings of Nature into close communion with which they are brought while pursuing the daily routine of farm work. Remember every effect must have a cause, and as the Society is an outgrowth of its members severally, let us have your hearty coöperation; prize the general welfare of the Society and community above the mere premium, and interest yourself in the great object for which we are organized. Bring whatever you have of merit to the show, and this will still further aid in maintaining the high position we now hold among other similar organizations. There are some members who are always willing to help with time or money, and it is to these, as well as the officers, that are due the improvements of the past year at the hall and grounds, in making a new poultry stand, arranging the tables in the hall so as to give more room and a better light to the increasing exhibits, as well as clean show cases and office windows. For these and other favors we are truly grateful.

Our financial status will appear from the Treasurer's report, and notwithstanding the fact of having paid more money in premiums, and also that our largest attendance was not on benefit day, still we have reduced the debt. It was voted last year to revise the list of members, but the expense not being provided for, the matter remains as last year for your consideration. I would recommend that there be a new grand stand built in place of the old one, which is becoming unsafe from age, and that a small admittance fee be charged for a few years till it is paid for. This would add much to the grounds.

At the expiration of this our term of office, we are happy to be able to present the Society to you in so favorable circumstances, and congratulate you on the uniform good feeling which seems to prevail among its members; indeed, not a dissatisfied voice have we heard except, perhaps, that of the local editor, whose reform in this respect we consider past hope.

LIST OF PREMIUMS AWARDED

[*Amherst is understood as residence when none is given.*]

TOWN TEAMS.—Leverett, \$22; Hadley, \$18; Amherst, \$15.

FAT OXEN.—A. W. Stacy, Belchertown, \$4; A. Gates, Pelham, \$2.

WORKING OXEN.—E. R. Carpenter, Charlton, \$5; R. Carpenter, Brookfield, \$4; C. W. Thurber, Leverett, \$3.

STEERS.—*Three years old.*—A. W. Stacy, Belchertown, \$3; D. Presho, Pelham, \$2; R. Carpenter, Brookfield, \$1. *Two years old.*—C. W. Thurber, Leverett, \$3; E. R. Carpenter, Charlton, \$2. *Yearlings.*—E. R. Carpenter, \$2; T. D. Morton, Hadley, \$1.

MILCH COWS.—*Jersey.*—T. G. Huntington, \$4; Wm. A. Childs, New Braintree, \$3; E. A. Munsell, \$2. *Shorthorn.*—P. West & Son, Hadley, \$4; Mrs. R. A. Hunt, \$3; William A. Childs, \$2. *Devon.*—D. A. Horton, Hadley, \$4 and \$3. *Ayrshire.*—William A. Childs, \$4; D. A. Horton, \$3. *Native.*—A. J. Perveir, \$4.

HERDS OF MILCH COWS.—William A. Childs, New Braintree, \$4; E. A. Munsell, \$3; James P. Smith, \$2; P. West & Son, Hadley, \$1.

HEIFERS.—Mrs. R. A. Hunt, \$3; W. C. Owen, \$2; Emma Perveir, \$1.

BULLS.—*Shorthorn.*—A. W. Stacy, Belchertown, \$4; P. West & Son, Hadley, \$3. *Ayrshire.*—William A. Childs, New Braintree, \$4. *Jersey.*—C. E. Wakefield, \$4.

CALVES.—*Heifer.*—William A. Childs, New Braintree, \$2. *Steers.*—W. M. Kellogg, \$2; P. West & Son, Hadley, \$1.

HERDS OF CATTLE.—William A. Childs, New Braintree, \$6; E. A. Munsell, \$5; P. West & Son, Hadley, \$4; Austin Eastman, \$3.

SWINE.—*Boars*.—D. F. Hagar, Deerfield, \$4; William S. Shipman, Hadley, \$3; Charles Russell, Sunderland, \$1. *Sow with Pigs*.—E. N. Smith, Sunderland, \$4; William A. Childs, New Braintree, \$3; J. W. Allen, \$1. *Weaned Pigs*.—M. L. Hubbard, Sunderland, \$4.

SHEEP.—*Bucks*.—George Green, Hadley, \$4; James Comins, No. Hadley, \$3; P. West & Son, Hadley, \$2. *Ewes*.—James Comins, North Hadley, \$4; F. Gaylord, \$3; T. D. Morton, Hadley, \$2. *Lambs*.—J. Comins, North Hadley, \$3; George Green, Hadley, \$2; T. D. Morton, Hadley, \$1.

POULTRY.—*Collection*.—Austin Eastman, \$3. *Brahmas*.—W. J. Seelye, \$2; L. W. Allen, \$1. *Leghorns*.—William Crocker, Sunderland, \$2; George Green, Hadley, \$1. *Plymouth Rock*.—M. B. Kingman, \$2; George Green, Hadley, \$1. *Gamz*.—J. C. Dillon, \$2; E. J. Clark, North Hadley, \$1. *Turkeys*.—S. Jewett, Pelham, \$2. *Ducks*.—S. Jewett, Pelham, \$2; E. C. Parker, \$1.

MECHANIC ARTS, &c.—*Organs*.—George W. Newell, \$1. *Plows*.—F. L. Stone, \$1.50; R. Carpenter, Brookfield, \$1. *Mowers*.—F. L. Stone, \$1; D. Cook, Hadley, 50c. *Horse Hoe*.—G. F. Hobart, No. Amherst, 50c. *Clocks*.—J. A. Rawson, \$2. *Creamery*.—P. Stedman, Chicopee, \$1. *Drum*.—George W. Newell, 50c. *Patent Goods*.—H. T. Dunakin, \$1. *Wire Goods*.—L. H. Allen, diploma. *Pruner*.—C. G. Crafts, Whately, diploma. *Socket Broom*.—G. M. Smith, North Hadley, diploma.

MERCANTILE GOODS.—F. H. Howes, \$10; Marsh & Young, \$5.

DOMESTIC MANUFACTURES.—*Bedquilts*.—Mrs. O. A. Moore, Hadley, \$1; Carrie Eastman, \$1; Mrs. H. J. Clark, 75 cents. *Counterpane*.—Mrs. T. Williams, \$1. *Rag Carpets*.—Mrs. Sophia Sikes, Sunderland, \$1.50 and \$1.; Mrs. S. W. Boutwell, Leverett, \$1.50; Mrs. McMaster, \$1. *Stair Carpet*.—Mrs. S. W. Boutwell, 75 cents. *Rugs*.—Mrs. H. Ingram, \$1.50; Mrs. Austin Eastman, 75 cents; Mrs. Charles Gallond, \$1.50; Miss W. C. Bliss, \$1.50; Mrs. Sanford Boice, 75 cents. *Hose*.—Belle Wrigley, 50 cents. *Gent's Scarf*.—Belle Wrigley, 50 cents. *Mittens*.—Mrs. Salmon Clark, Sunderland, 50 cents. *White Fancy Hose*.—Mrs. Emily Hyde, 50 cents.

FANCY ARTICLES.—*Tidies*.—Miss Carrie Eastman, 50 cents; Mrs. Mattie Smith, 50 cents; Mrs. Henry Shaw, 50 cents; Almera Shaw, 75 cents; Mrs. Robbins, 75 cents; Miss Belle Chapin, 50 cents; Mrs. S. A. Thayer, 75 cents; Mrs. George Cooley, Sunderland, 50 cents; Mrs. A. W. Stacy, Belchertown, 75 cents. *Toilet Set*.—Miss Sarah Haskins, \$1; Almera Shaw, 50 cents; Miss Lucy Fish, 75 cents; Mrs. W. M. Goodell, 50 cents. *Afghan*.—Mrs. A. W. Stacy, Belchertown, \$2.50; Mrs. E. S. Graves, Sunderland, \$1.50. *Silk Quilt*.—Mrs. H. Adams, \$1. *Sofa Pillow*.—W. L. Warner, Sunderland, \$1; Mrs. G. Fisher, 50 cents. *Worsted Wreath*.—Mrs. William Bangs, \$1. *Cushion*.—Miss Sarah Haskins, 50 cents; Miss Emma Dickinson, 50 cents. *Fancy Show Case*.—Charles Deuel, \$3. *Bead Work Stand*.—Mrs. H. Dana, \$1.50. *Creton Work*.—Mrs. H. Dana, 50 cents. *Fancy Table*.—Mrs. F. A. Hobbs, 50 cents. *Rugs*.—Mrs. P. D. Hubbard, Sunderland, 75 cents; Mrs. George Cooley, Sunderland, 75 cents. *Commode Cover*.—Almera Shaw, 25 cents. *Babies' Articles*.—Mrs. E. Gardner, Plainfield, 25 cents; Miss Jennie Cowles, 25 cents; Mrs. D. A. Horton, Hadley, 50 cents. *Lamp Mat*.—Miss Dora Horton, Hadley, 50 cents; Mrs. H. Ballou, Pelham, 50 cents. *Whip*.—Fred Deuel, 25 cents; Ned Deuel, 25 cents. *Ottoman Cover*.—Miss Anna Dickinson, 75 cents; Mrs. A. W. Stacy, 50 cents; Miss Lucy Haskell, Holyoke, 25 cents. *Scrap Bag*.—Miss Gertie Dickinson, 25 cents. *Air Castle*.—Mrs. E. J. Leach, 50 cents. *Lace Work*.—Miss Nellie Leach, New London, 25 cents; Mrs. T. A. LeGro, 25 cents. *Vases*.—Mrs. P. E. Irish, 25 cents. *Pillow Shams*.—Miss C. E. Wakefield, \$1. *Watch Case*.—Miss Ella Pierce, 25 cents. *Applique Stand Cover*.—Miss Lucy Boice, 50 cents. *Fun*.—Miss M. E. Curtis, New Haven, Ct., 25 cents. *Slipper Case*.—Mrs. T. A. LeGro, 50 cents. *Shoe Box*.—Miss Jennie L. Cowles, 50 cents. *Motto*.—Mrs. L. H. Frary, Leverett, 25 cents. *Work Basket and Slippers*.—Mrs. A. W. Stacy, Belchertown, 50 and 25 cents. *Lambrequin*.—Miss E. L. Moore, Hadley, 50 cents. *Wall Pocket*.—Miss Ella Nims, 50 cents.

FINE ARTS.—*Oil Painting*.—S. N. Kingman, \$1. *Pictures*.—Chas. Plumb, 50 cents; Miss M. E. Curtis, New Haven, Ct., 50 cents. *Water Color Painting*.—Miss Carrie Eastman, No. Amherst, \$2.

BREAD, BUTTER, &c.—*Wheat Bread.*—Mrs. George Cooley, Sunderland, \$2; Mrs. Austin Eastman, \$1; Miss Belle Wrigley, 50 cents. *Graham Bread.*—Mrs. Charles Kellogg, \$2; Mrs. E. C. Parker, \$1; Mrs. S. W. Boutwell, Leverett, 50 cents. *Rye Bread.*—Mrs. J. W. Allen, \$2; Mrs. P. D. Hubbard, Sunderland, \$1; Mrs. C. L. Russell, Sunderland, 50 cents. *Brown Bread.*—Miss Anna Crocker Sunderland, \$2 Mrs. Austin Eastman, \$1; Mrs. E. C. Parker, 50 cents. *Butter.*—Mrs. P. D. Hubbard, Sunderland, \$3; Mrs. E. C. Parker, \$2; Mrs. S. W. Boutwell, \$1; Mrs. H. Ingram, 50 cents. *Cheese.*—Mrs. A. W. Stacy, Belchertown, \$2; Mrs. E. W. Hubbard, Sunderland, \$2; Mrs. Isaac King, \$2.

CANNED FRUITS.—Mrs. P. D. Hubbard, Sunderland, \$2.75; Mrs. Mattie Smith, \$2. *Jellies.*—Mrs. P. D. Hubbard, Sunderland, \$2. *Dried Apples.*—Mrs. Sanford Boice, \$1; Mrs. Asahel Gates, Pelham, 75 cents; Mrs. W. W. Dickinson, 50 cents. *Maple Syrup.*—Mrs. P. D. Hubbard, Sunderland, 50 cents. *Cane Molasses and Vinegar.*—Eddie Kellogg, Hadley, 50 cents.

FRUIT.—*Collection.*—George L. Batchelder, Sunderland, \$4; E. A. Munsell, \$3; Cephas Frary, Leverett, \$2; F. B. Page, Prescott, \$1. *Assorted Fruit.*—Mrs. P. D. Hubbard, Sunderland, \$3; M. B. Kingman, \$2. *Apples.*—E. A. Munsell, \$4; F. B. Page, Prescott, \$3; A. Eastman, \$2; D. S. Cowles, Hadley, \$1. *Pears.*—E. H. Judd, Hadley, \$4; E. A. Munsell, \$3; D. S. Cowles, Hadley, \$2; F. B. Page, Prescott, \$1. *Grapes.*—E. A. Munsell, \$4; D. S. Cowles, Hadley, \$3; F. B. Page, Prescott, \$2; W. L. Warner, Sunderland, \$1. *Quinces.*—H. Graves, Sunderland, \$1. *Peaches.*—A. D. Loomis, \$2; P. D. Hubbard, Sunderland, \$1. *Cranberries.*—B. Page, Pelham, \$1; Asahel Gates, Pelham, 50 cents.

VEGETABLES.—*Collection.*—W. L. Warner, Sunderland, \$4; F. B. Page, Prescott, \$3. *Best exhibition of Potatoes.*—Thomas and Robbie Smith, \$2; W. L. Warner, Sunderland, \$1. *Peck of Potatoes.*—J. L. Delano, Sunderland, \$1. *Onions.*—A. Hubbard, Sunderland, \$1. *Carrots.*—W. L. Warner, Sunderland, \$1; D. S. Cowles, Hadley, 50 cents. *Parsnips.*—A. Eastman, \$1; James Comins, Hadley, 50 cents. *Flat Turnips.*—George L. Batchelder, Sunderland, \$1; A. D. Loomis, 50 cents. *Beets.*—J. L. Delano, Sunder-

land, \$1; E. C. Parker, 50 cents. *Rutabagas*.—James Comins, Hadley, \$1; F. B. Page, Prescott, 50 cents. *Tomatoes*.—S. W. Boutwell, Leverett, \$1; D. S. Cowles, Hadley, 50 cents. *Collection of Beans*.—W. L. Warner, Sunderland, \$1; S. A. Thayer, 50 cents. *Peck of Beans*.—W. L. Warner, Sunderland, \$1; George N. Beals, Sunderland, 50 cents. *Winter Squashes*.—W. V. Hawkes, \$2; E. J. Clark, Hadley, \$1. *Cabbages*.—W. L. Warner, Sunderland, \$2; B. Page, Pelham, \$1. *Sweet Corn*.—S. A. Thayer, \$2; W. L. Warner, \$1; E. H. Judd, \$1. *Seed Corn*.—H. C. Comins, Hadley, \$2; Asahel Gates, Pelham, \$1. *Winter Wheat*.—George C. Smith, Hadley, \$2; James Comins, Hadley, \$1. *Spring Wheat*.—James Comins, \$2; S. D. Crocker, Sunderland, \$1.

FARM PRODUCTS.—D. S. Cowles, Hadley, \$3; E. J. Clark, North Hadley, \$2.

FLOWERS.—L. W. Goodell, collection, \$5; asters, \$2; dahlias, \$2; pinks, \$1; pansies, \$1; cockscombs, \$1; phlox, \$1; verbenas, \$2; gladioli, \$2; Mrs. S. W. Boutwell, Leverett, collection, \$3; asters, \$1; dahlias, \$1; wild flowers, \$2; gratuity on design, \$2; Mrs. E. C. Parker, asters, \$1.

STALLIONS.—P. D. Hubbard, Sunderland, \$8; E. Owen, Greenfield, \$5.

BREEDING MARES WITH SUCKING COLTS.—C. L. Russell, Sunderland, \$5; P. D. Hubbard, Sunderland, \$4; F. H. Graves, Sunderland, \$3; T. S. Marsh, Hadley, \$2.

COLTS.—*Three years old*.—A. W. Stacy, Belchertown, \$3; S. C. Bodman, Florence, \$2; James Comins, North Hadley, \$1. *Two years old*.—P. D. Hubbard, Sunderland, \$3; A. W. Stacy, Belchertown, \$2; W. V. Hawkes, \$1. *Yearlings*.—C. L. Russell, Sunderland, \$2; F. H. Graves, Sunderland, \$1.

FARM HORSES.—*In Pairs*.—Munroe Keith, Granby, \$5 and \$3; Edmund Smith, Hadley, \$4. *Single*.—W. H. H. Morgan, \$3.

CARRIAGE HORSES.—*Pairs*.—E. F. Cook, \$6; W. H. Comins, Hadley, \$5; Frank Ingram, \$4; Mrs. E. P. Hibbard, North Hadley, \$3. *Single*.—P. D. Hubbard, Sunderland, \$6; J. G. Ward, Pelham, \$4; L. S. Dyer, Hatfield, 3; P. E. Irish, \$2.

ROADSTERS.—W. A. Bagg, Ludlow Centre, \$6; E. F. Bass, Worcester, \$4; J. J. Vincent, \$3.

REPORTS.—A. B. Howard, Belchertown, \$5; S. C. Damon, Ag'l College, \$4; J. L. Delano, Sunderland, \$3; L. P. Warner, Sunderland, \$2.

CROPS.—*Corn*.—E. C. Parker, \$5; H. C. West, Hadley, \$3.
Beets.—Joel Burt, Sunderland, \$5; H. C. Comins, Hadley, \$3.
Potatoes.—H. H. Bangs, Leverett, \$5.

PEACH TREES.—Willie Comins, Hadley, "Samuels' Birds of New England."

PURSES PAID.—*2.50 Class*.—C. A. Sweetser, Holyoke, "Topsy," \$20; E. F. Bass, Worcester, "Crazy Tom," \$15; Fred Abbott, Prescott, "Rob Roy," \$10. *2.34 Class*.—C. B. Davis, Holyoke, "Carrie Allen," \$50; C. A. Sweetser, Holyoke, "Jennie," \$30; E. F. Bass, Worcester, "Washington," \$20. *2.45 Class*.—C. R. Pomeroy, Northampton, "Lizzie," \$40; W. S. Miller, Springfield, "Little Mary," \$25; "Pride," \$15; E. F. Bass, Worcester, "Ibex," \$10.
Bicycle Race.—Paul Blatchford, A. C., \$8; Arthur Whittaker, M. A. C., \$5; George F. Fiske, A. C., \$4; A. S. Fisk, A. C., \$3.

PLOWING MATCH.—William W. Smith, \$6; R. Carpenter, Brookfield, \$5; George Hobart, \$4; E. R. Carpenter, Charlton, \$3; L. C. Warner, Sunderland, \$2.

REPORT ON SWINE.

It is no part of the work of your Committee in this report to recite the history of the hog or to trace step by step the work of domestication and breeding by which this animal has undergone such wonderful changes as scarcely to be recognized as having descended from the wild boar, but simply present such hints and suggestions in their care and management as it is hoped may be of some special benefit to those for whom it was written. How the farmers of New England shall manage their hogs so as to derive the largest amount of profit, and thus, perhaps, be able to successfully compete with the Western farmers in supplying our own markets with pork, is a question that interests no small proportion of our farmers at the present time.

The farmers of 50 or 75 years ago, in certain portions of this state at least, looked upon the keeping and fattening of hogs as one of the most important and valuable means of disposing of their grain and adding to the profits of their farming. While liberal quantities of pork were cured for home use, a large amount was annually transported by teams to Boston, and there either exchanged for cash or the yearly supply of groceries. Now this to a great extent is changed. By means of the railroads our farmers are brought into direct competition with the great grain growing sections and interests of the West. The increased attention bestowed on the improvement of their breed of hogs and the rapid strides which have taken place in the business as the outgrowth of these improvements, and the problem which the Western farmer has solved in sending their cheap grain to our Eastern market in the shape of pork (or as one writer states it, "of sending 30 bushels

of grain in a three-bushel barrel"), has given the Western farmer no small advantage. This competition, instead of discouraging, should stimulate our farmers to secure the very best breeds and to pursue such a wise system in their care and management as shall make this department of their farming pay. It can be done, and our farmers owe it to themselves that they do this, or cease to keep that which so many now declare to be so unprofitable. Such farmers, however, should blush to own themselves beaten by the humble Irish cottager, who, with few, if any of the natural resources, such as are incidental to a well managed farm and dairy, finds it highly profitable to keep one or more "Gintlemiu" that, if necessary, goes to pay the "rint," or to furnish himself and family with their year's stock of meat.

SELECTION OF BREED.

No small amount of the profits in feeding pigs will depend upon the breed. Therefore, in selecting the hog best adapted to the wants of the New England farmer, an animal neither too large and coarse, nor one too small, should be chosen. While in some sections a black hog is all the rage, the color being no objection, in others, it is looked upon with such dislike that however excellent the breed or the animal, its color is such a fault that the breed is condemned. Therefore, the farmer who intends to breed pure bloods to sell for breeding purposes, or expects his neighbors to use his thoroughbred sires to cross on common sows, will do well to consult the taste of the farmers of the locality in which he lives.

With the great advantage to be secured by the use of the best improved breeds, and which skillful and money-making farmers have not been slow to discover, it is unaccountably strange that there should be a class of farmers so blind to their own interests as to continue to keep and breed the "Racer" or "Landpik" breed in nearly its original purity. These original sub-soilers are never quiet,—either squealing, rooting, or tearing their pens to pieces, all the time. No wonder their unfortunate owners bewail the hard times and speak the truth when they say "that their hogs are a dead loss to them, eating themselves and their owners out of house and home." Why such stock is kept from becoming extinct is because there exists a class of farmers

so unwise that they think it is just as well to breed from a boar the service of which they usually get for nothing, as to patronize the use of a good thoroughbred for which one or two dollars is charged.

We have had some experience in breeding pure blood hogs first and last, and while we would not discourage anyone from engaging in the business with a view to supplying the demands for such stock for breeding and for the purpose of fattening, still we would especially recommend such breeds as the Suffolk, Essex, small and medium Yorkshire, and Berkshires to cross with the common stock of the country. No matter how coarse and common the sows may be, if bred to a good boar of one of the above breeds, the result will be the most satisfactory. Why? Because the offspring will possess all the good qualities of the sire. These are: 1st, gentleness; 2d, small bones and light offal; 3d, good feeders, making the most of what they consume; 4th, easy to fatten at any age. These, with the strong, vigorous constitutions which they receive from their dam, will make them the *ne plus ultra* of a family pig for fattening.

SELECTION OF THE MALE.

The selection of the male in breeding is of the first importance. Not only should he be a thoroughbred, but what is of still greater importance, he should be well bred. We are sorry to observe that many worthless animals are saved and sold for breeding purposes for the reason of their "fancy pedigree," or because they were from imported stock, or were raised by Col. So-and-So, or out of stock that cost so many hundreds or perhaps thousands. Too many specimens of this class have found their way among the farmers. There could be but one result of breeding from such stock. For this reason pure bloods are not looked upon with that favor to which their merits entitle them and which they would have received had it not been for the dissemination of this worthless stock.

We do not believe it best to breed from so-called native male animals when the use of good thoroughbred males suitable, that produce such vastly superior results, can be secured without too much trouble or expense. But poor as these native scrubs sometimes may be, we know of no animal that is quite as worthless as a *thoroughbred*

scrub. Never be deceived into purchasing or using animals of this sort. For breeding purposes, as well as feeding, select an animal with broad, deep chest, broad loin, large ham, fair length of body, but not too long, straight on the back or slightly arched (never hollow), small bone in proportion to the flesh, short leg and small feet, small head with wide, heavy chaps, short nose, broad between the eyes, small, thin ear, body neither too light or heavy-coated with hair. He should be selected from a family that shows uniform good qualities, where the pigs run even, look alike, well marked, &c., are the ones to select from, everything else being equal.

SELECTION AND MANAGEMENT OF BREEDING SOWS.

In selecting sows with a view to breeding, choose those that are long and rangy, what might be called rather coarse for the breed, rather than those fine drawn, compact, chubby ones. Look to the male for the *fine* point, rather than the sow, if even well-bred pigs are desired. Even with the best of management there is considerable liability of loss in getting a litter of pigs through the first two weeks of their lives. The tendency of the sow to devour her young is usually the result of costiveness and its accompanying evils. Breeding sows need exercise and plenty of green food, if in its season; if not, feed plenty of coarse bran and roots, but little, if any, meal. The fact is we consider corn the least desirable food that can be fed to a sow in farrow, for the reason that it causes her whole system to become feverish and inflamed. If a clear grain diet must be fed, we know of nothing as safe as oats. They are less heating than most other grains, and the thick skins cause a healthful distension of the bowels. Their food, if possible, should be varied and abundant enough to keep them thriving, yet not sufficient to fatten. An occasional dose of sulphur in their food, as well as charcoal, a supply of which should be constantly at hand, to be given twice a week. It promotes their health by helping digestion, improving their appetite, etc. They should have access to pure water, and the feed should be occasionally salted. The good luck which some farmers almost invariably have in raising pigs is the result of good management. If a breeding sow is properly fed, kindly treated, petted, she seldom disappoints her owner. Unless one has a

suitable place where the sow and pigs will not suffer from the effects of the usually severe cold at that time, we do not believe in having our sows drop their litters in mid-winter.

There is much less danger of loss, and we think it far better to have them dropped in April, and if full fed all the time until the first of December, they will dress from 300 to 400 pounds. After farrowing, the sow for a few days should be disturbed as little as possible. Her food for the first few days should be warm and sloppy, and small in quantity. If she is doing well and is quiet and takes good care of her little grunters, "let well enough alone." After a week or ten days, feed more liberally. Nothing we ever found is equal to skim milk and oat meal to make a sow give a large quantity of milk and the pigs to flourish. Next to this would be corn meal thoroughly cooked and made into a gruel, with sufficient bran in it to keep the bowels open and to give a more glutinous diet. Before the sow farrows, if a rail is placed around the side of the pen one foot from the side and 8 or 10 inches high, there is less liability of the mother lying on her young before they have acquired sense or strength enough to avoid the danger. Pigs should not be put to breeding too early,—eight or nine months is early enough. If a sow in breeding shows a quiet disposition and has a reasonable number of pigs, and proves to be a good mother and milker, she should be kept; for a sow seldom throws her best and most vigorous progeny until they have arrived at the age of two or three years.

IN-AND-IN BREEDING

is especially to be avoided, if the breeder wishes to maintain size, vigor, fecundity, and constitution. However successful the practice of in-and-in breeding may have been in improving and establishing certain families and breeds of domestic animals, it is a practice to be carefully avoided by our farmers in the breeding of swine. We have known what was originally a profitable breed of hogs, by a continued course of this practice, dwarfed and deformed and so completely "run out" as to be in a few generations comparatively worthless.

MANAGEMENT OF PIGS.

While it is highly desirable to start with the right kind of hogs, let the breed be what it may, the fact that the feed makes the hog, to a

great or less extent, must not for once be overlooked. Without good feeding it is impossible to secure the full benefit of well bred stock. For this reason the swine claimed to have originated out of "swill pail" by "corn bin" are usually fat, showing the result of good feeding, if not good breeding. If sows are served in December they will farrow in April,—the period of gestation is usually sixteen weeks and three days. When the pigs are two or three weeks old they should be fed in an inclosure separate from the sow, with milk in a small trough. They learn quickly, and although they take but little at first, as they grow they consume more and more, so that by the time they are ready to be taken from the sow, there will be no check to their growth, besides being if properly fed much larger and superior to pigs that only suckle the sow. The drain on the sow will be much less; therefore, she will be in better condition for immediate breeding again. We never found anything quite equal to milk to make pigs grow. Next to this are oats, ground fine, and made into a gruel or porridge and thoroughly cooked.

Six or eight times a day is not too often to feed young pigs. Give them all that they will readily eat up clean, and no more. Do not overfeed; "little and often" is the golden rule. When the pigs are three months old, three times a day will answer. Be regular in feeding; feed just strong enough to keep the stock in a good growing condition, but not to fatten. We are satisfied that it pays to cook or scald the meal fed to growing pigs, or what are commonly called shoats. This is easily done by placing the feed, say one-half meal and the other half coarse bran, in an empty barrel that is sufficiently tight to hold water. Pour upon the feed sufficient boiling water to thoroughly scald it. This is to be covered up and allowed to stand until next day's feeding, or in other words, the food is prepared before it is wanted in order to give the meal time to cook and swell. As needed, it can be made thin and sloppy, either with milk or slops from the kitchen, or water. Up to the time of fattening we prefer to scald the feed, but for fattening we have serious doubts as to there being any thing gained by this practice. It is true the feed goes farther, from the fact that they cannot eat so much on account of its bulk. But it takes longer, and where the object is to induce the animal to eat all he

can digest, bulky food is an objection. The prevalent custom of deferring the fattening until cold weather is not good economy. Much food might be saved and a hog's growth much increased, if this fattening process was well under way before cold weather comes on. Give such animals a warm dry shelter, for warmth is equivalent to food, and the comfort and quietude thus secured tends to the secretion of fat.

HOG PENS.

It is worse than folly to expect an animal of any breed to do well if kept in small and filthy pens. Farmers who cannot afford (?) to give their pigs a dry place, but oblige them to live in a hole reeking with filth and mire, eating out of a trough perhaps half full of the same material, ought never to own or have the care of a hog of any kind,—let alone any of the improved breeds.

It is painful to see such stock, as is too often the case, deprived of suitable shelter, their pens open to rain, snow and mud, the little straw they chance to have as wet as rain and mud can make it, squealing their discontent “in tones that drown the wintry blasts.” For shame on such neglect and abuse. Treat and let them live the very aldermen of the farmer's stock, and then if they do not flourish and grow fat under such easy circumstances, they are not worthy of their name and breeding. However desirable it may be in point of convenience to have the pens within easy range of the kitchen, yet it is a barbarous custom and one which cannot be too severely censured. Many an otherwise attractive farmer's buildings and home is made unhealthy, besides being unsightly, in consequence of the offensive smell and noise that penetrates the house because the owner must needs give the hog house and yard a commanding position in the foreground. If the pig-sty is placed where it properly belongs, it certainly will not form a part of or be closely connected with the dwelling where the farmer and his family live.

MAKING MANURE.

If properly managed, the hog can be made of practical use in the manufacture of a large amount of valuable manure. The excrements of the hog, owing to the concentrated food upon which it is fed and fattened, are among the most valuable manures upon the farm. The

disposition of this animal to root and exercise should be encouraged when young, especially in such animals as it is intended to keep for breeding purposes; for it not only tends to develop a stronger and more vigorous constitution, but if suitable material is furnished in a yard attached to the pen, they will work over and convert into a valuable fertilizer such waste stuff as weeds, potato tops, leaves, rubbish from the garden, etc. These, with an occasional load of loam, will in a season secure a mass of material that will be worth not less than ten dollars for each animal that is kept and fattened to the age of eight or nine months. It is a great mistake for farmers to neglect this advantage of the manufacture of manure, and to rely in its stead upon commercial fertilizers. The sad results of this unwise course are only too often apparent.

DISEASES OF HOGS.

The value and importance of the hog as food is a sufficient reason for guarding with scrupulous care the health of this animal. Too often reared in filth and slaughtered in disease, it is not strange that the use of pork is unpleasantly suggestive of "cholera" and "trichiniasis." It is safe to say that most of the diseases of swine are the results of inattention and neglect. Give the hogs clean pens, a large yard or lot in which to exercise and access to fresh earth, healthful food, pure water, and seldom, if ever, will they be troubled with disease. Study to promote the comfort of all the creatures in your keeping, if the best results are desired and you wish to prove yourself a humane man.

For hogs that are kept closely penned an occasional dose of sulphur is thought to be beneficial. The same can be said of charcoal. An occasional scrubbing with the aid of a brush, warm water and soap, not only adds to their looks but promotes their growth and comfort. For mild cases of diarrhea, give the pigs fresh skimmed milk thickened with wheat flour. For measles, kill or get rid of the animal that has them. That is the best way to treat such diseased stock. Let some one else doctor and eat them afterwards if they chance to live,—not you.

BREEDS OF SWINE.

Before we proceed to notice the various breeds that are deserving the attention of those in search of pure blood stock, it might be well to observe that many persons engage in breeding such stock, solely for the purpose of supplying their neighbors and the public with the same at "fancy prices." Not unfrequently such breeds soon have their run, but this class of speculators are all sold out at just the right time, and are now in for something else that's new. These men are not breeders; they know little or nothing about the art of breeding. Therefore, in purchasing new and improved breeds of any kind, never allow this spirit of speculation to enter into your plans. Let the motive be to help improve the domestic animal. Thus our farmers by securing the best breeds and their crosses, not only secure to themselves increased profit, but embellish their farms with that which will afford them a new interest and a satisfaction not to be found in the ownership and breeding of inferior stock.

THE ESSEX.

This is a favorite breed with those who have given them a fair trial. For the production of nice pork for family use, it is claimed there can be nothing superior. They certainly have a larger per cent. of lean meat, and less of that gross, oily tendency to which the Suffolk runs. They are a thoroughly established breed, good families of which will re-produce themselves as near alike as two peas. They are remarkably quiet and gentle,— "no other breed equals them in this respect," it is claimed. Small boned, light offal, easy to keep and good grazers. To cross on coarse sows they are especially recommended. We do not think it would pay to keep the breed simply for the production of pork, unless customers are willing to pay an extra price for a nice article. They are pure black in color, rather small but very compact.

YORKSHIRE.

The Yorkshire is one of the oldest of the white breeds of swine. They are generally divided into the large, small, and middle breeds. The small Yorkshires are a quiet, easy hog to keep, and it is claimed that "no animal of the pig species carries so great a proportion of

flesh to the quantity of bone, or flesh of so fine a quality, as the small Yorkshire." There has been several of these hogs imported into this state, and so far they have given very general satisfaction. The middle Yorkshire are larger, not quite so highly refined or compactly built as the small, but are a desirable breed. The large Yorkshire, of which several have been imported into this state, are a much larger size than either of the others. Six or eight hundred pounds are common weights and as high as twelve hundred pounds has been secured by English breeders. Considering the enormous size of these animals, they are not coarse. Their shape is generally good, the legs straight, the back generally arched and well calculated to sustain great weight. We know of no one who has met with any special success in the breeding or fattening of these large Yorkshires in this country.

CHESTER (COUNTY) WHITE.

This American breed, which was introduced several years ago from Pennsylvania, for a time had a tremendous "run." One firm alone in Chester County, Penn., it is claimed, shipped from 2500 to 2900 of these pigs each year. Owing to the great demand and the dishonesty of dealers, many worthless animals were shipped and scattered over the country, which naturally brought this breed in to bad repute with some. A well bred Chester White, if not too coarse (and large size is wanted), is a desirable kind of hog. The sows of this breed, owing to their size, strong digestive powers, hardiness, and vigorous constitution, and usually good milkers, make most excellent stock to cross refined English breeds of hogs upon. They are pure white, have long, round bodies, short head and legs, are hardy, prolific, and good milkers.

THE SUFFOLKS.

This breed, now so seldom seen either in the pens of our farmers or at our annual agricultural fair, was twenty years ago a more common and deservedly popular breed. They are a very quiet, easy animal to keep, and fatten readily at any age. Generally, however the pure bloods were most too fine drawn; they were too lightly coated and lacked muscular strength and hardiness of constitution. The males make most excellent sires to cross with the coarse common stock. It is generally conceded that their introduction into this state and county

was the means of greatly improving the swine, and thus adding greatly to the wealth of our farmers. Two fair specimen boars of what might be called Suffolk and Yorkshire crossed were entered and received first and second premium at our late Fair in Amherst.

POLAND CHINA.

This breed originated in southern Ohio, and was the result of crossing several breeds with the Berkshire as a basis. They are a large hog, and perhaps better suited to the wants of the farmers of the West, rather than those of the East. "This breed is very hardy, profitable to feed, and will (it is claimed) dress 300 pounds at nine or ten months, and if kept growing until eighteen or twenty months will fall little short of 500 or 600 pounds." When well bred they have long, deep bodies, bone medium to large, broad and straight back, good square hams and shoulders, short legs, small head, irregularly spotted white and black. At the West this breed fairly divides the honors with the Berkshire. Crossing this breed by the use of pure Berkshire sires gives a most satisfactory result in stock for fattening. They are far superior to the full blood Poland China, if early maturity, small bone, little offal and economy of feed is desired.

THE BERKSHIRE.

Among the several improved breeds which prominently claim the attention of our farmers, there are none, we think, more deserving of notice than the improved Berkshire. They are an English breed, established many years ago. No pure bloods that we ever tried excel them either for fattening purposes or for crossing on common stock. The Berkshires are thin-haired, but the skin is almost always healthy, smooth and elastic. In size they should be classed as medium, although now and then a specimen develops a size that should be reckoned with the large. Experience has proved this breed to be very hardy, prolific and excellent foragers. When properly fed the pigs can be made to weigh from 300 to 500 pounds at a year old. The young pigs are thrifty, grow very rapidly, and are easy to fatten at any age. Their hams are celebrated as the finest in the world. The

true Berkshire is docile, short-legged, sound in the loins; ears thin, small and erect; straight back, of uniform width from shoulder to ham, very full and deep in the ham and shoulder; face short, fine and well dished, broad between the eyes, which are large, bright and intelligent; color black with white on feet, face and tip of tail. With the merits which this breed possesses, it is no wonder that where they are best known they are deservedly popular.

For the Committee,

A. B. HOWARD, *Chairman.*

REPORT ON MILCH COWS.

The subject of this report is one that is second to none in its importance, either at the fair or at home on the farm, and for this reason I wish it were in more able hands than mine to present it in its deserving embellishment of words to the members of the Hampshire Agricultural Society.

It gave the Committee great pleasure to find in entering upon their duties, that the number of entries in this class was twice as large as that of the previous year. The wish was expressed then, that they might continue to increase in this ratio for several years, and then the Society would again receive its old-time compliments on the show of this most necessary of all farm animals. The cows entered for premiums were of the five leading breeds of the day, viz. :—Shorthorn, Ayrshire, Jersey, Devon, and last but not least, because such a large proportion of the cows in the State belong to it, the Native breed. Some of the cows from their deserving merits should be noticed here, but it would be unadvisable to lengthen out this report by any special remarks upon each animal.

Beginning with the Shorthorn:—The breed represented by the largest number of animals entered for premium, the cows shown by P. West & Son, of Hadley, should be mentioned first, for it is praiseworthy of any breeder to be able to exhibit such fine animals and ones that give such large returns to the milk pail. Other exhibitors of this breed were Mrs. R. A. Hunt, of Amherst, who showed a fine cow, the milk record of which all must have seen, as it was in the Secretary's report of the Fair, printed in the *Amherst Record* of Sept. 29th, 1880; Wm. A. Childs, of New Braintree, who had some fine

cows among his herd; and E. A. Munsell, of Amherst, whose cows gave evidence of returning good results in the business of milk producing.

The next largest number of entries were of the Ayrshire breed, and particularly noticeable among them was the cow that took the first premium at the New England Fair, two weeks before. The animal was one that any breeder or exhibitor might point out with pride, and comments upon such an animal would be out of place, for the red ribbon worn by them is pass-word enough. The competing animal of this blood was shown by D. A. Horton, of Hadley, and compared well with the first mentioned.

The attention of the Committee was next directed to the Jerseys, and found that the cows owned by T. G. Huntington, of Amherst, Wm. A. Childs, of New Braintree, and E. A. Munsell, of Amherst, were well deserving the premiums awarded them.

Another breed, which was not represented last year, has this year come to the front with some fine animals. I refer to the Devons, exhibited by D. A. Horton, of Hadley. The products of these cows were shown in the hall, and their good quality was enough to insure them a place in any butter-maker's herd.

The Native breed was not so well represented as one would expect, although the cow shown by A. J. Pervier, of Amherst, was a good one, yet there ought to be more in number, and the farmer should not hesitate to take the best cows in his herd to the Fair, even if they are not full bloods. The only way to have a good Fair is to have each one bring the best he has to it.

There were a number of milch cows on the grounds that, although they were not entered for premiums, should be noticed here, from the addition they made to the show. They were among the Ayrshires from the Mass. Ag'l College. This breed is now the only one owned there, and as it is being improved by the importation of new blood, it will be able in a short time to show improvement on their now almost model cows.

The cows on exhibition were in good condition and appeared to have been taken directly from the pastures to the exhibition, and not to have been fixed up for the occasion. This was gratifying to the

Committee, as it is the only true condition in which an animal can be correctly judged. How often at our Agricultural Fairs, animals, that are only fit for the shambles, carry off the premiums over equally as good and even better ones for the work of the dairyman.

In a word to the exhibitors, the Committee would like to make one or two suggestions and call their attention to the fact that more care is needed on their part in complying with the by-laws of the Society, in regard to the pedigree and milk or butter record to be handed in with the entry of each animal. These should be complied with, for with these statements in their hand, the work of the Committee would be not only easier and more interesting, but they would be better able to place the premiums on the deserving animals. Then as to the arrangement of the cows on the grounds, if the Committee of Arrangements find it necessary to scatter them so much, the owners or exhibitors should be where they can come to the assistance of the judges and facilitate their work by pointing out their animals and answering any questions concerning the same.

While examining the different animals entered for premium, my thoughts turn back to the farms from which they came, and it was with no little accuracy that one could form an opinion of the rest of the herd, and of the farms and farmers these individual animals represent. It must give tone to the farmer's life and calling to be able to own and show a premium herd of those large, mild-tempered Shorthorns, while others take no less pride in the close jointed, compact bodies, and large milk-producing qualities of their Ayrshires. Then turning to the Jerseys, with their yellow skin, sleek coats and slender limbs, and to the Devons, with their bright red coats, their lively disposition, and handsome head and horns, we are so well pleased with them that one is forced to believe that for some objects of the dairy, these two breeds have all the good qualities of the first two, with the faults of neither.

There seems to be a general wish that the farmers of the northern and western part of the county would bring their cows to compete with those that are shown from directly around Amherst. The farmers own them, there can be no doubt about that; for if not, whence come those golden balls of butter and rich cheeses that were on exhibition in the hall during the Fair, and those long strings of oxen that added so

much to the success of the show? Now as the cow is the direct source of both these valuable products of the farm, why will not their owners bring them to the Fair and show from what breeds and what animals these results are obtained?

The Committee were glad to notice that a good deal of interest centered about these animals during the day. They are important features of the Fair, and such they will continue to be. Therefore, let every farmer strive to improve them from year to year, and to show such improvements at the Annual Fair.

For the Committee,

S. C. DAMON, *Chairman.*

REPORT ON CANNED FRUITS, &c.

The Committee in charge of this department did not find a very extensive exhibition of articles, but nearly everything that was shown possessed unusual merit, and in point of quality excelled the exhibits of many former years.

This is perhaps owing somewhat to the fact that increased attention is being given to new methods of preserving fruits and other nutritious edibles, and also of improving some of the old ways of accomplishing the same object. Formerly, scarcely any of our common fruits were preserved for domestic use, except the Quince, Apple, Peach and Plum, and these were cooked in their own weight of sugar, "pound for pound," and boiled down till it was strong enough to keep. In many cases this boiling down caused the fruit to become quite hard and tough so as to be absolutely indigestible, and while the original flavor of the fruit was so counteracted by the large amount of sugar used that it needed an expert to tell what variety of fruit any specimen of "preserves" contained. This course was also costly, and when fruit was plenty, the economical housekeeper often bewailed the high price of sugar which prevented her from keeping a sufficient quantity of fruit for the comfort and enjoyment of the family. But now, the art of putting ripe fruit of all kinds into cans, and by different methods excluding the air, has become so universal that the variety of fruits preserved is only limited by the infinite number of good things that grow upon the face of the earth.

This new method is also economical. The cans will serve for use for many years, and some kinds of fruit need no addition of sugar, and therefore retain their original flavor and digestibility. So also in

regard to drying fruit, berries, etc., improvement seems to be the order of the day, and while much time is saved over the old manner of sun-drying, a much nicer article can be produced, of an agreeable snowy whiteness, and less liable to be destroyed by worms or mold.

In canned fruit there were two competitors. Mrs. Mattie Smith, of North Amherst, displayed twenty-one cans, containing as many varieties, all very nicely prepared and of fine color. Mrs. P. D. Hubbard, of Sunderland, exhibited twenty-four cans, containing twenty-four varieties, many of which seemed to excel in the size and beauty of the fruit chosen, and also for preserving the natural form and shape during the process of canning, for which reason, and because of the largest number of varieties, your Committee gave her the first premium and Mrs. Smith the second.

Mrs. Hubbard also entered ten varieties of Jelly, of exquisite color and firmness, and also a delicious sample of Maple Syrup, the product of the well-known Hubbard sugar orchard.

Eddie Kellogg, of Hadley, brought in samples of domestic vinegar and cane molasses, which were of decided merit, very agreeable in taste and clearness.

Three specimens of dried apples were shown, all of superior excellence, differing, however, very much in color, and as that is becoming an essential quality in dried apples at the present day, your Committee accordingly awarded the first premium to Mrs. Sanford Boice, of Amherst, the second to Mrs. Asahel Gates, of Pelham, and third to Mrs. W. W. Dickinson, of Amherst. Through the liberality of the Society the Committee were enabled to grant a premium to each of the competitors in our department, and we wish to call attention to the fact that the Hampshire Agricultural Society recognizes the importance of this growing industry which combines skill and usefulness, and we suggest to the *young ladies* of our community who have felt that they could do nothing for our Annual Fair, that here is a broad field for the exercise of their skill in which they can display their industry and taste, in the number, variety, and superiority of their canned fruits and jellies.

For the Committee,

J. L. DELANO, *Chairman.*

REPORT ON STOCK.

As we review the stock, implements and other products of industry exhibited at the Thirty-First Annual Fair, memory travels over some earlier exhibitions of the Hampshire Agricultural Society, and strange pictures start up in all their varied colors. Pictures of exhibitions where the clatter of the mowing machine was not heard, or the noiseless sewing machine seen; where kinds and varieties of fruit and vegetables were less, and their quality inferior to those on exhibition to-day;— where the fragrant flowers were treated as a “side show.” Pictures of “native” cattle, long strings of working oxen, the old brindle, white face and lime-back cows, with young stock of all ages bearing the same marks; of the long-bristled, coarse-formed swine, of the native sheep, and the dung-hill fowl. Pictures of the farm horse that, with sufficient urging, could “go” five miles an hour; of the three-minute horse that possessed no good qualities but speed, and the stallion in whose veins was not a drop of pure blood.

How changed! The name “native” applied to neat stock on exhibition to-day would be a misnomer, for it is almost an impossibility to find an animal that can trace back its pedigree for three generations with no admixture of foreign blood; and they show unmistakable characteristics of those distinct breeds with which they have been crossed. It is somewhat remarkable that we have not had any distinct breed of cattle produced in this country, but have been relying entirely upon foreign blood, either to improve our native stock or to supplant them. Still we have our choice animals, and when we assert the superior excellence of all classes on exhibition, we only give the united testimony of all observing spectators. For these important improvements the community are largely indebted to the Mass. Agricultural College,—to men like Lathrop, Sweetser, Cobb and Bates, who have from time to time given the matter their most careful attention; all of

which have been encouraged by officers of the Hampshire Agricultural Society. We are rejoiced to learn that a considerable portion of the stock was produced within the limits of the Society. This calls to mind the question we so often hear discussed: Is it better for farmers to raise their stock than to buy it? and would infer from the exhibition that, practically, all successful farmers prefer raising to buying stock.

We should be glad to particularize in regard to many of the animals exhibited, but if we commence we shall exceed our limits, and must only generalize. There were on exhibition several very fine pairs of working oxen and a trial of their strength, but not feeling much interested in seeing this useful animal put to so useless a test of his strength, we did not give that part of the Fair any particular attention. The dullest observer could not fail to notice the perfect symmetry of those well-bred swine on exhibition, and admit their superiority when compared with the long-bristled, leggy, scraggy specimens, sometimes called hogs, which, passing for such, throw the whole race into disfavor and so much retard improvement in this branch of agricultural industry. The exhibition of poultry was finer than ever before, and as this division is growing so fast in number and quality of the entries, we think it but fair that more money be appropriated for premiums.

The display of horses was every way creditable. There were some very fine driving horses, and the stallions, mares, and colts gave evidence that the breeding of good horses was well understood and practiced in this neighborhood; and it is a paying business, too, judging from the price asked for some of the colts on exhibition. We noticed that either the dam or sire of premium colts had some reputation for speed. Among such improved stock a horse can be easily found that can perform the work on the farm, and at the same time keep clear of the dust of the road, having a reserve of locomotive power. The number of sheep on exhibition was quite small, but of the very best grade and a credit to the exhibitors.

In closing this report on stock we would say that these improvements are mainly due to the use of none but thoroughbred males for the purposes of procreation.

L. P. WARNER,
General Reporter on Stock.

STATEMENTS ON CORN.

CORN GROWN BY E. C. PARKER, SOUTH AMHERST.

The soil on which I raised my acre of corn was a sandy loam, which grew a crop of corn in 1878 and a crop of rye in 1879, without manure. The land was plowed in the spring to a depth of eight inches and harrowed twice. The manure was stable manure, twenty-two loads of thirty bushels each spread on and plowed under, and a handful of ashes and hen manure to the hill. The corn was planted in hills 3x3 feet by hand, on the 21st and 22d of May, and was the "Parker twelve-rowed variety." Cultivated and hoed twice. Commenced cutting September 7th; cut close to the ground and set it up thirty hills to the stook, tying the top. Husked in the field, or made into bundles and carted to the barn to husk. The yield was determined by measuring four average rods in different parts of the field, and computing the result from the average weight of corn on each. The amount of fodder was estimated by weighing that grown on the before mentioned four rods. I also took one hill of four ears, shelled and weighed the corn, which was 11-2 pounds; the result computed from this would give a yield of 129 3-4 bushels; the result from measurement of the four rods gave 113 22-56 bushels, which result I have adopted. Considering one-half of the manure still in the land, the account will stand about as follows:—

Dr.

To Plowing, harrowing and furrowing,	\$ 3 00
Manure, half of 22 loads of 30 bushels,	15 00
Seed and planting,	2 00
Hoeing and cultivating,	2 80
Harvesting and husking,	7 20
	\$30 00

Cr.

By 113 22-56 bushels corn at 65 cents,	\$73 81
4,480 pounds fodder at \$8 per ton,	17 92
	91 73
Profit of one acre,	\$61 73

So. Amherst, Nov. 18, 1880.

E. C. PARKER.

CORN RAISED BY H. C. WEST, HADLEY.

The field of corn I present for premium contains five acres, it was cleared twenty-three years ago of a heavy growth of hard and white pine and white oak timber, sowed to wheat the next fall and pastured since with sheep and cattle. Plowed early in the spring, and planted from the 20th of May to the 2d of June; with three dollars worth of fertilizers per acre in the hill; one acre with phosphate, three with fish and potash, and one with chemicals, all at near the same value as possible without any perceptible difference in the yield of corn. It was cut up the second week in September. The amount of corn was determined as follows: Two rods were selected and measured, as near an average as possible, and the last of August they were topped and allowed to stand until Oct. 26th, when it was picked and husked. Weighed the same day 83 pounds, allowing 70 pounds to the bushel, gives 94 bushels and 60 pounds per acre. The corn was shelled Nov. 1st, and the corn and cob weighed again, giving 14 3-4 pounds of cob and 65 1-4 pounds of corn. A stricken bushel weighed 56 1-2 pounds, making 93 bushels and 12 pound per acre.

The corn was planted with sixteen hills to the rod, making thirty-two hills on the two rods measured. Whole number of ears 253, to each hill 7 1-36, largest number one hill 9, smallest number 2, on one stalk. Allowing the fodder for husking and no rent for the land, as it is worth more than when I commenced, the account will stand about as follows:—

Cost of labor up to planting,	\$ 65 00
Cost of labor up to time of husking,	62 50
Fertilizers,	15 00
	—————\$142 50

Cr.

By 466 bushels of corn at 31 cents, \$144 46

H. C. WEST.

Hadley, Nov. 12, 1880.

CORN GROWN BY TIMOTHY PUTNAM, LEVERETT.

The corn we entered was in two pieces. The first contained one acre and was planted with corn last year, producing a good crop, this year it was manured with ten two-horse loads of good compost, spread on and harrowed in. Planted May 15th, with a "Woodward" planter in drills, and thinned to four stalks to three and one-half feet; it was cultivated three times and hoed twice. It produced as near as we could estimate 6027 pounds, which, reckoning 70 pounds to the bushel, gives 86 bushels. The other piece contained one acre and fifty rods, was turf mowed twice last year, plowed in the spring and treated the same as the other piece, produced 9163 pounds or 130 bushels. Considering the improvement of the land as equal to interest and taxes, the account for the two acres and fifty rods is viz :—

Dr.

Plowing and harrowing,	\$ 8 00
8 1-2 cords manure, and carting,	56 00
Hoeing and cultivating,	8 00
Harvesting and husking,	16 35
	————\$88 35

Cr.

216 bushels of corn at 70 cents,	\$151 20
Fodder, 6 1-2 tons at \$6.00,	39 00
	————\$190 20

Balance in favor of the crop \$101.85, or the corn reckoned at cost would be 27 cents per bushel.

Leverett, Nov. 20, 1880.

TIMOTHY PUTNAM.

CORN RAISED BY AUSTIN EASTMAN, NORTH AMHERST.

The land on which the corn grew was a stiff, loamy, gravelly soil; it measured three hundred rods and had been mowed several years without top-dressing. Manure was harrowed in and the fertilizer put in the hill. Yield 68 bushels per acre :—

Cr.

By 127 bushel at 60 cents,	\$76 20
Corn fodder,	24 00
	—————\$100 20

Dr.

To Plowing,	\$3 00
Carting manure,	3 00
Harrowing,	1 50
Planting,	2 50
Hoeing,	9 00
Cutting and stocking,	3 00
Husking,	6 35
Manure,	22 00
Stockbridge Fertilizer,	13 50
	—————\$63 35

Net profit, 36 85

North Amherst, Nov. 15, 1880.

AUSTIN EASTMAN.

CORN RAISED BY GEO. L. COOLEY, SUNDERLAND.

The land on which the corn grew was a peat or muck meadow that had been drained by surface ditches, and also improved by carting on to it in former years considerable loam and sand. I value the land at \$100 per acre. The land had been down to grass for six or eight years previous, being top-dressed with barnyard manure two or three times. The land was plowed partly in the fall of 1879 and the remainder in the spring of 1880, with no apparent difference in the crop. The depth of furrow was from four to seven inches, or about six inches average depth. The piece was manured with twelve two-horse loads of manure, sledded out the previous winter and left in piles; these were forked over once before using and covered with dirt scraped up about the pile. No other fertilizer was used. May 17th the soil was pulverized thoroughly with a wheel harrow, occupying the team four hours. The field was rowed both ways with a furrowing plow; time used in furrowing, three and one-half hours for man and horse. Putting out manure in the hill, one man with horse ten hours; amount used in each hill, a medium shovel full. Time used in planting, one man fourteen hours. Commenced hoeing June 11th; labor

first hoeing, one man six hours ; cultivating, two and one-half hours ; second hoeing, July 9th, one man ten hours ; cultivating three and one-half hours. No other labor was expended on this piece of corn till cutting in September, and as I frequently let out corn to cut and husk for the fodder, I made no further account of labor. Care was taken to have the stooks of uniform size, each to contain eight bundles. The piece was measured by a surveyor before and after cutting and setting up, and contained 110 stooks. In October ten of these stooks were taken in different parts of the field to get a fair average, and the product kept separate when husked and spread in a chamber to dry. The ten stooks yielded nearly fourteen baskets of corn, which, shelled November 20th, yielded just seven bushels by measure and the same by weight, calling 56 pounds a bushel. This result multiplied by eleven gives 77 bushels of shelled corn to the acre.

The estimated cost of labor up to harvesting is as follows :—

<i>Dr.</i>	
To Plowing,	\$2 00
Hauling manure,	2 00
Harrowing,	1 20
Furrowing out,	75
Putting out manure,	2 25
Planting,	2 10
Cultivating for first hoeing,	56
First hoeing,	90
Cultivating for second hoeing,	78
Second hoeing,	1 50
	<hr style="width: 100%;"/>
Total for labor,	\$14 04
Value of manure, \$18 ; calling one-half left in the land, we charge the crop	9 00
	<hr style="width: 100%;"/> \$23 04

<i>Cr.</i>	
Value of 77 bushels of corn at 65 cents,	\$50 05
	<hr style="width: 100%;"/>
Profit,	\$27 01

Now we deduct six dollars for interest and one dollar and forty cents for taxes and we still have a profit of \$19.61.

GEORGE L. COOLEY.

Sunderland, Nov. 20, 1880.

CORN GROWN BY H. C. COMINS, HADLEY.

The field of corn which I entered measured seven acres, the soil being gravelly loam. It was sod land, part of which produced a light crop of hay last year, which was not worth cutting. All the labor was done with a team, except applying fertilizers and planting; indeed, not a hoe touched the piece after planting. The items of cutting, stacking, and husking which appear in the account may seem too low, but the work was jobbed at those figures. The corn was measured in two baskets and quite a number weighed, taking the average and allowing 75 pounds for a bushel of corn. The grain was very dry, with no soft corn, and the fertilizer was Stockbridge Corn Fertilizer. The field was rented as appears below. My object in entering this field was not to see how large a yield I could get, but how cheap I could raise corn. The account stands as follows:—

Dr.

To rent of land,	\$18 00
Plowing,	14 00
Work with "Randall Harrow,"	4 00
Harrowing with seed harrow,	4 00
Marking both ways,	2 50
Furrowing one way,	2 50
Cost of fertilizer,	58 50
Applying fertilizer and planting,	6 00
Cultivating twice, once each way,	5 00
Hoeing with "Prout's Horse Hoe,"	4 00
Cutting and stacking,	10 00
Husking,	22 00
Carting corn and fodder,	20 00
	<hr/> \$170 50

Cr.

By 439 bushels of corn at 70 cents,	\$307 30
14 tons of fodder at \$6 00,	84 00
	<hr/> \$391 30
	<hr/>
Net profit,	\$210 80

Hadley, Nov. 10, 1880.

H. C. COMINS.

CORN RAISED BY W. A. WILSON, NO. HADLEY.

The land measured five acres, and is valued at \$15 00 per acre. Improvement of land pays rent and taxes. Stover pays harvesting and husking.

Dr.

To plowing and harrowing,	\$11 25
Furrowing and planting,	2 50
Stockbridge fertilizer,	45 00
Hoeing and cultivating once,	8 50
	—————\$67 25
Cost per acre,	\$13 45

Cr.

By 376 baskets, 40 pounds per basket, or 15,040 pounds, which reckoning 70 lbs. per bushel, would make 214 bushels of 60 lbs. at 60 cents,	\$128 91
Or per acre,	\$25 78

North Hadley, Nov. 18, 1880.

W. A. WILSON.

SUGAR BEETS.

CROP GROWN BY JOEL BURT, OF SUNDERLAND.

The half acre of land on which the beets were grown is a fine loam river soil. In 1877 it produced wheat and in 1878 clover, not having received any manure since 1876. Last year fifteen loads of stable manure, thirty bushels per load, were spread on and plowed in; the piece was then set with tobacco. This year the land was plowed once in April to a depth of eight inches, pulverized thoroughly, harrowed and carefully raked. The fertilizer was applied broadcast, fourteen dollars' worth of Bradley's XL super-phosphate, and no other was used. The land being now ready to receive the seed, this was sown the twentieth of April, with Matthew's Seed Drill, in rows twenty inches apart; four pounds of seed was used, furnished by the Franklin Beet Sugar Co. As soon as the plants appeared the piece was gone over with a hand cultivator and in a few days the plants were thinned to about eight inches apart in the row. The seed came up so well that no transplanting was required, as a result the beets were smooth and free from prongs. The piece was hoed three times and kept free from weeds. On the twenty-sixth of October commenced to harvest, this was done by pulling up the beets and twisting off the tops with the hands, leaving the beets in rows convenient for carting away. The beets were drawn to South Deerfield and placed on board the cars. This added somewhat to the expense of harvesting, more than if the beets had been stored in the pits or cellar. The beets on the one half acre were weighed and amounted to 35,810 pounds. The cost of producing is as follows:—

Plowing,	\$ 75
Harrowing and raking,	1 75
Sowing,	50
Seed, four pound,	80
Hoeing, thinning, etc.,	10 00
Harvesting and delivering,	15 00
Fertilizer,	14 00
	<hr/> \$42 80

Sunderland, Nov. 10, 1880.

JOEL BURT.

BEETS GROWN BY H. C. COMINS, HADLEY.

The soil on which the crop grew was a heavy loam, which is sometimes overflowed by the river. The land measured 75 rods, and the beets were sown in drills two and one-half feet apart. The yield is estimated by weighing ten baskets which averaged 66 pounds per basket. The account stands about as follows:—

<i>Dr.</i>	
To Manure, three cords at \$7,	\$21 00
Stockbridge fertilizer,	10 00
Plowing,	1 00
Harrowing and fitting,	1 00
Sowing seed and fertilizer,	50
Seed, five pounds at 20 cents,	1 00
Cultivating with horse four times,	1 00
Hoeing first time,	1 00
Hoeing second time and thinning,	2 00
Cutting weeds,	50
Harvesting, four days' work,	5 00
	<hr/> \$44 00
<i>Cr.</i>	
By one-half the manure left in the soil,	\$10 50
22,364 pounds of beets at \$5 per ton,	55 91
Tops used for feed,	2 00
	<hr/> \$68 41
Balance,	\$24 41

H. C. COMINS.

North Hadley, Nov. 10, 1880.

POTATOES.

RAISED BY HOWARD BANGS, LEVERETT.

The field of potatoes which I enter for premium was planted about the middle of May to Snowflake and Burbank potatoes, those of medium size were used cut once, and one piece put in the hill; the rows were 3 1-2 feet apart, and the hills 3 feet apart. The soil was a sandy loam, and the crops for the three preceding years were grass, corn, and rye, respectively.

The only fertilizer used was tobacco stalks, put three to a hill in a furrow made with a heavy plow, the potatoes having been dropped, the whole were covered with a ridger. The piece was hoed twice, and when dug the last of September, yielded at the rate of 250 bushels to the acre, of large size and excellent quality tubers. The account stands as follows:—

Dr.

To plowing and harrowing,	\$1 50
Carting stalks,	1 50
Value of stalks at \$5 per cord,	6 25
Planting,	75
Hoing and cultivating,	2 50
Harvesting,	4 50
Seed potatoes,	2 25
Interest and taxes,	1 00
	<hr/> \$20 25

Cr.

By potatoes,	\$52 50
Net profit,	\$32 25
The potatoes cost me 18 cents per bushel, nearly.	
<i>Leverett, Nov. 18th, 1880.</i>	H. H. BANGS.

PEACH TREES.

SET OUT BY W. H. COMINS, HADLEY.

The soil on which the trees were set is a light sandy loam. There were 50 trees set out in May, and not watered; although the weather was very dry, only five have died. The land was plowed and harrowed; the trees set out in two rows one rod apart, and one rod apart in the row. The holes were dug two feet square and one and one-half feet deep; in each hole was placed about three pecks of leaves and grass, cleaned out of a ditch. Sweet corn was raised between the rows, and the crop will pay for all the cost of trees and labor, which stands as follows:—

Plowing one-third acre,	\$0 50
Smoothing and harrowing,	50
Preparing the holes,	50
Setting trees,	1 00
Cost of 50 trees at 12 cents each,	6 00
Hoeing up weeds,	2 00
	<hr/>
	\$10 50

W. H. COMINS.

Hadley, Nov. 10, 1880.

NEW MEMBERS FOR 1880.

E. D. CHITTENDEN,	Sunderland.
CHARLES A. BANGS,	Amherst.
R. CARPENTER,	Brookfield,
E. R. CARPENTER,	Charlton.
WM. J. SEELYE,	Amherst.
FRANK INGRAM,	North Amherst.
WM. A. CHILDS,	New Braintree.
A. J. PERVIER.	Amherst.
F. L. STONE,	Amherst.
SALMON WAKEFIELD,	Amherst.
MRS. S. N. KINGMAN,	Amherst.
JOEL BURT,	Amherst.
E. C. PARKER,	Amherst.
MRS. E. C. PARKER,	Amherst.
H. C. WEST,	Hadley.
S. C. DAMON,	Hadley.

TREASURER'S REPORT.

E. D. BANGS, TREASURER, *in account with* THE HAMPSHIRE
AGRICULTURAL SOCIETY.

1880.

Dr.

To Cash from E. E. Webster, Treasurer, 1879,	\$339	93
Levi Stockbridge,	45	00
J. J. Potwin, gate money,	490	01
Entrance fees, plowing,	6	00
“ “ bicycle race,	4	00
“ “ horse races,	93	00
Peddlers,	82	50
New life members,	70	00
W. L. Boutwell, dinner tickets	5	50
R. H. Howard, for grass on park,	10	00
State Treasurer,	600	00
Donations to the Society,	60	29
Agricultural College tickets,	40	00
	\$1,846	23

Cr.

By am't paid J. E. Williams' bill,	\$ 68	75
Amherst Savings Bank on note,	200	00
“ “ interest,	39	80
A. F. Cowles' bill,	54	
Stamps on checks,	04	
Levi Stockbridge,	5	00
Frank P. Wood's bill,	4	00
Carpenter & Bangs,	7	50
H. C. West, Stockbridge prize,	25	00
A. R. Cowles, “	15	00

Amount brought forward,	\$365 63
C. A. Bangs & Co's. bill,	22 25
2.50 class trotting,	45 00
2.45 “	90 00
2.34 “	100 00
Bicycle Races,	20 00
W. F. Gunn's bill,	43 00
S. Holland & Son's bill,	4 65
Amherst Savings Bank interest,	32 04
C. M. Smith & Co.'s bill,	5 33
J. J. Potwin's bill,	4 00
W. E. Stebbins' bill,	7 50
James Wiley's bill,	1 75
Check book,	1 20
W. L. Warner,	14 60
William W. Smith,	36 00
Asahel Gates,	9 00
Jesse L. Delano,	2 00
W. L. Boutwell, Secretary,	35 00
Marsh & Young's bill,	2 50
A. J. Perveir's bill,	1 60
J. A. Rawson,	1 50
E. D. Bangs, Treasurer,	25 00
Samuel Hastings' bill,	1 00
E. A. King's bill,	24 00
S. A. Thayer's bill,	9 00
W. L. Boutwell's bill,	6 00
Asahel Dwight's bill,	2 50
E. T. Sabin's bill,	5 00
C. A. Bangs & Co.'s bill,	1 90
J. E. Williams' bill,	5 00
R. H. Howard's bill,	2 00
P. E. Irish's bill,	1 00
Postage,	45
Premiums,	686 00
Cash on hand,	232 83
	<hr/> \$1,846 23

Financial Condition of the Society.

LIABILITIES.

Note at Amherst Savings Bank,	\$900 00	
Interest due January 1st, 1881,	31 50	
Interest due July 1st, 1881,	31 50	
Printing Annual Report and advertising Annual Meeting,	46 25	
	<hr/>	\$1,009 25
Cash on hand,		232 83
		<hr/>
Total indebtedness,		\$776 42

AMHERST, Dec. 15, 1880.

This is to certify that I have examined the accounts of E. D. Bangs, Treasurer of the Hampshire Agricultural Society for 1880, and find them correct, with a balance on hand of two hundred thirty-two, and eighty-three one-hundredths dollars.

D. W. PALMER, *Auditor.*

F. H. HOWES,

DEALER IN

Fine Groceries and Crockery,

China, and Glassware,
Table Cutlery, &c.



FINE TEAS,

Coffee, Sugar, Spices, &c., &c.

Best Goods and Lowest Prices at

FRANK H. HOWES,

Merchants Row,

Amherst, Mass.

THIRTY-SECOND ANNUAL REPORT.

TRANSACTIONS

OF THE

Hampshire Agricultural Society,

1881.

AMHERST, MASS. :
PRESS OF E. W. CARPENTER,
1881.

OFFICERS FOR 1881.

PRESIDENT,

W. L. WARNER,

OF SUNDERLAND.

VICE-PRESIDENT,

DR. P. E. IRISH,

OF AMHERST.

SECRETARY,

W. L. BOUTWELL,

OF LEVERETT.

TREASURER,

E. D. BANGS,

OF AMHERST.

EXECUTIVE COMMITTEE.

A. W. STACY, of Belchertown, MONROE KEITH, of Granby.

SYLVESTER JEWETT, of Pelham,

HOMER COWLES, of Hadley, HENRY COOK, of Amherst.

AUDITOR,

D. W. PALMER, OF AMHERST.

DELEGATE TO STATE BOARD OF AGRICULTURE, CHOSEN IN 1879,

FOR THREE YEARS,

FLAVEL GAYLORD, OF AMHERST.

SECRETARY'S REPORT.

Members of the Hampshire Agricultural Society:—

The time has again arrived for making our annual report, and in doing so we wish to call your attention to the present condition of the Society; also what has been done this year and during the last three years.

In 1879 the debt was \$1100, while the hall, fences, railings, track and grand stand needed repairs; since that time, the hall has been re-shingled on one side, a new, substantial poultry stand built, and besides all other repairs, the grand stand, which had become unsafe from decay, has been this year remodeled at an expense of \$150. The debt has been reduced at the rate of one hundred dollars each year, and now stands at \$900 with enough in the treasury to pay one hundred dollars, while our real estate has not deteriorated in value. The amount of premiums paid in 1879 was \$622, this year \$650: therefore, it may be seen that although the list has been cut down in some classes, it has been made up in others. So much for our financial property.

It may be seen by reference to the books, that for the three years past the number of entries as a whole have been steadily increasing. This might not be apparent in the hall to an ordinary observer, but it must be remembered that the tables have all been re-arranged so as to afford about fifty feet more table room than formerly. The show of

stock has not varied much for several years. but we have turned over a new leaf this year and instructed committees to act strictly according to rules.

The attendance at the Fair, as may be seen by reference, has varied but little for several years. Thus it is evident that the Society has made advancement in two of the three elements which combine to make a successful fair, namely, finances and exhibition; while in the third element, attendance, we have held our own.

It has been the aim of the managers to conduct all business connected with the Society in such a manner that the debt shall decrease steadily year by year, without detriment to the best interest of the Society, or checking its advancement. We hope in selecting your officers for the coming year, you will choose such as will not hesitate to enforce the rules and who will be willing to labor in the interest of the Society, so that the time will not be far distant when the debt will be cleared and the premiums increased by the amount now used on principal and interest, which is over one hundred and sixty dollars.

The officers have endeavored in the discharge of their duties to deal justly with all, and we now cordially thank the members for their coöperation with us and rejoice in the hearty good will which has prevailed throughout our whole term of office.

W. L. BOUTWELL, Secretary.

LIST OF PREMIUMS AWARDED.

[*Amherst is understood as residence when none is given.*]

TOWN TEAMS.—Amherst, \$16; Hadley, 16; Pelham, 14; Leverett, 4.

FAT CATTLE.—Chester Smith, Hadley, \$6.

WORKING OXEN.—C. W. Thurber, Leverett, \$5; W. M. Kellogg, 4; O. A. Moore, Hadley, 3.

STEERS.—*Three Years Old*—C. W. Thurber, Leverett, \$3; A. Gates, Pelham, 2; O. A. Moore, Hadley, 1. *Two Years Old*—A. W. Stacy, Belchertown, \$3; D. Presho, Pelham, 2; Benjamin Page, Pelham, 1. *Yearlings*—W. M. Kellogg, \$2; P. West & Son, Hadley, 1.

MILCH Cows—*Grades*—A. W. Stacy, Belchertown, \$7; Thomas W. Smith, 2.

HERDS OF MILCH Cows.—Wm. A. Childs, New Braintree, \$4; E. A. Munsell, 3; James P. Smith, 2.

HEIFERS.—P. West & Son, Hadley, \$3; Wm. A. Childs, New Braintree, 2; L. Gates, 1.

BULLS.—*Short Horn*—P. West & Son, Hadley, \$1. *Ayrshire*—Wm. A. Childs, New Braintree, 2.

CALVES.—*Steers*—P. West & Son, Hadley, \$2. *Heifers*—Wm. A. Childs, New Braintree, 2; John W. Clark, 1. *Bull*—Wm. A. Childs, New Braintree, 3.

HERDS OF CATTLE.—Wm. A. Childs, New Braintree, \$6; A. W. Stacy, Belchertown, 5; James P. Smith, 4; E. A. Munsell, 3; P. West & Son, Hadley, 2.

SWINE.—*Bovars*—Wm. S. Shipman, Hadley, \$5; F. H. Williams, Sunderland, 3. *Sow with Pigs*—C. K. Smith, Sunderland, \$4; J. W. Allen, 3; F. H. Williams, Sunderland, 1. *Weaned Pigs*—S. Brown, Sunderland, 3.

SHEEP.—*Buck*—C. A. Eastman, \$4; Geo. Green, Hadley, 3; Henry Green, Hadley, 2. *Ewes*—Geo. Green, Hadley, 4; James Comins, No. Hadley, 3; T. D. Moreton, Hadley, 2. *Lambs*—T. D. Moreton, Hadley, 3; Geo. Green, Hadley, 2.

POULTRY.—*Collection*—M. B. Kingman. “Samuels Birds of New England.” *Brahmas*—W. J. Seelye, 2; M. B. Kingman, 1. *Cochins*—M. B. Kingman, 2; Geo. Graves, 1. *Plymouth Rock*—M. B. Kingman, 1. *White Leghorns*—M. B. Kingman, 2. *Brown Leghorns*—S. Jewett, Pelham, 2; John W. Clark, 1. *B. R. Games*—E. J. Clark, No. Hadley, 3. *D. Games*—John C. Dillon, 2. *Bantams*—M. B. Kingman, 3. *Turkeys*—S. Jewett, Pelham, 2. *Ducks*—S. Jewett, Pelham, 3.

MECHANIC ARTS, &c.—Diplomas, viz., Alvin Sanderson, Sunderland. “Gales Plows;” L. V. B. Cook, “Granite State Mowing Machine;” George W. Newell, “Pianos & Organs;” T. H. Hastings, “Horse Rake,” “Randall Harrows;” P. Stedman, Chicopee, “Mosley’s Cabinet Creamery;” P. Bartlett, Florence. “Sewing Machines;” James Pyles, N. Y., “Pearline.”

MERCANTILE DISPLAYS.—F. H. Howes, \$10; T. W. Sloan, “Samuels Birds of New England.”

DOMESTIC MANUFACTURES.—*Rag Carpets*—Mrs. S. W. Boutwell, Leverett, \$1; Mrs. M. F. Dickinson, 1. *Bedquilts*—Mrs. Belle Wrigley, 1; Mrs. S. W. Magill, 1; Mrs. M. F. Dickinson, two, 1.50; Mrs. E. P. Dickinson, three, 2; Mrs. F. H. Howes, 1. *Rugs*—Mrs. S. W. Boutwell, Leverett, 75 cents; Mrs. L. M. Dickinson, 25. *Skirt*—Mrs. L. M. Dickinson, 75 cents. *Worsted Shawl*—Miss Dora Horton, Hadley, 50 cents. *Extracts, &c.*—Fred Deuel, \$2. *Silk Mittens*—Mrs. P. D. Hubbard, Sunderland, 1. *Hose, Mittens and Scarf*—Mrs. Belle Wrigley, 1.25.

FANCY ARTICLES.—*Best Display*—Mrs. F. H. Howes, “Samuels Birds of New England.” *Afghans*—Mrs. Charles Kellogg, \$1.50 and 50 cents; E. D. Chittenden, Sunderland, 50 cents. *Lambrequins*—Miss Lucy Fish, \$1; Mrs. H. D. Dana, 1; Mrs. C. A. Legro, 75c; Miss Clara Sykes, 50c; Mrs. P. D. Spaulding, 25c. *Silk Quilts*—Mrs. R. W. Stratton, \$1.50; Mrs. Leander Merrick, 1.50; Mrs. Henry Shaw, 1; Mrs. M. L. Dickinson, 1. *Tidies*—Miss Ellen Dickson, 25c; Miss Dell Stebbins, 25c; Miss Flora Stebbins, 25c; Miss Mary Piper, 25c; Mrs. J. L. Lovell, 25c; Miss Nellie Loomis, 25c; Mrs. Belle Wrigley, 25c and 25c; Mrs. S. Boice, 25c; Mrs. P. D. Hubbard, Sunderland, 25c. *Apron*—Mrs. P. D. Hubbard, Sunderland, 50c. *Toilet Sets*—Mrs. McMaster, 25c; Mrs. M. L. Dickinson, 25c; Mrs. Henry Shaw, 25c. *Pin Cushions*—Mrs. Wm. Gray, Hadley, 25c; Mrs. O. F. Morse, 25c; Miss Gertrude Dickinson, 25c. *Creton Work*—Mrs. H. D. Dana, 75c. *Skirts*—Mrs. R. W. Stratton, \$1.50; Miss Lucy Boice, 50c. *Mottoes*—Arthur Morse, 25c; Miss Nellie Fitch, 25c; Miss Mary Chapin, 25c; Miss May Harkness, 25c. *Lamp Mat*—Miss Ada Moulton, 25c. *Mittens*—Neddie Deuel, 25c. *Broom Case*—Mrs. Charles Deuel, 25c. *Show Case*—Henry Adams, \$2; Charles Deuel, 3. *Sofa Pillow*—Mrs. J. L. Lovell, \$1. *Macrame Lace*—Mrs. L. F. Marshall, \$1. *Medicine Chest*—Mrs. S. P. Clutia, 75c. *Scroll Sawing*—S. P. Clutia, 50c. *View Holder*—Carlton Clutia, 25c. *Work Bag*—Mrs. J. L. Lovell, 50c. *Handkerchief Box*—Mrs. S. A. Thayer, 25c. *Brush Case*—Mrs. Lowe, 25c. *Hand Bag*—Mrs. Ella King Lowe, 25c. *Slipper Case*—Mrs. Ella King Lowe, 50c. *Ottoman*—Miss Jennie L. Cowles, 50c. *Worsted Cross*—Mrs. C. E. Wakefield, 50c. *Gents Scarf*—Mrs. S. F. Whitney, 50c. *Hood*—Mrs. S. F. Arnold, 50c. *Lounge Cover*—Mrs. S. F. Arnold, 25c. *Edging*—Miss May Dickinson, 25c. *Silk Hose*—Mrs. M. L. Dickinson, 50c. *Rustic Frame*—Miss Cora Church, 25c. *Card Case*—Miss Mabel Morse, 25c.

FINE ARTS—Mrs. Ella King Lowe, \$6; J. L. Lovell, 2; James Ingalls, 1; Mrs. S. W. Boutwell, Leverett, 50c.

BREAD, BUTTER AND CHEESE.—*Wheat Bread*—Mrs. S. W. Boutwell, Leverett, \$1; Mrs. Belle Wrigley, 50c. *Rye Bread*—Mrs. A. F. Crocker, Sunderland, \$1; Mrs. Austin Eastman, 50c. *Graham Bread*—Mrs. E. C. Parker, \$1; Mrs. Charles Kellogg, 50c. *Brown*

Bread—Miss Anna Crocker, Sunderland, \$1 ; Mrs. S. W. Boutwell, Leverett, 50c. *Butter*—Mrs. Sanford Boice, \$3 ; Mrs. Chester Cowles, 2 ; Mrs. P. D. Hubbard, Sunderland, 1 ; Mrs. W. A. Magill, 50c. *Cheese*—F. B. Page, Prescott, \$2.

CANNED FRUITS, &c.—Mrs. S. W. Boutwell, Leverett, \$3.50 ; Mrs. Sanford Boice, 1 ; Mrs. M. L. Dickinson, 50c ; Mrs. S. Jewett, Pelham, 50c.

FRUIT.—*Display*—George L. Batchelder, Sunderland, \$4 ; E. A. Munsell, 3. *Assorted Basket*—Fred A. Crocker, Sunderland, 3 ; W. V. Hawks, 2 ; F. L. Hill, 1. *Apples*—E. A. Munsell, 4 ; F. B. Page, Prescott, 3 ; W. N. Waite, 2 ; D. S. Cowles, Hadley, 1. *Pears*—E. A. Munsell, 4 ; F. B. Page, Prescott, 3 ; D. S. Cowles, Hadley, 2 ; P. E. Irish, 1. *Grapes*—E. A. Munsell, 4 ; D. S. Cowles, Hadley, 3 ; F. B. Page, Prescott, 2 ; R. W. Stratton, 1. *Peaches*—A. D. Loomis, 2 ; F. B. Page, Prescott, 1. *Quinces*—F. B. Page, Prescott, 1. *Cranberries*—Benjamin Page, Pelham, 1.

VEGETABLES.—*Collection*—D. S. Cowles, Hadley, \$3 ; George L. Batchelder, Sunderland, 2 ; West Bros., Hadley, 1. *Best Exhibition Potatoes*—Charles S. Smith, 2 ; West Bros., Hadley, 1. *Peck Potatoes*—Charles S. Smith, 1. *Onions*—George N. Beals, Sunderland, 1 ; *Carrots*—Benjamin Page, Pelham, 1. *Parsnips*—Benjamin Page, Pelham, 1. *Flat Turnips*—Benjamin Page, Pelham, 1. *Beets*—D. S. Cowles, Hadley, 1 ; George L. Batchelder, Sunderland, 50c. *Ruta Bagas*—Benjamin Page, Pelham, 1. *Tomatoes*—E. C. Parker, 1 ; A. Gates, Pelham, 50c. *Beans, Collection*—Thomas W. Smith, \$1 ; A. D. Loomis, 50c. *Beans, Peck*—Fred A. Crocker, Sunderland, \$1 ; Wm. Magill, 50c. *Pumpkins*—Arthur Magill, \$1. *Cabbage*—Benjamin Page, Pelham, 2 ; West Bros. Hadley, 1. *Seed Corn*—Willard M. Kellogg, 2 ; A. Gates, Pelham, 1. *Sweet Corn*—Homer Cowles, Hadley, 2 ; George L. Batchelder, Sunderland, 1. *Winter Squashes*—D. S. Cowles, Hadley, 2 ; Mrs. Taylor, Pelham, 1. *Winter Wheat*—James Comins, No. Hadley, 1 ; A. D. Loomis, 50c. *Spring Wheat*—S. D. Crocker, Sunderland, \$1 ; James Comins, No. Hadley, 50c. *Rye*—Daniel Cowles, Hadley, \$1 ; S. D. Crocker, Sunderland, 50c. *Oats*—James Comins, North Hadley, \$1 ; Horace D. Dana, 50 cents.

FARM PRODUCTS.—West Bros., Hadley, \$3.

FLOWERS. — *Collection* — L. W. Goodell, \$5 ; Mrs. S. W. Boutwell, Leverett, 3 ; Mrs. E. C. Parker, 2. *Asters*—L. W. Goodell, 2 ; Mrs. S. W. Boutwell, Leverett, 1. *Dahlias*—L. W. Goodell, 2. *Verbenas*—L. W. Goodell, 2. *Gladioli*—L. W. Goodell, 2 ; Mrs. E. C. Parker, 1. *Wild Flowers* — Mrs. S. W. Boutwell, Leverett, 2. *Bouquet*—Mrs. S. W. Boutwell, Leverett, 2 ; L. W. Goodell, 1.

STALLIONS.—C. R. Pomeroy, Northampton, \$8 ; J. L. Parker, Worcester, 5.

BREEDING MARES WITH SUCKING COLTS.—F. H. Graves, Sunderland, \$5 ; Henry E. Johnson, 4 ; Charles R. Dickinson, 3.

COLTS.—*Three Year Old Stallion*— P. D. Hubbard, Sunderland, \$3. *Fillies*—Patrick Linnehan, 3 ; Oliver Cowles, 2. *Two Years Old*—E. M. Ingram, Leverett, 3 ; Frank Ingram, 2 ; Nelson Angus, 1. *Yearlings*—A. D. Horton, Hadley, 2.

FARM HORSES. —*Pairs*—Chester Smith, Hadley, \$4 ; Munroe Keith, Granby, 3 ; Edmund Smith, Hadley, 2. *Single*—O. D. Hunt, 3 ; West Brothers, Hadley, 2.

CARRIAGE HORSES.—*Pairs*—L. S. Dyer, Hatfield, \$6 ; Samuel Boltwood, 4 ; A. D. Horton, Hadley, 2. *Single* — James S. Henry, 6 ; W. H. Comins, Hadley, 4 ; Joseph Ward, Pelham, 2.

ROADSTERS.—L. S. Dyer, Hatfield, \$6 ; Frank Ingram, 4 ; John W. Clark, 2.

REPORTS.—L. Stockbridge, \$5.

CROPS—*Corn, Best Acre*—West Brothers, Hadley, \$5 ; E. C. Parker, 3. *Corn, experiment on level, or on hill culture.*—James Comins, North Hadley, 15 ; West Brothers, Hadley, 10. *Potatoes, best half acre* — West Bros., Hadley, “Samuels Birds of New England ;” *Potatoes, Experiment* — West Bros., Hadley, 15. *Beets*—West Brothers, Hadley, 5.

PEACH TREES.—A. D. Loomis, “Samuels Birds of New England.”

PURSES PAID.—*Popular Trot*—C. A. Sweetser, Holyoke, “Brown Johnny,” \$20 ; Andrew Liberty, “Bay Horse,” \$15 ; C. B. Davis, Holyoke, “Billy Jefferson,” \$10. *2.40 Class*—F. S. Hagar, Holyoke, “Florence,” \$30 ; C. A. Sweetser, Holyoke, “Brown Johnny,” \$20 ; C. H. Hatfield, “Little Mary,” \$15. *Free for all*—Gary Brothers, Stafford Springs, Ct., “Mazeomana,” \$40 ; C. R. Pomeroy, Northampton, “Fanny Jefferson,” \$30 ; C. A. Sweetser, Holyoke, “Johnny,” \$20.

REPORT ON MILCH COWS.

The Committee appointed as judges of the merits, and to award the premiums in "Class 5, Milch Cows," found twenty-one entries and all the animals were on exhibition. The premiums were offered for the three best cows of the Short Horn, Ayrshire, Devon and Jersey breeds, and also for the three best Natives or grades. Pedigree was required of pure breeds, and in all cases, a statement of the number of pounds of milk and butter produced by each during a period of seven consecutive days. There were no entries of Short Horns or Devons, but one Jersey and five Ayrshires, the remainder were grades or Natives, but none were true crosses. But two competitors complied with the requirements by making a statement of the number of pounds of milk and butter produced, and from the necessity of the case these were awarded the premiums, though, however meritorious, they evidently were not the best animals examined. All the animals were of good quality and gave clear indication that the members of the Society have made a decided improvement in the milking and butter qualities of their dairy stock during the last twenty years, as well as in their size and general beauty and symmetry of form. William A. Childs, of New Braintree, exhibited a pure bred Ayrshire, which in August last, on grass feed alone, gave during seven days an average of $23\frac{1}{2}$ quarts of milk per day, and two others which at the same time averaged 21 and 20 quarts respectively. E. A. Munsell, of Amherst,

showed an animal of the same breed, which during a period of seven days produced 17 pounds of butter, and 50 pounds in three consecutive weeks.

Though records superior to these have been made by cows held not to be "phenomenal," yet they are quite remarkable, especially so when we consider that the original stock from which the Ayrshire came was ill-shaped, small in size, weighing when fat and dressed for beef but about two hundred pounds, and yielding when in full flow of milk not more than from six to eight quarts per day. This inferior, primitive Ayrshire stock was similar in all its characteristics to the wild race from which all our present improved breeds sprang, and which yielded barely milk enough to give subsistence to its offspring for a few weeks and went dry most of the year. No more marked example can be produced of the capacity of the animal organism for change, modification and improvement by selection, breeding, feeding and use than the bovines.

This will be fully illustrated if we compare the small native Asiatic, or even the comparatively wild Texas steer, with the Short Horn as a beef animal, or the female of the two former varieties as a milker, with some of our present Ayrshires, Jerseys or Holsteins. There has been not only a general change of type and form, but such a marked modification in the details of the organism that the whole class at the present time may be said to be an artificial production. When the want of the breeder has been a larger butter yield, he has successfully made use of certain agencies and influences and obtained the "butter cow." When the desired object was a cow of large milk yield without regard to quality, he has reached that result. The characteristics of milk rich in caseine has been sought and found, and when required, the great tendency to milk has, by breeding and treatment, been turned to the production of beef.

Though these great changes in the race have fitted it to our varied and intensified wants they have undoubtedly weakened its constitution, but especially that of the cow. She is not so sure and constant a breeder as in her primitive state, and her young offspring is weaker and more helpless. She is more liable to a certain class of diseases, as a milker wears out quicker, and her life is shorter. But, notwithstanding this, our needs not only compel us to take her as she is, but, if possible, to still further increase her milk production.

This as it now exists has been made by art, and as it can be maintained only by art, every dairyman should understand the process and the specific condition of the animal essential for its continuance. Good judges of the Dairy Cow are not, and probably never will be, harmonious in relation to many of her characteristic points, and any description of a model would meet with criticism. Therefore each individual must speak and act on convictions resulting from his own observations, and with no thought that his judgment is law. My cow in size must be large. All dairy qualities may exist in perfection in a large animal, and other things being equal, she will yield the greater quantity of milk, while her general care will be no more expensive than a small one. Eventually she will come to the block as beef, and whether she then weighs four hundred or eight hundred pounds is a matter of much consequence to the pocket of her owner. She must give every indication of possessing a strong, vigorous constitution, must be in perfect health, with every organ and function in normal activity. This in the first place because her product should be healthy, and in the second, because there is no animal on the farm of which so much hard, unintermitted work is required as of the good milch cow. We expect her to nourish her young and bring it forth at regular intervals, and from ten to eleven months of the year, morning and evening, give us the "flowing pail of milk."

The working horse and ox rest from labor one day in seven, but she does not, neither does their labor deplete the system of the nutriment derived from food more rapidly or completely than does hers. To sustain the system under this exhaustive strain her digestive organs must be largely developed and their action perfect. Heart and lungs must be without taint of weakness, and have full play in a broad, deep, capacious chest. However large of size she should be fine. Hair fine and soft, skin thin and elastic, light boned in the legs, head, neck and shoulders, but with frame broad in the region of the pelvis, and of the chest. There should be ample development of the blood vessels and connective tissues of the udder, and this all important organ should be long and broad rather than deep, and, when not distended with milk, as soft, including skin and gland, as the finest sponge. Her teats must be large and placed well out toward the corners of a square udder, and look as if "made for use and not for ornament."

I should like a fine yellow horn and skin of the same color; a broad forehead, mild but bright and intelligent eye, and a fine taper from cheek and face to muzzle.

I should want a good "milk vein" and escutcheon, but would not reject her if she was deficient in some of these finer details if the general characteristics were up to standard, if she was of nervous rather than of phlegmatic temperament, and so intelligent that she would yield milk from design and as a pleasure, rather than by accident or from compulsion. Were it possible, I should like one of those cows which are said to yield twenty quarts of milk per day, or eighteen pounds of butter per week, when she has "no feed but what she can get in a dry summer pasture," but such an animal I never expect to produce or to own by purchase.

My cow being of the best so far as general form and structure are concerned, her care and management becomes a matter of great importance. Just so far as art has removed her from her natural state, so far has her capacity to care for and protect herself decreased and for this, whatever may be its extent, extra attention and oversight of her owner must be substituted. In her natural condition she endures a rigorous climate with little inconvenience, though unsheltered except by hill or forest. Hardened by inclement seasons, thickly covered with a coat of long, matted hair, and with no draft on her system by a milk flow, she maintains a vigorous life on coarse and scanty fare. But placed in the farmer's dairy and her vital forces turned from the simple labor of sustaining the system, to the secretion of a large milk product, regardless of the vicissitudes of the season, those forces must be husbanded and supported by the most perfect shelter, protection and warmth which can be obtained with pure sweet but changing air.

Food in quality and quantity are of equal importance with shelter, and have an intimate relation as a question of economy, for shelter to a certain extent is a substitute for food. The cow as an artificial animal is a machine to work farm products into milk, and though I have heard of such cases, I have never seen one which could make the milk without the products, even if her carcass was substituted for them. The cow returns us in the pail only what she receives in her food, and, all other things being equal, the one which takes the most

food will return the most milk, and the increase of food and milk will advance together until the capacity of the machine for this work is reached. In feeding, sound judgement and the most scrupulous care are required in each individual case, that the line of capacity be not passed and the machine become clogged or ruined. Though nearly all the products of the farm may at certain times and in a proper manner be profitably fed to cows, yet it is a known fact that quantity and quality of milk are materially affected by the *quality* of the food though each kind is of equal abundance.

The natural grasses before flowering in June, and when in their sweetest, most succulent and nutritious state are a type of the best food for a cow in milk, and in the food fed to her in the stall, the nearer we approach that type, the better for her, her product, and her owner. The *quantity* of milk yield can be materially increased by "slush feed," like cooked or steam fodder of various sorts, or boiled shorts or bran, but the cow will eventually suffer if this is its sole food.

As a rule sour or fermenting food, or food with a marked pungent odor should be avoided. And in this class may be placed some of our root and vegetable crops. All the crops which have been named have a tendency to produce "thin" milk, or at least they do not perceptibly increase the quantity or improve the quality of its normal butter content. But early cut, well cured "English hay," or blue grass, and the oily grains like cotton seed, flax seed and Indian corn do this in a marked degree. The two grains first named are so nutritious and rich in oil that great care is needed in feeding them lest injury result to the cow, and the butter, though large in quantity, may not be of superior excellence in quality. But the grain last named, with the hay is undoubtedly the best raw material to manufacture choice butter, and at the same time there is nothing better to sustain the system of the cow if she have an occasional feed of the sugar beet as a condiment or appetizer.

By the comparison which has been made in this report between the modern Ayrshire breed and the original stock from which they came, it has not been intended to represent it as par excellence the best breed for the dairy, but simply to use it as a single example of the result of effort to improve this class of animals. The Jersey or

the Hereford would have answered the same purpose. None of our improved breeds are like their ancestors of a hundred years ago. They are all excellent of their kind, and each has been carefully selected and bred for some specific quality. One for beauty and symmetry of form, early maturity and tendency to fatten; another for a large flow of milk; and others still for milk of superior quality in the cheese or butter dairy. From these breeds with their special qualities, the farmer can select the one best adapted to his wants and circumstances, or to the specific stock product his best market demands; or grades or crosses of them which will supply his needs.

The question, which is best full bloods, grades or crosses? is one which is often seriously asked, and to which theoretically there is but one answer. The more you have of a good thing the better. But practically, it is more than doubtful if pure breeds, either for the dairy or the stall, are the best, the most profitable, for the average farmer. To make them so, he must possess such skill as a breeder as to improve and make a reputation for his stock, by the sale of which for extra prices, he obtains a profit double that which he receives for their products. Comparatively few farmers are qualified either by taste or experience to do this, and if not, there will be a loss of income on the extra capital required to stock the farm with such breeds, and a greater loss by their deterioration. For simple dairy purposes in its different departments, or for beef alone, high grades can be obtained at fair prices and which possess, in a marked degree, the special qualities of the pure breeds. With such a herd, the quality desired can be obtained, the capital invested is not large, and there will be no loss by deterioration.

This is not the time or place to discuss principles of breeding for fine points of form or quality, but a few general rules may be stated that are of value to every dairyman. Cows have strong local attachments, and are more quiet and orderly when familiar with surrounding objects and scenes. Therefore, other things being equal, she does best on the farm where she is reared. The average farmer should breed his own cows. If starting in the business, let him procure the best he can find, and those which have a special adaptation for the kind of dairying he proposes to pursue. In breeding with these animals, use invariably bulls of a stock known to possess the same quality. From

the heifer calves, retain for the dairy such, and only such, as give clear indications of possessing the desired qualities. This course followed for a very few years will give to any farmer a superior and profitable herd.

L. STOCKBRIDGE, Committee.

STATEMENTS ON CORN.

*Statement of an Experiment to Ascertain the Difference between
Level and Hill Culture for Corn, by James Comins.*

COMMITTEE ON CROPS, GENTLEMEN:—

To enable an intelligent and interested reader to judge fairly of the result of this experiment, it is necessary to state some of the circumstances in which the trial was made; such as kind of soil, former management, and manner of doing the labor and ascertaining the result.

The soil is a fine sandy loam, moderately heavy and not liable to be injured by heavy rainfall, or long, continued dry weather. It is a little rolling and what would be called a good lay for corn. The land was cleared of forest about fifty years ago, and for the last forty years has been cultivated in a four years' rotation of corn, rye, and two crops of grass. Previous to eighteen hundred and fifty the only fertilizer used was seven bushels of ashes mixed with one of plaster, per acre, and applied in the hill for corn. It produced very good crops with this light application till the land was nearly cleared of the natural fertility; but this was a reducing process, and the pasturing of cows on the grass and driving them home for the night so reduced the fer-

tility that the crops at the above date were not remunerative. At that time the land changed ownership, and the same rotation continued with a more liberal use of fertilizer. About three cords of coarse barnyard manure plowed in, and from ten to twenty bushels of ashes, per acre for corn, has so improved the soil that the crops are now moderately paying.

The operation of raising the crop on which this experiment was tried was similar to the above. Three cords of coarse barnyard manure were plowed in the first week in May, the land was pulverized with a Randall wheel harrow and furrowed out; twenty bushels of unleached ashes per acre were applied in the furrow. The corn was planted the twenty-fifth of May, in hills four feet apart; the rows were three and a half feet apart, each containing one hundred and thirty-two hills and six rows in each quarter acre. The corn was hoed three times, hilling each alternate quarter acre. It was cut and put up in sixteen stacks on each lot. Stacks on the level lot averaged fifty-eight pounds of ears, on the hilled lot fifty-five and one-half pounds. Stover on the level lot averaged forty-six and three-fourths pounds per stack, and on the hilled lot forty-six pounds. Total weight of ears on level lot, 928 pounds; on hilled lot, 888 pounds; making a difference of forty pounds of corn (about four per cent), and twelve pounds of stover (about one and a half per cent), in favor of level culture. Cost of raising is about as follows:—

Interest and taxes on land,	\$1 12
Plowing, harrowing and planting,	1 88
Furrowing and applying fertilizer,	63
Hoeing and cultivating level lot,	1 13
Cutting and stacking level lot,	62
Husking and drawing fodder,	75
	<hr/>
Total cost of level lot,	\$6 13
“ hilled lot,	5 38
	<hr/>
Difference between the two,	75

The only item of difference was cost of cultivation, the second and third hoeing on the hilled lot was done with a Ross horse hoe, which

only took about half as much time as to cultivate and hoe the level lot. The first hoeing had to be done by hand in order to thin and weed the corn properly.

The question to be determined by this experiment is, whether we can profitably use a horse hoe in cultivation of corn? In the case above described, the soil was light and comparatively free from weeds, and the work could be done with a horse hoe if we would allow our land to be hilled up. While the above experiment does not show a very great difference in the result, what there is favors level culture.

This report does not require an account of the yield per acre, but I will give the result as computed from the above weights, showing that the experiment had a fair trial on a good crop.

The yield on the level acre, reckoning eighty pounds of partly dry ears for a bushel of dry shelled corn, was forty-six and six-tenths bushels; while that on the hilled acre was forty-four and a half bushels.

Respectfully submitted,

North Amherst, Oct. 24, 1881.

JAMES COMINS.

*Statement of an Experiment to Ascertain the Difference between
Level and Hill Culture for Corn, by West Brothers.*

COMMITTEE ON CROPS, GENTLEMEN:—

The half acre on which we tried this experiment was divided into eight plots for convenience, each plot was eight rows and alternate plots were hilled, the accompanying table will show the number of hills and yield.

Plots 1 and 2 were on land that bore rye in 1879 and grass in 1880. Numbers 3—8 were pasture for twenty years.

Plots 1 and 2 were planted in eight rows of the same number of hills to the row. Rows 1-2-7-8 level culture, 3-4-5-6 hilled. Yield on rows 1 and 2, 142 pounds; on 7 and 8, 138 pounds; on 3 and 4, 115 pounds; on 5 and 6, 143 pounds. There was a difference of four lbs. between 1 and 2, and 7 and 8, both level; and between 3 and 4, and 5 and 6, which were hilled, twenty-eight pounds.

Rows 1 and 2 level yielded 27 pounds more than 3 and 4 hilled ; 5 and 6 hilled yielded 5 pounds more than 7 and 8 level.

Plots 3 and 4, side by side, eight rows each with same number of hills, show a difference of 1 5-70 bushels in favor of level culture ; plots 5 and 6 a difference of 2 51-70 ; 7 and 8 a difference of 2 2-70 bushels per acre, all in favor of level or drawing the dirt away from the corn, but no two plots yielded the same to the acre, either of level or hilled.

From the above we conclude that to ascertain for a certainty the best way to cultivate a crop, one trial is not enough, for it is not easy to find land that will yield alike side by side. The following table gives the exact yield. :—

Number of Plot.	Number of Hills.	Rods of Land in each Plot.	Sound Corn in Pounds to each Plot.	Soft Corn in Pounds to each Pl't.	Total Corn in each Plot.	Bushels per Acre from each Plot.
1	272	10	247	11	258	58 $\frac{6}{70}$
2	272	10	267	13	280	64
3	224	9	299	9	308	78 $\frac{37}{70}$
4	224	9	308	7	315	80 $\frac{25}{70}$
5	272	10 $\frac{2}{5}$	361	4	265	76 $\frac{47}{70}$
6	272	10 $\frac{2}{5}$	370	5	375	79 $\frac{28}{70}$
7	254	10 $\frac{4}{5}$	333	5	238	76 $\frac{2}{70}$
8	254	10 $\frac{4}{5}$	343	4	347	78 $\frac{4}{70}$

Bushels sound corn from 8 plots,	361 $\frac{11}{7}$
“ soft “ “	5 $\frac{8}{70}$
“ per acre from whole piece,†	73 $\frac{9}{10}$

Respectfully submitted,

Hadley, Oct. 25, 1881,

WEST BROTHERS.

Statement on Corn, by West Brothers.

COMMITTEE ON CROPS, GENTLEMEN:—

The land we planted with corn was one-half planted last year and one-half pastured; plowed in May, and planted very late; cut and stacked the first of October, and husked the twenty-ninth.

The land measured one acre; planted five rows to the rod each way. The corn was husked in a two-bushel basket, the number of baskets counted and five of them weighed, which averaged eighty-one pounds. There were sixty-three baskets of sound corn and little over a bushel of soft corn, equal to seventy-four bushels of corn per acre, allowing seventy pounds for a bushel. Allowing the stover for harvesting, the account will stand as follows:—

	<i>Dr.</i>	
Plowing,	\$1	50
Harrowing,	75	
Marking,	2c	
Fertilizer,	3	00
Planting,	1	50
Cultivating,	2	50
Hoeing twice,	4	00
Use of land,	6	00
	<hr/>	\$19 50
	<i>Cr.</i>	
By 74 bushels at 85 cents,	\$62	90

Respectfully submitted,

Hudley, Oct. 25, 1881.

WEST BROTHERS.

Statement on Corn, by E. C. Parker.

TO THE COMMITTEE ON CROPS, GENTLEMEN:—

The acre of corn which I enter for premium is a moist sandy loam. It had borne grass since 1874 without manure, and the yield of last year was about half a ton. Plowed in the spring

about seven inches deep and harrowed. The manure, 18 loads of 30 bushels, was spread on and harrowed in. The piece was then furrowed out three feet apart each way and fish and potash dropped in the hill; planted May 30th with six quarts of 12-rowed corn; cultivated and hoed the piece twice; commenced harvesting Sept. 23d; put 30 hills to the stack, around a horse made for the purpose, and tied the top; when dry, picked the corn, and bundled the stalks to carry to the barn.

The plot measured to determine the yield was two rods, the number of hills 56, and number of ears 240. The amount of dry, shelled corn was $61\frac{1}{4}$ pounds, making $87\frac{1}{2}$ bushels per acre. The amount of stover was 75 pounds, or three tons per acre.

The account stands as follows:—

	<i>Dr.</i>	
To plowing and harrowing,	\$3 00	
Manure half to the land,	18 00	
Fish and potash,	5 00	
Seed and planting,	2 00	
Cultivating and hoeing,	4 00	
Cutting and stacking,	2 00	
Husking at price paid,	3 50	
	<hr/>	
	\$32 50	
	 <i>Cr.</i>	
By $87\frac{1}{2}$ bushels of corn at 90 cents,	\$78 75	
3 tons stover at \$8,	24 00	
	<hr/>	
	\$102 75	
Cost of raising,	32 50	
	<hr/>	
Profit,	\$70 22	

Respectfully submitted,

South Amherst, Oct. 20, 1881.

E. C. PARKER.

STATEMENTS ON POTATOES.

*Statement of an Experiment in raising Potatoes
by West Brothers.*

COMMITTEE ON CROPS, GENTLEMEN :

The land on which this experiment was tried was about half an acre, sowed to rye for the last three years with two cords of manure harrowed in, in 1879. Plowed the first week in May and planted the fifth and sixth ; the first twenty-four rows with Early Rose, nine rows with very small Peerless and Brigham Seedlings. The rows were five to the rod. We have prepared a table of the twenty-four rows so anyone can tell at a glance the weight of seed used per acre and the amount of the crop per acre. In figuring the latter, if the fraction was over a half-bushel it was added and vice versa.

Plot Number.	Cut from whole Potato.	Eyes in one piece.	Distance between hills in feet.	Seed per acre in bushels and pounds.	Weight of crop in bushels.
1	Whole.	2	2	1-55	111
2	Whole.	2	1	3-35	194
3	Stem-end.	2	1	3-59	199
4	Seed-end.	2	1	1-49	160
5	Seed-end.	2	1	2-13	166
6	Stem-end.	2	1½	4-17	166
7	Middle.	1	2	2-54	148
8	Middle.	1	1	3-56	187
9	Stem-end.	1	1	3-53	133
10	Seed-end.	1	1½	1-5	31
11	Seed-end.	1	1	1-46	67
12	Whole	Potato.	2	26-30	288
13	Half	Potato.	1	25-37	304
14	Fourth	Potato.	1	12-22	256
15	From fifteen to twenty-four pieces cut from whole potatoes with one piece in a hill.	1	½	From fifteen to twenty-four pieces cut from potatoes as they were bought and were not weighed.	139
16		1	1		93
17		1	1½		70
18		1	2		67
19		1	2½		60
20		2	½		248
21		2	1		187
22		2	1½		145
23		2	2		138
24		2	2½		132

The account stands about as follows :—

	<i>Dr.</i>
To Plowing and harrowing,	\$ 1 50
Manure, 2 cords at \$7.00,	14 00
Furrowing and manuring in drill,	3 75
Cutting, weighing, etc.,	2 00
Manuring and planting by hand,	4 87
Hoeing twice with ridger,	88
Hoeing by hand,	30
Cutting weeds,	1 87
Paris Green and applying,	2 63
Plaster,	1 05
Digging and weighing,	5 25
Seed,	4 00
Use of land,	3 00
	<hr/>
	\$45 10

	<i>Cr.</i>
By 80 bushels and 20 pounds of Potatoes at 56 $\frac{1}{4}$ cents,	\$45 10

Respectfully submitted,

Hadley, Oct. 25, 1881.

WEST BROTHERS.

Statement by West Brothers on Potatoes.

COMMITTEE ON CROPS, GENTLEMEN :

The half acre we planted to potatoes has been pastured for twenty years or more. Plowed in April and planted the second week in May with two cords of manure in the furrow. The potatoes were dropped on the manure eighteen inches apart and the whole covered with ridger and hoe.

Part of the piece seeded with very large Burbanks, a fourth to a sixth of a potato to a hill, and the balance were Brigham Seedlings, one small potato to a hill. The rows were five to a rod.

From one measured rod the potatoes weighed $157\frac{3}{4}$ lbs., equal to $240\frac{2}{3}$ bushels per acre. From ten rows twenty-one rods long planted to Burbanks we sold $95\frac{3}{10}$ bushels of large potatoes and $8\frac{1}{10}$ bushels of small ones. From two rows twenty-one rods long planted to Brigham Seedlings we sold $12\frac{1}{5}$ bushels of large and $2\frac{3}{10}$ bushels of small potatoes. The balance were put in the cellar and were not weighed. The total cost for seed, manure and labor on the half acre was \$45.75. The crop sold at the present market price would give a good profit.

Respectfully submitted,

Hadley, Oct. 27, 1881.

WEST BROTHERS.

STATEMENT ON PEACH TREES.

Peach Trees set out by A. D. Loomis.

TO THE HAMPSHIRE AGRICULTURAL SOCIETY, GENTLEMEN :

The Peach Trees I present for your inspection were procured at the M. A. C. in Oct. 1880. The tops were cut off, also the limbs to within six inches of the body. The trees were then set to the same depth they grew in the nursery, and ten feet apart in the row. Loam was placed around each tree to the depth of a foot and trod down for protection from wind and storms. In April following the loam was spread around the tree.

At this time I cut with a sharp knife the limbs close to the body to give the trees an even top. Hay was placed around them for mulch and proved of great benefit.

Every tree has made a good growth the past season, the land slopes to the south and is naturally a warm soil.

Expense is as follows :

52 trees at $12\frac{1}{2}$ cents	\$6 50
Setting,	2 00
Mulching,	1 00
	<hr/>
	\$9 50

Respectfully submitted,

North Amherst, Oct. 30, 1881.

A. D. LOOMIS.

STATEMENT ON BEETS.

Statement on Sugar Beets, by West Brothers.

COMMITTEE ON CROPS, GENTLEMEN:—

The land on which our beets grew was a side hill which had been graded, and was consequently poor.

The piece contained forty square rods, and had borne rye for the past two years, with a thin coat of manure.

The manure was plowed in the first of June, the land ridged June 20th, and the beets set out the 21st. One pound of seed was used to raise the plants.

From one measured rod, the yield was 215 pounds, or 8600 per quarter acre.

The account stands as follows:—

	<i>Dr.</i>
To manure, $2\frac{1}{2}$ cords at \$7.00	\$17 50
Plowing and fitting,	1 00
Seed and setting plants,	3 05
Cultivating and hoeing twice,	3 25
Cutting weeds,	75
Harvesting,	2 75
	<hr/>
	\$28 30

Cr.

By 8600 lbs. beets at \$6.58 per ton, \$28 29

Respectfully submitted,

Hadley, Oct. 26, 1881.

WEST BROTHERS.

NEW MEMBERS FOR 1881.

HOMER L. COWLES,	Hadley.
WM. A. MAGILL	Amherst.
FRED. A. CROCKER,	Sunderland.
SAMUEL S. HAMILTON,	Barre.
JESSE STOCKBRIDGE WILSON,	North Hadley.

TREASURER'S REPORT.

E. D. BANGS, TREASURER, *in account with* THE HAMPSHIRE
AGRICULTURAL SOCIETY.

1881.

Dr.

To balance from report 1880,	\$232 83	
To cash from J. J. Potwin, Gate-Money,	411 84	
Peddlers,	67 20	
Grand stand,	11 69	
New Life members,	25 00	
State Treasurer,	600 00	
Donations to Society,	79 13	
Agricultural College Tickets.	40 00	
Entrance fees, trotting,	66 00	
	<hr/>	\$1,533 69

Cr.

By Paid C. A. Bangs & Co., bill,	\$ 43 00	
Amherst Savings Bank interest,	31 50	
D. W. Blodgett, bill,	1 65	
Dickinson & Lee, bill,	1 25	
J. E. Williams, bill,	5 00	
C. M. Smith & Co., bill,	2 16	
Edward J. Shaw, bill,	15 14	
Charles P. Jewett, bill,	5 50	

Savannah A. Thayer, bill,	4 50
Amherst Savings Bank, interest,	31 50
Sylvester Jewett, bill,	5 24
Charles P. Jewett, bill,	5 10
Edward Shaw,	4 77
Savannah A. Thayer,	5 00
Henry A. Cook,	5 00
J. E. Williams,	18 00
Purses for trotting,	155 00
W. L. Boutwell,	11 50
C. M. Smith & Co.,	1 22
Austin Eastman,	138 54
Sylvester Jewett,	1 50
Dr. P. E. Irish,	1 20
Rufus Jennings,	1 00
E. W. Carpenter,	5 35
E. A. King,	15 00
Charles P. Jewett,	1 50
William F. Gunn,	20 00
William F. Gunn,	25
W. L. Boutwell, Secretary,	35 00
J. E. Williams,	75
J. J. Potwin,	4 00
S. A. Thayer,	3 50
E. A. Davis,	9 00
E. D. Bangs, Treasurer,	25 00
Michael Mahar,	50
George Graves,	2 25
W. L. Warner,	11 39
J. G. Ward,	6 00
Express and postage,	2 20
Insurance on Hall,	30 00
Premiums paid,	649 25
Cash on hand,	218 48
	<hr/>
	\$1,533 69

Financial Condition of the Society.

LIABILITIES.

Note at Amherst Savings Bank,	\$900 00	
Interest due Jan. 1, 1882,	31 50	
Interest due July 1, 1882,	31 50	
Printing Annual Report and advertising Annual Meeting,	35 00	
	<hr/>	\$ 998 00
Cash on hand,		218 48
		<hr/>
		\$ 779 52

AMHERST, Dec. 16, 1881.

This is to certify that I have examined the accounts of E. D. Bangs, Treasurer of the Hampshire Agricultural Society for 1881, and find them correct, with a balance on hand of two hundred eighteen and forty-eight one-hundredths dollars.

D. W. PALMER, *Auditor.*

THIRTY-THIRD
ANNUAL REPORT.

TRANSACTIONS

OF THE

HAMPSHIRE AGRICULTURAL SOCIETY

FOR THE YEAR 1882.

AMHERST, MASS.

J. E. WILLIAMS, BOOK AND JOB PRINTER.

1882.

OFFICERS FOR 1882

PRESIDENT,

W. L. WARNER, OF SUNDERLAND.

VICE PRESIDENT,

W. W. SMITH, OF AMHERST.

SECRETARY AND TREASURER,

FRANK E. PAIGE, OF AMHERST.

EXECUTIVE COMMITTEE :

CHARLES S. SMITH, OF AMHERST,

HENRY C. WEST, OF HADLEY.

SYLVESTER JEWETT, OF BELMONT.

A. W. STACY, OF BELCHERSTOWN.

W. L. BOUTWELL, OF LEVERETT.

AUDITOR,

E. D. BANGS, OF AMHERST.

DELEGATE TO THE STATE BOARD OF AGRICULTURE,

FLAVEL GAYLORD, OF AMHERST.

PRESIDENTS AND SECRETARIES
OF THE
HAMPSHIRE AGRICULTURAL SOCIETY.

Presidents :

- 1850—4, ALFRED BAKER,
1855—7, WILLIAM P. DICKINSON,
1858—9 N. A. SMITH,
1860—1, W. S. CLARK,
1862—5, HON. LEVI STOCKBRIDGE,
1866, LUKE SWEETSER,
1867, AUSTIN EASTMAN,
1868, HON. LEVI STOCKBRIDGE,
1869—70, LEVI P. WARNER,
1871—2, W. S. CLARK,
1873—5, H. C. COMINS,
1876—8, FLAVEL GAYLORD,
1879—82, W. L. WARNER.
-

Secretaries :

- 1850—8, J. W. BOYDEN,
1859—60, HON. L. M. BOLTWOOD,
1861—3, A. P. HOWE,
1864—7, M. N. SPEAR,
1868, O. G. COUCH.

- 1869—70, R. W. STRATTON,
1871—2, E. A. THOMAS,
1873—6, J. L. SKINNER,
1877, E. E. WEBSTER,
1878, { H. M. McCLOUD,
 { FOSTER R. CLEMENTS,
1879, { MOODY S. HARRINGTON,
 { W. L. BOUTWELL,
1880—1, W. L. BOUTWELL,
1882, FRANK E. PAIGE.

BY-LAWS

OF THE

HAMPSHIRE AGRICULTURAL SOCIETY.

ARTICLE 1. The officers of this Society shall be one President, a Vice President, a Secretary, a Treasurer, and an Executive Committee of five, to be chosen by ballot at the annual meeting, and to serve one year, or until others are chosen in their stead.

ART. 2. The President shall preside at all meetings of the Society, and in his absence, the Vice-President.

ART. 3. The Secretary shall keep a true record of all the doings of the Executive Committee and of the Society.

ART. 4. The Treasurer shall keep an account of all moneys received into and paid out of the Treasury. His accounts shall always be open for the inspection of any member of the Society, and he shall give bonds in such sum as shall be designated by the Executive Committee, for the faithful discharge of his duties, and he shall make an annual report, previously audited.

ART 5. It shall be the duty of the Executive Committee to call special meetings of the Society, and upon the request of not less than ten members from each of four different towns, they shall call such meetings to designate the time and place of the annual exhibitions. make all necessary arrangements therefor ; to appoint sub-committees for examination and to award premiums ; and to have a general supervision over the funds and affairs of the Society. The President, Vice President and Secretary shall be members of the Executive Committee.

ART. 6. The annual meeting of the Society shall be held on the last Wednesday of December, each year, and twenty members shall constitute a quorum to do business.

ART. 7. Notices for all meetings of the Society shall be signed by the President and Secretary, and published in some newspaper in the county, or circulated by hand-bills, or in any other manner that may be designated by the Executive Committee.

ART. 8. Any male person may become a life member by paying to the Treasurer the sum of five dollars, and any female by payment of two dollars and fifty cents.

ART. 9. All premiums not called for within six weeks after the same are awarded shall be paid into the Treasury and be considered as presented to the Society.

ART. 10. These By-Laws may be amended or altered by a majority of the members present at any legal meeting.

SECRETARY'S REPORT.

The advancing seasons and flight of time has again brought the duty of printing the annual transactions of the society. This year has been a peculiar one in the history of the society, everything seemingly working against its best interest. The severe drought during the summer affected vegetation so that crops of all kinds were poor. Cattle and sheep were not in as good condition on account of it. When the time arrived for the Fair, a severe storm commenced on the first day and continued during the Fair; Hon. John E. Russell who had been engaged to deliver the address, was prevented from being present on account of sickness; with this series of misfortunes and disappointments, with some others, the officers have had much to contend with, yet by hard work, by exerting every effort, and with coöperation of the members, we have succeeded in not merging the society in debt.

Much could be said of the Fair, yet a few words will suffice. The exhibition of stock on the first day, in spite of the storm, all admit was the best for a number of years. The exhibition in the Hall was first-class in all respects; the awarding of premiums by the various committees gave universal satisfaction, and we tender to them our sincere thanks for the prompt and impartial manner in which they discharged their duty.

The financial condition of the society can be ascertained by an examination of the treasurer's report; the debt has been reduced \$100, and the interest paid to July 1st. The amount of the debt is now \$800. Had the weather been propitious, notwithstanding the other misfortunes, there is every reason to believe there would have been at least \$100 in the treasury, that could have been applied on the debt.

In accordance with a vote passed at the annual meeting a list of the members is published. It has been impossible to publish a full and complete list, as some of the records were destroyed in the fire

of July 4, 1879. Any members whose names do not appear on the list, and who will prove their membership, will have their names added. It is the duty of every member whose name does not appear in the list to do this, as this is the only way a complete list can be obtained. It may also at some time save a question of membership.

There are some changes in the rules of the society, that if made would be beneficial to it. For instance: The one relative to paying out premiums now reads, "All premiums not *called for* within six weeks after same are awarded shall be forfeited;" it ought to read, "All premiums *not claimed and paid* between Oct. 1st and Nov. 15th shall be forfeited." This would give the secretary a week after the Fair to prepare a list of the premiums awarded; it would give the executive committee an opportunity to meet, revise and approve the list of premiums. Under the present rules, if a person *calls for* a premium during the time that elapses between the Fair and the meeting of the executive committee to revise and approve the list, the exhibitor is entitled to it, and it places the duty upon the treasurer to remember all who call during the time, and of holding the money for them until they see fit to get it, although it may be a year afterward. Why should the treasurer have this extra duty thrown upon him? Is he at fault? during the time he cannot pay out premiums, because they have not been approved; and is it not easier for each man to remember and get his premium during the stipulated time, than for the treasurer to remember all who have called, and to hold the money subject to their orders? Under the present rule it is almost impossible to close the books for the year. Besides, the rule would work no injustice to the exhibitors, as they have the same period of time to get their premiums in as under the present rule.

I desire to call attention to the necessity of passing a vote similar to this: "No member of the society shall be admitted free the first day of the Fair unless he presents his membership ticket at the gate." Under the present arrangement the gate-keepers are obliged to rely upon the word of the person who desires admission, and a stranger may present himself and claim to be a member, while he is not, and gain admission. One admission fee is a small sum, yet if fifty should gain admittance in this manner all will agree that it would be a loss which the society cannot afford. The only safeguard is to require each member to present his ticket or pay. In this way the gate-keepers will know who should be admitted free; it will also save all trouble and annoyance, and perhaps a few dollars for the society.

Necessity compels that one side of the roof on the hall shall be newly shingled ; it has been patched and repatched until it has cost nearly as much as to shingle it, and still it leaks. The best interest of the society, and the preservation of its property, demand that this should be done.

Thanking all who have contributed to the exhibition, and rendered assistance at the Fair,

I remain, yours truly,

FRANK E. PAIGE, *Secretary.*

LIST OF PREMIUMS AWARDED.

CLASS 1—TOWN TEAMS. 8 ENTRIES.

Hadley.	\$20 00
Amherst,	15 00
Pelham,	10 00

CLASS 2—FANCY CATTLE. ENTRIES.

Chas. W. Thurber, Leverett.	\$4 00
A. W. Stacy, Belchertown,	3 00
Daniel K. Wilson, Belchertown.	2 00

CLASS 3—WORKING OXEN. 6 ENTRIES.

Edmund Smith, Hadley.	\$4 00
Chester Smith, Hadley,	3 00
Benj. Paige, Pelham.	2 00

CLASS 4—STEERS. 9 ENTRIES.

A. W. Stacy, Belchertown.	3 years old,	\$3 00
Dwight Presho, Pelham,	" "	2 00
Benj. Paige, Pelham,	" "	1 00
William Kellogg, Amherst.	2 " "	3 00
A. W. Stacy, Belchertown,	" "	2 00
P. West & Son, Hadley,	" "	1 00
P. West & Son, Hadley,	yearlings,	2 00
Benj. Paige, Pelham,	"	1 00

CLASS 5—MILCH COWS. 11 ENTRIES.

W. A. Childs, New Braintree,	Durham,	\$4 00
" "	"	3 00
J. P. Smith, Amherst.	"	2 00
W. A. Childs, New Braintree,	Ayrshire,	4 00
" "	"	3 00
" "	"	2 00
G. W. Fitch, Amherst,	Jersey.	4 00
" "	"	3 00

CLASS 6—HERD OF MILCH COWS. 26 ENTRIES.

W. A. Childs, New Braintree,		\$1 00
Bishop F. D. Huntington, Hadley,		3 00
West Bros., Hadley,		2 00

CLASS 7—HEIFERS. 26 ENTRIES.

A. W. Stacy, Belchertown,	2 years old,	\$3 00
West Bros., Hadley,	“ “	2 00
Bishop F. D. Huntington, Hadley,	“ “	1 00
W. M. Kellogg, Amherst,	1 year old,	3 00
E. C. Parker,	“ “	2 00
G. W. Fitch,	“ “	1 00

CLASS 8—BULLS. 8 ENTRIES.

P. West & Son, Hadley,	Durham,	\$4 00
W. A. Childs, New Braintree,	Ayrshire,	4 00
G. W. Fitch, Amherst,	Jersey,	4 00
West Bros., Hadley,	“	2 00

CLASS 9—CALVES. 11 ENTRIES.

David Pomeroy, Amherst,	steer calves,	\$2 00
W. A. Childs, New Braintree,	heifer calf,	2 00
“ “	“ “	1 00
“ “	bull calf,	2 00

CLASS 10—HERDS OF CATTLE. 6 ENTRIES.

W. A. Childs, New Braintree,		\$6 00
P. West & Sons, Hadley,		5 00
J. P. Smith, Amherst,		4 00
G. W. Fitch, Amherst,		3 00
E. A. Munsell, Amherst,		2 00

CLASS 11—SWINE. 10 ENTRIES.

West Bros., Hadley,	boar,	\$4 00
C. H. Kellogg, Amherst,	“	3 00
F. H. Williams, Sunderland,	“	1 00
“ “	sow with pigs,	4 00
J. W. Allen, Amherst,	“	3 00
West Bros., Hadley,	“	1 00
Josiah Cook, Hadley,	lot weaned pigs,	4 00
M. L. Hubbard, Sunderland,	“	3 00
F. W. Field, Leverett,	“	1 00

CLASS 12—SHEEP. 12 ENTRIES.

P. West & Son, Hadley,	buck,	\$4 00
Dwight Morton, Hadley,	“	3 00
D. K. Wilson, Belchertown,	“	2 00
D. Morton, Hadley,	ewes,	4 00
D. K. Wilson, Belchertown,	“	3 00
Jas. Comins, No. Hadley,	“	2 00
D. Morton, Hadley,	lambs,	3 00
Jas. Comins, “	“	2 00
D. K. Wilson, Belchertown,	“	1 00

CLASS 13—POULTRY. 33 ENTRIES.

Wm. J. Seelye, Amherst,	Brahmah chicks,	\$2 00
Geo. Graves, “	Plymouth Rocks,	2 00
Arthur Jameson, “	“ “	1 00
A. J. Pervier, “	Silver Hamburgs,	2 00
“ “	“ “ chicks,	1 00
R. H. Howard, “	White Leghorns,	2 00
M. B. Kingman, “	“ “ chicks,	1 00
“ “	Brown “ “	2 00
E. J. Clark, No. Hadley,	“ “ “	1 00
W. J. Seelye, Amherst,	Black-Red Games,	2 00
E. J. Clark, No. Hadley,	“ “	1 00
M. B. Kingman, Amherst,	Bantams,	2 00
S. Jewett, Pelham,	Turkeys,	2 00
M. B. Kingman, Amherst,	Ducks,	2 00
S. Jewett, Pelham,	“	1 00
M. B. Kingman,	Display of fowls,	Samuel's
“ Birds of New England. “		

CLASS 14—MECHANIC ARTS AND FARM IMPLEMENTS. 18 ENTRIES.

Lee & Philips,	Stoves,	Diploma
D. A. Horton, Hadley,	Fruit and Veg. Evaporator,	“
A. P. Brown, Amherst,	Ame Harrow,	“
Alvin Sanderson, Sanderland,	Yale Plow,	“
T. H. Hastings, Amherst,	Buckeye Mower,	“
“ “	Wiard Sulky Plow,	“
“ “	Amenter Clipper Swivel Plow,	“
Vt. Farm Machine Co.,	Davis Swing Churn,	“
“ “	Eureka Butter Worker,	“

CLASS 15—MERCANTILE GOODS. 9 ENTRIES.

F. H. Howes,	\$5 00
Marsh & Young,	5 00
D. W. Palmer,	2 50
W. Wilbur,	2 50

DOMESTIC AND OTHER MANUFACTURES. 23 ENTRIES.

B. N. Fish, Sunderland,	Rag Carpet,	\$1 00
Belle Wrigley, Amherst,	Hose,	50
“ “	Wool Mittens,	25
“ “	Bed spread,	75
Mrs. S. W. Boutwell, Leverett,	Rag carpet,	1 00
Mrs. L. Merrick, Amherst,	Rug,	40
L. J. Sykes, “	Bed quilt,	50
Mrs. P. E. Irish, “	Rug,	25
Mrs. G. Sanderson, “	“	75
W. L. Warner, Sunderland,	“	50
Miss Estella Cutting, Amherst,	Bed quilt,	75
Mrs. S. W. Boutwell, Leverett,	Rug,	40
Mrs. Sanford Boice, Amherst,	Counterpane,	75
“ “	Embroidered blanket,	50
“ “	Worsted mitts,	25
“ “	Scarf,	25
Mrs. E. A. Davis, “	Bed quilt,	50
“ “	Knitted Rug,	75
Mrs. M. E. Merchants,	Turkish rug,	1 00
Mrs. D. M. Warren, Amherst,	Pillow shams,	50
P. C. Moore, “	Mittens,	50
Mrs. Amos Greay, Hadley,	Bed quilt,	1 00

CLASS 17—FANCY ARTICLES. ENTRIES.

Mrs. Jas. Comins,	Hadley,	Picture frame,	\$ 25
“	“	Tidies,	50
“	“	Toilet set,	25
Miss Hattie D. Kellogg,	“	Cross and frame,	25
Miss Jennie M. Allen,	Amherst,	Ottoman cover,	75
Emma Moulton,	“	Motto,	25
Ada Moulton,	“	Tidy,	25
Minnie Moulton,	“	Motto,	25
Mrs. Henry Shaw,	“	Silk bed quilt,	1 00
“	“	Black wool tidy,	50

Mrs. Henry Shaw,	Amherst,	White canvas tidy,	50
“	“	Baby sack,	25
“	“	Baby socks,	25
Lessie Wrigley,	“	Tidy,	50
Nettie H. Piper,	“	Hair pin case,	25
Miss L. Piper,	“	Tidy,	25
Mary E. Piper,	“	Pin cushion,	25
Mabel E. Morse,	“	Hair receiver,	25
“	“	Tidy,	50
Mrs. O. F. Morse,	“	Child's skirt,	25
Belle Fitch,	“	Motto,	25
Abby Fitch,	“	Picture card board,	25
Clara Sykes,	“	Sofa pillow,	1 00
Mrs. S.W. Boutwell,	Leverett,	Tidy,	50
“	“	Lamp mats,	50
Miss M. Dickinson,	Amherst,	Mat,	25
Miss Elva Blodgett,	“	Work box,	25
Miss G. Dickinson,	“	Evening hood,	25
Ida Brown,	Pelham,	Pin cushion,	25
Mrs. Z. K. Chapin,	Amherst,	Cross in frame,	25
Mrs. L. Merrick,	“	Table spread,	75
W. L. Warner,	Sunderland,	Fancy table scarf,	1 50
“	“	Panel,	75
Sadie J. Clark,	Amherst,	Tidies,	50
“	“	Shopping bag,	50
Mary Clark,	“	Tidy,	75
Mrs. C. S. Kenfield,	“	Brush broom and case,	25
“	“	Toilet set,	25
“	“	Lamp shade,	25
“	“	Brush and comb case,	25
C. R. Kenfield,	“	Brackets. picture frame,	1 50
Mrs. L. H. Pomeroy,	“	Table spread,	1 00
Mrs. D. A. Horton,	Hadley,	Lace,	75
Lucy Boice,	Amherst,	Wax flowers,	1 00
Mrs. E. A. Davis,	“	Table napkins,	50
Mrs. D. M. Warner,	“	Lamp mat,	50
Chas. Deuel,	“	Case fancy articles,	4 00
Mrs. Chas. Le Gro.	“	Bead lambrequin,	50
“	“	Silk mittens,	25
Jennie L. Cowles,	“	Chamois gloves,	25
Mrs. H. H. Adams,	“	Ottoman cover,	75

Mrs. M. N. Spear,	Amherst,	Millinery goods,	2 00
Fannie L. Cowles,	"	Lace,	25
Miss H. B. Pitcher,	Leverett,	Socks,	50
Mrs. J. E. Strickland,	Amherst,	Table spread,	1 25
Miss Laura Hawley,	"	Fancy articles,	Samuel's
" Birds of New England."			
Mrs. H. L. Couch,	"	Silk bed quilt,	2 00
Miss Maria E. Harris,	"	Hand-worked chair,	50

CLASS 18—FINE ARTS. 20 ENTRIES.

J. L. Lovell,	Amherst,	Carbon photographs,	\$3 00
Miss Anna E. Stockbridge,	"	Hand-painted china,	1 50
Miss Eliza Mitchell,	"	Oil painting,	1 50
Geo. A. Thomas,	"	Crayon drawing,	1 50
Sarah N. Kingman,	"	Paintings,	1 00
Miss A. Hall,	"	Letter heads,	50
Mrs. L. H. Pomeroy,	"	Crayon drawings,	50
Mrs. E. F. Strickland,	"	Oil paintings,	50

CLASS 19—BREAD, BUTTER AND CHEESE. 31 ENTRIES.

Mrs. E. C. Parker,	Amherst,	Butter,	\$3 00
F. B. Paige,	Prescott,	Cheese,	2 00
Mrs. Isaac King,	Amherst,	"	1 00
Mrs. Jas. Comins,	Hadley,	Sage cheese,	2 00
Mrs. M. E. Merchants,	Amherst,	Wheat bread,	2 00
Mrs. Z. K. Chapin,	"	" "	1 00
Mrs. M. L. Hubbard,	Sunderland,	Rye bread,	2 00
Mrs. J. W. Allen,	Amherst,	" "	1 00
Mrs. E. A. Davis,	"	Rye and Indian bread,	2 00
Mrs. D. B. Crocker,	Sunderland,	" "	1 00
Mrs. G. L. Batchelder,	"	Graham bread,	2 00
Mrs. S. W. Boutwell,	Leverett,	" "	1 00

CLASS 20—HONEY, WINES, ETC. 15 ENTRIES.

Mrs. S. Boice,	Amherst,	Dried Apples,	\$ 75
Mrs. Henry Shaw,	"	"	50
Mrs. Lewis West,	Hadley,	Maple syrup,	50
"	"	Canned fruit,	2 00
Miss E. S. Maynard,	Amherst,	" "	1 00
Mrs. S. W. Boutwell,	Leverett,	" "	3 00
Mrs. L. W. West,	Hadley,	Pickles,	1 00
Miss S. N. Kingman,	Amherst,	"	75

Mrs. S. Jewett,	Pelham,	Pickles,	50
Miss S. N. Kingman,	Amherst,	Jellies,	1 00
Mrs. L. W. West,	Hadley,	"	75
Mrs. O. F. Morse,	Amherst,	"	50

CLASS 21—FRUIT. 5 ENTRIES.

E. A. Munsell,	Amherst,	Best display,	\$4 00
W. M. Waite,	"	"	2 00
G. L. Batchelder,	Sunderland,	Assorted basket,	3 00
M. B. Kingman,	Amherst,	" "	2 00

CLASS 22 FRUIT GROWN BY EXHIBITOR. 26 ENTRIES.

Wm. W. Smith,	Amherst,	Apples,	\$4 00
E. A. Munsell,	"	"	3 00
D. S. Cowles,	Hadley,	"	2 00
F. B. Paige,	Prescott,	"	1 00
"	"	Quinces,	1 00
Benj. Paige,	Pelham,	Cranberries,	1 00
W. V. Hawkes,	Amherst,	Peaches,	2 00
E. A. Munsell,	"	Pears,	4 00
Prof. Morse,	"	"	3 00
D. S. Cowles,	Hadley,	"	2 00
F. B. Paige,	Prescott,	"	1 00
E. A. Munsell,	Amherst,	Grapes,	4 00
W. V. Hawkes,	"	"	3 00
W. L. Warner,	Sunderland,	"	2 00
D. S. Cowles,	Hadley,	"	1 00

CLASS 23—VEGETABLES. 109 ENTRIES.

W. L. Warner,	Sunderland,	Collection,	5 00
West Bros.,	Hadley,	"	4 00
G. L. Batchelder,	Sunderland,	"	3 00
F. B. Paige,	Prescott,	"	2 00
C. S. Smith,	Amherst,	Exhibition potatoes,	2 00
West Bros.,	Hadley,	" "	1 00
P. Toole,	Amherst,	Best peck "	1 00
Alvin Sanderson,	Sunderland,	Onions,	1 00
W. L. Warner,	"	Carrots,	1 00
G. L. Batchelder,	"	"	50
West Bros.,	Hadley,	Beets,	1 00
A. D. Loomis,	Amherst,	"	50
Chester Cowles,	"	Ruta-Bagas,	1 00
G. L. Batchelder,	Sunderland,	"	50

E. C. Parker,	Amherst,	Tomatoes,	1 00
G. L. Batchelder,	Sunderland,	"	50
A. D. Loomis,	Amherst,	Beans,	1 00
E. C. Parker,	"	"	50
W. A. Magill,	"	"	1 00
Jas. Comins,	Hadley,	Pumpkins,	1 00
David Pomeroy,	Amherst,	Cabbages,	2 00
W. L. Warner,	Sunderland,	"	1 00
"	"	Sweet corn,	2 00
D. S. Cowles,	Hadley,	"	1 00
G. W. Fitch,	Amherst,	Seed corn,	2 00
D. M. Warren,	"	"	1 00
W. L. Warner,	Sunderland,	White squashes,	2 00
D. M. Warren,	Amherst,	"	1 00
Jas. Comins,	Hadley,	Winter wheat,	1 00
E. C. Parker,	Amherst,	"	50
Jas. Comins,	Hadley,	Spring wheat,	1 00
Daniel Cowles,	"	Rye,	1 00
John S. Cowles,	"	"	50
Jas. Comins,	"	Oats,	1 00
Asahel Gates,	Pelham,	"	50

CLASS 24—FLOWERS. 23 ENTRIES.

L. W. Goodell,	Belchertown,	Collection,	\$5 00
Mrs. S. W. Boutwell,	Leverett,	"	3 00
Mrs. E. C. Parker,	Amherst,	"	2 00
Mrs. George C. Fitch,	"	"	1 00
L. W. Goodell,	Belchertown,	Asters,	2 00
"	"	Dahlias,	2 00
Mrs. S. W. Boutwell,	Leverett,	"	1 00
L. W. Goodell,	Belchertown,	Verbenas,	2 00
Mrs. E. C. Parker,	Amherst,	"	1 00
L. W. Goodell,	Belchertown,	Gladioli,	2 00
Mrs. E. C. Parker,	Amherst,	"	1 00
Mrs. S. W. Boutwell,	Leverett,	Wild flowers,	2 00
"	"	Bouquet,	2 00
L. W. Goodell,	Belchertown,	"	1 00

CLASS 25—STALLIONS. 3 ENTRIES.

P. D. Hubbard,	Sunderland,		\$8 00
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CLASS 26—MARES WITH COLTS. 7 ENTRIES.

M. F. Dickinson,	Amherst,	\$5 00
P. D. Hubbard,	Sunderland,	4 00
T. H. Hastings,	Amherst,	3 00
Patrick Donahue,	"	2 00

CLASS 27—COLTS AND FILLIES. 7 ENTRIES.

C. L. Russell,	Sunderland, Colt, 3 years old,	\$3 00
F. H. Graves,	" " "	2 00
Oliver Cowles,	Amherst, " "	1 00
Henry Holland,	" " yearling,	2 00

CLASS 28—FARM HORSES. 5 ENTRIES.

L. M. Hubbard,	Sunderland, Pair,	\$4 00
C. W. Thurber,	Leverett, "	3 00

CLASS 29—DRAFT HORSES. 5 ENTRIES.

Chester Smith,	Hadley, Pair,	\$3 00
West Bros.,	" "	2 00

CLASS 30—CARRIAGE HORSES. 10 ENTRIES.

George P. Smith,	Sunderland, Pair,	\$6 00
J. R. Gould,	Belchertown, "	4 00
L. D. Cowles,	Amherst, "	2 00
Oliver Cowles,	" Single,	6 00
L. S. Dyer,	Hatfield, "	4 00
Samuel Boltwood,	Amherst, "	2 00

CLASS 31—ROADSTERS. 5 ENTRIES.

C. H. Hatfield,	Chicopee,	\$6 00
Frank Ingram,	Amherst,	4 00
L. S. Dyer,	Hatfield,	2 00

AWARDED UNDER FOURTH DIVISION.

F. B. Paige, Prescott,	Best orchard of not less than fifty Pear Trees in one lot,	Diploma
West Bros.,	Hadley, Best acre of corn,	\$5 00
"	" " $\frac{1}{2}$ " potatoes,	5 00
Alvin E. Sanderson,	Sunderland, " $\frac{1}{2}$ " onions,	5 00
J. W. Clark,	Amherst, " Report,	

BICYCLE RACE.

J. E. Goldthwait,	\$20 00
F. M. Williams,	10 00
C. D. Houghton.	5 00

WHEELBARROW RACE.

Charles Jackson,	\$5 00
Walter H. Doucet,	3 00
John Linnehan,	1 00

FOOT RACE.

Walter H. Doucet,	\$5 00
P. Garvey,	3 00
Peter White,	1 00

THREE-LEGGED RACE.

Walter H. Doucet,	}	1st.,	\$5 00
A. B. Copeland,			
John Linnehan,	}	2nd	\$3 00
George Miller,			

2.30 CLASS. ENTRIES.

C. E. Tanner,	Springfield,	" Hersey, "	\$35 00
C. A. Sweetzer,	Holyoke,	"Brown Johnnie,"	30 00
"	"	" Lizzie R., "	15 00

2.40 CLASS. ENTRIES.

H. H. Carter,	Holyoke,	" Kate Harris, "	\$30 00
C. A. Sweetzer,	"	" Lizzie R., "	20 00
C. H. Hatfield,	Chicopee,	" Surprise, "	15 00

FLOWERS.

The committee on flowers respectfully submit the following :

Collection of wild flowers, Mrs. S. W. Boutwell, Leverett.

“ Cultivated flowers, 1st., L. W. Goodell, Amherst.

“ “ “ 2nd, Mrs. S. W. Boutwell, Leverett.

“ “ “ 3rd, Mrs. E. C. Parker, Amherst.

“ “ “ 4th, Mrs. George C. Fitch, Amherst.

Bouquets, 2nd, L. W. Goodell, Amherst.

“ 1st, Mrs. S. W. Boutwell, Leverett.

Asters, L. W. Goodell, Amherst.

Dahlias, 1st, L. W. Goodell, Amherst.

“ 2nd, Mrs. S. W. Boutwell, Leverett.

Verbenas, 1st, L. W. Goodell, Amherst.

“ 2nd, Mrs. E. C. Parker, Amherst.

Gladiolas, 1st, L. W. Goodell, Amherst.

“ 2nd, Mrs. E. C. Parker, Amherst.

Among the exhibits, for which premiums were not offered, were the following by L. W. Goodell: Balsams, 12 varieties; Nasturtiums, 8 var.; Japanese Pinks, 39 var.; D. Phlox, 18 var.; Pansies, 25 var.; Petunias, 12 var.; Snapdragon, 12 var.; Zinnias, 12 var. The show of flowers was good; the tables allotted them seemed to be covered with a mass of sunshine of every conceivable color and hue capable of being produced by our most beautiful flowers, the size, form and beauty of which almost made one believe that the extreme drought of the past summer with its scorched and browned vegetation, was a dream. The collection of Asters, twenty-five varieties, was fine, including many distinct forms and colors. Of Dahlias, there were twenty-five or more different varieties, ranging from the smallest button-shaped specimens to those of the largest size. The Dahlia produces one of the most perfect-shaped flowers of all our cultivated plants, if a change in nature's forms can be called perfect; each petal

is arranged and shaped so that the flower forms a perfect rosette. It can be grown from seed and from roots; if raised from seed they should be started early in the house in boxes and planted out as soon as danger from frost is past; if grown in this way they will produce flowers as soon as from roots. The show of *Gladiolus* (fifty varieties) was fully equal to that of previous years. The finest specimens were shown by Mr. J. K. Nevius of Montague, but were not entered for competition. This gentleman also exhibited some fine Hybrid Perpetual Rosebuds of the new and choice varieties; these did not compete for premiums. The collection of *Verbenas* was larger, including two hundred distinct kinds, some of which were of considerable merit. The wild flowers exhibited by Mrs. Boutwell deserve special mention on account of their variety and the taste shown in their arrangement. The cultivation of flowers is increasing, and a few suggestions in regard to their cultivation, arrangement and kinds may not be out of place here. In cultivating the varieties grown annually from seed, the seed should be planted as soon as the weather will permit; or they can be sown in boxes and started in the house and transplanted to the open air as soon as it is safe to do so. Flowers to perfect themselves should be given plenty of room for each individual plant to attain its full size. The soil in which they are to be planted should be made very rich and fine; this will give much larger and more distinct flowers. Many plants for bedding out are also raised from cuttings. The chief end sought in growing bedding plants is to grow them in a sufficient size to flower or to produce the desired effect as soon as possible, for, if this is not done, our seasons are so short that frost often kills them before they reach the point of their greatest beauty. Bedding plants are divided into two classes, flowering and foliage plants. Flowering plants are often planted singly, but foliage plants to produce the best effect should be planted in groups or masses; this requires a considerable outlay of time and money, and more than the majority of people can afford. This expense is an annual one, for nearly all of our bedding plants are killed by frost. Our seasons are so short that to me it has often seemed as if the money and care spent on this class of plants is next to throwing it away, for just as we commence to enjoy their beauty the frost of fall in a single night destroys them forever. If in place of these tender plants people would plant those that last for several years, or such as re-seed themselves, such as *petunias*, *phlox*, *verbenas* etc., or, better than this, if they will plant our hardy shrubs, they will have something requiring very little care and attention

after they are well started, and producing annually some of the most beautiful flowers. If care and good judgment is used in selecting varieties, many different forms and colors can be obtained, and also shrubs that will give a continual bloom from early spring to the frosts of fall. Beginning with the Japan Quince, *Cydonia Japonica*, with its scarlet flowers early in spring before the leaves are developed, closely followed by the Forsythias with thin, yellow, bulb-shaped flowers: then comes the Spirea. The Spirea *Thunbergii*, with its small, star-shaped flowers, bending beneath its load of white, looks as if the winter's snow still covered the branches; the foliage of this shrub is very fine and graceful, which makes it a desirable shrub for the foliage alone. The Deutzias now come with their white and pink and white flowers, followed by the different varieties of Spireas, Weigelias, Honeysuckles, Altheas (Rose of Sharon) Hydrangeas, etc., giving a succession of bloom the season through. In planting all kinds of flowering plants, whether it be the tender annuals, the hardy perennials or our flowering shrubs, in every case make the soil rich and give the plants the care they require, and at the proper time, for in this way alone will the best results be obtained and plants grown that will be a credit and source of enjoyment to the owner.

J. W. CLARK, Chairman.

STATEMENT ON CORN,

BY WEST BROS.

The acre of Corn we offer for premium had a crop of Rye on it last year. Ploughed last Fall about four inches deep, and in May there were about five cords of manure spread on and a part of it ploughed under; the balance was worked in with a wheel-barrow. Planted with Red-dent corn with four kernels in the hill, 3 feet 3 inches by 4 feet in the row. Hoed three times and cultivated three times each way. The account reads as follows :

Ploughing and fitting land,	\$4 00
Drawing and spreading manure,	16 50
Five cords of manure at \$7 per cord,	35 00
Hoeing three times,	9 00
Seed,	25
Cultivating six times,	5 00
	<hr/>
	\$69 75

CREDIT.

By Stover for harvesting,	
By 63 bushels corn at \$1 00.	\$63 00

Yours respectfully,

Hadley, Oct. 31, 1882.

WEST BROS.

STATEMENT ON POTATOES.

BY WEST BROS.

The field of potatoes we enter for premium contains 96 rods.

The soil is a loam and it was manured twice last year and cut about one and one-half tons of hay.

The Tobacco stalks from one and three-fourths acres of Tobacco were spread on the land and ploughed under the last of November, about six inches deep.

The land was divided into five plats. The first four contained seven rows, thirteen rods long, each.

The first plat was manured with 200 lbs of Stockbridge's manures.

The second plat with 200 lbs of Chemicals bought of Horton & Phelps.

The third plat with muriate of potash at the rate of 200 lbs to the acre, and enough dry fish sown to have it cost five dollars for the plat.

The fourth plat with five loads of stable manure, in the hill, or about one cord of manure.

The balance of the piece with stable manure, at the rate of ten tons to the acre, spread on top and worked into the soil with a wheel-barrow.

The land was marked out with five rows to the rod.

The first three plats were planted with Beauty of Hebron, Early Rose and Clark's No. 1.

The fourth and fifth with Early Rose and Bliss' Triumph.

The yield was as follows; the rows are all thirteen rods long. Early Rose from

Plat No. 1,	One row, 13 rods long,	4 bu., 45 lbs.
“ 2,	“ “	3 “ 2 “
“ 3,	“ “	3 “ 8 “
“ 4,	“ “	3 “ 45 “
“ 5,	“ “	3 “ 48 “
Beauty of Hebron,		
Plat No. 1,	One row, 13 rods long,	5 bu., 8 lbs.
“ 2,	“ “	4 “ 2 “
“ 3,	“ “	4 “ 4 “
Clark's No. 1,		
Plat No. 1,	One row, 13 rods long,	5 bu., 30 lbs.
“ 2,	“ “	3 “ 45 “
“ 3,	“ “	4 “ 12 “
Bliss' Triumph,		
Plat, No. 4,	One row, 13 rods long,	3 bu., 15 lbs.
“ 5,	“ “	3 “ 9 “

The Early Rose, Clark's No. 1, and Beauty of Hebron, were in blow at the same time, and all ripe together. Bliss' Triumph ten days or two weeks earlier than the other three kinds, and the best potatoes to raise for a very early variety.

The potatoes on Plat No. 1 were dug two weeks later than those on the other four plats.

The account stands as follows, viz. :

For ploughing and fitting land,	\$ 3 00
Fertilizer for Plat No. 1,	5 00
“ “ 2,	4 50
“ “ 3,	5 00
Manure, 1 cord, for Plat No. 4,	8 00
“ 1 $\frac{3}{4}$ “ “ 5,	11 40
Nine bushels seed,	9 75
Labor at \$1.50 per day,	24 00
Team “ \$3.00 “	13 00
Paris Green and Plaster,	3 50
	<hr/>
	\$87 95

CREDIT.

By 156 Bushels of Potatoes sold in Holyoke for \$155 10

Yours respectfully,

Hadley, Oct. 31, 1882.

WEST BROS.

NEW LIFE MEMBERS OF 1882.

Mrs. E. A. Davis.	Amherst,
William A. Kellogg.	..
Daniel K. Wilson.	Belchertown.
Mrs. M. E. Merchant.	Amherst.
Wm. H. Smith.	..
George E. Smith.	Hadley.
George P. Smith.	Sunderland.
James B. Paige.	Prescott.
John A. Page.	Pelham.
Alvin E. Sanderson.	Sunderland.
Dr. J. J. Vincent.	Amherst.
Mrs. Mary E. R. Clark.	..

At the thirty-third annual meeting of the Hampshire Agricultural Society the following vote was passed:

That any person having articles on exhibition shall not serve on that committee under penalty of forfeiting the premium it awarded them.

TREASURER'S REPORT.

FRANK E. PAIGE, TREASURER, IN ACCOUNT WITH THE HAMPSHIRE
AGRICULTURAL SOCIETY.

1882.	Dr.
To Balance from report 1881,	\$ 218 48
" Cash received of E. E. Webster,	11 54
" " " J. J. Potwin, gate-money,	323 34
" " " Peddlers,	47 25
" " " Entrance fee, bicycle races,	14 00
" " " " " horses,	42 50
" " " New life members,	45 00
" " " State Treasurer,	600 00
" " " Agricultural College. tickets,	40 00
" " " Donation to Society.	77 99
	\$1420 10

1882.	Cr.
By paid J. E. Williams, bill,	\$ 4 00
" E. W. Carpenter, bill,	28 80
" Amherst Savings Bank, interest,	31 50
" " " " on note,	100 00
" Edward Conkey, bill,	5 25
" J. E. Williams. "	10 00
" Check books,	2 00
" Russell Morgan & Co., posters.	10 00
" Express on posters,	1 30
" Bridgman & Childs, bill,	7 00
" Postage, paper, etc.,	9 26
" M. N. Spear, blank book,	40

By paid Amherst Savings Bank, interest.	28 50
“ Chas. S. Smith, bill,	2 00
“ D. W. Blodgett, “	13 00
“ W. W. Smith, “	12 37
“ E. T. Sabin,	26 24
“ No. Amherst Band,	30 00
“ E. D. Huntington,	1 75
“ John Wetherbee,	10 00
“ L. Merrick.	7 50
“ Express on books,	35
“ Chas. Kellogg,	2 00
“ W. L. Warner.	7 76
“ W. L. Davis,	7 50
“ Geo. E. Thayer,	90
“ Henry Holland,	2 67
“ Frank E. Paige, Treas. and Sec’y.,	75 00
“ C. Thompson,	7 87
“ E. A. King,	10 00
“ J. J. Potwin,	4 00
“ J. E. Williams,	22 50
“ Geo. Graves,	1 00
“ Premiums,	637 05
“ Trotting,	145 00
“ J. N. White. dinner tickets.	33 50
Cash on hand.	122 13
	<hr/>
	\$1420 10

FINANCIAL CONDITION OF THE SOCIETY.

LIABILITIES.

Note at Amherst Savings Bank,	\$800 00	
Interest due Jan. 1st, 1883,	28 00	
Interest due July 1st, 1883,	28 00	
Printing annual report and advt'g annual meet'g,	47 00	
	<hr/>	\$903 00
Cash on hand,		122 13
		<hr/>
Total indebtedness of Society,		\$780 87

AMHERST, Nov. 25, 1882.

I hereby certify that I have examined the accounts of Frank E. Paige, Treasurer of the Hampshire Agricultural Society for 1882, and find them correct, with a balance in the treasury of one hundred and twenty-two dollars, and thirteen cents.

E. D. BANGS, Auditor.

LIFE MEMBERS.

AMHERST.

FARMERS.

Adams Asa	Cowles Jonathan Jr.
Adams Mrs. Asa	Cowles Mrs. Jonathan Jr.
Albee John E	Cowles Levi D.
Ayers Elijah	Cowles Mrs. Levi D.
Ayers Mrs. Elijah	Cowles Ransom
Allen L. W.	Cowles Mrs. Ransom
Allen James W.	Curtis O. H.
Allen Mrs. James W.	Curtis Mrs. O. H.
Baker Mrs. Alfred	Dana Joseph
Baker George	Dana Joseph D.
Baker Mrs. George	Darling B. R.
Baker Enos	Dickinson Asa
Baker Joel	Dickinson Charles
Bangs Danforth K.	Dickinson Mrs. Daniel
Bangs Mrs. Danforth K.	Dickinson Josiah
Bartlett Lewis A.	Dickinson M. F.
Belden Horace	Dickinson Mrs. M. F.
Billings Warren S.—removed	Dickinson Mrs. Moses B., removed
Blanchard Horace	Dickinson Mrs. S. S.
Boltwood Mrs. William	Dickinson William
Braley John	Dickinson W. W.
Bridgman Guilford	Dickinson C. R.
Clark Simeon	Dutton Alonzo
Cooley Alden	Dutton Mrs. Alonzo
Cooley Samuel D.	Eastman Austin
Cowles Chester	Eastman Mrs. Austin
Cowles Clinton J.	Eastman Charles A.
Cowles Mrs. Clinton J.	Eastman Mrs. Charles A.
Cowles Mrs. Enoch	Eastman George H.
Cowles Erastus	Eastman William
Cowles Francis J.	Fish Cummings
Cowles James	Gaylord Flavel
Cowles Mrs. James	Gray Joseph P.

- Gray Mrs. Joseph P.
 Harlow L. N.
 Hastings Edmund
 Hastings Mrs. Edmund
 Hastings J. C.
 Hastings Mrs. J. C.
 Hastings Samuel
 Hawley Stetson
 Hawley Mrs. Stetson
 Hills Samuel
 Hills Mrs. S. T.
 Hobart Edmund
 Hobart Mrs. E.
 Hobart Mrs. S.
 Huntington F. G.
 Hyde C. A.
 Ingram Mrs. H.
 Ingram Frank
 Ingram Rufus
 Ingram Lucius
 Kellogg Eleazar
 Kellogg W. A.
 Kellogg Lyman
 Kellogg Mrs. Lyman
 Kellogg Willard
 Kellogg W. M.
 Kellogg Mrs. W. M.
 Kellogg C. H.
 Kellogg Mrs. C. H.
 King E. A.
 King Isaac
 King W. A.
 Lincoln R. S.
 Lincoln Mrs. R. S.
 Loomis A. D.
 Lovett E. B.
 Longley Mrs. O. S.
 Marshall A. C.
 Marshall Mrs. A. C.
 McMaster Charles
 McMaster Mrs. C.
 McMaster Alvan
 Merrick J. E.
 Merrick Mrs. J. E.
 Miller C. H.
 Mosman A. A.
 Munsell E. G.
 Munsell Mrs. E. G.
 Needham E. H.
 Needham Mrs. E. H.
 Nash L. S.
 Owen W. C.
 Parker E. C.
 Parker Mrs. E. C.
 Pomeroy David
 Reed Thomas
 Reed Mrs. T.
 Roberts J. B.
 Smith Thomas W.
 Smith Charles S.
 Smith Mrs. Charles S.
 Smith John W.
 Smith Mrs. J. W.
 Smith S. D.
 Smith J. P.
 Smith Mrs. J. P.
 Smith Mrs. W. B.
 Smith W. W.
 Smith Mrs. W. W.
 Spaulding Philip D.
 Spaulding Mrs. P. D.
 Spear E. P.
 Stone F. L.
 Thayer Charles E.
 Thayer Mrs. J.
 Thayer Savannah A.
 Thayer Mrs. S. A.
 Thurston Stillman
 Wakefield Solomon
 Warner George
 Watson H. D.—removed
 Watson Mrs. H. D.
 Webster Charles N.
 White John C.
 White Mrs. J. C.
 White Martin
 Whitney S. W.
 Wiley Samuel
 Wiley John
 Wiley Mrs. John
 Williams Oren
 Williams Mrs. Oren
 Williams Mrs. F.

NOT FARMERS.

- Adams Charles—removed
 Adams Mrs. John S.
 Adams John Q.—removed
 Ainsworth Forrester
 Aldrich Charles P.—removed

Allen Mrs. H. H.
 Allen Lysander H.
 Allen M. Adams
 Albee Mrs. Lydia
 Aldrich Nehemiah—removed
 Allen B. B.
 Bangs Charles A.
 Bartlett Moses L.
 Boice Mrs. Sanford
 Boltwood Samuel
 Bridgman Mrs. May S.
 Briggs Ebenezer—removed
 Burnham George—removed
 Burnham Mrs. George—removed
 Bliss Zenas W.—removed
 Carter Samuel C.
 Carter Mrs. S. C.
 Chapin Otis H.
 Church Mrs. E. S.
 Clapp Oliver M.
 Clark Prest. W. S.
 Clark Mrs. W. S.
 Clark Albert
 Clark John W.
 Clark Mrs. Mary E. R.
 Clark Mrs. E. W.
 Clapp Miss Hattie
 Chittenden Mrs. Erastus
 Crosier Mrs. James
 Clark Mrs. Stillman D.
 Conkey Mrs. I. F.
 Conkey Miss Jennie C.
 Conkey Edward
 Conkey Miss Kate
 Conkey William
 Converse Daniel
 Converse Mrs. Daniel
 Cook Mrs. David S.
 Cook Enos F.
 Cook Mrs. Enos F.
 Cooke Rev. George—removed
 Cooke Mrs. George
 Cowles Miss Etta
 Cowles Frank
 Cowles Oliver
 Cowles Walter D.
 Cowles Mrs. Francis J.
 Cowles Miss Jennie
 Cushman Avery R.
 Cushman Mrs. Avery R.
 Cushman Mrs. Ephraim
 Cushman Ephraim
 Cushman Ephraim Jr.
 Cushman Mrs. Ephraim Jr.
 Cushman John R.
 Cushman Mrs. John R.
 Cushman Sanford C.
 Cushman Mrs. S. C.
 Cutler Esther
 Cutler George
 Cutler Mrs. George
 Cutler Mrs. S. F.
 Couch O. G.
 Couch Mrs. O. G.
 Davis Mrs. E. A.
 Dana H. D.
 Dana Mrs. H. D.
 Deuel Charles
 Deuel Mrs. Charles
 Dickinson Mrs. E. P.
 Dickinson Mrs. L. M.
 Dickinson Mrs. M. L.
 Dickinson Emily E.
 Dickinson Miss Charlotte
 Dickinson Miss L. N.
 Dickinson Miss Lovina
 Dickinson Miss Lydia
 Dickinson Miss Sarah M.
 Dickinson Waitstill
 Dickinson Mrs. W.
 Dickinson William A.
 Dickinson Mrs. W. A.
 Dickinson Mrs. Mary
 Dillon John C.
 Dunlap Samuel
 Dunlap Mrs. Samuel
 Eastman Mrs. Baxter
 Eastman Mary C.
 Eastman Martha E.
 Emerson Mrs. Sarah E.
 Edwards Simeon E.
 Ferry Miss Sarah P.—removed
 Fearing H. D.
 Fisher Miss Fidelia
 Fisher Rev. George E.
 Fisher Mrs. George E.
 French Miss Mary
 Field E. G.—removed
 Field Mrs. E. G.—removed
 Fitts Elijah B.—removed

Gallond George B.
 Gaskill Chester
 Gates Sanford
 Gaylord Mrs. William
 Graves George
 Graves Dwight
 Goodale Lewis
 Gunn William F.
 Gunn Mrs. William F.
 Hall Mrs. J. B.
 Hastings Thomas H.
 Hastings James
 Hastings Mrs. James
 Hammond Nellie L.
 Haskins John H.
 Haskins Mrs. J. H.
 Haskins H. W.
 Haskins Mrs. H. W.
 Hawley C. M.—removed
 Hayward Mrs. C. F.
 Harrington Moody
 Harrington S. F.
 Harrington Mrs. S. F.
 Hills H. F.
 Hills Mrs. L. M.
 Hills L. D.
 Hobart Mrs. G. W.
 Hobart Hattie S.
 Howes F. H.
 Hobbie W. H.—removed
 Howard M. W.
 Howard Mrs. M. W.
 Howard R. H.
 Holland Henry
 Howland Mrs. W. S.
 Hunt O. D.
 Hutchinson C. E.
 Howard Mrs. S. A.
 Henderson Hon. Horace—removed
 Henderson A. R.—removed
 Henderson Mrs. A. R.—removed
 Hunt William W.
 Howard Mrs. C. H.
 Irish P. E.
 Jackson Henry
 Jones Mrs. Mary
 Joy H. N.
 King Miss Ella
 Kenfield C. S.
 Kellogg H. C.—removed
 King Mrs. C. A.
 Kingman M. B.
 Kingman Miss S. N.
 Kendrick B. F.
 Leach B. F.
 Lovell C. O.
 Lovell J. L.
 Lovell Mrs. J. L.
 Lewis Hattie E.—removed
 Magill Wm. E.
 Magill Wm. A.
 Mather Mrs. W. E.—removed
 Mayo Mrs. Noah
 Merchants Mrs. M. E.
 McCloud H. M.
 McCloud Milton—removed
 McCloud Mrs. Milton—removed
 Merrill Miss H. O.—removed
 Montague George
 Montague G. C.
 Nash Mrs. Charles
 Nash Henry C.
 Nash Mrs. L. S.
 Nash Mrs. H. C.
 Olney Mrs. Almira
 Parker G. L.
 Palmer D. W.
 Palmer Miss S. D.
 Parmenter C. O.
 Pervier A. J.
 Pomeroy L. H.
 Pomeroy Mrs. L. H.
 Park J. W.—removed
 Read J. E.
 Read Mrs. J. E.
 Roberts Mrs. F. H.
 Robinson Ferdinand—removed
 Robinson Mrs. F.—removed
 Rawson J. H.
 Russell Emerson
 Russell Mrs. Emerson
 Russell Calvin
 Russell Mrs. Calvin
 Sabin E. T.
 Scott Nelson Rev.
 Saxton W. H.
 Seely W. J.
 Stratton R. W.
 Stratton Mrs. R. W.
 Shaw Almira

- Sisson John
 Sisson L. W.
 Sisson T. T.
 Shepard Prof. C. U.
 Skinner J. L.
 Skinner Mrs. J. L.
 Sloan T. W.
 Smith Robert H.
 Smith Wm. H.
 Snell Mrs. E. S.
 Spear Mrs. S.
 Spear M. N.
 Storrs C. L.—removed
 Stockbridge Hon. Levi
 Stockbridge Alice
 Stockbridge H. D.
 Stratton Mrs. Chester
 Seelye Prof. L. C.
 Seelye W. J.
 Temple Theron M. D.—removed
 Taylor I. H., M. D.
 Taylor Mrs. I. H.
 Turner Mrs. E. G.
 Thomas Hon. E. A.
 Tuckerman Prof. Edward
 Turner Mrs. R.—removed
 Tyler Prof. W. S.
 Tyler Mrs. W. S.
 Upton Mrs. E. C.
 Vincent Dr. J. J.
 Whitney Miss Hattie
 Whitney Mrs. S. W.
 Wrigley Belle
 Wheaton E. J.
 Wheaton Mrs. E. J.
 White Harvey
 Wrigley Mrs. John
 Williams J. E.
 Wiley Miss Dolly T.
 Ward Horace
 Ward Mrs. Horace
 Warner David S.
 Watson Mrs. Oliver—removed
 Westcott J. T.
 Whipple Geo. A.—removed
 Williams Lucas
 Williams Mrs. Enos D.—removed
 Woodworth C. L. Rev.—removed
 Woodworth Mrs. C. L.—removed
 Wright Sylvanus M.—removed
- Young J. J.
- ATHOL.
- Putnam Rufus
 Putnam Mrs. Rufus
 Horr Geo. W. Esq.
 Horr Mrs. George W.
- BARRE.
- Hamilton S. S.
- BALTIMORE, MD.
- Brown Smith
- BERNARDSTON.
- Slate Jonathan S.
- BOSTON.
- Flint Hon. C. J.
 French Hon. H. F.
 Rowe Mrs. A. C.
 Shaw G. L.
 Wetherell Leander
 Wilder Hon Marshall P.
 Woodman G. S., M. D.
 Woodman Mrs. G. S.
- BELCHERTOWN.
- FARMERS.
- Cook Olney
 Cook L. V. B.
 Dwight Nathaniel
 Eaton Calvin D.
 Goodale Asahel
 Goodell L. W.
 Howard A. B.
 Longley H. A.
 Montague Ephraim
 Owen A. R.
 Perkins S. G.
 Russell F. H.
 Stacy A. W.
 Stacy Mrs. A. W.
 Sabin Lyman
 Thayer Martin
 Walker Emory P.—removed
- NOT FARMERS.
- Chandler George—removed
 Chandler Mrs. George—removed
 Chandler Henry J.—removed
 Clark Norman P.

Clark Mrs. N. P.
 Cowles Samuel D.
 Dickinson Samuel—removed
 Goodale Rufus
 Graves Mrs. William
 Hall Levi B.—removed
 Hannum George O.—removed
 Hannum Mrs. L. W.
 Packard Joel—removed
 Thayer Morris—removed
 Thayer Manser R.
 Wilson Daniel K.
 Whitney A. A.

BRIGHTON.

Clark Rev. Sereno D.
 Clark Mrs. S. D.

BROOKFIELD.

Carpenter R.

CHICAGO, ILL.

Alden Thomas
 Boyden Hon. J. W.
 Dickinson W. P.
 Dickinson Mrs. W. P.
 Haven Joseph D. D.
 Haven Mrs. J.
 Pierce Francis A.
 Tapley George W.
 Payson Joseph K.

CLINTON, N. Y.

Swift Rev. E. Y.
 Swift Mrs. E. Y.

CHARLTON.

Carpenter E. R.

COLERAINE.

Sprague Joseph G.

CONWAY.

Brown J. F.
 Johnson G. H.
 Montague Warren
 Montague Mrs. Warren

DEERFIELD.

Ely John D.
 Fogg Josiah

Mosher Chas.
 Rust H. N.
 Stebbins B. F.
 Stebbins Evander G.
 Stebbins Moses
 Stebbins Mrs. Moses

DURIAM, CONN.

Fowler Prof. W. C.

EASTHAMPTON.

Colton Rev. A. M.
 Colton Mrs. A. M.
 Matthews Horace
 Sabin Sherman
 Sabin Mrs. Sherman
 Williston Hon. Samuel

ENFIELD.

FARMERS.

Blodgett David
 Fobes Henry
 Howe J. J.
 Hunt Horace
 Kimball W. B.
 Kimball C. H.
 Martindale J. W.
 Porter Lyman D.
 Randall Alvin
 Root Joseph
 Shearer L. F.

NOT FARMERS.

Abbott Frederick
 Ballou Hiram—removed
 Gillette Hon. D. B.
 Moody Augustus
 Randall Ozias
 Smith E. P.
 Smith H. M.
 Woods C. F.
 Woods Hon. R. D.
 Wood Joseph E.

ERVING.

Stone J. E.

FREEDOM, PENN.

Howe A. P.
 Howe Mrs. A. P.

GRANBY.

FARMERS.

Ayres Rodney
 Barton James M.
 Barton P. D.
 Clark Augustus
 Clark Charles F.
 Clark Spencer
 Dickinson S. B.
 Eastman S. F.
 Eastman Mrs. S. F.
 Ferry Charles S.
 Ferry Lucius
 Montague Giles F.
 Montague Holland
 Patrick W. D.
 Preston J. H. D.
 Richardson Orsemus
 Smith Geo. F.
 Smith Jared C.
 Smith Nelson
 Smith Samuel Jr.
 Smith Mrs. Samuel Jr.
 Smith W. A.
 Warner Alonzo
 Witt Horace

NOT FARMERS.

Aldrich C. C.
 Chapin Philo
 Lyman David
 Lyman George J.
 Stebbins Cyrus
 Taylor M. A.

GRANBY, CONN.

Gaylord Ebenezer
 Gaylord Mrs. Ebenezer

GRAND RAPIDS, MICH.

Cutler Robert
 Cutler Mrs. Robert

GREENFIELD, N. H.

Downs A. S.

GREENFIELD.

Davis Hon. G. T.
 Hager F. S.
 Owen Euclid

GREENWICH.

Carter John
 Warren S. M.

HADLEY.

FARMERS.

Adams Benjamin
 Adams Mrs. Benjamin
 Adams Chas. W.
 Baker John A.
 Chapin Edwin
 Clark E. J.
 Cook George E.
 Comins James
 Comins Mrs. James M.
 Comins H. C.
 Comins Mrs. Ellen
 Comins W. H.
 Comins Mrs. James
 Cowles Daniel
 Cowles Mrs. Daniel
 Cowles David S.
 Cowles Mrs. David S.
 Cowles D.
 Cowles Lewis
 Cowles Mrs. Lewis
 Cowles Homer L.
 Cowles John S.
 Daunon S. C.
 Davis Warren N.
 Dickinson Alphonzo
 Dickinson Mrs. A.
 Dickinson George
 Gray Amos
 Gray Chester
 Green George
 Green Henry
 Green Mrs. Linus
 Hawley F. A.
 Hawley W. F.
 Hibbard E. P.
 Hibbard Mrs. E. P.
 Hibbard S. S.
 Hibbard Mrs. S. S.
 Hibbard Mrs. Willard
 Huntington T. G.
 Huntington Mrs. T. G.
 Horton Mrs. D. H.
 Ingram F. E.
 Kellogg J. C.
 Kellogg B. A.

Kellogg Stillman
 Kenfield J. B.
 Kenfield Mrs. J. B.
 Montague Royal M.
 Morton T. Dwight
 McQuillan W. E.
 Morton Mrs. J. A.
 Newton Walter
 Nash John W.
 Newton William
 Newton Mrs. William
 Pasco Mrs. Theodore
 Russell A. P.
 Russell Horace
 Russell Mrs. Horace
 Russell John
 Russell Mrs. John
 Russell W. H.
 Richardson H. L.
 Smith George C.
 Smith Mrs. G. C.
 Smith Chester
 Smith Edmund
 Smith Enos D.
 Smith Mrs. Enos D.
 Smith George E.
 Smith Jereiah S.
 Smith Oliver E.
 Smith 2nd Roswell
 Smith 2nd Mrs. Roswell
 Stockbridge Wilson J.
 White Moses
 West H. C.
 West Parsons
 West Mrs. Parsons
 Wilder S. C.
 West Lewis
 Wright D. A.

NOT FARMERS.

Adams Levi
 Adams Mrs. Levi
 Adams Frank E.
 Bartlett D. H.
 Bonney Franklin M. D.
 Bonney Oliver E.—removed
 Clark John
 Cooley Mrs. S. F.
 Cowles Elijah—removed
 Cowles Mrs. Elijah—removed

Dickinson C. D.
 Dickinson E. S.
 Dwight Rev. E. S.
 Dwight Mrs. E. S.
 Granger Mrs. L. N.
 Hill Roderic B.
 House Albert R.
 Huntington Mrs. T. P.
 Lawrence Hubbard—removed
 Marsh H. M.
 Marsh T. S.
 Nash Mrs. Samuel
 Porter Edwards J.—removed
 Porter Eleazer
 Scott Mrs. Rufus
 Smith Charles
 Smith Charles H.—removed
 Smith Francis
 Tuxbury Rev. Franklin, removed
 Tuxbury Mrs.—removed
 White David—removed
 Wood George—removed
 White S. G.

HARTFORD, CONN.

Faxson William

HARDWICK.

Cleaveland William

HATFIELD.

FARMERS.

Dyer L. S.
 Fitch G. W.
 Hubbard I. W.
 Porter H. S.
 Porter J. E.

HOLYOKE.

Dickinson Edward

IOWA.

Strickland W. G.
 Strickland Mrs. W. G.

KEENE, N. H.

Sprague J. G.

KEY WEST, FLA.

Allen B. W.

LEVERETT.

FARMERS.

Adams Alden
 Ashley Marvin
 Ashley Mrs. Marvin
 Ball Silas
 Bangs Howard
 Boutwell W. L.
 Boutwell Samuel W.
 Boutwell Mrs. Samuel W.
 Dudley Nathan
 Field Abner
 Field Asa L.
 Field Mrs. Asa L.
 Field Charles H.
 Field H. O.
 Field Mrs. H. O.
 Field Mrs. Moses
 Frary Cephas
 Frary Mrs. L. H.
 Graves Elmer
 Howard Baxter
 Ingram Elisha
 Leach Chester
 Lock Mrs. Ezekiel
 Porter Cephas
 Putnam Timothy
 Putnam Mrs. Timotly
 Rice Mrs. Josiah
 Smith Wm. H.
 Smith Mrs. Wm. H.
 Taylor Wm.
 Thurber C. W.
 Thurber Mrs. C. W.

NOT FARMERS.

Ball Orus
 Ball Mrs. Orus
 Clark W. W.—removed
 Dunklee Hezekiah—removed
 Field Alden C.
 Field Mrs. Alden C.
 Field Carrie M.
 Hobart B. R.—removed
 Hobart Mrs. B. R.—removed
 Hobart Charles D.
 Hobart Colbum
 Hobart Peter
 Hobart Spencer—removed
 Ingraham Elijah—removed

Leach H. S.
 Leach Mrs. H. S.
 Lyman W. H.
 Lyman Mrs. W. H.
 Moore Dexter
 Nutting Lucius—removed
 Nutting Ransom—removed
 Rice Mrs. David
 Strong Mrs. A. A.
 Smead Mrs. S. S.—removed
 Willis Lawson S.—removed
 Wood Ira—removed
 Wood Mrs. Ira—removed
 Woodbury Mrs. Jason
 Woodbury Jason H.—removed

LONGMEADOW.

Goldthwaite W. C. Esq.

LOCKPORT, N. Y.

Sears Simon

LODI, ILL.

Hunt James

LYNN.

Fuller S. B.

MINN.

Farrar Mrs. G. H.
 Nutting Truman

MELROSE, PENN.

Guerusey Mrs. Martha

NORTHFIELD.

Brown Charles T.
 Brown Mrs. Charles T.

OSHKOSH, WIS.

Russell C. R.

MILLERS FALLS.

Goodnow J. E.

MT. PALATINE, ILL.

Wright Abram

MONTAGUE.

FARMERS.

Boutwell W. H.
 Cook H. B.

Paine Alonzo
 Paine Mrs. Alonzo
 Spaulding Peter Jr.
 Smith Charles
 Shaw Thaxter
 Ward W. H.

NEW-BRAINTREE.

Childs W. A.

NEW SALEM.

Eastman Mrs. David
 Haskins Nelson

NEW YORK CITY.

Ford Mrs. Emily
 Harrington Mrs. Samuel
 Hawks Charles
 Nash Mrs. John A.
 Shipman John Jr.
 Smith Prof. H. B.
 West Joseph J.

NORTHAMPTON.

Chase L. A.
 Childs Paris
 Clapp D. M.
 Dickinson Geo. P.
 Hillyer Winthrop
 Kirkland Harvey
 Parsons Charles T.
 Parsons Samuel L.
 Peck A. P.—removed
 Ranney David
 Shepard Asher
 Shepard Henry
 Smith S. M.
 Strong Ebenezer
 Strong Elisha
 Strong William
 Trumbull James R.
 Trumbull Mrs. James R.
 Washburn L. I.

OTISCO, N. Y.

Clark Luke M.

OREGON.

Warren James R.

PELHAM.

Boyden Sanford
 Blair L. K.
 Cook Nathaniel
 Fales Abijah
 Gates Asabel
 Jewett Sylvester
 Jewett Mrs. S.
 Newell L. A.
 Page John A.
 Presho Dwight
 Rankin A. A.—removed
 Rankin Mrs. A. A.—removed
 Shaw Jr. John
 Thayer Jacob
 Ward Joseph G.
 Cadwell Mrs. Aretus J., removed
 Gray Mrs. C. D.
 Gray Horace
 Gray Mrs. H.
 Jones Rev. John
 Russell John—removed
 Ward Mrs. J. G.

PALMER.

Chapman Mrs. Mary
 Dodge F. M.
 Field E. S.
 Reed James
 Shaw E. B.
 Stever Col. Jacob

PHILADELPHIA, PA.

Arnold W. A.
 Montague Albert
 Wilson John W.

PRESCOTT.

Allen Roswell A.
 Freeman A. W.
 Johnson L. S.
 Paige F. B.
 Paige James B.

PROVIDENCE, R. I.

Leonard D. M.
 Smith Hon. J. Y.

ROCKFORD, ILL.

Bartlett Mrs. Harvey

ROSEMOND, ILL.

Smith Brainard
Smith Mrs. Brainard

SALEM.

Jewett Rev. G. B.

SHARON, ILL.

Godfrey William B.

SOUTHAMPTON.

Edwards Elisha

SHUTESBURY.

Bartlett Moses
Dudley S. F.
Dudley Mrs. S. F.
Fitts Edward
Newell Samuel
Shores David
Stetson W. B.

SOUTH HADLEY.

FARMERS.

Allen Levi W.
Alvord Hervey
Bates Emerson
Bates S. A.
Clark Marcellus
Eastman Charles
Eastman G. R.
Eastman Miss E. S.
DeWitt H. B.
Judd A. T.
Judd Edward H.
Judd Edwin H.
Montague Newton C.
Miller S. N.
Moody Hovey
Nash Thomas M.

NOT FARMERS.

Brainard Sylvester
Gaylord Lorenzo
Judd Watson S.
Kellogg Amos
Lyman Lorenzo W.
Lyman Mrs. Lorenzo W.
Montague Elliot
Moody Alvin
Preston Joseph S.

Smith E. L.
Smith Gilbert A.
Smith Mrs. Gilbert A.
Smith G. Morgan
Smith Henry N.
Smith Jason
Smith Mrs. Jason
Snow Mrs. Sheldon
Smith Philip

SUNDERLAND.
FARMERS.

Adams J. G.
Batchelder G. L.
Brown Sylvester
Brown Mrs. Sylvester
Beals George N.
Burt Joel
Childs Israel
Childs Mrs. Israel
Chittenden E. D.
Chittenden L. O.
Chittenden Mrs. L. O.
Clark E. G.
Crocker F. A.
Crocker Daniel B.
Crocker Stoughton D.
Crocker Mrs. S. D.
Crocker Zacheus
Cooley Geo. L.
Cooley Mrs. G. L.
Cogswell M. B.
Delano A. C.
Delano Mrs. A. C.
Delano Jesse L.
Dickinson Mrs. E. P.
Fish B. N.
Graves Alden
Graves Geo. W.
Graves H. D.
Graves F. H.
Graves Mrs. Timothy
Gunn Isaac S. H.
Hobart Albert
Hobart Mrs. Albert
Hubbard Alanson
Hubbard Mrs. Alanson
Hubbard Kelita
Hubbard David—removed
Hubbard Mrs. David—removed

Hubbard Parker D.
 Hubbard Mrs. P. D.
 Hubbard Martin L.
 Hubbard Mrs. M. L.
 Hubbard Moses
 Hunt Melzar
 Hunt Mrs. Z.
 Newton Lyman A.
 Pronty James B.
 Russell C. L.
 Robinson Mrs. E. E.
 Robinson John R.
 Russell Emmons
 Russell Mrs. Emmons
 Russell Wm. W.
 Russell Mrs. Wm. W.
 Sanderson Alvin E.
 Smith C. R.
 Smith Edward N.
 Smith Mrs. E. N.
 Smith John M.
 Smith Mrs. John M.
 Smith John R.
 Smith George P.
 Smith Nathaniel
 Smith Mrs. N.
 Smith N. Austin
 Smith Mrs. N. A.
 Warner W. L.
 Warner Levi P.
 Warner Mrs. L. P.
 Warner Louis H.
 Warner Wallace R.
 Warner Mrs. W. R.
 Wiley Ebenezer
 Wiley Mrs. E.
 Williams Franklin
 Williams Mrs. F.
 Williams Oliver

NOT FARMERS.

Bowman William—removed
 Bowman Mrs. William—removed
 Bartlett Mrs. Dexter
 Darling Mrs. B. C.
 Dickinson Mrs. R.
 Dunklee B. F.—removed
 Field Erastus S.
 Gaylord William—removed
 Graves Mrs. Hannah

Hemenway Mrs. B. C.—removed
 Hubbard Avery D.
 Hubbard Mrs. A. D.
 Hunt Mrs. William
 Lyman Horace
 Montague John
 Montague Mrs. John
 Pomeroy Wm. D.—removed
 Richards Mrs. Perrin D.
 Russell Mrs. A. N.
 Russell Austin R.—removed
 Russell J. Wiley **
 Russell Mrs. J. Wiley **
 Rowe Appleton E. **
 Rowe Mrs. A. E. **
 Smith Elihu **
 Smith Mrs. Elihu **
 Trow N. G., M. D.
 Trow Mrs. N. G.
 Warner Chester
 Warner Luther C.
 Williams Mrs. Henry C.

SMITHS FERRY.

Smith Milo J.

SPRINGFIELD.

Briggs J. L.
 Chaffee Hon. C. C.
 Crouch J. S.
 Hubbard Caleb T.
 Montague Isaac W.

SYRACUSE, N. Y.

Huntington Rt. Rev. F. D., D. D.

WARE.

FARMERS.

Andrews W. G.
 Bowen Sylvester
 Breckenridge Hon. W. S.
 Devens Arthur L.
 Devens Mrs. A. L.
 DeWitt Francis

NOT FARMERS.

Gilbert Mrs. G. H.
 Phelps Samuel H.
 Rice Joel
 Richards F. D.
 Sage Orrin

Stevens Hon. C. A.

WENDELL.

Whitaker A. G.

WESTBORO.

White Samuel N.

White Mrs. Samuel N.

WILLIAMSBURG.

Bartlett N. G.

Graves L. N.

WILMINGTON, VT.

Smith N. W., M. D.

Smith Mrs. N. W.

WORCESTER.

Cummings Rev. E. A.

Cummings Mrs. E. A.

Chamberlain C. N., M. D.

WHATELY.

Graves C. A.

Ludden Parmenus

WEST BROOKFIELD.

Aiken Benjamin P.

Any member whose name is not found in the above list is requested to report the fact to the Secretary.

THIRTY-FOURTH ANNUAL REPORT.

TRANSACTIONS

OF THE

Hampshire Agricultural Society,

FOR THE YEAR 1883.

AMHERST, MASS.

J. E. WILLIAMS, BOOK AND JOB PRINTER.

1883.

OFFICERS FOR 1883.

PRESIDENT,

W. W. SMITH, OF AMHERST.

VICE PRESIDENT,

W. L. WARNER, OF SUNDERLAND.

SECRETARY AND TREASURER,

FRANK E. PAIGE, OF AMHERST.

EXECUTIVE COMMITTEE.

CHARLES S. SMITH, OF AMHERST,

HENRY C. WEST, OF HADLEY,

JAMES B. PAIGE, OF PRESCOTT,

A. W. STACY, OF BELCHERTOWN,

B. M. FIELD, OF LEVERETT.

AUDITOR,

E. D. BANGS, OF AMHERST.

DELEGATE TO THE STATE BOARD OF AGRICULTURE,

W. L. WARNER, OF SUNDERLAND.

SECRETARY'S REPORT.

Our Fair this year was a grand and glorious success. None are more rejoiced than the officers who, for years, have worked and toiled, exerting every effort to maintain the old, and incite new interest among the members of the society and those outside of it. Yet their efforts in the past have only been partially rewarded on account of the storm that invariably comes on the days of the Fair. But this year was an exception, warm, cloudless, and beautiful days were bestowed upon us, and the officers, stimulated by the propitious weather, went to work with new zeal and energy to add every possible comfort and enjoyment to those who were in attendance. That the efforts of the officers were appreciated, the fair a success, the once waning interest in the society has gone, and new interest in agriculture is being diffused through the people of this section, is evidenced by the list of new members, which is larger than for some years previous.

We proudly point to the products that were gathered in the hall, as a proof of Hampshire and Franklin county farmer's skill in wringing from the soil the choicest fruits and vegetables. If we have not the abundance of our Western brothers, we glory in our crops as the product of thought, labor and industry.

In number the entries in Fancy Articles, etc., were not as numerous as last year, but all agree who examined the various articles with care, that they were far superior in quality and point of beauty to those of last year.

Outside the hall was a surprise to every one, not even the most sanguine officer anticipated such a display of the finest of herds and flocks as were on exhibition. The reports of J. C. Dillon, George P. Smith, and W. L. Boutwell, printed elsewhere, partially describe the entries.

The financial condition of the society can be ascertained by an examination of the Treasurer's Report. The society were obliged to borrow \$200, \$100 of which was expended in shingling one side of the hall, the balance, with the amount subscribed by a few energetic citizens, in repairing the track, and we can now truly boast of the finest half mile track in the State. One hundred dollars of the sum borrowed has been repaid. The expenses have been unavoidably large this year, yet the officers have endeavored to be prudent and practiced strict economy.

During the winter the required number of Institutes were held. They were well attended and proved profitable and beneficial to all. I trust that the members and all others interested in agriculture will be in attendance at the institutes this winter. Nothing can be of more profit to the farmer than these, as it affords a meeting where farmers can compare the labors of the past year, relate experiments which they have tried, so that others may profit by them, suggest new ideas and thoughts, propound new questions and theories, and above all, it tends to stir up a spirit of sociability, which farmers as a rule lack.

In conclusion I desire to urge every member of the society and all others interested in it to contribute something to our next Fair, see to it that your neighbor and all in your immediate vicinity do so, attend the institutes, and by your acts and deeds show to all that you are interested in agriculture and in the best welfare of the Hampshire Agricultural Society.

Thanking all who have aided us in our last Fair, either as members, officers, or contributors, and trusting they will continue so to do,

I am, yours truly,

FRANK E. PAIGE,

Secretary.

LIST OF PREMIUMS AWARDED.

CLASS 1—TOWN TEAMS. 3 ENTRIES.

Hadley,	\$20 00
Amherst,	15 00
Pelham,	10 00

CLASS 2—FANCY CATTLE. 6 ENTRIES.

H. C. West, Hadley,	\$4 00
Chester Smith, Hadley,	3 00
Dwight Presho, Pelham,	2 00

CLASS 3—WORKING OXEN. 13 ENTRIES.

G. W. Morgan, Belchertown,	\$4 00
N. A. Dudley, Leverett,	3 00
W. B. Fales, Pelham,	2 00

CLASS 4—STEERS. 16 ENTRIES.

W. M. Kellogg, Amherst,	3 years old,	\$3 00
C. W. Thurber, Leverett,	" "	2 00
G. W. Morgan, Belchertown,	" "	1 00
" " "	2 " "	3 00
F. Gaylord, Amherst,	" "	2 00
R. Fitts, Shutesbury,	" "	1 00
David Pomeroy, Amherst,	1 " "	2 00

CLASS 5—MILCH COWS. 19 ENTRIES.

W. A. Childs, New Braintree,	Ayrshire,	\$4 00
" " "	" "	3 00
" " "	" "	2 00
Bishop F. D. Huntington, Hadley,	Jersey,	4 00
G. W. Fitch, Amherst,	"	3 00

P. D. Hubbard, Sunderland,	Native or Grade,	\$4 00
W. A. Childs, New Braintree,	“ “	3 00
J. P. Smith, Amherst,	“ “	2 00

CLASS 6—HERD OF MILCH COWS. 5 ENTRIES.

W. A. Childs, New Braintree,		\$5 00
J. P. Smith, Amherst,		4 00
G. W. Fitch, “		3 00
H. C. West, Hadley,		2 00
W. A. Childs, New Braintree,	Best 5 Thoroughbreds,	5 00

CLASS 7—HEIFERS. 20 ENTRIES.

G. W. Fitch, Amherst,	Thoroughbred 1 year old,	\$2 00
L. W. West, Hadley,	“ 1 “	1 00
G. W. Fitch, Amherst,	“ 2 “	3 00
W. A. Childs, New Braintree,	“ 2 “	2 00
F. Gaylord, Amherst,	“ 2 “	1 00
E. D. Huntington, Amherst.	Grade 1 “	2 00
J. P. Smith, “	“ 1 “	1 00
W. A. Childs, New Braintree,	“ 2 “	3 00
L. W. West, Hadley,	“ 2 “	2 00
W. A. Childs, New Braintree,	“ 2 “	1 00

CLASS 8—BULLS. 6 ENTRIES.

W. A. Childs, New Braintree,	Ayrshire,	\$4 00
G. W. Fitch, Amherst,	Jersey,	4 00
W. A. Reed, Hadley,	Guernsey,	4 00
H. C. West “	Jersey,	2 00
Chester Smith, “	Durham,	2 00

CLASS 9—CALVES. 8 ENTRIES.

P. D. Hubbard, Sunderland,	Thoroughbred bull calf,	\$2 00
G. W. Fitch, Amherst,	“ “	1 00
“ “ “	Heifer calf,	2 00
“ “ “	“	1 00
Dwight Morton, Hadley,	Steer calves,	2 00

CLASS 10—HERDS OF CATTLE. 6 ENTRIES.

W. A. Childs, New Braintree,		\$6 00
L. W. West, Hadley,		5 00
G. W. Fitch, Amherst,		4 00
J. P. Smith, “		3 00
H. C. West, Hadley,		2 00

CLASS 11—SWINE. 13 ENTRIES.

Josiah Cook, Hadley,	Sow and pigs,	\$4 00
H. C. West, “	“ “	3 00
J. W. Allen, Amherst,	“ “	1 00
Josiah Cook, Hadley,	Weaned pigs,	4 00
E. N. Fisher, Belchertown,	“	3 00
L. W. West, Hadley,	“	1 00
Josiah Cook, Hadley,	Grade boar,	4 00
C. H. Kellogg, Amherst,	“	3 00
H. C. West, Hadley,	Thoroughbred boar,	4 00
“ “ “	“	3 00
L. W. West, “	“	1 00

CLASS 12—SHEEP. 13 ENTRIES.

G. Greene, Hadley,	Buck,	\$4 00
D. Morton, “	“	3 00
Rufus A. Cook, Hadley,	“	2 00
D. Morton, “	Lot 25 sheep,	6 00
James Comins, “	“ 8 ewes,	4 00
Rufus A. Cook, “	“ “	3 00
G. Greene, “	“ “	2 00

CLASS 13—POULTRY. 54 ENTRIES.

Thomas Smith, Belchertown,	Best display,	Samuel's
“ Birds of New England.”		
W. J. Seelye, Amherst,	Trio Brahmas,	\$2 00
E. C. Parker, “	“ “	1 00
George Graves, “	“ Plymouth Rocks,	2 00
“ “ “	“ “	1 00
Thomas Smith, Belchertown,	Trio Hamburgs,	2 00
M. B. Kingman, Amherst,	“ White Leghorns,	2 00
L. W. Goodell, Belchertown,	“ “ “	1 00
M. B. Kingman, Amherst,	“ Brown “	2 00
W. J. Seeley, Amherst,	“ “ “	2 00
Henry Harris, “	Black-Red Games,	2 00
Harvey Stone, “	“ “	1 00
J. C. Dillon, “	Dorking Games,	2 00
“ “ “	“ “	1 00
Thomas Smith, Belchertown,	Bantams,	2 00
M. B. Kingman, Amherst,	“	1 00

E. N. Fisher, Belchertown,	Turkeys,	\$2 00
Thomas Smith, " "	" "	1 00
" " " "	Ducks,	2 00
Walter F. Gaylord, Amherst,	" "	1 00
Thomas Smith, Belchertown.	Geese,	2 00
R. H. Howard, Amherst,	Cochins,	2 00
Thomas Smith, Belchertown.	" "	1 00

CLASS 14—MECHANIC ARTS AND FARM IMPLEMENTS.

E. A. Munsell, Amherst,	Mowing machine,	Diploma.
T. H. Hastings, " "	Perry Seeder,	" "
" " " "	Spring tooth harrow,	" "
" " " "	Cultivator,	" "
Lee & Phillips, " "	Bread Mixer,	" "
G. W. Newell, " "	Organ,	" "
C. R. Kenfield, " "	Guns,	" "
A. W. Hall, " "	Express wagon,	" "
Nathan Olney " "	Timmers Punch,	" "
E. Steadman, Chicopee.	Stoddard Churn,	" "

CLASS 15.—MERCANTILE GOODS. 5 ENTRIES.

F. H. Howes, Amherst.	Best display,	\$10 00
E. D. Marsh, " "	" "	8 00
W. W. Hunt, " "	" "	6 00
Lee & Phillips, " "	" "	4 00
W. Wilbur, " "	Gratuity,	7 00

CLASS 16—DOMESTIC AND OTHER MANUFACTURES. 20 ENTRIES.

Miss Hattie King, Amherst,	Bed quilt,	\$ 50
Mrs. O. F. Morse, " "	Rug,	50
Miss Alva Blodgett, " "	Rug,	75
Mrs. L. M. Dickinson, " "	Skirt,	75
" " " "	Afghan,	1 00
Mrs. E. D. Baker, " "	Rag Carpet,	75
Mrs. Oscar Barron, " "	Bed quilt,	25
Mrs. W. M. Thurber, " "	Carpet,	50
Mrs. Belle Wrigley, " "	Rag Carpet,	1 00
" " " "	6 pairs hose,	75
" " " "	4 pairs mittens,	75
Mrs. Sanford Boice, " "	Bed Spread,	50
" " " "	Blanket,	75
Mrs. Chas. Currier, " "	Mat,	50

Mrs. C. B. Greene, Hadley,	Bed quilt,	\$ 50
Laura Moody, Amherst,	"	75
Mrs. Chas. E. Kingsley, Hatfield,	"	1 00
Mrs. C. C. Tilley, Amherst,	Mat,	1 00
Mrs. D. A. Horton, Hadley,	Bed quilt,	1 00

CLASS 17—FANCY ARTICLES. 90 ENTRIES.

Miss Jennie Cowles, Amherst.	Table scarf,	\$ 75
Mrs. Chas. Deuel, "	Sofa pillow,	75
Miss Nellie Rice, Leverett,	Fan,	10
Mrs. F. Deuel, Amherst.	Mats.	15
A. E. Smith, "	Basket,	10
C. E. Allen, "	Tidy,	10
Mrs. A. P. Brown, "	"	10
Belle and Abby Fitch "	"	15
Mary and Nettie Piper, "	"	25
Lena Fitch, "	"	10
Emma Moulton, "	"	10
Mrs. E. J. Leach, "	Cushion,	70
Miss Mabel Leach, "	"	15
Miss Hattie King, "	Paintings,	1 00
Amelia Dickinson, "	Tidy,	35
Lucy Boice, "	"	50
Mrs. S. W. Boutwell, Leverett,	Tidy and Mat,	15
Miss M. Deane, Amherst,	Table scarf,	1 00
" " "	Lamp screen,	50
Miss Clara Sykes, "	Tidy,	50
Mrs. Belle Clapp, Leverett,	Chair,	50
Mattie and Anne Jewett, Pelham,	Tidy,	15
Miss S. M. Robinson, Amherst,	"	10
Miss Lessie N. Goodell, "	"	10
Mrs. S. W. Boutwell, Leverett,	Bird,	50
Mrs. C. G. Wakefield, Amherst,	Tidy and picture,	1 00
Mrs. Wm. Crocker, Sunderland,	Tidy,	25
Mrs. D. A. Horton, Hadley,	Lambrequin,	25
Mrs. W. Blanchard, Amherst,	Fancy work,	3 00
Alice A. Purple, "	Fancy clock,	1 00
Mrs. M. Merchants, "	Fancy work,	2 50
Mrs. C. E. Kenfield, "	Table spread,	1 00
Miss Cora Porter, "	Handkerchief box,	50

Mrs. J. B. Kenfield, Hadley,	Bed spread,	\$2 00
Mrs. Henry Shaw, Amherst,	Spread,	25
Mrs. Belle Wrigley, "	"	75
Miss Josie Gilbert, "	Afghan,	75
" " " "	"	25
Miss Mary Y. Clark, "	Tidy,	40
Mrs. H. L. Clark, Hadley,	"	25
Mrs. C. L. Ensign, Amherst,	"	50
Mrs. C. E. Kenfield, "	Silk bed spread,	1 00
Chas. Deuel, "	Show ease,	10 00
Mrs. D. A. Horton, Hadley,	Bed spread,	75
Mrs. C. E. Kingsley, "	"	50
Mrs. C. S. Sawyer, "	"	30
Mrs. E. Ayers, Amherst,	Spread,	50
Mrs. J. C. Dillon, "	Pencil drawing,	75
George O. Pierce, "	Colored flowers,	20
Minnie Moulton, "	Tidy,	15
Miss Mary Clark, "	"	40
Mrs. G. E. Clark, "	"	50
Miss Lizzie Ball, "	"	10
Miss Susie Cutting, "	Scarf,	15
Mary Chapin, "	Tidy,	20
Lessie Wrigley, "	"	15

CLASS 18—FINE ARTS. 5 ENTRIES.

Mrs. L. M. Pierce, Amherst,	Painting,	\$ 75
Miss Hattie King, "	"	2 00
Mrs. C. E. Wakefield, "	Picture,	50

CLASS 19—BREAD, BUTTER AND CHEESE. 18 ENTRIES.

Mrs. James Comins, Hadley,	Sage Cheese,	\$2 00
" " " "	Cheese,	1 00
Mrs. Belle Wrigley, Amherst,	Wheat bread,	1 00
Mrs. Chas. Kellogg, "	"	2 00
Mrs. S. W. Boutwell, Leverett,	Butter,	5 00
Mrs. E. C. Parker, Amherst,	"	3 00
Mrs. Belle Wrigley, "	"	2 00
Mrs. S. W. Boutwell, Leverett,	Rye and Indian bread,	2 00
Mrs. Chas. Kellogg, Amherst,	Graham bread,	2 00
Mrs. E. C. Parker, "	"	1 00
Mrs. E. C. Parker, "	Rye bread,	2 00

CLASS 20—HONEY, WINES, CANNED AND DRIED FRUIT. 26 ENTRIES.

Mrs. L. W. West, Hadley,	Jellies,	\$2 00
Miss Sarah Kingman, Amherst,	"	1 00
Mrs. S. W. Boutwell, Leverett,	"	50
Mrs. L. W. West, Hadley,	Canned fruit,	2 00
Mrs. S. W. Boutwell, Leverett,	"	1 00
Mrs. J. C. Dillon, Amherst,	"	50
Mrs. L. W. West, Hadley,	Pickles,	2 00
Miss Sarah Kingman, Amherst	"	1 00
Mrs. Sanford Boice. "	Dried apple,	50
Mrs. J. C. Dillon, "	"	1 00
Mrs. S. W. Boutwell, Leverett,	Honey,	1 00
Mrs. L. W. West, Hadley,	Syrup,	50
R. G. Williams, Amherst,	Soy,	1 00
" " "	Cordial,	1 00

CLASS 21—FRUIT. 5 ENTRIES.

F. B. Paige, Prescott,	Basket.	\$4 00
W. W. Smith, Amherst,	"	2 00
E. A. Munsell. "	Display,	4 00
R. G. Williams, "	"	2 00
E. C. Parker, "	"	1 00

CLASS 22—FRUITS GROWN BY EXHIBITOR. 41 ENTRIES.

W. W. Smith, Amherst,	Best collection apples,	\$4 00
E. A. King, "	" "	3 00
W. A. King, "	" "	2 00
E. A. Munsell, "	" "	1 00
" " "	" pears,	4 00
F. B. Paige, Prescott,	" "	3 00
D. S. Cowles, Amherst,	" "	2 00
Charles Cowles, "	" quinces,	1 00
E. A. Munsell, "	" grapes,	4 00
D. S. Cowles, "	" "	3 00
R. G. Williams, "	" "	2 00
F. B. Paige, Prescott,	" "	1 00
A. D. Loomis, Amherst,	" peaches,	2 00
F. B. Paige, Prescott,	" "	1 00
A. Gates, Pelham,	" cranberries,	1 00
E. C. Parker, Amherst,	Best 20 Baldwin apples,	50
" " "	" Greening "	50

CLASS 23—VEGETABLES GROWN BY EXHIBITOR. 100 ENTRIES.

E. C. Parker, Amherst,	Collection,	\$5 00
R. G. Williams, “	“	4 00
F. B. Paige, Prescott,	“	3 00
T. W. Smith, Amherst,	Exhibition potatoes,	2 00
W. P. Montgomery, Pelham,	Best peck potatoes,	1 00
Austin Loomis, Amherst,	“ onions,	1 00
H. A. Parsous, “	Exhibition carrots,	1 00
J. C. Dillon, “	“ beets,	1 00
R. G. Williams, “	“ garden beets,	50
James Comins, Hadley,	“ Ruta-Bagas,	1 00
Belle Wrigley, Amherst,	“ tomatoes,	1 00
James Comins, Hadley,	Peck beans,	50
A. Gates, Pelham,	“	1 00
R. G. Williams, Amherst,	Exhibition pumpkins,	1 00
David Pomeroy, “	“ cabbages,	2 00
Bishop F. D. Huntington, Hadley,	Exhibition sweet corn,	2 00
W. M. Goodell, Amherst,	“ “	1 00
E. C. Parker, “	“ winter squashes,	2 00
R. G. Williams, “	“ “	1 00
E. C. Parker, “	“ winter wheat,	1 00
James Comins, Hadley,	“ spring wheat,	1 00
C. R. Dickinson, Amherst,	“ rye,	50
E. N. Fisher, Belchertown,	“ “	1 00
A. Gates, Pelham,	“ oats,	50
E. N. Fisher, Belchertown,	“ “	1 00

CLASS 24—FLOWERS. 12 ENTRIES.

L. W. Goodell, Belchertown,	Collection,	\$5 00
Mrs. S. W. Boutwell, Leverett,	“	3 00
Mrs. E. C. Parker, Amherst,	“	2 00
Mrs. S. W. Boutwell, Leverett,	Wild flowers,	2 00
Mrs. E. C. Parker, Amherst,	Roses,	2 00
L. W. Goodell, Belchertown,	Asters,	2 00
“ “ “	Verbenas,	2 00
Mrs. E. C. Parker, Amherst,	Gladioli,	2 00
Mrs. S. W. Boutwell, Leverett,	Bouquet,	2 00
L. W. Goodell, Amherst,	“	1 00

CLASS 25—STALLIONS. 5 ENTRIES.

C. B. Davis, Holyoke,	\$8 00
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P. D. Hubbard, Sunderland,		\$5 00
Palmer Bros., Huntington,	Gratuity,	3 00

CLASS 26—BREEDING MARES WITH SUCKING COLTS. 11 ENTRIES.

F. F. Adams, Leverett,		\$5 00
D. H. Bartlett, Amherst,		4 00
H. W. Cook,	“	3 00
R. H. Allen, Prescott,		2 00

CLASS 27—COLTS AND FILLIES. 15 ENTRIES.

Chas. Russell, Sunderland,	Stallion 3 years old,	\$3 00
Dr. J. J. Vincent, Amherst,	“ 3 “	2 00
L. S. Dyer, Hatfield,	Colt, 3 “	3 00
R. H. Allen, Prescott,	“ 3 “	2 00
W. Ahern, Sunderland,	“ 3 “	1 00
W. G. Cunningham, Hadley,	“ 2 “	3 00
B. F. Kendrick, Amherst,	“ 2 “	2 00
W. C. Owen,	“ 2 “	1 00
Patrick Donahue,	“ 1 “	2 00

CLASS 28—FARM HORSES. 8 ENTRIES.

C. W. Thurber, Leverett,	Pair,	\$4 00
F. G. Shaw, Belchertown,	“	3 00
O. D. Hunt, Amherst,	Single,	3 00
H. M. Whitaker, Leverett,	“	2 00

CLASS 29—DRAFT HORSES. 2 ENTRIES.

H. A. Parsons, Amherst,	Single,	\$3 00
O. P. Gaylord,	“ Pair,	1 00

CLASS 30—CARRIAGE HORSES. 11 ENTRIES.

A. Hubbard, Sunderland,	Pair,	\$6 00
B. F. Dewitt, Grauby,	“	4 00
G. F. Hobart, Amherst.	“	2 00
Chester Smith, Hadley,	Single,	6 00
Palmer Bros., Huntington,	“	4 00
L. W. Hill, Amherst,	“	2 00

CLASS 31—ROADSTERS. 4 ENTRIES.

F. H. Graves, Sunderland,	Single,	\$6 00
F. A. Ingram, Amherst,	“	4 00
C. C. Robinson, Hinsdale,	Pair,	2 00

AWARDED UNDER FOURTH DIVISION.

Eddie A. Parker, Amherst,	Experiment on $\frac{1}{8}$ acre potatoes, Samuel's "Birds of New England."	
J. C. Dillon, Amherst,	Corn,	\$5 00
" " "	Peach trees,	Diploma.
Alvin Sanderson, Sunderland,	Onions,	\$5 00
" " "	Potatoes,	5 00
J. C. Dillon, Amherst.	" Samuel's "Birds of New England."	
J. C. Dillon, Amherst.	Report,	\$5 00
George P. Smith, Sunderland,	"	4 00
W. L. Boutwell, Leverett,		3 00

BICYCLE RACE.

J. E. Goldthwait, Amherst,		\$10 00
A. de Almedia, "		6 00
F. M. Williams, "		4 00

WHEELBARROW RACE.

George Miller, Amherst,		\$5 00
Frank Raymond, "		3 00
R. W. Crowell, "		1 00

RACES. PURSE \$50.

C. R. Pomeroy,	Eventide,	\$25 00
F. A. Kilburn,	James K.,	15 00
C. H. Halfield,	Clara H.,	10 00

2-30 CLASS. PURSE \$100.

C. A. Sweetser,	Brown Johnnie,	\$40 00
H. H. Carter,	Kate Harris,	30 00
A. Dutton,	Johnnie,	20 00
George Sawtelle,	Fanny Allen,	10 00

2-40 CLASS. PURSE \$75.

C. H. Hatfield,	Surprise,	\$30 00
C. R. Pomeroy,	Molly F.,	20 00
C. B. Davis,	Billy Jefferson,	15 00
C. H. Woodman,	Kittie,	10 00

STATEMENT ON CORN.

BY JOHN C. DILLON.

Committee on crops, Gentlemen:—

The acre of corn which I have entered for premium, is one of five lately purchased by Mr. William Westcott, and may be described as a stony loam, resting on a gravelly subsoil. The land has been in the hands of the Smith Charities by foreclosure of mortgage, and has been let on shares for several years, without, as far as I can learn, much profit to the lessors or the cultivators. Last year the land lay fallow, and at Mr. Westcott's suggestion I undertook the cultivation of it this season.

The terms of the arrangement were as follows:—Mr. Westcott was to furnish two tons of Stockbridge Corn Manure at \$45 per ton, and I was to provide seed, plough, plant, cultivate, cut and stook the crop for \$60, or \$12 per acre; and we were to divide the crop in the stook on this basis. I was also to have the privilege of taking the whole crop, if I chose, by paying Mr. Westcott \$100, the regular market price of the fertilizer.

The corn was planted the 4th of June, and up to August 1st was regarded as very promising. During the cold dry weather in August it grew and matured very slowly, and the severe frosts of the nights of September 2d and 9th destroyed all hope of a profitable crop.

Nevertheless, having entered the crop for premium, and kept a particular account of its cost, I have thought best to forward the details of the experiment. It is claimed that failures are often as instructive as successes; and to offer an acknowledged failure for premium will, at least, have the merit of novelty.

The following is an account of seed, labor, and fertilizer on the five acres, and estimated value of the crop:

CORN CROP ON FIVE ACRES OF LAND.

In Account with

W. S. WESTCOTT AND J. C. DILLON.

1883.

May 25 to 29.	To ploughing, man and team, 25½ hours, at \$3.50 per day,	\$8 92
“ 30.	To harrowing and crop harrowing 15 hours,	5 25
June 1.	To marking rows 3 ft. apart, both ways, 8 hours,	2 80
“ 4.	To seed corn, (early Northern), 5 pecks, Planting by hand planter,	1 25 1 50
“ 5.	Fertilizer,	90 00
“ 6.	Sowing and covering with smoother, Cultivating four times, Hoeing twice, Cutting, binding and stooking,	4 50 12 00 15 00 9 00
		<hr/>
		\$150 22
	Husking 228 baskets at 5 cts.,	11 40
		<hr/>
	Total cost of crop,	\$161 62

Cr.

By 6840 lbs. mixed corn on the ear, worth, for home use, 75 cts. per 100 lbs.,	\$51 30
By 17005 lbs. cornfodder, at \$4 per ton in the field,	34 00
	<hr/>
Total value of crop,	\$85 30
	<hr/>
Loss on crop,	\$76 32

The total yield was 304 stooks of which an average sixteen weighed 1255 lbs., and yielded 12 baskets averaging 30 lbs. of mixed corn. Some of this was handsome seed corn, while more than half of it was too soft to be cribbed and had to be spread on the attic floor. From these data I have estimated the crop as above. This is not a very encouraging result, but the situation is not without its consolations. And first, most of the work was done by myself at odd times, and

therefore was not felt as it would have been if I had had to attend at stated hours. Secondly, if I had not taken this job I should have plowed in five acres of rye at home, and planted it to corn as I intended. This five acres of rye yielded 70 bushels, and $3\frac{1}{2}$ tons of straw, so that my position, *as it is*, and *as it might have been*, if I had not taken the Westcott lot, may be thus stated:

AS IT IS.

Cr.

By $\frac{2}{5}$ lbs corn crop as above,	\$35 12
By 70 bushels rye, at 80 cts.,	56 00
By $3\frac{1}{2}$ tons straw, at \$9,	31 50
	<hr/>
	\$122 62

Dr.

To cost of raising of harvests, corn,	\$60 32
To husking my share,	4 56
To harvesting and threshing rye,	17 00
	<hr/>
	\$81 88
	<hr/>
Profit on the double crop,	\$40 74

AS IT MIGHT HAVE BEEN.

Dr.

To cost of raising and harvesting 5 acres of corn as above.	\$60 22
To Fertilizer,	90 00
To husking,	11 40
	<hr/>
Total cost of 5 acres as above,	\$161 62

Cr.

By five acres of corn as above,	\$85 30
	<hr/>
Making the loss on the crop,	\$76 32
Add balance of profits on corn and rye as above,	40 74
	<hr/>
Advantage of present position,	\$117 06

These calculations seem to show that in spite of appearances my experiment in co-operative planting was a fortunate and profitable one. It may be contended that my saving my rye crop was entirely accidental, and distinct from the question of profit and loss on the corn crop. But it was not more accidental than the premature freeze ; and the fact remains that I am at least \$100 better than I should have been if I had plowed in the rye and planted the corn, buying my own fertilizer, and then losing more than half the crop by frost.

I have also learned two lessons from this years' experience :—

First, that it is not absolutely safe to plant even early corn as late as the first week in June.

Second, that a killing frost may come a fortnight before the full moon in September.

JOHN C. DILLON.

Amherst, Mass., Oct. 29th, 1883.

STATEMENTS ON POTATOES.

BY JOHN C. DILLON.

Committee on Crops, Gentlemen:—

The half acre of potatoes which I offer for premium was planted on a sandy loam in rather low condition, having yielded a poor crop of rye in 1881, and with the help of commercial fertilizers a still poorer crop of corn in 1882. It was ploughed early in April, seven inches deep, and planted May 1st, twelve rows with St Patricks, and twenty-six rows with Burbanks. In planting, I made with a two-horse plow, furrows six inches deep and three feet apart, dropped whole potatoes, planting size, eighteen inches apart, and covered them by hand hoe with three inches of soil. In a few days, I spread along the furrows two cords of well rotted manure—mainly corn stalks, which, after being picked clean by the cows, had served as bedding for the horses, and had afterwards been kept in a fermenting condition through the winter by daily applications of "slops" from the house. This manure was thrown over early in April, and at the time of planting the potatoes, was well rotted and fine. I then harrowed the piece thoroughly with a rotary harrow, cultivated twice and hoed once.

the twelve rows of St. Patricks yielded thirty-eight bushels marketable potatoes, three bushels planting size (two to four oz.,) and about five pecks of small.

The twenty-six rows of Burbanks yielded seventy-nine bushels marketable, six bushels planting, and two bushels small.

In a number of experiments I have found the yield of these two varieties to be about equal, and they are equally fair, handsome, and

good keepers, but the quality of the St. Patricks is decidedly superior.

Except for earliness, I think the St. Patricks has no superior in any valuable property. The following is an account of the crop and the cost of making it:—

41 bushels St. Patricks, at 60 cents,		\$24 60
85 bushels Burbanks, at 50 cents,		42 50
3 $\frac{1}{4}$ bushels pig potatoes,		50
		<hr/>
Value of crop,		\$67 60
Plowing, planting and cultivating,	\$8 00	
Seed, 16 bushels at 75 cents,	12 00	
Manure and applying,	16 00	
Paris green and plaster,	1 30	
Digging,	4 50	
		<hr/>
Total cost of raising,		\$41 80
		<hr/>
Profit on $\frac{1}{2}$ acre,		\$25 80

Yours, very respectfully,

Amherst, Oct. 29th, 1883.

JOHN C. DILLON.

BY ALVIN SANDERSON.

The piece of land contained one acre, plowed and furrowed in early spring. The furrows were filled with tobacco stalks, no other fertilizer being used. Variety of potato used, Beauty of Hebron. Five bushels being used, cut to single eyes and planted one foot apart. Said crop was cultivated and hoed three times, and in August dug and sold for 50 cents per bushel.

Tobacco stalks,	\$8 00
Plowing and harrowing,	3 00
Seed and planting,	7 00
Cultivating and harvesting,	11 00
	<hr/>
Dr.,	\$29 00
Cr. by 370 bushels, at 50 cents,	\$185 00

BY EDDIE A. PARKER,

12 years old.

The piece of potatoes for boys, of one-eighth of an acre, plowed in the spring. Put three loads of manure on to it and subsoiled it in. It was furrowed out and sixty lbs. fertilizer dropped in the hill and covered, and the potatoes dropped and covered. The kind was Beauty of Hebron. It was cultivated out twice, and hoed twice.

Dr.	To plowing and harrowing,	\$ 50
	Manure, 3 loads,	6 00
	Fertilizer,	1 00
	Cultivating and hoeing,	1 00
	Digging and harvesting,	2 00
	One-half bushel potatoes,	50
		<hr/>
		\$11 00
	Half the manure left in the ground,	3 00
		<hr/>
		\$8 00
Cr.	By 26 1-2 bushels potatoes at 50 cents,	\$13 25
	For raising crop,	8 00
		<hr/>
	Leaving profit,	\$5 25

This piece was turf land.

STATEMENT ON ONIONS.

BY ALVIN SANDERSON.

The piece of land contained eighty-four rods and had been used for onions three consecutive years. Nothing but Bradley's Phosphate being used, three hundred lbs. each year. The land was plowed last fall, 1882. Early in the spring the ground was smoothed and two lbs. Danver's onion seed, sown in drills 15 inches apart. Said land was cultivated and wed four times. They were harvested as soon as ripe and sold.

Dr. Manure, 300 lbs. phosphate, at \$2.15,	\$6 45
Plowing and fitting,	2 00
Seed and sowing,	3 00
Cultivating and harvesting,	25 00
	<hr/>
	\$36 45
Cr. 370 bushels onions at 46 cents,	\$170 20

STATEMENT ON PEACH TREES.

Committee of Hampshire Agricultural Society,

GENTLEMEN :—

The thirty peach trees I enter for premium were planted May 3d, 1883. Before planting I trimmed them to single stems. They were then set out fifteen feet apart each way, and the land planted to corn, which would have been a good crop had it not been necessary to cut it prematurely to save it from the frost. The land is good corn land, and is in good heart. The trees were rather long in starting, but have since made a very satisfactory growth. I got the trees from the Mass. Agricultural College.

Respectfully,

JOHN C. DILLON.

Amherst, Oct. 29th, 1883.

REPORT ON MILCH COWS.

Selfishness is not only a prominent, but, in some sense, an indispensable attribute of animated being under the present dispensation ; and it is an important mission of Agricultural and other societies so to cultivate and direct this propensity that each individual shall be stimulated to work earnestly and intelligently for the welfare of the community.

To this end the Hampshire Agricultural Society offers premiums for the best horses, cows, sheep, swine, fowls, plows, pickles, and patchwork quilts ; and by the addition of a little trotting, some music and considerable eloquence, tries to attract as many as possible to admire and emulate the farmers success, and to study and discuss the means by which the best results have been or may be attained.

The Society also offers five premiums for reports by the Committees of Award ; and these, I presume, are intended to elicit such criticisms, observations and suggestions, as may point out and impress the lessons of the past exhibition and help and guide the Society, managers, exhibitors and visitors, to make each succeeding fair more enjoyable and profitable.

The first day of the Thirty-fourth Annual Cattle Show and Fair of the Hampshire County Agricultural Society, was fortunate in many of the essential features of a farmer's festival. The weather was delightful, the exhibition of stock, vegetables, fruits and industrial products of all kinds was full and admirable, the dinner was good and well served, and the speeches were short, pertinent and interesting.

But the delegates from the State Board of Agriculture asked, "Where are the people?"

The true and simple reply would have been, "Most of them are at home, getting ready for the horse show." The average fair-goer

cares little more about a horse than he does about a hog ; but the race furnishes a temporary excitement more gratifying than the contemplation of udders and sirloins, fleeces, hams, poultry and agricultural implements.

And so, year by year, the attendance at the cattle show has waned, and that at the horse show has waxed ; until, at present, the school keeps, the pop corn man and the whip vender come not, and the "First Day" is sacred to stock, industrial products, exhibitors, committees, officers of the society, and the few old fashioned people who feel an interest in these matters. And, if it be so, so be it.

We should of course prefer to think that the cattle show is in fact as well as in name the chief attraction of the fair. We should be glad if the public would display a more lively interest in the matters which occupy our thoughts and employ our labors during the year. But as this is plainly unreasonable, let us devote our energies to making the most of the day as a means of mutual instruction, benefit and enjoyment. We shall do this more permanently and effectually if we also try to make it profitable, in a pecuniary sense.

By the bounty of the State and the exertions of its officers, the Society has a considerable fund which it is anxious to dispense in premiums for earnest, well directed efforts for the promotion of agriculture ; and only the apathy of farmers themselves prevents the beneficial influence of the Society from being extended tenfold.

Now brother farmers, let us have a change. Let us prepare for the fair of 1884, and all succeeding fairs, by improved cultivation of our crops, and by increased care in the selection, breeding and management of our stock. Let us encourage our children to raise and make something worthy of exhibition and premium. And, when the time comes, let us exhibit the best products of our thought and labor, together with such statements as the Society requires, and have a good time, and get well paid for our trouble into the bargain.

As a rule the man who exhibits his cow for a premium will do more good than the one who sends his just to help out the show. The former will make out and send the required statements as to the breeding, management and produce of his cow, and both cow and statement will at least be examined and criticised by his competitors and the committee ; while the other will not affect the personal interests of any one ; and is quite likely to escape all particular notice whatever.

Let us then try to help others by helping ourselves. The Society is well to do and liberal; and, as old Gray said at the raising, "Come gentlemen, let's be walking up and taking some of her."

In the class of milk cows at the last fair, the display was good in quality; but the eighteen premiums offered ought to have brought out more than nineteen specimens: and, even with a liberal construction of the rules, the committee could only award eight premiums for want of the requisite statements of the milk and butter produced by each candidate. As I understand the matter, these statements are not designed as aids or guides to the committees in judging the stock, but rather for the information and instruction of the Society and the public as to the results obtainable from superior animals; and I would respectfully submit that they are of but little value for this purpose unless accompanied by an intelligent and reasonably particular description of the food, the treatment, and the general conditions under which these products were obtained. It would also seem to me an improvement on the present system, if a member were added to each committee, in classes requiring statements, for the sole purpose of receiving and deciding on the sufficiency of these statements. This would leave the committee of award to the exercise of their independent judgment, and would save the exhibitors from the temptation of making exaggerated and often absurd statements.

The Ayrshires and grades of W. A. Childs of New Braintree, came very near, in the judgment of your committee, to the standard of the representative cow of New England; and their condition and the owners clear and reasonable statements as to their yield, were deserving of honorable mention. The Jerseys and grades of Bishop Huntington and C. W. Fitch, also received and merited much admiration and favorable comment. P. D. Hubbard's grade Jersey cow was a large, gentle, and milky looking animal; a worthy granddaughter of Essex, the first Jersey bull at the Agricultural College. He was presented by Dr. Geo. B. Loring, and was the most strikingly beautiful bull I ever saw. The only fault I ever heard found with him was, "He's too handsome for a Jersey." His influence on the stock of this section is very marked and extensive. Mr. J. P. Smith showed two promising young grade Jersey cows; and his testimony, as an experienced and successful milkman, that he finds the Jersey grades profitable, is a compliment to the breed and also to the appreciation of his customers. Of the above named gentlemen, Mr. Childs took four premiums, and each of the others one. Mr. Flavel

Gaylord exhibited a good looking Shorthorn cow ; but as there was no record of her milk and butter, she was not eligible for premium. We could not but regret the absence of the stately Shorthorns which have graced former exhibitions. It may perhaps be doubted whether the Shorthorn cow is eminently adapted to the wants and conditions of the New England farmer ; but it is pleasant and instructive to see what a breed of cattle may be made by persistent liberality and judicious management.

It is customary in a report of this kind to offer some suggestions pertinent to the selection, breeding, feeding, and management of dairy cows ; but the subject was so ably—so tersely and yet so exhaustively—handled by President Stockbridge in his report on this class in 1881, that I can think of little to add.

On one point, however, it may be desirable to enlarge. I mean the treatment of the cow at and after calving. In her natural condition, the cow is a hardy, self-helpful animal, toughened by exercise and exposure to the elements. Her lacteal secretions are not comparatively greater than those of other mammals, and suffice only for the support of her calf until it can eat and digest grass. As the period of delivery approaches, the sluggishness natural to her condition, and the necessity for finding a suitable lair, combine to diminish the amount of food consumed ; and maternal anxiety and vigilance will effectually prevent her gorging herself after the calf is born. Let us contrast this with the history and treatment of the modern milch cow.

For many generations of ancestors, the milk and butter capacity has been cultivated at the expense of constitutional vigor and hardihood ; and the cow herself has been fed and treated from calfhood as if her only use were the conversion of fodder into milk. Her milking capacity has been so stimulated and prolonged since her previous calving, that she is rather weak, and low in flesh ; and her owner, whether he dries her up or not, feeds liberally to strengthen her for calving and subsequent milking. Quite likely her only exercise has been to walk from the stall to the drinking trough and back ; and many owners of cows think more about keeping them warm than about providing them with sufficient ventilation.

The milk producing functions being thus stimulated to the highest pitch, and the constitution correspondingly weakened, the farmer puts on the last straw in the shape of a warm drink or a bran mash ; and the overtaxed organization collapses in a fatal attack of milk

fever or parturient apoplexy, two diseases differing widely in character and symptoms, but both included in the common term, "dropping after calving," and both rendered more probable and more dangerous by the treatment I have described. Of course we do not want to return to the wiry hardness and comparative milklessness of the wild cow; and fortunately this is not necessary. In a quite extensive experience I have never had a case of dropping after calving; and with wide opportunities of observation, I have never known of a case which was not, in my opinion, directly traceable to overfeeding either before or after calving. Of the two, I am inclined to charge by far the greater number of cases to afterfeeding. A bran mash, or even a copious draught of tepid water are all sufficient to overload the flabby prostrate stomach, and any derangement at this crisis meets with a terrible sympathy on the part of the "co-ordinate organs."

It is a disputed point whether or not the cow should be allowed to eat the secundaries or after-birth. It is the cow's nature in a wild state to hide, or, as it is technically called, to "lay up" her calf, until it is strong enough to follow her safely and easily; and it is plainly desirable that this retreat should be as free as possible from all odors which might attract beasts of prey. To this end, the cow is taught by her instinct to eat not only the secundaries, or after-birth, but also all the excretions of her offspring for several days after its birth. Now, whenever Nature or Providence ordains the instinctive performance of any function, it usually provides that the results shall be harmonious and beneficial; and it seems fair to presume that the eating of the placenta, tends to the healthy regulation of the cow's system, and promotes and assists the secretion of milk for the calf.

In practice I allow all heifers and most cows to follow the promptings of their instinct; but, in the case of very large milkers, I sometimes remove the placenta; because I regard their condition as entirely artificial and abnormal, and I carefully avoid any indulgence which might add to the labors of the already overtaxed system. I will say, however, that I never knew a cow in any way injured by eating the placenta; while, on the other hand, I have thought that heifers especially are sensibly benefitted by it.

I make no apology for the introduction and discussion of this subject, because I am writing for those who have sense enough to appreciate the wisdom and beauty of nature's provisions. For the rest, I only

will say that the most disgusting piece of affectation I ever saw, was that of a hired man, whose chief delight was in perpetrating, witnessing, relating, discussing, and generally wallowing in filth and nastiness, pretending to gag at the sight of a clean, wholesome cow consuming, in obedience to a divinely implanted instinct, the beautiful membrane in which her calf had been enveloped in her womb, lest in its decomposition it might serve to guide the enemies of her offspring to its destruction.

JOHN C. DILLON,

Chairman of Com. on Milch Cows.

MECHANIC ARTS

AND

FARM IMPLEMENTS.

This class includes a great variety of articles. Your committee found twenty-three entries on their list. As the person named first on the committee was absent, it falls upon me to make this report.

Under the first division of the class, I will only mention two entries in particular, choosing to pass on to the second as concerning us more as agriculturalists. The tinner's punch, entered by Mr. N. Olney, of Amherst. I suppose his own invention, is simple in construction, made for power and durability. Two express wagons manufactured and entered by A. W. Hall, No. Amherst, were well made and neat looking wagons, just such as every farmer needs.

When we consider the improvement made in farm implements in the last few years, and the new inventions which are being made constantly to save manual labor, it must be admitted that the exhibitions at our last fair was not what it ought to be. Looking over the list we find, to our surprise, that the plow, the emblem of husbandry, was conspicuous by its absence. Not a solitary mouldboard! notwithstanding several new and improved plows have been brought into this region in the last few years.

In all kinds of farm tools there was little or no competition, so the committee thought best to award the diploma offered by the society

to most of the entries. Let me suggest that perhaps something more than this is needed to induce manufacturers and dealers to take the trouble and expense of showing their goods.

Taking up the list of entries, let us notice a few in particular. First, the Warrior Mower, entered by E. A. Munsell, the only machine of the kind present. Durability and easy draft are the claims of the manufacturer for this mower. Next in order we notice the Perry spring tooth implements, made by G. B. Olin & Co., Perry, N. Y., including cultivator, harrow, and seed sower and harrow combined. This last mentioned may be a good thing on the large fields of the West, but would hardly be called for in New England.

Coming to dairy implements we find a little competition, the rival creameries, Moseley's and Cooley's being on exhibition by their agents who were ready to explain the merits of each. Either creamery is a means of saving a great deal of labor in dairying over old methods. The Moseley's claim is that they use less water, and consequently save ice in raising the cream. This creamer is used by some of the best dairymen in the vicinity. The Cooley men claim a superiority for their system of submerging the milk, thus preventing all possibility of impurities from the air reaching it while the natural odors of the milk can pass into the water. The Cooley can and creamer were selected by the managers of the Amherst Creamery for its patrons to use after they had made a thorough examination of different cans used by like institutions. The great advantage in using a creamery is the ability of the dairyman to control the temperature, and raise all the cream before the milk can sour, as it is sure to do in warm weather when set in shallow pans before the cream can rise. I am satisfied that a man with a large dairy with running water or plenty of ice, will get enough more butter from milk set in that way in one year to pay the first cost of the creamer.

At the present time when it costs so much to hire laborers to do the farm work, it is very important that a farmer should have the implements to do as much as possible by horse power. This is especially true of the larger farms. That the farmers in Amherst and vicinity may have an opportunity to see the implements on the market at present without the trouble of extra travel and time for the purpose, it seems to me that the officers of this society should use every effort to make the show of implements and machines as large and complete as possible, and that the fair may be of more practical importance to us all, let as many as possible be shown in opera-

tion. We see a machine and wonder how it would work in the field, and if a farmer could have this opportunity of testing implements, it would save him the trouble of carrying home one after another, and perhaps, at last, taking one that does not suit him because it is at hand.

I have no doubt that it would prove a great advantage to manufacturers of farm machinery if they could be brought in contact with those who use them in this way. There are weak points in many machines which do not appear at first sight. In using implements I have noticed many little changes which could be made for convenience of handling, and more effective work. I hope the officers of this society will take these matters into consideration in making up the premium list next season.

GEO. P. SMITH,

Chairman Committee.

REPORT ON POULTRY.

Your committee beg leave to submit the following :—

There were fifty-four entries in this class, including some very fine specimens of pure bred fowls, nearly all of which were a credit to the exhibitor. Four entered for best display, and as there was but one premium, this was awarded to Thomas Smith of Belchertown, who exhibited ten coops, including geese, turkeys, ducks, leghorns, brahmas, cochins, hamburgs and bantams. The other premiums we will not take space to enumerate here as they will be found in the list; but just a word in regard to breed.

Every breed has its fanciers and all breeds are good in their place, but the question here is which is best, all things considered, for the farmer to raise; it is desirable of course to have good layers and also good fowls for market. Leghorns, both brown and white, are remarkably good layers, but too small for a profitable market fowl; on the other hand, large breeds like Brahmas and Plymouth Rocks, although nice market fowls, are only ordinary layers; it is easy to obtain by crossing, fowls which will have some characteristics of both parent breeds, then if your flock are Brahmas, replace the cocks with pure-bred Leghorns, and the chicks will be apt to be good layers, larger than Leghorns, and will make, when dressed for market, handsome poultry. Any farmer can improve his flock by getting a pure-bred cock from some breed having the qualities which his hens seem to lack.

We might occupy several pages in treating the subject of food and care of poultry. Indeed, this subject forms a department of most

agricultural papers. Almost all pieces written on the subject recommend a variety of grain, such as corn, wheat in some form, either screenings or rejected, oats, etc. Some kind of green food during winter, and at all times when they are kept in confinement, meat scraps and some form of lime like ground oyster shells, but the whole matter may be summed up as follows: Give them as great a variety of food as possible, and keep in a warm, sunny place.

We like to see on a farm a good collection of fowls, each kept pure during the breeding season. Keep a flock of turkeys to run at large during the summer and thin out the grasshoppers; they will almost keep themselves. Some ducks and geese will thrive in the pond or brook near by, and a good flock of hens well cared for are as profitable, considering the amount they consume, as any stock kept on a farm.

For the committee,

W. L. BOUTWELL,

Chairman.

LIFE MEMBERS, 1883.

C. C. Montague,	Amherst.
W. Wilber,	Amherst.
W. A. Reed,	Shutesbury.
E. N. Fisher,	Belchertown.
B. F. Dewitt,	Granby.
Frank E. Paige,	Amherst.
Josiah Cook,	Hadley.
Miss Lizzie Ball,	Amherst.
Rufus M. Smith,	Hadley.
E. D. Marsh,	Amherst.
Palmer Bros.,	Huntington.
Rufus A. Cook,	Hadley.
Miss Hattie J. King,	Amherst.
Frank A. King,	Amherst.
Thomas Smith,	Belchertown.
R. G. Williams,	Amherst.
F. F. Adams,	Leverett.
H. A. Parsons,	Amherst.

TREASURER'S REPORT.

FRANK E. PAIGE, TREASURER, IN ACCOUNT WITH THE HAMPSHIRE
AGRICULTURAL SOCIETY, 1883.

	Dr.
To cash from 1882,	\$122 13
“ “ Amherst Savings Bank,	200 00
“ “ Subscription to repair track,	63 00
“ “ Life members,	80 00
“ “ Entrance fee,	85 00
“ “ Peddlers,	44 50
“ “ Gate and grand stand,	500 87
“ “ State,	600 00
“ “ Donation to Society,	124 82
“ “ Ag'l College tickets,	40 00
	\$1860 32

	Cr.
By paid C. L. Russell,	\$ 6 00
“ T. G. Huntington,	5 00
“ J. E. Williams' bill,	49 50
“ Edith Clark,	50
“ Amherst Savings Bank interest,	54 87
“ Pacific Lodge, for hall,	6 00
“ C. W. Thurber,	4 00
“ Baptist Society, use of vestry,	5 50
“ E. Conkey,	3 00
“ John A. Noble, bill,	28 12

By paid S. Holland & Son, bill,	\$11 83
“ J. E. Williams, bill,	36 12
“ W. S. Westcott, bill, shingles,	61 88
“ Express,	90
“ W. W. Smith, bill, repairing track, etc.,	157 50
“ Express,	1 15
“ Russell, Morgan & Co., posters,	15 00
“ Trotting,	225 00
“ G. B. Gallond, dinner tickets,	41 00
“ Blank book,	25
“ John A. Noble, repairing fence,	11 50
“ Chas. Thompson, “	3 37
“ E. Crafts, binding books,	70
“ W. L. Stiles, watching at hall,	11 00
“ R. H. Howard, bill,	50
“ F. A. Hobbs, “	2 00
“ Paige Bros., “	5 00
“ W. L. Warner, “	1 50
“ W. S. Westcott, “	12 87
“ J. J. Potwin “	4 00
“ George Graves, “	3 00
“ Chas. Kellogg, “	8 00
“ John Wetherbee, “	2 00
“ E. T. Sabin, “	2 85
“ No. Amherst Band,	35 00
“ Frank E. Paige, Sec. and Treas.,	80 00
“ Chester Williams, bill,	5 00
“ C. S. Smith, “	4 79
“ E. A. King, “	16 50
“ G. B. Gallond, “	17 96
“ Postage, paper, etc.,	9 59
“ Amherst Savings Bank, on note,	102 40
“ Premiums,	701 90
Cash on hand,	105 77
	<hr/>
	\$1860 32

FINANCIAL CONDITION OF THE SOCIETY.

LIABILITIES.

Notes at Amherst Savings Bank,	\$900 00	
Interest due Jan. 1st, 1884,	27 00	
Interest due July 1st, 1884,	27 00	
Printing annual reports,	37 00	
	<hr/>	\$991 00
Cash on hand,		105 77
Total indebtedness of Society,		<hr/>
		\$885 23

AMHERST, Dec. 4, 1883.

I hereby certify that I have examined the accounts of Frank E. Paige, Treasurer of Hampshire Agricultural Society for 1883, and find them correct, with a balance in the treasury of one hundred and five dollars and seventy-seven cents.

E. D. BANGS, *Auditor.*

THIRTY-FIFTH
ANNUAL REPORT.

TRANSACTIONS

OF THE

HAMPSHIRE AGRICULTURAL SOCIETY,

FOR THE YEAR 1884.

AMHERST, MASS.
J. E. WILLIAMS, BOOK AND JOB PRINTER.
1884.

OFFICERS FOR 1884.

PRESIDENT,

W. W. SMITH, OF AMHERST.

VICE PRESIDENT,

W. L. WARNER, OF SUNDERLAND.

SECRETARY AND TREASURER,

FRANK. E. PAIGE, OF AMHERST.

EXECUTIVE COMMITTEE,

CHARLES S. SMITH, OF AMHERST,

A. W. STACY, OF BELCHERTOWN,

JAMES B. PAIGE, OF PRESCOTT,

D. A. HORTON, OF HADLEY,

CHARLES W. THURBER, OF LEVERETT.

AUDITOR,

E. D. BANGS, OF AMHERST.

DELEGATE TO THE STATE BOARD OF AGRICULTURE,

W. L. WARNER, OF SUNDERLAND.

SECRETARY'S REPORT.

MEMBERS OF HAMPSHIRE AGRICULTURAL SOCIETY:—At the close of each year it is customary for the Secretary of the Society to make a brief and concise report of the transaction during the year.

When the present board of officers were elected it was the determination of each to introduce some new feature at the Fair: and get out of the old rut in which the society have been traveling in so long. We have been in this rut for years, offered the same premiums, same purses for trotting, have had no new attractions. The result has been, the same persons have exhibited at our Fair in nearly the same classes, and taken the same premiums year after year. The same persons have come with horses, taken the purses offered. This process has continued so long that people have become tired of attending our Fair, and lost interest in the society. The gate receipts have decreased from year to year, and not increased as they ought, if this continues it is only a question of time when the society *must* give up its grounds and disband. Something must be done which will excite new interest, and enthusiasm in our Annual Fair, we must offer premiums and purses so that we shall have more exhibitors, we must make the attractions and exhibitions at our Fair such that they will draw the people from year to year, and thus steadily increase the attendance. For it is from the gate receipts that we derive our principal income.

With this feeling the officers determined to introduce some new attraction at the Fair. Bearing in mind the financial condition of the society, it was a difficult task to obtain any. But at last we secured Prof. James K. Allen and son of Providence, R. I. to make a balloon ascension. They considered the financial condition of the society and gave their services for about one half their regular price. The officers deemed it advisable to advertise more than usual. This was done, the officers posting the bills, etc. With this attraction, if two fair days were granted, their success would be assured. These proved to be exceptionally fair and warm. On the second day of the Fair as the hour arrived for the ascension, the crowd increased rapidly, one looking up the road leading to the grounds could see it

filled with teams of every description. At the precise hour advertised, the balloon was cut loose and shot into the air with Prof. James K. Allen in the basket, for some time it hovered over the grounds and was watched by the thousands of people who had gathered. It slowly drifted to the west, descended and rose again and finally landed on the north end of Mount Warner in North Hadley. That it was a grand success there can be no reasonable doubt, and the officers desire to extend their thanks to Prof. Allen, whom they recommend to all as a thorough, competent and daring aeronaut. That the balloon was the chief attraction of the Fair was proved by the fact that soon after the ascension a large number of people could be seen leaving the grounds. The result is the gate receipts were more than they have been for ten years previous. Though the society did not quite pay all the bills for the year, yet there can be no doubt, that this is more than offset by the new interest and enthusiasm that has been awakened and diffused among the people of Hampshire and adjoining counties in our annual Fair.

Space will not permit to give an account of the fine exhibition of stock on the ground, and numerous articles collected in the hall, suffice it to say all who attended were well paid.

An examination of the treasurer's report will show the financial condition of the society. The insurance expired on the hall and it was necessary to renew it, the rates were increased by the Insurance Board so that it cost \$50 for three years on \$2000. The track and hall are in good condition, about \$25 was raised during the summer and expended on the track.

The required number of institutes was held during the winter and were fairly attended. I trust that all will attend those to be held this winter as farmers and all may learn and profit by them.

Thanking all who contributed and assisted at our Fair and especially the officers who have worked with untiring zeal for the best interest of the society and trusting that the society will prosper in the future I am yours truly.

FRANK E. PAIGE, Secretary.

LIST OF PREMIUMS AWARDED.

CLASS 1—TOWN TEAMS. 3 ENTRIES.

Hadley,	\$20 00
Amherst,	15 00
Pelham,	10 00

CLASS 2—FANCY CATTLE. 5 ENTRIES.

George N. Smith, Granby,	\$4 00
Edmund Smith, Hadley,	3 00
Willard Kellogg, Amherst,	2 00

CLASS 3—WORKING OXEN. 9 ENTRIES.

J. G. Ward, Pelham,	\$5 00
Chester Smith, Hadley,	4 00
W. B. Fales, Pelham,	3 00
P. D. Spaulding, Amherst,	2 00

CLASS 4—STEERS. 5 ENTRIES.

David Pomeroy, Amherst,	2 years old,	\$3 00
L. W. West, Hadley,	3 years old,	3 00
Dwight Morton, Hadley,	yearlings,	2 00
L. W. West, Hadley,	“	1 00

CLASS 5—MILCH COWS. 4 ENTRIES.

G. W. Fitch, Amherst,	Jerseys,	\$4 00
“ “ “	“	3 00
J. C. Dillon, “	Grade,	4 00
G. W. Fitch, “	“	3 00

CLASS 6—HERDS OF MILCH COWS.

L. W. West, Hadley,	5 00
G. W. Fitch, Amherst, with Pedigree,	5 00

CLASS 7—HEIFERS. 9 ENTRIES.

Willard Kellogg, Amherst,	Grade, 2 years old,	\$3 00
L. W. West, Hadley,	“ “	3 00

J. C. Dillon, Amherst,	" 1 year old,	2 00
E. C. Parker, "	" "	1 00
L. W. West, Hadley,	Thoroughbred, 2 years old,	3 00
G. W. Fitch, Amherst,	" 1 "	2 00

CLASS 8—BULLS. 4 ENTRIES

James B. Paige, Prescott,	Gratuity,	\$2 00
L. W. West, Hadley,	"	2 00

CLASS 8½—REGISTERED BULLS.

G. W. Fitch, Amherst,		\$4 00
P. D. Hubbard, Sunderland,		2 00

CLASS 9—CALVES. 11 ENTRIES.

L. W. West, Hadley,	steer calves,	\$2 00
G. W. Fitch, Amherst,	heifer calf,	2 00
L. W. West, Hadley,	" "	1 00
F. J. Humphrey, Amherst,	bull calf,	2 00
G. W. Fitch, "	" " "	1 00

CLASS 10—HERDS OF CATTLE.

L. W. West, Hadley,		6 00
G. W. Fitch, Amherst,		5 00

CLASS 11—SWINE. 16 ENTRIES.

Chas. H. Kellogg, Amherst,	Grade boar,	\$4 00
Josiah Cook, Hadley,	" "	3 00
H. C. West, "	" "	1 00
F. H. Williams, Sunderland,	Thoroughbred boar,	4 00
C. E. Williams & Son, So. Deerfield,	" "	3 00
H. C. West, Hadley,	" "	1 00
F. H. Williams, Sunderland,	sow with pigs,	4 00
C. E. Williams & Son, So. Deerfield,	" "	3 00
Josiah Cook, Hadley,	" "	1 00
L. W. West, "	weaned pigs,	4 00
D. Pomeroy, Amherst,	" "	3 00
H. C. West, Hadley,	" "	1 00

CLASS 12—SHEEP. 15 ENTRIES.

Dwight Morton, Hadley,	buck,	\$4 00
Francis Clapp, So. Deerfield,	"	3 00
James Comins, Hadley,	"	2 00
Francis Clapp, So. Deerfield,	flock sheep,	6 00

Dwight Morton, Hadley,	flock sheep,	3 00
Rufus A. Cook, "	" ewes,	4 00
C. E. Williams & Son, So. Deerfield,	" "	3 00
James Comins, Hadley,	" "	2 00

CLASS 13—POULTRY. 41 ENTRIES.

James B. Roberts, Amherst,	Brahmas,	\$2 00
" " "	" "	1 00
E. N. Fisher, Belchertown,	Cochins,	1 00
George Graves, Amherst,	Plymouth Rocks,	2 00
E. N. Fisher, Belchertown,	" "	1 00
W. J. Seelye, Amherst,	Brown Leghorns,	2 00
E. N. Fisher, Belchertown,	" "	1 00
J. C. Dillon, Amherst,	Dorking Games,	2 00
" " "	" "	1 00
E. N. Fisher, Belchertown,	Game Bantams,	1 00
T. W. Smith, Amherst,	Wyandottes	2 00
James B. Roberts, "	" "	1 00
E. N. Fisher, Belchertown,	Ducks,	2 00
Walter Gaylord, Amherst,	" "	1 00
E. N. Fisher, Belchertown,	Turkeys,	2 00
" " "	" "	1 00
" " "	Display of fowls,	Samuel's
" Birds of New England."		

CLASS 14—AGRICULTURAL AND FARM IMPLEMENTS.

R. W. Crowell, Amherst,	sawing machine,	Diploma.
M. L. Hubbard, Sunderland,	Churn,	"
H. A. Parsons, Amherst,	Plow,	"
" " "	Tiles,	"
C. G. Allen & Co., Barre,	Horse-rake,	"
W. C. Owen, Amherst,	Acme harrow,	"

CLASS 14½—MECHANIC ARTS. 7 ENTRIES.

S. W. Steadman, Amherst,	Bell,	Diploma.
J. W. Goodell, Belchertown,	Engraving,	"

CLASS 15—MERCANTILE GOODS. 6 ENTRIES.

D. W. Palmer, Amherst,		\$10 00
E. D. Marsh, "		8 00
W. Wilbur, "		5 00
Lee & Phillips, "		2 50
W. W. Hunt, "		2 50

CLASS 16—DOMESTIC AND OTHER MANUFACTURES. 33 ENTRIES.

W. L. Warner, Sunderland,	Knit skirt,	\$ 75
Mrs. L. M. Dickinson, Amherst,	Rag carpet,	75
“ “ “ “	Rug,	50
“ G. W. Fitch, “	“	50
Edith Stiles, “	Bed quilt,	50
Cora B. Fitch, “	“ “	25
Mrs. S. W. Moore, “	“ “	75
“ “ “ “	Rug,	50
“ S. W. Boutwell, Leverett,	“	75
Grace Haskell, Belchertown,	Bed quilt,	50
Mrs. Belle Wrigley, Amherst,	Rag carpet,	75
“ “ “ “	Wool hose,	50
“ “ “ “	Mittens,	50
“ C. J. King, “	Bed quilt,	1 00
Effie J. Way, “	Rag carpet,	75
“ “ “ “	Rug,	50
Mrs. Sanford Boice “	Wool mittens,	25
“ “ “ “	Nubias,	25
“ E. Mason, Hadley,	Quilt,	1 00
“ E. A. Davis, Amherst,	Rug,	50
“ “ “ “	“	50
“ E. C. Parker, “	Bed quilt,	50
“ Alanson Hubbard, Sunderland,	Rag carpet,	1 25
“ Henry Taylor, Ashfield,	Bed quilt,	50
“ “ “ “	Counterpane,	1 00
“ J. B. Brown, Amherst,	Bed quilt,	25
“ O. A. Moore, Hadley,	“ “	75
“ John M. Smith, Sunderland,	Knit skirt,	1 00
“ Emma Hubbard, “	Bed quilt,	50
Miss Mattie Jewett, Pelham,	Basket,	50
“ May Reise, Amherst,	Rug,	50
“ H. S. Johnson, “	Mat,	1 00

CLASS 17—FANCY WORK. 74 ENTRIES.

W. L. Warner, Sunderland,	Afghan,	\$1 50
“ “ “ “	Sofa pillow,	50
“ “ “ “	Chair seat,	25
“ “ “ “	Table scarf,	1 00
“ “ “ “	Lamp screen,	25

Mrs. L. M. Dickinson,	Amherst,	Tidy,	25
" "	"	Pillow shams,	75
" "	"	Scrap bag,	25
Miss Abbie Fitch,	"	Sofa pillow,	25
Emma Moulton,	"	Bed quilt,	25
Mrs. Charles Denel	"	Silk bed quilt,	1 50
" "	"	Toilet set,	50
" "	"	Breakfast cap,	25
" Fred Denel,	"	Hairpin roll,	25
" Caleb Osgood,	"	Lap robe,	1 00
" B. R. Franklin,	"	Mantle lambrequin,	50
" "	"	Table scarf,	50
Miss Lena Fitch,	"	Shelf lambrequin,	25
Lena Moulton,	"	Tidy,	25
A. S. Dickinson,	"	Hood,	25
E. R. Dickinson,	"	Tidy,	25
Mrs. S. W. Boutwell.	Leverett,	Wall pocket,	50
" "	"	Brush receiver,	40
Miss Nellie Perkins,	Amherst,	Best Display, Samuel's Birds of New England,	
Mable Morse,	Amherst,	Tidy,	25
Mrs. O. F. Morse,	"	Holder,	25
Mabel Leach,	"	Card case,	25
Mrs. E. J. Leach,	"	Slippers,	25
" "	"	Stocks,	25
" "	"	Pin cushion,	25
" "	"	Slipper case,	25
" Henry Shaw,	"	Silk quilt,	1 00
" "	"	Tidies,	25
" Belle Wrigley,	"	Silk quilt,	1 25
Lessie Wrigley,	"	" "	1 25
Mrs. Julia Harrington,	"	" "	1 00
Lizzie B. Gehring,	"	Table scarf,	1 00
Mrs. James Willey,	"	Collar,	25
" B. R. Franklin,	"	Cushion,	40
" A. M. Currier,	"	Mat,	50
" J. E. Strickland,	"	Silk quilt,	1 00
Miss Clara Cutter,	"	Tidy,	25
Mrs. Sanford Boice,	"	Bracket lambrequin,	25
Lucy Boice,	"	Silk mittens,	25

Mrs. Geo. Sanderson, Amherst,	Sofa pillow,	25
Julia S. Pomeroy,	“ Repousse work,	30
Mrs. E. A. Davis,	“ Crochet cape,	30
“ Levi Stockbridge,	“ Table spread,	50
“ Benj. Root,	“ Embroidered handkerchief,	75
“ H. L. Ufford,	“ Lambrequin,	50
“ E. S. Moore, Hadley,	Frame,	25
“ “ “ “	Mat,	25
Nellie Gray,	“ Tidy,	30
Mrs. M. W. Howard, Amherst,	Blanket,	50
Miss Jennie L. Cowles,	“ Embroidered work,	50
Mrs. J. D. Miller,	“ Brush case,	25
“ E. A. Kenfield,	“ Emb'd flannel skirt,	50
“ “ “ “	“ Silk mat,	50
“ “ “ “	“ Emb'd sofa pillow,	75
“ J. G. Ward, Pelham,	Hand knit lace,	25
“ P. D. Hubbard, Sunderland,	Tidy,	25
“ E. P. Dickinson, Amherst,	Pillow shams,	75
“ Lucius Ingram,	“ Knit rug,	50
“ F. P. Ainsworth,	“ Carriage robe,	1 00
“ “ “ “	“ Lambrequin,	50
“ Henry Stearns,	“ Sofa pillow,	50
“ “ “ “	“ Spread,	25

CLASS 18—FINE ARTS. 24 ENTRIES.

R. G. Williams,	Amherst,	Paintings,	\$1 50
J. C. Dillon,	“	Drawings,	1 00
Miss Nellie Perkins,	“	Paintings,	1 50
“ Estelle	“	“	1 75
“ Hattie J. King	“	“	75
Alex. Labar,	“	Picture,	75
Mrs. Levi Stockbridge,	“		1 00
Miss Abbie	“		1 75

CLASS 19—BREAD, BUTTER AND CHEESE. 13 ENTRIES.

Ruth Deming,	Savoy,	Cheese,	\$2 00
Mrs. James Comins,	Hadley,	“	1 00
“ Amos Demming,	Savoy,	Sage cheese,	2 00
“ James Comins,	Hadley,	“ “	1 00
“ Belle Wrigley,	Amherst,	Wheat bread,	2 00
“ Z. K. Chapin,	“	“ “	1 00

" M. L. Hubbard, Sunderland,	Rye bread,	2 00
" E. C. Parker, Amherst,	" "	1 00
" " " "	Graham "	2 00
" S. W. Boutwell, Leverett,	" "	1 00
" E. C. Parker, Amherst,	Rye and Indian bread,	2 00
" S. W. Boutwell, Leverett,	" " " "	1 00
" " " "	Butter,	3 00
" E. C. Parker, Amherst,	"	2 00
" C. H. Kellogg, "	"	1 00

CLASS 20—HONEY, WINES, CANNED AND DRIED FRUITS, JELLIES,
PICKLES, MAPLE SYRUP AND SUGAR. 12 ENTRIES.

Mrs. P. D. Hubbard, Sunderland,	Canned fruit,	\$2 00
" S. W. Boutwell, Leverett,	" "	1 50
" J. C. Dillon, Amherst,	" "	1 00
" P. D. Hubbard, Sunderland,	Jellies,	1 75
" Geo. H. B. Greene, Hadley,	"	1 50
" S. W. Boutwell, Leverett,	"	1 00
" Geo. H. B. Greene, Hadley,	Wines,	2 50
E. N. Fisher, Belchertown,	Honey,	1 00
Mrs. S. W. Boutwell, Leverett,	"	25
" J. C. Dillon, Amherst,	Pickles,	1 25
R. G. Williams, "	"	75
Mrs. J. C. Dillon, "	Dried apples,	50

CLASS 21—FRUIT.

F. B. Paige, Prescott,	Display,	\$4 00
J. C. Dillon, Amherst,	"	3 00
" " " "	Basket,	2 00

CLASS 22—FRUIT GROWN BY EXHIBITOR. 26 ENTRIES.

Geo. H. B. Greene, Belchertown,	Collection apples,	\$4 00
F. B. Paige, Prescott,	" "	3 00
W. C. Owen, Amherst,	" "	2 00
J. C. Dillon, "	" "	1 00
Geo. H. B. Greene, Belchertown,	" Pears,	4 00
F. B. Paige, Prescott,	Collection pears,	3 00
J. C. Dillon, Amherst,	" "	2 00
R. G. Williams, "	" "	1 00
Geo. H. B. Greene, Belchertown,	Collection grapes,	4 00
F. B. Paige, Prescott,	" peaches,	1 00

F. B. Paige, Prescott,	Collection quinces,	25
W. C. Owen, Amherst,	“ “	25
J. C. Dillon, “	Platter Baldwin apples,	50
“ “ “	“ Greening “	50

CLASS 23—VEGETABLES GROWN BY EXHIBITORS. 103 ENTRIES.

E. C. Parker, Amherst,	Collection,	\$5 00
R. G. Williams, “	“	4 00
J. C. Dillon, “	“	3 00
F. B. Paige Prescott,	“	2 00
E. C. Parker, Amherst,	Exhibition potatoes,	2 00
J. C. Dillon, “	“ “	1 00
“ “ “	Peck “	1 00
Thomas Reed, “	Onions,	1 00
Robert Smith, “	Exhibition carrots,	1 00
W. F. Hanlon, “	“ “	50
Robert Smith, “	“ beets,	1 00
E. C. Parker, “	“ “	50
Charles S. Holden, “	“ ruta-bagas,	50
R. G. Williams, “	“ tomatoes,	1 00
H. A. Parsons, “	“ “	50
R. G. Williams, “	“ beans,	1 00
Arthur E. Magill, “	“ “	50
Asahel Gates, Pelham,	Peck beans,	1 00
James Comins, Hadley,	“ “	50
“ “ “	Exhibition pumpkins,	1 00
R. G. Williams, Amherst,	“ cabbages,	2 00
Geo. H. B. Greene, Belchertown,	“ “	1 00
E. C. Parker, Amherst,	“ sweet corn,	2 00
R. G. Williams, “	“ “ “	1 00
S. N. Miller, So. Hadley,	“ seed “	2 00
R. Cowles, Amherst,	“ “ “	1 00
E. C. Parker, “	“ Winter squashes,	2 00
J. C. Dillon, “	“ “ “	1 00
James Comins, Hadley,	“ “ wheat,	1 00
E. C. Parker, Amherst,	“ “ “	50
James Comins, Hadley,	“ Spring “	1 00
E. N. Fisher, Belchertown,	“ “ “	50
“ “ “	“ Rye,	1 00
E. C. Parker, Amherst,	“ “	50
James Comins, Hadley,	“ Oats,	1 00
F. A. Crocker, Sunderland,	“ “	50

CLASS 24—FLOWERS. 28 ENTRIES

L. W. Goodell, Amherst,	Collection of flowers,	\$5 00
Mrs. S. W. Boutwell, Leverett,	“ “ “	3 00
“ A. Hubbard, Sunderland,	“ “ “	2 00
“ E. C. Parker, Amherst,	“ “ “	1 00
“ “ “ “	“ “ roses,	3 00
L. W. Goodell, “	“ “ asters,	2 00
Mrs. S. W. Boutwell, Leverett,	“ “ “	1 00
“ “ “ “	“ “ dahlias,	2 00
L. W. Goodell, Amherst,	“ “ verbenas,	2 00
Mrs. A. Hubbard, Sunderland,	“ “ “	1 00
L. W. Goodell, Amherst,	“ “ gladioli,	2 00
Mrs. E. C. Parker, “	“ “ “	1 00
“ S. W. Boutwell, Leverett.	“ “ wild flowers,	2 00
“ A. Graves, Sunderland,	“ “ “ “	1 00
“ S. W. Boutwell, Leverett,	Bouquet,	2 00
“ A. Hubbard, Sunderland,	“	1 00

CLASS 25—STALLIONS.

P. D. Hubbard,	Sunderland,	\$8 00
E. F. Wiley,	“	5 00

CLASS 26—BREEDING MARES AND SUCKING COLTS.

C. L. Russell,	Sunderland,	\$5 00
Dwight Graves,	Amherst,	4 00
James Comins,	Hadley,	3 00
W. H. Smith,	Leverett,	2 00

CLASS 27—COLTS AND FILLIES.

James Twohig,	Pelham,	3 years old,	\$3 00
L. S. Dyer,	Hatfield,	“	2 00
Calvin O. Lock,	Amherst,	“	1 00
Dwight Morton,	Hadley,	2 “	3 00
Pat Donabue,	Amherst,	“	2 00
P. D. Hubbard,	Sunderland,	1 “	2 00
H. W. Cook,	Amherst,	“	1 00

CLASS 28—FARM HORSES.

No premiums awarded.

CLASS 29—DRAFT HORSES.

Frank Cadwell,	Amherst.	Pair,	\$4 00
D. L. Viaria,	Hadley,	“	3 00

Edmuud Smith,	Hadley,	Single,	3 00
H. A. Parsons,	Amherst,	"	2 00

CLASS 30—CARRIAGE HORSES.

G. E. Searl,	Northampton,	Pair,	\$6 00
H. B. DeWitt,	Granby,	"	4 00
W. L. Hubbard,	Sunderland,	"	2 00
L. S. Dyer,	Hatfield,	Single,	6 00
J. G. Ward,	Pelham,	"	4 00
C. K. Smith,	Sunderland,	"	2 00

CLASS 31—ROADSTERS.

F. H. Graves,	Sunderland,	Single,	\$6 00
L. S. Dyer,	Hatfield,	"	4 00
Oliver Cowles,	Amherst,	"	2 00
F. H. Graves,	Sunderland,	Pair,	4 00

AWARDED UNDER FOURTH DIVISION.

Henry Burt,	Sunderland,	Best acre corn,	\$5 00
Levi Adams,	Hadley,	" " "	3 00
J. C. Dillon,	Amherst,	" $\frac{1}{2}$ acre potatoes,	5 00
" "	"	Report,	5 00
R. G. Williams,	"	"	4 00
George P. Smith,	Sunderland,	"	3 00

RACES.

PACING RACE.

T. T. Sisson,	Amherst,	Belle D.,	\$25 00
A. Liberty,	"	Dick,	15 00
F. A. Ingram,	"	Modesty,	10 00

2-30 CLASS. TROTTING RACE. PURSE \$100.

D. B. Goff,	Amherst,	Echo,	\$40 00
C. A. Sweetser,	Holyoke,	Johnnie,	30 00
C. P. Davis,	"	Billy Jefferson,	20 00
Henry Bissell,	"	Dennis,	10 00

2-40 CLASS. PURSE \$75.

C. R. Pomeroy,	Northampton,	Molly P.,	30 00
Sol. Clark,	"	Grey Ben,	20 00
G. F. Hobart,	Amherst,	Red Bird,	15 00
S. J. Hobbs,	Holyoke,	Mack,	10 00

REPORT ON VEGETABLES.

The season has been quite favorable to vegetable growth, and the display was creditable to the Society. The list of premiums awarded is given elsewhere, so that I will not speak of any exhibit in particular. The honors were very evenly divided between those who grow vegetables for market and farmers who are not extensive growers.

All who have a farm or garden may and should have choice vegetables in their season to supply their tables. This is a great blessing in a time of financial depression like the present.

Market gardening has not yielded large returns the past season; owing to the over supply in market, the demand being lighter than usual. We might look at the question purely as a matter of producing a crop, or as a matter of business to gain the largest returns in cash; in the latter case the market and marketing is an important item. In order to discuss the first part of the subject satisfactorily each crop would have to be taken in detail and that could not come within the limits of a brief paper like the present so I will pass it with a few general remarks.

Good seed and plants are very important in putting out a crop, as well as fertilizing and tillage.

Drouth and insects often cause great loss to growers. Market gardeners near large cities have resorted to irrigation to obviate the first trouble. Various remedies can be used against insects. I have used Pyrethrum Powder to destroy cabbage worms with good results.

If one wishes to carry on a market garden truck business it is greatly to his interest to be near the place of sale, where he can watch the market constantly to take advantage of fluctuations in prices. Otherwise he will be at the mercy of tradesmen and customers. Those who take loads to market at long intervals and live at a distance so that they feel obliged to sell their load before returning is sure to lower the price and injure the business for all. It would be much better for gardeners to allow produce to waste in the fields than force the sale at a ruinous low price.

As far as producing vegetables is concerned farmers can compete successfully with gardeners. They can produce a crop as cheap or cheaper, they have land at a less cost per acre, manure at their disposal. The item of fertilizer and help are about equal. The regular stock of the farm can consume what does not sell so that nothing is an entire loss. What shall he do for a market? I have known farmers to make arrangements with dealers to take their produce through the season and that is a very good plan when reliable dealers can be found. I think those are most successful who take some special crop like asparagus, and gains a reputation for producing the best. Those crops that can be handled in large quantities are best suited for growers who live at a distance from large cities. This can be done directly to the retail trade as consigned at commission houses. Vegetables can be stored very cheaply in pits, well kept produce usually sells well in the spring.

It is useless for any to offer inferior goods, vegetables must be well grown, assorted and put up in attractive shape to bring remunerative prices. The exhibitions exceptional in the merchantable quality of most specimens shown, and the absence of monstrosities which are really worthless for market purposes.

I think gardeners do not find much encouragement in the present outlook and every one must work out the problem of success for himself. But it looks to me about like this. If gardeners would curtail expenses and concentrate their operations largely to a truck business, and if farmers would let the retail trade alone and confine themselves to field crops all would stand a better chance to get a living.

GEO. P. SMITH, Chairman of Committee.

REPORT ON FLOWERS.

The committee on Flowers would respectfully submit the following report :

Mrs. J. H. Demond, of Northampton not being present, Mrs. E. N. Fisher of Belchertown was appointed in place of Mrs. Demond. The chairman found the assistance of these ladies of great value. They brought to the discharge of the duties devolved upon them, a high appreciation of their responsibility and manifested an earnest purpose to render an impartial, unbiassed judgement, and to give to each exhibitor exact justice. By their interest in the cultivation of flowers and their evidently practical acquaintance with them and their cultivation, the committee were enabled to ascertain many of the merits of the exhibits, which a less intelligent acquaintance with the subject would have passed by.

The display of flowers was not only much larger than for some years, but very much larger than last year. The arrangement of many of the exhibits were worthy of great praise, as exhibitions of patience, labor and taste in the designs, and in harmony of form and colors.

The committee accepted the entries as made in the class book, but could not otherwise properly recognize some of the designs as bouquets which were entered as such. Large trays, with pyramids and arches and other forms, are not in floral work, called bouquets. It seems to the committee that the society should either add to its premium list and award for "flower designs," or limit its committee and so its list to the universally accepted meaning of the article known as "bouquet." The term does not admit of a wide range of arrangement of flowers in every possible form and design.

The committee found pleasure in studying the designs and arrangement of the flowers, and discovered in them so much to admire and commend, that in several cases there was much difficulty in reaching what they believed to be a just, impartial decision. The collections

and specimens of the exhibitors were in different parts of the building, thus subjecting the committee to considerable extra trouble, both in finding the different exhibits and in reaching the decision finally attained. It is hoped that this difficulty will be avoided in the future by affording to this class sufficient space to make a worthy display of the exhibits which may be offered. If the increase of these displays should be as great in another year as in this, the society will need to enlarge very considerably the accommodations for this whole class. It is worthy of more attention on the part of the society and with such fostering aid as the society can render, it will naturally become one of the most attractive features of the Fair.

The examination of the different exhibits was a source of much pleasure to the members of the committee and it became a matter of much curious interest to know just how each would vote when the examination was closed. No words were spoken to bias the judgment of any. The examinations were made in comparative silence, notes were taken by each in private, and then the results were compared. It was really interesting and became somewhat exciting as one decision after another was reached, to find that each one had reached precisely the same result. The whole list was gone over with an entirely unanimous verdict, except in one individual instance. The society had offered eighteen premiums. There were entered for competition but one exhibit of roses and one of dahlias. To these the rules of the Society restricted the committee to awarding only the second premium. It would seem that the number of exhibitors in this class should be greatly increased. The records for three years show that the same persons have been nearly the only exhibitors and consequently the only ones obtaining prizes.

As an inducement to the ladies of the society it may be stated that in 1882 only four persons carried off all the prizes, and in 1883 only three took all the prizes and the same three who took all but one in 1882. In 1884 these same three take all the prizes but three. True they deserved them, but it does not speak well for the ladies of Hampshire county to show so little interest in this department of the Fair. There certainly are more ladies fond of these beautiful productions of nature, and who devote much time and labor in their cultivation. It would add to the interest of our annual gathering to see the ladies more interested in making this department *the* most attractive feature in the whole exhibition. The means are at hand, are *in* many

hands. The honor of a prize, the pecuniary value of the prize are worth the effort to take some time and trouble to prepare collections and arrangements of flowers and the pleasure afforded to the general public, all should be a stimulus to those who can so easily do so much to enhance the interest of the annual Fair.

As we have, in the person of one of our members, one who shows us how much can be done, by only out-door cultivation of flowers, we need not hesitate to engage largely in following so worthy and successful a pattern. It seems a natural employment for ladies to hold this close communion with these beautiful forms of nature. Ladies and flowers are natural associates, and the flowers are ever ready to respond to the gentle attentions of their ministering hands. And as they have enjoyed the results of the labor and care bestowed, so should their kind natures lead them to bring forward their choice treasures and place them for a day or two upon the Society's tables, that the thousands who assemble to view the exhibition, may have for the time, the great pleasure of beholding the beautiful products of intelligent treatment of nature's tenderest children.

The committee, in behalf of the society would respectfully urge upon the ladies of the county, to engage more heartily in this department, and bring in at the next annual gathering many results of their handy work.

The committee have awarded the following premiums :

COLLECTION OF FLOWERS: 1st Premium, L. W. Goodell; 2d, Mrs. S. W. Boutwell; 3d, Mrs. A. Hubbard; 4th, Mrs. E. C. Parker.

ROSES: 2nd premium, Mrs. E. C. Parker.

ASTERS: 1st, L. W. Goodell; 2nd, Mrs. S. W. Boutwell.

DAHLIAS: 2nd, Mrs. S. W. Boutwell.

VERBENAS: 1st, L. W. Goodell; 2nd, Mrs. A. Hubbard.

GLADIOLI: 1st, L. W. Goodell; 2nd, Mrs. E. C. Parker.

WILD FLOWERS: 1st, Mrs. S. W. Boutwell; 2nd, Mrs. A. Graves.

BOUQUETS: 1st, Mrs. S. W. Boutwell; 2nd, Mrs. A. Hubbard.

R. G. WILLIAMS, Chairman.

REPORT ON SWINE.

According to the best considered experiments, it takes seven pounds of Indian meal to make one pound of pork. At this rate, when meal is worth \$1.35 $\frac{1}{4}$ per 100 lbs., a pound of pork would cost 9 $\frac{1}{2}$ cents, and can be bought by the carcass for 7 $\frac{1}{2}$ cents.

Nevertheless the exhibition of swine at the Hampshire Society's Fair of 1884 was the best on the ground, comprising sixteen entries for premiums, and 79 animals, and not an inferior pig among them. The Agricultural college also sent a collection of Berkshires and Yorkshires, which were a credit to the farm and the Fair. This apparent anomaly is explained by the fact that a large proportion of the pork raised in New England is made out of much cheaper material than Indian meal: and materials which it would be difficult to utilize to as great advantage in any other way. The refuse of the table, the dairy, the barn, the vegetable cellar, and orchard, suffice to keep young pigs in good growing condition, and practical experience confirms the scientific doctrine that the excrement of fattening hogs is worth at the current prices of fertilizers, almost if not quite as much as the grain from which it is made.

Granting then that there is a satisfactory profit in keeping a lot of swine in proportion to the size and resources of the farm, it is gratifying as well as instructive to see such an exhibition by practical farmers of good judgment in the selection of animals for breeders, and skillful kindness in furnishing to these creatures the conditions for making their existence enjoyable by themselves, and profitable to their owners and the community.

Among the swine exhibited for premiums there were Berkshires and Chester Whites and crosses of these breeds on one another, and grades with common mixed stock. Some had pedigrees as long as the moral law; others had only their owners voucher to back up their claims to recognition as thoroughbred. Manifestly they all belong to the "Swill pail breed;" and if they had ever squealed for their feed it was a good while before Fair time.

And thus after all is the one preëminent essential to success in keeping swine and all other live stock on the farm. "A handsome horse is always fat," "A cow milks by the mouth," and "you can't fat a pig on boughten meal" are all particular applications of the general rule, "There's two in the feed to one in the breed."

With a profound respect for the accumulated power of transmission which comes from a long line of worthy ancestors, your committee has little sympathy with the superstitious reverence with which many regard a thoroughbred. At periods more or less remote, practical men have devoted thought and effort to the improvement and adaptation of different classes of stock to special or general purposes. The means employed have usually been skill and judgment in the selection and mating of animals for breeding, and increased care and liberality in keeping and feeding. A certain character for uniformity and excellence having thus been established, a strain or breed is created, and animals belonging to it come into demand at prices considerably higher than ordinary market values.

A stud book, herd book, or other record is formed for the registrations of pedigrees, and all animals which can prove their descent from a grade stock are recognized as *thoroughbred*.

Hereafter the breed belongs more or less to the class of fancy stock and is often valued more in proportion to its conformity to an arbitrary standard of color, marking and appearance, than for the useful properties which its founders aimed to produce and perpetuate.

Other evils are incident to the system; such as the raising and keeping of inferior specimens because the breed is in demand, the temptation to excessive in-breeding, to manufacture pedigrees, to keep animals in a forced and unnatural condition, and to make false or exaggerated statements as to their merits and performances.

But even without reference to these hypothetical drawbacks, the word "thoroughbred" neither creates nor certifies any personal excellence or profitableness; but merely that an animal's qualities such as they are, are hereditary, and are therefore more likely to be transmitted to its posterity than if the animal itself was of common or mixed descent. In these remarks we do not wish to lead anyone to underrate the value of a good pedigree; but rather to point out the still higher importance of each breeder understanding what he wants, and striving to produce animals adapted to the conditions he provides and the objects he has in view. All agree that swine should be kept well fed, healthy, and comfortable: but the methods of accomplish-

ing the object are as numerous and various as the means, circumstances, and appliances of individuals.

It would obviously be out of place to attempt a general survey of this subject, and I shall confine myself to a few suggestions, the importance of which has been impressed upon me by my own experience and observation.

And first I would say "Provide your swine, especially in cold weather, with warm, snug sleeping places." The hardiest animals including man, require conditions of much greater warmth during periods of rest, than while the circulation is quickened by exercise. The pig is no exception to this rule; and if left to himself will excavate a den or avail himself of a hole in a tree, where he can be protected from draughts, and where his own exhalations will favorably affect the temperature of the apartment.

Many years ago I had a litter of Yorkshire pigs farrowed about the beginning of November, in a roomy pen in one corner of a large, new, tight shed. The month of November and the first half of December were comparatively warm, and the little pigs thrived finely till they were six weeks old, when they were weaned. Then the cold weather came on, and in spite of all we could do in furnishing them abundant food and bedding, they grew less instead of bigger. One January night, with the thermometer about zero, I was going my final rounds, when I found the eight scurvy little wretches lying squealing in their dry straw and fighting with what little strength they had for the bottom place in the heap. With little hope of benefiting them but because I could not go to bed and leave them squealing, I got a large packing box, half filled it with straw, pitched the little beasts in, and splitting out a small crack for air, nailed the lid on and left them. In the morning they were snoring comfortably and after a warm breakfast returned eagerly to their snug quarters, to which I had made them a small entrance. From that time they began to improve, and instead of misery it was a delight to watch their habits and progress. On a bitter cold morning they would come out of their box all steaming, stretch themselves, eat their breakfast and return to bed, without the slightest indication of suffering. They soon lost their scurvy mangy look, and instead of dying as they were in a fair way to have done in a fortnight, they became as healthy and thrifty pigs as I ever saw.

In this case a few feet of cheap boards were worth many times as many pounds of pork; and I have since then seen numberless instances

of the benefit of warm quarters and of loss and misery endured for want of them. Another important matter is the management of sows at the time of parturition. At this period sows are very liable to a feverish condition, which often exhibits itself in restlessness and a desire to destroy their offspring; but sometimes only in an inability to furnish them their natural sustenance. In the majority of cases this results from costiveness, to which at this crisis they seem especially subject, and which should therefore be guarded against by the use of cooling and laxative food. Should this have been neglected, resort must be had to an enema of luke warm soap suds. This may be easily administered by means of a piece of rubber tube and a funnel, which every farmer ought to have. At such times we perceive the advantage of kind and reasonable treatment, which begets mutual confidence and good will.

To some it may appear ridiculous to talk of gaining the confidence and good will of a pig; but in the experience of the writer, no animal is more capable of intelligence and affection, tho' he is allowed few opportunities to exhibit these characteristics. "Stupid as a hog," "Filthy as a hog," are common but unjust aspersions of an animal whose merits are original and conspicuous, and whose faults are the inevitable result of man's ignorance, tyranny and greed.

Hear what the poet says:—

“Jacob! I do not like to see thy nose
 Turned up in scornful curve at yonder pig.
 It would be well, my friend, if we like him,
 Were perfect, in our kind! And why despise
 The sowborn grunter? He is obstinate,
 Thou answerest; ugly and the filthiest beast
 That banquets upon offal. Now I pray you
 Hear the pigs counsel.

Is he obstinate?

We must not, Jacob, be deceived by words;
 We must not take them, as unheeding hands
 Receive base money at the current worth,
 But with a just suspicion try their sound,
 And in the even balance weigh them well.
 See now to what this obstancy comes,
 A poor mistreated democratic beast,
 He knows that his unmerciful drivers seek
 Their profit and not his. He hath not learned
 That pigs were made for man, born to be brown'd
 And baconized: that he must please to give
 Just what his gracious masters please to take:

Perhaps his tusks, the weapons Nature gave
 For self defence, the general privilege ;
 Perhaps, * * * hark, Jacob! dost thou hear that horn?
 Woe to the young posterity of Pork!
 Their enemy is at hand.

 Again, thou say'st
 The pig is ugly. Jacob look at him!
 Those eyes have taught the lover flattery.
 His face * * * nay Jacob! Jacob! were it fair
 To judge a lady in her dishabille?
 Fancy it dressed and with saltpetre rouged,
 Behold his tail, my friend; with curls like that
 The wanton hop marries her stately spouse:
 So crisp in beauty Amoretta's hair
 Rings round her lovers soul the chains of love.
 And what is beauty, but the aptitude
 Of parts harmonious? Give thy fancy scope,
 And thou wilt find that no imagined change
 Can beautify this beast. Place at his end
 The starry glories of the peacocks pride,
 Give him the swans white breast; for his horn hoofs
 Shape such a foot and ankle as the waves
 Crowded in eager rivalry to kiss
 When Venus from the enamoured sea arose:
 Jacob, thou canst but make a monster of him!
 All alteration man could think, would mar
 His pig perfection.

 The last charge * * * he lives
 A dirty life. Here I could shelter him
 With noble and right reverend precedents,
 And show by sanction of authority
 That 'tis a very honorable thing
 To thrive by dirty ways. But let me rest
 On better ground the unanswerable defence.
 The pig is a philosopher, who knows
 No prejudice. Dirt? Jacob, what is dirt?
 If matter, why the delicate dish that tempts
 An o'er-gorged epicure to the last morsel
 That stuffs him to the throat gates, is no more
 If matter be not; but as sages say,
 Spirit is all, and all things visible
 Are one—the infinitely modified,
 Think Jacob, what that pig is, and the mire
 Wherein he stands knee deep!

 And there! the breeze
 Pleads with me and has won thee to a smile
 That speaks conviction. O'er yon blossomed field
 Of beans it came, and thoughts of bacon rise."

JOHN C. DILLON, Chairman.

REPORT ON CORN.

PIECE No. 1. ONE ACRE.

170 baskets, each weighing 35 lbs., estimated value, 25c.	\$42 50
4 tons of stalks at \$7.00,	28 00

70 50

Plowing in Fall,	2 00	
Fitting for planting in Spring,	3 00	
Planting,	1 50	
Seed,	50	
Fertilizer,	18 00	
Sowing, 700 dry fish, 200 muriate of potash,	1 00	
Cultivating, usual methods,	6 00	
Cutting up,	4 00	
Husking and binding stalks,	11 00	47 00

\$23 50

PIECE No 2. ONE ACRE. Same soil as No. 1.

160 baskets weighing 35 lbs. each, estimated value 25c.	\$40 00
3 $\frac{3}{4}$ tons of stalks at \$7.00,	26 25

66 25

Cost of cultivation same as No. 1,	47 00
------------------------------------	-------

\$19 25

Fertilizers fish and potash same value as No. 1.

Nos. 1 and 2 supposed to be better soil than Nos. 3 and 4. Nos. 1 and 2 join each other. Value of fertilizer equal on each acre. Nos. 3 and 4 are a separate lot from Nos. 1 and 2. Nos. 3 and 4 join other.

PIECE No. 3. ONE ACRE.

140 baskets, 35 lbs. each, estimated value 25c.	\$35 00
2 $\frac{3}{4}$ tons of stalks at \$7.00,	19 25

\$54 25

Cost of cultivation same as No. 1 less \$3.00,	44 00
--	-------

\$10 25

Fertilizer, Stockbridge for corn, same value as No. 1.

PIECE No. 4. ONE ACRE. Nearly same soil as No. 3.	
125 baskets, 35 lbs. each, estimated value 25c.	\$31 25
2½ tons of stalks at \$7.00,	17 50
	<hr/>
	48 75
Cost of cultivation same as No. 1 less \$4.00,	43 00
	<hr/>
	\$5 75

Fertilizer, ashes, value same as No. 1.

If I deduct the value of the stalks from the cost of raising the whole I find the following result of cost per bushel, allowing 2 baskets for a bushel.

	BASKETS.	CTS.
No. 1 cost \$47.00, value stalks \$28.00—170 equals	221	25.
No. 2 " 47.00, " " 26.25—160	"	25.
No. 3 " 44.00, " " 19.25—140	"	35.
No. 4 " 43.00, " " 17.50—125	"	41.

By this analysis and estimate it will be seen that the cost per bushel of No. 4, 125 baskets or 62½ bushels per acre is nearly double of that of No. 1, 170 baskets or 85 bushels per acre.

This report or any part of it is respectfully submitted for any use you may please to make. The baskets are actual count and weight at the time of husking, no allowance being made for shrinkage.

LEVI ADAMS.

GENTLEMEN:—J. Burt has just handed me his statement.

Weight of corn on one rod was 36 lbs.

Weight of the stalks on the acre 5 tons, 818 lbs.

The fertilizer used was 600 lbs. Bowker's.

The crops on land the year before were cabbages and corn.

HENRY BURT.

REPORT ON CROPS.

GENTLEMEN :—Numberless are the plans for success in farming ; but unfortunately many of them are, like an excellent lady's advice to her husband, somewhat too general. " John," she said, " I'll tell you what I'd do : I'd plant a good lot, and manure it well, and take good care of it." Occasionally some one undertakes to tell us how this is to be done ; but a course which may seem simple and easy to one, is entirely beyond the comprehension and ability of his neighbor.

For instance, at a meeting of the Farmers' Institute, a wealthy and worthy gentleman, who had inherited a good property and exceptional business capacity, advised farmers to buy cattle and fat them, and so enrich their farms and themselves. He admitted that this required caution and good judgment, but had little sympathy with those who pleaded poverty. " If they have not money to buy cattle, let them go to the bank and borrow it," he said, as honestly as the little Princess said, " How foolish of the poor people to starve to death ! I'd eat bread and cheese first.

But, says another, if you have little manure and cannot afford to buy, you should plant the less and do ample justice to that. But this is not so conclusive as it appears. If you have plenty of manure and little land and labor, you must clearly manure highly as far as you go ; but if you have only a small amount of manure in proportion to the land and labor at your disposal, it seems desirable to make your manure go as far as it will.

I do not claim that these arguments are entirely unanswerable ; but they account for a good deal of the farming I practise, and some of that which I see in my neighbors' fields.

These among other considerations have induced me to relate my success in raising two paying crops of corn on land in a reduced condition, with only a small supply of manure.

The first crop was grown on a piece of land owned by L. D. Hills, Esq., containing 19-10 acres. The land was a rather light sandy loam, with many gravelly spots in it. It had been mown many years since it had received any manure, so long indeed that last year the hay crop scarcely paid for harvesting.

The part of the process to which I would call particular attention is the planting and the application of the fertilizer. The system which I have adopted after considerable thought and experiment, has succeeded to my satisfaction, and I confidently recommend it where commercial fertilizers or small quantities of thoroughly rotted compost are used.

First I plough and harrow thoroughly, then mark both ways with an instrument drawn by two horses, consisting of a plank with four runners, on which I ride. This leaves the field cut up by furrows one to two inches deep into squares of one yard; and at each corner I plant five kernels of early yellow corn with Macomber's Improved Corn and Bean planter, which covers the seed about an inch deep. With this implement a man can plant in the best possible manner 5 acres in a day. After the whole field is planted, I *scatter* the fertilizer so as to cover *about a foot square* directly over the seed, and then harrow the whole with a smoothing harrow.

I thus secure three important advantages. The corn is planted in *check rows*, and can be cultivated both ways. The fertilizer is *mixed with the soil directly over the seed*, to which its elements are carried by the first rain, and lastly the land being harrowed a few days after planting, *the corn gets a start of the weeds*, and can afterwards be kept clean with but little hand hoeing, and that of the very easiest kind.

Two rows—400 hills—on one side of the piece were planted with potatoes, but they were damaged by turning on them and by the bugs, so that they yielded only six bushels of marketable potatoes.

It rained just as we had finished planting, and the ground being warm, the corn came up like a jack-in-the-box. Some few hills were killed by the freeze of the 29th and 30th of May; and these we filled up with pumpkins, which grew and yielded well.

I husked every other stook in the field, and delivered the corn and stalks to Mr. Hills at his barn. Mr. Hills' half weighed at Bowles' scales 2,466 lbs. of sound ears, equal to 35 16-70 bushels shelled corn, and 2,520 lbs. of dry bright green stalks.

I also delivered to him half of the potatoes and pumpkins.

The following is my account with the crop:

L. D. HILLS & J. C. DILLON IN ACCOUNT WITH
CORN CROP ON 1 9-10 ACRES.

1884.	Dr.
May 17, To plowing, man and team, 12 hours, at \$3.50 per day,	\$ 4 20
“ “ “ Harrowing,	1 40
“ 21, “ Marking both ways,	1 05
“ “ “ Seed corn, 1-2 bushel,	50
“ “ “ Planting by hand planter,	75
“ 22, “ Seed potatoes and planting,	50
“ “ “ Fertilizer (2,200 lbs. Geo. W. Miles’ Fish and Potash),	36 00
“ “ “ Applying,	1 50
“ 23, “ Harrowing,	1 40
“ “ “ Line and lining,	50
June 11, “ Planting pumpkins,	1 00
“ “ “ Cultivating 4 times,	4 00
“ “ “ Hoeing twice,	4 50
Sept. 9, “ Cutting, binding and stooking,	4 50
“ 20, “ Husking,	6 00
“ 21, “ Drawing in stalks,	2 00
“ “ “ Harvesting potatoes and pumpkins,	50
	\$70 30
1884.	Cr.
By 70 1-2 bushels corn at 75 cents,	\$52 87
“ 2 1-2 tons stalks, at \$10 per ton,	30 00
“ 6 bushels potatoes at 50 cents,	3 00
“ 360 pumpkins at 3 cents,	10 80
	\$96 67
Deduct cost as above,	70 30
	\$26 37

Of the expense Mr. Hills contributed \$36 in the shape of 2,200 lbs. of Geo. W. Miles’ fish and potash, and received into his barn produce well worth \$48.33; while I contributed in seed and labor \$34.30 and got the other half.

In other words I got pay for my seed and labor and \$14.03 for profit, and Mr. Hills gets back cost of fertilizer and \$12.33 for the use of the land, and also whatever benefit remains on the land from the manure and cultivation.

The other piece contained 9,450 square yards, or 230 yards less than two acres, and is a part of the farm which I rent and on which I reside. Two rows all round the piece were planted with potatoes. The land is a sandy loam, easy of cultivation, bore rye in 1880, rye in 1881, potatoes on rye ploughed in, with commercial fertilizers, in 1882, rye in 1883, and a crop of rye sown in the fall of 1883 was plowed in May 30, 1884, for the corn crop under consideration. The rest of the cultivation was almost precisely like that before described; but instead of \$36 worth of fish and potash, I used about 9,450 lbs. of compost, consisting of manure and litter from the horse and cow stables, the contents of the w. c., about three barrels of hen manure, and at least a third of the heap was composed of sandy loam. These ingredients were collected and mixed together May 19, and the pile was thrown over twice before it was drawn to the field for use. It also received the house slops daily. It would be almost impossible to ascertain its precise cost; but I think I can manufacture such a fertilizer for \$4 a ton, and get paid for my labor. My way of arriving at the weight is also rather vague, but I am satisfied the amount applied was, if either, less than I have stated. We made a six-tined forkfull go eight hills, and by weighing six forkfulls we found they weighed eight lbs. the forkfull; which gave one pound of manure to each hill. The manure was shaken from the fork directly over the seed, and the smoothing harrow mixed it slightly with the loam, but moved it very little, if any, from where it fell. The corn came up a good color, which it has retained through the season, and spite of injury from my neighbors' cows, which got in several times, the crop is fairly satisfactory.

I am not prepared to deny that in a succession of crops the amount and quality of manure applied, so that it be evenly distributed, is of more importance than its condition or the manner in which it is applied: but I find that a small quantity of manure will make the best *immediate* return, if it is presented in the condition and the position in which it is *immediately* available.

One day Col. Clark drove down to the field, and I showed him my corn crop and explained my plan of manuring. "Well," he said, "your idea is like the Chinaman's as far as it goes: but he applies his manure in liquid form, and goes over the ground at least twice during the life of the crop."

Below is my account with the crop:

JOHN C. DILLON IN ACCOUNT WITH CORN CROP ON 1 20-21 ACRES.		
1883.		Dr.
Sept.	To plowing rye stubble, 12 hours,	\$ 4 20
	" 3 bushels rye,	2 10
	" Sowing,	50
	" Harrowing,	1 00

1884.		
May 30,	“ Plowing in rye,	4 20
“ 31,	“ Harrowing,	1 05
June 2,	“ Marking both ways,	1 05
	“ Seed corn, 1-2 bushel,	50
	“ Planting,	75
3,	“ Seed potatoes and planting,	1 00
4,	“ Manure, 4 3-4 tons at \$4 per ton,	19 00
	“ Applying,	4 50
	“ Harrowing,	1 00
	“ Line and lining,	50
	“ Cultivating 4 times,	4 00
	“ Hoeing twice,	3 00
Sept. 8,	“ Cutting, binding and stooking,	4 50
Oct. 20,	“ Drawing in and husking,	8 00
	“ Digging potatoes,	1 00
	“ Rent,	6 00
		<hr/>
		\$67 85
1884.		Cr.
By 67 bushels of corn at 75 cents,		\$50 25
“ 4,896 lbs of fodder at \$10 per ton,		24 48
“ 9 bushels potatoes,		4 50
		<hr/>
		\$79 23
	Deduct cost as above,	67 85
		<hr/>
	Net profits,	\$11 38

In making these returns no mention is made of pig corn. The fact is we did not husk nubbens, but left them for the cows and the rats. As I keep five good cats I am not much troubled with rats.

It has been a matter of pleasant interest to watch the progress and compare the profits of these two crops, and in the hope that others may also be interested in the comparison I respectfully submit these notes to the attention of the committee.

I am a little surprised to find that my profit on the whole crop with manure is nearly three dollars less than I make on my half of the crop planted for Mr. Hills. I think however that taking into consideration the condition of the two pieces in September, 1883, my piece is benefitted more than his. It is also much more convenient to work at home than at a distance of two miles.

Altogether there is no great choice in the two jobs. As I intimated at the beginning, we must all cut according to our cloth; and I am encouraged to believe that whether we raise corn for ourselves or our neighbors we can get fair pay for our work.

GENTLEMEN :—The half acre of potatoes which I offered for premium was ploughed early in April seven inches deep, harrowed thoroughly, and planted April 18th.

I marked the ground in rows three feet apart, furrowed six inches deep, planted whole potatoes, planting size two to four ounces, eighteen inches apart, and covered them by hand hoe with two or three inches of sod. In a few days I spread along the furrows two cords of well rotted manure, mainly corn stalks, which after being picked clean by the cows, had served as bedding for the horses, and afterwards mixed with the manure from the cow stables, and the whole kept in a fermenting condition through the winter and early spring by the daily application of slops from the house. This manure was twice thrown over, and at the time of using was well rotted and fine. I then harrowed the piece thoroughly with a rotary harrow. May 24th we cultivated and hoed the piece, and it then looked as promising as it possibly could. Five days later we had the freeze, and an occasional scrap of tinder was all that could be seen of the potato crop.

My usual practice is to harrow the potato crop once after the vines are up: but this year the crop looked so promising that I substituted cultivating and hand hoeing.

But the frost changed all that, and on the 31st of May I harrowed and cross harrowed the piece with an Acme harrow, till it was as fine as an ash heap.

In about ten days the vines began to show again, and on the 16th of June they were all well up, looking almost as well as they did three weeks before and we cultivated and hoed them: and this, with one dusting with plaster and paris green, was all the attention the crop received.

When the committee were here in September, they selected and dug what they considered an average rod, and the yield was at the rate of four hundred bushels to the acre.

The varieties planted were Beauty of Hebron and Pride of America. I did not perceive any difference in the yield of these varieties. Beauty of Hebron is a few days earlier, while Pride of America is the better keeper.

It may be of interest to state that on the 30th of May I dug up a Beauty of Hebron potato on this piece and broke off all the shoots and reset it about three inches deep. The vine was about a week later in coming up: otherwise there was no appreciable difference between this and the other plants which had been cut down by the frost, in time of blossoming, ripening, or in the yield.

Respectfully,

JOHN C. DILLON.

TREASURER'S REPORT.

FRANK E. PAIGE, TREASURER, IN ACCOUNT WITH THE HAMPSHIRE
AGRICULTURAL SOCIETY.

1884.	Dr.
To cash from 1883,	\$ 105 77
“ “ “ H. C. West,	2 00
“ “ “ New life members,	45 00
“ “ “ Pacing race,	27 30
“ “ “ Entrance money,	97 50
“ “ “ Rents,	63 00
“ “ “ Stand,	14 90
“ “ “ Gate,	658 23
“ “ “ State,	600 00
“ “ “ Donation to Society.	117 90
	\$1,732 10

1884.	Cr.
By paid W. A. Child, premiums,	\$ 32 00
“ H. C. West, “	8 00
“ J. E. Williams, bill,	46 33
“ D. A. Horton, expenses for Institute,	2 00
“ Grange store, “ “	1 82
“ Baptist society, “ “	5 00
“ W. W. Smith, bill,	14 00
“ Expenses to Worcester,	9 10
“ Express on posters,	1 55
“ Nails,	35
“ Expense posting bills,	90
“ Ribbons for officers,	1 04
“ Telegram,	29
“ For trotting,	215 00

By paid J. F. Sprague, bill labor,	3 00
“ James K. Allen, balloon,	175 00
“ Dennis Garvey, labor,	3 65
“ Nails,	2 19
“ L. J. Spear, bill,	1 00
“ Oliver Cowles, “	4 00
“ Russell & Morgan, bill,	30 00
“ Blank book,	40
“ Freight,	4 94
“ Charles Finamore, labor,	6 75
“ E. T. Jennings, “	5 00
“ Henry Adams, acids,	74 88
“ G. B. Gallond, dinner tickets,	39 50
“ Geo. Graves, bill,	2 00
“ W. W. Smith, repairing track,	20 00
“ A. Dwight, tank,	50 00
“ C. Thompson, labor,	5 75
“ H. C. Graves, “	6 00
“ L. Merritt, “	1 00
“ Frank E. Paige, Secretary and Treasurer,	100 00
“ W. L. Stiles, labor,	6 00
“ Amherst Savings bank, interest,	28 22
“ Thayer & Co., bill,	28 00
“ J. J. Potwin, “	4 00
“ J. F. Perkins, “	2 12
“ F. Cadwell, “	2 50
“ J. E. Williams, “	34 75
“ Paige Bros., “	2 50
“ W. W. Hunt, “	2 25
“ H. Holland, “	5 18
“ Jackson & Cutler, “	8 60
“ E. Conkey, “	9 00
“ O. D. Hunt, insurance,	50 00
“ Amherst bank,	25 00
“ J. E. Williams, bill,	2 50
“ Knowles steam pump works,	14 00
“ Postage and stationery,	8 81
“ Premiums,	621 95
Cash on hand,	4 38
	<hr/>
	\$1,732 10

FINANCIAL CONDITION OF THE SOCIETY.

LIABILITIES.

Note at Amherst Savings Bank,	\$ 900 00	
Interest due Jan. 1, 1885,	27 00	
" " July 1, 1885,	27 00	
J. E. Williams, bill,	3 50	
Lee & Phillips, "	11 27	
E. P. Dickinson, "	2 00	
W. W. Smith, "	22 60	
J. F. Gilbert, "	11 55	
Amounts due under Fourth Division,	25 00	
	\$1,029 92	
Cash on hand,		4 38
		\$1,025 54

AMHERST, Dec. 10, 1884.

I hereby certify that I have examined the accounts of Frank E. Paige, Treasurer of the Hampshire Agricultural Society for 1884, and find them correct, with a balance in the treasury of Four and 38-100 dollars.

E. D. BANGS, Auditor.

NEW LIFE MEMBERS OF 1884.

B. F. Kellogg,	Amherst.
E. F. Wiley,	Sunderland.
George H. B. Greene,	Belchertown.
Mrs. J. C. Dillon,	Amherst.
H. F. Williams,	South Deerfield.
William L. Hubbard,	Sunderland.
Francis Clapp,	South Deerfield.
Mrs. Levi Stockbridge,	Amherst.
“ E. J. Leach,	“
D. L. Viaria,	Hadley.
Ruth Demming,	Savoy.

THIRTY-SIXTH ANNUAL REPORT.

TRANSACTIONS

—OF THE—

HAMPSHIRE

AGRICULTURAL SOCIETY,

FOR THE YEAR

→* 1885 *←

AMHERST, MASS.

J. E. WILLIAMS, BOOK AND JOB PRINTER.

1885.

OFFICERS FOR 1885.

PRESIDENT,

W. W. SMITH, OF AMHERST.

VICE PRESIDENT,

D. A. HORTON, OF HADLEY.

SECRETARY AND TREASURER,

FRANK E. PAIGE, OF AMHERST.

EXECUTIVE COMMITTEE,

J. C. DILLON, OF AMHERST,
W. L. WARNER, OF SUNDERLAND,
DWIGHT PRESHO, OF PELHAM,
JAMES B. PAIGE, OF PRESCOTT,
W. A. REED, OF HADLEY,
A. F. FIELD, OF LEVERETT,
J. R. GOULD, OF BELCHERTOWN.

DELEGATE,

W. L. WARNER, OF SUNDERLAND.

SECRETARY'S REPORT.

In looking back over past life we are reminded of our faults and are stimulated to rectify them in the future. Perhaps it will be well for the members of the Society to glance back and see of what importance the Hampshire Agricultural Society Fair was in this and adjoining counties. It can be best described by the report of the secretary made at the time. The first fair was held Oct. 30, 1850; of this the secretary said: "The morning broke in splendor. The booming of artillery announced the advent of the farmer's holiday. The signs of a cattle show began to multiply in variety and number. Winding over hill and dale, came long strings of cattle and files of lowing cows, bleating calves and sheep, squealing pigs, roaring bulls and neighing horses. The public square was dotted with oyster booths, auction-stands, ginger-bread and cider carts. The number of working cattle on the ground at noon was 630 and was the largest display ever made in this part of the state." Of the second Fair he says: "The second anniversary came, with its excitement, its crowd of spectators, exhibitors and cattle. It swept by with the rush of a tempest." The number of horses on exhibition was 123. A ploughing match was had in which there were twenty-three entries, the whole number of cattle was five hundred. Three town teams contained 165 pairs of working oxen. The Belchertown team contained over 131 yoke, which were decorated with banners and drew a car ornamented with agricultural devices, and holding 181 persons." Of the hall display he says: "The exhibits of the dairy was good, there was twenty lots of butter and thirty of cheese, all of fine appearance and quality. The loaves of wheat and rye bread exceeded 100 in number."

Compare these exhibits with those of thirty-five years later. In 1885 there were less than twenty-five yoke of working oxen and fifty horses entered. There were six entries of cheese, eight of butter and nineteen of wheat, rye and Indian bread.

Why this difference? Can it be possible that the farms of this beautiful Connecticut valley, are diminishing in productiveness? That the farmers cannot cultivate the land as advantageously and profitably as their predecessors?

That they cannot grow stock worthy of exhibition? That they have never acquired the art of making good bread, butter and cheese? Every farmer would emphatically deny this.

Then I ask why this difference? When we have agricultural colleges and experimental stations in our midst; when we have improved machinery to plant, cultivate and harvest the farm crops; when we have papers devoted to the science of agriculture to read at our fireside; when manufacturers have their farms in connection with other business; when physicians have their stables of fine bred horses; when eminent lawyers enter the court room with the pedigree of their stock in one hand and briefs in the other; in short when everything is done that can be to help on agriculture, and every one is interested in it; why should not our Fair be equal to those held thirty-five years ago?

Is it because the members have lost their interest in the welfare of the Society? Then I ask every member, what shall be done to renew that interest and make our Fair the most successful and instructive? This is a grave question at the present time and demands the careful consideration of every member.

The comparisons that I have made are not for the purpose of casting reflection upon our Fair this year, but I desire to impress upon the members the painful, yet indisputable fact, that the interest in and attendance to our exhibition is gradually decreasing, and that they are called upon to exert every effort to assist in bringing our Fairs back to what they were a quarter of a century ago.

The finances of the Society can be learned by an examination of the treasurer's report. Water pipes have been laid this year and water introduced on the ground and into the hall, it being the intention of the officers to rent the ground for pasture.

The required number of institutes were held during the winter and were well attended and many important questions discussed. Of the Fair this year it was equal to that of last, which all admit was excellent. The hall was well filled. The vegetables and fruit displayed were remarkably fine. Outside the hall the poultry exhibit was large and some fine specimens were shown. The exhibition of stock was worthy of examination.

Trusting that every one will contribute to the fair of 1886, and thanking all who have aided in our Fair this year, and especially the officers who have labored so faithfully and cheerfully, endeavoring and anxious to do all that lay in their power for the best interest of the society,

I am yours truly,

FRANK E. PAIGE, Secretary.

REPORT OF THE DELEGATE OF THE STATE BOARD OF AGRICULTURE IN 1884.

The visit of your delegate to the thirty-fifth annual exhibition of the Hampshire Agricultural Society on the 18th and 19th days of September, 1884, was a pleasant one to remember. My report can scarcely prove interesting, there being nothing to criticise adversely and so much to commend. The weather—always a matter of so much anxiety to managers of cattle shows, and a potent factor in determining the degree of success which shall attend them—was of the finest during the two days of the Fair. The first day but few persons were on the ground. The second day a large crowd assembled, making the Fair financially successful and manifesting a deserved appreciation of the efforts of the energetic and genial officers of the Society. This Society is especially fortunate in the character and ability of its officers and their determined spirit to make their Fair deserve success even if it fails to win it. There was a large array of oxen present and the performance of some of them in drawing heavy loads was remarkable. The milch cows and heifers on the ground were largely Jerseys and Ayrshires and mostly fine animals. It was gratifying to see so many registered animals. Two very good registered bulls were on exhibition and the presence of these thoroughbreds must tend greatly to the improvement of the stock in that county. It must be confessed however that some of the stock might have presented a neater appearance. That was not the fault of the animals.

There were sixteen entries of swine and the show was good. The pigs had no occasion to be ashamed of themselves.

The show of sheep was also very good indeed there being about one hundred in number divided among fifteen entries.

The display of poultry was fair. There were about forty entries and some fine specimens.

The display of draft horses, carriage horses and roadsters on the track was a remarkably good one. Seldom can so many very fine

horses be seen together. Two first rate blooded stallions competed for premiums.

Their were eight entries of mares with sucking colts and ten entries of colts and fillies. This part of the exhibition was a great credit to all the contributors. Among all the horses young and old there was not a single mean animal. All were good.

The trotting on the track both days was very good. The Society is to be congratulated upon its fine Fair grounds in the midst of such a fine country and surrounded by scenery of surpassing beauty, and the owners of fast horses upon having here a track for the exhibition of one of the horse's most valuable qualities, that is so perfectly level and well adapted to their purpose.

The exhibition in the hall was remarkably large and fine. Domestic manufactures and fancy articles were displayed in bewildering profusion and beauty. The vegetable kingdom must have sent its kingliest specimens to this hall. All kinds of vegetables abounded and in perfection of development. The same may be said of the fruit of which there werh a large number of entries.

The canned and dried fruits and honey were noticeable and a prominent feature of the exhibition. A somewhat novel feature was the presence of quite a large number of bottles of native wine of various kinds and ages.

But the exhibition of butter, cheese and bread was, we venture to assert, one of the best ever seen at any fair. The ladies of Hampshire county may claim pre-eminence for ability to contribute to an exhibition of this character.

The exhibition in all its parts was excellent. The arrangements for it by the officers of the Society were admirable and well carried out. Excellent as was this exhibition, however, when it is remembered where and what Amherst is, and what a magnificent agricultural region this is, better things yet may be reasonably expected of this Society. Respectfully submitted,

DANIEL E. DAMON.

LIST OF PREMIUMS AWARDED.

CLASS 1—TOWN TEAMS. 3 ENTRIES.

Town of Hadley,	\$20 00
" Amherst,	15 00
" Enfield,	10 00

CLASS 2—FANCY CATTLE. 4 ENTRIES.

C. W. Thurber, Leverett,	\$4 00
Lyman Shearer, Enfield,	3 00
Chester Smith, Hadley,	2 00

CLASS 3—WORKING OXEN. 11 ENTRIES.

Francis Clapp, So. Deerfield,	\$5 00
J. M. Fales, Pelham,	4 00
Chester Smith, Hadley,	3 00
William B. Fales, Pelham,	2 00

CLASS 4—STEERS. 4 ENTRIES.

L. W. West, Hadley,	2 years old,	\$3 00
L. W. West, "	2 years old,	2 00
C. W. Thurber, Leverett,	1 year old,	2 00
L. W. West, Hadley,	1 year old,	1 00

CLASS 5—MILCH COWS. 15 ENTRIES.

Parker Hubbard, Sunderland,	Thoroughbred Jersey,	\$4 00
J. C. Dillon, Amherst,	Grade,	3 00
Parker Hubbard, Sunderland,	"	2 00
Samuel Boltwood, Amherst,	"	1 00
J. P. Smith, "	"	4 00

CLASS 6—HERDS OF MILCH COWS. 6 ENTRIES.

G. W. Field, Amherst,	5 Thoroughbreds,	\$5 00
L. W. West, Hadley,	Herd,	5 00
James P. Smith, Amherst,	"	4 00
Parker Hubbard, Sunderland,	"	3 00
Rufus A. Cook, Hadley,	"	2 00

CLASS 7—HEIFERS. 25 ENTRIES.

Parker Hubbard, Sunderland,	Grade, 2 years old,	\$3 00
E. C. Parker, Amherst,	" "	2 00
G. W. Fitch, "	" "	1 00
L. W. West, Hadley,	" 1 "	2 00
" " "	" 1 "	1 00
G. W. Fitch, Amherst,	" 2 " Thoroughb'd,	3 00
" " "	" 2 " "	2 00
Parker Hubbard, Sunderland,	" 2 " "	1 00
G. W. Fitch, Amherst,	" 1 " "	2 00
" " "	" 1 " "	1 00

CLASS 8—BULLS. 7 ENTRIES.

Parker Hubbard, Sunderland,	Jersey,	\$4 00
F. J. Humphrey, Amherst,	"	2 00
L. W. West, Hadley,	Shorthorn,	2 00

CLASS 9—CALVES. 17 ENTRIES.

L. W. West, Hadley,	Bull calf,	\$2 00
G. W. Fitch, Amherst,	"	1 00
" " "	Heifer,	2 00
" " "	"	1 00

CLASS 10—HERDS OF CATTLE. 4 ENTRIES.

L. W. West, Hadley,	\$6 00
G. W. Fitch, Amherst,	5 00
Rufus A. Cook, Hadley,	4 00
William A. Magill, Amherst,	3 00

CLASS 11—SWINE. 17 ENTRIES.

Moses White, Hadley,	Thoroughbred Boar,	\$4 00
J. W. Clark, "	" "	3 00
L. W. West, "	" "	1 00
H. F. Williams, So. Deerfield,	Grade, "	4 00
Rufus Cook, Hadley,	" "	3 00
H. A. Parsons, Amherst,	" "	1 00
L. W. West, Hadley,	Sow and Pigs,	4 00
H. C. West, "	"	3 00
Moses White, "	"	1 00
H. C. West, "	Weaned Pigs,	1 00
Josiah Cook, "	"	3 00
J. W. Clark, "	"	1 00

CLASS 12—SHEEP. 18 ENTRIES.

H. F. Williams, So. Deerfield,	Flocks,	\$6 00
Dwight Morton, Hadley,	"	3 00
Francis Clapp, So. Deerfield,	Buck,	4 00
Edmund Hobart, Amherst,	"	3 00
W. D. Gray, Hadley,	"	2 00
Francis Clapp, So. Deerfield,	Ewes,	4 00
Rufus A. Cook, Hadley,	"	3 00
W. D. Gray, " "	"	2 00
Dwight Morton, " "	Lambs,	4 00
Francis Clapp, So. Deerfield,	"	3 00
James Comins, Hadley,	"	2 00

CLASS 13—POULTRY. 51 ENTRIES.

James B. Roberts, Amherst,	Brahmas,	\$2 00
E. N. Fisher, Belchertown,	"	1 00
W. J. Seelye, Amherst,	Plymouth Rocks,	2 00
" " " "	" "	1 00
Arthur E. Magill, Amherst,	Hamburgs,	1 00
W. J. Seelye, " "	Brown Leghorns,	2 00
E. N. Fisher, Belchertown,	" "	1 00
J. C. Dillon, Amherst,	Dorking Games,	1 00
E. N. Fisher, Belchertown,	Turkeys,	2 00
" " " "	" "	1 00
J. C. Dillon, Amherst,	Ducks,	1 00
W. J. Seelye, " "	Wyandottes,	2 00
James B. Roberts, Amherst,	"	1 00

BREEDING PENS.

E. C. Parker, Amherst,	Brahmas,	\$2 00
George Graves, " "	Plymouth Rocks,	2 00
E. N. Fisher, Belchertown,	" "	1 00
J. C. Dillon, Amherst,	Dorking Games,	2 00
George Graves, " "	Wyandottes,	2 00
" " " "	" "	1 00

CLASS 14—AGRICULTURAL AND FARM IMPLEMENTS. 6 ENTRIES.

There being but one entry by an exhibitor, no award was made.

CLASS 14½—MECHANIC ARTS. 3 ENTRIES.

Sanderson & Robinson, Northampton, Organ,	Diploma.
C. N. Stimpson, Springfield,	"
Whitbeck & Shearn, Northampton,	"

CLASS 15—MERCANTILE GOODS. 5 ENTRIES.

F. H. Howes, Amherst,	\$8 00
H. L. Coe, "	6 00
Charles Deuel, "	3 00
Lee & Phillips, "	4 00
E. D. Marsh. "	4 00

CLASS 16—DOMESTIC AND OTHER MANUFACTURES. 26 ENTRIES.

Miss E. J. Way, Amherst,	Worsted mittens,	\$ 50
" " " " "	Knit skirt,	50
W. L. Warner, Sunderland,	Rug,	1 00
Mrs. C. J. King, Amherst,	Bed quilt,	25
" " " " "	" " " " "	25
" Belle J. Wrigley, Amherst,	9 pairs hose,	1 00
" " " " "	Mittens,	50
" Henry Shaw, "	Scarf,	25
" S. W. Boutwell, Leverett,	Rug,	1 00
Miss Lucy Boice, Amherst,	Cape,	25
Mrs. M. F. Dickinson, Amherst,	Skirt,	50
Lessie Wrigley, "	Rug,	50
Charles Deuel, "	Show-case,	3 00
Mrs. C. F. Dickinson, "	Rugs,	50
" S. Hubbard, "	Quilt,	50
Mrs. Belle J. Wrigley, "	Rag carpet,	1 00
" Henry Taylor, Ashfield,	Bed spread,	1 25
Miss S. J. Clark, Amherst,	Quilt,	50
Mrs. Amos Demming, Savoy,	Carpet,	1 50
Ruth P. " "	Yarn,	75
Mrs. H. Ramsdell, Pelham,	Mats,	1 25
" J. R. Powell, "	" "	1 25

CLASS 17—FANCY ARTICLES. 67 ENTRIES.

Mrs. A. F. Curtis, Hatfield,	Quilt,	\$2 00
Miss E. J. Way, Amherst,	Spread,	50
Mrs. Parker Hubbard, Sunderland,	Banner,	75
" " " " "	Scarf,	50
" " " " "	" "	75
Lena Fitch, Amherst,	Picture frame,	25
Abbie " " "	Tidy,	25
Mrs. W. W. Smith, Amherst,	Quilt,	1 50
Albert McCloud, "	" "	25

Mrs. E. J. Leach,	Amherst,	Infant's sack,	40	
"	"	"	"	
"	"	Crotchet work,	25	
Fannie Tremer,	Holyoke,	Pin cushion,	50	
Mrs. C. S. Haskell,	Boston,	Slipper case,	50	
"	T. S.	Belchertown,	Cape,	50
"	E. A. Vining,	Amherst,	Banner,	1 00
W. L. Warner,	Sunderland,	Table scarf,	1 50	
F. E. Paige,	Amherst,	Brass work,	1.00	
Lula Willson,	"	Blocks,	25	
Hattie King,	"	Hand-bag,	50	
"	"	"	"	
"	"	Match-safe,	25	
Mrs. Henry Shaw,	Amherst,	Toilet set,	50	
"	Belle J. Wrigley,	"	Bed quilt,	50
Lessie Wrigley,	"	"	"	50
Mrs. S. W. Boutwell,	Leverett.	Lamp mats.	25	
"	"	"	Brush receiver,	25
"	"	"	Panels,	25
"	Sanford Boice,	Amherst,	Lambrequin,	75
Minnie Allen,	"	"	Rug,	50
Mrs. E. C. Parker,	"	"	Tidy,	50
"	M. L. Dickinson,	"	Table scarf,	75
"	A. L.	"	Bed quilt,	75
"	E. R.	"	Lamp mats,	25
"	J. D. Miller,	"	Scrap rack,	25
"	E. Sabin,	"	Tidy,	25
"	"	"	Mats,	25
"	E. F. Strickland,	"	Bed spread,	50
"	"	"	"	50
"	"	"	Sofa pillow,	45
"	Lucius Ingram,	"	Afghan,	1 50
"	Eliza M. Thayer,	"	Bed quilt,	1 50
"	Mary M. Chapin,	Chicopee,	Quilt,	1 00
"	L. W. West,	Hadley,	Banner.	50
Miss Mary M. Chapin,	Chicopee,	"	"	1 00
"	Belle Van Horn,	"	"	1 00
"	"	"	Arasene,	75
Mrs. P. D. Hubbard,	Sunderland,	Bracket.	25	
Mr. W. L.	"	"	Toilet set,	1 00
"	"	"	Tidy,	25
"	M. L.	"	Table scarf,	50

Mrs. S. W. Holton, Amherst,	Lace collar,	75
Miss Jennie L. Cowles, "	Bed spread,	50
Nellie L. Gray, Hadley,	Spread,	1 50
" " " "	Brush case,	25
Jennie L. Cowles, Amherst,	Table scarf,	1 00
Dora M. Horton, Hadley,	Rick-rack,	50

CLASS 18—FINE ARTS. 27 ENTRIES.

Miss Sarah N. Kingman, Amherst,	Paintings,	\$3 00
Edwin B. Childs, "	" "	3 00
Hattie King, "	" "	2 00
George A. Russell, "	" "	1 25
Mrs. C. E. Wakefield, "	" "	50
Bessie Parents, "	Vase,	25

CLASS 19—BREAD, BUTTER, AND CHEESE. 30 ENTRIES.

Mrs. Belle J. Wrigley, Amherst,	Wheat bread,	\$2 00
" G. L. Cooley, Sunderland,	" "	1 00
" E. C. Parker, Amherst,	rye "	2 00
" M. L. Hubbard, Sunderland,	" "	1 00
" E. C. Parker, Amherst,	Graham "	2 00
" S. W. Boutwell, Leverett,	" "	1 00
" T. L. Paige, Amherst,	Rye and Indian bread,	2 00
" E. C. Parker, "	" " "	1 00
" Parker Hubbard, Sunderland,	Butter,	3 00
" E. C. Parker, Amherst,	" "	2 00
" M. L. Hubbard, Sunderland,	" "	1 00
" Amos Demming, Savoy,	Sage cheese,	2 00
" James Comins, Hadley,	" "	1 00
" " " "	Cheese,	2 00
" Ruth P. Deming, Savoy,	" "	1 00

CLASS 20—HONEY, WINES, CANNED AND DRIED FRUITS, JELLIES,
PICKLES, MAPLE SYRUP, AND SUGAR. 21 ENTRIES.

E. N. Fisher, Belchertown,	Honey,	\$ 50
J. W. Allen, Amherst,	" "	25
Mrs. S. W. Boutwell, Leverett,	" "	50
Mrs. Parker Hubbard, Sunderland,	Jellies,	1 00
R. G. Williams, Amherst,	" "	50
Mrs. S. W. Boutwell, Leverett,	" "	75
" W. M. Bliss, Amherst,	" "	25

R. G. Williams, Amherst,	Pickles,	50
“ “ “	Catsup,	25
Mrs. Parker Hubbard, Sunderland,	Canned fruits,	1 00
“ S. W. Boutwell, Leverett,	“ “	75
“ Parker Hubbard, Sunderland,	Maple syrup,	75
Ruth Demming, Savoy,	“ “	50
Mrs. Sanford Boice, Amherst,	Dried apples,	75
“ Henry Shaw, “	“ “	50
“ Parker Hubbard, Sunderland,	“ “	25
G. H. B. Greene, Belchertown.	Wine,	75
Ruth Demming, Savoy,	“	50

CLASS 21—FRUIT. 9 ENTRIES.

G. H. B. Greene, Belchertown,	Display,	\$4 00
F. B. Paige, Prescott,	“	3 00
R. G. Williams, Amherst,	“	2 00
J. C. Dillon, “	“	1 00
Mrs. Parker Hubbard, Sunderland,	Basket,	4 00
F. B. Paige, Prescott,	“	2 00

CLASS 22—FRUITS GROWN BY THE EXHIBITOR. 28 ENTRIES.

G. H. B. Greene, Belchertown,	Collection of apples,	\$4 00
W. W. Smith, Amherst,	“ “ “	3 00
R. G. Williams, “	“ “ “	2 00
J. C. Dillon, “	“ “ “	1 00
G. H. B. Greene, Belchertown,	“ “ pears,	4 00
F. B. Paige, Prescott,	“ “ “	3 00
J. C. Dillon, Amherst,	“ “ “	2 00
E. C. Parker, “	“ “ “	1 00
G. H. B. Greene, Belchertown.	“ “ Grapes,	4 00
R. G. Williams, Amherst,	“ “ “	2 00
J. C. Dillon, “	“ “ “	1 00
J. W. Clark, Hadley,	“ “ Peaches,	1 00

CLASS 23—VEGETABLES GROWN BY THE EXHIBITOR. 86 ENTRIES.

J. C. Dillon, Amherst,	Collection of vegetables,	\$5 00
F. B. Paige, Prescott,	“ “ “	4 00
E. C. Parker, Amherst,	“ “ “	3 00
R. G. Williams, “	“ “ “	2 00
E. T. Sabin, “	Exhibit of potatoes,	2 00
J. C. Dillon, “	“ “ “	1 00
D. A. Horton, Hadley,	Peck “ “	1 00

A. E. Sanderson, Sunderland,	Peck of onions,	1 00
R. G. Williams, Amherst.	Exhibit of carrots,	50
A. D. Loomis, “	“ “ beets,	1 00
J. C. Dillon, “	“ “ “	50
R. G. Williams, “	“ “ Rutabagas,	1 00
E. C. Parker, “	“ “ tomatoes,	1 00
L. W. Goodell, “	“ “ “	50
R. G. Williams, “	“ “ beans,	1 00
Arthur E. Magill, “	“ “ “	50
James Comins, Hadley,	Peck “ “	1 00
William A. Magill, Amherst,	“ “ “	50
G. L. Cooley, Sunderland,	Exhibit of pumpkins,	1 00
A. D. Loomis, Amherst,	“ “ cabbages,	2 00
R. G. Williams, “	“ “ “	1 00
William A. Magill, “	“ “ sweet corn,	2 00
E. C. Parker, “	“ “ “ “	1 00
“ “ “	“ “ seed “	2 00
Thomas Reed, “	“ “ “ “	1 00
W. W. Smith, “	“ “ winter squashes,	2 00
William A. Magill, “	“ “ “ “	1 00
James Comins, Hadley,	“ “ “ wheat,	1 00
Chester Cowles, Amherst,	“ “ “ “	50
James Comins, Hadley,	“ “ spring “	50
Chester Cowles, Amherst,	“ “ rye,	1 00
E. C. Parker, “	“ “ “	50
Robert H. Smith, “	“ “ oats,	1 00
James Comins, Hadley,	“ “ “	50

CLASS 24—FLOWERS. 24 ENTRIES.

L. W. Goodell, Belchertown,	Best collection,	\$5 00
L. W. Goodell, Amherst,	Collection of asters,	\$2 00
Mrs. E. C. Parker, Amherst,	“ “ “	1 00
“ S. W. Boutwell, Leverett,	“ “ dahlia,	2 00
“ E. C. Parker, Amherst,	“ “ “	1 00
L. W. Goodell, Belchertown,	“ “ verbenas,	2 00
Mrs. E. C. Parker, Amherst,	“ “ “	1 00
L. W. Goodell, Belchertown,	“ “ gladioli,	2 00
Mrs. E. C. Parker, Amherst,	“ “ “	1 00
“ Alden Graves, Sunderland,	“ “ wild flowers,	2 00
“ S. W. Boutwell, Leverett,	“ “ “ “	1 00
“ “ “ “	“ “ bouquet,	2 00
“ E. C. Parker, Amherst,	“ “ “	1 00

CLASS 25—STALLIONS. 3 ENTRIES.

J. F. Stevens,	Monson,	\$8 00
Parker Hubbard,	Sunderland,	5 00

CLASS 26—BREEDING MARES WITH SUCKING COLTS. 7 ENTRIES.

C. L. Russell,	Sunderland,	\$5 00
H. Holland,	Amherst,	4 00
J. F. Marshall,	“	3 00
L. W. West,	Hadley,	2 00

CLASS 27—COLTS AND FILLIES. 13 ENTRIES.

Howard Osgood, Shutesbury,	3 years old,	\$3 00
James Phelps,	“ 3 years old,	2 00
F. F. Adams, Leverett,	2 years old,	3 00
Andrew Johnson, Prescott,	2 years old,	2 00
R. H. Allen,	“ 2 years old,	1 00
Rufus Fitts, Shutesbury,	1 year old,	2 00
Frank Ingram, Amherst.	1 year old,	1 00

CLASS 28—FARM HORSES. 3 ENTRIES.

W. L. Hubbard, Sunderland,	Single,	\$3 00
James P. Smith, Amherst,	“	2 00

CLASS 29—DRAFT HORSES. 4 ENTRIES.

Frank Cadwell, Amherst,	Single,	\$3 00
Chester Smith, Hadley,	Pair,	4 00
D. L. Viaria,	“	3 00

CLASS 30—CARRIAGE HORSES. 10 ENTRIES.

L. S. Dyer, Hatfield,	Single,	\$5 00
F. H. Graves, Sunderland,	“	4 00
R. H. Clapp, Northampton,	“	2 00
L. S. Dyer, Hatfield,	Pair,	6 00
J. F. Burt & Son, Easthampton,	“	4 00
R. H. Allen, Prescott,	“	2 00

CLASS 31—ROADSTERS. 5 ENTRIES.

L. S. Dyer, Hatfield,	Single,	\$6 00
T. T. Sisson, Amherst,	“	4 00
J. F. Stevens, Monson,	“	2 00
W. H. Comins, Hadley,	Pair,	4 00

AWARDED UNDER FOURTH DIVISION.

J. C. Dillon, Amherst,	Report,	\$4 00
M. B. Kingman, Amherst,	“	3 00

Patsey Palmer, Hadley,	$\frac{1}{8}$ acre of potatoes,	3 00
H. C. West, Hadley,	$\frac{1}{2}$ " "	5 00
J. C. Dillon, Sunderland,	$\frac{1}{2}$ " "	2 00
Alvin Sanderson, Sunderland,	Onions,	5 00
J. C. Dillon, Amherst,	Corn,	5 00
James Comins, Hadley,	Corn,	3 00

PLOUGHING MATCH.

E. C. Parker, Amherst,	First,	\$5 00
G. W. Fitch, "	Second,	3 00
J. A. Sullivan, Northampton,	Third,	2 00

RACES.

PURSE \$20.00

Horses owned in Hampshire county that never trotted for money.

P. Munson, Amherst,	Frank,	\$10 00
L. E. Howard, New Salem,	Canadian Boy,	5 00
F. P. Newkirk, Easthampton,	Gray Bess,	3 00

2-30 CLASS. PURSE \$100.00.

S. Richards, Springfield,	Propeller,	\$40 00
J. P. Stevens, Monson,	Morrel Boy,	30 00
Lewis Martin, East Brookfield,	Kenset F.,	20 00
H. B. Graves, Northampton,	Fearnaught,	10 00

2-45 CLASS. PURSE \$75.00.

S. Richards, Springfield,	Deceit,	\$30 00
C. R. Pomeroy, Northampton,	Lizzie,	20 00
H. T. Mathewson, Brookfield,	Lady Richwood,	15 00
E. L. Powers, New Salem,	Mountain Boy,	10 00

REPORT ON BULLS.

The illness of one and the extreme business of another member of the committee appointed by the Society, devolved on your chairman the task of obtaining substitutes; and he was fortunate in securing the assistance of two gentlemen of ripe experience, acknowledged judgment, and marked independence of character. This made his task easy and pleasant, and even where his opinion was over-ruled by his associates, he had the satisfaction of feeling thorough confidence in the integrity of their motives, and a sincere respect for the principles on which their decision was based.

Of the seven entries in this class, six animals were Jerseys, a tolerably fair criterion of the general estimation in which this breed is held. Of these six, some had authentic certificates of registry in the books of the American Jersey Cattle Club (A. J. C. C.), others were recorded in the American Jersey Herd Book (A. J. H. B.), while the pedigrees of the rest depended on the assertion of their owners, supported by more or less testimony of a more or less vague and unofficial kind.

Fortunately for the committee, the question of the comparative validity of the several pedigrees did not arise, as the two bulls to which the first and second premiums were awarded were indisputably the best animals in the class, and their proofs of pure, indeed aristocratic ancestry, were clear and undeniable. As however this question is likely to arise in the future, it may be well for the Society to decide and define what registration or evidence of pedigree shall be necessary to qualify an animal to receive the Society's premiums. Must a bull be registered in the Herd Record of the American Jersey Cattle Club, or is it sufficient if his pedigree is recorded in the American Jersey Herd Book, or may the committee award a premium to an animal on satisfactory proof that he is descended in a direct line from imported stock, or from registered stock or stock popularly recognized as pure, always supposing the appearance of the animal to bear out his owner's claims? Much may be said both for and

against each of these rules, but it seems desirable that the society should relieve their committees on stock of an irksome responsibility, and remove a fertile cause of dissatisfaction and irritation to exhibitors, by defining clearly the nature and evidence of pedigrees required.

Deferring to the public verdict, which has selected the Jersey as the best bull for the improvement of the stock for the butter dairy, we could not but regret the absence of the stately Shorthorn, the massive Dutch, the plump Devons, the spirited Ayrshires, the useful looking Guernsey, the neat little Britanniens, and other breeds which have heretofore graced this class at other exhibitions. Except for a yearling Shorthorn, in only ordinary condition, these breeds were conspicuous by their absence, but it was some consolation to those who had known and loved them, to see that Mountain Lad, Colfax, Gen. Lyon, Fourth Highland Chief, William Tell and Upton had not lived and labored in vain. On every side we see their excellencies reflected in their daughters, grand daughters, great grand daughters, and in the capacious chests, well arched ribs, wide long loins, broad hips, level rumps, big well shaped udders and robust constitutions of these descendants, we recognize the metal which, stamped with the Royal Jersey die, makes a coin that is legal tender wherever butter making is the chief or even a considerable object of the farmer.

Perhaps it would be well to stop here, but like the immortal Dogberry "I do not forget to specify when time and place serves that I am an ass," that, after all I have admitted in favor of the Jerseys I love them about as much as the California Irishman loves the heathen Chinee. As the successful result of patient and persistent effort to produce an animal, adapted to a certain locality and a specific use, I appreciate and respect them, but as cattle for New England in general, and the Connecticut Valley in particular, I think they are over-rated. I recognize their general superiority as butter producers, but I think it is not only possible but desirable to combine this faculty with larger size and better forms and constitutions.

At a Farmers' Institute some years ago I was asked what breed of cattle I would select if I could have my choice of them all. I replied that I would take as my model the famous "Duchess by Daisy bull." A friend soon after took occasion to express his surprise that I should give so decided a preference to the Shorthorns, and it cost me some little pains to explain that, tho' "Duchess by Daisy bull" was the ancestress of most of the Shorthorns in existence, she died some

five years before the first volume of the English Shorthorn Herd Book was published, and that I admired her because she was worthy to found a breed, and not simply because she belonged to one. As some of my readers may not have heard, or may not remember her character and history, I will quote from a letter written by Mr. Bates to the *New Farmers' Journal* in November, 1842; he says:

“ I selected this (the “ Duchess ”) tribe of Shorthorns as superior to all other cattle, not only as small consumers, but as great growers and quick grazers, with the finest quality of beef. My first ‘ Duchess ’ calved at Holton Castle, June 7, 1807. She was kept on grass only, in a pasture with nineteen other cows, and made in butter and milk, for some months, above two guineas per week.” This quotation is copied from the *History of Shorthorns*, by Lewis F. Allen, and the editor goes on to say, “ Not knowing the prices of either milk by the gallon or butter by the pound, at that time, a statement of the quantity of each which the cow made would be more satisfactory to readers of the present day.” This is a self evident proposition, and turning to the *History of Improved Shorthorn Cattle* by Thomas Bell, published just before Mr. Allen’s book, we find the following interesting and exhaustive explanation. Mr. Bell says: “ Mr. Wastell had a cow called Barforth that gave eighteen quarts of milk at each meal, and made sixteen pounds of butter per week of twenty-four ounces to the pound. Mr. Bates never had a cow that gave, to his knowledge, more than fourteen quarts to a meal. His first ‘ Duchess by Daisy bull ’ gave that quantity, and each quart when set up and churned separately gave one and a half ounces, or twenty-one ounces per meal. The butter was made up for Newcastle Market in half pounds of ten and a half ounces each, and was sold at one shilling per half pound. The milk after being creamed was sold to the laborers at a penny per quart, which makes at twenty-eight quarts per day, 16s. 4d. per week, and taking off 2s. for the diminution of the cream, and fourteen pounds of butter per week at 2s. per pound, making 28s. this, added to the old milk value, makes better than two guineas per week.” Translated into plain United States, this means that she gave 28 beer quarts of milk a day, from which was made 294 ounces, or eighteen pounds six ounces of butter per week. This butter was sold for \$6.72 and the skim milk for \$3.44, making together, \$10.16 per week. Mr. Bell goes on to say, “ This she did for some time in the summer, having calved the 7th of June, 1807. She pastured with other nineteen cows, and was

kept in the same way in every respect, getting no hard food whatever." And Mr. Allen adds, "At seventeen years of age, having done breeding, she was fed off and made an excellent carcass of beef. She was a great milker."

This record is not very wonderful alongside of Bomba, 21 lbs. and 11½ oz., Mary Ann of St. Lamberts, 36 lbs. and 12 oz., and Princess 2d, 46 lbs. and 12½ oz., but these cows were confessedly fed all they would eat of the most concentrated food; and two out of the three have died in their prime, presumably because their milking capacity was developed and stimulated beyond the limit of their constitutional strength. It has also been suggested by skeptical people that the owners' gift of embellishing may have grown in at least an equal ratio with the butter making capacity of the cows. But, be this as it may, I have recalled the history of Duchess to show that the butter producing faculty is not only incompatible with good size and admirable symmetry, but that it is found in a high degree and is most permanently and practically useful when combined with the most perfect development of form and physical constitution. I also wish to call attention to the fact that the particular excellence of Duchess by Daisy bull, as well as the general superiority of the tribe and the breed, had been achieved by close study and care in breeding animals for practical value as profitable producers of milk and butter and beef; and that while due importance was attached to pedigree, each breeder used his own judgment as to the value of an animal or a family for his purpose. There were then no herd books, and farmers were not tempted to use an inferior animal because he was recorded, or to reject a superior one because he was not.

Few have more respect than I have for the different herd books as books of reference; like other agricultural text books they are liable to mislead but the neophyte who rushes confidently into paths which the more experienced tread with caution and misgiving. Mr. Bates ably remarks. "The value of pedigree depends not upon the length of such pedigree, but on the length of time there has been a succession of the best blood, without any inferior blood intervening in such succession." "This can only be known by those who have known all the various crosses there are in any animal, and the blood or breeding of such from their own knowledge of the tribes from which they came, and how that produce bred again." Mr. Bates was an intelligent, careful, experienced and eminently successful breeder. Let us see how his teachings and practice bear on the question of breeding at the present day.

The Massachusetts State Board of Agriculture has forbidden the encouragement by the Societies of grade bulls, and has done its best to discourage their use by the farmers of the state. Now suppose two farmers in the Valley, who each own a herd of good useful dairy cows, want to breed a lot of calves to grow up into cows for butter making and finally for profitable conversion into beef. One of them loyally accepts the dictum of the Board, "Never breed from a grade bull," and at some cost and inconvenience sets out to provide himself with a thoroughbred. The Board only stipulates that the bull shall be thoroughbred, but putting aside the temptation to take the first that offers, our farmer is determined to proceed cautiously and intelligently in quest of an animal suited to his purpose. His first consideration will be to select from a good milking breed, but even in this there is no general rule that can be absolutely depended on. In the grazing breeds are numerous individuals and families with superior milking capacity, and in the so-called milking breeds there are still more which are deficient in this respect. Let us suppose however that our loyal farmer decides on some one breed, as best suited to his purpose and circumstances, and secures a bull calf from a heifer with a satisfactory milking capacity. Fed and treated as a well-bred and expensive animal should be, the calf thrives and flourishes, and the loyal farmer thinks he has got a prize, and perhaps he has, but at any rate he must take his chance again and again. And sometime he will make a mistake, and what then? His heifers as they come into milk will sicken and die of tubercular consumption, or his cows will develop a tendency to abortion, milk fever, or apoplexy; the milk will be deficient in quantity or quality or both, and then the farmer will show his bull's pedigree to some one who knows the breed, and he will be told that his misfortunes are not accidental, but the inevitable result of breeding from ancestors known to the initiated to be defective or worthless.

The other farmer has bred Plymouth Rocks and Wyandottes and knows the possibility as well as the difficulty of combining desirable properties and breeding out defects; he believes that he has got about the class of cattle that suits him, but as there are degrees of merit, he raises a bull calf from the best cow in his own or his neighbor's herd. He has confidence this calf will not disgrace the mother, as he knows the sire, and also the two grand sires and grand dams of the calf; and he also knows the kind of stock which for several generations the bulls of this family have begotten on different classes of

cows. It is an affliction to him that he cannot exhibit his bull or his herd at the Society's Fair, but the Society suffers with him; and he thinks he has more assurance of satisfaction than if he had depended on the herd book, of which he knows practically nothing at all, and the interested representations of breeders whose stock (or at least a good deal of it) is bred, like the celebrated razors were made, not for use but for sale.

I make these remarks with much diffidence, as I have the highest possible respect for the Board of Agriculture, and for many years fully approved the policy of discouraging the use of grade bulls, but observation and experience have led me to change my views, and having often expressed these opinions in private conversation I have thought proper to present them for the consideration of the Society. I have written this hurriedly, amid constant interruption and distractions and I feel that I have not done justice to my subject. I will therefore quote the terse conclusions of an eminent thinker and writer published nearly thirty years ago:

“If all would begin to-day to use what skill and judgment they have, or can acquire, in breeding only from the best of such as they have, coupling with reference to their peculiarities, and consigning to the butcher as fast as possible every inferior animal, and if, in addition, they would do what is equally necessary, namely: improve their general treatment as much as lies in their power, there would result an immediate, a marked, and a steadily progressive improvement in stock. To the acclimation or Americanization already acquired, would be added increased symmetry of form and greater value in many other respects. This is within the power of every man, and whatever else he may be obliged to leave undone, for want of ability, none should be content to fall short of this.”

To all of which I earnestly and respectfully respond “Amen.”

JOHN C. DILLON.

P. S. Since writing the foregoing, I have read in the report of the Secretary of the Massachusetts Board of Agriculture for 1885, a paper on “Shorthorned Cattle in Massachusetts,” by William P. Sessions of Hampden, in which the merits of the pure and grade Shorthorn of the present, as well as of former days, are very ably and truthfully presented. Every member of this Society is entitled to a copy of the report, and will find it interesting and instructive reading.

REPORT ON POULTRY.

The committee of poultry make the following report :

The show of fowls this year was probably not so large as in the last few years, but the quality was fully equal to that of any year, and in some classes a good deal better. The committee wished to award the premiums entirely on the merits of the fowls exhibited, and in two or three cases where the fowls were of an inferior grade made no award whatever.

The special premium offered by the Society for the originality of a new breed was not awarded for the reasons that there was only one entry and that of a cross where there was no great amount of excellence claimed over the progenitors, and the committee seeing no special merit in the production, when placed against the existing breeds. I would suggest that if thought best to offer this premium again (as would seem desirable) it would be well to make it more public, so that anyone interested might know it in time.

I presume in a report of this kind it is desired that there may be some hints on this subject that may be of use to interested ones. I will therefore tell a few facts that have come to my notice. One is that it pays to take more pains in selecting the fowls kept for breeding purposes. A few years ago I obtained a half dozen Plymouth Rock pullets from Newington, Ct., one of which proved to be an excellent layer, and noticing a peculiarity in her eggs, the next spring I saved enough of her eggs to furnish a hen a setting. From this brood I saved pullets, and put these with their mother in a separate coop the next winter, and kept a record of the eggs laid. I am sorry I cannot give this record but it was one to be proud of. I mention this because it seems to me that too much attention to the breeding for feather and size of the Plymouth Rock, and too little to the laying capabilities, so that you find few good laying strains. In selecting future breeders of any variety, you cannot cull out too much of the poor birds, or have too high a standard. Choose a few of your best to breed from and use the rest for laying or meat. It has been found

that the best results are obtained by mating a young male with older females and vice versa.

Too little attention is paid by some to the feeding of the fowls. Many are very irregular in caring for their stock, giving too much at one time and not enough at another time. Fowls that have a good range do not need nearly as much as those inclosed, but a good many feed too much to cooped fowls. Watch them when you feed and give only what they will take care of directly, for it is not a good plan to keep food before them all the time, especially is it so with Asiatics, Brahmas, Cochins, etc. It is a good plan to feed cooped fowls in such a manner, that they will have to scratch for their living, thus keeping them in a good healthy condition.

I have been asked a great many times if poultry raising pays. My experience has been that it does. One year I kept a flock of thirty hens and in that time netted \$35, all the attention that they received being given in odd moments. In proof also that it does pay, look at the many large poultry farms. Not everybody succeeds in this business, but in what business does every one succeed. But when managed in a thorough business manner and using the same rules that bring success in any undertaking, it is a paying business. It can also be a source of profit to many who can use spare moments in this work to their advantage, and it will also be found a source of pleasure.

M. B. KINGMAN, Chairman of Committee.

REPORT ON CORN.

Two of the three pieces of corn I submit for your examination and award were raised on shares for Messrs. W. T. Westcott and L. D. Hills, and I offer my experience as illustrating one plan by which a poor farmer can find employment for himself and team without spreading his home-made manure over an unprofitably large area; while the capitalist improves his land and gets his corn and stover at a reasonable rate without the necessity of constant personal supervision.

The first lot, consisting of two acres, is owned by L. D. Hills; and last year, with \$36 worth of fertilizer, I raised a crop of corn on it worth \$96.67. This year I took it on the same terms, viz.: Mr. Hills to furnish \$36 worth of fertilizer and to receive half the crop of ears and fodder, husked and delivered at his barn. I have not yet finished husking, but a square rod selected by the committee in September, and husked October 31st, yielded 33 lbs. of ears and 30 lbs of stalks. This is at the rate of $75\frac{3}{7}$ bushels of shelled corn, allowing 70 lbs. of ears to the bushel and 2 tons, 800 lbs. of stalks per acre.

The second piece containing three acres is the property of W. S. Westcott. Most of it had been sown down with oats and grass seed one and two years before, but the grass seed had not taken very well, and its place was supplied by a healthy growth of sorrel. As this piece was in somewhat better heart than the last, I agreed to raise the crop for \$16 worth of fertilizer per acre; but the amount actually supplied by Mr. Westcott for the three acres was \$52.85 worth. A square rod selected and husked by the committee at the same time as the first piece yielded 35 lbs. of corn and 31 lbs. of stover. This is at the rate of 80 bushels of corn and 2 tons, 960 lbs. of stalks per acre. At the second hoeing, July 16, I sowed, on about two acres of the piece, three pecks of timothy and 20 lbs. of red clover. Mr. Westcott also sent me 200 lbs. of superphosphate, which I sowed on about half an acre. The catch of grass seed was reasonably satisfactory on the whole piece, and where the superphosphate was sown

it was eminently so. By repeated careful experiments, I have found the following to be about the expense of labor in raising a good crop, say 50 bushels of corn on an acre :

To ploughing,	\$2 25
Harrowing,	75
Marking,	60
Seed corn (1 peck),	25
Planting,	50
Applying fertilizer,	75
Harrowing,	50
Line and lining,	50
Cultivating four times,	2 00
Hoeing and thinning,	2 00
Hoeing second time,	1 50
Cutting and binding of stalks,	2 50
Husking and cribbing,	5 00
Drawing in stalks,	75
	<hr/>
	\$19 85

I quote the following from a former report: "The system which I have adopted after much thought and experiment has succeeded to my satisfaction; and I confidently recommend it where commercial fertilizers or small quantities of thoroughly rotten compost are used. First I plough and harrow thoroughly, then mark both ways with an instrument drawn by two horses, consisting of a plank with a pole and four runners, on which I ride. This leaves the field cut up by furrows, one to two inches deep, into squares of one yard; and at each corner I plant five kernels of early yellow corn, with Macomber's Improved Corn and Bean Planter, which plants and covers the seed about an inch deeper than the bottom of the furrow. With this implement, a man can plant, in the best possible manner five acres in a day. After the whole field is planted, I scatter the fertilizer so as to cover about a foot square, directly over the seed, and then harrow the whole with a smoothing harrow. I thus secure three important advantages. The corn is planted in check rows, and can be cultivated both ways. The fertilizer is mixed with the soil, directly over the seed, to which its elements are carried by the first rain; and lastly, the land being harrowed a few days after planting, the corn gets a start of the weeds, and can afterwards be kept clean with but little hand hoeing, and that of the very easiest kind."

The third piece, one acre, is part of the farm which I rent, and on which I reside. It has been cultivated for different crops during the past five years, and was in fair average condition. Instead of sixteen or eighteen dollars worth of fertilizers, I spread about four cords of compost, worth say \$24, and harrowed it in, and applied \$8 worth of superphosphate in the hill. This makes the cost of manure twice that of the last piece. Otherwise the method and cost of cultivation is about the same. A square rod selected and husked by your committee, yielded 47 lbs. of ears and 44 $\frac{1}{2}$ lbs. of stalks. Calling 70 lbs. of ears a bushel, this is at the rate of 107 $\frac{3}{7}$ bushels of shelled corn, and 3 tons, 1120 lbs of stover per acre.

The comparative profit of the three pieces will be seen by the following summary :

PLOT NO. 1, 2 ACRES.

Dr.

To the expense of cultivation, etc.,	\$39 70
" " " fertilizer,	36 00
	<hr/>
Total cost of crop,	\$75 70

Cr.

By 150 $\frac{3}{7}$ bushels of corn at 70 cents,	\$105 60
4 tons, 1600 lbs. stalks at \$7 per ton,	33 60
	<hr/>
Total value of crop, *	\$139 20
Deduct cost,	75 70
	<hr/>
Profit,	\$63 50

PLOT NO. 2, 3 ACRES.

Dr.

To the expense of cultivation, etc.,	\$ 59 55
" " " fertilizer,	52 85
	<hr/>
Total cost of crop,	\$112 40

Cr.

By 240 bushels of corn at 70 cents,	\$168 00
7 tons, 880 lbs. stover at \$7 per ton,	52 08
	<hr/>
Total value of crop,	\$220 08
Deduct cost,	112 40
	<hr/>
Profit,	\$108 68

PLOT NO 3, 1 ACRE.

Dr.

To the expense of cultivation,	\$ 19 85
“ “ “ fertilizer,	32 00
	<hr/>
Total cost of crop,	\$ 51 85

Cr.

By 107 $\frac{3}{4}$ bushels of corn at 70 cents,	\$ 75 25
3 tons, 1120 lbs. of stalks at \$7 per ton,	24 92
	<hr/>
Total value of crop,	\$100 17
Deduct cost,	51 85
	<hr/>
Profit,	\$ 48 32

The above were three good crops of corn. As far as I could judge, the plots selected by the committee were fair average samples of the respective fields, and I have correctly stated the weight of corn and stover, and correctly as I could, have calculated the consequent yield per acre by the usual method of allowing 70 lbs. of ears for a bushel of shelled corn.

The result is very gratifying, but unfortunately, like many other agricultural calculations, it wont hold out. The cost is a fixed sum and is apt to be understated; but the crop is subject to a portentous shrinkage, which materially reduces the balance of profit, if it does not quite turn it over to the other side. Exactly how much this shrinkage is, I cannot at this moment say. President Stockbridge and Mr. Horton have both made interesting experiments to determine this question, and I have bagged and hung up the corn and stover above referred to, to see how much it will lose in two, four and six months.

JOHN C. DILLON.

REPORTS ON POTATOES.

PATSY PALMER IN ACCOUNT WITH POTATO CROP ON 1-8 ACRE

To plowing and fitting for planting,	\$ 50
One-half bag Stockbridge potato fertilizer,	2 25
Sowing fertilizer and planting potatoes,	50
One bushel Burbank seed potatoes,	60
Hoeing twice,	1 00
Putting on paris green, twice,	50
Cost of digging and picking,	1 50
Rent of land,	50
	<hr/>
Total cost,	\$7 35
By 1605 lbs. market potatoes at 50c. per bushel,	\$13 37½
330 lbs. small potatoes at 25c. per bushel,	1 37½
	<hr/>
Total received,	\$14 75
	7 35
	<hr/>
Net profit,	\$ 7 40

I planted the potatoes May 19th, making the rows three feet and three inches apart, strewed the fertilizer in the rows, cut the potatoes in two and dropped 15 inches apart, put three inches of covering on and tread on every hill.

PATSY PALMER.

North Hadley.

The half acre of potatoes which I offer for premium is a sandy loam. For many years previous to 1880, the grass had been given to Mr. L. D. Cowles for the harvesting. In the fall of 1881 I plowed it; and in 1882 I got a fair crop of potatoes by using a moderate amount of fertilizer. In 1883 it gave a good crop of rye, and in 1884 another but much smaller crop of rye. In August, 1884, I ploughed the land six inches deep, and sowed two bushels of rye to

the acre. The rye made a strong, thick growth; and the 4th of May last I ploughed it in seven inches, harrowed thoroughly with Aeme harrow, and marked in rows three feet apart. The 6th of May I furrowed six inches deep, planted halves of potatoes, eighteen inches apart, and covered them with two or three inches of soil by hand hoe. May 15th I spread along the furrows about three cords to the acre of well rotted compost, worth, say \$24, and harrowed the whole piece with a smoothing harrow covering the manure, and partially filling up the furrows. May 28th I sowed along the furrows 668 lbs. of superphosphate (costing \$11) per acre, and harrowed the piece again, this time with a rotary harrow, completely filling up the furrows and leaving the whole surface clean, level and mellow. The potatoes now came up with a rush and took possession of the land; they received no further attention till July 1st, when we cultivated and hoed them, and afterwards applied 200 lbs. of plaster and 2 lbs. of paris green per acre to kill the bugs. August 3d, dusted again with paris green and plaster, and pulled out the few weeds we found. I had a very fine crop, smooth and even, and seven-eighths of them good marketable size. The rod selected and dug by the committee in September yielded at the rate of 454 $\frac{2}{3}$ bushels to the acre. I have always thought it important to plant potatoes early; but an acre planted on better land April 21, and in every respect treated as well or better than the piece above described, did not yield one-third as much.

JOHN C. DILLON.

Hadley, Mass., Oct. 31, 1885.

F. E. PAIGE, SECRETARY OF H. C. A. S.:—The field of potatoes I entered for premium was plowed in October, 1883 eight inches deep, and in May, 1884 at the rate of fifty-two horse loads of manure was spread on and wheel-harrowed in and set to cabbage the last of June with enough phosphate dropped on the cabbage to kill the green worms. In April, 1885 ploughed again, and about the middle of May it was harrowed and furrowed about five inches deep and at the rate of 1800 lbs. per acre of fertilizer sown broadcast, and Pearl of Savoy potatoes were cut and dropped about eighteen inches apart in the row, making about sixty hills to the rod, and covered with a horse-hoe. As the potatoes came up the ground was bushed to kill

the weeds, and at the first hoeing when the potatoes were about three inches high, fertilizer was sown broadcast at the rate of 1800 lbs. per acre, and covered with a horse-hoe. The horse-hoe was run over them once in about ten days, and the weeds that were left were cut the last of July, and paris green enough used to kill the bugs. Was offered sixty cents per bushel for the potatoes in the cellar by a seed dealer.

Dr.

To plowing,	\$2 00
Fitting and planting,	6 00
Horse-hoeing,	3 00
Hand-hoeing,	2 00
Paris green and plaster,	4 00
Seven bushels of seed at \$2 per bushel,	14 00
3600 lbs. of fertilizer at $2\frac{1}{4}$ cents,	81 00
Digging and storing,	9 00
	<hr/>
	\$121 00

Cr.

By 480 bushels of potatoes at 60 cents, \$288 00

Respectfully,

H. C. WEST.

REPORT OF ALVIN SANDERSON ON ONIONS.

The onion land was the same piece which has been cultivated for onions for eight years. The season for 1885 Buffalo fertilizer was used at the rate of ten hundred pounds to the acre, which produced over 800 bushels to the acre.

STATEMENT OF JAMES COMINS OF HADLEY, ON CORN.

The land the crop was planted on had been in grass two years. It was dressed with five cords of coarse cornstalk manure the last of April and plowed under with the turf. It laid until the twelfth of May when it was fitted with a wheel harrow, marked $3\frac{1}{2}$ feet between the rows, furrowed, and five cords of hog manure applied in the rows the whole length, and it was planted the fifteenth of May with Billings' corn planter, which drops the hills about four feet apart. Carefully hoed; replanted whenever needed and thinned out to four stalks in a hill.

TREASURER'S REPORT.

FRANK E. PAIGE, TREASURER IN ACCOUNT WITH THE HAMPSHIRE
AGRICULTURAL SOCIETY.

	Dr.
1885.	
To cash from 1884,	\$ 4 38
“ “ “ James Comins,	1 00
“ “ “ Amherst Savings Bank,	200 00
“ “ “ Entrance fee,	79 00
“ “ “ Gate, first day Fair,	57 35
“ “ “ Gate, second day Fair,	373 36
“ “ “ Peddlers,	58 60
“ “ “ F. H. Howes,	3 50
“ “ “ Arthur E. Magill, L. M.,	5 00
“ “ “ C. C. Burt, L. M.,	5 00
“ “ “ James M. Fales, L. M.,	5 00
“ “ “ H. L. Coe, L. M.,	5 00
“ “ “ Mr. Munson,	15 00
“ “ “ State,	600 00
“ “ “ Donations to Society,	111 79
	\$1,523 98
1885.	Cr.
Paid R. G. Williams, premiums,	\$ 4 00
“ Express,	45
“ Postage,	1 35
“ Amherst Savings Bank, interest,	55 00
“ J. F. Gilbert, bill 1884,	11 55
“ J. E. Williams, printing report 1884,	45 76
“ Lee & Phillips, bill 1884,	11 27
“ W. W. Smith, bill 1884,	22 60
“ J. C. Dillon, premium,	10 00
“ Levi Adams, premium,	3 00
“ George P. Smith, premium,	3 00

Paid Express on reports,	90
" James Wiley, bill,	4 00
" Express on posters,	2 60
" Brush,	38
" Pins,	03
" Trotting,	193 00
" G. B. Gallond, bill,	37 50
" J. E. Williams, bill,	34 75
" Kate Thompson, bill,	4 00
" F. O. Curtis, bill,	2 00
" J. F. Gilbert, bill,	16 50
" E. C. Parker,	2 50
" Frank E. Paige, secretary,	75 00
" Russell & Morgan, posters,	25 00
" Lee & Phillips, bill,	11 25
" H. Holland, bill,	14 72
" Expenses posting bills,	3 50
" George Graves, bill,	6 50
" H. C. Graves, "	4 00
" L. J. Souther, "	4 00
" W. W. Smith, "	24 00
" Paige Bros., "	6 00
" Chas. Thompson, "	3 00
" Postage and stationery,	10 05
" F. L. Stone, bill,	8 00
" Frank Hubbard, bill,	2 00
" T. T. Sisson, "	1 00
" E. A. King, "	11 00
" W. H. Smith, "	4 00
" E. T. Sabin, "	25 12
" Amherst Savings Bank, interest,	32 45
" J. F. Perkins, bill,	2 40
" Amherst Band,	25 00
" Alvin E. Sanderson, premium,	5 00
" Premiums,	656 85
" Cash on hand,	95 00

\$1,523 98

FINANCIAL CONDITION OF THE SOCIETY.

LIABILITIES.

Notes at Amherst Savings Bank,	\$1,100 00
Interest due Jan. 1, 1886,	33 00
“ “ July 1, 1886,	33 00
	<hr/>
	\$1,166 00
Cash on hand,	95 00
	<hr/>
	\$1,071 00

AMHERST, Dec. 5, 1885.

I hereby certify that I have examined the accounts of Frank E. Paige, Treasurer of the Hampshire Agricultural Society for 1885, and find them correct, with a balance in the treasury of ninety-five dollars.

E. D. BANGS, Auditor.

NEW LIFE MEMBERS OF 1885.

Arthur E. Magill,	Amherst.
C. C. Burt,	Easthampton.
James M. Fales,	Pelham.
H. L. Coe,	Amherst.

THIRTY-SEVENTH ANNUAL REPORT.

TRANSACTIONS

OF THE



Hampshire Agricultural Society,



FOR THE YEAR 1886.

AMHERST, MASS. :
J. E. WILLIAMS, BOOK AND JOB PRINTER.
1886.

OFFICERS FOR 1886.

PRESIDENT,

D. A. HORTON, *Hadley.*

VICE-PRESIDENT,

F. L. STONE, *Amherst.*

SECRETARY,

FRANK E. PAIGE, *Amherst.*

TREASURER,

FRANK E. PAIGE, *Amherst.*

EXECUTIVE COMMITTEE,

FLAVEL GAYLORD, *Amherst.*

A. B. HOWARD, *Belchertown.*

W. L. WARNER, *Sunderland.*

JAMES B. PAIGE, *Prescott.*

DWIGHT PRESHO, *Pelham.*

DELEGATE,

W. W. SMITH, *Amherst.*

SECRETARY'S REPORT.

Members of Hampshire Agricultural Society:

The prospects of a successful Fair were never more favorable than this year. The seasons for farmers have been exceptionally good. No long drought or early frost occurred to injure crops, and the farms under the careful, competent and prudent management of their occupants showed every evidence of a large and bountiful yield. The officers of the society were confident of a successful Fair; nor were they disappointed in this.

The first day of the Exhibition was a total failure on account of the severe storm, and many who would otherwise have exhibited were kept away. Yet there were a large number of energetic and enterprising farmers who, in spite of rain and mud, brought their produce and drove their stock, some coming from a long distance. The officers deemed it prudent to postpone the exhibition to next day, and combine horse and cattle show together. Shelter was provided for all stock on the grounds, in the sheds and barns of the farmers adjoining the grounds. The second day proved the ideal of a farmer's holiday—warm, clear and cloudless. Early in the morning could be seen herds of cattle, flocks of sheep, large numbers of swine, horses, poultry and other exhibits on their way to the grounds. At the grounds the officers were busy in their various duties, and the attendance constantly increased, until noon, when there had gathered a large crowd of people. There were exhibits and competition enough among the various departments to furnish amusement and instruction to all.

Outside the hall was a large display of choice cattle, sheep, horses, swine, poultry, farm implements, etc. Within was displayed vege-

tables, fruit, cereals, and all varieties and kinds of farm produce ; also mercantile, fancy and domestic goods.

As night closed over the scene, all went away feeling it was one of the best exhibitions ever held by the society.

The financial success can be ascertained by an examination of the Treasurer's Report. Although no money was received on first day, yet the society has been able to pay its bills for the year. The grand stand and fence were badly damaged by the severe storms of the Winter and Spring, and cost considerable to repair them. Yet, with all this, had the first day proved fair, we could have paid a small sum on our debt.

The required number of institutes was held during the year, important questions were ably discussed by those present, with profit and advantage to all. I trust all will attend the institutes to be held this winter, as it brings the farmers of this section together, they become better acquainted with each other, relate and compare their different experiments during the year, their various methods of fertilizing the soil and producing crops, discuss the merits of machinery used, crops raised, in short, everything that pertains to the farmer's interest and welfare.

A number have joined the society during the year ; this is a fact that tends to show the interest in the society is increasing ; let it continue, let each member make it his duty to contribute something to our, next Fair, and see to it that his neighbor does the same. Thanking all who have assisted and contributed to the Fair of 1886, especially the officers, who have labored so earnestly,

I am yours respectfully,

FRANK E. PAIGE.

Secretary.

REPORT

OF THE

DELEGATE OF THE STATE BOARD OF AGRICULTURE, 1885

BY HON. JAMES P. LYNDE.

In accordance with your assignment, I attended the 36th Annual Exhibition of the Hampshire Agricultural Society at Amherst, Sept. 24th and 25th, 1885.

The officers of the society had arranged a varied list of premiums on a liberal scale, and the result was a very creditable exhibition in many departments.

The hall presented a very neat and attractive appearance, filled with fruits, flowers, vegetables, the products of the dairy and kitchen, articles of domestic manufacture, and fine art work.

A small number of excellent horses, cattle, swine, sheep and poultry, well worthy of careful examination, were shown on the grounds. The plowing match was well contested, and the trial of working oxen, with a loaded cart, was considerate and humane. This Fair was well arranged and conducted with excellent method and good order, by officers well qualified for their positions, who attended to their duties faithfully, using all their influence to promote the usefulness and prosperity of the society—the entries in some departments being secured by their personal appeals and solicitations among the farmers.

They were not encouraged and assisted by members of the society and the people of the vicinity, as they should have been, and less enthusiastic men would have been utterly discouraged with the outlook, but they were not, and their competent Secretary has issued a very creditable report of their transactions.

When we remember that Hampshire county is one of the most prosperous in the State; that within the limits of this Society are farms of great fertility, successfully cultivated by energetic farmers,

combining their capital with knowledge and skill in the art of agriculture; that here is an important centre of education and influence, the seat of Amherst College, the Agricultural College, both aided by the State, and the Experiment Station, supported by the State, and that the State sends this Society six hundred dollars yearly for the encouragement and advancement of intelligent scientific agriculture. Is it too much to expect of a community so highly favored, that the people would be actively interested in the practical work and success of this Society? and by their presence at the Fair, and an exhibition of the abundance of their agricultural and material products, secure the personal interest and assistance of the large number of educated people in this locality—more to a square mile than are found anywhere in the State, outside the larger cities—and make this Hampshire County Fair a festival of the whole community, one of the most successful in the State?

The early history of the Society shows that this result was attained for several years. The first Fair, Oct. 30th, 1850, was a grand success. Of this, the Secretary said: “The morning broke in splendor. The booming of artillery announced the advent of the farmer’s holiday. Winding over hill and dale, came long strings of cattle and files of lowing cows, bleating calves and sheep, squealing pigs, roaring bulls and neighing horses. The number of working cattle on the ground at noon was 630, and was the largest display ever made in this part of the State.”

Of the second Fair he says: “It swept by with the rush of a tempest. The number of horses on exhibition was 123. A plowing match was had, in which there were twenty-three entries, the whole number of cattle was 500; three town teams contained 165 pairs of working oxen. The Belchertown team contained over 101 yoke, which were decorated with banners, and drew a car ornamented with agricultural devices, and holding 181 persons. The exhibits of the dairy was good; there was twenty lots of butter and thirty of cheese, all of fine appearance and quality. The loaves of wheat and rye bread exceeded one hundred in number.”

From the Secretary’s report for this year, 1885, we find that there were less than twenty-five yoke of working oxen and fifty horses entered. There were six entries of cheese, eight of butter, and nineteen of wheat, rye and Indian bread. The earlier Fairs “were attended by crowds of spectators, exhibitors, cattle and horses;” while this year only \$57 was taken at the gate the first day, and \$373 the second.

From these facts it is apparent that for some reason, or for many reasons, the people in this fertile locality, the garden of the State, are losing their interest in the practical work of the Society, are withholding their influence and support, and seriously impairing its success and influence. Unless a general public interest can be secured and the old enthusiasm aroused, the inevitable result of the prevailing apathy will be financial embarrassment, the loss of the State bounty, and collapse of the Society. Already there are indications of improvement, and we may reasonably hope and expect, that in the near future appeals to the common sense of the people will be heeded, and by their united action, the desired prosperity be again secured.

The presence of the people is essential to the success of a Fair for any purpose. It is useless to gather domestic animals and products of the soil for exhibition, unless the great public patronize the show, and study the object-lessons there presented, with an enthusiasm that is only born of numbers.

The policy of the State in aiding agriculture is educational. The Agricultural College, the Experiment Station, and Agricultural Societies, are established, aided and administered for the purpose of securing and diffusing information that will elevate, improve and develop the science and art of agriculture. It is left for the people to reject or improve these liberal provisions for their welfare.

LIST OF PREMIUMS AWARDED.

CLASS 1—TOWN TEAMS. 3 ENTRIES.

Town of Amherst,	\$20 00
“ Pelham,	15 00
“ Hadley,	10 00

CLASS 2—FANCY CATTLE. 5 ENTRIES.

P. Munson, Amherst,	5 00
L. W. West, Hadley,	3 00
Geo. Green, “	2 00

CLASS 3—WORKING OXEN. 16 ENTRIES.

R. H. Fitts, Shutesbury,	5 00
E. S. Moore, Hadley,	4 00
Flavel Gaylord, Amherst,	3 00
W. B. Fales, Pelham,	2 00

CLASS 4—STEERS. 9 ENTRIES.

Dwight Presho, Pelham,	3 years old,	5 00
L. W. West, Hadley,	3 “	5 00
Benj. Page, Pelham,	3 “	1 00
L. W. West, Hadley,	2 “	4 00
Dwight Presho, Pelham,	2 “	2 00
Benjamin Page, “	2 “	1 00
L. W. West, Hadley,	Yearling,	3 00
Harry Fitts, Shutesbury,	“	2 00

CLASS 5—MILCH COWS. 16 ENTRIES.

W. C. Stoughton, Montague.	Jersey,	4 00
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G. W. Fitch, Amherst,	Jersey,	\$3 00
“ “ “	“	2 00
J. P. Smith, “	Grade,	4 00
W. C. Stoughton, Montague,	“	3 00
Parker Hubbard, Sunderland,	“	2 00
“ “ “	“	1 00

CLASS 6—HERDS OF MILCH COWS. 5 ENTRIES.

W. C. Stoughton, Montague,	5 Thoroughbreds,	4 00
J. P. Smith, Amherst,	Herd,	5 00
L. W. West, Hadley,	“	4 00
P. D. Hubbard, Sunderland,	“	3 00

CLASS 7—HEIFERS. 15 ENTRIES.

W. C. Stoughton, Montague,	Grade 2 years old,	3 00
L. W. West, Hadley,	“ 2 “	2 00
S. Jewett, Pelham,	“ 2 “	1 00
L. W. West, Hadley,	“ 1 “	2 00
P. D. Hubbard, Sunderland,	“ 1 “	1 00
Geo. W. Fitch, Amherst,	Thoroughbred 2 “	3 00
P. D. Hubbard, Sunderland,	“ 1 “	2 00
W. C. Stoughton, Montague,	“ 1 “	1 00

CLASS 8—BULLS. 8 ENTRIES.

F. D. Huntington, Hadley,	Jersey,	4 00
W. C. Stoughton, Montague,	“	2 00
L. W. West, Hadley,	Shorthorn,	4 00
“ “ “	“	2 00

CLASS 9—CALVES. 17 ENTRIES.

L. W. West, Hadley,	Pair Steer Calves,	1 00
G. W. Fitch, Amherst,	Heifer Calf,	2 00
P. D. Hubbard, Sunderland,	“ “	1 00
E. S. Moore, Hadley,	Thoroughbred Bull Calf.	2 00
P. D. Hubbard, Sunderland,	“ “	1 00

CLASS 10—HERDS OF CATTLE. 4 ENTRIES.

L. W. West, Hadley,	6 00
W. C. Stoughton, Montague,	5 00
J. P. Smith, Amherst,	4 00

CLASS 11—SWINE. 18 ENTRIES.

H. C. West, Hadley,	Thoroughbred Boar,	\$4 00
Frank H. Williams, Sunderland,	“ “	3 00
M. D. White, Hadley,	“ “	1 00
Josiah Cook, “	Grade “	4 00
H. C. West, “	“ “	3 00
“ “ “	“ “	1 00
“ “ “	Sow with Pigs,	4 00
Josiah Cook, “	“ “ “	3 00
J. W. Allen, Amherst,	“ “ “	1 00
L. W. West, Hadley,	Weaned Pigs,	4 00
H. C. West, “	“ “	3 00
Josiah Cook, “	“ “	1 00

CLASS 12—SHEEP. 14 ENTRIES.

Francis Clapp, South Deerfield,	Buck,	4 00
L. W. West, Hadley,	“	3 00
James Comins, “	“	2 00
Francis Clapp, South Deerfield,	25 Sheep,	6 00
Dwight Morton, Hadley,	25 “	3 00
Edmund Hobart, Amherst,	8 Ewes,	4 00
James Comins, Hadley,	8 “	3 00
Dwight Morton, “	8 Lambs,	4 00
Francis Clapp, South Deerfield,	8 “	3 00
Edmund Hobart, Amherst,	8 “	2 00

CLASS 13—POULTRY. 38 ENTRIES.

Jas. B. Roberts, Amherst,	Brahmas,	2 00
E. C. Parker, “	“	1 00
W. J. Seelye, “	Plymouth Rocks,	2 00
Moses White, Hadley,	“ “	1 00
W. J. Seelye, Amherst,	Wyandottes,	2 00
George Graves, “	“	1 00
D. H. Tillson, “	White Leghorns,	2 00
George Graves, “	B. R. Games,	2 00
W. J. Seelye, “	Brown Leghorns,	2 00
George Graves, “	Breeding Pen Wyandottes,	2 00
W. F. Goodell, “	“ “ “	1 00
J. C. Dillon, “	“ “ Games,	2 00

W. J. Seelye, Amherst,	Breed'g Pen Plymouth R'ks	\$2 00
Moses White, Hadley,	“ “ “ “	1 00
Geo. W. Fitch, Amherst,	Plymouth Rock Chicks,	1 00
Henry Bishop, “	Ducks,	2 00
Harry Hubbard, “	“	1 00
Fred Hubbard, “	Gratuity on Ducks,	75
G. L. Cooley, Sunderland,	“ “ “	75
Fred A. Crocker, “	“	75

CLASS 14—AGRICULTURAL AND FARM IMPLEMENTS. 17 ENTRIES.

J. A. Sullivan, Northampton,	5 00
F. L. Stone, Amherst,	4 00
D. J. Wright, Northampton,	3 00
J. C. Dillon, Amherst,	2 00
J. D. Norton & Son, Loudville,	1 00

CLASS 14 1-2—MECHANIC ARTS.

E. H. Arnold, Amherst,	Sewing Machine,	Diploma.
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CLASS 15—MERCANTILE GOODS. 5 ENTRIES.

Jackson & Cutler, Amherst,	10 00
Osgood & Russell, “	8 50
Chas. Deuel, “	6 00
E. P. Bartlett, Pelham,	4 00

CLASS 16—DOMESTIC AND OTHER MANUFACTURES. 38 ENTRIES.

Mrs. Henry Taylor, Ashfield,	Knitted Spread,	3 00
“ Josiah Cook, Hadley,	“ “	2 00
“ S. W. Whitney, Amherst,	Bed Quilt,	1 75
“ Henry Taylor, Ashfield,	“	1 25
Haskell Sisters, Belchertown,	“	75
Mrs. Furgerson, Hadley,	Rug,	1 00
“ Belle J. Wrigley, Amherst,	“	75
“ J. Gilbert, “	“	75
“ S. W. Boutwell, Leverett,	“	50
“ H. C. Comins, Hadley,	Stockings,	1 00
“ Lydia Spear, Amherst,	“	75
“ Belle J. Wrigley, “	“	50
“ H. C. Comins, Hadley,	Mittens,	50

Mrs. E. J. Leach, Amherst,	Ottoman,	\$ 25
Miss E. J. Way, "	Switches,	1 00
Mrs. Belle J. Wrigley, Amherst.	Carpet,	50
" Sanford Boice, "	Cape,	25
" E. C. Parker, "	Tidy,	50
Thos. Charnbury, "	Hawk,	50
Mrs. E. F. Moore, Hadley.	Afghan,	1 00
" H. C. Comins, "	Gloves,	1 00
" S. Boice, Amherst,	Lace,	25
" " "	Rolling Pin,	25

CLASS 17—FANCY ARTICLES. 89 ENTRIES.

W. T. Chapin, Amherst,	Bird House,	1 00
" " "	Shaving Case,	1 00
" " "	Medicine "	1 00
F. E. Paige, "	Silk Apron, etc.,	3 25
Mrs. L. A. Spaulding, Amherst,	Tidy,	25
Mrs. M. A. " "	Holly Leaves,	25
Miss E. J. Way, "	Collar,	25
" Eunice Rhoads, Hadley,	Afghan,	50
Mrs. Chas. Denel, Amherst.	"	2 00
" " "	Banner,	50
" " "	Table Scarf,	50
" " "	Tidy,	25
" " "	"	25
" " "	"	25
Miss A. S. Dickinson,"	"	50
Lutie Eaton, "	Sofa Pillow,	25
Mrs. G. L. Cooley, Sunderland,	" "	25
" " "	Robe,	25
" " "	Tidy,	25
" " "	Sachet Bag,	25
Claud A. Magill, Amherst,	Bed Quilt,	1 00
Susie Heath, "	Sofa Pillow,	50
Mrs. E. J. Leach, "	Sack,	25
" S. Ayers, Brooklyn,	Pin Cushion,	25
" H. D. Eaton, Amherst,	Table Scarf,	50
" " "	"	50
" S. W. Whitney, "	"	25
" " "	Sofa Pillow,	50

Mrs. James Haskins, Amherst,	Tidy,	\$ 25
“ “ “ “	Skirt,	50
“ E. A. Stockbridge, Amherst,	Collar,	25
“ “ “ “	Handkerchief,	25
Hattie M. Gold, “	Tidy,	25
Mrs. Parker Hubbard, Sunderland,	Pillow Shams,	50
“ “ “ “	Cushion,	50
“ “ “ “	Handkerchief,	50
“ L. A. Dickinson, Amherst,	Bracket,	50
“ W. Lamson, “	Quilt,	50
Miss Hattie King, “	Wax Flowers,	25
C. E. Clutia, “	Chain,	25
F. E. Paige, “	Banner,	25
Josie P. Gilbert, “	“	50
“ “ “ “	Sofa Pillow,	50
Mrs. J. F. Gilbert, “	Bed Spread,	1 00
“ Joseph Dickinson, “	Lambrakin,	25
“ “ “ “	Bag,	25
James B. Paige, Prescott,	Table Scarf,	75
“ “ “ “	Panel of Flowers,	75
Miss Jennie L. Cowles, Amherst,	Table Scarf,	50
Mrs. Harley Kendrick, “	Bed Spread,	1 00
“ “ “ “	Pillow Shams,	50
Miss Lucy Boice, “	Banner,	50
Mrs. Edmund Hastings, “	Edging,	50
“ L. J. Sykes, “	Afghan,	50
“ L. M. Hills, “	Silk Scarf,	50
“ H. D. Eaton, “	Afghan,	25
“ “ “ “	“	25
Bessie Sears, “	Lamp Mat,	25
Allie “ “	Tidy,	25
Edith Wheden, “	Cushion,	25
“ “ “ “	Tidy,	25
Fanny Potwin, “	Hoods,	1 00
Mrs. L. T. Farnsworth, “	Quilt,	1 00
Mrs. D. H. Bartlett, “	“	2 00
Mabel Seelye, “	“	1 00

CLASS 18—FINE ARTS. 18 ENTRIES.

Miss Abbie M. Stockbridge, Amherst, Oil Paintings,	3 00
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Miss Nellie Cooley, Sunderland,	Oil Paintings,	\$2 25
Mrs. C. E. Wakefield, Amherst,	“ “	75
Miss Abbie M. Stockbridge, Amherst,	Water Color Paintings,	1 25
Miss Nellie Cooley, Sunderland,	“ “ “	1 00
Miss Nannie Hubbard, “	“ “ “	37
Mrs. E. J. Leach, Amherst,	“ “ “	37
L. J. Souther, “	Drawings,	1 00

CLASS 19—BREAD, BUTTER AND CHEESE. 24 ENTRIES.

Mrs. Belle J. Wrigley, Amherst,	Wheat Bread,	2 00
“ E. C. Parker, “	“	1 00
“ “ “ “	Rye Bread,	2 00
“ S. W. Boutwell, Leverett,	Graham Bread,	2 00
“ S. Jewett, Pelham,	“	1 00
“ T. L. Paige, Amherst,	Rye and Indian,	2 00
“ J. C. Dillon, “	“	1 00
“ Parker Hubbard, Sunderland,	Butter,	3 00
“ S. W. Boutwell, Leverett,	“	2 00
“ E. C. Parker, Amherst,	“	1 00
“ Amos Deming, Savoy,	Cheese,	1 00
“ Ruth “ “	“	2 00
“ James Comins, Hadley,	Sage Cheese,	2 00

CLASS 20—HONEY, WINES, CANNED AND DRIED FRUITS,
JELLIES, PICKLES, MAPLE SYRUP AND SUGAR.

Mrs. Parker Hubbard, Sunderland,	Canned Fruit,	1 50
“ “ “ “	Jellies,	50
“ “ “ “	Maple Syrup,	50
“ S. W. Boutwell, Leverett,	Canned Fruit,	2 00
“ “ “ “	Jellies,	1 50
“ Belle J. Wrigley, Amherst,	Dried Apples,	50
“ S. W. Boutwell, Leverett,	Honey,	1 50
“ J. C. Dillon, Amherst,	Canned Fruit,	1 50
“ Sanford Boice, “	Dried Apples,	50
“ S. W. Boutwell, Leverett,	Canned Fruit,	3 00
Henry Bishop, Amherst,	Honey,	1 00
George H. B. Green, Belchertown.	“	1 00

CLASS 21—FRUIT. 3 ENTRIES.

George H. B. Green, Belchertown, Display,	4 00
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J. C. Dillon, Amherst,	Display,	\$3 00
Mrs. Parker Hubbard, Sunderland,	Basket,	3 00

CLASS 22—FRUITS GROWN BY EXHIBITOR. 43 ENTRIES.

F. B. Paige, Prescott,	Coll. Apples,	3 00
George H. B. Green, Belchertown,	“ “	4 00
G. L. Cooley, Sunderland,	“ “	2 00
J. C. Dillon, Amherst,	“ “	1 00
A. B. Howard, Belchertown,	“ Pears,	4 00
G. H. B. Green, “	“ “	3 00
L. W. Goodell, “	“ “	2 00
J. C. Dillon, Amherst,	“ “	1 00
L. W. Goodell, Belchertown,	“ Grapes,	4 00
G. H. B. Green, “	“ “	3 00
J. C. Dillon, Amherst,	“ “	2 00
F. B. Paige, Prescott,	“ “	1 00
G. H. B. Green, Belchertown,	“ Peaches,	2 00
W. A. King, Amherst,	“ “	3 00
D. H. Tillson, “	“ Quinces,	1 00
A. Gates, Pelham,	“ Cranberries,	1 00
G. H. B. Green, Belchertown,	Plate Baldwins,	50
“ “ “	“ Greenings,	50
“ “ “	“ Gravensteins,	50
G. L. Cooley, Sunderland,	“ Russets,	50
L. W. Goodell, Belchertown,	Gratuity on Plums,	1 00
G. H. B. Green, “	“ “ “	2 00

CLASS 23—VEGETABLES GROWN BY THE EXHIBITOR. 85 ENTRIES.

F. B. Paige, Prescott,	Collection,	5 00
J. C. Dillon, Amherst,	“	4 00
W. A. Magill, “	“	3 00
G. H. B. Green, Belchertown,	“	2 00
“ “ “	Potatoes,	2 00
E. C. Parker, Amherst,	“	1 00
G. H. B. Green, Belchertown,	Peck Potatoes,	1 00
F. E. Loomis, Amherst,	Onions,	1 00
F. B. Paige, Prescott,	Carrots,	1 00
W. A. Magill, Amherst,	“	50
F. B. Paige, Prescott,	Beets,	1 00
G. H. B. Green, Belchertown,	“	50

F. B. Paige, Prescott,	Tomatoes,	\$1 00
W. A. Magill, Amherst,	“	50
G. H. B. Green, Belchertown,	Beans,	1 00
W. A. Magill, Amherst,	“	50
A. E. Magill, “	Peck Beans,	1 00
G. L. Cooley, Sunderland,	“ “	50
James Comins, Hadley,	Pumpkins,	1 00
H. A. Parsons, Amherst,	Cabbages,	2 00
F. B. Paige, Prescott,	“	1 00
James Comins, Hadley,	Sweet Corn,	2 00
J. C. Dillon, Amherst,	Winter Squashes,	2 00
G. H. B. Green, Belchertown,	“ “	1 00
James Comins, Hadley,	Winter Wheat,	1 00
G. L. Cooley, Sunderland,	“ “	50
James Comins, Hadley,	Spring “	1 00
G. L. Cooley, Sunderland,	Rye,	1 00
James Comins, Hadley,	“	50
“ “ “	Oats,	1 00
G. L. Cooley, Sunderland,	“	50

CLASS 24—FLOWERS. 33 ENTRIES.

Mrs. E. C. Parker, Amherst,	Roses,	3 00
L. W. Goodell, Belchertown,	Asters,	2 00
Mrs. E. C. Parker, Amherst,	“	1 00
L. W. Goodell, Belchertown,	Dahlias,	2 00
Mrs. E. C. Parker, Amherst,	“	1 00
A. B. Howard, Belchertown,	Verbenas,	2 00
L. W. Goodell, “	“	1 00
“ “ “	Gladioli,	2 00
Mrs. E. C. Parker, Amherst,	“	1 00
“ S. W. Boutwell, Leverett.	Wild Flowers,	2 00
“ S. Jewett, Pelham,	“ “	1 00
“ S. W. Boutwell, Leverett,	Bouquet,	2 00
“ E. C. Parker, Amherst,	“	1 00
L. W. Goodell, Belchertown,	Collection,	5 00
Mrs. S. W. Boutwell, Leverett,	“	3 00
“ E. C. Parker, Amherst,	“	2 00
A. B. Howard, Belchertown,	“	1 00

CLASS 25—STALLIONS. 8 ENTRIES.

E. E. Wood, Northampton,		6 00
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Parker Hubbard, Sunderland,	\$4 00
C. B. Palmer, Huntington,	3 00

CLASS 26—BREEDING MARES WITH SUCKING COLTS. 8 ENTRIES.

G. L. Cooley, Sunderland,	5 00
Alden Wilder, “	4 00
Hollis Graves, South Deerfield.	3 00
W. H. Tuttle, Hadley,	2 00

CLASS 27—COLTS AND FILLIES. 15 ENTRIES.

C. L. Russell, Sunderland,	Yearlings,	2 00
L. W. West, Hadley,	“	1 00
Hollis Graves, South Deerfield,	2 years old,	3 00
J. C. Hammond, Northampton,	2 “ “	2 00
“ “ “	2 “ “	1 00
E. F. Cook, Amherst,	3 “ “	3 00
F. F. Adams, Leverett,	3 “ “	2 00
Parker Hubbard, Sunderland,	3 “ “	1 00

CLASS 28—FARM HORSES. 11 ENTRIES.

George A. Gunn, Sunderland,	Single,	3 00
C. L. Russell, “	“	2 00
W. L. Hubbard, Sunderland,	Pair,	3 00
D. L. Viaria, Hadley,	“	2 00

CLASS 29—DRAFT HORSES. 3 ENTRIES.

Chester Smith, Hadley,	Pair,	4 00
D. F. Shumway, Belchertown,	“	3 00

CLASS 30—CARRIAGE HORSES. 12 ENTRIES.

E. F. Cook, Amherst,	Single,	6 00
Samuel Dickinson, Hadley,	“	4 00
D. A. Horton, “	“	2 00
Paige Bros., Amherst,	Pair,	6 00

CLASS 31—ROADSTERS. 7 ENTRIES.

P. D. Hubbard, Sunderland,	Single,	6 00
L. S. Dyer, Hatfield,	“	4 00
W. H. Comins, Hadley,	“	2 00

Paige Bros., Amherst,	Pair.	\$6 00
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BICYCLE RACE.

E. Dole,		5 00
Mr. Porter,		3 00
W. E. Sanderson,		2 00
A. Almeida,		1 00
Gratuity to Mass. A'g'l College for their display at Fair,		40 00

PLOWING MATCH.

F. E. Loomis, Amherst,	Horses,	5 00
Geo. W. Fitch, "	"	3 00
L. W. West, Hadley,	"	2 00
Josiah Cook, "	"	1 00
Asa Dickinson, Amherst,	Oxen,	5 00
Flavel Gaylord, "	"	3 00
F. W. Page, Pelham,	"	2 00
W. B. Fales, "	"	1 00

RUNNING RACE.

E. S. Puffer, Amherst,	" Bessie,"	10 00
Chas. Church, "	" Minnie,"	5 00
E. C. Parker, "	" Kit,"	3 00
J. Underwood, "	" Bunco,"	2 00

2-45 CLASS—TROTTING.

C. R. Pomeroy, Northampton.	" John S.,"	30 00
A. W. Rideout, Holyoke,	" Billy M.,"	20 00
Geo. W. Rice, Springfield,	" Lisbon Maid,"	15 00

2-30 CLASS.

W. Alvord, Easthampton,	" Geo. Davis,"	40 00
C. R. Pomeroy, Northampton,	" Julia C.,"	30 00
Elmer Powers, Cooleyville,	" Mountain Boy,"	20 00

FIELD CROPS.

H. C. West, Hadley,	Potatoes,	5 00
" " "	"	2 00
Henry Tillson, Sunderland,	Corn,	5 00
D. A. Horton, Hadley,	"	3 00

REPORTS OF COMMITTEES.

J. C. Dillon, Amherst,	5 00
James Comins, Hadley,	4 00

REPORTS ON CORN.

In the struggle to live the early settlers of Massachusetts Bay found Indian corn, here produced by Indians, to be a most substantial article of food to sustain animal life, and to this day it is extensively used for the same purpose throughout the length and breadth of our land. Therefore it is profitable to study its production both in the different kinds of corn now in use and different manner of producing and harvesting now practiced by farmers in this vicinity.

First, the kind of corn now gaining the attention of farmers is western dent corn. Your committee in their examination found some fields of this corn that produced very abundant crops, and with favoring circumstances the grain was of good quality for that kind, but the fodder was long, coarse, and heavy to handle, and did not appear so good for feeding as some of the smaller varieties. To investigate this subject further I have collected some specimens of this large corn with the fodder attached, together with several specimens of smaller kinds, in the same condition, and left it at the Massachusetts Experiment Station, and in due time shall expect a report of the percentage of digestible and nutritive value of each in comparison.

It is found by practical observation that some of the fine, thick grasses grown on top dressed land are better for making butter and beef than coarser varieties grown on similar land. Therefore I argue that the smaller kinds of corn grown thickly may contain a larger percentage of digestible and nutritive value, and are much easier handled than the larger and coarser kinds.

Secondly, the method of producing the corn crop is worthy of our consideration.

The producer should try to be master of the circumstances in which he is surrounded, he should have his plans laid and worked out that will produce a hundred bushels of corn on two acres or less, rather than four acres or more ; he should have his land plowed some weeks,

if not months, before filling and planting, to gain the benefit of the sun and air on the new turned furrows.

With my experience of forty years I have always succeeded in producing a fair crop, and sometimes an extra good one, by plowing in, six or seven inches deep, coarse barnyard manure with the turf of two years growth, on land varying from moist, heavy, sandy loam to that which is quite dry and light. I also apply twenty-five bushels of unleached ashes strewed in the rows to the acre.

My reason for this process is that the manure decomposes by nature's slow and economical way, and is taken up by the soil and crop in the months of July and August, when the corn needs it most.

Again, the manure can be applied usually in the latter part of April, is beneath the sod out of the way of machinery, in fitting and planting and after cultivation. The decomposition is slower and more lasting for improvement of the soil for future crops.

Harvesting corn deserves a few words of comment in closing this report. Of the many ways of harvesting, the latest way practiced by many farmers is much the easiest way of handling a heavy crop. Have a horse made by taking a pole ten feet long, put two legs in one end and have the other end rest on the ground, put a cross pin about two feet from the two legs, made about three feet long and to go in and out easy, and you have your horse.

Set up the horse where you want the stook, cutting as many rows at once as you want in a row of stooks, setting up as straight and even around the cross pin as possible, tie the tops with straw firmly, pull out the cross pin and pull along the horse for the next stook. Two hands can work together with advantage with one horse.

The husking or picking should be done in the field in the month of October, binding the fodder with straw as fast as husked, if not dry it can be set up again until it is ready to cart. This saves much heavy handling and makes the labor comparatively light.

JAMES COMINS,

Chairman of Committee on Field Crops.

The acre of corn offered for your award is grown on a sandy, gravelly loam exhausted by successive crops raised and taken off without adequate return. Last year it produced a small crop of oats; but the clover and grass seed which I sowed with the oats, though it started well, failed for want of available nutriment. I plowed the piece,

May 27, with a Weiard plow, with jointer, turning in a luxuriant growth of sorrel and an occasional tuft of clover, harrowed with the Acme harrow, marked the piece in rows three feet apart both ways, and planted it May 19th, with Macomber's Hand Corn Planter, setting the planter to drop five kernels in each hill. My hired boy was just one hour and thirty-five minutes planting the acre, and I think the work was better done than it could possibly be done by hand and hoe.

On the 21st of May, I manured the corn with a well rotted compost made from barn manure, light soil, hen manure, and loam, and costing about five dollars a ton. Of this we put about a pound and a half on each hill, and then harrowed the field again with the Acme harrow. This second harrowing worked the manure into the soil directly over the seed, and left the whole piece in the finest possible condition of tilth. As I knew from previous experience would be the case, this harrowing did not in any way disturb or hurt the corn, which came up strong and regular; but some pumpkin seeds, which I planted with the hoe, were torn up and scattered. The piece was cultivated each way about the 28th of June, and the corn thinned to three stalks in the hill. About the 12th of July I sowed on 500 lbs. Lister's U. S. Phosphate, costing eight dollars, cultivated the piece both ways, and hand hoed it, or rather went over the piece with hand hoes, cutting or pulling an occasional weed out of the hills.

The result was a good crop. Fifty-four bushels hard, sound, shelled corn, by measurement, and about two bushels pig corn. I estimate the stover at 3500 lbs. worth ten dollars per ton.

The following is my account with the crop:

Corn Crop, Dr. in account with John C. Dillon, Cr.	
To rent of land,	\$ 3 50
7260 lbs. compost, at \$5 per ton,	18 15
500 lbs. Lister's U. S. Phosphate,	8 00
Seed and labor,	20 00
	<hr/>
Total,	\$49 65
	<i>Cr.</i>
By 54 bushels corn, at 60 cents,	\$32 40
2 bushels pig corn, at 20 cents,	40
3500 lbs. stover, at \$10 per ton,	17 50
	<hr/>
Value of crop,	\$50 30*
Deduct cost,	49 65
	<hr/>
Profit,	\$ 65

*As I want it to feed to my stock, the crop is worth to me a little more than this. If I had to sell it, I must deduct cost of marketing and delivery.

JOHN C. DILLON.

The land entered for the corn premium was an old pasture that had not been plowed for years. In October, 1885, it was plowed about six inches deep and the third week in April fitted with a wheel harrow and furrowed with a double mould board plow, and ten loads of manure put in the hill and corn and manure covered with a hand hoe.

Cultivated with common cultivator twice, once in a row and twice with Prout's horse-hoe and the weeds cut in June once and in August once. The corn and cob weighed from one rod $36\frac{1}{2}$ pounds, shelled corn $25\frac{1}{2}$ pounds, cob $9\frac{3}{4}$ pounds; shrinkage in shelling $1\frac{1}{2}$ pounds and the corn at $25\frac{1}{4}$ pounds to the rod makes $72\frac{1}{7}$ bushels to the acre. The corn is green and will probably shrink to about 50 bushels to the acre.

<i>Dr.</i>		
To 10 loads of manure,		\$10 00
Labor in planting and fitting land,		10 50
Hoeing and cultivating,		3 80
Harvesting,		1 25
Husking and care of stalks,		5 00
		<hr style="width: 100px; margin: 0 auto;"/>
Total,		\$30 55
<i>Cr.</i>		
By 50 bushels of corn at 60 cents,		\$30 00
1 $\frac{1}{2}$ tons of stalks,		9 00
		<hr style="width: 100px; margin: 0 auto;"/>
		\$39 00

If there is $72\frac{1}{7}$ bushels of corn at 60 cents per bushel and $1\frac{1}{2}$ tons of stalks it leaves a balance in favor of credit of \$21.73 to the acre.

H. C. WEST.

ONE ACRE CORN GROWN BY HENRY TILLSON, SUNDERLAND, IN 1886.

It had been mowed four years and plowed late in the fall of 1885. As soon as dry enough it was thoroughly pulverized with wheel-har-

row then smoothed down with a lump crusher. On May 27, four cords of common barnyard manure was spread evenly on the piece and May 28 thoroughly worked in with the wheel-harrow, then smoothed down as before. May 29 it was marked out three feet and four inches each way and 150 pounds of Quinnipiac phosphate was dropped in the hill and planted by hand.

It was cultivated three times, twice in a row and hoed once. An average rod of the ears husked Oct. 16 weighed 50 pounds or 8000 pounds to the acre.

Considering the improvement on the land equal to the interest and taxes and the stover to pay for harvesting, the account stands as follows :

<i>Dr.</i>		
To plowing,		\$ 2 00
Four cords manure,		20 00
Carting and spreading manure,		3 50
Wheel-harrowing,		3 50
Phosphate,		3 00
Planting,		1 50
Cultivating and hoeing,		4 00
		<hr style="width: 10%; margin: 0 auto;"/>
Total,		\$37 50
<i>Cr.</i>		
By 114 bushels at 55 cents,		\$62 70
Balance in favor of corn,		\$25 20

HENRY TILLSON.

The field of corn I offer for premium was a piece of turf ground plowed May 15th, and twelve two-horse loads of manure spread on to the acre, well pulverized with the soil using for the purpose a sixteen inch Corbin disk harrow. Marked three feet, ten inches each way, planted from three to five kernels in a hill, cultivated both ways, was planted May 28th, kind of corn Western dent red cob.

D. A. HORTON.

REPORT ON POTATOES.

BY H. C. WEST.

Of the fields entered for premiums one was planted to corn for two years and the other had grown corn for seven years previous with about seven loads of manure in the hill in 1885.

In April both had about twenty-five loads of manure plowed under and the second week in May they were harrowed and marked out three rows at a time and five rows to the rod, and 300 pounds of cotton-seed meal, 500 pounds of cotton hull ashes, 100 pounds of plaster, 150 pounds of lime (dry slacked) mixed and sowed broadcast to the acre. One field planted with seed said to have been brought from England to Canada and planted one year, then planted one year in Massachusetts, a long, large white potato, with shallow eyes and smooth skin that holds its size well at the ends. The second field with a potato said to be from a seed ball of the Early Rose that resembles the old Peerless.

The potatoes were cut and dropped so that about ten bushels would plant an acre from 18 to 24 inches in the row and covered with a horse-hoe that leaves a small ridge. Before they came up or about the time they appeared top of the ground bushed them with a green cedar bush which killed the weeds in the hill or on the ridge and saved a large amount of hand labor.

Before the weeds got started again went over them with the horse-hoe once in about every ten days as long as the horses could walk between the rows without pulling up the tops, and the few weeds that were left cut them with a hand-hoe and on an average two days work by hand to the acre will keep the land free from weeds.

The brush and horse-hoe must be used before the weeds get started or when *very small* for they will not kill large weeds that have rooted.

The committee gave me 164 pounds to the rod. One of the com-

mittee suggested to me that they be spread on the ground and allowed to dry to see how much they would shrink in weight, and when weighed again had only 150 pounds or a shrinkage of 14 pounds to a rod or 135 pounds of merchantable potatoes and 15 pounds of poor and small ones.

On field No. 2, the committee gave me 132 pounds to the rod or at the rate of 352 bushels per acre. This field measured 108 rods or about two-thirds of an acre and 191 bushels sold at an average of 49 cents per bushel or at the rate of $286\frac{1}{2}$ bushels per acre, no account kept of the poor and small ones. Have charged the crop \$25 for the manure without any rent for land as it is enough better to make up any deficiency in the charge.

Dr.

To 25 loads of manure,	\$25 00
1050 pounds of fertilizer,	13 30
10 bushels of seed at \$1.25 per bushel,	12 50
Plaster and paris green,	1 55
Labor,	35 50
	<hr/>
Total,	\$87 85

Cr.

By 360 bushels at 50 cents,	\$180 00
40 bushels at 15 cents,	6 00
	<hr/>
Total,	\$186 00

FIELD NO. TWO, TWO-THIRDS OF AN ACRE.

Cr.

By 191 bushels at 49 cents,	\$93 59
Poor and small potatoes,	4 00
	<hr/>
	\$97 59

Dr.

To Manure,	\$16 66
Fertilizer,	8 87
$6\frac{2}{3}$ bushels of seed at 50 cents per bushel,	3 33
Plaster and paris green,	1 03
Labor,	23 67
	<hr/>
Total,	\$53 56

REPORT ON SHEEP.

BY JOHN C. DILLON.

The display of sheep at the Hampshire Society's thirty-seventy exhibition was a very respectable, and, considering the weather on the first day, a remarkably good one. There were fourteen entries, comprising 121 sheep, and not an inferior animal among them. In fact your committee were puzzled how to make a fair return to the several exhibitors (many of whom had had to keep their sheep over from the preceding day) for the labor, skill, patience, and public spirit they had manifested.

And this leads me to say a word or two about the business of awarding premiums at Agricultural Fairs, in which I feel sure I shall have the sympathy of many who have been in the habit of serving on committees of award.

Where premiums are offered for specific, well defined objects, as for the best Ayrshire bull, or the best Jersey cow, it is plainly the duty of the committee to award them to the animals which, in their judgment, nearest approach the recognized standard of excellence in the respective breeds.

But where the offer of premiums is more general; as for the best buck, or the best eight lambs; it is usual and proper to take into consideration circumstances and conditions which would have no weight in determining the award, if the premiums had been for the best South Down or the best Leicester. For instance an exhibitor shows a lot of sheep remarkable for pureness of blood and neatness and uniformity of appearance; while another flock, though less uniform and perhaps a little coarser, shows a size and rugged vigor which would commend them to the butcher, or to those farmers who buy instead of raising the sheep they feed. In this case, it is usual, and I think justifiable to *distribute* the premiums among the meritorious

exhibitors, even where a critical judge would feel compelled to award all the premiums to one person

The six bucks entered were all superior animals, and well calculated to stamp their characteristic excellences on the commoner and therefore cheaper cross bred ewes on which our supply of mutton mainly depends. The ewes and lambs were also deserving of high commendation; though their merits and value would have been variously estimated by different individuals and from different stand-points.

Your committee were much pleased with this evidence of a growing interest in sheep-husbandry. Fifty and a hundred years ago, large numbers of sheep were kept, and hardly a farm of any size but had its flock; for they were considered indispensable both for the good of the farmer and the interest of the farm. They were generally small, but tough and hardy, and well fitted to bear the rough and negligent treatment they received. They were easily kept, helped to clear up the weedy, briary pastures, and produced enough wool, tho' of a poor texture, to supply the household wants, and a nutritious and very convenient article of animal food. But times change, and the introduction and rapid improvements of power machinery drove the hand-loom and spinning wheel into the garret, introduced new fashions and finer varieties of fabrics, and not only superseded the household products, but called for a better and finer quality of the raw material. This difficulty could and doubtless would have been overcome by the introduction of new and improved varieties of sheep; but the opening up and settlement of the cheap and rich lands of the West, where the cost of keeping is principally comprised in the herding, salting and shearing of the flock, has rendered the keeping of large flocks of sheep for wool unprofitable on our higher priced farms, where fodder must be artificially provided for at least five and a half months in the year. Still there are good and valued reasons why we may profitably keep more sheep than we do, and I think, I perceive unmistakable signs of a growing interest in this branch of husbandry.

The following are some of the reasons alluded to :

1. Sheep would afford a better income from some land, than could be obtained in any other way.
2. To a certain extent they can be made to improve some land by the destruction of bushes, brambles and other wild plants.
3. Mutton can be produced at a less cost than any other meat.

altho', when first class, it commands a higher price in our markets.

4. And lastly and principally because almost every farmer in New England might keep a sheep to every cow, without any addition to or change of pasture. This would bring a welcome addition to the income of the farm, while the pasture would be materially benefitted by the manure which is rich and well-distributed, and is largely composed of plants which the cows reject, and which therefore are liable to over-run and possess the land.

Three of the most important objects of sheep husbandry in New England :

1. The raising of market lambs.
2. The production of Wethers for feeding.
3. The feeding of mutton sheep for the butcher.

The raising of lambs for the market offers great inducements when judiciously managed. The most approved system is to buy good common ewes in early autumn, and to breed them to a pure bred ram of one of the mutton breeds.

There is room for the exercise of judgment and discretion in the selection of both ewes and rams. The following are some of the desirable points : In ewes, nice straight backs, broad chests, round barrels, broad across the hips. Of a ram, a rather small head, but with a good masculine countenance, a lively bright eye, broad across the shoulders and breast, straight and even across the back, round in the barrel, full in the hams, holding as near as possible, the same width from shoulder to rump. To produce good early lambs both the ewes and ram should be well kept, and in good thrifty condition, and the ram especially should have from a pint to a quart of oats per day. The ewes should be well kept thro' the winter, by feeding not only hay, but also a few roots and a little grain every day. They should also have convenient yards, plenty of clean bedding, and constant or at least frequent access to pure water. In each yard should be a box with salt in one end, and salt, wood ashes and sulphur in the other ; and it is well to feed occasionally a little browse of pine or hemlock. Three or four weeks before lambing time, the ewe's grain should be increased and the supply of roots lessened. During the season of lambing they should be watched very closely and assisted a little if necessary. If lambs come in winter, the ewes should be in a dry warm place, with plenty of litter. While suckling their lambs, the ewes should have about half a pint of corn meal daily, together with their hay or corn stalks. The early lambs are

sold as soon as they will dress 50 to 60 pounds. The later lambs and ewes are sold together during the summer. It is the experience of good farmers that from six to seven dollars advance on each ewe may be expected, say \$4.50 for the lamb, \$1 for gain on ewe, and \$1 for her wool.

With regard to the production of wethers and the feeding of mutton sheep, the practice will differ with the situation and opportunities of different individuals. In the selection of breeds the following statements, by the writer of a prize essay in the *Country Gentleman* of the weights of dressed meat and washed wool, may be of interest :

		lbs.		lbs.
Lincolns	carcase,	350	fleece,	28
Cotswolds	“	320	“	26
Leicesters	“	250	“	22
Dorsets	“	240	“	20
Oxford Downs	“	240	“	18
Shropshire Downs	“	220	“	16
Hampshire Downs	“	200	“	12
South Downs	“	160	“	10

These weights are of extra fed sheep, and the writer remarks “There have been individual cases of heavier weights, but not many.” Each of the above named breeds has peculiar properties, which render it especially suitable to certain situations and conditions, but success in stock husbandry depends more on judicious selection, proper treatment and regular and well arranged feeding as to time, quantity and quality of food, condition of the animal, etc., than upon the intrinsic characteristics of any particular breed.

From experience and observation, I am satisfied that with judicious management the sheep returns, proportionately, as large a pecuniary profit for its care and costs as any of our farm animals, and certainly no class of animals, when well kept, and the manure husbanded, will do so much to fertilize the farm. Why then do so few farmers keep sheep? The reason usually assigned is “the dogs,” or even more emphatically “the d—d dogs.” But I think this objection is entirely over-rated. We have a very excellent law which taxes dogs just enough to prevent people keeping them without use or motive, and more than enough to make good any damage of which they may have been the cause. I know many farmers claim that the amount they recover does not compensate for the damage they have sustained, but I also know that their neighbors think the dog fund pays higher

prices than the butcher. The average mind can scarcely comprehend the modesty and generosity which leads a man to claim only a percentage of his loss, when there are hundreds of dollars of public money collected from dog owners, waiting to pay him in full.

In many years experience in keeping sheep I have never suffered any loss or to the best of my knowledge. any damage from the attacks of dogs. A more natural reason appears to be that while it is conceded that large flocks can be more profitably kept on the wide and fertile ranges of the West, farmers hesitate to incur the expense and trouble of fencing and providing winter accommodations for a small flock. Of the expedience of this each will judge for himself, but I am satisfied that in the next twenty years the number of sheep kept in New England will be sensibly increased, to the substantial benefit of the land as well as the material profit of the farming community.

LIFE MEMBERS FOR 1886.

F. E. Loomis,	Amherst.
John C. Hammond,	Northampton.
Miss Mary E. Cook,	Amherst.
R. H. Fitts,	Shutesbury.
E. S. Moore,	Hadley.
Henry Bishop,	Amherst.
W. C. Stoughton,	Montague.
J. A. Sullivan,	Northampton.
Mrs. E. S. Moore,	Hadley.
Alden Wilder,	Sunderland.
George Cutler, Jr.,	Amherst.
Henry Tillson,	Sunderland.
Parnell Munson,	Amherst.
Hollis C. Graves,	South Deerfield.
Mrs. T. L. Paige,	Amherst.
D. H. Tillson,	Amherst.
R. M. Horton,	Hadley.
J. A. Porter,	Hatfield.

TREASURER'S REPORT.

FRANK E. PAIGE, TREASURER, IN ACCOUNT WITH THE HAMPSHIRE
AGRICULTURAL SOCIETY, 1886.

	<i>Dr.</i>
To cash from 1885,	\$ 95 00
“ “ Life membership,	77 50
“ “ George Blodgett,	3 50
“ “ Dinner ticket,	1 00
“ “ Entries bicycle race,	5 00
“ “ “ Fees horse race,	61 70
“ “ “ Running race,	6 80
“ “ Peddlers,	42 00
“ “ Gate,	409 04
“ “ State,	600 00
“ “ James W. Allen,	5 00
“ “ Mass. Ag'l College tickets,	40 00
“ “ Donation to Society,	115 82
	\$1,462 36
	<i>Cr.</i>
By paid Chester Smith,	\$ 2 50
“ George Graves,	2 00
“ Chester Williams,	8 25
“ J. E. Williams,	41 50
“ Grange Store,	2 32
“ Mrs. L. Ashley,	2 00
“ B. F. Kendrick,	2 50
“ Rent of Pacific Hall,	20 00

By paid Expense posting bills,	\$	75
“ Morris Garvey,		50
“ W. E. Sanderson, bicycle race,		2 00
“ E. J. Bennett, bicycle races,		5 00
“ Trotting and running,	185	00
“ M. N. Spear,		20
“ George H. Bias,		4 00
“ Fred Bell,		2 00
“ S. W. Crafts,		25
“ J. F. Perkins,		1 92
“ G. B. Gallond,		18 50
“ W. L. Stiles,		6 00
“ Frank E. Paige, Secretary and Treasurer,	100	00
“ J. J. Potwin,		2 00
“ Russell & Morgan,		18 50
“ Amherst Savings Bank, interest,		68 00
“ J. F. Gilbert,		5 75
“ Express and postage,		11 77
“ Paige Bros.,		3 00
“ H. Holland,		3 40
“ E. D. Huntington,		2 53
“ Jackson & Cutler,		4 52
“ Charles Kellogg,		7 56
“ J. E. Williams,		36 95
“ H. W. Haskins		53 87
“ E. A. King		10 00
“ E. D. Huntington,		1 25
“ D. H. Tillson,		2 00
“ Stationery, etc.,		4 50
“ W. W. Smith,		11 00
“ Premiums,	720	99
Cash on hand,		87 58
		<hr/>
		\$1,462 36

FINANCIAL CONDITION OF THE SOCIETY.

LIABILITIES.

Notes, etc. at Amherst Saving Bank,	\$1,100 00
Interest due Jan. 1, 1887,	33 00
Interest due July 1, 1887,	33 00
	<hr/>
Total,	\$1,166 00
Cash on hand,	87 58
	<hr/>
Balance,	\$1,078 42

AMHERST, Nov. 30, 1886.

I hereby certify that I have examined the accounts of Frank E. Paige, Treasurer of Hampshire Agricultural Society for 1886, and find them correct with a balance in the treasury of eighty-seven dollars and fifty-eight cents.

E. D. BANGS, *Auditor.*

THIRTY-EIGHTH ANNUAL REPORT.

TRANSACTIONS

OF THE



Hampshire Agricultural Society,



FOR THE YEAR 1887.

AMHERST, MASS.:
J. E. WILLIAMS, BOOK AND JOB PRINTER.
1887.

OFFICERS FOR 1887.

PRESIDENT,

D. A. HORTON, *Hadley.*

VICE-PRESIDENT,

F. L. STONE, *Amherst.*

SECRETARY,

FRANK E. PAIGE, *Amherst.*

TREASURER,

FRANK E. PAIGE, *Amherst.*

EXECUTIVE COMMITTEE,

E. F. COOK, *Amherst.*

A. B. HOWARD, *Belchertown.*

F. H. WILLIAMS, *Sunderland.*

JAMES B. PAIGE, *Prescott.*

DWIGHT PRESHO, *Pelham.*

F. F. ADAMS, *Leverett.*

RUFUS SMITH, *Hadley.*

DELEGATE,

W. W. SMITH, *Amherst.*

LIST OF PREMIUMS AWARDED.

CLASS 1—TOWN TEAMS. 3 ENTRIES.

Town of Amherst,	\$20 00
“ Hadley,	15 00
“ Pelham,	10 00

CLASS 2—FANCY CATTLE. 7 ENTRIES.

R. H. Allen, Prescott,	\$5 00
P. Munson, Amherst,	3 00
Rufus Smith, Hadley,	2 00

CLASS 3—WORKING OXEN. 12 ENTRIES.

G. W. Morgan, Belchertown,	\$5 00
Francis Clapp, South Deerfield,	4 00
C. W. Thurber, Leverett,	3 00
Rufus Fitts, Shutesbury,	2 00

CLASS 4—STEERS. 11 ENTRIES.

G. W. Morgan, Belchertown, 3 years old,	\$5 00
C. W. Thurber, Leverett, 3 “	3 00
L. W. West, Hadley, 3 “	1 00
E. S. Moore, Hadley, 2 “	4 00
Rufus Fitts, Shutesbury, 2 “	2 00
L. W. West, Hadley, 2 “	1 00
“ “ “ 1 “	1 00

CLASS 5—MILCH COWS. 5 ENTRIES.

G. W. Fitch, Amherst, Jersey,	\$4 00
“ “ “ “	3 00
Patrick Danahey, “ Grade,	3 00
G. W. Fitch “ “	2 00

CLASS 6—HERDS OF MILCH COWS. 5 ENTRIES.

G. W. Fitch, Amherst,	\$5 00
W. A. Magill, “	4 00
J. P. Smith, “	3 00
L. W. West, Hadley,	2 00

CLASS 7—HEIFERS. 17 ENTRIES.

G. W. Fitch, Amherst, Thoroughbred, 1 year old,	\$2 00
H. E. Alvord, “ “ 1 “	1 00
L. W. West, Hadley, Grade, 2 “	3 00
W. A. Magill, Amherst, “ 2 “	2 00
L. W. West, Hadley, “ 2 “	1 00
C. P. Jewett, Pelham, “ 1 “	2 00
L. W. West, Hadley, “ 1 “	1 00

CLASS 8—BULLS. 7 ENTRIES.

H. E. Alvord, Amherst, Jersey,	\$4 00
F. L. Stone, “ “	2 00
E. S. Moore, Hadley, Holstein,	4 00
L. W. West, “ Shorthorn,	4 00
“ “ “ “	2 00

CLASS 9—CALVES. 13 ENTRIES.

L. W. West, Hadley, Pair Steer Calves,	\$3 00
E. S. Moore, “ “ “	2 00
Rufus M. Smith, “ Heifer Calf,	2 00
E. S. Moore, “ “ “	1 00
D. A. Horton, “ Thoroughbred Bull Calf,	2 00
G. W. Fitch, Amherst, “ “ “	1 00

CLASS 10—HERDS OF CATTLE. 4 ENTRIES.

L. W. West, Hadley,	\$6 00
James P. Smith, Amherst,	5 00
D. A. Horton, Hadley,	4 00

CLASS 11—SWINE. 9 ENTRIES.

Josiah Cook, Hadley, Grade Boar,	\$4 00
W. F. Williams, Amherst, “ “	3 00
H. C. West, Hadley, Thoroughbred Boar,	4 00
R. M. Horton, “ Sow with Pigs,	4 00
J. W. Clark, “ “ “	3 00

Josiah Cook, Hadley,	Sow with Pigs,	1 00
H. C. West, “	Lot Weaned Pigs,	4 00
Josiah Cook, “	“ “ “	3 00

CLASS 12—SHEEP. 20 ENTRIES.

Edmund Hobart, Amherst,	Buck,	\$4 00
W. D. Crocker, Sunderland,	“	3 00
Henry Green, Hadley,	“	2 00
Francis Clapp, So. Deerfield,	Lot 25 Sheep,	6 00
Dwight Morton, Hadley,	“ “	3 00
Henry Green, “	8 Ewes or more,	4 00
Edmund Hobart, Amherst,	“ “	3 00
Wm. D. Crocker, Sunderland,	“ “	2 00
Francis Clapp, So. Deerfield,	8 Lambs,	3 00

CLASS 13—POULTRY. 62 ENTRIES.

F. E. Melendy, Hatfield,	Breeding Pen Light Brahmas,	\$2 00
C. C. Montague, Amherst,	“ “ “ “	2 00
James B. Brannan, Pelham,	Trio Brahmas,	2 00
“ “ “	“ “	1 00
E. A. Harris, “	“ Cochins,	2 00
James B. Brannan, “	“ “	1 00
C. C. Montague, Amherst,	“ Plymouth Rocks,	2 00
George Graves, “	“ “ “	1 00
F. H. Morgan, Pelham,	“ Hamburgs,	2 00
C. P. Jewett, “	“ White Leghorns,	2 00
F. E. Melendy, Hatfield,	“ “ “	1 00
C. P. Jewett, Pelham,	“ Brown “	2 00
E. N. Fisher, Belchertown,	“ “ “	1 00
George Graves, Amherst,	Bantams,	2 00
R. L. Peckham, Leverett,	“	1 00
E. N. Fisher, Belchertown,	Trio Turkeys,	2 00
F. E. Melendy, Hatfield,	“ Ducks,	2 00
C. S. Wilbur, Amherst,	“ “	1 00
C. P. Jewett, Pelham,	“ Wyandottes,	2 00
W. J. Seelye, Amherst,	“ “	1 00
“ “ “	Breeding Pen Wyandottes,	2 00
A. E. Ray, “	“ “ Plymouth Rocks,	2 00
W. J. Seelye, “	“ “ Wyandottes,	2 00
C. C. Montague, “	“ “ Brown Leghorns,	2 00

E. N. Fisher, Belchertown,	Breeding Pen Cochins,	1 00
George Graves, Amherst,	“ “ Wyandottes,	1 00

CLASS 14—AGRICULTURAL AND FARM IMPLEMENTS. 3 ENTRIES.

J. A. Sullivan, Northampton,		\$5 00
D. A. Horton, Hadley,		4 00
J. C. Dillon, Amherst,		3 00

CLASS 14 1-2—MECHANIC ARTS. 4 ENTRIES.

A. F. Bardwell, Amherst,	Sewing Machine,	Diploma.
E. H. Fairbank, “	Drawing Tables,	Diploma.
G. H. B. Green, Belchertown,	Harness,	Diploma.

CLASS 15—MERCANTILE GOODS. 3 ENTRIES.

Jackson & Cutler, Amherst,		\$10 00
E. D. Marsh, “		8 00
W. W. Hunt, “		6 00

CLASS 16—DOMESTIC AND OTHER MANUFACTURES. 36 ENTRIES.

Mrs. Josiah Cook, Hadley,	Knit Bed Spread,	\$ 75
“ Henry Taylor, Ashfield.	“ “ “	1 00
“ “ “	Quilt,	50
“ Charles Hartwell, Amherst,	Rug,	25
“ L. F. Farnsworth. “	Silk Quilt,	50
Miss Fanny E. Potwin, “	“ “	50
Mrs. Belle Wrigley, “	Rag Carpet,	50
“ “ “	Hose,	25
“ Henry Shaw, “	“	50
“ Sanford Boice, “	Knit Shirt,	50
“ “ “	Bed Socks,	25
“ “ “	Silk Mittens,	25
“ “ “	Hassock.	50
“ “ “	Shop Bag,	25
Miss Lucy Boice, “	Shoe Bag,	25
Mrs. Sanford Boice, “	Knit Nubia,	50
“ A. Eastman, “	Bed Quilt,	75
Miss M. E. “	“ “	50
“ Carrie Eastman, “	Knit Spread,	50
Mrs. E. C. Parker, “	Rag Carpet,	75
“ H. C. Comins, Hadley,	4 Pair Hose,	50
“ S. W. Boutwell, Leverett,	Sofa Pillows,	50

Mrs. S. W. Boutwell, Leverett,	Rug,	25
“ O. H. Curtis, Amherst,	Afghan,	50
“ Henry Stearns, “	Rug,	50
“ Amos Demming, Savoy,	Rag Carpet,	75
Ruth “ “	Carpet,	75
Mrs. Amos “ “	Wool Hose,	75
“ “ “ “	Cotton Hose,	50
“ “ “ “	“ “	50
“ “ “ “	Bed Quilt,	25
“ D. A. Horton, Hadley,	“ “	50
“ “ “ “	“ “	50
“ T. L. Paige, Amherst,	Ancient China,	1 75
“ M. E. Smith, “	Quilt,	75

CLASS 17—FANCY ARTICLES. 83 ENTRIES.

Mrs. J. L. Lovell, Amherst,	2 Table Spreads,	50
“ “ “ “	Banner,	25
“ “ “ “	Work Bag,	20
“ “ “ “	Panels,	50
“ “ “ “	Chatelaine,	20
“ “ “ “	Pair Hose,	25
Della Fitch, “	Tidies,	50
Mrs. E. J. Leach, “	Infant Sack and Socks,	25
“ “ “ “	Purse,	37
Mabel Leach, “	Skirt,	25
Mrs. T. W. Sloan, “	Sofa Pillow,	75
“ Belle Wrigley, “	Sofa Pillow,	50
“ P. C. Moore, “	Quilt,	75
“ W. C. Bliss, “	Silk Quilt,	75
“ Chester Cowles, “	Mat,	25
“ J. E. Strickland, “	Table Scarf,	37
Miss C. E. Pitcher, Leverett,	Tidy,	37
“ Helen B. “ “	Afghan,	50
“ Jennie L. Cowles, Amherst,	Mats,	37
Oliver Cowles, “	Fan,	37
George Lessey, “	Pen Wiper,	20
Miss Flora Lessey, “	Tidy,	20
“ Mary Robison, “	“	20
Mrs. J. Ward, Pelham,	Embroidery,	37
“ J. M. Fay, Northampton,	Sofa Pillow,	37

Mrs. J. M. Fay, Northampton,	Table Scarf,	75
“ “ “ “	Chair Seat,	25
“ “ “ “	Quilt,	1 25
“ E. S. Moore, Hadley,	Quilt,	75
“ C. C. Hastings, Amherst,	Afghan,	50
“ Stetson Hawley, “	Quilt,	50
“ Sanford Boice, “	Blanket,	50
“ “ “ “	Sofa Pillow,	37
“ “ “ “	Picture Holder,	20
Miss Lucy “ “	Banner,	37
“ “ “ “	Duster,	25
“ “ “ “	Tidy,	25
“ “ “ “	Table Mats,	25
Mrs. P. D. Spaulding, “	Sofa Pillow Cover,	75
“ L. E. Wheaton, “	Fancy Work,	50
Miss Carrie Eastman, “	Tidy,	25
Mrs. H. C. Comins, Hadley,	Lace,	25
“ E. J. Leach, Amherst,	Pincushion,	50
“ H. M. Dwight “	Portiere,	50
“ “ “ “	Bed Spread,	1 00
“ “ “ “	Handkerchief Case,	25
“ S. W. Boutwell, Leverett,	Wall Pocket,	25
“ L. M. Hills, Amherst,	Mantle Scarf,	25
“ L. J. Sykes, “ “	“ “	25
Emily O. Curtis, “	Mat,	37
Nellie Curtis, “	Chair Scarf,	25
Miss M. M. Cook, “	Toilet Cushion,	50
Mrs. E. F. Cook, “	Afghan,	50
“ H. J. Kendrick, “	Silk Quilt,	75
“ “ “ “	Foot Quilt,	37
“ F. Green, Hadley,	Sofa Pillow,	75
“ H. “ “	Bed Quilt,	50
“ E. S. Moore, “	Apron,	25
“ “ “ “	Handkerchief Box,	37
“ “ “ “	Tidy,	25
“ “ “ “	Commode Cover,	25
“ “ “ “	Silk Quilt,	75
“ “ “ “	“ “	37
Alice R. Fairbanks, Amherst,	Rug,	37
Mission Band, Lessie Wrigley,	Toboggan,	25

Mission Band, Alice Howard,		Mat,	25
“ “ Mabel Leach,		Tidy,	25
Mrs. J. C. Reed,	Amherst,	Quilt,	50
“ O. W. Smith,	“	Bed Spread,	1 25
“ D. A. Horton,	Hadley,	Tidy,	25
“ “ “	“	Stand Spread,	37
F. Sanders,	“	Edgings,	25
Annie Gaylord,	“	Flowers,	20
Myra Boynton,	“	Sofa Pillow,	50
T. C. Dillon,	Amherst,	Birds,	75
Mrs. H. J. Clark,	“	Table Spread,	75

CLASS 18—FINE ARTS. 11 ENTRIES.

Miss S. N. Kingman,	Amherst.	Collection,	\$7 00
“ Fannie E. Potwin,	“	Placque,	1 00
“ Lizzie Sloane,	“	Painting,	1 00
Mrs. J. L. Lovell,	“	“	1 00

CLASS 19—BREAD, BUTTER AND CHEESE. 26 ENTRIES.

Mrs. S. W. Boutwell,	Leverett,	Wheat Bread,	\$2 00
“ T. L. Paige,	Amherst,	“ “	1 00
“ M. C. Eastman,	“	Rye “	2 00
“ D. E. Dickinson,	Hadley,	“ “	1 00
“ S. W. Boutwell,	Leverett,	Graham “	1 00
Chester Cowles,	Amherst	Butter,	3 00
Mrs. S. W. Boutwell,	Leverett,	“	2 00
“ James Comins,	Hadley,	Cheese,	1 00
“ N. E. “	“	Sage Cheese,	2 00
“ James “	“	“ “	1 00

CLASS 20—HONEY, WINES, CANNED AND DRIED FRUITS, JELLIES,
PICKLES, MAPLE SYRUP AND SUGAR. 9 ENTRIES.

Mrs. J. C. Dillon,	Amherst,	Canned Fruit,	\$1 00
“ W. L. Boutwell,	Leverett,	“ “	75
W. L. Boutwell,	“	“ “	50
Henry Bishop,	Amherst,	Jellies,	1 00
Mrs. W. L. Boutwell,	Leverett,	“	50
“ J. C. Dillon,	Amherst,	Pickles,	50
“ Sanford Boice,	“	Dried Apples,	1 00
“ J. C. Dillon,	“	“ “	50

Mrs. Belle Wrigley,	Amherst.	Dried Apples,	75
Henry Bishop,	“	Honey,	1 00
G. H. B. Green,	Belchertown,	“	75

CLASS 21—FRUITS.

G. H. B. Green,	Belchertown,	Best Display,	\$4 00
A. B. Howard,	“	“ “	3 00
J. C. Dillon,	Amherst,	“ “	2 00

CLASS 22—FRUITS GROWN BY THE EXHIBITOR. 29 ENTRIES.

G. H. B. Green,	Belchertown,	Collection Apples,	\$4 00
R. M. Horton.	Hadley,	“ “	3 00
J. C. Dillon,	Amherst,	“ “	2 00
G. H. B. Green.	Belchertown.	“ Pears,	4 00
A. B. Howard,	“	“ “	3 00
F. B. Paige,	Prescott	“ “	2 00
L. W. Goodell.	Amherst.	“ “	1 00
G. H. B. Green.	Belchertown.	“ Grapes,	4 00
A. B. Howard,	“	“ “	3 00
J. C. Dillon,	Amherst,	“ “	2 00
G. H. B. Green,	Belchertown,	“ Peaches,	2 00
J. C. Dillon,	Amherst.	“ “	1 00
Henry Bishop,	“	“ Quinces,	1 00
A. Gates,	Pelham,	“ Cranberries,	1 00
G. L. Cooley.	Sunderland,	Platter Baldwins,	50
“ “	“	“ Greenings,	50
G. H. B. Green,	Belchertown.	“ Gravesteins,	50
G. L. Cooley,	Sunderland,	“ Russets.	50

CLASS 23—VEGETABLES GROWN BY THE EXHIBITOR. 63 ENTRIES.

G. H. B. Green,	Belchertown,	Collection.	\$5 00
J. C. Dillon,	Amherst,	“	4 00
W. A. Magill,	“	“	3 00
James Comins,	Hadley,	“	2 00
D. J. Wright.	Northampton,	Exhibition Potatoes.	2 00
G. H. B. Green,	Belchertown,	“ “	1 00
F. E. Loomis.	Amherst,	“ Onions,	1 00
D. H. Tillson,	“	“ Carrots,	50
James Comins,	Hadley,	“ Rye,	1 00
F. E. Loomis,	Amherst,	“ Seed Corn,	2 00

James Comins,	Hadley,	Exhibition Seed Corn,	1 00
“	“	“ Pumpkins,	1 00
“	“	Peck Beans,	1 00
D. H. Tillson,	Amherst,	Potatoes,	1 00
James W. Allen,	“	Exhibition Cabbages,	1 00
G. L. Cooley,	Sunderland,	“ Winter Squashes,	2 00
W. A. Magill,	Amherst,	“ Tomatoes,	1 00
G. H. B. Green,	Belchertown,	“ “	50
“	“	“ Beans,	1 00

CLASS 24—FLOWERS. 27 ENTRIES.

L. W. Goodell,	Belchertown,	Collection,	\$5 00
A. B. Howard,	“	“	3 00
Mrs. S. W. Boutwell,	Leverett,	“	2 00
“ E. C. Parker,	Amherst,	“	1 00
L. W. Goodell,	Belchertown,	“ Asters,	2 00
Mrs. S. W. Boutwell,	Leverett,	“ “	1 00
“ E. C. Parker,	Amherst,	“ Dahlias,	2 00
L. W. Goodell,	Belchertown,	“ “	1 00
A. B. Howard,	“	“ Verbenas,	2 00
L. W. Goodell,	“	“ “	1 00
“	“	“ Gladioli,	2 00
Mrs. E. C. Parker,	Amherst,	“ “	1 00
“ W. L. Boutwell,	Leverett,	“ Wild Flowers,	2 00
“ S. W.	“ “	“ “ “	1 00
“	“	“ Bouquet,	2 00

CLASS 25—STALLIONS. 3 ENTRIES.

Oliver Cowles,	Amherst,	\$6 00
Hollis Graves,	South Deerfield,	4 00
George F. Hobart,	Amherst,	3 00

CLASS 26—BREEDING MARES AND SUCKING COLTS. 12 ENTRIES.

D. Pomeroy,	Amherst,	\$5 00
D. A. Horton,	Hadley,	4 00
P. Munson,	Amherst,	3 00
J. W. Chandler,	“	2 00

CLASS 27—COLTS AND FILLIES. 10 ENTRIES.

Fred Field,	Shelburne,	3 years old Stallion,	\$3 00
W. H. Comins,	Hadley,	3 “ “	1 00

C. L. Russell,	Sunderland,	2 years old Stallion,	3 00
J. C. Hammond,	Northampton,	2 “	2 00
L. W. West,	Hadley,	2 “	1 00
Alden Wilder	Sunderland,	Yearling,	2 00
John L. Brown,	Pelham,	“	1 00
H. C. Graves,	Sunderland,	3 years old,	2 00

CLASS 28—FARM HORSES. 5 ENTRIES.

J. P. Gray,	Amherst,	Single,	3 00
L. W. West,	Hadley,	“	2 00
T. L. Paige,	Amherst,	Pair,	4 00
D. L. Viaria,	Hadley,	“	3 00

CLASS 29—DRAFT HORSES.

H. C. West,	Hadley,	Single,	\$3 00
J. G. Ward,	Pelham,	Pair,	4 00
F. A. Cadwell,	Amherst,	“	3 00

CLASS 30—CARRIAGE HORSES.

E. F. Cook,	Amherst,	Pair,	\$8 00
T. L. Paige,	“	“	6 00
C. W. Thurber,	Leverett,	“	4 00
L. S. Dyer,	Hatfield,	Single,	6 00
S. N. Miller,	South Hadley,	“	5 00

CLASS 31—ROADSTERS. 10 ENTRIES.

P. Munson,	Amherst,	Pair,	\$8 00
H. C. Nash,	“	“	6 00
F. H. Graves,	Sunderland,	“	4 00
L. S. Dyer,	Hatfield,	Single,	8 00
F. S. Bailey,	Northampton,	“	5 00
John Parnell,	“	“	5 00
A. W. Prouty.	“	“	2 00

FIELD CROPS.

H. C. West,	Hadley,	$\frac{1}{2}$ Acre Potatoes,	\$5 00
“ “	“	$\frac{1}{2}$ “ “	2 00
T. L. “	“	$\frac{1}{2}$ “ “	4 00
E. P. “	“	$\frac{1}{8}$ “ “ (Boy's exp't),	3 00
J. C. Dillon,	Amherst,	1 “ Corn,	5 00
L. W. West,	Hadley,	1 “ “	4 00

REPORTS OF COMMITTEES.

John M. Smith, Sunderland,	\$5 00
James Comins, Hadley,	4 00
MASS. AGRICULTURAL COLLEGE, Gratuity for Display,	\$40 00

RUNNING RACE.

F. H. Thayer, Northampton,	\$6 00
Wild Jim, Colchester, Conn.,	4 00
Geo. M. Parker, Amherst,	3 00
Oliver Cowles, “	2 00

REPORT

OF THE

CHAIRMAN OF COMMITTEE ON FIELD CROPS.

—

JAMES COMINS, HADLEY.

—

It was with much pleasure on the part of myself, as one of the committee, that I visited the fields of the members of this Society who had made efforts to produce premium crops. Had the entries been more numerous, and the duties more laborious, there would have been more pleasure in visiting and making the awards. I would suggest that there be a more extensive circulation of the premium list, for it would be profitable for the members of this society and farmers generally, both young and old, to take more interest in this class of premiums offered by the society. It would pay in the more bountiful crops produced, and in the study of the various methods of producing the same. If all do not succeed in getting a premium, the effort will help them to advance in the science of agriculture and profitable farming. It is on the producing of the potato crop that I would engage your attention in this report. It should, and probably will be, a long time before all classes of the American people will dispense with the use of potatoes as an article of diet. It is, under favorable circumstances, easily produced, and constitutes a healthy and easily digested food for both man and beast.

The little hindrances that come to prevent raising a good crop easy, only call for a more determined effort. The past season has been unfavorable for producing large crops of potatoes; the excessive rainfall during the months of July and August, have injured, and in some places nearly destroyed the crop. The short supply has made a greater demand, and higher prices are obtained for what we have, so that, as a money crop, it will amount to nearly as much as a more bountiful yield with low prices. In visiting the several fields we find, where a determined and faithful effort has been made, and the locality has been well selected, a fair crop has been produced, amounting to from two to three hundred bushels per acre, as was es-

timated by weighing a sample rod. In selecting the potato plot, it is well to have some variation of moist and dry soil, for we have sometimes excessive drought to hinder the growth; but wherever it is, let the preparation be thorough, the application of fertilizer liberal and the cleaning of weeds complete. Of all the extravagance in farming, the permitting of our fertilizer to produce a large crop of worthless weeds, as is often seen in potato fields, is one of the worst economies of time and effort. In stocking the ground with seed, the best results have been obtained by selecting tubers of the size of hens' eggs, and cutting in the middle from seed to stem end; then drop in rows three feet apart, and from one and one-half to two and one-half feet in the row. In experimenting the past season there was no perceptible difference in the size of tops or yield of tubers where halves or whole potatoes were used. The crop of H. C. West shows what can be done as a money crop, while the crops of L. W. West and sons in testing a large number of varieties, makes an interesting study for the intelligent reader. Mr. Dillon shows what can be done under unfavorable circumstances.

All the above is respectfully submitted for your consideration.

JAMES COMINS,

Chairman of Committee on Field Crops.

REPORTS ON CORN.

To the Committee on Crops,

GENTLEMEN :—The acre of corn I offer for premium is grown on warm, sandy loam, which has been in cultivation seven years to my knowledge, but has never had any barn manure before this year. The crops have been potatoes, with commercial fertilizers, followed by rye, and then a crop of rye to turn in for potatoes again—under this treatment I think the land has improved; but, as may be supposed, the improvement has been very gradual. This spring I plowed in a tall, but rather thin crop of rye, May 23rd, using the Wiard plow with jointer; and, though I purposely plowed only five inches deep, I succeeded in covering the rye completely. I harrowed with the Acme harrow (which thoroughly pulverized and leveled the surface without tearing up the rye), and marked the field three feet apart both ways, and planted June 3d, three kernels of early yellow corn, in hills eighteen inches apart. For planting I use Macomber's improved corn and bean planter, which plants and covers the seed about an inch deep, and firms and presses the earth about it. Continued use strengthens the good opinion I formed of the Macomber planter. With it a man can easily plant five acres a day, and the work is so well done, that, *after five years experience* with it, I would not have my corn planted in the old way if I could have it done for nothing, and precisely at the time I wanted. Three days after planting the corn, I applied about five tons of home-made compost, costing about \$5 per ton, scattering it along the rows, over the corn, and then harrowing with the Acme harrow. This completely mixed the compost with the surface soil, without disturbing the corn, which came up in five (5) days from the time it was planted, grew vigorously, and, with two subsequent applications of fertilizer (Lister's U. S. Phosphate), costing \$12, made a very satisfactory crop. The rod selected by you yielded, November 8th, forty-four and one-half pounds (44½ lbs.) of very sound, dry corn, and one and three-quar-

ters pounds ($1\frac{3}{4}$ lbs.) of pig corn; and, by estimate, forty pounds (40 lbs.) of very bright dry green fodder. This is at the rate of one hundred and one and five-sevenths bushels ($101\frac{5}{7}$ bush.) of marketable corn, four bushels of pig corn, and three tons, four hundred pounds of fodder, per acre. Perhaps the rod selected was a little better than the average; but the entire yield was a very satisfactory one. Each little hill had two, and many of them five good ears, and as the rows were only three feet apart, and the hills only half that distance in the row, the amount of corn and fodder were very large. Last spring I agreed with Messrs. Chester Cowles & Son to take the planting of their farm at the halves. A portion of this consisted of two acres of sod land, which had been mown a number of years and needed cultivation. I plowed this May 16th. with a Wiard plow with jointer, about five inches deep, spread on about 15 cords of barn manure, harrowed thoroughly with the Acme harrow, and planted May 20th, with Macomber's corn planter. The field lies near the tract drained and reclaimed by Mr. H. F. Hills and called Blackbirds Island. When I began to plow I noticed a pair of blackbirds or purple grackles (*Quiscalus versicolor*) which followed, or rather accompanied me on my bouts, and I was delighted by their graceful movements, the brilliant metallic reflections on their plumage, and the evident confidence they reposed in my friendly disposition towards them. Before I had finished plowing another pair had put in their appearance, and when I planted the corn there were three pairs. Ten days later the field was alive with blackbirds, and almost every bit of corn pulled up. This was provoking, and none the less so that it was my own fault. True, I had planted corn in New England nearly thirty years, and had never had any trouble with blackbirds; but almost every farmer I met could tell me of their destructiveness, and on referring to "Samuel's Birds of New England," I found the thievish character of the grackle fully set out. So, if I did not know, it was plain I ought to have known; and as Mr. C. Cowles was an old gentleman of 84, and his son a chronic invalid, who, on fine days, can just creep out to the barn, it was equally plain that the loss as well as the blame must fall upon me. I therefore said to Messrs. Cowles, "I will pay you for 50 bushels of shelled corn and $1\frac{1}{2}$ tons of fodder, and make what I can of the land." They were quite satisfied with my offer, so I paid them and set about making the best of a bad job. But what was I to do with the blackbirds? I did not want to shoot the confiding little scamps myself, so I dele-

gated that business to some young Nimrods who undertook to provide for a pie which would eclipse the famous one immortalized by Mother Goose. But by some means or other the blackbirds got an inkling of their designs, and persistently declined to be shot. It seemed generally admitted that the blackbirds would not disturb corn if it were tarred; but some who had tried Macomber's corn planter complained that it would not plant tarred corn. But the season was late, help and money were scarce, and so I harrowed the piece thoroughly with the Acme harrow, marked it three feet apart each way, got some early Canada corn from Mr. O. D. Hunt, tarred it, and planted it June 4th with Macomber's planter, regulated to drop three kernels in a hill, the hills being eighteen inches apart in the row. Two days afterwards I applied six hundred (600) pounds of Lister's U. S. phosphate, having previously used this brand with much satisfaction. The fertilizer was scattered on the surface just over the hills, and harrowed in with the Acme harrow. The result has been very encouraging. The corn came up strong and vigorous, the blackbirds pulled a very few hills and then left in disgust. The repeated harrowings made the after cultivation simple and easy, and an average rod, cut and stooked September 25th, and husked and weighed November 9th, yielded 40 lbs. of very dry, well ripened ears, 2½ lbs. of pig corn, and a proportionate amount of bright green fodder, so dry that it would need to be sprinkled with water before being stowed away.

The following is my account with the crop :

AMHERST, MASS., Nov. 9th, 1887.

Corn Crop on two acres in account with J. C. Dillon.

To plowing,		\$ 4 00
Drawing and spreading 15 cords of manure,		15 00
Harrowing and cross harrowing with Acme,		2 00
Seed,		50
Planting,		80
Harrowing after planting,		50
Am't paid Messrs. Cowles		
For 50 bush. corn, at 60c.,	\$30 00	
“ 1½ tons stover, at \$7,	10 50	
	<hr/>	\$40 50
Deduct culling and stooking,	\$3 00	
“ husking,	5 00	
	<hr/>	\$8 00
Cash paid Messrs. Cowles,		32 50

Harrowing and cross harrowing,	2 00
Marking both ways,	1 00
Seed and tarring,	1 00
Planting,	80
600 lbs. Lister's U. S. Phosphate,	7 50
Hauling and dropping,	1 50
Harrowing after planting,	50
Cultivating 4 times,	6 00
Hoeing twice,	6 00
Culling and stooking,	5 00
Drawing and husking,	19 00
	<hr/>
Total cost,	\$105 60
<i>Cr.</i>	
By 182 $\frac{6}{10}$ bushels corn, at 65 cents,	\$118 69
400 lbs. pig corn,	2 00
6 tons fodder, at \$7 per ton,	42 00
	<hr/>
Total value of two acres of corn,	\$162 69
Deduct cost,	105 60
	<hr/>
Profit,	\$56 09

I also attach some value to the lessons I have learned, and which I now present to the Society and the public for what they are worth :

1st. That for harrowing in manure and producing the fine tilth so acceptable to corn in its early stages, there is no implement that even approaches the Acme harrow.

2nd. That it is unwise to plant corn in places where there are blackbirds without tarring it.

3rd. That Macomber's hand corn planter will plant tarred corn perfectly—much better than it can be done by hand and hoes, and six times as fast.

4th and lastly. That a poor beginning sometimes makes a good ending ; and that, if you make a mistake, the worst thing you can do is to stand still and squizzle over it.

Respectfully submitted,

JOHN C. DILLON.

Amherst, Mass., Nov. 11th, 1887.

The acre of corn I present for premium, was raised on land that was in grass last year. It was plowed in the fall and well fertilized

with stable manure, in quantities sufficiently large to tell on future crops. Part of the piece was planted in hills and part in drills, with Chittenden's Grain Grower in hill and drill. It was well tended with horse and hand hoes. The corn was picked October 8th. One rod of that planted in hills yielded 112 ears and weighed 49 lbs., while of that planted in drills one rod yielded 136 ears weighing 52 lbs. November 2nd, 112 ears weighed $37\frac{1}{2}$ lbs., and 136 ears $40\frac{1}{2}$ lbs. The acre planted in hills yielded $85\frac{4}{7}$ bushels, and the one planted in drills $92\frac{4}{7}$ bushels. I think there was decidedly too much rain for the best results in corn this year.

L. W. WEST.

REPORTS ON POTATOES.

ONE-EIGHTH ACRE RAISED BY A BOY.

The land on which my potatoes were raised has been in grass for the last five years, without any fertilizer. It was plowed in the fall and a good coat of manure well harrowed in in the spring. From two to three bags of Chittenden's Complete Fertilizer to the acre was sown in the drill. The potatoes were then dropped two feet apart and covered by hand. The potatoes were hoed twice with a horse hoe and twice by hand. One-eighth acre yielded $26\frac{1}{2}$ bushels potatoes. I think the yield would have been better if we had not had so much rain.

EDWARD C. WEST, 14 years old.

ONE-HALF ACRE.

The land on which the potatoes were raised was in grass the previous five years without any fertilizer. It was plowed in the fall, and manured in the spring at the rate of 25 loads per acre. This was harrowed in and one bag of Chittenden's Fish and Potash sown in the drill. The potatoes were then dropped two feet apart in the row and five rows to the rod. They were horse hoed twice.

Dr.

To 12 loads manure,	\$18 00
167 lbs. fish and potash,	2 75
Labor,	7 50
Plaster and Paris green,	75
5 bushels seed, at 75 cents,	3 75
	\$32 75
Total,	

Cr.

By $123\frac{2}{3}$ bushels potatoes, at 75 cents,	\$91 50
$\frac{2}{3}$ manure,	12 00
	\$103 50
Total,	

THOS. I. WEST.

The field of potatoes that I entered for premiums was plowed in the fall seven inches deep, and on one-half of the piece thirty loads of manure to the acre was spread in the fall; the other part had thirty loads of manure to the acre spread on in the spring, and the whole field worked in the spring with a wheel harrow, and five dollars worth of dry fish and sulphate of potash sowed in the furrow, and the cultivation of the whole was the same. The committee gave me on the first plat at the rate of 332 bushels, and on the second plat 290 bushels.

Dr.

To fitting land,	\$ 5 00
30 loads manure,	30 00
Fertilizer,	5 00
10 bushels seed,	7 50
Paris green and plaster,	3 00
Labor,	30 00

Cr.

By 166 bushels potatoes on $\frac{1}{2}$ acre.
 145 " " " " $\frac{1}{2}$ "

The crop rotted some so that there was about 250 bushels good, merchantable potatoes left.

250 bushels, at 70 cents, \$175 00

H. C. WEST.

REPORT ON MILCH COWS.

HERDS OF MILCH COWS AND HEIFERS, ONE AND TWO YEARS OLD.

Your committee appointed to examine Herds of Milch Cows and Heifers, one and two years old, entered for examination and premium at the Cattle Show and Fair of the Hampshire Agricultural Society of 1887, attended to their duties faithfully, being but slightly disturbed by the great crowds (!) of people attendant upon the exhibition.

The large number of entries was quite gratifying, there being six entries of herds of milch cows and sixteen of heifers. But we are sorry to say that "their sweetness was wasted on the desert air," as it were, so far as there being many present to be made wiser by the examination of the animals on exhibition.

The herds of milch cows were all quite worthy of merit, so much so, that your committee decided to award the premiums to the animals rather than to their owners.

The herd of Mr. Magill was accompanied with a written statement showing their capabilities. We are sorry to say that such a statement was lacking in the other entries.

The Magill cows, according to the record of the Amherst Creamery, made in June, nine months after calving, an average of one pound one ounce per cow per day. Believing as we do, that there is a fractional waste of cream in all public creameries, owing to the cream adhering to the various utensils, we reason, that if the cream had been churned at home, the return would have shown a slight increase of butter from that reported by the creamery. We do not state this as an argument against public creameries, for we are very much prejudiced in their favor, but as a matter of fact.

Mr. Geo. W. Fitch exhibited a herd of sixteen cows, with no poor ones, of whose good qualities the committee could only judge by their capacious udders, their large and tortuous milk veins, and their softness of touch. All of which points indicated marked ability in the production of milk, the main object of Mr. Fitch.

From the herd of Mr. Smith, your committee were of the opinion that five cows (the number required by the society for the entry) could be selected equal to those of the herd which robbed him of a higher premium in consequence of his having no written statement, which may teach him, as well as others who may exhibit milch cows for premium, that the main thing is to show what the animals are able to do. The primary object of Agricultural Fairs is supposed to be to induce emulation.

Nothing would suit your committee better than to enlarge somewhat upon the usefulness and absolute necessity to mankind of the milch cow, and, in so doing, end their report. But the thought is suggested to us that as a child must creep before it can walk, so must the milch cow first be a heifer, or a heifer calf; and that animal will demand a share of our time and space.

Your committee had the same trouble in this part of their service as has been too often experienced by other committees in making awards at fairs, viz: How to make one breed of cattle compete with another in the same class and give satisfaction to exhibitors, and which can only be done by dividing up the money and giving the premiums to the exhibitors instead of the animals.

All of the sixteen entries of heifers were creditable ones, soon to become famous with their records as milk and butter producers.

We would be very glad to make mention here, if it were not for exciting the envy of other young bovines, of the beauty of two yearlings exhibited by Major H. E. Alvord, of the Massachusetts Agricultural College; but, having alluded to them, our extreme modesty inclines us to say no more.

Those who are interested in neat stock production cannot have failed to have noticed the increased demand during the last four or five years for new milch cows. This demand has risen because of the increasing demand for milk in all of our large towns and cities, and also because of the call for cows to supply cream for butter factories and for families. Of the latter demand it is a fact undeniable that the use of cream in families has to a great extent arisen or largely increased within a very short period of time. It may truthfully be remarked that the use of sweet cream as an article of diet or condiment is an act of wisdom and economy, and productive of health to the user.

Upon the effect which the increasing number of butter factories or creameries are having upon the production of neat stock, we cannot

forbear saying something in this report. It is being shown in the vicinity of creameries that there is a call for more cows. A "middlemen," whose business has been to buy cows every year in the vicinity of one of the public creameries, remarked that "the creamery had spoiled his business in that locality as there were no more cows for sale; farmers preferred to keep them and buy others, or raise them to produce cream for the creamery." We see here a two-fold advantage to the stock raiser—a profit gained by stock production, and an enhanced value of the farm in consequence of the inducement to raise and feed more material to the increasing number of stock kept, and by so doing, increase the manure pile.

We can but believe that this will follow the establishment of public creameries in our grazing towns; that more attention will be given to raising milch cows for home use and for market. We often hear it said by croakers that the great increase of the number of butter-workers will soon break down the business, which we are not inclined to believe at all. We know that at present all of our creameries have orders for butter which they are unable to fill. We believe that the demand for good butter will increase with the supply. The demand for milk is also continually increasing. Our large cities are every year sending farther into the country for milk. The building up of the manufacturing towns about us gives increasing demand for our dairy products, which, together with the exportation of our goods, gives great encouragement to all who are in circumstances to be able to raise or handle neat stock.

JOHN M. SMITH, Chairman.

Sunderland, Nov. 1, 1887.

LIFE MEMBERS FOR 1887.

E. P. Bartlett,	Pelham.
James B. Brannan,	Pelham.
T. L. Paige,	Amherst.
Charles P. Jewett,	Pelham.
W. B. Jackson,	Amherst.
Henry E. Alvord,	Amherst.
William D. Crocker,	Sunderland.
F. E. Melendy,	Hatfield.
Frank A. Cadwell,	Amherst.

FINANCES.

Amount received from State,	\$600 00
" " New Members,	45 00
" " Donations,	51 34
" " All other sources,	895 52
Total receipts for the year,	1,591 86
" Amount of Premiums offered,	773 00
" " " and Gratuities awarded,	691 95
" " " " paid,	691 95
Current expenses for year, not including premiums and gratuities paid,	788 36
Total amount of disbursements for the year,	1,480 31
" Indebtedness of the Society,	918 45
" Value of real estate,	4,100 00
" " Personal property,	150 00

FARM STOCK.

Amount awarded for Bulls,	\$16 00
" Milch Cows,	26 00
" Heifers,	12 00
" Calves,	11 00
" Working Oxen,	14 00
" Steers,	17 00
" Horses,	131 00
" Sheep,	30 00
" Swine,	26 00
" Poultry,	42 00
" All other Stock,	110 00
Total amount offered, Live Stock,	549 00
" awarded, "	435 00
" paid, "	435 00

FARM PRODUCE.

Amount awarded for Indian Corn,	3 00
“ Rye,	1 00
“ Beans,	2 00
“ Potatoes,	4 00
“ Carrots,	50
“ Onions,	1 00
“ Collection Vegetables,	14 00
Total amount offered for Grain and Root Crops,	47 00
“ awarded “ “	31 00
“ paid “ “	31 00
Amount awarded for Fruits,	44 00
“ “ Flowers,	28 00
“ “ Butter,	5 00
“ “ Cheese,	4 00
“ “ Preserved Fruits and Vegetables,	8 25
“ “ Wheat Bread,	3 00
“ “ Rye and Indian,	3 00
Total amount paid out under head of Farm Produce,	127 26

MISCELLANEOUS.

Amount awarded for Agricultural Implements,	12 00
“ offered for the raising of Forest Trees,	16 00
“ paid Running horses,	15 00
“ awarded for all other objects, strictly agricultural, not specified above,	23 00
“ awarded for objects other than agricultural, includ- ing mechanical inventions, etc., etc.	94 70

NAMES OF TOWNS AND CITIES TO WHICH THE PREMIUMS AND GRATU-
ITIES WERE DISBURSED, AND THE AMOUNT TO EACH.

Amherst,	\$301 71
Pelham,	32 37
Shelburne,	3 00
Hadley,	156 48
Prescott,	7 00
Ashfield,	1 50
Belchertown,	65 75
South Deerfield,	17 00
Savoy,	3 50
Leverett,	27 62

Shutesbury,	4 00
Sunderland,	24 40
Hatfield,	19 00
South Hadley,	5 00
Northampton,	23 62
	<hr/>
	\$691 95

TREASURER'S REPORT.

FRANK E. PAIGE, TREASURER, IN ACCOUNT WITH THE HAMPSHIRE
AGRICULTURAL SOCIETY.

	<i>Dr.</i>
Cash on hand, January 1, 1887,	\$87 58
Cash received of Jackson & Cutler,	3 50
" Gate receipts, first day,	68 15
" " second day,	587 26
" Entrance fee, Running race,	7 00
" " Roadsters,	8 00
" Peddlers and Grand Stand,	84 03
" Jackson & Cutler,	3 00
" E. F. Cook, for Purse on Running race,	4 00
" Life Members,	45 00
" E. D. Marsh,	3 00
" Mass. Agricultural College tickets,	40 00
" Donation to Society,	51 34
" State Treasurer,	600 00
	\$1,591 86
	<i>Cr.</i>
By paid, Chester Smith,	\$3 00
" T. T. Sisson,	3 00
" Wrappers,	1 10
" J. E. Williams,	40 00
" H. A. Parsons,	2 00
" Express,	90
" Postal Order,	54
" J. C. Dillon,	5 00
" Calhoun Printing Company,	50 10
" Curtis & Sntton, "Wild West,"	150 00
" G. B. Gallond,	19 00
" Mrs. Cashman,	1 05

By paid, J. J. Potwin,	4 00
“ R. Bell,	5 00
“ T. W. Sloan,	2 00
“ Amherst Savings Bank, interest,	67 25
“ E. A. King,	6 00
“ T. L. Paige,	2 00
“ J. E. Williams,	35 12
“ S. W. Crafts,	40
“ E. D. Huntington,	2 25
“ W. D. Cows,	19 70
“ Henry D. Haskins,	18 87
“ Postage,	8 55
“ O. D. Hunt. insurance,	50 00
“ E. P. Dickinson,	2 00
“ Henry Holland,	10 18
“ W. B. Stetson,	33 00
“ Geo. E. Thayer,	2 70
“ Kate Taylor,	1 00
“ James Comins,	4 00
“ Stationery and incidentals,	5 36
“ J. F. Perkins,	2 01
“ Frank E. Paige, Secretary and Treasurer,	100 00
“ George H. Bias,	4 00
“ James Wiley,	5 50
“ Amherst Savings Bank, note and interest on same,	102 48
“ Chas. Kellogg,	4 00
“ F. H. Thayer, Running race,	6 00
“ Geo. H. Parker,	3 00
“ O. Cowles,	2 00
“ Curtis & Sutton,	4 00
“ Premiums,	691 95
“ Cash on hand,	111 55

\$1,591 86

LIABILITIES OF SOCIETY.

Notes at Amherst Savings Bank,	\$1,000 00
Interest due January 1, 1887.	30 00
	<hr/>
Total,	\$1,030 00
Cash on hand,	111 55
	<hr/>
Balance,	\$918 45

AUDITOR'S REPORT.

AMHERST, MASS., Dec. 5, 1887.

This is to certify that I have examined the accounts of Frank E. Paige, Treasurer of Hampshire Agricultural Society, and find them correct, with a balance in the treasury of one hundred and eleven dollars and fifty-five cents ($\$111\frac{55}{100}$).

E. D. BANGS, *Auditor*.

THIRTY-NINTH
ANNUAL REPORT.

TRANSACTIONS

OF THE

HAMPSHIRE AGRICULTURAL SOCIETY,

FOR THE YEAR 1888.

NORTHAMPTON, MASS. :
WADE, WARNER & Co., PRINTERS.
1888.

OFFICERS 1888.

PRESIDENT,

D. A. HORTON, OF HADLEY.

VICE PRESIDENT,

W. C. OWEN, OF AMHERST.

SECRETARY AND TREASURER,

FRANK E. PAIGE, OF AMHERST.

EXECUTIVE COMMITTEE,

PARNELL MUNSON, AMHERST,
GEO. H. B. GREEN, BELCHERTOWN,
C. L. RUSSELL, SUNDERLAND,
E. P. BARTLETT, PELHAM,
B. C. FIELD, LEVERETT,
RUFUS SMITH, HADLEY, •
W. B. KIMBALL, ENFIELD.

DELEGATE,

W. W. SMITH, AMHERST.

LIST OF PREMIUMS AWARDED.

CLASS 1—TOWN TEAMS. 4 ENTRIES.

Town of Leverett,	\$20 00
“ “ Hadley,	15 00
“ “ Pelham,	10 00

CLASS 2—FANCY CATTLE. 6 ENTRIES.

Williard Stowell, Shutesbury,	\$5 00
Edmund Smith, Hadley,	3 00
Dwight Precho, Pelham,	2 00

CLASS 3—WORKING OXEN. 6 ENTRIES.

G. W. Morgan, Belchertown,	\$5 00
Chester Smith, Hadley,	4 00
L. W. West, Hadley,	3 00
Edmund Smith, Hadley,	2 00

CLASS 4—STEERS. 12 ENTRIES.

Edward Smith, Hadley,	3 years old,	\$5 00
C. J. Rice, Leverett,	“ “ “	3 00
Edmund Smith, Hadley,	“ “ “	1 00
L. W. West, Hadley,	2 “ “	4 00
L. W. West, Hadley,	1 “ “	3 00
E. S. Moore, Hadley,	1 “ “	2 00
E. S. Moore, Hadley,	1 “ “	1 00

CLASS 5—MILCH COWS. 5 ENTRIES.

W. A. Magill, Amherst,	Grade,	\$4 00
W. C. Owen, “	“	3 00
H. D. Dana, “	“	2 00

CLASS 6—HERDS OF MILCH COWS. 9 ENTRIES.

James Smith, Amherst,	\$5 00
Mrs. C. A. Hyde, Amherst,	4 00
W. A. Magill, “	3 00
E. S. Moore, Hadley,	2 00

CLASS 7—HEIFERS. 23 ENTRIES.

Mrs. C. A. Hyde, Amherst,	Grade, 2 years old,	\$3 00
H. D. Dana, Amherst,	“ “ “ “	2 00
W. A. Magill, Amherst,	Thoroughbred 2 years old,	3 00
E. S. Moore, Hadley,	“ “ “ “	1 00
E. S. Moore, Hadley,	Grade, 1 year old,	1 00
W. F. Williams, Amherst,	“ 1 “ “	2 00

CLASS 8—BULLS. 7 ENTRIES.

G. W. Morgan, Belchertown,	\$4 00	
E. S. Moore, Hadley,	Holstein,	4 00
B. M. Field, Leverett,	“	2 00
D. A. Horton, Hadley,	Jersey,	4 00
W. C. Owen, Amherst,	“	2 00
L. W. West, Hadley,	Short Horn,	4 00

CLASS 9—CALVES. 21 ENTRIES.

H. C. Comins, Amherst,	Steer Calves,	3 00
L. W. West, Hadley,	“ “	2 00
Rufus Fitch, Shutesbury,	“ “	1 00
Mrs. C. A. Hyde, Amherst,	Heifer Calf,	2 00
E. S. Moore, Hadley,	“ “	1 00
L. W. West, Hadley,	Thoroughbred Bull Calf,	2 00

CLASS 10—HERDS OF CATTLE. 7 ENTRIES.

E. S. Moore, Hadley,		\$6 00
L. W. West, “		5 00
J. P. Smith, Amherst,		4 00
D. A. Horton, Hadley,		3 00
W. A. Magill, Amherst,		2 00

CLASS 11—SWINE. 9 ENTRIES.

W. F. Williams, Amherst,	Grade Boar,	\$4 00
Josiah Cook, Hadley,	“ “	3 00
F. H. Williams, Sunderland,	Thoroughbred boar,	4 00
H. C. West, Hadley,	“ “	8 00
H. C. West, Hadley,	“ “	2 00
F. H. Williams, Sunderland,	Sow with pigs,	4 00
Josiah Cook, Hadley,	“ “ “	3 00
Josiah Cook, Hadley,	Weaned pigs,	4 00
C. E. Wilson, Amherst,	“ “	3 00

CLASS 12—SHEEP. 15 ENTRIES.

Francis Clapp, So. Deerfield,	Buck,	\$4 00
James Comins, Hadley,	“	3 00
L. W. West, “	“	2 00
W. D. Crocker, Sunderland,	8 lambs,	4 00
Dwight Morton, Hadley,	“ “	3 00
L. W. West, Hadley,	“ “	2 00
Francis Clapp, So. Deerfield,	Flock Sheep,	6 00
L. W. West, Hadley,	“ “	3 00
Henry Green, “	8 Ewes,	4 00
Francis Clapp, So. Deerfield,	“ “	3 00
L. W. West, Hadley,	“ “	2 00

CLASS 13—POULTRY. 69 ENTRIES.

James E. Brannan, Pelham,	Trio Brahmas,	\$1 00
George Graves, Amherst,	Trio Plymouth Rocks,	1 00
C. C. Montague, Amherst,	“ “ “	2 00
George Graves, “	“ Bantams,	2 00
Melrose Paige, “	“ “	1 00

F. H. Morgan, Pelham,	Trio S. S. Hamburgs,	\$2 00
A. E. Ray, Amherst,	Trio Wyandottes,	2 00
E. N. Fisher, Ludlow,	“ “	1 00
F. E. Melendy, Hatfield,	Trio White Leghorns,	1 00
C. C. Montague, Amherst,	Trio Brown Leghorns,	2 00
C. P. Jewett, Pelham,	“ “ “	1 00
L. S. Wilbur, Amherst,	Trio Ducks,	2 00
E. N. Fisher, Ludlow,	“	1 00
E. N. Fisher, “	Trio Turkey,	2 00
E. N. Fisher, “	Trio Cochins,	2 00
C. C. Montague, Amherst,	Breeding Pen, Brahmas,	1 00
James E. Brannan, Pelham,	“ “ Plymouth Rocks,	1 00
Smith Thornton, Pelham,	“ “ “ “	2 00
C. C. Montague, Amherst,	“ “ Cochins,	1 00
Smith Thornton, Pelham,	“ “ Wyandottes,	2 00
A. E. Ray, Amherst,	“ “ “	1 00
C. C. Montague, Amherst,	“ “ Brahmas,	2 00
C. C. Montague, “	“ “ R. C. Leghorns,	2 00
C. C. Montague, “	“ “ Brown Leghorn,	1 00
C. P. Jewett, Pelham,	“ “ White Leghorns,	2 00
C. P. Jewett, “	“ “	

CLASS 14 1-2—MECHANIC ARTS. 4 ENTRIES.

A. F. Bardwell, Amherst,	Sewing Machine,	Diploma.
Z. K. Chapin, “	Hand-made Horse Shoes,	“
J. C. Dillon, “	Halters,	“

CLASS 15—MERCANTILE GOODS.

E. D. Marsh, Amherst,	\$10 00
C. H. Osgood, “	8 00

CLASS 16—DOMESTIC AND OTHER MANUFACTURES. 4 ENTRIES.

Mrs. Amos Deming, Savoy,	Rag Carpet,	\$1 00
“ D. A. Horton, Northampton,	“ “	1 00
“ G. L. Cooley, Sunderland,	Rug,	50
“ E. C. Parker, Amherst,	Rag Carpet,	50
“ A. A. Strong, Leverett,	“ “	50

Mrs. H. D. Dana, Amherst,	Rag Quilt,	\$0 75
“ G. S. Hawley, “	“ “	75
Miss Lucy Boice, “	Comfortable,	35
W. F. Williams, “	Bed Quilt,	50
Mrs. D. A. Horton, Northampton,	Knit Quilt,	75
“ “ “ “	“	50
W. F. Williams, Amherst,	Spread,	1 00
Mrs. C. E. Wakefield, Amherst,	“	1 00
“ Sanford Boice, “	Mittens,	25
“ C. E. Wilson, “	Ottoman,	75
“ “ “ “	“	50
“ Sanford Boice, “	Hassock,	25
“ Lucy Boice, “	Slippers,	25
“ H. A. Parsons, “	Sack,	25
W. F. Williams, “	Sheets,	25
Mrs. M. L. Dana, “	Afghan,	1 00
“ H. D. Dana, “	“	75
“ J. L. Lovell, “	Rug,	75
Miss Dora M. Horton, Northampton,	Rag Carpet,	75
Mrs. P. D. Hubbard, Sunderland,	Rug,	75
“ J. Davis, Amherst,	“	50
“ D. A. Horton, Northampton,	“	1 00
“ H. D. Dana, Amherst,	“	35
“ C. L. Nims, “	“	25
“ C. E. Wakefield, “	“	75
“ H. D. Dana, “	“	25

CLASS 17—FANCY ARTICLES. 143 ENTRIES.

M. E. Hastings, Amherst,	Sofa pillow,	50
M. E. Hastings, “	Banner,	25
Mrs. Geo. Cooley, Sunderland,	Table scarf,	25
Mrs. Geo. Cooley, “	Easel scarf,	15
Mrs. Geo. Cooley, “	Photograph case,	15
Essie Cooley, “	Handkerchief,	25
Mrs. C. H. Fernald, Amherst,	Sofa pillow,	50
“ Sanford Boice, “	Bag,	25
Miss Lucy Boice, “	Hand bag,	25
“ “ “ “	Tidy,	25

Miss Lucy Boice, Amherst,	Pin cushion,	\$0 15
Mrs. Sanford Boice, “	Dressing cape,	25
Miss Lucy Boice, “	Banner,	25
“ “ “ “	Blotter,	25
“ “ “ “	Fan,	25
“ “ “ “	Wax flowers,	75
“ “ “ “	Plaque,	25
“ “ “ “	Spectacle Wiper,	25
“ “ “ “	Photograph Case,	25
“ “ “ “	Nubia,	50
“ “ “ “	Bed Quilts,	37
Mrs. Sanford Boice, “	Dolly,	25
“ “ “ “	Bed quilt,	37
“ “ “ “	Afghan,	50
Carrie Perkins, Belchertown,	Pin Cushion,	15
Nellie Leach, Amherst,	Tidy, etc.,	37
Abbie Fitch, “	Afghan,	75
Mrs. L. J. Blodgett, Amherst,	Table Spread,	25
Nettie Piper, “	Banner,	25
“ “ “ “	Plaque,	25
W. F. Williams, “	Table scarf,	25
C. E. Clutia, “	Easel,	50
Mrs. C. E. Wakefield, “	Decorated Work,	25
“ “ “ “	Tile,	25
“ W. M. Kellogg, “	Tidy,	15
“ L. F. Farnsworth, “	Bag,	15
“ “ “ “	Handkerchief,	20
“ “ “ “	Collarlette,	15
Fannie Potwin, Holyoke,	Toilet set,	15
Mary E. Wiley, Amherst,	Tidy,	15
Samuel Wiley, “	Plaque,	15
Mrs. T. L. Paige, Amherst,	Vase mat,	15
“ T. L. Paige, “	Afghan,	25
“ T. L. Paige, “	Table scarf,	23
“ E. D. Huntington, “	Work basket,	15
“ Lura Burby, Monson,	Quilt,	25
“ M. E. King, Amherst,	Tidy,	15
Hattie J. King, “	“	25

Mrs. E. A. King,	Amherst,	Quilt,	\$0 25
“ E. A. King,	“	“	25
“ E. A. King,	“	“	50
Nellie Curtis,	“	Handkerchief,	25
Emily Curtis,	“	Table scarf,	25
Mrs. Charles Moore,	“	Quilt,	50
May Dickinson,	“	“	56
Amy Dickinson,	“	Banner,	25
Mrs. Noah Dickinson,	“	Lace,	15
“ W. M. Kellogg,	“	Bed spread,	75
“ E. M. Clapp,	“	Afghan,	50
Miss Emily Clapp,	“	Rug,	40
Mrs. E. M. “	“	Tidy,	15
“ Henry Hawley,	“	Rug,	25
“ H. D. Dana,	“	Scarf,	37
“ “ “	“	Bracket,	50
Miss M. L. Dana,	“	Tidy,	37
Mrs. H. Dana,	“	Lace,	25
“ H. Sabin,	“	Pillow Shams,	75
“ “ “	“	Fancy stand,	25
“ “ “	“	Lamp mat,	25
“ “ “	“	Pin cushion,	50
“ “ “	“	Set Mats,	37
“ “ “	“	Pr Hose, etc,	75
M. C. Leonard,	“	Rug,	50
Miss Fannie Cowles,	“	Table scarf,	15
Miss Jennie L. Cowles,	“	Basket,	15
Miss Willie H. Pope,	“	Fan,	15
Mrs. Oliver Cowles,	“	Fan,	15
“ “ “	“	Vase,	15
“ F. A. Thayer,	“	Quilt,	25
“ Josiah Cook, Hadley,	“	“	37
“ Henry Taylor, Ashfield,	“	Spread,	50
“ C. H. Osgood, Amherst,	“	Scarf,	75
Miss Nellie “ “	“	Sofa pillow,	50
Mrs. S. Wakefield,	“	Afghan,	25
Miss J. P. Dickinson,	“	Edging,	25
Mrs. S. W. Boutwell, Leverett,	“	Rug,	25

Mrs. S. W. Boutwell, Leverett,	Tidy,	80 25
“ “ “ “	Birds,	37
“ “ “ “	Apron,	15
Hattie B. Morton, Hadley,	Silk Quilt,	50
Carrie Marsh, “	Rug,	25
Mrs. George Underwood, Amherst,	Rug,	25
“ H. L. Cowles, Hadley,	Blanket,	50
“ “ “ “	Spread etc,	75
Mrs. P. D. Hubbard, Sunderland,	Scarf,	25
Mrs. P. D. Hubbard, Sunderland,	Pillow sham,	25
Mrs. P. D. Hubbard. “	Knit shirts,	15
Mrs. J. L. Lovell, Amherst,	Apron,	15
Mrs. J. L. Lovell, “	Handkerchief,	25
Mrs. J. L. Lovell, “	Scarf,	25
F. F. Adams, Leverett,	Afghan,	50
Mrs. G. L. Miller, Amherst,	Pin cushion,	25
Mrs. J. D. Miller, “	Sofa pillow,	25
Mrs. Henry Stowell, “	Flowers,	25
Mrs. L. W. Blanchard, “	Sofa pillow,	25
Miss C. A. Bartletf, “	Tidy,	25
Mrs. S. S. Dickinson, “	Quilt,	37
Mrs. Cora Stebbins, “	Skirt,	25
Mrs. Mary Robinson, “	Tidy,	15
Mrs. A. D. Morse, Belchertown,	Rustic work,	2 00
Miss Dora M. Horton, Northampton,	Panel,	25
“ “ “ “ “	Panel,	25
“ “ “ “ “	Fan,	25
“ “ “ “ “	Table scarf,	25
“ “ “ “ “	Foot rest,	50
Mrs. D. A. Horton, Northampton,	Lambrequin,	50
Mrs. D. A. Horton “	China, etc.,	37
Mrs. D. A. Horton, “	Tidy,	25
Mrs. D. A. Horton, “	Silk quilt,	50
Mrs. D. A. Horton, “	Afghan,	50
Mrs. D. A. Horton, “	“	37
Mrs. E. J. Dole, Amherst,	Scarf,	25
Mrs. E. J. Dole, “	Lace spread,	50
Mrs. F. Williams, “	Mats, etc.	50

CLASS 18—FINE ARTS. 25 ENTRIES.

Mrs. Cora Stebbins,	Amherst, Painting,	\$2 00
Mrs. Sarah N. Kingman,	“ “	1 00
Mrs. C. S. Walker,	“ “	1 00
Mrs. E. C. Wakefield,	“ “	1 00
Miss Mary Cook,	“ “	75
Miss Nettie Piper,	“ “	75
Miss Hattie J. King,	“ “	50
Mrs. Samuel Smith,	“ “	50
Mrs. Henry Hawley,	“ “	50
Mrs. J. D. Dana,	“ “	50
Mrs. Alice Fairbanks,	“ “	50
Miss Dora M. Horton,	Northampton, “	50
J. C. Dillon,	Amherst, “	25
Henry Cluta,	“ “	25

CLASS 19.—BREAD, BUTTER AND CHEESE. 30 ENTRIES.

Mrs. S. W. Boutwell,	Leverett,	Butter,	\$3 00
Mrs. James Comins,	Hadley,	“	2 00
“ “ “ “		Cheese,	2 00
“ “ “ “		Sage cheese,	2 00
Miss Jennie L. Cowles,	Amherst,	Wheat bread,	2 00
Mrs. L. K. Chapin,	“	“ “	1 00
Mrs. Z. M. Thayer,	“	Graham bread,	2 00
Mrs. S. W. Boutwell,	Leverett,	“ “	1 00
Mrs. T. L. Paige,	Amherst,	Rye bread,	2 00
Mrs. Sanford Boice,	“	“ “	1 00
Mrs. T. L. Paige,	“	Rye and Indian bread,	2 00
Mrs. E. E. Hyde,	“	“ “ “ “	1 00

CLASS 20—HONEY, WINES, CANNED AND DRIED FRUITS, JELLIES, PICKLES, MAPLE SYRUP AND SUGAR. 12 ENTRIES.

Mrs. Sanford Boice,	Amherst,	Honey,	\$1 00
“ “ “ “		Dried Apples,	25
“ “ “ “		Hops,	25
“ John Wrigley,	“	Dried Apples,	50

Mrs C. H. Osgood, Amherst,	Coll. of Canned Fruits,	\$2 00
“ E. Sabin, “	“ “ “ “	1 00
“ C. S. Smith, “	“ “ “ “	50
E. N. Fisher, Ludlow,	Honey,	1 50
J. C. Dillon, Amherst,	Fruits,	2 00
Mrs. S. W. Boutwell, Leverett,	Canned Fruits,	2 00
“ “ “ “	Jellies,	1 00
“ “ “ “	Honey,	50

CLASS 21—FRUITS. 4 ENTRIES.

Geo. H. B. Green, Belchertown,	Display,	\$4 00
H. D. Dana, Amherst,	“	3 00
E. A. King, “	“	2 00
J. C. Dillon,	Basket,	1 00

CLASS 22—FRUIT GROWN BY EXHIBITOR. 16 ENTRIES.

G. H. B. Green, Belchertown,	Collection Apples,	\$4 00
H. D. Dana, Amherst,	“ “	3 00
Chas. Kellogg, “	“ “	2 00
George Cooley, Sunderland,	“ “	1 00
A. B. Howard, Belchertown,	“ Pears,	4 00
A. D. Morse, Amherst,	“ “	3 00
G. H. B. Green, Belchertown,	“ “	2 00
H. D. Dana, Amherst,	“ “	1 00
G. H. B. Green, Belchertown,	“ Grapes,	4 00
“ “ “ “	“ Peaches,	4 00
H. D. Dana, Amherst,	“ “	3 00
D. H. Tillson, “	“ Quinees,	1 00
H. W. Cook, “	“ Cranberries,	1 00
Geo. H. B. Green, Belchertown,	Platter Greenings,	50
H. D. Dana, Amherst,	“ Baldwins,	50
“ “ “	“ Russetts,	50
G. H. B. Green, Belchertown,	“ Gravensteins,	50

CLASS 23—VEGETABLES GROWN BY EXHIBITORS. 124 ENTRIES.

C. S. Smith, Amherst,	Best Collection,	\$5 00
G. L. Bachelder, Sunderland,	“ “	4 00
G. H. B. Green, Belchertown,	“ “	3 00

Chas. Kellogg, Amherst, Best collection,		\$2 00
C. S. Smith, " Exhibition Potatoes,		2 00
A. B. Howard, Belchertown, " "		1 00
Chas. S. Smith, Amherst, Peck "		1 00
Geo. Cooley, Sunderland, " Onions,		1 00
G. L. Bachelder, Sunderland, Exhibition Carrots,		1 00
F. H. Williams, " " "		50
F. E. Loomis, Amherst, " Beets,		1 00
H. W. Cook, " " "		50
A. B. Howard, Belchertown, " Tomatoes,		1 00
G. L. Bachelder, Sunderland, " "		50
Geo. H. B. Green, Belchertown, " Beans,		1 00
H. W. Cook, Amherst, " "		50
W. D. Crocker, Sunderland, Peck "		1 00
" " " " "		50
G. L. Bachelder, " Exhibition Cabbages,		1 00
W. L. Boutwell, " " "		1 00
Chas. Kellogg, Amherst, " Pumpkins,		1 00
C. S. Smith, " " Sweet Corn,		2 00
G. L. Bachelder, Sunderland, " " "		1 00
C. S. Smith, Amherst, " Seed "		2 00
H. D. Dana, " " "		1 00
G. L. Bachelder, Sunderland, " Winter Squash,		1 00
S. Jewett, Pelham, " " Wheat,		1 00
E. N. Fisher, Ludlow, " Rye,		1 00
F. H. Williams, Sunderland, " "		50
G. H. B. Green, Belchertown, " Oats,		1 00
James Comins, Hadley, " "		50
" " " " Spring Wheat,		50

CLASS 24—FLOWERS. 27 ENTRIES.

L. W. Goodell, Belchertown, Collection,		\$5 00
Mrs. S. W. Boutwell, Leverett, "		3 00
A. B. Howard, Belchertown, "		2 00
L. W. Goodell, " " Asters,		2 00
Mrs. S. W. Boutwell, Leverett, " "		1 00
" " " " Dahlias,		2 00
" H. D. Dana, Amherst, " "		1 00

A. B. Howard, Belchertown,	Collection Verbenas,	\$2 00
L. W. Goodell, " "	" "	1 00
" " " "	Gladioli,	2 00
Mrs. S. W. Boutwell, Leverett,	" "	1 00
" " " "	Wild flowers,	2 00
" " " "	Boquet,	2 00
L. W. Goodell, Belchertown,	"	1 00

CLASS 25—STALLIONS. 4 ENTRIES.

E. E. Wood, Northampton,	\$6 00
P. D. Hubbard, Sunderland,	4 00
E. F. Wiley, " "	3 00

CLASS 26—BREEDING MARES AND SUCKING COLTS. 11 ENTRIES.

C. R. Shattuck, North Hadley,	\$5 00
Edmund Smith, Hadley,	4 00
P. D. Hubbard, Sunderland,	3 00
Dwight Graves, Amherst,	2 00

CLASS 27—COLTS AND FILLIES. 11 ENTRIES.

G. I. Davis, Belchertown,	3 years old,	\$3 00
J. F. Marshall, Amherst,	3 " "	2 00
G. B. Frink, " "	3 " "	2 00
L. S. Dyer, Hatfield,	3 " "	3 00
E. E. Wood, Northampton,	2 " "	3 00
C. R. Shattuck, Hadley,	1 " "	2 00
Edmund Smith, Hadley,	1 " "	1 00

CLASS 28—FARM HORSES.

T. L. Paige, Amherst,	Pair,	\$4 00
S. Wakefield, " "	" "	3 00
Procter Gray, " "	Single,	3 00

CLASS 29—DRAFT HORSES.

H. C. West, Hadley,	Pair,	\$4 00
Frank Cadwell, Amherst,	Single,	3 00
" " " "	" "	2 00

CLASS 30—CARRIAGE HORSES. 14 ENTRIES.

F. P. Newkirk, Easthampton,	Pair,	\$6 00
M. F. Dickinson, Amherst,	“	5 00
J. D. Wright, Northampton,	“	4 00
P. D. Hubbard, Sunderland,	Single,	5 00
M. W. Lee, So. Deerfield,	“	4 00
S. S. Hibbard, Hadley,	“	2 00

CLASS 31—ROADSTERS. 6 ENTRIES.

F. H. Graves, Sunderland,	Pair,	\$6 00
T. L. Paige, Amherst,	“	5 00
L. S. Dyer, Hatfield,	Single,	6 00
E. F. Strickland, Amherst,	“	4 00
F. J. Humphrey,	“	2 00

FIELD CROP.

J. C. Dillon, Amherst,	Corn,	\$5 00
L. W. West, Hadley,	“	4 00
James Comins, Hadley,	“	3 00
J. C. Dillon, Amherst,	Potatoes,	5 00
Thomas I. West, Hadley,	“	4 00
E. P. West,	Boys experiment potatoes,	3 00
F. E. Loomis, Amherst,	Onions,	5 00

REPORT.

J. C. Dillon, Amherst,	5 00
James Comins, Hadley,	4 00
J. C. Dillon, Amherst,	3 00

FARMER'S RACE.

FIRST DAY.

H. E. Paige, Amherst,	\$5 00
A. F. Nutting, “	3 00
J. B. Paige, Northampton,	2 00

SECOND DAY.

J. D. Wright, Northampton,	5 00
John Welch, Amherst,	3 00
P. D. Hubbard, Sunderland,	1 00
J. B. Paige, Northampton,	1 00

RUNNING RACE.

F. L. Stone, Amherst,	5 00
G. L. Davis, Belchertown,	3 00
Eugene Mickiewicz,	2 00

 NEW MEMBERS, 1888.

A. F. Nutting, Amherst.
 Henry W. Owen, Amherst.
 F. P. Newkirk, Easthampton,
 E. E. Wood, Northampton.
 Charles Kellogg, Amherst,
 Miss Lucy C. Boice, Amherst,
 Calvin R. Shattuck, North Hadley,
 W. F. Williams, Amherst.

REPORT ON HERDS OF CATTLE.

Your committee have found the duties quite laborious, in making the awards of premiums offered by this Society, for the best herds of cattle exhibited.

The entries were more numerous than the premiums offered, there being seven entries for the five premiums. The herds were quite large, one numbering forty-five head, another twenty-two, and others varying from twelve to seventeen head. We found the different breeds represented here, according to the different fancies, and hope for profit of the exhibitor. The Short Horns and Holsteins, Jerseys and Guernseys, Native and Grades, were numerous. Some were collected together with regard to their milk-producing qualities, that being the business that is receiving the attention of many farmers in this vicinity at this time. The Jerseys were the most numerous of any breed exhibited in the herds, therefore I propose to consider some of the merits and demerits of this breed first. There is no doubt but their small bodies and rawney frames will produce a large amount of excellent milk, which is made into a good quality of butter, when fed on the richest products of the best of soil. This breed needs extra good care to keep them quiet and healthy, to make their products available. The ordinary farmer is not able to give that care and feed that is necessary for success with the Thoroughbred of this breed. Therefore the low grades are more practical for business profit for the farmers in this vicinity. A judicious cross of this breed with some larger animals of a more tame and quiet disposition, would have a tendency to improve the stock for health and business. The Holsteins are becoming quite numerous and popular of late in this vicinity. Their large size give promise of consuming a large amount of feed that need not always be of the

best quality. This breed is reported to produce a large quantity of milk, and make a large amount of beef, which may not always be of the best quality, but as an animal for cash profit this breed gives better promise than any of the smaller breeds.

The Shorthorns have long been noted for their large size, handsome, square forms and good quality of beef. Some families are good milking stock, while others are very deficient in milking qualities, not giving enough to raise a good calf. If the individual farmer is so situated that beef producing can be made profitable, this is the breed that should receive his careful attention.

The Guernseys are not very numerous in this vicinity, and from what I have seen they are but little better than the Jersey. They are reported to give high color to the butter made from their milk. A cross of this breed with one deficient in these good qualities, would have a tendency to improve the stock of both.

Then why not some good farmer who has the means, start out and produce new and better breed of animals, one that is better than any that we have imported, with a long string of names and numbers too numerous to remember. It has long been known that animals that have been crossed with like animals, to produce similar form and color, produce inferior constitutions. They are often deficient in breeding qualities, and will not compare with grades or native stock for every day business. If a long continued cross of good animals from grades of the different breeds we now have, could be made, we could expect something that would be superior for practical business to any imported Thoroughbred.

We want an animal that is truly American, like the young farmer or Yankee school teacher, who are organized from all the nationalities that settled on the shores of America at an early date, We want animals that are adapted to our climate and feel that we can depend upon to do well on good feed. We are often disappointed with the results of high priced Thoroughbred animals; let us have something better.

The efforts of the members of this Society to collect together or otherwise produce a herd of neat cattle, is worthy of the

encouragement of the Society. It requires a large amount of thought, labor and capital to produce and exhibit a good breed. The cash profit may not always pay large for the effort, but the pleasure of accomplishing something worthy of being exhibited and seen, and the feeling that we are doing that which will make the world of humanity more healthy and happy, by being better clothed and fed, should amply compensate any one who has ambition and enterprise enough to engage in so honorable a calling. Let us keep up the effort to produce and exhibit our stock of cattle to as great an extent as our means will warrant in doing well, for in doing well whatever we undertake we make sure of the greatest profit.

JAMES COMINS, Chairman.

REPORT ON BULLS.

Fifty years ago as a little four year old boy lay kicking his heels up on the hearthrug, he suddenly broke out with, "Grandpa was I a little baby once?" "Yes my dear," answered Grandpa, looking up from his book. "Were you ever a little baby Grandpa?" "Certainly I was." This seemed to require a little consideration, but it not unnaturally led up to the next question. "Grandpa was everybody a baby once?" "Yes, yes boy! of course they were." The old gentlemen went on with his reading, thinking, no doubt, that his little torment had about exhausted the subject: but he found out his mistake when the young inquisitor nailed him with "Grandpa, who dressed the first baby?"

The man, whom this little boy grew into, was Chairman of Committee on Classes eight and nine, at the last Fair of the Hampshire Agricultural Society, and in setting out to write his report on "Bulls and Calves," he is almost as much puzzled as his Grandpa was, whether to begin with the calves or the bulls; as each appears at first sight to be a necessary antecedent, as well as complement of the other.

Not, however, having committed himself to the assertion that "everybody was a baby once;" he resorts to the generally received impression that when God made the beasts of the field, as related in the first chapter of Genesis, he made them all of adult age; and, hence concluding that the first Male of the Bovine race was a bull, he gives the bulls the precedence in his report.

Owing, doubtless, to the unfavorable weather, there were only seven entries of bulls, comprising three Jerseys, two Holsteins, one shorthorn, and one Hereford; and I think we should not be far out of the way in accepting the relative number of the ani-

mals exhibited as some indication of the esteem in which different breeds are at present held in the country.

The office of Judge or Committeeman at an Agricultural Fair, is not altogether a desirable one. If a conscientious man, the discharge of his duties will cause him considerable labor and perplexity; while most likely he will get no thanks from the winners, and forever ruin himself in the judgment and affections of those who fail to get the first place. It is not usual, and would often be impossible, for a committee to explain the considerations which actuated them in making their awards; but, as the class was a small one, I shall try to recall our impressions of the animals of which it was composed.

There were three exhibits of Jerseys—all excellent specimens of their breed—of these Mr. Horton's was the smoothest, and we awarded him first premium. Mr. Owen's was also a very superior animal, individually, and by right of descent; but on account of some blemishes, in no way affecting his usefulness, we placed him second. Mr. Magill showed a very promising young bull, a few days over a year old, but he was not sufficiently developed to compete successfully with his more mature rivals.

The two Holstein bulls were exceptionally good representatives of their breed. In quality they were very evenly matched, but Mr. E. S. Moore's has the advantage of a year in age and development, and was accompanied by numerous creditable specimens of his progeny, and we awarded him the first premium. None the less did we consider Mr. B. M. Field's young bull a strictly first premium animal.

Mr. L. W. West exhibited a useful young Shorthorn bull of a milking family, and Mr. G. W. Morgan an excellent Hereford.

There were also several bulls of mixed blood, fully equal, in the opinion of your committee, as progenitors of stock adapted to the needs and conditions of Hampshire county, to the thoroughbreds; but, as the fiat has gone forth, "Never breed from a grade bull!" your committee can only express their personal admiration of the moral courage and public spirit which the owners of grade bulls evince by exhibiting them in the face of a deeply rooted prejudice and without any chance of obtaining a premium.

The writer of this report has the highest possible respect for the Board of Agriculture of Massachusetts, and its reports are his most valued resources for encouragement and information; but he respectfully submits that through the various instrumentalities which have been at work in the last thirty years, among which the Board of Agriculture is honorably conspicuous, so much attention has been called, and so much information has been spread with regard to the improvement of stock, that the Massachusetts farmer of to-day may be safely entrusted with the choice of the best means for the formation and perpetuation of a breed of cattle, "Native and to the manor born," and better adapted to the needs of Massachusetts husbandry than any of the breeds of England, Scotland, Holland, or the Channel Islands.

No doubt many a scrub bull is raised because he cannot be fattened for the butcher, but farmers know this, and know that if they use an unknown bull they do so at their peril. And how much better are they off if they pay a fancy price for a thoroughbred? All the varieties of so-called thoroughbred stock have, in their early history, attained a certain reputation for superiority in certain valuable properties, or for adaptation to certain localities and conditions; but as soon as their recognition as a breed is effected, these practical advantages become altogether secondary to certain fanciful markings, such as a solid color, a black tongue, a flesh colored nose, or white face and feet; and males are selected and used chiefly on account of their possession of power to transmit these "Fancy points." In the meantime surplus bull calves, however worthless, are raised and sold for the improvement of the native stock, as prescribed by the Board of Agriculture, and if one farmer uses a Jersey bull to raise veal calves and beef cattle in the Connecticut Valley, and another uses a Holstein to beget cows for making butter on dry hill pastures, they may both receive the Society premium for their judicious conduct; while the farmer who uses a grade animal, however admirable individually, and deriving his merits immediately from an ancestry known for a long series of generations to combine precisely the qualities most desirable in his owner's circumstances, is branded as an old fashioned ignoramus, because his animal's pedigree is not recorded in a Herd Book, which, after all, is only a collect-

ion of statements made by interested parties, and is about as intelligible to the average farmer as a Polish prayer book.

To a disinterested observer there is a good deal that is positively funny in the popular use and construction of the terms thorough bred, pure blood, herd book, &c. Within the last twenty years, by crossing three or four very encouraging varieties, a strain of fowls has been developed resembling each other in some properties, but so far from having attained fixed characteristics that only a small proportion of the chickens, even from the finest fowls, attain the qualities required in exhibition birds. Still later, say within 5 or 6 years, a sub-variety has been produced, avowedly by selecting and breeding together sports from the first named fowls.

Both of these varieties, though possessing many excellent qualities, are evidently the verest mongrels; but both have been admitted to the standard, and I lately read an article in a Poultry paper, severely denouncing certain strains of the youngest of these two breeds (?) *as mongrels*, because they had been too plainly produced by an out crop, instead of being inbred sports of the original jumble.

Something like this, in kind, is the present status of the Ayrshires as a breed. The Ayrshires are the result of a cross of Dutch or Shorthorn bulls on the native cattle of the district of Ayr, commenced about a hundred and twenty years ago, and continued to the present time, and accompanied with better feed and increased attention to the general welfare of the stock. The outcome was a sort of condensed Shorthorn, with a large capacity for the production of milk suitable for cheese making; and in this respect many of the Ayrshires imported to this country in the last forty years have been unsurpassed. That they have failed to hold the place they gained in New England is due partly to the greater skill with which the Jerseys have been boomed, partly to the universal tendency of human nature to follow each fresh fashion or fancy, but mainly, doubtless, to the actual superiority of the Jerseys, as a breed, as butter cows. It now appears that in Ayrshire and the adjoining counties increased attention has been given to butter making, and Guernsey bulls have been used to improve the qualities of the cows for

the butter dairy. Now bulls of this Ayrshire and Guernsey crop could, I presume, be imported to Massachusetts, registered in the Ayrshire Herd book, and awarded premiums at our County Fairs. But if a Massachusetts farmer breeds a bull from a Jersey or Guernsey or his Ayrshires or Shorthorns, he cannot exhibit him for premiums, although the animal may, both from his individual character and by virtue of his ancestry, be eminently qualified to beget the very stock which his owner and his owners neighbors need.

Now this appears to me to be all wrong. What the intelligent farmer means by a well-bred bull, is one whose ancestors, for many generations, have excelled in those properties which he wishes to maintain in his stock; and he is justified in thinking that the places to find such an animal is in a community where cattle are bred and raised under the same conditions and for the same purposes that he has in view. No two sections are subject to the same conditions of climate, pasturage and markets; and certainly no one breed of cattle is so well suited to the needs and circumstances of Hampshire County as the cattle which can be and are produced by skillful mixture of the existing breeds, or by judicious selection and well considered mating of superior animals, without regard to breed.

I want to be understood that I do not underrate the merits of the so-called throughbred cattle, nor the value of herd books and registries for the preservation of pedigrees; but I claim that Farmers and not Fanciers have developed and fostered the practical qualities for which the different breeds are valued and celebrated; and that when a breed has been established, and its pedigrees have been recorded in a herd book, there is danger that constitutional vigor and practical excellence will be sacrificed to inbreeding and breeding for fancy points and for sale.

Above all I claim that the Farmers of Hampshire county are the best judges of their own needs and circumstances: and, as I am assured that I am expressing the views of many experienced and successful farmers, including, as I believe, a large majority of the members of this Society, I venture to suggest that, subject, to the consent of the Board of Agriculture the rule condemning the use of grade bulls shall be repealed; and that, in addition to the

premiums now offered there shall be another premium offered "For the best bull of any breed or grade for getting dairy stock adapted to the wants and conditions of the Farmers of Hampshire county."

JOHN C. DILLON, Chairman of Committee on Bulls.

REPORT ON CALVES.

In another report I have urged the propriety of offering a premium for Grade Bulls, but recalling the very beautiful display of Grade Calves by Thoroughbred Bulls at the last fair, I cannot claim that the rule of using only Thoroughbred bulls has shown other than the most satisfactory results.

Perhaps few people are more impressed with the value of hereditary virtues in the "Male calf of the herd" than I am; and my chief argument for extending the offer of premiums to Grade bulls is the belief that the essential properties of abundant rich milk, desirable size and shape, hardness, docility, thriftiness, and general profitableness are combined and inbred in some of the Grade stock of Hampshire County, in a higher degree than they are in any of the so-called Thoroughbreds, which have been imported into this country from different localities, where they have been raised and cultivated for various purposes, and under various conditions of climate, feed, and management.

The office of Judge, or Committee of Award, in the Class of Calves, is an exceptionally trying one: and judgment being necessarily given on the actual appearance of the young animals, is not likely to be acquiesced in by the defeated exhibitors who know the latent and inherited virtues of their favorites. Unpleasantly conscious of this liability to disappoint and offend some of those on whose opinions and regard they place a high

value, your committee has tried to perform the duties assigned them, awarding the premiums for heifer calves to Mrs. C. A. Hyde and L. S. Morse, for bull calf to L. W. West, and for steer calves to H. C. Comins, L. W. West, and Rufus Fitch. These young animals combined superior show condition with the more essential qualities of shape, breeding, and the promise of future usefulness. But your committee wish to add that the calves exhibited by J. W. Allen, C. S. Smith, W. A. Magill and W. Cowen, were all very superior animals and little, if any, in actual merit or value, behind their sleeker and therefore more successful competitors.

The calves were of various grades, usually one-half to seven-eighths Jersey, the other part of their blood being derived from Ayrshire, Shorthorn, Hereford and Holstein sires. The result of this mixture appears to be a healthy, hardy animal of medium size, good shape, a hearty appetite and vigorous digestion, and with the energy and activity requisite to obtain in ordinary pastures the materials for a large yield of milk of more than average quality for butter making.

As an example of the methods of breeding generally adopted in this neighborhood, and their results, I may mention the practice of my neighbor, Mr. W. C. Owen, Vice President of this society. In the past two years he has used successfully Ayrshire, Shorthorn, Jersey and Guernsey bulls from herds of established reputation, and has now a herd of very useful and good-looking cows. His heifers at two years old, will make a pound and a half of butter a day, and can be readily sold to a cow jobber for \$50 each.

It will probably be remarked that I have presented some pretty strong arguments for the continued use of thoroughbred bulls. But he is an unwise as well as an ungenerous advocate who affects to ignore or undervalue the evident merit of his opponents case. The practical excellence of the young animals exhibited at the Fair, and the others to which I have alluded, and their special adaptation to the uses and conditions of the farmers of this section, *have doubtless been produced* by a skillful or fortunate blending of the qualities inherent in the different breeds: but this excellence and special adaptation, having been attained,

would, it seems to me, be better preserved by the use of males in which the desired admixture is already perfect, than of any of the recognized breeds, in each of which, (in theory at least) some one or more of the useful properties preponderates at the expense of others equally desirable.

Besides, by constantly resorting to the so-called pure breeds for bulls, the farmer forfeits that intimate knowledge of the history and quality of the male line which is admittedly necessary for the most judicious action and the highest possible success in stock breeding.

While my convictions have been impressed upon me chiefly by my own observation, I find that they are in accordance with the teachings of many eminent breeders and thinkers, and notably of George Culley, who has long been regarded as one of the highest authorities on the breeding and improvement of live stock. In "Observations on Live Stock," written in 1786, Mr. Culley says: It is certainly from the best males and females that best breeds can be obtained or preserved. To breed in this manner (?) is undoubtedly right so long as better males can be met with, not only amongst our neighbors but also amongst the most improved breeds in any part of the island, or from any part of the World, provided the expense does not exceed the proposed advantage: *and when you can no longer, at home or abroad, find better males than your own, then, by all means, breed from them:* but, upon no account, attempt to breed or crop from worse than your own: for that would be acting in contradiction to common sense experience and that well established rule "That best only can beget best."

JOHN C. DILLON, Chairman Committee on Calves.

REPORTS ON CORN.

The acre of corn I enter for premium was produced on land that in a four year's rotation of corn, rye and two crops of grass, had produced ten crops of corn within the last forty years. This year's crop of corn was the heaviest of the ten, all of which I have had the pleasure of harvesting. The land was plowed early in May. A dressing of coarse cornstalk manure was plowed in with the turf. It was harrowed with a Randall harrow both ways, and marked in rows three and one-half feet apart. Nine dollar's worth of cotton hull ashes was strewed in the rows. It was then planted with a Billings corn planter, which drops hills four feet apart in the rows, and covers the ashes and corn complete. The work of planting was finished the twenty-fifth of May. It has long been my practice to use unleached wood ashes for starting corn in the hill, but the experiment this year with cotton hull ashes indicate that they are better than wood ashes to start corn. The corn was earlier and heavier with an application of the same cost of hull ashes, when compared with wood ashes side by side. The corn was cut and stacked the tenth of Sept., and in the acre was sixty large stacks. The average weight of ears at husking, Sept. 20, per stack, was 7 7-13 pounds, making the product of the acre, 4.550, or sixty-six and three-sevenths bushels, at 70 pounds each. There is considerable difference in the shrinkage of corn in drying; this would probably shrink twenty per cent. The cost of the crop was as follows;

Dr.

Interest and taxes on land,	\$3 00
Plowing, harrowing and marking,	3 00
Barnyard manure, half spent in corn,	7 50
Cotton hull ashes, do. do. do.	4 50
Cultivating and hoeing,	4 50
Cutting and husking,	10 00
	<hr/>
Total cost,	\$32 50

Cr.

Sixty bushels of dry corn, at 75 cents per bushel,	\$45 00
Three tons of fodder, at \$5.00 per ton,	15 00
	<hr/>
Total value of crop,	\$60 00
Total cost,	32 50
	<hr/>
Value above cost,	\$27 50

JAMES COMINS.

The acre and quarter of corn which I offer for premium, consists of three pieces:—No. 1, one-half acre, planted with “Angel of Midnight;” No. 2, one-half acre, planted with “Ohio Dent,” and No. 3, one-quarter acre, planted with “Self-husking corn.” The character of all three pieces was very much alike, the soil being sandy loam, in good condition from previous cultivation, and no barn manure was used this year. Plowed May 29 with Wiard plow, harrowed with Acme harrow, marked three feet apart one way and eighteen inches the other. Planted May 31, with “Macomber’s Improved Corn, Bean and Beet Planter,” in rows three feet apart, hills eighteen inches apart, three kernels to the hill. Three days after planting I applied a fertilizer composed of two parts of hard wood ashes, one part of dry fish, and one part of bone meal, thoroughly mixed, at the rate of 1200 lbs per acre. The ingredients cost me at the depot \$21 per ton, to which must be added cartage and cost of mixing and applying. I scatter the fertilizer along the rows, over the corn, and then harrow with Acme harrow. This completely mixes the fertilizer with the surface soil right over the corn, and also destroys any

germs of weeds which may have started to grow, but does not disturb or injure the corn. It is a peculiar feature of the Acme harrow, with sulky attachment, that it can easily and instantaneously be set to cut anywhere from half an inch to five inches deep, and that at any and all depths it is a perfect pulverizing harrow, clod crusher and leveler. All three pieces were cultivated three times and hoed once, and at the second cultivation received another dressing of fertilizer similar to the one described. All three pieces gave excellent crops of corn: but through the mistake of a Polish boy who worked for me, in setting up the corn, I can only give the yield of Plot No. 3. This was 46 1-2 pounds of very sound, well ripened corn on a rod, or at the rate of 106 2-7 bushels, of 70 pounds of corn on the cob, to the acre,

This "Self-Husking" seems to me a very valuable variety. It is very prolific of ears, producing often two and sometimes three good ears on a stalk; and though not planted till the first of June the whole crop matured perfectly in this exceptionally cold, wet season.

The other kinds yielded fully as large crops; but a considerable proportion of the Angel of Midnight, and a small proportion of the Ohio Dent failed to mature perfectly.

The crop on an acre and half of cold, clay land, which I planted about the same time with early Canada corn, with fifteen cords of clear stable manure, spread and harrowed in, and 300 pounds Superphosphate in the hills was almost a perfect failure.

JOHN C. DILLON.

Amherst, 31st Oct. 1888.

The acre of corn I present for premium was raised on light land that has been in grass for a number of years. It was plowed in the spring and well fertilized with stable manure, with Chittenden's Grain Grower in the hill. It was well tended with horse and hand hoes.

One rod was picked Oct. 15th, and weighed 42 pounds. At 70 pounds to the bushel this equals 96 bushels to the acre.

Respectfully,

L. W. WEST.

REPORT ON POTATOES.

The potatoes offered for premium is a sandy loam. Has been mown for the past six years, and was very much run out. Plowed May 15th, seven inches deep, harrowed thoroughly with Acme harrow, marked rows three feet apart, furrowed with two horse plow, six inches deep, planted May 19 cut potatoes, set fourteen inches apart, covered with hand hoes—June 1st dropped with course barn manure, at the rate of five cords to the acre, and harrowed in manure with Acme harrow.

The crop was cultivated three times, hoed twice, and at the first hoeing received an application of 1200 lbs to the acre of a Fertilizer composed of two parts hardwood ashes, one part salt, and one part bone meal.—Cost of fertilizer at depot \$15.50 per ton.

We also dusted the vines twice with plaster and paris green, using 100 lbs of plaster and 1 lb. paris green at each dropping—As the weather was very wet I hilled up the potatoes very considerably. The potatoes were healthy and vigorous throughout, and an average rod gave 94 lbs of clean smooth potatoes of excellent quality. The varieties are Lee's Favorite and Pride of America; of these Lee's Favorite was the better yielding, while the quality of both was all that could be desired.

JOHN C. DILLON.

Amherst, 31st Oct. 1888.

REPORT ON POTATOES ONE-HALF ACRE.

The land on which my potatoes were raised was in grass some years, it was plowed in the spring and a fair coat of manure

spread on and harrowed in and two bags of Chittenden's Bone Phosphate in the drill. The potatoes were hoed once with horses and twice by hand.

Dr.

To Manure,	\$15.00
To Fertilizer,	8.00
To Labor,	7.00
To Plaster and Paris Green,	1.00
To Four bushels seed at 85,	3.40
	<hr/>
	\$34.40

Cr.

By 128 Bushels potatoes at 55,	\$70.40
By two-thirds manure,	10.00
	<hr/>
	\$80.40

THOMAS I. WEST.

ONE-EIGHT ACRE RAISED BY A BOY.

The land on which my potatoes were raised was in grass last year. It was plowed in the spring and a fair coat of manure well harrowed in, from two to three bags of fertilizer to the acre was sown in the drill. The potatoes were then dropped eighteen inches apart and covered by hand. The potatoes were hoed once with horsehoe and twice by hand. One-eight acre yielded thirty and one-third bushels potatoes.

EDWARD P. WEST, Fifteen years old.

REPORT ON ONIONS.

My piece had Onions on it in '85, '86 and '87 with a ton of Bradleys XL Superphosphate and anywhere from twenty-five to fifty bushels of ashes yearly. In the Fall of '87 I plowed in five cords of stable manure and in the Spring of '88 sowed broadcast 1100 lbs of Bradleys XL and forty bushels of ashes. The ashes we use on our onions are picked up by ourselves wherever a man has a few to sell. Our onions were sowed April 27th to April 30th inclusive, variety "Yellow Globe Danvers;" they were hand weeded four times, cultivated with hand cultivator eight times; began harvesting by taking off ten bushels August 29th, finished October 18th. My piece contains 143 square rods, and the yield 688 bushels of sound onions, a yield of 770 bushels per acre.

Respectfully submitted by

F. E. LOOMIS.

TREASURER'S REPORT.

FRANK E. PAIGE, TREASURER, IN ACCOUNT WITH THE HAMP-
SHIRE AGRICULTURAL SOCIETY.

1888.	Dr.
Cash on hand January 1st, 1888,	\$111 55
“ received, Gate fees,	289 84
“ “ Peddlers,	31 00
“ “ Life members,	37 50
“ “ D. A. Horton,	1 00
“ “ State,	600 00
“ “ Donation to Society,	64 04
	\$1,134 93

1888.	Cr.
Cash paid W. H. Smith,	\$ 4 00
“ “ Amherst Savings Bank,	30 00
“ “ J. E. Williams,	36 50
“ “ L. Gates,	4 00
“ “ Chester Williams,	9 00
“ “ Alden Wilder,	2 00
“ “ Lee & Phillips,	10 23
“ “ F. H. Howes,	2 62
“ “ A. B. Culver,	1 00
“ “ B. F. Kendrick,	3 26
“ “ J. W. Russell,	1 45
“ “ Express,	1 65
“ “ Jackson & Cutler,	64

Cash paid	Postage & Wrappers,	\$8 12
"	" W. C. Paige,	4 01
"	" F. P. Wood,	1 20
"	" F. L. Stone, running race,	5 00
"	" G. S. Davis, " "	3 00
"	" A. F. Nutting, walking race,	3 00
"	" S. W. Crafts,	35
"	" Amherst Savings Bank,	30 45
"	" D. A. Horton,	5 50
"	" W. D. Cowles,	18 71
"	" Henry Haskins,	25 45
"	" James Wiley,	16 75
"	" Kate Taylor,	2 00
"	" J. B. Paige, walking race,	3 00
"	" Geo. Graves,	6 68
"	" Russell, Morgan & Co.,	30 00
"	" J. A. Noble,	8 14
"	" C. Williams,	9 50
"	" Interest National Bank,	3 30
"	" C. A. Wheaton,	12 50
"	" Merrick Lumber Co.,	18 00
"	" John C. Manning,	4 50
"	" E. E. Wood,	4 72
"	" Gray & Osgood,	9 83
"	" J. J. Potvin,	2 00
"	" D. A. Horton,	18 09
"	" P. D. Hubbard, walking race,	1 00
"	" W. H. Riley,	2 45
"	" J. E. Williams,	40 50
"	" Frank E. Paige, salary,	81 37
"	" John Welch, walking race,	3 00
"	" H. E. Paige, " "	5 00
"	" A. E. Munsell,	7 50
"	" Chas. Dickinson,	1 00
"	" D. J. Wright, walking race,	5 00
"	" E. A. King,	6 00
"	" R. Bell,	5 00
"	" E. Mickiewicz,	2 00
"	" Premiums,	614 27

\$1,134 93

AMHERST, Nov. 28, 1888.

This is to certify that I have examined the accounts of F. E. Paige, Treasurer of Hampshire Agricultural Society, and find them correct with no balance of cash in treasury.

E. D. BANGS, Auditor.

LIABILITIES.

Notes at Amherst Saving Bank,	\$1,000 00	
Interest due January 1st 1888,	30 00	
Due for premiums awarded,	41 00	
Bills unpaid and printing of report,	58 63	
	<hr/>	\$1,129 63

▷ FORTIETH ANNUAL REPORT. ▷

TRANSACTIONS

OF THE



Hampshire Agricultural Society



FOR THE YEAR 1889.



AMHERST, MASS. :
J. E. WILLIAMS, BOOK AND JOB PRINTER.
1889.

OFFICERS FOR 1889.

PRESIDENT,

L. W. WEST, *Hadley.*

VICE-PRESIDENT,

J. C. DILLON, *Amherst.*

SECRETARY,

FRANK E. PAIGE, *Amherst.*

TREASURER,

FRANK E. PAIGE, *Amherst.*

EXECUTIVE COMMITTEE,

FLAVEL GAYLORD, *Amherst.*

CHAS. S. SMITH, *Amherst.*

RUFUS SMITH, *Hadley.*

ASAHEL GATES, *Pelham.*

D. J. WRIGHT, *Northampton.*

DELEGATE,

D. A. HORTON, *Northampton.*

SECRETARY'S REPORT.

The past year has been one tinged both with discouragement and encouragement.

The storm of the first day of the Fair, the fact that little funds were received from gate receipts on the first day, the unpleasant weather of the second day, and a smaller amount of gate receipts than usual, the interest on the debt, premiums, trotting purses and incidental expenses to be paid, the outlook to the officers was not encouraging, and each one realized the fact that something must be done, and that at once, to relieve the financial embarrassment of the society.

The officers, after a careful investigation of all the plans proposed to relieve the society, voted to ask each exhibitor, who had been awarded a premium at the Fair, to donate the same to the society. In doing this they believed there was enterprise, pride and liberality enough among the farmers and others of this vicinity to relieve the society from its unfortunate condition.

How well they were supported in this view can be best ascertained by an examination of the long list of persons who donated a part or whole of their premiums to the society. It will be noticed that some donated the whole, others part, while a very few none.

Only one expressed a desire that the Fair be given up, or rather, said that they did not care for the society's continuance. All others expressed a hope that it might continue. The generosity and liberality with which the donations have been made prove that the farmers and others in this vicinity wish to have the exhibition held and are ready and willing to help support it. As a result of the donation this year, the deficiency of the year has been paid and over three hundred dollars on the debt of the society.

There are many members of the society who did not exhibit at the Fair this year, while some who did were not awarded premiums, and only those who were awarded premiums have been asked to contribute. And all members and others, who are interested in the continuance of the society, ought to contribute equally to the reduction of the debt.

I trust, therefore, that at the annual meeting some action will be taken so that all may have an opportunity and may be called upon to contribute their share.

I desire personally, also in behalf of the officers and members of the society, to thank all who have donated or contributed to the society.

Yours truly,

F. E. PAIGE,

Secretary.

LIST OF PREMIUMS AWARDED.

CLASS 1—TOWN TEAMS.

Town of Hadley,	\$20 00
“ Amherst,	15 00

CLASS 2—FANCY CATTLE.

Chas. W. Green, Hadley,	5 00
Chester Smith, “	3 00
Town of Shutesbury,	2 00

CLASS 3—WORKING OXEN.

Town of Shutesbury,	5 00
Edmund Smith, Hadley,	4 00
Chester Smith, Hadley,	3 00
F. Gaylord, Amherst,	2 00

CLASS 4—STEERS.

L. W. West, Hadley,	3 years old,	5 00
“ “ “	“ “	3 00
E. S. Moore, Hadley,	2 “	4 00
L. W. West, Hadley,	1 “	3 00
“ “ “	1 “	2 00

CLASS 5—MILCH COWS.

L. W. West, Hadley,	Shorthorn,	4 00
C. K. Childs, Conway,	Jersey,	4 00
“ “ “	Grade.	4 00
W. A. Magill, Amherst,	“	3 00
C. K. Childs, Conway,	“	2 00
H. C. Piper, Amherst,	“	1 00

CLASS 6—HERDS OF CATTLE.

C. K. Childs, Conway,	5 00
W. A. Magill, Amherst,	4 00
J. P. Smith, “	3 00
F. Gaylord, “	2 00

CLASS 7—HEIFERS.

C. K. Childs, Conway,	Grade 1 year old,	2 00
“ “ “	“ “ “	1 00
W. F. Williams, Amherst,	“ 2 “	3 00
L. W. West, Hadley,	“ 2 “	2 00
C. K. Childs, Conway,	Thoroughbred 2 “	3 00
“ “ “	“ 2 “	2 00
“ “ “	“ 1 “	2 00
“ “ “	“ 1 “	1 00

CLASS 8—BULLS.

C. K. Childs, Conway,	Jersey,	4 00
W. A. Magill, Amherst,	“	2 00
L. W. West, Hadley,	Durham,	2 00

CLASS 9.—CALVES.

C. K. Childs, Conway,	Heifer Calf,	2 00
“ “ “	Bull Calf,	2 00

CLASS 10—HERDS OF CATTLE.

C. K. Childs, Conway,	6 00
L. W. West, Hadley,	5 00
J. P. Smith, Amherst,	4 00
W. A. Magill, “	3 00
D. A. Horton & Son, Hadley,	2 00

CLASS 11—SWINE.

L. W. West, Hadley,	Grade Boar,	4 00
Josiah Cook, Hadley,	“	3 00
H. C. West, Hadley,	“	1 00
Francis Clapp, So. Deerfield,	Thoroughbred Boar,	4 00
C. H. Kellogg, Amherst,	“ “	3 00
Francis Clapp, So. Deerfield,	“ “	1 00

Josiah Cook, Hadley,	Sow with Pigs,	4 00
W. D. Crocker, Sunderland,	“ “ “	3 00
L. W. West, Hadley,	“ “ “	1 00
H. C. West, Hadley,	Weaned Pigs,	4 00
“ “ “	“ “	3 00
Josiah Cook, Hadley,	“ “	1 00

CLASS 12—SHEEP.

W. D. Crocker, Sunderland,	Buck,	4 00
Francis Clapp, So. Deerfield,	“	3 00
“ “	25 Sheep,	6 00
L. W. West, Hadley,	25 “	3 00
W. D. Crocker, Sunderland,	8 Ewes,	4 00
Francis Clapp, So. Deerfield,	8 “	3 00
L. W. West, Hadley,	Lambs,	4 00
Henry Green, Hadley,	“	2 00

CLASS 13—POULTRY.

H. D. Howes, Hadley,	Cochins,	2 00
C. C. Montague, Amherst,	Plymouth Rocks,	2 00
“ “	R. C. Brown Leghorns,	2 00
J. C. Dillon, Amherst,	Dorking Games,	2 00
E. C. Howard, Belchertown,	Bantams,	2 00
M. S. Paige, Amherst,	“	1 00
E. N. Fisher, Ludlow,	Turkey,	2 00
“ “	Ducks,	1 00
Chas. Comins, Pelham,	“	2 00
C. C. Montague, Amherst,	Wyandottes,	1 00
George Graves, Amherst,	Duck Winged Bantams,	2 00
C. C. Montague, Amherst,	Breeding Pen Brahmas,	2 00
“ “	Trio “	2 00
“ “	Breeding Pen Plymouth Rocks,	2 00
“ “	“ “ Wyandottes,	2 00
“ “	“ “ R.C.Br. Leghorns,	2 00
A. E. Ray,	Trio Wyandotte Fowles,	2 00

CLASS 14—AGRICULTURAL AND FARM IMPLEMENTS.

J. C. Dillon, Amherst,	Exhibit,	5 00
A. W. Merrick, “	“	2 00

CLASS 14 1-2—MECHANIC ARTS.

Joseph H. Cummings, Ware.	Washing Machines,	Diploma.
A. F. Bardwell, Amherst.	Sewing Machines,	“

CLASS 16—DOMESTIC AND OTHER MANUFACTURES.

Mrs. Sanford Boice, Amherst,	Silk Mittens,	50
“ “ “ “	Tray Cloth,	25
Miss Lucy “ “	Quilt,	50
“ “ “ “	Table Mat,	50
“ “ “ “	Doiley,	15
Mrs. Sanford “ “	Knit Shawl,	75
Mrs. E. C. Parker, “	Quilt,	1 00
Mrs. Henry Shaw. “	Wool Hose,	50
Mrs. John Wrigley, “	Rag Carpet,	75
L. K. Chapin,		50
Mrs. P. D. Hubbard, Sunderland,	Rug,	1 00
Mrs. H. Sabin, Amherst,	Quilt,	1 00
Mrs. B. Dickinson, “	“	75

CLASS 17—FANCY ARTICLES.

Mrs. Sanford Boice, Amherst,	Table Scarf,	25
Miss Lucy Boice, “	“	75
“ “ “ “	Tidy,	25
Mrs. Sanford Boice, “	“	25
“ “ “ “	Lambrequin,	50
“ “ “ “	Travelling Bag,	50
Miss Lucy “ “	Painted Banner,	75
“ “ “ “	Screen,	50
“ “ “ “	Afghan,	75
“ “ “ “	Banner,	50
Mrs. Sanford “ “	Button Bag,	25
Miss Lucy “ “	Glove Case,	50
“ “ “ “	Fascinator,	35
Mrs. Sanford “ “	Banner Lining,	25
Mrs. M. E. Scott, “	Silk Quilt,	1 50
Mrs. B. Dickinson, “	“	1 50
“ “ “ “	Quilt Embroidered,	1 25
“ “ “ “	Afghan,	75
Miss L. W. Dickinson, “	Embroidered Quilt,	1 00
Mrs. T. S. Haskell, Belchertown,	Pin Cushion,	35

Mrs. S. W. Boutwell, Leverett,	Artificial Roses,	25
Mrs. E. C. Parker, Amherst,	Tidies,	1 00
Mrs. John Wrigley, "	Sacque,	25
" " " "	Socks,	25
Miss M. C. Leonard, "	Rug,	50
Mrs. H. B. Strickland, "	Doilies,	50
" " " "	Table Cover,	35
" " " "	Silk Quilt,	1 50
Mrs. E. J. Leach, "	Lace,	1 00
" " " "	Sacque,	25
Mrs. A. D. Loomis, "	Rug,	75
Mrs. M. E. Struther, "	Edging,	75
Mrs. P. D. Hubbard, Sunderland.	Paper Holder,	75
Mable M. Leach, Amherst,	Table Mat,	50
Mrs. C. E. Wakefield, Amherst.	Tidy,	50
Mrs. E. P. Sabin, "	Sofa Pillow,	50
Miss Jennie L. Cowles, "	Glove Case,	50
" " " " " "	Mat,	25
" " " " " "	Silk Case,	25
Miss Fannie C. Cowles, "	" Bags,	50
Mrs. J. C. Dillon, "	Stuffed Birds,	1 00
" " " " " "	Splasher,	50

CLASS 18—FINE ARTS.

Miss Lucy Boice, Amherst,	Painted Shells,	1 50
Miss Helen Hubbard, Sunderland,	Drawings,	1 00
Mrs. L. H. Pomeroy, Amherst,	Pictures,	2 00
Mrs. D. A. Horton, Northampton,	Paintings,	1 00

CLASS 19—BREAD, BUTTER AND CHEESE.

Mrs. S. W. Boutwell, Leverett,	Wheat Bread,	2 00
Miss Jennie L. Cowles, Amherst,	"	1 00
Mrs. C. H. King, "	Rye Bread,	2 00
" Sanford Boice, "	"	1 00
" T. L. Paige, "	Rye and Indian,	2 00
" J. C. Dillon, "	"	1 00
" " " "	Graham,	2 00
" " " "	"	1 00
C. K. Childs, Conway,	Butter,	3 00
Asahel Gates, Pellham,	"	2 00
Amherst Creamery, Amherst,	Creamery Butter,	3 00
Mrs. Isaac King, "	Cheese,	3 00

CLASS 20—HONEY, WINES AND JELLIES.

Mrs. J. C. Dillon, Amherst,	Canned Fruit,	2 00
“ S. W. Boutwell, Leverett,	“	1 50
“ E. J. Jay, Hadley,	“	1 00
“ J. C. Dillon, Amherst,	Wines,	2 00
“ “ “ “	Pickles,	1 00
“ R. Hammond, “	Jellies,	1 00
“ E. J. Jay, Hadley,	“	1 00
“ S. W. Boutwell, Leverett,	“	50
“ J. C. Dillon, Amherst,	“	50
Miss Lucy Boice, “	Hops,	1 00
“ “ “ “	Dried Apples,	1 00
Jason Gardner, Plainfield,	Syrup,	50
E. N. Fisher, Lndlow,	Honey,	1 50
Mrs. S. W. Boutwell, Leverett,	“	50

CLASS 22—FRUITS GROWN BY THE EXHIBITOR.

H. D. Dana, Amherst,	Coll. Apples,	4 00
D. A. Horton & Son, Hadley,	“ “	3 00
A. B. Howard, Belchertown,	“ Pears,	4 00
“ “ “	“ Grapes,	4 00
Mrs. Sanford Boice, Amherst,	Ex. Cranberries,	1 00
D. H. Tillson, “	“ Quinces,	1 00
G. L. Cooley, Sunderland,	Platter Baldwins,	50
D. A. Horton, & Son, Hadley,	“ Greenings,	50
Mrs. Sanford Boice, Amherst,	“ Russets,	50

CLASS 23—VEGETABLES GROWN BY THE EXHIBITOR.

W. L. Boutwell, Leverett,	Coll.	5 00
Chas. Kellogg, Amherst,	“	4 00
J. C. Dillon, Amherst,	“	3 00
D. A. Horton & Son, Hadley,	“	2 00
J. C. Dillon, Amherst,	Ex. Potatoes,	2 00
“ “ “	Peck “	1 00
F. H. Williams, “	Onions,	1 00
“ “ “	Carrots,	1 00
“ “ “	Beets,	1 00
Chas. Kellogg, “	“	50
Jas. W. Allen, “	Ruta Bagas,	50

W. L. Boutwell, Leverett,	Tomatoes,	1 00
W. A. Magill, Amherst,	“	50
J. C. Dillon, “	Beans,	1 00
E. C. Parker, “	Peck Beans,	1 00
G. L. Cooley, Sunderland,	“	50
W. L. Boutwell, Leverett,	Pumpkins,	1 00
“ “ “	Cabbage,	2 00
J. C. Dillon, Amherst,	“	1 00
Asahel Gates, Pelham,	Seed Corn,	2 00
F. E. Loomis, Amherst,	“	1 00
W. L. Boutwell, Leverett,	Winter Squashes,	2 00
J. C. Dillon, Amherst,	“	1 00
W. L. Boutwell, Leverett,	Sweet Corn,	2 00
G. L. Cooley, Sunderland,	“	1 00
D. A. Horton & Son, Hadley,	Rye,	50
E. N. Fisher, Ludlow,	“	1 00
“ “ “	Wheat,	50
“ “ “	Oats,	1 00

CLASS 24—FLOWERS.

L. W. Goodell, Dwights,	Collection,	5 00
A. B. Howard, Belchertown,	“	3 00
Mrs. S. W. Boutwell, Leverett,	“	2 00
M. B. Kingman, Amherst,	“ Roses,	2 00
L. W. Goodell, Dwights,	“ Asters,	2 00
Mrs. S. W. Boutwell, Leverett,	“ “	1 00
L. W. Goodell, Dwights,	“ Dahlias,	2 00
Mrs. S. W. Boutwell, Leverett,	“ “	1 00
A. B. Howard, Belchertown,	“ Verbenas,	2 00
L. W. Goodell, Dwights,	Gladioli,	2 00
Mrs. S. W. Boutwell, Leverett,	Wild Flowers,	2 00
“ “ “ “	Bouquet,	2 00

CLASS 25—STALLIONS.

F. Laframboise, Northampton,	6 00
E. S. Warner, Hatfield,	4 00
H. W. Arms, Conway,	3 00
A. G. Childs, of Deerfield was awarded a gratuity, but as there were no funds, same was not allowed.	

CLASS 26—BREEDING MARES WITH SUCKING COLTS.

Henry Ramsdell, Pelham,		5 00
P. D. Hubbard, Sunderland,		4 00
F. W. Graves,	“	3 90
George E. Smith, Hadley,		2 00

CLASS 27—COLTS AND FILLIES.

Herdsdale Farm, Florence,	3 years old Stallion,	3 00
E. F. Cook, Amherst.	3 years old,	3 00
M. F. Dickinson, Amherst,	3 “ “	2 00
J. L. Brewer, Pelham,	3 “ “	1 00
F. W. Graves, Sunderland,	2 “ “	3 00
G. L. Gates, Leverett,	2 “ “	2 00
E. F. Wiley, Sunderland,	2 “ “	1 00
F. W. Prince, Hatfield,	1 “ “	2 00
D. H. Tillson, Amherst.	1 “ “	1 00

CLASS 28—FARM HORSES.

L. W. West, Hadley,	Pair,	4 00
C. W. Thurber, Leverett,	“	3 00
P. D. Hubbard, Sunderland,	Single,	3 00
S. Wakefield, Amherst,	“	2 00

CLASS 29—DRAFT HORSES.

F. A. Cadwell, Amherst,	Pair,	4 00
F. Gaylord,	“	3 00
H. C. West, Hadley,	Single,	3 00
H. Whittaker,	“	2 00

CLASS 30—CARRIAGE HORSES.

E. B. Dickinson, Amherst,	Single,	5 00
H. L. Cowles, Amherst,	“	4 00
J. Dickinson, Amherst,	“	2 00
A. L. Hubbard, Sunderland,	Pair,	6 00
F. P. Newkirk, Easthampton,	“	5 00
T. L. Paige, Amherst,	“	4 00

CLASS 31—ROADSTERS.

F. Humphrey, Amherst,	Single,	4 00
D. J. Wright, Northampton,	Pair,	5 00
T. L. Paige, Amherst.	“	4 00
Mass. A'g'l College, gratuity for exhibit,		40 00

FIELD CROPS.

Henry Tillson, Sunderland,	Corn,	5 00
J. C. Dillon, Amherst,	"	4 00
L. W. West, Hadley,	"	3 00
H. C. West, Hadley,	"	1 00
" " "	Potatoes,	5 00
" " "	"	4 00

WALKING RACE FOR HORSES.

C. W. Freeman, Northampton,	7 50
C. K. Smith, Sunderland,	3 75
D. J. Wright, Northampton,	2 25
F. H. Graves, Sunderland,	1 50

Premiums Donated to the Society.

Town of Hadley,	String Cattle,	20 00
" Amherst,	" "	15 00
J. W. Allen, Amherst.		50
H. W. Arms, Conway,		3 00
M. A. C.,		40 00
Mrs. Sanford Boice,		6 00
D. W. Bond, Northampton,		3 00
J. L. Brewer, Pelham		1 00
Josiah Cook, Hadley,		4 00
Francis Clapp, So. Deerfield,		8 50
W. D. Crocker, Sunderland,		3 50
Chas. Comins, Hadley,		1 00
Z. K. Chapin, Amherst,		50
Miss Jennie L. Cowles, Amherst,		2 00
Miss Fannie Cowles,	" "	50
Amherst Creamery,	" "	3 00
F. L. Cooley	" "	2 00
E. F. Cook,	" "	3 00
F. A. Cadwell.	" "	4 00
H. L. Cowles, Hadley,		2 00
J. C. Dillon, Amherst.		9 00
Mrs. B. Dickinson, Amherst.		1 75
Mrs. E. B. Dickinson,	" "	75
Miss L. W. Dickinson,	" "	50
H. D. Dana,	" "	4 00
M. F. Dickinson,	" "	2 00
John Dickinson,	" "	2 00
Flavel Gaylord,	" "	7 00
Henry Green, Hadley,		2 00
George Graves, Amherst,		2 00
Asahel Gates, Pelham.		4 00
Jason Gardiner, Plainfield,		50
L. W. Goodell, Dwight,		11 00
F. H. Graves, Sunderland,		6 00

G. L. Gates, Pelham,	2 00
D. A. Horton & Son, Hadley,	8 00
G. D. Howe, Hadley,	1 00
Mrs. P. D. Hubbard, Sunderland,	1 75
Mrs. F. S. Haskell, Belchertown,	35
Miss Helen Hubbard, Sunderland,	1 00
Mrs. D. A. Horton, Northampton,	1 00
Mrs. Robert Harmon, Amherst,	1 00
P. D. Hubbard, Sunderland,	3 00
F. L. Humphrey, Amherst,	4 00
Mrs. E. Jay, Hadley,	2 00
C. H. Kellogg, Amherst,	5 00
Chas. Kellogg, “	2 00
M. B. Kingman, “	2 00
F. Lafarboise, Northampton,	1 00
Miss M. C. Leonard, Amherst,	50
Mrs. E. J. Leach, “	1 25
Mrs. A. D. Doomis, “	75
Miss Mabel Leach, “	50
S. E. Loomis, “	1 00
C. C. Montague, “	10 00
A. W. Merrick, “	2 00
F. B. Newkirk, Easthampton,	5 00
H. C. Piper, Amherst,	1 00
E. C. Parker, “	2 00
Mrs. E. C. Parker, Amherst,	1 00
Mrs. L. H. Pomeroy, “	2 00
Mrs. T. L. Paige, “	2 00
F. W. Prince, “	1 00
T. L. Paige, “	3 00
A. E. Ray, “	2 00
Chester Smith, Hadley,	6 00
Town of Shutesbury,	8 00
Edmund Smith, Hadley,	4 00
Mrs. Henry Shaw, Amherst,	50
Mrs. Herbert Sabin, “	1 00
Mrs. M. E. Scott, “	75
Mrs. H. B. Strickland, “	2 35
Mrs. M. E. Struther, “	75
Mrs. E. T. Sabin, “	50

G. E. Smith, Hadley,	2 00
D. H. Tillson, Amherst,	2 00
C. W. Thurber, Leverett,	2 50
L. W. West, Hadley,	30 00
W. F. Williams, Amherst,	3 00
H. C. West, Hadley,	11 00
Mrs. John Wrigley, Amherst,	1 25
Mrs. C. Wakefield, “	50
F. H. Williams, Sunderland,	3 00
E. F. Wiley, “	1 00
S. Wakefield, Amherst,	2 00
H. A. Whittaker, “	2 00
D. J. Wright, Northampton.	7 25
C. K. Smith, Sunderland,	3 75
F. H. Graves, “	1 50
Henry Tillson, “	2 50
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	\$342 20

List of New Members, 1889.

Henry Ramsdell,	Pelham.
Mrs. Clara Kellogg,	Amherst.
E. S. Warner,	Hatfield.
F. Laframboise,	Northampton.
Charles W. Green,	Hadley.
A. L. Hubbard,	Sunderland.
C. K. Childs,	Conway.
Joseph C. West,	Hadley.
Thomas I. West,	Hadley.
Edward P. West,	Hadley,
Melröse S. Paige,	Amherst.
E. B. Dickinson,	Amherst.
Sarah E. Fisher,	Ludlow.
Everett C. Howard,	Belchertown,

TREASURER'S REPORT.

FRANK E. PAIGE TREASURER, IN ACCOUNT WITH THE HAMPSHIRE
AGRICULTURAL SOCIETY, 1889.

	<i>Dr.</i>
Cash rec'd from Amherst Savings Bank,	\$129 00
“ “ “ Gate, second day,	267 66
“ “ “ Entry fees,	60 00
“ “ “ Gate money first day, peddlers, and entrance fees in walking race,	54 78
“ “ “ New members,	70 00
“ “ “ State treasurer,	600 00
“ “ “ Advertising,	7 00
“ “ “ J. E. Williams, donation,	3 00
“ “ “ Rent of grounds,	20 00
“ “ “ F. E. Paige, donation,	25 00
“ “ “ Donation of premiums,	342 20
	\$1,578 64

	<i>Cr.</i>
Cash paid express,	\$ 1 40
“ Amherst Savings Bank, interest,	30 00
“ Wade, Warner & Co., printing report,	34 96
“ J. C. Dillon, premiums,	18 00
“ L. W. West, “	4 00
“ Thos. I. West, “	4 00
“ E. P. West, “	3 00
“ Jas. Comins,	7 00
“ F. E. Loomis,	5 00
“ F. E. Paige, bal. of salary of '88,	18 63
“ Geo. Bias, labor,	2 00
“ for postage and stationery,	14 68
“ “ dinner tickets,	1 50
“ “ purse, 2-30 class,	90 00
“ Russell, Morgan & Co., posters,	15 00

" Amherst Savings Bank, interest,	34 37
" Holland & Galloud, bill,	87
" L. A. Shaw,	1 25
" Purse in 2-45 Class,	85 00
" Mrs. Taylor, labor,	2 50
" C. Freeman, walking race,	7 50
" C. Wheaton, labor,	8 50
" J. J. Potwin, labor,	2 00
" James Wiley, labor,	11 35
" W. W. Hunt, bill,	7 30
" C. E. Wakefield, bill,	7 00
" Flavel Gaylord,	35 34
" Chester Williams,	8 50
" F. E. Paige, salary Secretary and Treasurer,	100 00
" J. E. Williams, bill,	39 12
" E. A. King, bill,	7 50
" Amherst Savings Bank on debt,	310 99
" Premiums,	602 45
Cash on hand,	57 93
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	\$ 1,578 64

LIABILITIES.

Note Amherst Savings Bank,	\$825 00
Interest on same Jan. 1st, 1890,	24 75
Printing Report, estimated,	30 00
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	\$879 75
Cash on hand,	57 93
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	\$821 82

AMHERST, MASS., Nov. 22, 1889.

This is to certify that I have this day examined the accounts of Frank E. Paige, Treasurer Hampshire Agricultural Society, and find them correct, the payment accompanied by the proper vouchers, with balance of cash in treasury of fifty-seven dollars and ninety-three cents.

E. D. BANGS, *Auditor.*

STATEMENT OF FINANCES.

Amount originally raised by contribution of individuals and put out at interest on public or private security, or invested in real estate, buildings, and appurtenances for the use and accommodation of the society, and then held so invested or well secured as a capital stock.	\$4,000 00
P. S., Chap. 114, Sects. 1 and 2, - -	-
Amount now held so invested or well secured as a capital stock. P. S., Chap. 114, Sects. 2 and 10,	4,000 00
How is this capital stock now invested? Real Estate.	
Total market value of real estate belonging to the society, - - - - -	2,500 00
Total market value of personal property belonging to the society other than notes, stocks or bonds,	150 00
Amount of funds drawing dividends or interest. None.	
Amount of bounty received from the Commonwealth the past year, - - - - -	600 00
Income from funds drawing dividends or interest. None.	
Amount received from new members, - -	70 00
Amount received as donations, - - -	370 20
Amount received from all other sources, -	538 44
Total amount of receipts for the past year, -	1,578 64
Total amount of premiums offered, - -	884 00
Total amount of premiums and gratuities awarded,	602 45
Total amount of premiums and gratuities paid,	602 45
Current expenses for the past year, not including premiums and gratuities paid, - - -	918 26
Total amount of disbursements for the past year,	1,520 71
Amount of cash on hand, - - -	57 93
Total actual assets of the society, - -	2,707 93
Total actual liabilities of the society, - -	875 00

