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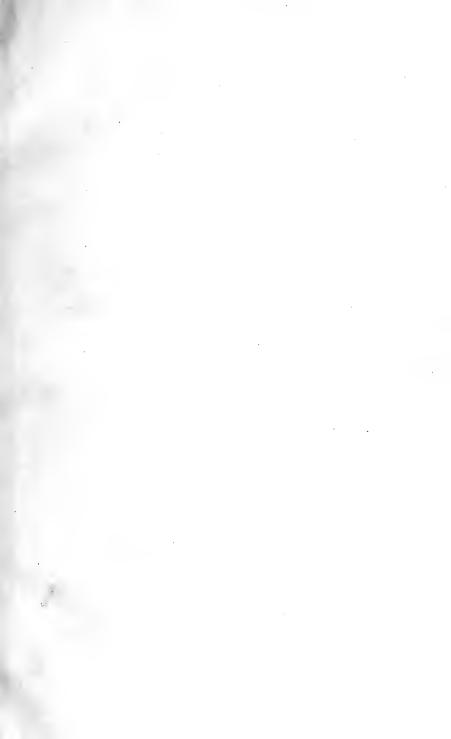
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1901









Year Book

of the

Ayrshire Breeders

For 1901.

Containing the proceedings of the Annual Meeting, recent Milk and Butter Records and general information about Ayrshires

and the Ayrshire Breeders' Association.



ISSUED BY THE

Hyrshire Breeders' Association.

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PROCEEDINGS.

The Twenty-sixth Annual Meeting of the Ayrshire Breeders' Association was held January 16, 1901, in the parlor of Gould's Hotel, Boston, Mass., in response to notice of the Secretary, and was called to order by the President, L. S. Drew, at 2:15 p. m.

The President appointed Messrs. S. M. Wells and J. O. Magie Auditors to examine the accounts of Treasurer and Secretary.

The roll call was responded to by the following members in person:

Brown, Obadiah
Doe, Charles C.
Fletcher, George A.
Hayes, Charles S.
Kimball, Herbert M.
Sherman, Everett B.
Stickney, William H.
Tyler, Arthur F.
Wells, S. M.

Converse, J. F.
Drew, L. S.
Hayes, Charles H.
Magie, J. O.
Piper, Anson C.
Spalding, L. C.
Turnbull, Thomas Jr.
Winslow, C. M.
Winsor, Nicholas S.

Yeaton, Geo. H.

The following members responded by proxy.

Arnold, Geo. W.
Betts, Henry
Blodgett, J. W.
Bowen, Edward S.
Byrne, Christopher
Cass, Geo. L.
Clark, C. W.
Cochran, T. Allman

Bement, Geo.
Blodgett, H. W.
Bowker, Geo. H.
Boynton, C. H.
Calumet Woolen Co.
Casterline, J. Andrew
Clark, N. E.
Cook, Howard

Cookingham, H. W. Curtis, L. W. Dorne, Elmer J. Fisher & May Fletcher, Etna J. Gold, T. S. Hopkins, Willis W. Irving, Thomas . Jones, Sam Larned, J. H. Magone, Daniel Milliken, Charles R. Pierce, Geo. H. Proctor, Fletcher D. Scott, John W. Sellers, William Smith, E. A. Stowell, L. D. Taber, George Tschudy, Fred Underhill, C. S. Viner, William

Cornell, F. P. Davidson, George Drummond, James, Garvin, W. R. Hall, Lott Hinson, W. G. Hubbard, Geo. D. Jackson, Ward R. Krebs, J. De Witt Leach, Philo McCrea, Robert Peck, Cassius Pike, George E. Reeves, C. McC. Sears, B. C. Shimer, B. Luther Stewart, John Surget, James Topping, R. R. Tubbs, Ambie S. Venable, A. R., Jr. Watson, H. R. C.

Wells, Dudley

The following gentlemen interested in breeding Ayrshire cattle but not members of the Association were present:

John P. Buckley, Strondwater, Me. F. A. Converse, Woodville, N. Y. Davis Copeland, Campello, Mass. Geo. B. Freeman, Atkinson, N. H. Aaron Gay, Stoughton, Mass. W. H. Hartshorn, F. C. Pierce, Concord Jct., Mass. E. E. Sawyer, Atkinson, N. H. Geo. W. Sanderson, Littleton, Mass.

W. P. Schanck, Avon, N. Y.

Geo. F. Stone, Ayer, Mass.

A. F. Stevens, Wellesley, Mass.

C. C. Tinkham, Littleton, Mass.

John T. Wade, Stoneham, Mass.

REPORT OF SECRETARY.

The past year has been one of some progress in the Ayrshire interest. There has been more than usual inquiry about the breed, especially by new men, and a good many inquiries for bulls to cross on other stock, especially Jerseys, and those who have tried it say it is a success. The Year Book has been a convenient and useful means of informing inquirers of the characteristics of the breed and the printed list of members has informed them of whom they may obtain stock.

Volume XIII is now in the hands of the printers and will be somewhat larger than Volume XII, about as much larger than XII was of XI.

The Herd Books of late have been steadily increasing in size by about 200 to 300 entries each volume.

During the past year the following have joined the Association:

Vermont Experiment Station, by Cassius Peck, Farm Superintendent.

John L. Taylor, Owego, N. Y.

Alfred J. Taylor, Worthington, Mass.

R. R. Topping, Amsterdam, N. Y.

Sam Jones, Juneau, Wis.

H. F. Cater, No. Barrington, N. H.

C. G. Emery, Clayton, N. Y.

D. E. Howatt, Clayton, N. Y.

Arthur F. Tyler, Athol, Mass.

H. M. Kimball, Concord, N. H.

Our Association, and the Ayrshire interests generally, have met with an irreparable loss in the death of

Mr. J. D. W. French, whose firm faith in the Ayrshire cow, whose sound judgement in the management of the affairs of the Association, and whose keen interest and liberal ideas in Ayrshire matters made him a power, we shall greatly miss.

I wrote to a sister of Mr. French, asking her to prepare, or have prepared for our meeting a sketch of Mr. French's life, and she requested Hon. Francis H. Appleton of Boston, a life-long friend of Mr. French, to prepare such a paper which was sent to me a few minutes ago. Not having time to read it, I asked Mr. Fletcher to look it over and read it to the Association.

The life of Mr. J. D. W. French was here read by Mr. Fletcher as follows:

"John Davis Williams French, son of Jonathan French, was born in Boston, January 29, 1841. Graduated at Harvard University in the class of 1863. Soon after graduation he entered the service of the Christian Commission and, without pay, served with fidelity among the armies of the East and West in Virginia, Tennessee, Alabama and Georgia. Returning home after the Civil War, he devoted himself to farming and became a writer and an authority on various subjects in connection with that pursuit. He was a successful breeder of Ayrshire cattle and one of the founders of the Ayrshire Breeders' Association, was for several years its secretary and president.

"Forestry especially interested him and he received from the Massachusetts Society for the Promotion of Agriculture, a prize of \$1,000 for a plantation of European larch, also a silver pitcher for a plantation of white ash. In a single spring a few years since, he planted 4,000 white pines and spruces. He was instrumental, with others, in the passage of a law in Massachusetts permitting a tree warden to be appointed

in every town. He took part in public duties for Church and State; served several years in the Common Council of the City of Boston, and during the last months of his life was a leading spirit in organizing a society for the protection of the Boston common.

"His sympathy was broad and to enumerate all the various societies of which he was an active member would make this paper too long. He was president of the Bay State Agricultural Society, trustee of the State Agricultural College, vice-president for Massachusetts of the American Forestry Association, vice-president of the Essex Agricultural Society, member of the Law and Order League, Veteran Association of the Independent Corps of Cadets, Boston Associated Charities, Workingman's Club and Institute, New England Historic Genealogical Society, Boston Young Men's Christian Association, a devoted member of the Episcopal Church, president of the Episcopalian Club, member of the Episcopal City Mission, St. Mary's Corporation for Sailors, vice-president of St. Luke's Home for Convalescents, trustee for the Church Home for Orphan and Destitute Children, etc.

"In all his work, Mr. French was most conscientious, and his patience and thoroughness made him wise in counsel and one whose judgement could be depended on.

"Inheriting an independent fortune he might have lived a life of ease but he chose to work for the welfare and happiness of his fellow men.

"Death came to him while still in the fullness of his powers. At Atlantic City, New Jersey, May 2, 1900, after a few days illness, he passed from earth."

THE SECRETARY—I move you a committee of three be appointed by the Chair to draft suitable resolutions in regard to Mr. French's death, and ask that in

appointing the committee you waive the fact of my having made the motion.

THE PRESIDENT—I appoint Mr. Geo. A. Fletcher, Mr. Obadiah Brown and Mr. C. H. Hayes as that committee.

The committee then retired to draw up suitable resolutions.

The secretary resumed the reading of his report, giving an account of his visit to Chicago, last May, in response to a call issued by Messrs. J. H. Pickrell, Springfield, Ill., secretary American Short Horn Breeders' Association, and Charles F. Mills, secretary Illinois Swine Breeders' Association, to the secretaries of pedigree record associations to meet the director of the twelfth census at the Palmer House in Chicago to arrange for a more complete census of blooded stock. Your secretary attended the meeting last May and arrangements were made whereby it is expected that a more complete and better report will be made of the blood stock industry of the United States. At that meeting was organized a society of the secretaries of the blood stock associations for the purpose of meeting and discussing the best methods for furthering the blood stock interests of the country, the first meeting to be held in December at Chicago, at the time of the Fat Stock show with the following program, which was carried out, and arrangements made for publishing the minutes of the meeting and these papers which were prepared for the meeting.

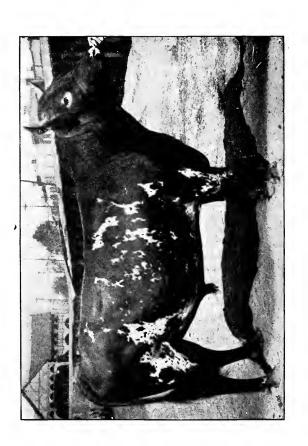
Springfield, Ill., November 7, 1900.

To the Secretaries of Pedigree Record Associations:

The second meeting of the Secretaries of Pedigree Record Associations, will be held in Parlor O, Palmer



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House, Chicago, Tuesday, at 7:30 P. M., December 4,

1900, as per adjournment.

At the meeting of Secretaries held in Chicago, May 1, 1900, the following program was arranged for the December meeting and the gentlemen named were designated to prepare papers on the topics named:

Exhibition of Stock, J. H. Pickreil, Secretary

American Shorthorn Breeders' Association.

Public Sale of Stock, Thomas McFarlane, Secretary American Aberdeen Angus Breeders' Association.

Registration of Stock, Win. M. McFadden, Secretary American Poland-China Association.

tary American Poland-China Association.

Exporting Live Stock, W. I. Buchanan, Director Pan-American Congress.

Testing Dairy Breeds, C. M. Winslow, Secretary Ayrshire Breeders' Association.

The resolutions adopted at the preliminary meeting of Secretaries referred to above are enclosed herewith.

The director of the twelfth census has made the preliminary canvass for obtaining a classified enumeration of the pure breeds of domestic animals of the United States, and measures will doubtless be taken at the meeting appointed for December 4, 1900, to encourage the Director to complete the work.

Your presence and co-operation in the important work contemplated by the promoters of the organization is urgently requested.

CHARLES F. MILLS,

F. S. HOUGHTON,

Secretary pro-tem.

Temporary Chairman.

Many important questions relating to the interests of the stock breeders' and registry associations were brought out and discussed and the question of a permanent organization was introduced and left to the secretaries to bring before their respective associations. The cost will be little beside the cost of the secretary in attendance and a small amount divided between the associations for what printing is necessary.

THE PRESIDENT—Would you like that brought up?

THE SECRETARY—We might as well decide it now.
THE PRESIDENT—Well, gentlemen, it is open for discussion. What shall we do with it?

THE SECRETARY—The question is, whether this association will authorize its secretary to have the Ayrshire Breeders' Association join the association of secretaries of the blooded stock societies in the United States, and meet whenever it seems advisable, and bear their share of the expenses.

THE PRESIDENT—Have you any idea what the expense would be?

THE SECRETARY—If they should meet East the expense would not be very much for travelling, but if in the West, it would necessitate the expense of travelling some distance to the meeting; the other expenses, I should say, would be very slight—I should say five or ten dollars would pay all the expenses outside of that.

THE PRESIDENT—You were out there, what is your opinion?

THE SECRETARY—I got a good many ideas in consultation with other men that I thought were very valuable. One of them I propose to bring up at this meeting. At that meeting, it was thought, in order to protect the registration of stock, each association should have a form of a herd register which they should issue to each breeder and compel him to keep his record of bull service and calving in that book and have that owned by the association and subject to their call at any time. As it is now, some men keep a private

record and some do not; some men know when a cow calves and some do not; some men get three separate calvings out of one cow in thirteen months, and it gets to be a little confusing. Now if a record was kept, and a man was compelled to keep that record, if anything of that kind came up, the secretary would write that man for his record which would show what was the matter with his getting so many calves out of one cow. The idea is to get a more correct herd book. One secretary told me they found calves were being sent in for record from cows that had been dead a long time We had a heifer sent in for record dropped by a cow a year after she was dead. I happened to know the cow was dead and prevented an error. If a record was kept by the breeder, subject to the call of the association, it might prevent such errors and others.

That is one of the things. There are some others which are not formulated but are to be presented at the next meeting when called.

Where a man keeps a record so carelessly that he will send in three calves dropped from one cow in thirteen months at different births, the inference is that the man needs looking after.

MR. YEATON—Mr. President, I move that this society join the societies of secretaries of blooded stock.

(Adopted by an unanimous vote.)

Your secretary was invited by Mr. C. L. Peck, secretary of the Pennsylvania Dairy Union, to attend the annual meeting of that association held at Corey, Pa., a week after the meeting in Chicago, and present the Ayrshire breed of cattle in connection with the associations of other dairy breeds, with the understanding that his expenses should be paid by the Dairy Union, but after the meeting Mr. Peck said that the other associations sent men at their own association's

expense, and your secretary informed them that if that were a fact, our association would probably do the same. The Ayrshire, Hölstein, Jersey and Guernsey breeds were represented at that meeting.

THE SECRETARY—At the last meeting, we left over for consideration at this meeting the matter of revision of scale of points. A committee was appointed consisting of the late J. D. W. French and myself. had one meeting in consultation, and decided to recommend the change of points relating to length of teat, and in place of 2 1-2 to 3 inches in length, substitute 3 to 3 1-2 inches, and left the rest open for a future meeting which did not take place. After his death I prepared the report alone, making some changes with the view of giving the Ayrshire cow a little more of a dairy type than formerly, eliminating some of the beef form of the Scotch type, which report was read before the Executive committee this morning and carefully discussed, point by point, with the result of the following scale of points, recommended by the Executive Committee for adoption by the Association:

SCALE OF POINTS OF AYRSHIRE BULL.

(Adopted January 16, 1901.)

The points desirable in the female are generally so in the male, but must, of course, be attended with that masculine character which is inseparable from a strong and vigorous constitution. Even a certain degree of coarseness is admissable; but then it must be so exclusively of masculine description as never to be discovered in a female of his get.

1. The head of the bull may be shorter than that of the cow, but the frontal-bone should

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	be broad, the muzzle good size, throat nearly free from hanging folds, eyes full. The horns should have an upward turn, with sufficient size at the base to indicate	
	strength of constitution	10
2.	Neck of medium length, somewhat arched, and large in the muscles which indicate	
	power and strength	IO
3.	Forequarters—shoulders close to the body, without any hollow space behind; chest broad, brisket deep and well developed,	
	but not too large	7
4.	Back short and straight; spine sufficiently defined, but not in the same degree as in the cow; ribs well sprung, and body deep	
	in the flanks	10
5.	<pre>Hindquarters—long, broad and straight; hip bones wide apart; pelvis long, broad and straight; tail set on a level with the back;</pre>	
_	thighs deep and broad	01
6.	Scrotum large, with well developed teats in front	7
7.	Legs, short in proportion to size, joints firm. Hind legs well apart, and not to cross in	
0	walking	5
8.	thickness	10
9.	Color, red of any shade, brown or white, or	
	a mixture of these—each color being	
	distinctly defined	3
0.	Average live weight at maturity, about 1,500	10
Ι.	pounds	
2.	movement Escutcheon, large and fine development	15 3
	Danisation	

SCALE OF POINTS AYRSHIRE COW.

(Adopted January 16, 1901.)

The following scale of points for the Ayrshire cow was adopted—being similar to the scale adopted in Scotland in 1884, and changed in a few points to render them applicable to this country.

10

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5

10

7

- 2. Neck, moderately long, and straight from the head to the top of the shoulder, free from loose skin on the under side, fine at its junction with the head, and enlarging symmetrically towards the shoulders......
- 3. Forequarters—shoulders, sloping; withers, fine; chest, sufficiently broad and deep to insure constitution; brisket and whole forequarters light, the cow gradually increasing in depth and width backwards
- 4. Back, short and straight; spine, well defined especially at the shoulders; ribs, well sprung giving large barrel capacity; the body deep at the flanks......
- 5. Hindquarters, long, broad and straight, except a pelvic arch; hookbones wide apart, and not overlaid with fat; tail long, slender and set on a level with the back....
- 6. Udder, capacious and not fleshy, hind part broad and firmly attached to the body, the sole nearly level and extending well forward; milk veins about udder and

	abdomen well developed; the teats from	
	2 1-2 to 3 inches in length, equal in thickness	
	—the thickness being in proportion to the length—hanging perpendicularly, their distance apart at the sides should be equal to one-third of the length of the	
	vessel, and across to one-half the breadth with no divisions between quarters of	20
	the udder	30
7.	Legs, short in proportion to size; hindlegs, straight when viewed from behind; thighs thin, giving plenty of room for udder	4
8.	Skin, yellow, soft and elastic, and covered	4
٥,	with soft, close, woolly hair	5
9.	Color, red of any shade, brown or white, or a mixture of these—each color being distinctly defined	2
		3
10.	Average live weight, in full milk, about 1,000 pounds	8
II.	General appearance, including style and movement	10
12.	Escutcheon, large and fine development	3
	Perfection	
	你! 1 (1 1 1	1

The scale of points as read and recommended by the Executive Committee is not so different from the Scotch or Canadian scale as to prevent a judge from giving a fair decision in the ring where all types are placed in competition.

There is a material difference in the prevailing type of old Scotch and the new, the old Canadian and the new, and the majority of the Ayrshires in the States resemble the old type of the Scotch and the old type of the Canadian Ayrshires except with a greater length of

teat on the American and especially those bred in the States.

You will notice that instead of a straight back we have added "except a pelvic arch," which only changes the shape of the back for a few inches, rising from a level and returning to the level before it reaches the root of the tail, and being a purely dairy mark. Aside from this, there is no material change, and in the ring any judge is influenced in his decisions by his own tastes and preferences even when following the scale of points closely.

If he is a lover of a dairy form and a dairy cow he will insensibly lean that way as between a cow placed before him having a remarkable dairy form and one of beautiful shape but lacking in superior dairy points.

There is a great deal of latitude in judging in the ring, however conscientious and honest a judge may try to decide.

THE PRESIDENT—Gentlemen, it is before you for discussion. We would like to hear from anyone who has anything to say about it.

MR. Wells—I move the scale of points for the cow be adopted as recommended by the committee.

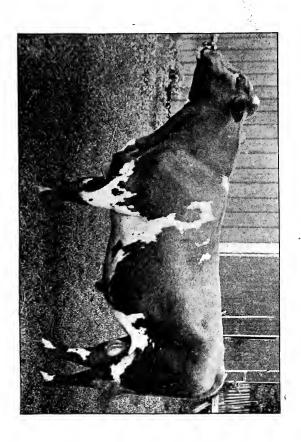
THE PRESIDENT—It is moved and seconded that we adopt the scale for the cow as recommended by the committee.

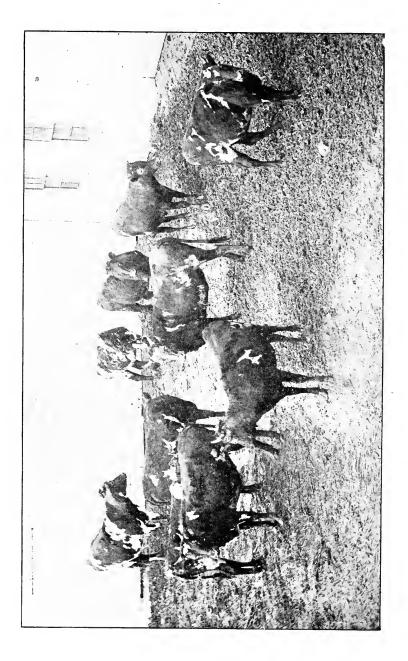
(Adopted by unanimous vote.)

THE SECRETARY—The scale of points for the bull we have not changed. The Executive Committee did not read them over and there seemed to be no special need of changing. I will read them that they may be acted upon.

(Scale of points for the bull read by secretary.)

THE PRESIDENT—That seems to be open for discussion. Would you care to make any change? If so, make the suggestion.





Mr. Sherman—I do not exactly like the arched neck in the bull. I would like to hear from others. Why not have the neck straight instead of having an arched neck? I do not think it looks well.

THE SECRETARY—Mr. Chairman, the arched neck is purely a masculine characteristic.

MR. CONVERSE—I believe, Mr. President and gentlemen, all of the acknowledged authorities practically agree that the arched neck is an indication of prepotency of the animal and one of the strongest indications of masculine tendencies, and I believe where you find a neck does not arch, you will find it just the opposite of those tendencies.

(It was unanimously adopted that the scale of points for the bull should remain as it is.)

THE SECRETARY — The Executive Committee recommend to the Association that Regulation 10 of the By-Laws, which now reads:

An individual membership shall be continued after the death of a member in the settlement of his estate until the same shall be settled and then the membership shall cease. In case of corporations, the corporation may continue as a member so long as they are interested in the Association, and shall be represented by such person as may be designated by the president and secretary of the corporation.

shall be changed after the words ''shall cease'' by the insertion: ''that the inheritor of a herd of Ayrshires shall also inherit the membership of the Ayrshire Breeders' Association—subject to approval of said Association.''

(Adopted by unanimous vote.)

FAIR GROUND TEST.

THE SECRETARY—The surviving member of your Committee on Dairy Tests would respectfully submit the following report:

At the last Annual Meeting the late Mr. J. D. W. French and myself were appointed as your committee to take charge of the dairy tests, and it was voted to change the requirement for qualifying—so that a cow should on the fair ground show an average of at least 3.70 per cent. fat and make at least 1 1-4 pounds of butter as shown by the Babcock test and figured by the experiment station method of 1-6th addition.

In accordance with these instructions your committee issued the following special offer which was sent to all the New England fairs and to all the state fairs in the United States, but where there was no state fair, or the state fair association did not choose to accept, we offered it to some noted local fair in that state.

SECRETARY'S OFFICE

AYRSHIRE BREEDERS' ASSOCIATION.

Brandon, Vt., February 15, 1900.

The Ayrshire Breeders' Association offers a special premium, for the season of 1900, of \$25.00—\$15.00 to first and \$10.00 to second—to the two Ayrshire cows, registered in the Ayrshire Record, that shall score the highest from one day's milking on your fair ground at the time of holding your fair, the butter fat not to fall below an average of 3.70 per cent. butter fat for the two milkings as determined by the Babcock test, nor the butter to fall below 1 1-4 pounds for the two milkings figured by the experiment station method of 1-6th addition, and the award to be decided by the following

SCALE OF POINTS:

For each 20 days since calving, - - I point.

For each 15 days of gestation, - - - 1 point. For each pound of milk in 24 hours, - 1 "
For each pound of butter fat in 24 hours, - 20 "

Provided, however, that your Fair Association will offer a like amount, making the whole premium offered amount to \$30.00 to first and \$20.00 to second, and that your Fair Association take the full charge of the testing, and return a full official report of the test to the secretary of the Ayrshire Breeders' Association.

C. M. WINSLOW, Secretary.

The special prize offer was accepted by the New England Fair at Old Orchard, Me., the Valley Fair at Brattleboro, Vt., the St. Louis Fair at St. Louis, Mo., and the Oak Park Fair at Greenfield, N. H.

At the Old Orchard Fair the only entries were made by Geo. H. Yeaton, of Dover, N. H., who won 1st and 2d with: Miss Olga 13984, 1st, giving 32.13 milk, 4.75 per cent. fat, 1.82 lbs. butter; Gibic 13981, giving 40 milk, 3.80 per cent. fat, 1.81 lbs. butter.

At the Greenfield Fair, E. A. Hall won 1st with Mars Crescent 12626, giving 44 lbs. milk, 4 per cent. fat, 1.78 lbs. butter; E. J. Fletcher won 2d with Collinwood 11404, giving 43.10 milk, 3.9 per cent. fat, 1.68 lbs. butter.

At the Brattleboro fair, under the new rules requiring 3.70 per cent. and 1 1-4 lbs. butter, none of the cows qualified. Mr. Drew's cows being long in milk showed 4.30 per cent. and 4.42 per cent. but failed to come up to the 1 1.4 lb. requirement. C. M. Winslow's cows being new milk gave 1.23 and 1.25 butter but were not up to 3.70 per cent. fat.

At the St. Louis Fair they made a mistake and printed the 1899 offer under which J. F. Converse, Woodville, N. Y., Howard Cook, Beloit, Ohio, and J. P. Beatty, Pataskala, Ohio, entered and their

Association reported a cow owned by Mr. Converse as winning 1st, with Rose Telford 13665, showing 4.87 per cent. fat, and a cow belonging to Howard Cook, name not given, 2d, showing 3.71 per cent. fat. I wrote them that, although the 1899 offer was not in force, it was my opinion that the Association would, at their annual meeting, order the payment of their part of the premium if their Fair Association fulfilled their part of the offer, it being evidently a mistake on their part in not printing the 1900 offer.

In 1899 the Cambridge (N. Y.) Fair accepted the offer and cows were entered by L. C. Spaulding & Son, Poultney, Vt., and E. H. & S. C. Barney, Milford, N. Y. The result of the test showing Barney's Mable Douglass of Warren 13001, giving 4.02 per cent. fat. No report of this test was made until the past summer on account of the sickness and death of Mr. John T. Pratt, Jr., the secretary of the fair.

From a careful study of the results of the Fair Ground tests, it would seem to indicate that little can be learned in regard to the real value of a cow, because the excitement and travel throws the cow out of her normal condition and she shrinks in her milk and the per cent. of fat goes up or down from her normal quality and it is a question whether any reliable statistics can be obtained from any public test away from the home surroundings, especially from a nervous cow.

This opinion is my own, without consultation with Mr. French, as we had no meeting after the first one.

C. M. WINSLOW, for the Committee.

HOME DAIRY TEST.

REPORT OF COMMITTEE.

In accordance with the vote of the Association instructing its committee in charge of the Home Dairy Test to continue the test for 1900 on the general plan of 1899, we issued the following circular and sent to each owner of five or more Ayrshire cows in the United States, as far as we knew.

The statistics given below for cost of butter are of little comparative value, on account of the local difference in the cost of hay and pasturing, the price of pasturing ranging from 40c to 75c per week for a single cow.

AYRSHIRE BREEDERS' ASSOCIATION.

HOME DAIRY TEST, 1900.

For several years the officers of the Ayrshire Breeders' Association have been trying to obtain reliable records of the dairy ability of the Ayrshire cow. While the response has not been general it has been sufficient to demonstrate the fact that the Ayrshire cow is naturally a dairy cow of great ability, both in the production of butter and milk, and that it only needs a little attention on the part of her owners to ascertain by test which are the profitable cows, and having found them, to breed judiciously, and the Ayrshire cow will take rank with the best dairy breeds of the world, if not at the head of all.

The Association, for the purpose of making a still further attempt to obtain statistics, voted at its last annual meeting to authorize the "Dairy Committee" to conduct a Home Dairy test for seven consecutive days to obtain a week's record of quantity of milk, per cent. butter fat, per cent. total solids, and pounds of marketable butter with the cost of butter per pound, and voted

to offer three prizes for the largest amount of butter obtained in seven consecutive days from a herd of five cows, \$50 to the first, \$30 to the second and \$20 to the third.

RULES OF TEST.

Herds of cows will be tested for individual records. Any breeder of Ayrshires may enter a herd of cows. which shall at the time of notice of entry stand on the books of the Association as owned by him. He shall in giving notice of entry, furnish the secretary with a full list of the cows he proposes to have tested, giving name and Herd Book number and stating the time when he would prefer the test to be made. He may name as many of his cows for the test as he chooses and may have as many of those named tested as he chooses, but no notice of entry will be accepted after December 1, The time of having the test made is optional with the owner, but notice must be given the secretary at least one month previous, that arrangements may be The owner need not name the made for the test. individual cows he enters for the herd prize, until after the test of the herd has been made. He may also have as many tests, of cows named in the notice, made during the year as he desires but shall give notice to the secretary of each test he proposes to have made and shall himself employ and pay the Agent for all tests after the first test made by the Association, as the Association will pay for only one visit of the Agent, and he shall employ the same Agent the Association employed for the first test. In making his selection of the five cows for the herd, he may select any cow that was in the test made by the Association or by himself under the direction of the Association, as above stated; He shall in making the final entry, fill out a blank furnished by the secretary, giving name and number of each cow, her age and weight, the number of calves she has produced, the date of birth of last calf, and date of last service by bull since last calf was dropped. A statement, as accurate as possible, is requested of the method of feeding and care for at least two weeks previous to test, and during the seven days of the test a statement of the exact amount of food given each cow with its local market cost. If the cows are in pasture, give the local price per week for such pasturing and an exact account of any other food given. Also state the local price paid for butter. The object is to obtain the cost of the butter, but in awarding the prize it is for the

largest quantity regardless of cost.

The tests will be made as far as possible by agents from the Experiment Stations, or some other disinterested and competent persons, who will see the cows milked clean twelve hours previous to the beginning of the test, and will weigh and test the milk of each cow at each milking during the test, or he may test from a composite sample, being left optional and governed by the necessities of the case, but if he shall make a composite sample he shall place a seal on each jar of milk each time after adding milk to the composite sample in the jar and take such other care of samples as shall ensure freedom from suspicion of its having been tampered with. The test shall be made by the "Babcock Tester" and the "Quevenne Lactometer," and the quantity of marketable butter shall be calculated by the addition of one-sixth to the butter fat.

It will be expected that persons entering herds for the Home Dairy Test will entertain the agent while making the test, free of charge, and give him every facility for carrying on the test.

> J. D. W. FRENCH, No. Andover, Mass., C. M. WINSLOW, Sec'y, Brandon, Vt., Committee on Dairy Tests.

NAMES OF CONTESTANTS.

In response to the above circular we received entries by the following breeders:

- L. S. Drew, South Burlington, Vt.
- L. C. Spalding & Son, Poultney, Vt.
- C. M. Winslow & Son, Brandon, Vt.
- C. H. Hayes & Sons, Portsmouth, N. H.

Geo. H. Yeaton, Dover, N. H.

Oliver Smith, Chateaugay, N. Y.

Premiums were awarded on the result of the test as follows:

First Premium, \$50, to Geo. H. Yeaton. Second Premium, \$30, to L. S. Drew. Third Premium, \$20, to L. C. Spalding & Son.

SUMMARY OF TEST.

	Milk	Fat	Total Solids	Butter	Cos	t
Geo. H. Yeaton,	1723.70	3.92	12.25	78 30	173/4	ets.
L. S. Drew,	1639.60	3.79	13 03	72.69	10½	4.4
L. C. Spalding & Son,	144850	3.46	12.36	58.55	10	
C. H. Hayes & Sons,	1274.50	3.78	12.22	55.90	$14\frac{1}{4}$	4.6
C. M. Winslow & Son,	1397.	3 33	12.03	53.86	$10\frac{1}{3}$	"
Oliver Smith,	112290	3.56		48.19	81/4	

RECAPITULATION.

Herd of Geo. H. Yeaton, Dover, N. H.

I wish to enter the following herd of five cows for the prize offered by the Ayrshire Breeders' Association for the "Home Dairy Test."

Name	No.	Age	Weight	No. of calves	Date of birth of last calf	Date of last bull service since calving
Annie Bert,	9670	13	900	11	Mar. 30, '00	
Ouija,	11882	8	975	6	Apr. 10, '00	
Rayn,	12358	6	975	4	May 7, '00	
Miss Olga,	13984	4	950	2	Jan. 21, '00	Feb. 24, '00
Yuba Lass,	12353	7	950	6	May 14, '00	

The test was made in May while the cows were still in the stable, from the 19th to the 26th inclusive. Up to the 18th the cows were eating about 30 pounds of hay worth \$13 per ton; 4

pounds mixed feed, \$18 per ton; 4½ pounds gluten feed, \$19 per ton.

The grain ration was increased to about 8 pounds each of the mixed feed and gluten with the addition of 2 pounds of cotton seed, \$25 per ton, and 1½ pounds of ground oats, \$23 per ton.

GEO. H. YEATON.

NEW HAMPSHIRE COLLEGE OF AGRICULTURE AND THE MECHANIC ARTS.

AGRICULTURAL EXPERIMENT STATION.

Durham, N. H., Oct. 20, 1900.

Results of the Home Dairy Test with the herd of Geo. H. Yeaton, Rollinsford, N. H. Test made for the week of May 19 to 26, 1900. Samples taken by Mr. F. J. Durrell. Fats determined by Mr. C. H. Waterhouse. Solids determined and calculations made by Mr. H. A. Clark.

	Total milk		t. Per cent. total solids	Lbs. fat	Butter 1-6 add.
No. 3. Annie Bert,	356.	3,5	11.76	12.46	14.5
No. 4. Ouija,	377.7	3.5	11.95	13.23	15.4
No. 6. Rayn,	329.5	4.2	12.74	13.82	16.1
No. 9. Miss Olga,	333.5	4.3	12.36	14.34	16.7
No. 10. Yuba Lass,	3.27	4.1	12.41	13.41	15.6
	1723.7	392	12.25	67.26	78.3

FRED W. MORSE, Vice Director and Chemist.

Herd of L. S. Drew, South Burlington, Vt.

I wish to enter the following herd of five cows for the "Home Dairy Test" by the Ayrshire Breeders' Association:

						•
Name	No.	A ge	Weight	No. of calves	Date of birth of last calf	Date of last bull service since calving
Miss Ollie,	12039	7	1000	4	April 28.	Not served.
Nett 3d,	12647	7	1000	5	May 9.	4.6
Aunt Abbie,	13220	4	900	2	December 4.	
Printsteps 8tl	h,12643	7	950	5	April 25.	4.6
Lady Sears,	12641	7	1000	5	March 14.	"

I feed to each cow a day: 8 quarts No. 1 feed, corn and oats equal, 2 quarts gluten meal.

1 quart No. 1 feed weighs	1 ½ pounds.
1 quart gluten meal weighs	
No. 1 feed costs per ton	\$20 00
Gluten meal costs per ton	\$25.00

Making cost of grain 15 cents a day for a cow. Pasture for one cow 8 cents per day. Total 23 cents per day.

L. S. DREW.

UNIVERSITY OF VERMONT AND STATE AGRICULTURAL COLLEGE

AGRICULTURAL EXPERIMENT STATION.

Burlington, Vt.

Cow		cent. tal solids		Lbs. total solids	Lbs butter fat	Butter fat plus 1-6
Miss Ollie,	$364\frac{1}{4}$	$13 \ 53$	4 20	49.28	15.30	17.85
Nett 3d,	370%	13.22	3.80	49.03	14.09	16.44
Aunt Abbie,	278%	13.60	4.06	37.91	11.31	13.19
Printsteps 8th,	$321\frac{5}{8}$	12.57	3.40	40.43	10.94	12.76
*Lady Sears,	$304\frac{1}{4}$	12.25	3.51	37.27	10.67	12.45
	1.0005/					
	1639%	13.03	3.79			72.69

*Ladv Sears was tested March 25-31, 1900, the others May 24-30, 1900.

Correct. JOSEPH L. HILLS, Director.

Herd of L. C. Spalding & Son, Poultney, Vt.

I wish to enter the following herd of five cows for the "Home Dairy Test" by the Ayrshire Breeders' Association:

			No. of		Date of last bull service
Name	No. Age	Weigh	tcalves	last calf	since calving
Troy Girl,	12559 7	900		May 29, 1900	. Not
Lillian Drummond	, 9403 15	950	12	May 9, 1900.	served at
Brownie Douglas,	11825 9	900	7 P	May 21, 1900	. time
Rose Drummond,	10173 11	950	7	May 20, 1900	. of
*Nonpariel Mvra,	14707 .5		4	Dec. 6, 1900.	test.

*Tested in January, 1901.

The cows had pasture and 10 pounds of grain a day. Bran and corn (ears) and oats ground, 7 pounds; cotton seed meal, 1½ pounds; oil meal, 1½ pounds. (Bran cost \$16.25 a ton, corn and oats \$20.00, cotton seed and oil meal \$25.00, pasture 40 cents a week.) After calving and up to the commencement of test they had pasture and an increasing grain ration until the test. Butter sold in the local market for 22 cents in June. The weights given were about 3 weeks before calving. The test was lowered by three of the cows being in heat during the test.

L. C. SPALDING & SON.

January 12, 1901.

UNIVERSITY OF VERMONT AND STATE AGRICULTURAL COLLEGE.

AGRICULTURAL EXPERIMENT STATION.

June 12-18, 1900.

Name .	Pounds milk	er cent. total solids	Per cent butter fat	Lbs. total solids	Lbs. butter fat	Butter fat plus 1-6
Nonpariel Myra,	336	12.80	3.66	43.01	12.28	14.34
Brownie Douglas,	$263\frac{3}{4}$	13.00	3.77	34.29	9.94	11.60
Lillian Drummond,	275	11.89	3.27	32.70	8.99	10.49
Trov Girl,	276	12.09	3.23	33.37	8.92	10.41
Rose Drummond,	$297\frac{3}{4}$	12.04	3.37	35.85	10.04	11.71
-						
	$1448\frac{1}{2}$	12.36	3.46		50.17	58.55

JOSEPH L. HILLS, Director.

Herd of C. H. Hayes & Sons, Portsmouth, N. H.

I wish to enter the following herd of five cows for the "Home Dairy Test" by the Ayrshire Breeders' Association:

Name	No.	Age	Weight	No. of calves	Date of birth of last calf	Date of last bull service since calving
Lady Murcia	, 11111	10	1000	8	May 14.	Not served.
Cheolynne,	12325	7	900	5	May 30.	"
Dartwood,	13324	7	1200	5	June 2.	"
Briarwood,	11434	9	1200	8	March 9.	"
Hersa,	11204	9	800	7	March 20.	

These cows were in pasture feed.

Cost of pasturage per cow for one week, 75 cts.,.......\$3.75 Cost of brewers' grains per cow for one week, 21 cts., 1.05 Cost of mixed grains per cow for one week, 63 cts.,... 3.15

Total,.....\$7.95

The mixed feed consisted of cotton seed, gluten, shorts, linseed, mixed feed, meal. This mixed with brewers' grains and fed morning and night.

C. H. HAYES & SONS.

Jan. 12, 1901.

NEW HAMPSHIRE COLLEGE OF AGRICULTURAL AND THE MECHANIC ARTS.

AGRICULTURAL EXPERIMENT STATION.

Durham, N. H., October 20, 1900.

Results of the Home Dairy Test with the herd of Chas. H. Hayes & Sons, Portsmouth, N. H. Test made during the week of

June 18-25, 1900. Samples taken and analyses and calculations made by Mr. R. H. Shaw.

Name	Total milk	Per cent. fat	Per cent. total solids	Lbs. fat	Butter
Lady Murcia,	299.5	3.7	12.22	11.08	12.9
Cheolynne,	265.	3.6	11.94	9.54	11.1
Briarwood,	217.	4.2	12.53	9.11	10.6
Hersa,	248.	3.6	11.93	8.92	10.4
Dartwood,	245.	3.8	12.48	9.31	10.9
9					
	1274.5	3.78	12.22	47.96	55.9

FRED W. MORSE,

Vice-Director and Chemist.

Herd of C. M. Winslow & Son, Brandon, Vt.

I wish to enter the following herd of five cows for the "Home Dairy Test" by the Ayrshire Breeders' Association:

			Estima- t-d	of	Date of birth of	
Name	No.	Age	weight	calves	last calf	since calving
Rose Clenna,	11153	7	1100	5	March 9, '00). Not
Acelista,	12094	5	1000	3	March 5, '00). served
Hessler,	11765	8	1100		April 16, '00	. when
Rose Sultana,	12072	6	1000	4	June 22, '00.	tes-
lola Lorne,	12773	5	1050	3	July 21, '00.	ted.

The first three cows were tested in May, the other two in September. The cows were driven 1¼ miles to pasture. Cost of pasture 50 cents per week per cow. They also had a feed of 4 pounds of bran each and cotton seed meal, oil meal and gluten meal, mixed and fed one pound of the mixture each.

UNIVERSITY OF VERMONT AND STATE AGRICULTURAL COLLEGE.

AGRICULTURAL EXPERIMENT STATION.

Name	Total milk		Per cent. total solids	Lbs. fat	Butter
Rose Clenna,	298	3.53	12.73	10.52	12.27
Acelista,	276	3.33	12.05	9.19	10.72
Hessler,	$312\frac{1}{2}$	2.93	11.32	9.16	10.69
Rose Sultana,	282	3.07	11.63	8.66	10.10
Iola Lorne,	$228\frac{1}{2}$	3.78	12.43	8.64	10.08
	1397	3.33	12.03	46.17	53.86

JOSEPH L. HILLS, Director.

Herd of Oliver Smith, Chateaugay, N. Y.

I wish to enter the following herd of five cows for the "Home Dairy Test" by the Ayrshire Breeders' Association:

Name	No. Ag	e Weigh	No. of tcalves		Date of last bull service since calving
Janett,	15878 5	900	3	Feb. 24, '00	June 30.
Mabel D.	15874 5	1000	3	Apr. 12, '00	May 4.
Miss Mary 2d,	11326 12	1050	9	Feb. 17, '00	May 2.
Myrtle Beppo,	15396 7	1120	4	Mar. 19, '00	May 3.
Mamie 5th,	$15880 ext{ } 4$	925	2	May 11, '00	July 5.

Besides pasture there was consumed 63 pounds of mixed grain, consisting of bran, 28 pounds; gluten feed, 2 pounds; gluten meal, 2 pounds; oats, 13 pounds; and barley, 18 pounds. Each cow received the amount of 9 pounds per day. The pasture did not afford extra good feed as it was rather dry here at that time. Bran was worth \$18.00 per ton, gluten feed and meal \$21.00, and barley and oats, \$20.00. The market value of the ration for the week would therefore be 61 cents for each cow, and the pasture would be about 18 cents, making a total of 79 cents. Local price of butter, 22 cents.

OLIVER SMITH.

January 3, 1901.

CORNELL UNIVERSITY

AGRICULTURAL EXPERIMENT STATION.

Name	No.	Lbs. milk	Per cent. fat	Lbs. fat	Butter
Mamie 5th,	15880	233.3	3.8	8.918	10.40
Myrtle Beppo,	15396	242.8	3.6	8.87	10.35
Miss Mary 2d,	11326	229.6	3.6	8.366	9.76
Mabel D,	15874	211.4	3.4	7.263	9.47
Janett,	15878	205.8	3.4	7.041	8.21
		1122.9	3.56	40.465	48.19

Test made by Leo H. West.

H. H. WING, Prof. Dairy Husbandry.

There was no test made for total solids.

C. M. WINSLOW.

THE SECRETARY—Your Executive Committee this morning in consultation decided to recommend to the Association to drop the fair-ground test and to try the home dairy test for one year on this general basis,

which has not been exactly formulated but which I will state verbally in crude form. This test shall be for a year, beginning with some month and ending with that month in the following year, uniform for twelve months: allowing the owner of the cows to enter ten cows designated which shall be tested and from which, at the end of the year, he may select five as his herd in competition. He shall weigh the milk night and morning and set it down through the whole year from each of the ten cows; he shall the first of every month take a sample of the night's milk and a sample of the morning's milk and send it to the experiment station of his state for a test of butter fat and total solids, the same as we have here. At any time during the year the Association committee who shall be appointed to look after this matter shall send someone to this man's stable, unknown to him as to the time of coming, to see his cows milked night and morning, take a sample of it and send it to the experiment station to be tested as a check on the contestant's test, and at the end of the year the result of these samples taken through the year (that is, provided there is no great discrepancy between the tests sent by himself and those taken by the agent of the committee) shall be taken as a basis to reckon the amount of butter and milk for the year and the total solids, and the award shall be taken from that. We spent last year \$100 for the home dairy test, \$50 for the fair-ground test, and about \$60 for the testing. Provided we should offer \$75 for the first prize, \$50 for the second and \$25 for the third, we could keep within about our usual expenditure, and it was thought in discussion this morning that this would give us some valuable statistics other than what we have today. We have the two days' test, the seven days' test and the fair-ground test. The fairground test I consider of no especial value, but the

seven days' test is of value, and if we had a year test I think we might get some valuable statistics. This is substantially what the Guernsey men are doing. I have not drafted this, but that was the way it was talked of this morning and it was left for discussion at this meeting.

I think, Mr. Chairman, this concludes the Secretary's report.

THE PRESIDENT—Gentlemen, you understand Mr. Winslow's remarks. They are open for discussion. Anyone who has anything to say will please say it.

MR. MAGIE—Mr. Chairman, I would move the adoption of this plan as outlined by Mr. Winslow in order that it may be brought before the meeting.

THE PRESIDENT—Do you hear that motion? (To the secretary) As I understand it, that is for twelve consecutive months.

THE SECRETARY—Yes.

THE PRESIDENT—With all the cows?

THE SECRETARY—Yes.

DR. TURNBULL—Mr. Chairman, there will be a great many questions which will come up in regard to this matter and I move that a committee of three be appointed by the chair to draw up rules which shall govern this test.

THE SECRETARY—I would like to amend the Doctor's motion by appointing a committee to draft rules and regulations and have charge of the home dairy test. Will you accept this amendment?

DR. TURNBULL—I will.

THE PRESIDENT—Well, gentlemen, you hear Dr. Turnbull's motion. If that be your mind, make it manifest by saying aye.

(Unanimously adopted.)

THE PRESIDENT—I will name as members of that committee, Messrs. C. M. Winslow, Thomas Turnbull Jr., and John W. Scott.

The following resolution was here presented by Mr. Wells: Resolved, that the Executive Committee be and are hereby authorized to invite the members of the Association present at the next meeting to dine together at the expense of the Association.

(Unanimously adopted.)

NEW MEMBERS.

THE PRESIDENT—There is opportunity for presenting names for membership to the Association.

THE SECRETARY—Mr. Chairman, I present the name of John P. Buckley, Stroudewater, Maine.

Mr. Piper—I would like to present the names of George S. Stone, Ayer, Mass., and F. C. Pierce, Concord Junction, Mass.

MR. CONVERSE—I would present the name of W. P. Schanck, Avon, N. Y.

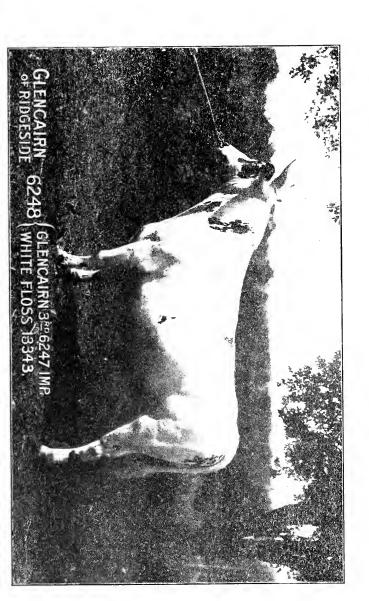
The Secretary—I move that these men become members upon payment of the membership fee.

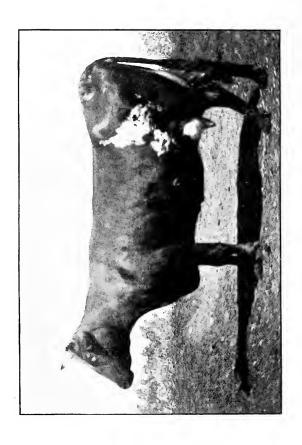
(Unanimously adopted.)

THE SECRETARY—Mr. Chairman, your secretary has frequently received letters from various state library associations, experiment stations and the like, requesting the donation of a set of herd books. I have here a letter which I received a day or two ago which is a fair sample.

(Letter is here read.)

He desires the herd books of the Ayrshire Breeders' Association up to date and future issues. I am glad this matter came up because it will bring before the Association those questions which have troubled Mr. Smith and myself, as to whether we should present





books in full to the different agricultural college libraries and other agricultural institutions throughout the country. This is a matter of a good deal of importance. If we present to one, we should present to another, and it might take a good many sets of books. Some institutions pay for them—I think we have a few who have paid—but the majority want them presented.

MR. WELLS—I think, Mr. Chairman, very few sets could be made fuil, because Volume I a few years ago was nearly out. We advertised, I think, for this volume and we bought all we could get hold of. I doubt very much if we could make up ten sets, Volume I included.

THE TREASURER—Mrs. Smith spoke of this at one time, but thought Mr. Smith found a few volumes at Mr. Joseph Brown's place, how many I do not know, but very few without doubt.

Dr. Turnbull-I think the treasurer's office should have and keep at least five complete sets of the Record. As Mr. Wells has said, these sets will be wanted by a breeder. Probably they could now be bought, but later on these books will command double their present value and the Association might just as well benefit by that as anyone else. I know of an association where they have only one complete set of their transactions today—that is, belonging to the association; of course, the various members have their complete sets. But there are a number of libraries and a number of individuals who would pay four or five times the actual value of those simply to acquire them for their libraries. So I would like to make a motion that five entire sets should be kept by the treasurer. If that is done, we can then consider the question of disposing of the rest.

THE TREASURER—I notice by a little record here that I sold two complete sets this year to breeders. In the future, should I find that the complete sets are limited, do you want those five sets reserved?

THE SECRETARY—I would like to make an amendment to Dr. Turnbull's motion, that the five sets should not be held to the exclusion of those wanted by members.

DR. TURNBULL—That is understood. The treasurer can sell any on hand to members, but not give them away. I would also suggest that the executive committee consider what price should be asked for them, as they are increasing in value all the time.

(Dr. Turnbull's resolution was unanimously adopted.)

TREASURER'S REPORT.

STATEMENT OF TREASURER'S ACCOUNT FOR	1900.
Balance received from Mrs. H. E. Smith,	Ø1 E0 .00
Stationery, \$ 5 15 Postage and freight, 6 10	\$159 93
Deposited in bank, 125 00	136 25
Balance on hand January 1, 1901,	\$23 68
Balance bank book January 1, 1900\$3493 60 Dividend May 1, 1900	
Dividend November 1, 1900, 71 26	
\$ Deposited November 1, 1900,	125 00
Balance of bank book January 1, 1901	3759 72 23 68
Total funds in Treasurer's hands,	83783 40 427 96
9	84211 -36

AVRSHIRE BREEDERS' ASSOCIATION

то	C.	Μ.	Winslow,	SECRETARY,	Dr.
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By amount on hand,		\$	523	82
Entries and transfers,			1369	70
Herd books sold,			27	00
New members,			250	00
Milk records sold			6	00
To postage,	\$ 61	75		
Express,	4	75		
Half tone plates,	36	62		
Telegrams,	1	12		
Twine,		50		
Stenographer,	16	75		
Argus Co., Vol. XII,	489	80		
Brandon Publishing Co.,	225	75		
Home dairy prizes,	100	00		
Experiment Station, testing,	64	05		
Fair test prizes,	65	00		
Salarv,	500	00		
Travelling expenses,	182	47		
	\$1748	56		
Cash on hand,	427	96		

\$2176 52 \$2176 52

e =00 co

We have examined the above accounts of the Treasurer and Secretary and find them correct with vouchers attached.

S. M. WELLS, Auditors J. O. MAGIE,

Boston, Mass., January 16, 1901.

(Unanimously adopted.)

The Secretary then read a lengthy letter from Mr. D. E. Howatt, and said:

I think there is one suggestion of particular value. I think if our Association would authorize the secretary to advertise our year books it would bring in a good many requests for that book and would really scatter them and do a great deal of good at a small cost.

MR. CONVERSE—Mr. Chairman, I have listened with a good deal of interest to this letter; I am person-

ally acquainted with the writer. He has been two years now manager for Mr. Emery; he is able to do anything he wants to do as far as money is concerned. When he went there Mr. Emery had quite a little herd of Jerseys, but they had gone into such condition that they were valueless, and Mr. Howatt said, "What can be done with these cows? They are worthless here; besides, they are diseased and their milk is unfit for use." "Why," he says, "do what you want to do with them. You are running that part of it. I do not know anything about a cow.'' The result was he sold them and got rid of them at any price. Mr. Emery then asked him what he wanted to do. Mr. Howatt is a Scotchman—dyed in the wool and a yard wide. swears by the Ayrshire. He said, "I would like to go out and buy five or six top-notchers which will be a credit to the owners." Mr. Howatt informed Mr. Emery that these would cost from \$300 to \$500 apiece. He advertised in the "Country Gentleman," saying he wanted to buy five or six of the best Ayrshires in the market. He came and looked us over, got a price on some of our good cows; then he sent to his brother, the manager of Briar Cliff Farm, who is a Scotchman, and, as this man says, he thinks he is the best judge of Avrshires he ever saw. They finally came up and spent a day and they bought every heifer on the premises—every heifer from four months to fifteen. When they got through he said, "I presume you think it queer we do not buy any age cows. If I buy three or four of your age cows they will cost something, but if I buy the whole lot of your heifers, we will get some topnotchers when they come to mature." I think that man is heart and hand with any man who is interested in Ayrshires. I had the pleasure of presenting his name, as well as that of Mr. Emery, for membership to

the Association. While Mr. Emery was unable to get away, Mr. Howatt said he would be here if it were possible. He has an idea we are a little too slow.

THE SECRETARY—I have a letter from Mrs. Young of Sterling, Ct.,—a little indirect business. She is the widow of the late James Young, who died recently. She has a herd of cattle she would like to sell on account of her husband's death. If anybody wants any they might correspond with her. I do not know anything about the cattle.

I have a letter from Mr. MacCallum of Danville, Que. He says he is going to Scotland in a few months and would like to bring over any Ayrshires our members might want.

THE SECRETARY—We have with us today Mr. F. A. Converse, superintendent of live stock, dairy and agricultural products at the Pan-American Exposition, to be held in Buffalo this season. He has a plan for a model dairy, in reference to which he would like to interest this Association, and I would suggest, Mr. President, that he be invited to speak.

THE PRESIDENT—Mr. Converse, will you favor us with some of your information?

MR. CONVERSE—Mr. Chairman and Gentlemen: I want to say that within the last three months I have visited something like eight cattle breeders' associations for the purpose of laying before them this matter of stock exhibit at the Pan-American fair at Buffalo. I find as a whole the stockmen are interested in this proposition, because they believe, with the present condition of the stock industry, the outlook for the stock industry in the immediate future at the Pan-American Expositon presents to them a proposition that certainly should be entertained by every man who is a live stock breeder or a breeder of thoroughbreds.

I want to say our purpose is to recognize every breeder. We are putting up good money for all kinds of live stock clear down through the category. Now, in order that a man may be more interested who belongs to certain associations or who is breeding a certain line of animals, we are asking the co-operation of those associations, and in most instances such associations are duplicating the prizes offered by the Pan-American, which amount to something like \$700. One association offers to put up \$2,000, another only puts up 50 per cent. of that money.

There is no class of foreign animals and no kind of cattle I am interested in so much as the Ayrshires. If that was not so, I would not be here today, because I ought not to be away from my office an hour at this time. But I must tell you, friends, we are not, as Ayrshire men, living up to our possibilities and getting what we ought to get out of it. Now, as I look at it, the reason is simply this: In the first place, every man who makes an investment wants to know what he is going to get out of it, hence, that man don't care so much about the pedigree of a cow, but he wants to know what she can do.

In reference to putting cattle in this dairy exhibit, I asked Mr. Winslow how many can be picked up in the Ayrshire Association and he said, "We have four men who keep records and can tell what they are doing. Now, in all seriousness, I believe that is a dreadful mistake. When we go to sell a cow, it is not as it was a few years ago,—that if one can trace up the importation he will buy it. He wants to know what she can do, and, as a rule, the members of this Association do not know. In view of that fact, we have had a good deal of discussion here today along the line of tests with reference to bringing out just this

thing. I believe the Pan-American Exposition presents the best opportunity to the breeders of anything that has come up in the last twenty-five years. I believe that the men are coming here to become purchasers of live stock rather than going to Europe where they have been buying in the past. We get letters in our office every day wanting to know where they can find this, that and the other thing. Now then, friends, that one proposition to the Ayrshire men of this country, I believe, means more than we can gain in ten years in any other way,—by putting before those prospective purchasers what we have to offer. Hence, I ask that this matter may be taken up at the proper time and the question be put to this Association whether they will co-operate with the Exposition Company, and if so, to what extent in the way of prizes in cash or medals or a cup or in anything they may see fit to do. What we want is to find out the performance of the animals with a view to getting more out of them than we are getting at the present time. That is what we are all after. You people all know how this Exposition tried to have the test in the beginning and the trouble we had with two of the dairy breeds in this country. My proposition in the beginning was to run a dairy the entire Exposition, beginning May 1st and ending December 1st, putting the animals in a stable that should be sanitary, built in every particular just as nearly as could be for their comfort, under the best possible conditions, and at the same time not have it so expensive but what it would be within the reach of every association. I agree with the Secretary that a test of two, or even seven, days is of no consequence. I beleive we would here have something of an educational value that would help every dairy.

After this test fell through, I took up this other

proposition and I am happy to say that the majority of the breeders of the ten breeds of cattle that lay claim to distinction think favorably of it. All we ask of your Association is to send your animals to Buffalo and let us run them along through the six months.

THE PRESIDENT—Let me ask you how many will be sent of the Holsteins, the Jerseys and other breeds?

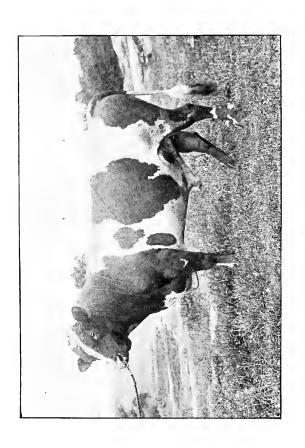
MR. CONVERSE—They are all going to send five apiece with the exception of the Holsteins and Jerseys; they have asked the privilege, at their own expense, to put in ten or fifteen. These are to come from all over the country, every city in the Union, and from Canada.

Now then, I find some associations, for instance, the Red Poll Association—they say, "We have only \$3,000 or \$4,000 in the treasury and we are not able to buy those animals and put them out there." They come there owned by individuals rather than by the association. Back of those cows will be a placard showing that man's name, the pedigree of the animal and her performance during the week, from week to week. It seems to me that ought to appeal to every man who has a reasonably good cow. There are one or two other associations following out that line of work, but the majority of them are following it as an association and the individuals will not be recognized except through the association.

With regard to the rules, what we shall have to do is this: The first three months of this experiment we shall allow the men, that is the representatives of the associations, to feed their animals just as they please. The following three months we will put them on a uniform basis, making such changes as may be necessary from time to time, but when they are made they will be made on the entire dairy.

Now I simply ask that you take this thing up and





if it is possible, and I know it is, to have these cows sent up tor this purpose. I have gone over this thing in a rambling way, but if there are any questions you would like to ask I will answer them if I can. If I cannot, I will tell you so. I thank you for this opportunity of addressing you.

THE PRESIDENT—Mr. Converse, as I understand it, you wish the exhibitors, whoever they are, of each breed of cattle, to send the stock there at their own expense and take them away at their own expense.

MR. Converse—The Exposition Company pays all the expenses save the expense of collecting the animals.

THE PRESIDENT—If they die it is a loss to the owner.

Mr. Converse—Yes sir, a loss to the owner or the association furnishing them. That seems to be the feeling of a great many men—that it is going to be run along the line of an experiment station feeding problem. That is not true. We are going to house them and feed them just as well as we know how. In regard to changing the ration, that will be changed possibly starting with a ration of 1 to 5, 1 to 5 1-2 and increasing it to 1 to 6, simply broadening it or narrowing it, to see what the breeds do under these conditions.

THE PRESIDENT—Let me ask you again, Mr. Converse, who selects the man who takes charge of the stock?

Mr. Converse—The Exposition company. I think I am not betraying any secret when I say that man is Mr. Edward Van Alstein, a splendid dairyman, and a man who nobody thinks is dishonest.

THE PRESIDENT—He don't see to the Ayrshires only. He has charge of other herds.

MR. CONVERSE—All of them.

THE PRESIDENT—Then, in short, he is the general superintendent.

MR. CONVERSE—Yes, everything is under his charge; of course he will have six or seven men under him.

THE PRESIDENT—What do I understand they would feed them the last three months?

MR. CONVERSE—With first quality of ensilage and all kinds of grain rations, but the associations demand—one or two of them—that they have the right to dictate or feed the animals themselves. We are going to let them do that the first three months and the last three months put them on a uniform ration.

THE SECRETARY—Why don't you make a division in your report. Report the first three months as what the breed can do and report the last three months as experiment station work.

MR. CONVERSE—It will hardly be experiment station work. I expect it will be done as you suggest.

THE SECRETARY—Of course, each representative will see that the animals from his association have the most useful feed to make the best result. The next three months they feed to show what result different foods will give.

MR. CONVERSE—No sir. The idea is to make those cows stand up and do the last three months as well as they do the first three months, because we think many of the associations are wrong.

DR. TURNBULL—I would move you that the president and secretary be authorized to obtain, if possible, suitable cows for the Model Dairy, and if such cows can be found, and the owners are willing to loan them to the Association, that we appropriate \$500 to defray the expenses of the same. I make this motion to bring it before the meeting for discussion.

I would like to ask Mr. Winslow, in the first place, in answer to those letters he sent out asking members to contribute towards the other test, how much would be donated for that work?

THE SECRETARY—As I remember it now, Dr. Turnbull subscribed, I think Mr. Drew subscribed, and I think I said I would give; I think, too, Mr. Fletcher, of Greenfield, N. H., agreed to subscribe, and I believe those are the only ones. There was less than \$100 subscribed.

THE PRESIDENT—I think this matter ought to be discussed

DR. TURNBULL—It seems to me this is an opportunity we should grasp. We have very few Ayrshire breeders who are keeping records. In England, the Ayrshire compares very favorably with the other breeds, but we have very few authentic records in this country. We have only five or six men, possibly less, who are keeping records and if they are keeping them they are not publishing them. The public doesn't know what is being done. Here is an opportunity to find out what the Ayrshire breed can do in a public test, a test extending over such a period that outside conditions, such as moving the animal and conditions which we find in a regular fair test, will not affect the result. The only way we can find out just what our animals can do at the present time is to have this six months' test made. It may cost us a little money, but I think it will be one of the cheapest and best things we can do.

THE SECRETARY here mentioned the fact that Mr. Yeaton had five cows, Mr. Drew two and possibly three, and Mr. Spalding one that might be entered if they were going to calve at the right time.

Continuing, he said:

I believe with Dr. Turnbull that it is a very

important thing for the Ayrshire interests to put our cows where they can be tested, provided we have the cows. I do not believe in Ayrshire men putting cows into that test that have never been tested. I do not believe in making that an experiment station test for the Ayrshire cows. We go in there against cows that have a record. The Jersey men and the Guernsey men have cows that have been recorded as producing large amounts; so have the Holstein men; and if we put cows there to compete with these record-breakers we want to put in such cows as we can reasonably expect will do the same, judging from what they have done. Here we have known to the Association some five or six cows which will give 14 pounds or over of butter in a week, official record, and these are all that I know of in the United States. Now, can we afford to put in cows that we do not know what they can do?

. We need a cow in the prime of life due to calve in March or April, in fine condition, accustomed to eating grain to some extent, a hearty cow and a great feeder, one whose appetite will make her eat everything that is placed before her and lick up the manger, and especially do we want a cow that is a heavy milker and that gives a high per cent. of butter-fat, and one that has been tested for at least a week. This does not call for cows for the show ring or for cows that will scale high. This does not call for a straight back or upright horns. No, it calls for a first-class dairy cow-not a lady cow but a working cow. I have no doubt but that there are many such, but we do not know where to look for them and I fear the owners themselves know but little more about which of their cows are of this kind than do we who have never seen them.

DR. TURNBULL—That is one reason I suggested that a committee be appointed to find out where these

cows were. It seems to me this is one of the severest criticisms which could be put upon this Association. With all the breeders and all the animals, we have to get up here today and admit that we do not know where we can get five cows that can be recorded.

THE PRESIDENT—Do you keep a record?

DR. TURNBULL—For two years I kept a record and knew what every cow was doing.

THE PRESIDENT—What have you got for last year that you can put in?

Dr. Turnbull—If I had personal control of my herd I would know just what they were doing.

THE PRESIDENT—That's just it. I do not want you to think, gentlemen, I am discouraging this thing at all, but I want to go prepared so that I may have something to show when I come home.

(Dr. Turnbull's motion was unanimously adopted.)

THE PRESIDENT—Mr. Fletcher, will you please read your report? Gentlemen, will you give your attention a moment?

MR. FLETCHER—Your committee, appointed to bring in resolutions on the death of Mr. French, feels that it has hardly had time to do the subject justice. It, however, begs to offer the following:

WHEREAS it has pleased Almighty God to remove from among us one of our oldest members, Mr. J. D. W. French,

RESOLVED: That in his death our Association has lost a staunch friend, who was always foremost in every good word and work for its benefit, and that it is an irreparable loss to this Association.

RESOLVED: That we tender our sympathy to the family of the deceased, and that a

copy of these resolutions be spread upon the records of this Association.

G. A. FLETCHER, OBADIAH BROWN, CHAS. H. HAYES.

(Unanimously adopted.)

THE PRESIDENT—Now, gentlemen, we will proceed to the election of officers. Will you prepare your votes? Now for the president.

(A motion was made that the secretary be authorized to cast a ballot for the election of Mr. Drew as president.)

(A ballot was cast by the secretary and Mr. Drew was unanimously elected.)

THE PRESIDENT—Gentleman, what can you expect when you find me so embarrassed? I will cut my speech short and simply say that I am much obliged to you for the confidence and respect shown for this office and I will try and not disgrace it.

Now, gentlemen, we require four vice-presidents. Will you please nominate them?

(List of vice-presidents read by the secretary.) (It was unanimously voted that the secretary cast one ballot for Obadiah Brown, Providence, R. I., H. R. C. Watson, New York, Thos. Turnbull, Jr., Alleghany, Pa., and John Stewart of Elburn, Ill., who were elected.)

THE PRESIDENT—Who will you have for your secretary?

(It was unanimously voted that the president should cast one ballot for C. M. Winslow, who was elected.)

THE PRESIDENT—Who will you have for your treasurer?

(It was unanimously voted that the secretary

should cast one ballot for Nicholas S. Winsor, who was elected.)

THE PRESIDENT—Who will you have for your executive committee? Mr. Magie and Mr. Wells go out this year and Mr. French is dead, so there are three vacancies.

(A motion was made that the Chair appoint a committee of three to fill the vacancies.)

MR. FLETCHER—The committee appointed to bring in the names of parties to fill the vacancies in the executive committee report the following: For three years, S. M. Wells and J. O. Magie; for one year, J. F. Converse.

(It was unanimously voted that the secretary cast one ballot for these gentlemen, who were elected.)

THE PRESIDENT—Now, gentlemen, will you come to order once more? Where will we have our next meeting?

A lively discussion ensued and it was finally voted upon and decided that the next meeting should be held at Providence, R. I.

THE SECRETARY—I move that the next meeting be held on the last Wednesday in January.

(Unanimously adopted.)

THE SECRETARY—I move you that Mr. F. A. Converse be appointed a special committee to represent the Ayrshire interest at the meeting in Buffalo to formulate rules for the model dairy at the Pan-American Exposition.

(Unanimously adopted.)

THE PRESIDENT—If there is no other business, gentlemen, we will adjourn.

(Adjourned.)

OFFICERS OF THE ASSOCIATION.

President.

L. S. DREW, South Burlington, Vt.

Vice-Presidents.

OBADIAH BROWN, H. R. C. WATSON, Providence, R. I. New York.

THOS. TURNBULL, JR., JOHN STEWART,
Alleghany, Pa. Elburn, Ill.

Secretary and Editor.

CHARLES M. WINSLOW, Brandon, Vt.

Treasurer.

NICHOLAS S. WINSOR, Greenville, R. I.

Executive Committee.

- J. ANDREW CASTERLINE, C. H. HAYES,
 Dover, N. J. Portsmouth, N. H.
- J. F. CONVERSE, JOHN W. SCOTT, Woodville, N. Y. Austin, Minn.
- S. M. WELLS, J. O. MAGIE,
 Wethersfield, Conn. Elizabeth, N. J.

MEMBERS OF THE ASSOCIATION.

Adams, A A	Garnet, Kansas.
Allan, Andrew	Montreal, P. Q.
Angell, Edwin G	Providence, R. I.
Arnold, George W	Warren, R. I.
Ayer, H S	Columbus, Pa.
Babcock, F M	Gouverneur, N. Y.
Bacon, P K	Campello, Mass.
Ball, A P	Derby Line, Vt.
Barney, C S	Milford, N. Y.
Barnes, N	Middle Hope, N. Y.
Beach, Frederick H	Dover, N. J.
Beatty, J P	Pataskala, Ohio.
Bell, George H	Rome, N. Y.
Bement, George	East Oakland, Cal.
Betts, Henry	Pittsfield, Ohio.
Birnie, Charles A	Long Meadow, Mass.
Blodgett, H W	Waukegan, Ill.
Blodgett, J W	East Saugus, Mass.
Boise, Enos W	Blandford, Mass.
Bowker, George H	Barre Plains, Mass.
Bowen, Edward S	Providence, R. I.
Boyer, R A	Catasauqua, Pa.
Boynton, C H	Lisbon, N. H.
Bradford, J H, Supt	Monson, Mass.
Brainerd, L	St. Albans, Vt.
Brayton, C N	South Wales, N. Y.
Brodie, Hugh	Rural Hill, N. Y.
Brown, Obadiah	Providence, R. I.
Brush & Rowley,	Northport, N. Y.
Burke, Joseph F	Morristown, N. J.
Burnett, John W	
Butterfield, Jerome F	
Buttrick, C A	-
Byrne, Christopher	Friendsville, Pa.

Calumet Woolen Co	Uxbridge, Mass.
Campbell, John S	New York Mills, N. Y.
Carr, Lewis	Providence, R. I.
Carrons, Robert M	Washington, Pa.
Cass, George L	McGraw, N. Y.
Casterline, J Andrew	
Cater, H F & Son,	=
Choate, Charles F	Southboro, Mass.
Clark, C W	Guymard, N. Y.
Clark, Franklin P	Sudbury, Mass.
Clark, N E	Potsdam, N. Y.
Clarkson, T S Jr	Potsdam, N. Y.
Cloud, James & Son	Kennett Square, Pa.
Cochran, M H	Compton, P. Q.
Cochran, T Allman	Baltimore, Md.
Coldren, J N	Iowa City, Iowa.
Connecticut Insane Asylum	Middletown, Conn.
Converse, J F	Woodville, N. Y.
Cook, Howard	Beloit, Ohio.
Cookingham, H W	Cherry Creek, N. Y.
Cooper, Albert	Java Village, N. Y.
Cornell, A M	Altus, Pa.
Cornell, F P	Sylvania, Pa.
Coutts, Peter	Mayfield, Cal.
Crane, Fred	Roselle, N. J.
Crane, John	Union, N. J.
Crane, J H & Sons	Toledo, Ohio.
Crayton, B F & Son	Anderson, S. C.
Crissey, Warren	Great Barrington, Mass.
Crozier, William	Nortliport, N. Y.
Curtis, L W	Globe Village, Mass.
Davidson, George	Fairfax, Que.
Davis, L D	Newport, R. I.
Dearborne, A J	
Delap, S N	Iola, Kan.

Doane, Franklin	Middletown, N. Y.
Doe, Charles C	
Dorne, Elmer J	
Drew, L S	
Drummond, James	•
Dunham, J L	Sharon, Conn.
Edes, Samuel	•
Emery, C G	
Ennis, Alfred A	
Fairweather, William	
Farley, F C	
Farrell, W E	Corey, Pa.
Fisher & May	St. Albans Hill, Vt.,
	and Potsdam, N. Y.
Fletcher, George A	Milton, Mass.
Fletcher, Etna J	Greenfield, N. H.
Fuller, C C	Nelson, Ohio.
Garvin, W R	Dover, N. H.
Gibb, John L	
Gold, T S	
Greene, B D	
Griffin, J H	Moira, N. Y.
Hall, Lott	Gouverneur, N. Y.
Ham, Eugene	Verbank, N. Y.
Hamilton Woolen Co	Southbridge, Mass.
Harrington, A D	Oxford, N. Y.
Harrington, H A	Worcester, Mass.
Harrison, Charles K	Pikesville, Md.
Haskins, J P & Son	
Hawes, Addison S	
Hawkes, E B	_
Hayes, Charles H	
Hayes, Charles S	
Hazard, Isaac	
Holt, Andy	Lyndeporo, N. H.

Brandon, Wis.
Exeter, N. H.
Northboro, Mass.
Petaluma, Cal.
St. Paul, Minn.
Charleston, S. C.
Providence, R. I.
Aldenville, Pa.
Clayton, N. Y.
Camden, N. Y.
Brunswick, Me.
120Broadway, NewYork.
Petite Cote, Que.
Boonville, N. Y.
Katonah, N. Y.
Vernon, N. Y.
Hartland, Wis.
Galesburgh, Ill.
Alfred, N. Y.
Billerica, Mass.
Juneau, Wis.
Mohegan, R. I.
New York.
Concord, N. H.
Morristown, N. J.
West Upton, Mass.
200 W .118—New York.
Putnam, Conn.
Groton, Mass.
Bridgewater, Mass.
Westbrook, Me.
Elizabeth, N. J.
Philadelphia, Pa.
Jobstown, N. J.
Elizabeth, N. J.

Magone, Daniel	Ogdensburgh, N. Y.
Mason, F H	Leon, Ohio.
Massey, D A	Asylum Station, Mass.
McCrea, Robert	Champlain, N. Y.
McFadden, George H	Bryn Mawr, Pa.
Merriam, Herbert	Weston, Mass.
Millard, L D	Taunton, Mass.
Miller, James	Pen Yan, N. Y.
Milliken, Charles R	Portland, Me.
Munce, R J	Washington, Pa.
Nichols, James H	5
Norton, W H	Allentown, N. Y.
Oliver, James	South Bend, Ind.
Oneida Community (Limited)	Kenway, N. Y.
Ormiston Bros	Cuba, N. Y.
Peck, Cassius	Burlington, Vt.
Peck, C L	Coudersport, Pa.
Peirce, F C	Concord Junction, Mass.
Perley, Charles	West Boxford, Mass.
Pierce, George H	Concord, Mass.
Pierce, W R	Middleborough, Mass.
Pike, Geo E	Gouverneur, N. Y.
Piper, Anson C	South Acton, Mass.
Pope, Rev G Stanley	Grand View, Texas.
Proctor, Fletcher D	Proctor, Vt.
Ramsdell, H S	Newburgh, N. Y.
Reed, Hammon	Lexington, Mass.
Reeve, C McC	Minneapolis, Minn.
Rhodes, TF	
Rhome, B C	(Etna, Texas.) Present
	residence unknown.
Robinson, Isaac R	Wakefield, R. I.
Roode, Joseph	Jewett City, Conn.
Russell, Henry G	Providence, R. I.
Sadler, Edward W	Mont Clair, N. J.

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Sage, Charles D	No. Brookfield, Mass.
Sanford, Charles	Orwell, Vt.
Scott, John W	Austin, Minn.
Schouten, E A	Cortland, N. Y.
Scribner, G S	Castleton, Vt.
Sears, B C	Blooming Grove, N. Y.
Sears, N E	Elmwood, Conn.
Seaver, Henry E	Canton, N. Y.
Sellers, William	Edge Moore, Del.
Sherman, Everett B	Harrisville, R. I.
Sherman, Leander	Harrisville, R. I.
Shimer, A S	Redington, Pa.
Shimer, B Luther	Bethlehem, Pa.
Smith, Daniel A	Tarkiln, R. I.
Smith, E A	Brandon, Vt.
Smith, J B	Walden, N. Y.
Smith, Oliver	Chateaugay, N. Y.
Smith, Peter D	Andover, Mass.
Spalding, L C	Poultney, Vt.
Spencer, A B	Goldwood, Ohio.
Stevens, Wm Stanford	St. Albans, Vt.
Stewart, John	Elburn, Ill.
Stewart, John Lorne	Island of Coll, Scotland
Stickney, William H	Brownfield, Me.
Stowell, L D	Black Creek, N. Y.
Stowits, H	Abilene, Kan.
Surget, James	Natchez, Miss.
Taber, George	East Aurora, N. Y.
Taylor, Alfred J	Worthington, Mass.
Taylor, John L	Owego, N. Y.
Thorp, John C	
Thurber, C S	
Tongue, Thomas H	
Topping, R R	
Tschudy, Fred	Monroe, Wis.

Tubbs, Ambie S	Mexico, N. Y.
Tucker, W G	Elm Valley, N. Y.
Turnbull, Thomas Jr	835 Western Ave.,
	Allegheny, Pa.
Turner, J C	Longview, Texas.
Tuttle, M A	Hornellsville, N. Y.
Tyler, Arthur F	Athol, Mass.
Underhill, C S	Glenham, N. Y.
Valentine, John R	Bryn Mawr, Pa.
Vaughn, William P	Providence, R. I.
Venable, A R Jr	Farmville, Va.
Verplank, Samuel	Fishkill-on-Hudson, N.Y.
Viner, William	Arden, N. Y.
Walker, William I	Great Barrington, Mass.
Watson, H R C	Brandon, Vt.
Weed, John W	Noroton, Conn.
Wells, Dudley	Wethersfield, Conn.
Wells, S M	Wethersfield, Conn.
Whitney, C P	Orleans, N. Y.
Whittingham, W R	Milburn, N.J.
Wilson, A J	Grafton, Ohio.
Winslow, C M	Brandon, Vt.
Winsor, Nicholas S	Greenville, R. I.
Winter, N H	Cortland, N. Y.
Wolcott, C W	Readville, Mass.
Wood, Lucius H	Cranston, R. I.
Yeaton, George H	
Young, Gilman P	Grafton, Mass

AYRSHIRE CATTLE.

C. M. WINSLOW.

The County of Ayr, in which the Ayrshire breed of cattle originated, is situated in the southwest of Scotland, backed by mountains on the east and washed by the ocean on the west, having the form of a crescent and embracing the Firth of Clyde in its circle. The face of the country is hilly and rises from the level of the sea to some 2,000 feet to the top of the mountains on the west.

The soil is strong and somewhat heavy, being a clay and clay-loam but thinner on the tops of the hills and mountains, the whole being originally covered with a dense growth of timber.

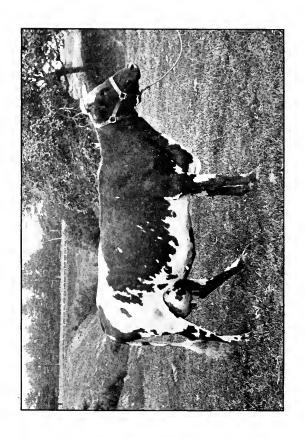
The climate is moist, with a temperature ranging from about 25° to 65° with a mean of about 47° regulated by its proximity to the sea, and with frequent rains which are favorable to the growth of grass and giving luxuriant pasturage, though sometimes it is swept by fierce coast storms.

The origin of the Ayrshire breed of cattle is veiled in some obscurity, but the earliest history speaks of the native wild cattle of the country as being white with red ears and black noses, high white horns with black tips, with an animal now and then having more of the brown, black or red, very wild and the bulls fierce, but when calves are taken young, grow up to be quiet and tame.

From the above it would seem a probable theory that the original white cattle of Scotland were the foundation of the Ayrshire.

This is the more reasonable when we consider the white color is the natural color of the Ayrshire and unless care is constantly exercised in selection for





coupling they will revert to white or more white than red.

The first we hear of any effort being made to improve the native stock of the country was about 1700 and this was said to have been accomplished by selection and better care.

About 1750, we read from Aitonthat Earl of Marchmont purchased from the Bishop of Durham, and carried to his seat in Berwickshire, several cows and a bull of the Teeswater or other English breed of a brown and white color.

He also writes that about 1770, bulls and cows of the Teeswater or Shorthorn breed were said to have been introduced by several proprietors, and it is from them and their crosses with the native stock that the present dairy breed has been formed.

In 1811, in "Survey of Ayrshire," Aiton writes that the Ayrshire dairy breed is "—in a great measure the native indigenous breed of the County of Ayr, improved in their size, shapes and qualities, chiefly by judicious selection, cross coupling, feeding and treatment for a long series of time and with much judgement and attention.

From about the beginning of the last century we find frequent mention of efforts for improvement in the shape of the body and especially in the shape of the udder.

Mention is made of a particular family of Ayrshires called the Swinley variety, obtained by infusion of the West Highland blood which produced cattle with a broader head, more upright horns, thicker hair and stronger constitutions. In 1853, the Ayrshire Agricultural Association established a scale of points as a guide to the breeder which differs in a few respects from ours in allowing "—the horns incline upwards and

curve slightly inwards"; "Teats 2 to 2 1-2 inches long"; "Colors preferred are brown or brown and white.

The Canadians claim that Ayrshires were very early brought into Canada on ships coming from Scotland being used for the supply of milk on the passage and sold at Quebec or Montreal on their arrival, and so popular did these become that shipmasters were frequently commanded to bring over one or more cows from Ayrshire.

More recently the importation of Ayrshires into Canada was constantly being made for breeding purposes by the Scotch farmers, and of late there have been a good many brought over by wealthy men of Montreal and other cities more particularly for competing against each other in the show ring, and with great rivalry.

The importation into the United States began in 1837 by an importation to Massachusetts and continued at intervals for about twenty or twenty-five years, with importations into various of the Eastern states, but, while they pleased their owners in easy keeping qualities, hardy constitution, perfect shaped udders and great milking capacity, they were very unsatisfactory milkers on account of their short teats, and they failed to obtain that strong foothold they had in Scotland and Canada where the women did the milking and preferred a small, short teat because they milked by stripping with the thumb and fore-finger, while in the United States the men did the milking and wanted a large, long teat they could grasp.

By reason of the short teats the importation into the United States gradually ceased and owners of Ayrshire cattle began by breeding and selection to try and lengthen the teats and at the same time retain their wonderful dairy quality and hardiness, which has been done and today the Ayrshires of the United States are undoubtedly the best dairy Ayrshires to be found in any of the three homes of the breed—Scotland, Canada or the States—and have uniformly the longest teats.

The Ayrshires of the United States are probably the purest bred Ayrshires to be found, for the importations were made direct from breeders in Scotland and the first account we have of a register being published for Ayrshire cattle was Volume I of the present series, published in 1863, which was revised in 1876 and now numbers seventeen volumes.

The requirement for eligibility to record in the Ayrshire Record is that each animal shall trace in an unbroken line in every branch to a reliable importation from Scotland and every effort possible is made to guard against mistakes from carelessness in keeping stable records.

The first Ayrshire Herd Book published in Scotland bears date of 1878 and the editor states in the preface that the first volume contains over 550 entries, but that he has encountered great difficulty in tracing pedigrees because names were rarely given to animals. Since then, up to 1898, there have been twenty-one volumes published.

At first, the old Scotch breeders were reluctant to join the Association and keep records of their cattle, saying there was no need of it, but the popularity of Herd Book cattle and increased demand for registered stock has brought most of them around.

The Toronto Ayrshire Herd Book was published in 1884 and the Montreal in 1886. In both these the requirements for eligibility were not very rigid and animals were sometimes recorded that were grades, but in 1899 the two registers were consolidated and

revised, claiming to reject all that could not trace to importation from Scotland, but they still record stock tracing to indefinite cows and bulls—but in doubt as to which.

While the Ayrshire scale of points in the main in Scotland, Canada and the States would call for about the same style of an Ayrshire, with the exception of a longer teat in the States' Ayrshires than in the other two, there is really quite a noticeable difference in the appearance of the different country Ayrshires as they are led into the ring for exhibition at fairs. The Scotch as a rule are nearly white in color, large upright horns, blocky build, a little inclined to the beefy type, rather thick skin, good shaped udder with short teats well spread, milk veins, holes, etc., of medium size.

The Ayrshires from the States that are usually led into the show ring are larger animals than the Scotch, red or red and white, small slim horns, many of them drooping or curling, soft mellow hide, large udders somewhat pendulous, long teats well spread, large milk veins, holes, etc., not always as straight on the back as the Scotch but looking more like a model dairy cow.

The Canadian bred cattle seem to be between the two extremes though so many have been imported into Canada of late that their show rings more resemble the Scotch.

The Ayrshire cow in general is a handsome sprightly-looking cow, of medium size, red and white—the proportion of red to the white being very variable, sometimes being nearly all red and sometimes nearly all white. Brown or brown and white is sometimes found.

She has a small bony head, large full eyes, dish face, broad muzzle, large mouth, slim upright horns, long slim neck, straight from top of head to top of shoulders, clean cut at throat, thin sloping shoulders

with the spine rising a little above the shoulder blades and wide between legs to give large lung capacity, back level to setting on of tail except a rise at the pelvic arch, broad across the loin, barrel deep and large with ribs well sprung to give large room for coarse fodder. Hips wide apart, rump long, hind legs straight, thighs thin, giving room for udder, legs short, bones firm and joints firm, udder large when full and nearly level with belly, wide, long and strongly hung, teats 2 1-2 to 3 1-2 inches long, of good size, placed wide apart on the four corners of the udder with udder level between them and not cut up, milk veins large and tortuous, entering the belly well forward toward the forelegs. Skin soft and mellow, covered with a thick growth of fine hair.

The standard Ayrshire cow is of medium size, weighing about 1000 pounds when fresh in milk, a tough, hardy cow with vigorous appetite and not too particular about what she eats. She is always hungry, eats greedily and chews her cud rapidly. It is rarely you can see an Ayrshire cow when not either taking in food or chewing what she has already gathered. While at pasture she does not wander around looking for sweet patches of grass but goes to work rapidly gathering what is most convenient either of grass or browse and when full lies down to chew her cud with no time wasted, and when going to and from the pasture will chew her cud as she walks and I have often seen her keep on chewing when started into a run.

She is a very healthy cow, rarely having ailments of body or udder, and you seldom see an Ayrshire cow but that has four healthy quarters and gives milk out of them of uniform quantity.

She is a very persistent milker, giving a uniform quantity well up towards calving and many of them

will not dry off unless extra care is taken to make them. She is very intelligent, quick to learn and of a retentive memory. Easily taught to take the same place in the stable and if her place is changed will in a few days take her new place of her own accord.

She is quiet and pleasant to milk, not easily disturbed and yields her milk as readily to one milker as to another and does not seem disturbed by any amount of noise in the stable.

As a dairy cow she is particularly adapted to the production of milk for the milkman and table use as her medium size, vigorous appetite and easy keeping qualities make her an economical producer, while her even, uniform production makes her a reliable supply and the richness of her milk in total solids places her milk above suspicion from city milk inspectors.

Her milk will bear unusual transportation and handling without souring and when poured back and forth a few times from one can to another will remix the cream and milk, which will not again readily separate, giving it a uniformity in quality until the last is sold or used. It has a good body and is rich looking, never looking blue.

The milk itself being evenly balanced with casein and butter-fat is a complete food, easily digested, nutritious and is particularly adapted for children and invalids. Stomachs that are weak and unable to digest other milk find no trouble with Ayrshire cows milk.

The Ayrshire being so superior for the milkman has usually found her way to the supply stable and has not been used to any great extent as a butter cow, but she is above the average as a butter producer and especially when the extra milk she gives is taken into account.

Her cream rises slowly and needs to be extracted

with a separator but it skims as closely and churns as easily as any other and cow for cow, taking all her other qualities into consideration, she will compare favorably with any of the so-called butter breeds in the amount of dollars she will return to her owner when kept as a butter cow.

The Association has of late been testing her butter qualities, the results of which will be given further along.

The Ayrshire cow has always been noted as a cheese cow, both for the superiority of the quality of her cheese and for its large quantity.

While she has never laid any claims to being a beef cow, the butchers are always glad to get hold of an Ayrshire because they cut up well and are heavy in the best paying parts. Heavy hind quarters, small bones, thick loins, meat nicely flecked with tallow and of good color.

Mr. F. S. Fulmer, of Gibbon, Nebraska. in a paper on ''The Ayrshire cow,'' read before the Nebraska Dairymans' Association, said:

"The fattening quality of Ayrshire grades is reported by Mr. J. A. Paterson of this state. He says: 'I am wintering on my farm seventy steers coming two years old. Among them are high grade Shorthorns. They will average 950 pounds but are thin in flesh. High grade Ayrshires that will average fully 900 and are fat enough for good beef. Polled Angus or Galloways, about the size of the Ayrshire steers are fat. Also a few Jersey steers that will average about 600 pounds and are poor. They are all fed together at stacks and about ten pounds of corn per day each." Mr. P. adds: "This feeding, I think, is a fair test and proves beyond a doubt that for common purpose cattle that will receive the care of the average western tarmer the Ayrshire or Polled Angus are by far the best."

An Ayrshire will always weigh more than its looks would indicate.

As a top cross on other breeds the Ayrshire seems to be a success in producing a more desirable dairy cow. With the Shorthorn they nick nicely, producing a fairly good dairy cow, in size between the two, and a handsome, attractive cow that sells well in the markets.

With the Jersey they seem to make up what is lacking in the Jersey and give a good all around dairy cow, larger and hardier than the pure bred Jersey, giving more milk and of nearly as rich quality, and are said to be more profitable in the dairy than the pure bred Jersey. Ayrshire bulls have for several years been eagerly sought for to cross on unregistered or high-grade Jerseys in the common dairy.

The following are the best of the milk and butter records that have been reported of private and official tests.

Private Tests for Butter for One Week and for One Month.

Name	No	Lbs. butter
Quess 2nd	3120	14.6 in seven days.
Rosa	3143	14.15 "
Bessie Bell 3d	4323	15.4 "
Tempie	3263	15.6 "
Juniper 4th	4578	17.11 "
Duchess of Smithfield	4256	19.6 "
Rose Cleon	11143	49.8 in Jan., 1897
Rose Electa	10336	57.8
Rose Sultana	12072	64.0 "
Rose Ladve	11158	78.4 "

Ayrshire Milk Records.

PRIVATE TEST.

The following are yields of milk that have been reported of 9000 pounds and over for 365 consecutive days:

•		-	
Name	No	Lb	s. milk
Sheba	11931		9043
Belle Hebron	13013		9084
Nancy B 2d	11936		9096
Clover Leaf 2d	12681		9142
Roxie	4498		9191
Yuba Lass	12353		9237
Rose Deruth	10346		9253

X	No.	T h	s. milk
Name			-
Lady Teazle	6579		9268
Rose Alta	9529		9307
Murrilla		•••••	9333
Betty Lightfoot	7498		9394
Clanwood	11103		9401
Acelista	12094		9407
Diannalynne	11109		9418
Olah		•••••	9490
Yucca			9496
Nett 3d			9538
Rose Sultana			9603
Annie Bert	9670		9613
Freda			9615
Comla			9620
Belle Temple	3353		9624
Roxanna 5th	4606		9671
Rose Erica			9893
Island Belle			9982
Biona			
Vinewood Queen			
Ethel Douglas 2d			
Queen of Ayr 3d	4464		
X̃oa	11469		10155
Rose Electa	10336		10207
Fernleaf	8397		10252
Rose Eola	8510		10323
Jennie Clyde			10344
Queen of Ayr 4th	4465		10426
Nellie Clyde	12723		10507
Queen of Ayr	1766		10632
Rose Deross			10645
Duchess of Smithfield	4256		10748
Ellen			10823
Queen of Ayr 6th	4881		10989
Meewe			11252
Lady Murcia	11111		11543
Queen of Avr 5th			
Manton Queen 4th			12162
Lukolela			
Lady Fox			
-			

Ayrshire Butter Records.

PRIVATE TEST.

There is a long list of records of 300 pounds and over but we have given only those reported as 400 and over:

Name	No.	Lbs. b	utter
Aunt Abbie	13220		402
Rose Clovis	12777		402
Queen Selga	9545		404
Rose Veritas	12076		405

Name	No	Lbs. b	utter
Olah	11471		412
Freda	11134		413
Biona	12383		413
Nancy B 2d	11936		414
Annie Bert	9670		417
Printsteps 2d	8410		418
Mexic	11131		419
Yuba Lass	12353		419
Rose Alta	9529		420
Rose Sultana	12072		421
Minnehaha 3d	12646		424
Ruth	4816		425
Nett 3d	12647		432
Sheba	11931		434
Acelista	12094		438
Clio Rose	7525		441
Yucca	11470		444
Miss Ollie	12039		446
Lovely	9596		448
Rose Clenna	11153		455
Rose Ladye			463
Rose Electa	10336		467
Iola Lorne	12773		474
Xoa			475
Miss Olga	13984		491
Rose Erica			504
Lukolela			543
Meewe			567
Rose Deross			572
Lady Fox	9669		624
Ayrshire	Milk I	Records.	

OFFICIAL TESTS

of the quantity of milk given in one year of 10,000 pounds and over:

Name	No.	Lbs. milk
Ruth	4816	 $10219\frac{1}{2}$
Queen Mary	6578	 11154
Myra	2955	 11908
Rena Myrtle	9530	 12172
Alice Douglas	4398	 12617

Ayrshire Butter Records.

OFFICIAL TEST

of pounds of butter for seven days.

Name	No.	Lbs.	butter
Rose Clenna	11153		12.27
Diannalynne	11109		12.44
Lady Sears	12641		12.45
Sadie Tascott	11483		12.56

Name	No.	Lbs. butter
Rose Allie	11154	12.67
Olah	11470	12.69
Cremona	11436	12.74
Miss Edna	13218	12.76
Printsteps 8th	12643	12.76
Hersa	11204	12.78
Rose Sultana	12072	12.86
Iona S	12350	13.02
Aunt Abbie	13220	13.19
Xoa	11469	13.78
Clem	11135	14.14
Nonpariel Myra	14707	14.34
Lady Murcia	11111	14.67
Ouija	11882	15.40
Yuba Lass	12353	15.60
Lady Fox	9669	16.08
Ryan	12358	16.10
Annie Bert	9670	16.31
Nett 3d	12647	
Miss Olga	13984	16.70
Miss Ollie	12039	17.85
Lukolela	12357	18.98

Ayrshire Butter Records.

OFFICIAL TESTS FOR ONE YEAR:

Name	No.	Lbs. b	utter
Atalanta	10777		314
Acme 5th	10342	***************************************	386
Nancy B	9581		416
Rena Myrtle			

Official Dairy Tests Between Ayrshires and Other Breeds.

At the New Hampshire Experiment Station, with four cows of each breed, the average results for a full year's test was as follows:

•	Ayrshire	Jersey	Holstein
Pounds of milk	5,845	4,847	5,971
Pounds of butter	267	$269\frac{1}{2}$	207
Per cent. of butter-fat	4.28	5.12	3.15
Cost of keeping	\$44.48	\$46.49	\$50.12
Pounds of milk to pounds of butter,	$21\frac{1}{2}$	18	29

At the British Dairy show in 1879, twelve samples of milk were tested representing seven different breeds and three crosses. One Ayrshire, three Jerseys, one Guernsey, one Kerry, one Dexter, one Brittany and two Dutch cows. Highest on the list ranked the

Ayrshire, showing the least water and most fat, followed in turn by the three Jerseys and the others in the order named above.

The Ayrshire gave 5½ per cent. butter fat, and the Dutch cows only 2¼ and 2½ per cent. butter fat.

At the same show in 1880, an Ayrshire in competition with eighteen other cows of noted breeds, yielded twenty-five pounds and two ounces of milk and in pure butter fat 6.82 per cent., and was only beaten by a Jersey with 7.78 per cent., which, however, only yielded for the day sixteen pounds of milk.

In the report of the New Jersey Experiment Station, experimenting for the most of the time with three cows of each of the following breeds, the average cost of food per quart of milk was: Ayrshire, 1.66 cents; Guernsey, 1.71 cents; Holstein F., 1.75 cents; Jersey, 1.91 cents; Shorthorn, 1.71 cents.

The following official test made at Brantford, Ont., between an equal number of Ayrshire and Jersey cows is a good illustration of the food value of the Ayrshire milk as compared with the Jersey. Notice that while the Jersey is higher than the Ayrshire in butter fat it is lower in solids not fat, also in total solids, so that while the Jersey would give a thicker cream or make more butter, it is not as rich in casein, and not as nutritious as a food. It is a settled fact that fat has no nutritive value, also that milk containing an excess of fat is more indigestible and causes serious disorders in the digestive organs of children and young calves.

Breed	Lbs. solids not fat	Lbs. fat	Total solids
4 Ayrshires,	21.608	8 847	30.455
4 Jerseys,	19.725.	10.680	30.405

In a milking contest at Bristol, Eng., 1887, under the direction of Dr. Voelker, an Ayrshire won, with 105.98 points over four competitors, one of which was a Guernsey.

Some comparative statements come to hand from Canada, at Ottawa, in 1888, in the milch cow competition between Ayrshires, Jerseys, Shorthorns and Grades; the Ayrshires won 1st, and at Quebec, an Ayrshire cow scored 98.95 and took 2d and 3d prizes, while the Jersey that took 1st scored but a trifle more.

At the Dairy test at the New England Fair at Old Orchard in 1900, open to all breeds or natives, for the largest quantity of milk and butter from a herd of five cows for one day the following was the result:

5 Holsteins gave	225¾ pounds	of milk.
5 Avrshires gave		"
5 Devons gave		44
5 Ayrshires gave	8.14 pounds of	butter.
5 Holsteins gave		6.6
5 Devons gave		

THE AYRSHIRE COW.

(This article is clipped from the American Dairyman. Author unknown.)

It has been said, and with much truth, that reputation is oft got without merit and lost without deserving. This applies most truly to the Ayrshire cow. This cow has been bred and reared for the dairy for more than a century with all the skill and perseverance possible by the most careful and expert breeders, and up to a very recent period possessed the highest reputation as the most profitable animal for this special use. As a milker and as producing excellent milk, and as free from the common proclivity to disease, and especially as a cheese producer, this cow has stood first among the dairy breeds. But that evanescent attribute of most things, popularity, has in late years forsaken this cow, and little is now said in

her favor. And this in spite of all justice and her special merit. The reason of it is quite apparent. There is not so much money for the professional breeders in this cow, and the others which are less numerous and of more recent introduction have been found more profitable to sell. The Jersey and the Dutch, or Holstein, have taken the priority in this respect, and have, by dint of profuse advertising and persevering puffing, been brought into notice to the seeming discredit of the Ayrshire. The Ayrshire, however, still holds a high place in a quiet way in the dairy, and will always do so, because of a distinct peculiarity of her milk. It is the best milk for cheese and for domestic use. And this depends upon her natural disposition and the character of her milk. Figure and form and color are not essential qualities in a cow that will fix the value permanently or for profitable use.

But yet no exception can be taken against the Avrshire on these accounts, for she is a handsome, well-formed animal and typical of a milker. She is a good feeder and by no means hard to suit in regard to pasture or ability to turn food into milk and butter. But it is as a milker and a producer of cheap and good milk that she is pre-eminent. Her milk is not as rich in fat as that of the Jersey or the Guernsey, but in this respect it is of more value for special purposes. The fat globules of Ayrshire milk are smaller than those of any other cow. And on this account the milk is better adapted for cheese and for family use than any other. The cream rises more slowly and is more intimately mixed with the milk, and is thus more easily taken into the system and turned into nutriment. As an infants' milk, for which there is a wide use, that of the Avrshire is preferable to any other, as it is more

nutritious and healthful. It more nearly approaches the natural mother's milk in this respect, and if the physicians knew the value of it in this peculiarity more generally, no other milk would be needed for this purpose. Some physicians who have made a study of milk for this use insist on the use of that from a fresh and healthy Ayrshire cow, and that some have taken the trouble to visit the dairy and select the cow whose milk is to be supplied to the family for the use of the infant. The fat in milk is the most important part of it for several reasons. It is the most particular constituent of it in the digestive process, and, as regards the proportion of fat and the more minute division of it in the milk, that of the Ayrshire most nearly approaches that of the human female than any other. Consequently, for domestic use it is the best and safest.

But it is also of the highest value for other purposes of the dairy. It stands first for the cheesemaker, because all the fat in it is retained in the curd, and the fat is fully sufficient for the best quality of cheese. The high quality of the Ayrshire cheeses has been proverbial for more than 100 years, and the Cheddar cheese, now made in England from the milk of the Ayrshire cows, stands the first in the market, of course excepting the fancy makes, which do not compete with it.

Some interesting tests have recently been made at the New York Experiment Station at Geneva, which go to show the value of this cow's milk, and the peculiarities above mentioned. And from the tables given in the published bulletin we gather the following figures:

72

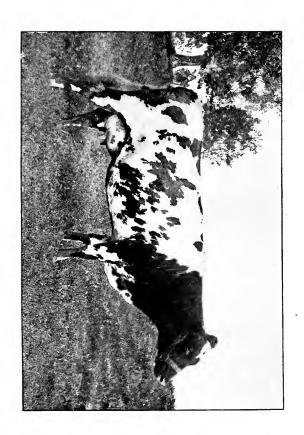
POUNDS OF FAT IN 100 POUNDS OF MILK.

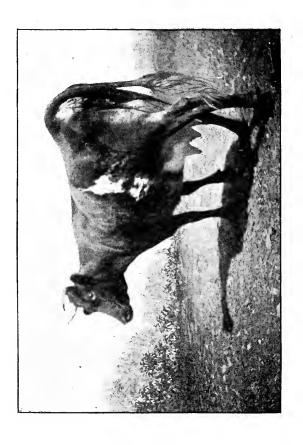
Month of					
milking	Ayrshire	Guernsey	Holderness	Holstein	Jersey
1	3.53	6.14	5.04	4.18	6.10
2	3.48	5.13	3.61	3.59	5.27
3	3.40	4.61	3.37	3.86	5.18
4	3.40	4.63	3.44	3.64	5.75
5	3.68	5.00	3.33	3.41	5.68
6	3.53	4.93	3.33	3.56	5.73
7	3.83		3.35	4.18	5.72
8	3.93		3.49	3.72	5.80
9	4.10		3.59	3.70	5.76
10	4.33			3.65	

These figures are extremely interesting as showing the uniformity of the Ayrshire milk and the gradual increase in the fat as the time of milking is extended. This is specially useful in milk that is used for the domestic purpose above referred to, as the infant, increasing in age, will require a stronger milk, as it is more fully able to digest it, and variation in the quantity of food for an infant is to be most carefully avoided as highly injurious. And further, as the milk lessens in quantity as the time of milking lengthens, the proportion of fat increasing equalizes the product, and the butter keeps up in quantity, while the amount of cheese will also be increased by the increase in the milk solids, of which the fats are the most valuable. Moreover, the milk of Ayrshire is found, contrary to all previous supposition, to lose less of the fat in the skimming than the vaunted "butter cows." following table shows this:

POUNDS OF FAT IN 100 POUNDS OF SKIMMED MILK.

Month of milking	Ayrshire	Guernsey	Holderness	Holstein	Jersey
1	0.35	0.16	0.63	0.58	0.44
2		0.18	0.42	0.78	0.40
3		0.23	0.38	0.74	0.25
4	0.38	0.21	0.42	1.45	0.25
5	0.42	0.20	0.43	0.50	0.41
6	0.40	0.37	0.36	0.70	0.52
7	1.00		0.33	0.51	0.31
8	1.17		0.44	0.53	0.29
9	0.83		0.56	0.83	0.38
10	1.19				





These figures will surprise those who have all along held that as the milk of the Ayrshire has smaller fat globules than any other milk, it would necessarily hold more of them in the skimmed milk on account of the difficulty of their separation while the milk is standing for the cream to rise, and that as the Jersey milk has much larger globules, that milk should separate from the cream so much more easily. But the very reverse seems to be the case, and the loss of fat in the skimmed milk is less in that of the Ayrshire than in any other cow except the Guernsey, and is precisely the same as that of the Jersey, taking an average. that for butter making, for which the Ayrshire has been held to be inferior, the cow stands equal to any in respect of the ease and completeness for raising the cream. Two more tables may be given, and are worthy of study.

	Ayrshire	Guernsey	Holdern :ss	Holstein	Jersey
Pounds milk for pound butter	20.40	19.40	28.20	40.00	17.50
Pounds milk for	49.40	10.40	20.20	40.00	17.50
pound cream	. 5.28	3.73	7.89	7.57	4.01
Pounds cream for					
pound butter	4 73	-4.86	5.81	5.05	4.40
Per cent. fat in					
cream	19.50	18.08	18.05	20.47	21.00

The Ayrshire seems to stand third in this list, but when the next table is studied it will be seen that the largest product of milk puts her at the head of all cows except the specially rich buttermakers, the Guernsey and Jersey:

MONTHLY YIELDS.

	Ayrshire	Guernsey	Holdern	's Holst'	n Jersey
Pounds of milk	617.9	494.7	488.8	783.1	480.6
Pounds of skimmed milk	. 518.4	360.7	392.2	675.1	358.7
Pounds cream	. 99.5	134.0	85.6	108.0	131.9
Pounds of buttermilk	. 77.9	106.9	68.7	86.5	94.3
Pounds fat in milk	$. \cdot 21.7$	24.8	17.4	28.4	26.7
Pounds fat in butter	. 18.4	23.7	14.4	17.3	23.5
Pounds of butter	. 21.6	27.1	16.9	20.5	27.6

Nothing is said about the food, but it is well known that the larger Holderness and Holstein consume fully one-half more food than the smaller Ayrshire. And when this is taken into account, it is readily perceived that the latter is far more profitable than these large breeds, and as much so as the other two, whose slightly larger product does not make up for the greater money value of these high-priced cows. It should be noticed that the smaller quantity of cream of Ayrshire milk is due to the less amount of milk in it, as shown by the small quantity of buttermilk left after churning, and the cream is, of course, richer in butter.

PROVINCIAL EXHIBITION, QUEBEC.

MILCH COW COMPETITION.

The following is the result of a test in 1888 at the Provincial Exhibition, Quebec. The mode of judging the exhibits entered in this competition was as follows: For every pound of dry milk solids eight points; thirty points for each pound of butter; one point for each twenty days from calving; and one point for every twenty days of gestation dating from last service.

FIRST PRIZE.

W. A. Reburn's Jersey cow "Jolie of St. Lambert 3rd."

Milk per day, 22.75 pounds.	
Solids, per cent. 16.91, equal to 3.848 lbs. X 8	30.784
Fat, per cent. 8.91, equal to 1.900 lbs. X 30	57.03
Days since calving, 160-20	8.00
Days of gestation, 70-20	3.50

SECOND PRIZE.

Thos. Brown's Ayrshire cov	" "Dossy."
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Milk per day, 33.5 pounds.	
Milk solids, per cent. 13.6; weight, 4.556 lbs X 8	36.448
Fat, per cent. 5.1; weight, 1.7085 X 30	51.255
Days since calving, 164-20	8.20
Days of gestation, 61-20	3.05
	98 953

THIRD PRIZE.

Jas. Drummond's Ayrshire cow, "May."

Milk per day. 44.75	
Solids, per cent. 12.6; weight, 5.6385 X 8	45.108
Fat, per cent. 3.57; weight, 1.597575 X 30	47.927
Days since calving, 22-20	1.1
Days of gestation, 6-20	.3
	94.435

Judge—James Cheesman, Toronto.

The following table will indicate the order of merit of the ten cows which remained in competition to the close.

Milk per day	Days calved	Days gestation	Per cent. solids	Weight solids	Per cent. fat	Weight of fat	Score
Jersey22.75	160	70	16.91	3.848	8.91	1.901	99.31
Ayrshire33.50	164	61	13.60	4.556	5.10	1.7085	98.95
Ayrshire44.75	22	6	12.60	5.6385	3.57	1.5976	94.43
Jersey20.00	173	97	16.72	3.344	8.60	1.72	91.852
Ayrshire43.00	11		12.30	5.289	3.50	1.505	88.012
Ayrshire35.00	31	6	12.49	4.3715	3.32	1.162	75.632
Jersey20.75	146	97	15.10	3.133	6.12	1.2699	75.34
Jsy Hltn Grade 24.00	37	13	12.80	3.072	4.4	1.056	58.756
ShortH'nGrade24.75	129	30	12.56	3.108	3.4	8.415	57.84
ShortH'nGrade23.75	62	17	12.70	3.016	3.56	8.455	53.75

KINGSTON (ONTARIO) EXHIBITION.

The following is the result of a dairy test conducted at the Kingston Exhibition in 1888. The subjoined table gives the order of merit in which the cows stood in the competition from the sweepstakes cow down:

111	LIIC		,,,,,	JCL	1610	711	110		CIIC		,	PS	Lak	es cow down.
E. M. Jones	Wm. Stewart	E. M. Jones	B. W. Folger	W. A. Reburn	W. A. Reburn	B. W. Folger	Wm. Stewart	Joseph Yuill	F. H. McCrae	S. Harper	W. A. Reburn	Joseph Yuill	W. A. Reburn	Exhibitor
M. Jones Daisy DellJersey	Wm. Stewart Princess Minnie Ayrshire	E. M. Jones Mulberry Jersey 9	B. W. FolgerHolstein	W. A. Reburn Lady Banff St. Anne Jersey	W. A. Reburn Jolie St. Anne Jersey	B. W. Folger Nixie L Holstein	Wm. Stewart Lady Minnie Ayrshire 6	Joseph Yuill Nellie Gray	F. H. McCrae Merrie Holstein 6	S. Harper Rose of Cobourg Devon	W. A. Reburn Jolie St. Lambert 3d Jersey 5	Joseph Yuill Partu Lacca Ayrshire 8	W. A. Reburn Jolie St. Lambert Jersey14	Cow
		Jersey 9	Holstein				Ayrshire	Ayrshire12	Holstein		Jersey	Ayrshire 8	Jersey1	Breed Years
12	7 1		ເມ	5 1	4 1	80		(2)		OI CO				Lbs, milk per day
9	15	15	33	15	16	37	23	32	38	32	23	38	25	Lus, mik perday
14.71	13.33	14.83	12.44	15.83	15.43	12.32	13.73	12.46	1250	13.60	15.98	13.81	17.67	Solids—Per cent.
1.32	2.00	2.23	3.70	2.37	2.46	4.56	3.16	3.98	4.75	4.35	3.67	5.24	4.41	Weight of solids—lbs.
5.69	3.90	5.98	3.17	7.16	7 23	2.93	4.40	2.97	3.29	4.13	8.01	3.72	8.89	Fat-per cent.
.51	.59	.89	1.04	1.07	1.16	1.08	1.01	.95	1.25	1.32	1.84	1.41	2.22	Weight of fat— 24 hours
13	120			145	124		178 122	223	130	187	126	283	167	Days calved
	70			73	56		122	154	53	167	62	131	62	Days of Gestation
32.18	43.45	44.71	61.08	62.10	63.15	69.00	70.08	78.26	84.65	92.15	94.16	105.09	113.38	Score

ONTARIO PROVINCIAL FAIR, OTTAWA.

MILCH COW COMPETITION.

The following is the result of the dairy contest at the Ontario Provincial Fair:

The cow test, which opened on Thursday morning, was based on the two milkings of that day. In accordance with the usual practice at these contests, the cows were stripped at five o'clock on Wednesday evening, and were milked at seven a. m. and five p. m. on the following day. Most of the cows exhibited having appeared at previous exhibitions, either at Quebec or Toronto, were much fatigued and unable to feed with their accustomed vigor. As was expected, there was a decided falling off in the milk yields and in the quality of the products. It would be noticed that the winner of the sweepstakes silver medal had not appeared at any of the large shows, while the Jerseys and Mr. Drummond's Ayrshires have travelled two long and tedious railway journeys in attending recent Mr. James Cheesman, of Toronto, exhibitions. conducted the test, devoting two days and a half to the work, having performed the same work at the Quebec Provincial and Toronto Industrial for two consecutive years. Although such competitions cannot be regarded as conclusive evidence of dairy merit, they are useful in encouraging breeders and feeders to force their art into greater public notice, and they usually result in bringing animals of decided merit to the front. interest has been displayed in these contests. following is the text of Mr. Cheesman's report:

OTTAWA, Sept. 23, 1887.

To the Board of Directors, Provincial Exhibition:

Gentlemen: In accordance with my appointment to conduct the milch cow competition, I beg to report that of the twenty-two cows entered twelve were withdrawn or disqualified, thus leaving only ten to compete for the prizes offered.

In section 1, Shorthorns, there was no competition; the award will therefore fall to Mr. Sangster. In section 2, there were six Ayrshires. The silver medal was won by Joseph Yuill, and the bronze medal by Mr. Drummond. In section 3, there was no competition, as the two cows entered by Mrs. E. M. Jones, of Brockville, were the total of this section. "Belle of Steuben" is winner of the silver medal, and "Girl of St. Lambert" of the bronze. In the last section there were two competitors. Mr. Albert Hagar, M. P. P., is winner of the silver medal, and the bronze falls to Mr. J. G. Clark. Your board having offered sweepstake prizes to the two best milch cows of any breed, I have to report that the silver medal falls to Mr. Joseph Yuill, and the bronze medal to Mrs. E. M. Jones.

The method of awarding the prizes is as follows: Eight points for each pound of dry milk solids: thirty points per pound of butter fat per day; one point for each twenty days from calving; and one point for every twenty days of gestation, counting from date of last service.

The following is the order of merit:

THE IOHO	wing	is the	order	or me	ciit:			
Breed	Milk per day	Solids per cent.	Weight of solids	Fat per cent.	Weight of fat	Days calved	Days of gestation	Score
2 Ayrshire	37.75	11.99	4.525	3.3	1.235	147	125	86.85
9 Jersey	29.75	14.16	4.213	4.22	1.255	116	86	81.45
10 Grade	37.50	11.87	4.45	2.80	1.05	104	36	75.10
4 Ayrshire	30.50	13.87	4.23	3.82	1.16	87	39	75.09
8 Jersey	22.25	14.83	3.30	4.96	1.103	85	30	64.85
6 Ayrshire	27.75	13.6	3.774	3.774	.916	102		62.77
11 Grade	23.75	12.8	3.03	3.07	.729	181	134	62.31
1 Short Horn.	26.00	12.08	3.14	3.22	.839	106	43	57.76
5 Ayrshire	21.25	12.98	2.75	3.50	.744	147	111	57.28
3 Ayrshire					.716	84	54	51.86

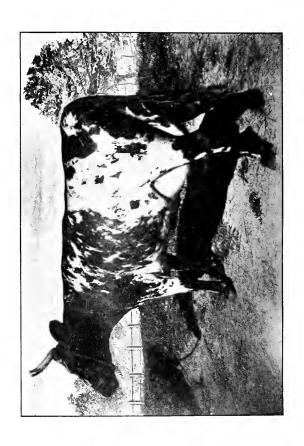
SCOTCH COMMENTS ON MODERN AYRSHIRE BREEDING.

At the annual dinner in connection with a recent 'agricultural show,' in Scotland, the principal speaker was a certain Professor Wright, and a synopsis of his remarks is published in one of the May issues of the Farming World, of Edinburgh, from which we copy as follows:

"After-dinner speeches at agricultural shows cannot always be taken seriously, nor do they always furnish mental pabulum for future use, but there has been one delivered recently that will bear repetition, and will repay the most careful consideration. This was the speech delivered by Prof. Wright, at the recent Kilbirnie cattle show. We pass over the jocular portion of it, and come to that part in which the Professor discussed Ayrshire cattle. He asked the pertinent question if agricultural societies had done all that they might for the benefit of agriculture. Their practice, he maintained, resolved itself in the majority of cases into the exhibition of live stock, and a means of gaining prizes, without regard to whether stock was improved or not. A few of the more prominent shows had added implements, which exhibitions were of great value; others had given dairying demonstrations, and encouraged ploughing matches; but taking all these extraneous benefits into consideration, he was not inclined to admit that agricultural societies had done all they could to improve agriculture. Take the question of improvement of stock, to which most attention is given. Take Ayrshire stock. He would like to know whether the breed had been improved within the last 50 years. If there had been any improvement, it was very slow, in his opinion. No one would contend that the breed was yet perfect. It was

a splendid breed, and an honor to this part of the country, and admitted to be one of the best breeds in the world, but it was not even yet a breed fixed into a perfectly distinct type—not a finished and complete breed. Nor could it ever be so while it consisted of two distinct tribes—milk winners and vield winners. shows had been the means of increasing the number of good animals; they enabled comparison of stocks, they excited emulation and taught some by observation, but still the progress was too slow. Two suggestions he would make, by the adoption of which he thought they might be made a means of promoting the object for which agricultural societies were formed: shows should be made more educational in character that judging ought to be accompanied by demonstration and explanation. The judges ought to be able to assign, either in speech or writing, their reasons why particular animals should be placed in particular places. (Applause.) He was quite satisfied that the judges in the west of Scotland were quite able to give the reasons for their awards. It would be of immense advantage to young farmers, and a check on the judges themselves. (Applause.) Out of a hundred farmers who went into a show, he ventured to say that not more than ten would certainly be able 10 pick out the winners. That showed the need of affording a means of educating and teaching farmers and young men what are the points of live stock. It was done by implement sellers, and is dairying demonstrations, at which there were generally crowds, and he held if live stock show's were conducted in the same way they would be of far greater educational interest. (Applause.) 2nd. That having heard reasons for judgements, the societies should meet occasionally for the purpose of revising and discussing the standards of judgement. For instance if they were





to improve the Ayrshire breed, or any other, it was necessary that they should understand what was wanted or aimed at. Was it the best show cow, the best milk cow, the best bodied cow, the best fattening cow, or the best vesselled cow. It was necessary to clear up these points in order that the judges themselves should be guided in a right direction, and in order to prevent what was a great misfortune in Ayrshire and other places—the judgements turning upon points of fashion without reference to the points of utility. (Applause.)

The vicious fashion which prevailed at one time of passing over the best of Ayrshire cows which had not small teats, had done considerable damage to the reputation of the breed outside Scotland; but, generally speaking, this show point had now been abandoned in favor of points of more general utility. (Applause.) Other points he mentioned, not for the purpose of expressing definite opinions, but of inviting consideration. As to horns, the "Avrshire Herd Book'' said "the horns should be set wide oninclining upwards." Was there anything particularly essential or right, the Professor asked, in that or was it merely a fashion, or was it a point of importance at all? Was there any need at all for horns on a milk cow? (Laughter.) He was quite certain that horns did not make beef. (Renewed laughter.)

The next point he referred to was that of "size." The judges didn't always put at the top the largest or most valuable cow in the auction ring, and some people objected and criticised them severely, and wanted what they called a good commercial cow. Was that right? He asked them to consider what was really the value of size in a cow. An Ayrshire was not kept for a fattening but a milk producing cow. The biggest cow did not always give the most milk. Suppose they took

two cows—one weighing 8 cwt. and the other 9 cwt., equal milkers, the latter would cost 20s to 30s more a year to feed, or, if kept for 4 years, from £4 to £6 more, and they would get only from twenty to thirty-five shillings more for the 9 cwt. animal, but they would really lose from £3 to £5 on the larger animal. What he would regard as the ideal Ayrshire cow was a cow without horns that yielded the most milk of the best quality in proportion to her size and the number of years she had been in milk. (Applause.) In concluding, Protessor Wright said he would not detain them longer with these heretical opinions, and he again congratulated the Society for having these discussions."

In the same paper, under "Notes and Queries" we find the following question and reply, which gives further insight into the conditions that have resulted from breeding for fancy points, rather than for dairy utility:

AYRSHIRE COW'S UDDER.—Why do the breeders of Ayrshire cows place so much value upon having the vessels or udders of their show cattle so shallow as to scarcely extend below the line of the belly, as in all other breeds they hang down considerably? Do those tight, broad-soled vessels indicate good milking properties?—Puzzled.

A good milking Ayrshire does not long retain a tight, shallow vessel. If a five or six-year-old cow continues to have such, it is a sure indication that she is a poor milker. It is a good property to be tight and level as three-year-olds, but the good ones soon lose what the "show fancy men" call the "grup."

J. D.

[This is an excellent reply, and J. D. puts his finger right on the defect of some of our present day

fancy Ayrshires, in that the hunt after "tight" vessels has, in some cases, been carried to an extreme. In fact, so far, that it has been almost necessary to go down on the knees to find them. Such vessels, embellished with lead-pencil teats, may be beautiful, but they don't assist in paying the rents.—ED.]

Of course, we do not agree with J. D. that it is "a good property to be tight and level as three-year-olds," although we have known some instances where such animals did eventually take on the true dairy form after losing the "grup." It is much to be preferred that they should not have any "grup" to lose, but show a dairy type from birth to maturity.

EXPERT JUDGES.

It is the opinion of the Ayrshire Breeders' Association that the men selected by the Agricultural Fair Associations throughout the country, to judge Ayrshire cattle in the ring, should be men acquainted with Ayrshire cattle, and men familiar with the scale of points and characteristics of the breed.

The Executive Committee have selected the following names of men in different parts of the country whom we believe to be experts in judging Ayrshire cattle, and would recommend to Fair Associations as Judges:

Alonzo Libby, Westbrook, Maine.
Charle's H. Hayes, Portsmouth, N. H.
George H. Yeaton, Dover, N. H.
W. R. Garvin, Dover, N. H.
L. S. Drew, Burlington, Vt.
F. W. Spalding, Poultney, Vt.
H. R. C. Watson, Brandon, Vt.
C. M. Winslow, Brandon, Vt.

George A. Fletcher, Milton, Mass.
Obadiah Brown, Providence, R. I.
H. S. Joslin, Mohegan, R. I.
Dudley Wells, Wethersfield, Conn.
S. M. Wells, Wethersfield, Conn.
J. H. Larned, Putnam, Conn.
B. C. Sears, Blooming Grove, N. Y.
George Taber, East Aurora, N. Y.
A. S. Tubbs, Mexico, N. Y.
C. S. Barney, Milford, N. Y.
Frank Converse, Woodville, N. Y.
J. D. Magie, Elizabeth, N. J.
William Lindsay, Elizabeth, N. J.

B. Luther Shimer, Bethlehem, Pa. H. Hayward, State College, Pa.

J. P. Beatty, Pataskala, Ohio. John Stewart, Elburn, Ill. C. S. Plumb, Lafayette, Ind.

Frank A. Lovelock, Lynchburg, Va. C. M. WINSLOW, Secretary.

CHARTER.

An Act to Incorporate the Ayrshire Breeders' Association.

It is hereby enacted by the General Assembly of the State of Vermont:

SEC. I. J. D. W. French, James F. Converse, Alonzo Libby, F. H. Mason, Obadiah Brown, Henry E. Smith, C. M. Winslow, S. M. Wells, H. R. C. Watson, James Scott, George A. Fletcher, Charles H. Hayes, John Stewart, their associates and successors, are constituted a body corporate by the name of the "Ayrshire Breeders' Association," and by that name may sue and be sued; may acquire by gift or purchase, hold and convey real and personal estate, necessary for the purpose of this corporation, not to exceed twenty-five thousand dollars; may have a common seal and alter the same at pleasure.

SEC. 2. The object of this corporation shall be to publish a herd book, and for such other purposes as may be conducive to the interest of breeders of

Ayrshire cattle.

SEC. 3. This corporation may elect officers and make such by-laws, rules and regulations for the management of its business as may be necessary, not inconsistent with the laws of this State.

SEC. 4. This corporation may hold its meetings at such time and place as the corporation may appoint.

SEC. 5 This act shall take effect from its passage.

JOSIAH GROUT,

Speaker of the House of Representatives.

· LEVI K. FULLER,

President of the Senate.

Approved November 23, 1886.

EBENEZER J. ORMSBEE,

Governor.

(A true copy.)

Attest: E. W. J. HAWKINS,

Engrossing Clerk.

CONSTITUTION.

Preamble.

We, the undersigned, breeders of Ayrshire cattle, recognizing the importance of a trustworthy Herd Book that shall be accepted as a final authority in all questions of Pedigree, and desiring to secure the co-operation of all who feel an interest in preserving the purity of this stock, do hereby agree to form an Association for the publication of a Herd Book, and for such other purposes as may be conducive to the interests of Breeders, and adopt the following Constitution:

ARTICLE I.

This Association shall be called The Association of Ayrshire Breeders.

ARTICLE II.

The members of the Association shall comprise only the original signers of this Constitution, and such other persons as may be admitted, as hereafter provided.

ARTICLE III.

The officers of the Association shall consist of a President, four Vice-Presidents, a Treasurer, a Secretary, who, together with six members of the Association, all chosen by ballot, shall constitute an Executive Committee.

The President, Vice-Presidents, Treasurer and Secretary shall be elected annually.

The six members who make up the balance of the Executive Committee shall be elected as follows: Two members for one year, two members for two years, and two members for three years, and hereafter two members shall be elected each year for a term of three years.

The Treasurer shall present at the annual meeting of the Association a full statement of his accounts, audited by two members of the Association, appointed by the Executive Committee.

The Executive Committee shall, under the general direction of the Association, prescribe the manner in which the business of the Association shall be conducted; shall have general control of all matters pertaining to its interests; shall have authority to appoint an editor of the Herd Book, and may fill any vacancies occurring among the officers. The office of Secretary, Treasurer, and Editor may be filled by the same person.

The Treasurer, Secretary, and Editor shall receive compensation for their services, to be fixed by the Association. The Treasurer shall give such bonds as may be required by the Executive Committee.

ARTICLE IV.

The annual meeting of the Association shail be held each year, at such time and place as shall be designated by the Executive Committee (of which notice shall be sent to members at least one mouth previous), for the discussion of questions of interest to the members, and for the election of officers for the ensuing year. Special meetings of the Association may be called by the President or by the Executive Committee or at the written request of ten members. Twenty days' notice must be given and the object of the meeting announced in the call, and no business other than that specified in the call shall be transacted at the special meeting. Time and place shall be determined in same way as annual meeting.

At all meetings of the Association members may vote in person, or by proxy, or they may send their ballots by mail to the Secretary, whose duty it shall be to vote the same and to acknowledge their receipt. At least twenty members present, represented by proxy, or written ballot, shall be a quorum for transacting business.

ARTICLE V.

Only breeders of Ayrshire cattle shall be eligible for membership, and members shall be elected at any regular meeting of the Association; also by the unanimous written consent of the Executive Committee at any time between the annual meetings, subject to the following conditions:

Each applicant for membership shall be recommended by one or more members of the Association, as a trustworthy and careful breeder; and no new member shall be admitted if objected to by any officer of the Association.

The Secretary shall notify the candidate of his rejection, or in case of his election that he will be admitted as a member on signing the Constitution and paying the initiation fee.

An applicant who has been rejected shall not be voted on again until two years from the date of his rejection, unless by the unanimous consent of the officers of the Association.

ARTICLE VI.

Each member shall pay an initiation fee of twenty-five dollars. These fees shall constitute an Association Fund to defray the expenses of publishing the Herd Book, and other charges incidental to the organization of the Association and to the transaction of its business.

No officer or member shall be authorized to contract any debt in the name of the Association.

ARTICLE VII.

The Herd Book shall be edited by an Editor appointed for that purpose, under the control and

supervision of the Executive Committee, and shall be published only with its official approval.

The charge for entry of the Pedigree of each animal belonging to a member of the Association shall be fixed by the Executive Committee, but shall not exceed one dollar, except for an animal two years old.

Animals not belonging to members of the Association may be entered in the Herd Book upon the payment of twice the amount charged to members.

The Herd Book charges shall be appropriated to the examination and verification of Pedigrees, and the preparation of the Herd Book which shall be published by the Association and shall be its property. The price of the Herd Book shall be determined by the Executive Committee. The Editor shall keep on file all documents constituting his authority for Pedigrees, and shall hold them subject to the inspection of any member of the Association, and shall deliver them to his successor in office.

ARTICLE VIII.

Should it occur at any time that any member of the Association shall be charged with wilful misrepresentation in regard to any animal, or with any other act derogatory to the standing of the Association, the Executive Committee shall examine into the matter; and if it shall find there is foundation for such a charge, the offending member may be expelled by a vote of two-thirds of the members of the Association, present or represented, at any regular meeting.

ARTICLE IX.

This Constitution may be altered or amended by a vote of two-thirds of the members present or represented by proxy, at any annual meeting of the Association.

Notice of proposed alterations or amendments shall be given in the call for said meeting.

REGULATIONS.

- 1. Only such animals shall be admitted to the Herd Book as are proved to be either imported from Scotland or descended from such imported animals.
- 2. All animals hereafter imported, to be eligible to registry in the Ayrshire Record, must previously be recorded in the Ayrshire Herd Book of Scotland, and an application for registry must be accompanied by a certificate of registry duly signed by the Secretary in Scotland.

Entries of calves imported in dam must be accompanied by the certificate of registry of sire and dam in the Scotch Herd Book, also certificate of bull service, signed by owner of bull.

- 3. No animal not already named and entered in some Herd Book at this date, shall be accepted for entry under a name that has already been offered for entry; also, the affix, 1st, 2d, and 3d, shall apply only to calves of the cow bearing the name used; not to her grandchildren, nor any other animal.
- 4. The breeder of an animal shall be considered the one owning the dam at the time of her service by the bull.
- 5. No Pedigree will be received for entry from anyone except the breeder of the animal offered, unless it is accompanied by a certificate of the breeder or his legal representative, indorsing the Pedigree.

Entries of calves, sired by bulls not owned by the breeder of the calf, shall be accompanied by a certificate of bull service signed by owner of bull.

6. All animals sold, in order that their progeny may be registered, must have their successive transfers duly recorded. Records of transfers will be made only on the certificate of former owner, or his legal representative.

- 7. A transfer-book shall be kept by the Editor, in which all changes of ownership shall be recorded.
- 8. The Editor shall keep a record of the deaths of all animals which may be sent to him. (And breeders are requested to forward the same, stating cause, etc.)
- 9. The fees for recording are one dollar for each animal recorded by and in the name of a member of the Association, being either bred or owned by him, and two dollars for animals over two years old at the time of entry.

Double the above rates are charged to those not members.

A fee of twenty-five cents will be charged for recording ancestors necessary to complete a pedigree to importation or to cattle already in the Ayrshire Record.

Transfer fee twenty-five cents. All the above fees should accompany the entry or transfer papers to insure attention.

- after the death of a member in the settlement of his estate until the same shall be settled and then the membership shall cease. The inheritor of a herd of Ayrshires shall also inherit the membership of the Ayrshire Breeders' Association—subject to approval of said Association. In case of corporations, the corporation may continue as a member so long as they are interested in the Association, and shall be represented by such person as may be designated by the President and Secretary of the Corporation.
- II. These Regulations may be altered, amended or added to, with the consent of two-thirds of the officers of the Association and Executive Committee.

GENERAL INFORMATION.

Price of Herd Books, &c.

Each volume, I to XIII inclusive, may be obtained of the treasurer, N. S. Winsor, Greenville, R. I., postage paid, \$2.25.

Milk Record blanks to accommodate herds of from 12 to 36 cows may be had of the secretary, C. M. Winslow, Brandon, Vt., \$1.50 per 100.

Blanks for extending pedigrees to five generations may be had of the secretary at \$1.00 per 100.

All blanks necessary for recording and transferring Ayrshires may be had of the secretary free of charge.

In recording stock fill out the color and distinctive marks for identification as fully as possible.

In giving sire and dam be careful to always give the Herd Book number of sire and dam.

When purchasing an animal be sure to get a transfer or see that the seller sends one to the secretary for record.

When buying a female in calf be sure to get a certificate of bull service from the owner of the cow and attach it to the entry of the calf when sending in for record.

Be careful to send pay with each entry and transfer.

In filling out an entry of an animal that is sold there is no need of a separate transfer, but enter it in the line for owner.

When the transfer is entered on the original entry for record there is no extra charge for the transfer above the entry fee.

When buying Ayrshires in Canada our government admits free of duty if they are registered in our Book before being entered at the Custom House, and it is much safer not to move them from the owner until they are recorded, because sometimes it happens that the pedigree must be looked up at the Canada office and there is often considerable delay. Then, too, there are some animals recorded in the Canadian Books that are not eligible to record in ours, and if they are recorded in our Book before closing the trade it saves loss to buyer.

Sometimes buyers go into Canada and are persuaded to buy and pay the duty to save time, but this is risky as afterwards it is sometimes found that such animals cannot be recorded in our Book.

The Canadians sometimes try to convince the buyer that it is just as well to simply continue the Canada Register and record there instead of in our Book, which is not true, as a record in the Canada Book is only valuable in Canada, for all Ayrshires to be salable this side the line must be recorded in our Book or be eligible to such record.











