The Carcass Competition at the Smithfield Show.

STEER OVER 2 AND NOT EXCEEDING 3 YEARS OLD.

Breed.	Fasted weight. Lbs.	Dressed weight. Lbs.	Percentage dressed to live weight. Lbs.	Award alive.	Award dressed.
Devon	1,604	1,046	62.71	..	1st
Cross-bred	1,436	958	66.71	..	2nd
Cross-bred	1,332	877	65.83	..	3rd

STEER OVER 1 AND NOT EXCEEDING 2 YEARS.

Galloway	1,178	763	64.76	3rd	1st
Cross-bred	1,222	800	65.45	..	2nd
Aberdeen Angus	1,286	842	65.47	..	3rd

HEIFER NOT EXCEEDING 3 YEARS.

Galloway	1,157	741	63.62	1st	1st
Devon	1,296	815	62.88	..	2nd
Cross-bred	1,285	830	64.58	..	3rd

ONE LONG-WOOLED WETHER OVER 12 AND UNDER 24 MONTHS.

Cross-bred	184	123	66.84	..	1st
Cross-bred	144	91	63.88	..	2nd
Herdwick	116	75	64.65	..	3rd

ONE LONG-WOOLED WETHER LAMB UNDER 12 MONTHS.

Black-faced	120	74	61.66	1st	1st
Lincoln	182	106	58.24	..	2nd
Cheviot	103	64	62.13	2nd	3rd
Border Leicester	130	83	63.84	..	4th

ONE SHORT-WOOLED WETHER OVER 12 AND UNDER 24 MONTHS.

Hampshire	219	147	66.84	1st	1st
Southdown	128	81	64.06	3rd	2nd
Hampshire	194	134	69.07	..	3rd
Southdown	170	122	68.92	..	Com.

ONE SHORT-WOOLED WETHER LAMB UNDER 12 MONTHS.

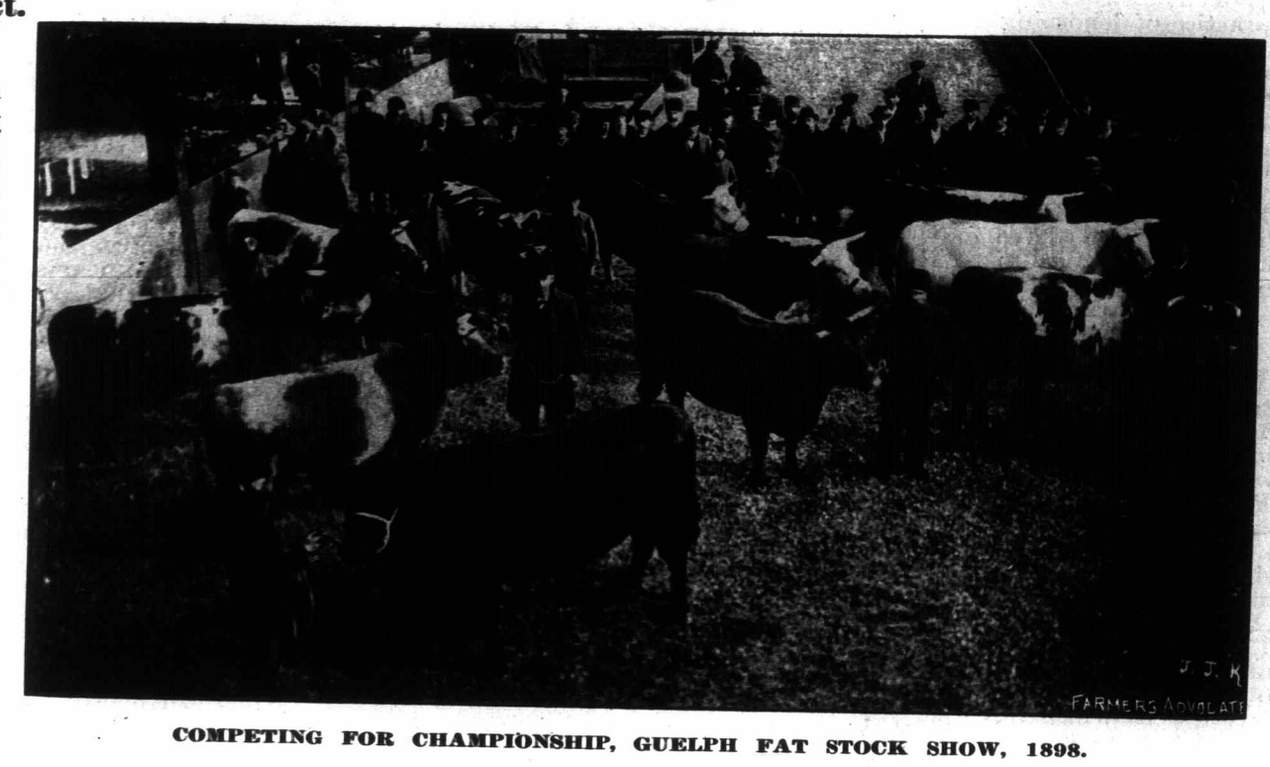
Suffolk	164	106	64.63	1st	1st
Suffolk	165	106	64.24	..	2nd
Dorset	151	89	58.94	3rd	3rd
Southdown	115	77	65.21	..	Com.

A Centenary Retrospect.

From the Illustrated London (Eng.) News.

Just a century ago, in the good old days of farming, when American beef and Australian mutton were not, when sheep stealing was a hanging matter, and wheat was low at forty shillings a quarter, a Derbyshire farmer named Wilkes had an idea. Do not infer that farmers in general, or Derbyshire farmers in particular, ever lacked ideas; but the one which emanated from the fertile brain of Mr. Wilkes was an idea worthy of capital—almost an inspiration. This mental acorn, if one may use the expression, was the seed whence sprang "The Smithfield Cattle and Sheep Society." The laudable aim of the society was "to supply the cattle markets of Smithfield and elsewhere with the cheapest and best meat." Mr. Wilkes' idea was taken up with moderate enthusiasm, and in the following year, 1799, the first show was held in Dolphin Yard, Smithfield. The society then counted 113 members; their show consisted of two classes of cattle and two of sheep, and the value of the prize list was exactly fifty guineas. The scheme of classification adopted was almost mediæval in its simplicity; "beasts" fed on grass, hay, turnips or cabbage competed in one class; "beasts" fed on corn or cake in the other; sheep (be pleased to note that agricultural zoology recognizes only one beast) fed on grass, etc., competed together. and sheep fed on corn. Five years later the members' roll had increased by one, but the show was expanded to nine classes for beasts and sheep, opened its arms to the humble, unimproved pig, and offered £215 5s. in prizes. The Smithfield Club, as the society became in 1802, was at this time a struggling young body trying hard to open the eyes of the agricultural world to the benefits it was trying to evolve from an empty treasury. At one time the outlook was so gloomy that the then Duke of Bedford, as President, advised that the club should be wound up. His advice was fortunately declined, and the club fought its way resolutely on, slowly increasing its membership and pressing financial embarrassments aside.

Transport was the difficulty in pre-railway days. Fat oxen driven up from the grazing counties were thin oxen by the time they reached London, and not every stock-breeder could afford to adopt the ingenious Mr. Terrett's plan of sending beasts to the show in a specially constructed van. Hence the club languished somewhat. After forty years of existence, the executive scheduled fourteen classes for cattle, sheep, and pigs, and offered £300 in prizes. The era of real prosperity dawned with the spread of railways. In 1862, when the show was held for the first time at Islington, there were fifty classes, and over £2,000 in prizes was offered, while the members of the club numbered 400. At the show of 1898 there were ninety-four classes, containing 364 cattle, 640 sheep, and 270 pigs: the prize list fell short by £34 9s. of £5,000 in cash, cups and medals. It was possible for one steer or ox to win about £400 worth in money and gold and silver plate, if he carried off every prize for which he was entered, including the prize of the centenary show—the Queen's challenge cup—value £150. A pen of three sheep could bring their owner about £228; while a pair of triumphant pigs could win about £138. Animals of such overwhelming merit, however, are rare in this imperfect world, and the rewards of obesity are more widely distributed.



COMPETING FOR CHAMPIONSHIP, GUELPH FAT STOCK SHOW, 1898.

FARM.

The Ontario Agricultural and Experimental Union.

The twentieth annual meeting of the Ontario Agricultural and Experimental Union was held at the Agricultural College, Guelph, on December 7th, 8th and 9th. In the absence of the president, Geo. Harcourt, B. S. A., Winnipeg, the chair was occupied by the vice-president, Mr. H. L. Beckett, B. S. A., Hamilton. The president's address, which was read by the chairman, referred to the encouraging growth of co-operative experimental work and its beneficial influence upon Ontario agriculture. It was recommended that co-operative experimental feeding of bacon pigs be carried on with a view to finding out the cause of soft bacon. The collecting and exhibiting of foul weeds and their mature seeds was recommended as being of valuable service to farmers in aiding them to recognize bad weeds at sight.

The chief object of the annual meeting is to bring together the students, ex-students, and other co-operative experimenters to hear reports of the season's work and to discuss various phases of it. It may be mentioned just here that co-operative experimental work commenced in 1886 at the suggestion of a few students and ex-students of the College, who met and appointed Mr C. A. Zavitz as director of the work. That first year eight men were prevailed upon to conduct one experiment on their various farms over the Province. Thirty-three plots were that year planted and looked after according to Mr. Zavitz's direction, and the following twenty-seven men carried out their line of work on 135 plots. Since that time the work has gone forward rapidly, until we find in 1898 no less than 3,028 men, living in the various portions of the Province, co-operated in this work with various varieties of grains roots, fodders, fertilizers, etc., to ascertain for themselves what will best suit their land and conditions. Of these, 667 successful reports were sent in to Mr. Zavitz, from which the reports of the season's work were summarized. There were over one hundred experimenters at the meeting, a number of whom claimed to have received great advantage from their investigations, not only in learning the sorts of crops best suited to their soil and vicinity but also in developing a local seed-grain trade of no mean magnitude. Some of the important results to the country have been the popularizing of the best varieties of crops, among which were mentioned Dawson's Golden Chaff fall wheat, Siberian oats, and Mandscheuri barley, each of which continues to stand from year to year at or near the head in all successful experiments over the Province. The introduction of Mandscheuri barley by the Union into the County of Glengarry, one experimenter present claimed, had been thousands of dollars advantage to the farmers. The director, in referring to this, pointed out the increase of profits that would follow if none but the proved best sorts of crops were sown on every farm of the Province. When it is remembered that the difference between the yield per acre of the best producing varieties and those sown by the average farmer is often several bushels per acre, the import of Mr. Zavitz's claim is the better understood, when the areas sown to the various crops are considered, which were in 1898 as follows:

CROP.	ACRES GROWN IN 1898.
Hay	2,453,503
Oats	2,376,360
Winter wheat	1,048,182
Peas	865,951
Corn	520,696
Barley	438,784
Spring wheat	889,205
Potatoes	169,946
Rye	165,089
Turnips	151,601
Buckwheat	150,394
Mangels	97,923
Beans	45,220
Carrots	12,418

The tests, as reported at the Union, dealt with the leading varieties of the crops mentioned above as found by several years' comparative tests on the Guelph Experimental Farm. We will publish the tables later in the season, when our readers are more interested than at present in the sorts of the various crops to plant in the coming spring.

Rational Dietary.—Mrs. S. T. Rorer, director and principal of Philadelphia Cooking School, gave a vigorous address upon the subject of scientific feeding of the human race. The inconsistency of having our farm animals carefully and regularly nourished by balanced rations, while little, if any, scientific insight is given to the preparation of human foods, was pointedly dwelt upon. The result of the present course is that the human race is becoming weaker and weaker. To illustrate the effect of certain foods on a race or a people, it was pointed out that the large-framed Scotchman was largely the result of the use of oatmeal as a diet through succeeding generations, while the agile, small Jap acquired his magnificent muscles from the continuous use of protein foods, such as eggs, fruit and rice, the last differing from our rice in being highly nitrogenous. The use of cow's milk for infants was strongly denounced on the ground that it is so composed as to build up a massive mature animal in three years. Young children deprived of their natural paternal food should receive cow's milk only after it was modified to a condition to suit the object of its use. Referring to combinations of foods for the human family, the use of potatoes and pork was denounced, as each of these products are deficient in muscle-forming material, but potatoes and beef, or pork and beans, answers very well when prepared in a digestible form. Mrs. Rorer strongly recommended the introduction of a domestic science department into the Ontario Agricultural College, as is being done with great advantage in several American colleges.

At the request of President Mills, the correct methods of cooking vegetables of various sorts were referred to. Potatoes are more digestible when baked, because of the slower and longer cooking. When potatoes are peeled it should be done very thinly, as the richest part of the tuber lies next the skin. They should never be put on to boil in cold water, but into water at the boiling temperature, but the temperature afterwards should be a little below the boiling point, about 200 degrees Fahr. Cabbage should be entirely immersed while cooking, and the water kept below the boiling temperature, when no odor will be given off, and the cooked dish will be rendered white in color, much more digestible than is ordinarily the case. Oatmeal should be cooked for several hours in a double cooker, but never stirred. Meat to be boiled should go at once into boiling water, and that to be roasted into a very hot oven so as to sear the surface and thus retain the juices of the flesh. By giving proper attention to the things that have to do with our very being we can enjoy almost perfect health, and render a more perfect service to our fellow men as well as to ourselves.

The Effect of Feed on the Quality and Quantity of Milk.—This subject was gone into very exhaustively by Prof. C. F. Curtiss, director of Iowa Experiment Station, who reviewed at length the work of many experiments conducted on this line by European and American Experiment Stations. Our best cows and breeds of cows represent, in many cases, the result of over a hundred years of effort in intelligent feeding and selection. While it is a much disputed point, especially among hard-headed, practical men, whether or not food does influence the percentage of fat in milk, the general result of carefully conducted tests go to prove that it has little effect upon the quality of milk. American experiments nearly all go to sustain this position, as was also the case in other countries when the tests were conducted with similar cows under similar conditions except food. Prof. Henry, in his valuable new book on "Feeds and Feeding," sums up the question with the statement that "richness of milk depends on breed rather than feed. Good treatment will always tend to develop a cow's