

TABLE NO. 2—Continued.

Rambouillet totals and averages.....	312	10.29	9 28	2.91
10 Delaine lambs, first experiment.....	258	9.35	9 76	3.78
Summary for the Merinos, both experiments.	570	9.85	19 04	3.34
Grand total, all breeds, second experiment.....	3,568	9.67	108 45	3.04
Grand total, first 7 breeds, second experiment....	2,842	9.58	86 56	3.04
Grand total, first 7 breeds, first experiment.....	3,281	7.25	94 69	2.88
Grand total, first 7 breeds, both experiments....	6,123	8.33	181 25	2.96
Grand total, all breeds, both experiments.....	8,246	8.38	245 69	2.97
10 Shropshire ewes, second ex- periment.....	Sept. 16 to 30. 72 October..... 102 November..... 77 December..... 82	5.96 9.94 12.41 12.57	1 21 3 42 3 09 2 89	1.69 3.34 4.03 3.52
Shropshire ewes, totals and averages.....	323	10.30	10 61	3.18

NO. 3. WEIGHTS AND VALUE OF THE FLEECES.

Breed.	Date of shearing.	Average age of fleece.	Average weight of fleece.	Value per pound in natural condition.	Per cent. shrinkage in scouring.	Value per pound in scoured condition.	Value of fleece per head.
		Days.		Cts.		Cts.	
10 Southdown lambs.....	Mar. 23	366	6.75	11½	54¼	26	*8.75
10 Shropshire lambs.....	Mar. 23	363	8.75	11	56¼	25	.98
10 Oxford lambs.....	Mar. 21-23	365	10.95	12¾	47	24	1.44
10 Suffolk lambs.....	Mar. 21	383	7.65	11	54¼	24	.76
10 Lincoln lambs.....	Mar. 17-20	332	12.85	13¼	40	23	1.79
9 Leicester lambs.....	Mar. 18-20	348	11.55	14¼	38½	24	1.76
10 Cotswold lambs.....	Mar. 17-20	334	12.65	13	43½	23	1.76
10 Dorset lambs.....	Mar. 18-20	355	6.825	10¾	55¼	24	.77
10 Merino lambs.....	Mar. 18 20	359	9.9	9¾	67½	30	1.00
10 crossbred lambs.....	Mar. 18-20	334	7.5	11¾	53	25	.90
10 range lambs.....	Mar. 20-21	321	5.125	12½	48	24	.67
10 Shropshire yearlings.....	Mar. 21	313	10.5	12¼	49	24	1.34

\* The values in this column are obtained by dividing the value of wool from each breed by the number of sheep. The Chicago weights varied a little from the home weights taken at date of shearing.

NO. 4. FEEDING OF LAMBS AND YEARLINGS COMPARED.

Breed.	Month	Mixed grain. Pounds.	Roots. Pounds.	Hay. Pounds.	Total gain. Pounds.	Average gain per head daily. Pounds.	Total dry matter. Pounds.	Pounds of dry matter per pound of gain. (average.)	Total cost of feed.	Cost of feed per pound of gain (average.) Cents.
10 Shropshire lambs.....	Jan. ..	595	279	464	123	.39	957.7	7.78	\$3.78	3.7
	Feb. ..	648	269	495	136	.40	1,030.4	7.57	4.14	3.4
	Mar. ..	681	234	504	170.5	.56	1,093.6	6.43	4.45	2.61
Totals and averages	.....	1,924	782	1,523	429.5	.48	3,081.7	7.18	12.37	2.88
5 Shropshire yearlings.....	Jan. ..	403	186	250	59	.34	594.3	10.07	2.38	4
	Feb. ..	362	174	216	38	.26	527.4	13.88	2.16	5.7
	Mar. ..	340	136	233	52.5	.35	516.6	9.93	2.10	4
Totals and averages	.....	1,105	496	699	149.5	.33	1,638.3	11	6.64	4.44

in which the cost of producing gain on pure-bred Shropshire wethers and lambs under the same conditions and on the same rations were compared. See Table No. 4.

It will be seen that it costs 56 per cent. more to produce gain on yearlings than on lambs of the same breed; perhaps this difference is somewhat greater than would ordinarily occur on account of the wethers being somewhat fatter at the beginning of the experiment than the lambs, although the comparison from month to month shows a wide difference in each case. It always costs proportionately less to make gains on young animals than on older ones.

## LAMBS PREFERRED IN THE MARKET.

The market also favors the younger animals. In this case the yearlings sold for \$4.25 per hundred, live weight, and the lambs for \$4.75 on the same market, a difference of 10 per cent. in favor of the lambs. On this account it is generally more profitable to finish sheep for market under one year of age than to hold them longer unless an abundance of cheap feed is available, as is the case where lands are cheap or free range accessible.

In the slaughter test the lambs dressed the following percentages of net carcasses to live weight:

## PERCENTAGES OF YIELD OF DRESSED MUTTON.

Breed.	First experiment.	Second experiment.
Southdown.....	55.4	55.26
Shropshire.....	56.3	52.88
Oxford.....	55.2	50.08
Suffolk.....	53.6	52.54
Lincoln.....	55.7	51.08
Leicester.....	57.8	51.87
Cotswold.....	54.9	53.57
Dorset.....	52.6	34.11
Merino.....	51.8	49.57
Crossbred.....	53.7	....

The Shropshire yearlings fed in comparison with the Shropshire lambs dressed 62.3 per cent.

The details of the slaughter test of lambs in the first experiment made by Swift & Co., of Chicago, are shown in the following tables, giving the weight and percentage of each part:

## METHOD OF CUTTING MUTTON.

The method of cutting a carcass is shown in the accompanying diagram, and the prices given for the several cuts are based upon the Chicago market for prime mutton at the time of this experiment.

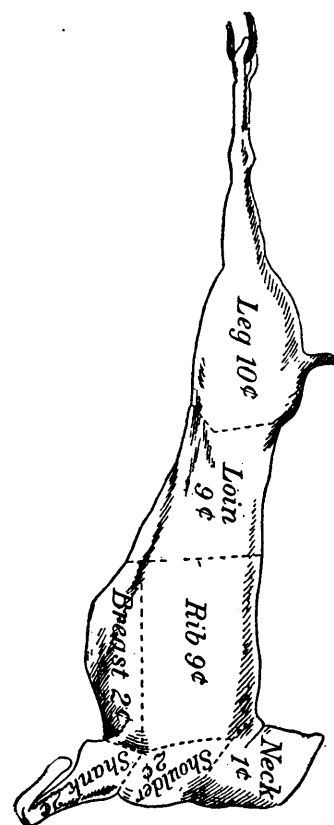


Diagram showing cuts of mutton.

The weights and values given below for the several cuts are the averages made by the seven special mutton breeds in the first experiment.

Leg, 22.2 pounds, at 10 cts..	\$2.22
Loin, 17.5 pounds, at 9 cts..	1.57
Rib, 14.5 pounds, at 9 cts....	1.30
Chuck,* 19.8 pounds, at 1½ cts..	.34

\$5.43

\* The chuck consists of the breast, shank, shoulder and neck.