

PROVINCE OF ALBERTA
DEPARTMENT OF AGRICULTURE
DAIRY COMMISSIONER'S BRANCH

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THE GRADING OF CREAMERY BUTTER

By C. MARKER, Dairy Commissioner



Issued under the direction of Hon. Duncan Marshall
Minister of Agriculture
1916

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THE GRADING OF CREAMERY BUTTER

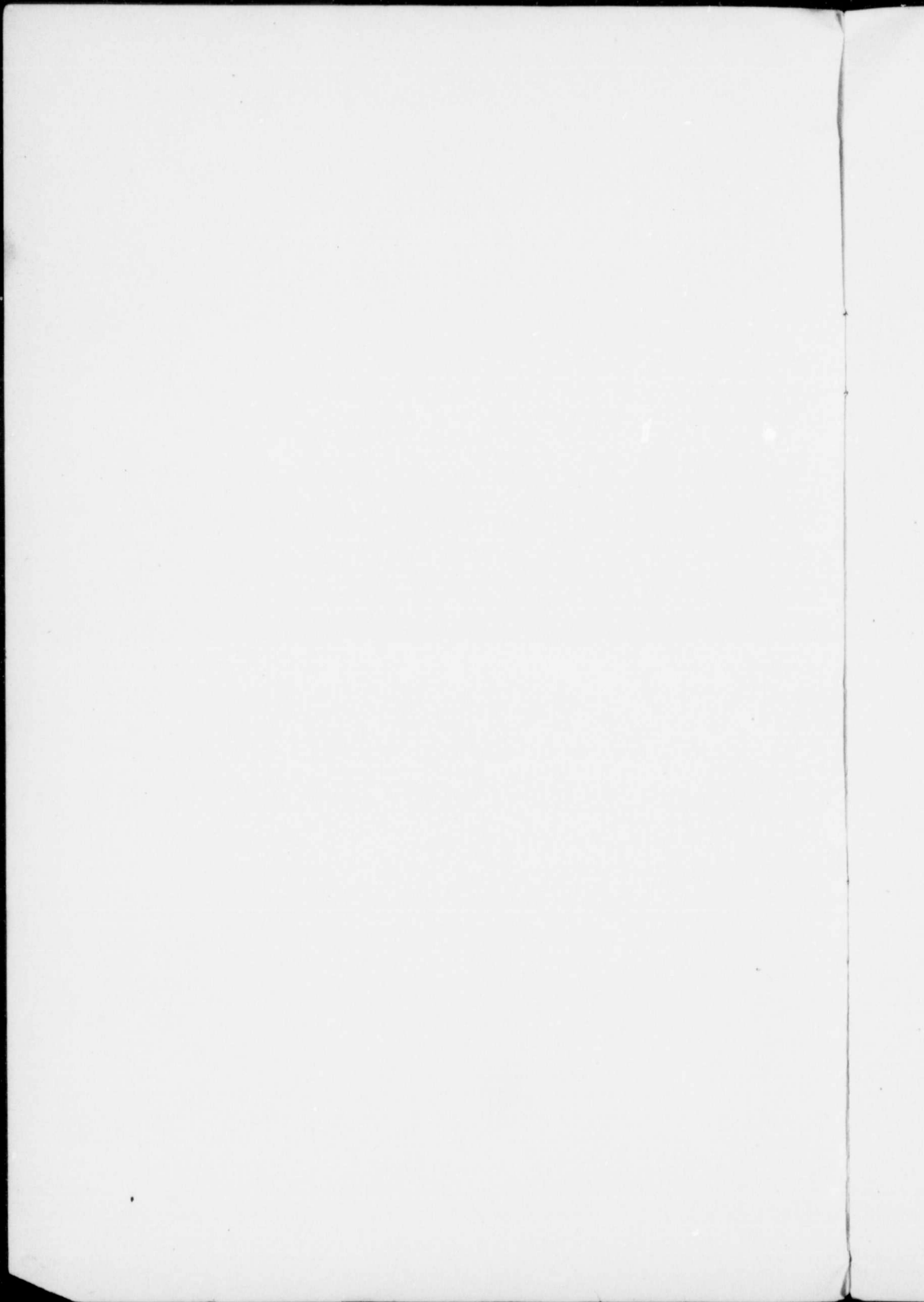
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Introduction

The development of the principle of the marketing of Alberta creamery butter upon a quality (grade) basis has been recorded in the Annual Reports of the Department of Agriculture and need not be referred to here at any length. It is sufficient to state that in initiating this movement the Department had the benefit of the co-operation of the progressive creamery operators of the Province and of the men who are engaged in the wholesale produce trade.

When the butter grading service was instituted, apart from the marketing service, it was deemed expedient to base the grades and to issue the grade certificates upon "representative samples" of butter. Otherwise, only a few creameries were able to take advantage of it.

The Department maintains butter grading stations, with good cold storage facilities, at Edmonton and at Calgary. The grading service is made generally available and any creamery operator in the Province who wishes to take advantage of it may enter into a formal agreement with the Dairy Commissioner, acting for the Department of Agriculture, in that behalf.

On the following pages the terms of the "Grading Agreement" are given, also the Grade Standards and the system of records, with explanatory notes. The Department realizes that a thorough understanding of the nature of the service, and of the conditions upon which it is rendered, is important not only to the creamery operators who avail themselves of it, but also to the men in the produce trade who buy their butter on the basis of the Department's grade certificates.

The utility, and the continuance, of the grading service will, in each case, depend upon the proper branding of all packages of butter by the creameries concerned and the rendering of accurate information on the shipping reports as to the identity of each lot.

It is but fair to state in this connection that nearly 12,000 churnings of butter have been scored and classified by the Department's graders during the past two years, under the "Grading Agreement," and that in no case has the Department been called upon to assist in the settlement of any disputes in the manner provided for in Sec. 2 of the Agreement.

I.—MEMORANDUM OF AGREEMENT.

Between

The Dairy Commissioner, acting for the Department of Agriculture for the Province of Alberta, and....., of....., covering the grading of creamery butter.

1. The Dairy Commissioner agrees for the period of one year from January 1st, 19.., to score and classify according to its marketable quality each shipment of representative samples of creamery butter received by him from.....for that purpose at the Government Grading Station at Edmonton or at Calgary, to mail as soon as possible thereafter to.....or to.....written order, score cards and grade certificates covering such samples, and to pay.....on each shipment of butter so received and graded, a price which, in his judgment, represents its relative market value after deducting:

- (1) The cost of transportation, if any, paid by him on such butter at the Grading Station.
- (2) The cost of packages and other supplies, if any, furnished by him to the said.....

GRADE BASED ON SAMPLE.

Under this arrangement, the Department's scores and grade certificates are necessarily based upon the quality and condition of the representative samples of butter which are shipped to and examined at the Government Grading Station. Yet, the score and classification of each such sample should apply, at the same time, to all the other packages of butter that are put up from the same churning and bearing the same brand and churning number. We wish to emphasize, however, that as inferior workmanship in the packing of butter tends to lower its grade and commercial value, equal care should be given in putting up and finishing *all* packages. (See notes on Grade Standards.)

2. The Dairy Commissioner agrees to hold for at least four weeks the sample packages of butter for which grade certificates have been issued, in order to facilitate the settlement of possible disputes between the buyer and the seller as to grade of the butter which these sample packages are reported to represent.

The butter grading service, specified in this Agreement, is performed at the request of the creamery operator and the Department assumes no liability in any matter of dispute that may arise as between him and the buyer of any of his creamery butter for which Grade Certificates may have been issued. The Department is willing, however, to forward to any given address, upon the written requisition of the shipper and at his expense, a portion of any specified "representative sample" furnished by him together with a copy of the Grade Certificate covering it. The requisition must be made, however, within the four weeks specified in the Agreement.

3. In consideration of the foregoing.....agree to use a separate serial number for each churning of butter that is to be scored and classified by the Dairy Commissioner throughout the period covered by this Agreement.

The creamery operator is recommended to keep for ready reference, and in a permanent form, a detailed record of each churning of butter. This record should show among other particulars: (1) the serial churning number, (2) the number and description (as to size and style) of the packages put up, and (3) the maximum temperature to which the cream has been heated in the process of pasteurization, and the time, in minutes, during which that temperature was maintained.

In addition to the use of the regular brand of the creamery, or special "creamery letter" allotted by the Department, the same churning number should be plainly stamped in the upper right-hand corner of all the packages that are put up from the same churning and as soon as they are packed. If the marking be not promptly and properly done there is a danger of a mix-up in the identity of the packages, and this should, of course, be scrupulously avoided. Each operator may select his own system of numbering the churnings. Cushioned rubber type should be used for numbering the packages, and they should be at least three-quarters of an inch in depth.

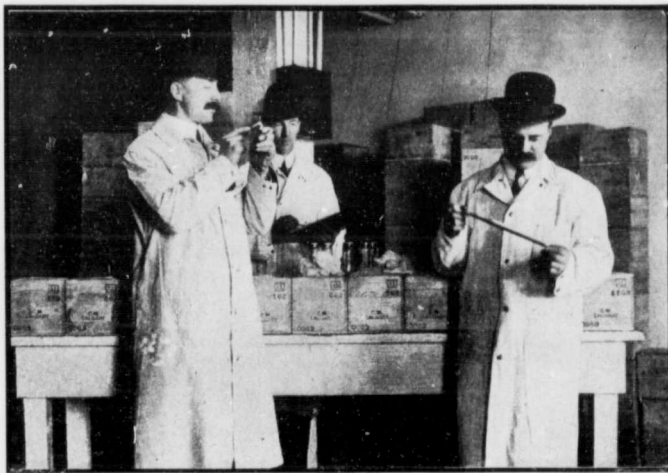


FIG. 1.—AT THE CALGARY GRADING STATION.

FIG. 1 illustrates how and where the brands and churning numbers should be placed on the "representative sample" packages—always in the upper right-hand corner. The same practice should be followed in marking all the corresponding standard packages that are to be sold on Grade Certificates. Indistinct or careless branding makes it needlessly difficult for the buyer to distinguish and identify the various lots, especially in a shipment of mixed grades.

4.agree to accept and to carry into effect such directions as the Dairy Commissioner may give from time to time respecting details of the packing, the marking and the shipping of the butter to be scored and graded by him and of the records to be made and forwarded in that connection.

Full directions and report forms are furnished by the Dairy Commissioner's Office, Calgary.

5. It is mutually understood by the parties hereto that in all cases the score cards and grade certificates issued by the Dairy Commissioner under this Agreement shall relate only to the packages of butter actually scored and graded and as at the time of scoring and grading.

As poor storage facilities at a creamery may in a very short time cause a marked deterioration in the quality and commercial value of any butter stored there it is desirable that whenever shipments of butter so stored are to be forwarded to the buyers, subject to grade certificates,

the representative samples should be shipped to the grading station at the same time. In this, as in other respects, it is assumed that the creamery operator is as much concerned in maintaining the integrity and efficiency of the butter grading service as is the Department and the Produce Trade generally.

2.—GRADE STANDARDS.

The grade standards for Alberta creamery butter are established and defined by the Department of Agriculture. They are based very largely upon the preferences of the trade and of the consuming public in the Western markets—with due regard to the conditions which surround the manufacture of creamery butter in this Province.

The following standards, as to points and description, were adopted at the beginning of the season of 1916:—

“Special” Grade, scoring 94 to 100 points, minimum for flavor 41 points.

“First” Grade, scoring 92 and under 94 points, minimum for flavor 39 points.

“Second” Grade, scoring 87 and under 92 points, minimum for flavor 37 points.

“Off” Grade, scoring under 87 points.

In order that creamery butter may qualify for “Special” grade certificate it must have been made from pasteurized cream and otherwise closely conform to the following description, which represents in a general way the requirements of the markets in which the great bulk of the Alberta product is consumed:—

Flavor: Fine, sweet, mild and clean.

Texture: Firm and fine; clear, but not excessive, free moisture.

Color: Uniform and of a pale straw shade.

Salting: About 2 per cent., thoroughly dissolved and incorporated.

Package: Well-made box of export type, clean and evenly coated with paraffin wax on the inside surface and properly branded. Good quality of parchment paper linings, neatly arranged. The butter is to be solidly packed, full weight and with a smoothly finished surface.

On and after April 1, 1917, Grade Certificates will be issued only on creamery butter which has been manufactured from properly pasteurized cream, and so recorded upon the shipping report (Forms D2 or D3).

The standard package for grading samples of butter will be the 14-lb. box with well-fitting bent nail hook fasteners in the cover. The creamery operator who wishes to use the Department's Butter Grading Service should specify just that type of package, in placing his order for his season's supply.

WORKMANSHIP.

Although the grade of a given churning of butter is based largely upon its score for flavor, the matter of workmanship is, of course, an important contributing factor. Even the most competent buttermaker is unable at times to secure the flavor he desires in the finished product, on account of defective raw material, but even if the flavor be defective, there is no reason why any buttermaker should not put uniformly good workmanship into each churning of butter and at least do his part to secure for it the best grade possible.

A very large proportion of the butter packed into 56-lb. boxes finds its way into the retail trade in the form of one pound "bricks." Therefore, poor workmanship in the packing alone will inevitably cause added labor, expense or short weight troubles to the dealer who does the "bricking."

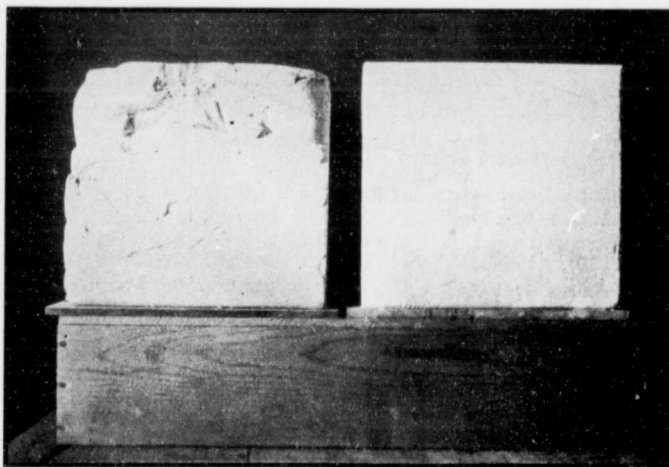


FIG. 2.—A CONTRAST IN WORKMANSHIP.

Every buttermaker should see to it that the butter made under his direction is being properly packed. It is a simple matter for him to "strip" one or more packages from each day's churnings and examine the workmanship with the critical eye of the buyer. This is what the Official Grader aims to do when he places the score and grade on any lot of butter.

The matter of packing is illustrated in a striking manner in Fig 2, which shows two "stripped" 56-lb. packages of butter. Assuming that these two packages were identical in quality as to flavor, texture, color and salting, the package shown to the left would not be worth as much as the other to the buyer who cuts the butter into one-pound bricks and sells it in that form.

3.—FORMS AND RECORDS.

The shipping report, form D3, is used in connection with the Department's butter grading service. When properly filled in the report gives the necessary particulars as to shipment, and for each churning it shows (1) the date, (2) the churning number, (3) the number and size of the packages put up, (4) the maximum temperature to which the cream was heated, if pasteurized, and the number of minutes during which that temperature was maintained. If, and when, no temperature be recorded it is assumed that the butter was made from non-pasteurized cream. Finally, the grading samples are recorded in the column provided for the purpose and the buttermaker's signature is attached, certifying that the correct information is given.

This report is made and forwarded in triplicate to the grading station, with the "representative samples." The butter grader checks the shipment with the report and signs the receipt in the lower left-hand corner. When the scoring and grading of the butter has been completed the records are forwarded to the Dairy Commissioner's Office, where the particulars are filled in showing the score for flavor and the classification of each churning in its proper grade.

As the "representative samples" are paid for and retained by the Department for a time, a statement is made in the lower right-hand corner of the form as to the payment. This completes the record. One copy is returned to the shipper and the others are retained by the Department for voucher and filing purposes.

The Score Card, as shown, is also used in connection with the grading work. The scores and the defects, if any, of the several packages of butter are recorded thereon, and a copy is returned to the shipper.

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C. Marker, Dairy Commissioner.

BUTTER SCORE CARD

		MARKS ON PACKAGES																			
FLAVOUR	45																				
Flat																					
Heated																					
Weedy																					
Sour																					
Stale																					
Metallic																					
TEXTURE	25																				
Overworked																					
Weak																					
Leaky																					
Milky Brine																					
SALTING	10																				
Too light																					
Too heavy																					
Undissolved																					
COLOUR	10																				
Too light																					
Too high																					
Uneven																					
PACKAGE	10																				
Poorly packed																					
Poorly printed																					
Poorly wrapped																					
Poorly nailed																					
Dirty																					
Poor finish																					
Short weight																					
TOTAL	100	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					
CHECK WEIGHT																					
DATE																					

REMARKS



DAIRY COMMISSIONER'S BRANCH.

Grade Certificate for Creamery Butter*

No.....

I have this day graded, as under, marked and placed in cold storage, One sample package of butter received from.....and branded.....

	Max. Score	GRADE				REMARKS:—
		Special 94-100 Points	First 92-94 Points	Second 87-92 Points	Off under 87 Points	
Flavour	45					
Texture	25					
Salting	10					
Colour	10					
Package	10					
	100					
Points given						Dairy Produce Grader.

* See circular of August 25, 1916, for conditions governing the grading of butter and issue of Grade Certificates. For copies of circular apply to the Dairy Commissioner, Department of Agriculture, Calgary, Alberta.

