



United States
Department of
Agriculture

Agricultural
Marketing
Service

Fruit and
Vegetable
Division

Fresh Products
Branch

Washington, D.C.

July 1971

Carrots

Shipping Point Inspection Instructions

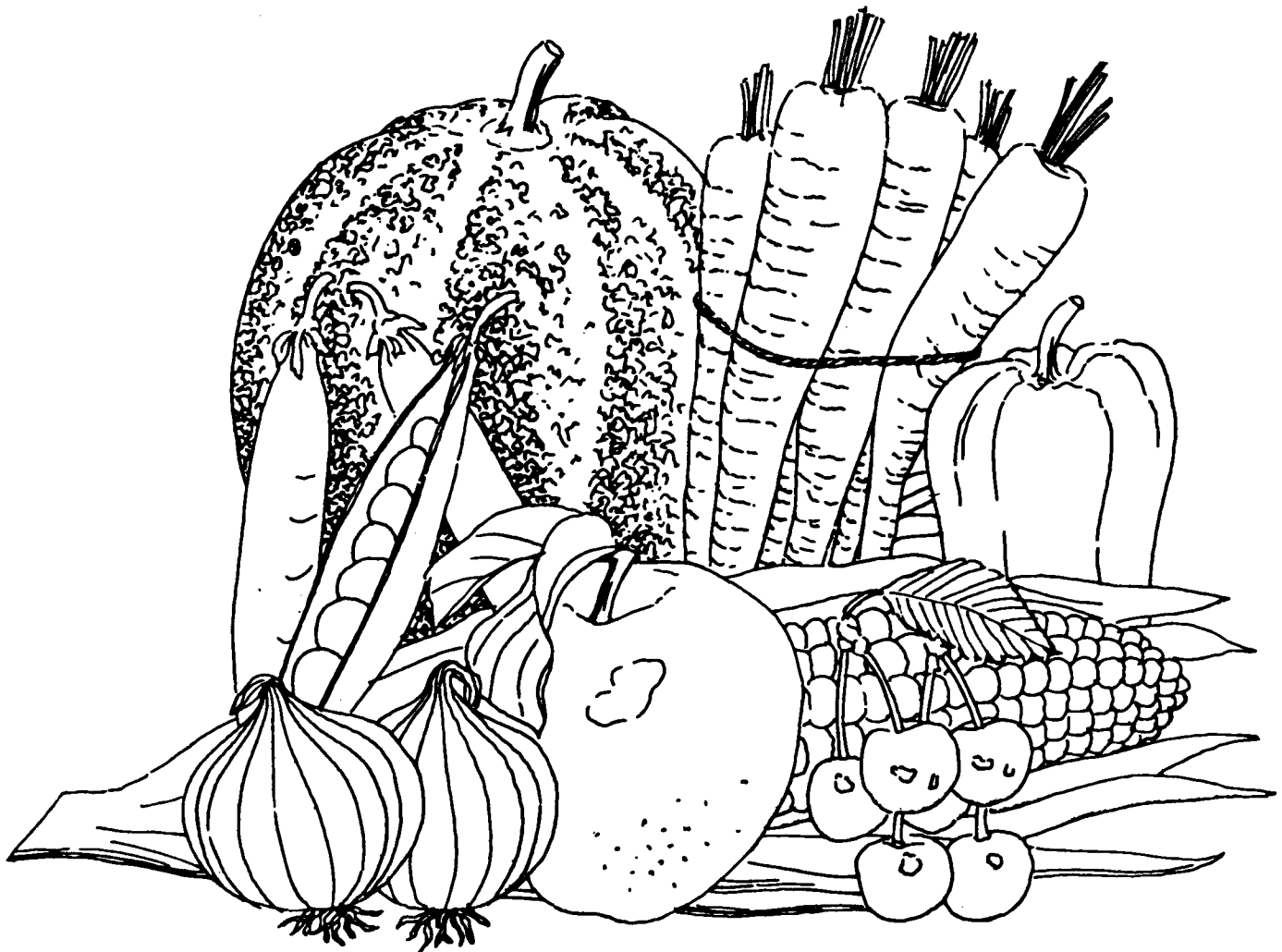


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TOPPED CARROTS

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Appendix I - United States Standards

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
FRUIT AND VEGETABLE DIVISION
FRESH PRODUCTS BRANCH

Washington, D. C. 20250

SHIPPING POINT INSPECTION INSTRUCTIONS FOR TOPPED CARROTS

Fresh carrots are marketed year round with no distinct peak. However, (1)
the lowest supply is likely to be in the summer and the highest in the
spring. Approximately 80% of the crop is produced in California and
Texas; with Arizona, Michigan, Colorado and several other states
producing the balance.

GENERAL

More detailed instructions pertaining to Date, Inspection Point, Kind (2)
of Car, Condition of Car, Loading and Pack than is found in this hand-
book may be found in the General Inspection Instructions-Shipping Point.

SAMPLING

Representative sampling is fully as important as grade interpretation. (3)
If the samples are not representative of the lot, the results of the
inspection may be incorrect regardless of how accurate the grade inter-
pretations may be. Samples selected should cover all portions of the
car or lot. Samples should be selected proportionately from each size,
grower's lot, grade or brand.

SAMPLES FOR GRADE DETERMINATION

Each sample shall consist of 50 carrots, regardless of the size of the (4)
package. When individual packages contain at least 50 carrots, the
50-carrot sample is drawn from one package. When individual packages
contain less than 50 carrots (such as 1 to 3 lb. consumer packages), a
sufficient number of adjoining packages are opened to form the 50-carrot
sample. For example, it may be necessary in the case of 1-lb. packages
packed in master containers to open as many as 5 or 6 of the 1-lb. units

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within the master container to obtain the 50-carrot sample. If five 1-lb. units are opened and found to contain only 47 carrots, then 3 carrots will be taken out of the sixth. Follow the same procedure (obtaining each sample from a different master container) until a sufficient number of samples are examined.

- (5) The number of individual samples to be examined per car or lot may vary according to conditions. The Federal Supervisor will issue instructions as to the minimum number of samples required for each size lot. When grade defects are found to be close to the tolerance the number of samples should be increased, if possible. This should apply when above or below tolerance. For examples, take more samples at 8% just as you would take more samples at 12%.

TOLERANCES

- (6) The tolerances in the U. S. Standards are applied on a count basis. The following table gives the over-all tolerances and restricted tolerances permitted for the grade.

	<u>U.S. Extra No. 1</u>	<u>U.S. No. 1</u> <u>U.S. No. 1 Jumbo</u>	<u>U.S. No. 2</u>
A. <u>For Total Defects</u>	10%	10%	10%
1. Serious Damage (included in "A")	5%	5%	
(a) Soft rot (included in serious damage)	1%	2%	2%
B. <u>For Off-size</u>			
1. 5% for carrots larger than specified maximum diameter.			
2. 10% for carrots smaller than specified minimum diameter or shorter than specified minimum length.			

APPLICATION OF TOLERANCES

- (7) Individual samples shall not have more than double the tolerance specified: Provided, that not more than one carrot which is frozen or affected by soft rot may be permitted in any package weighing

approximately 3 pounds or less: And provided further, that the averages for the entire lot are within the tolerances specified for the grade.

Thus, for consumer units of 3 lbs. or less, there are restrictions on (8) both the sample and the package when soft rot or freezing is a factor. Since not more than 1 carrot affected by soft rot or freezing is allowed in any package, it will be necessary to examine the contents of consumer units individually before making up the 50-carrot sample.

The tolerance for soft rot in the U. S. No. 1 grade is 2 percent. (9) Individual samples (50 carrots) may not contain more than 4 percent soft rot (or 2 carrots). For example, let us say that it takes five 1-lb. bags to make up the 50-carrot sample. One carrot affected by soft rot is found in each of two of these bags (or 4 percent for the sample). This lot could average within tolerance.

However, if these 2 carrots were found in the same consumer unit the (10) lot would not grade U. S. No. 1, regardless of the average for the lot. Such a lot would be reported as "in most samples no soft rot, in many samples 2%, in few samples 4% (2 carrots in one bag), average 1% soft rot". The grade statement would read "Fails to grade U. S. No. 1 account defects."

In the example above, the lot tolerance was not exceeded, but since (11) the package tolerance was exceeded it was necessary to show this in the soft rot statement.

Handwritten Certificates. The handwritten certificate, FV-184, was (12) developed so that it could be prepared and delivered to the applicant promptly on completion of inspection. The writing on the FV-184 form certificate should be neat and easily read.

The following is the minimum amount of information that should be (13) given under their respective heading. Additional information will be reported when instructed to do so by your supervisor.

PRODUCT

Usually the product will be designated on the certificate as "Topped (14) Carrots", without an attempt to determine the type or variety. Inspectors should not certify variety. However, the variety may be reported as "Manifested" or "Invoiced" if so requested by the applicant.

- (15) It is permissible (only at applicant's request) to show the carrots as being of a certain type. For example: "Long type Topped Carrots" or "Short type Topped Carrots". The principal difficulty in determining type is distinguishing between the long type and the half-long type. In many lots the roots may not be distinctly of one type or the other, but range from long to half-long with all intermediate degrees. Such variation is not unusual, and no attempt should be made to describe type in such a situation, though the variation in shape may be described if specifically requested by the applicant.

BRAND OR STAMPING

- (16) If present, the brand, grade marks, net weights, state lot stamps, export stencils and the like should be **reported** on the certificate. These various marks identify the lot with **the** certificate.

MANIFEST OR LOADER'S COUNT

- (17) The number of packages in a lot must be stated on the certificate. The amount will generally be based on the applicant's or loader's count. If the inspector can physically count the containers and if requested by the applicant, he may certify count on the certificate.

TYPE AND SIZE OF CONTAINER

- (18) Topped Carrots are most commonly shipped in standard open mesh sacks or in consumer size film bags which are placed in a master container. The open mesh sacks may or may not be film lined and are generally packed to 50 pounds. The film bags are packed in various types of master containers, the most common being open mesh sacks, multi-wall paper or in cartons.
- (19) There are a variety of different containers being used, in different areas, on special orders or shipments. Among these are larger film bags ranging from 5 to 50 pound capacities, burlap sacks, and loose in boxes, cartons or lined crates.

SIZE OR COUNT

- (20) U. S. Extra No. 1 requires that the diameter be not less than 3/4 inch or more than 1-1/2 inches and that the length be not less than 5 inches.

U. S. No. 1 requires that, unless otherwise specified, the diameter be not less than 3/4 inch or more than 1-1/2 inches, and that the length be not less than 5 inches.

U. S. No. 1 Jumbo requires that the diameter be not less than 1 inch or more than 2-1/2 inches, and that the length be not less than 5 inches.

U. S. No. 2 requires that, unless otherwise specified, the diameter be not less than 1 inch or more than 3 inches, and that the length be not less than 3 inches.

Measuring size. Length is measured from the crown to the lowest point which is not less than one-fourth inch in diameter. Diameter is measured at the greatest dimension at right angles to the longitudinal axis. (21)

Reporting size. A general range of the minimum and maximum diameter and length should be stated in inches and fractions of an inch. Unless this range is comparatively small, it may be necessary to also show the range of most carrots. For example, "Generally 3/4 to 1-1/4 inches in diameter and 5 to 10, mostly 7 to 9 inches in length. Off-size within tolerance." When fairly uniform, the "mostly" need not be shown. (22)

Reporting off-size. Except when the percentage of undersize or oversize is specifically requested, or in determining the percentage of U. S. No. 1 quality, and no sample exceeds the tolerance, it will be satisfactory to state "Off-size within tolerance". If no sample contains more than double the tolerance, and the lot averages within tolerance, the statement "off-size average within tolerance" should be used. (23)

Off-size Specimens which also show Grade Defects. Off-size specimens that are defective should be scored both for undersize and oversize and for grade defects. The reason for this is that size and grade defects have separate tolerances in the grade. Generally the percentage of off-size specimens that are defective will be negligible and will make no difference in the grade certification. (24)

On out of grade lots, when the percentage of off-size specimens that are also defective amounts to more than 1%, the usual size statement should be shown, giving the total amount of undersize and oversize, including those specimens which are also defective. No mention of defects should be made under the "Size" heading. However, this information should be reported under the "Defects" heading. For example: "Grade defects range from 5 to 25%, average 15%, mostly growth cracks, sunburn and badly misshapen, including 3% also shown as being undersize (or oversize, or both)". (25)

- (26) Certifying Standard Sizing. Standard sizing may be certified in connection with the grade when the product is in packages weighing approximately 2 pounds or less. This classification requires that not more than 10% of the individual packages in a lot may contain carrots which vary more than 3/8 inch in diameter or 2-1/2 inches in length.

GRADE DEFECTS

- (27) Each of our standards specify certain factors that are basic to describing the quality and condition of a lot. On carrots, these factors are: Firmness, Cleanness, Smoothness, Form (Shape), Trimming and Color of Roots. These factors may be described on the certificate in general terms unless they fall below the requirements of the grade. Although not required to be shown on the certificate, the description of the lot, in regard to these factors, should be recorded on the note sheet.

- (28) Firmness.

Firm - carrots not soft, flabby or shriveled (minimum requirement of all grades).

Fairly firm - carrots slightly wilted, soft or flabby.

Flabby and wilted - carrots badly wilted, flabby, soft, limp or rubbery.

- (29) Cleanness.

Clean - individual carrot is practically free from the dirt and other foreign matter. (Minimum requirement of U. S. Extra No. 1).

Fairly clean - individual carrot reasonably free from dirt and other foreign matter. Maximum aggregate area of caked dirt allowed on a carrot 1 inch in diameter and 6 inches in length is 11/16 of an inch (the size of a dime). Allow lesser or greater amounts on smaller or larger carrots. (Minimum requirement of U. S. No. 1).

Dirty - although not defined in standards may be used to describe carrots that are not "fairly clean" but are not so dirty as to be "seriously damaged" by dirt. (Minimum requirement of U. S. No. 2).

Serious damage - appearance is seriously affected. Individual carrots with more than 1/2 of surface smeared with mud or dirt (lesser amounts when dirt is thick or dark) are considered serious damage.

Smoothness. In determining smoothness the roughness of the surface as well as the presence of secondary rootlets should be considered. The official photographs (Topped Carrots folder C-1) illustrates degrees of smoothness without presence of secondary rootlets. Therefore, if secondary rootlets are present, a stricter interpretation of surface roughness than that shown in the photographs is necessary. (30)

Smooth - Carrot has fairly even surface, not ridged, grooved, or lumpy, and is practically free from secondary rootlets.

Fairly Smooth - Carrot is not rough, ridged or covered with secondary rootlets to extent that appearance is materially affected (Minimum requirement of U. S. No. 1).

Rough - Carrot is ridged, grooved, lumpy or covered with secondary rootlets to extent that appearance is materially affected (Minimum requirement of U. S. No. 2).

Excessively Rough Carrot is rough or ridged to extent that appearance is seriously affected. (Scored against all grades as serious damage).

Form (Shape). Waste is not a factor in scoring shape. Refer to official photographs for guidance in determining shape. (31)

Well formed - Carrot is not forked or misshapen to extent that appearance is more than slightly affected. (Minimum requirement of U. S. Extra No. 1)

Fairly well formed - Carrot is not forked or misshapen to extent that appearance is materially affected. (Minimum requirement of U. S. No. 1).

Misshapen - Carrot is forked, twisted, curved or otherwise ill-formed to extent that appearance is materially affected. (Minimum requirement of U. S. No. 2).

-8-

Seriously misshapen - Carrot is misshapen to extent that appearance is seriously affected (Scored against all grades as serious damage).

- (32) **Trimming**. Carrots in all grades are required to be "well trimmed." This means that the tops are cut back to not more than 1 inch in length. New leaves developing within the original cluster of leafstems or occasional uncut leaves or leafstems exceeding this length which do not materially affect the appearance of the carrots are permitted. Carrots may have tips of roots cut or broken off, provided, that these cuts or breaks are small and fairly smooth and do not materially affect the appearance of the individual carrot. Refer to the guide illustrating broken tips.

Trimming is concerned with the deliberate cutting of the carrot, so that the tops are not more than 1 inch in length. Also, tips of the carrots may be cut or broken in order to cut carrots to a certain length or cut away a defect. Often times carrots may be broken or cut due to rough handling (see mechanical damage). Since it is often difficult to determine whether a carrot was cut due to trimming or mechanical damage, unless the inspector is certain that the defect was caused due to trimming, score as mechanical damage.

- (33) **Color of Roots**.

Well Colored - Not specifically defined in standards but may be used to describe carrots well above minimum requirements of "fairly well colored."

Fairly Well Colored - Carrot has an orange, orange red, or orange scarlet color, but not a pale orange or distinct yellow color. (Minimum requirement of all grades except U.S. No. 2, which has no color requirements.)

Poorly Colored - Used to described those carrots which are not at least "fairly well colored."

- (34) Following are some additional defects which may also occur due to growing conditions or harvesting practices. Determination as to whether a defect is to be scored will be made on the basis of appearance or waste. When a defect materially (damage) or seriously (serious damage) affects the appearance or wastes more than 5% (damage) or 20% (serious damage) the carrot will be scored. Any one of the following may individually or in combination cause the carrot to be scored.

- (35) **Mechanical Damage**. Mechanical damage includes cut, broken or badly bruised carrots caused by rough handling. This general classification should be used when only small percentages of these defects are present thus eliminating the longer description that would be necessary if each type were enumerated. Score when any material portion of the tip or crown is bruised, broken, or cut off to the extent that the appearance is damaged. See "Amendment I."

- (36) **Insect Injury**. Wireworm and nematode are the most common insects affecting carrots. Nematodes may cause (1) the root to be rough; (2) enlarged tips of the carrots; or (3) the secondary rootlets to have a wart-like appearance. Score against grade when materially detracting from the appearance. Since such roughness may be due to other causes,

such carrots should be scored as rough. See paragraph on "Smoothness".

The extent of the injury caused by wireworm is difficult to determine. (37)
Unless the injury is only very slight and distinctly superficial it should be considered on the basis of waste. Ordinarily the appearance will be materially damaged before causing 5% waste, in which case it should be scored as damage.

Sunburn. Sunburn causing a loss of more than 5% shall be considered (38)
as damage. Superficial light green color at the stem end which does not materially affect the appearance shall be permitted. Superficial green or purple color at the crown not penetrating sufficiently to cause internal greening should not be counted in determining waste.

To determine waste, the top of the carrot should be cut off as in the (39)
ordinary preparation for use. Any additional cutting necessary to remove the green discolored area should be done to determine the percentage of waste.

By "ordinary preparation for use" we mean a crosswise cut made just (40)
below the attachment of the leafstem. Only that portion of the carrot in which the green predominates over the orange or yellow should be considered as discoloration when **determining waste.**

Growth Cracks. Deep or unhealed growth cracks are considered as damage (41)
but healed over growth cracks which are smooth and shallow are not to be considered as such if they do not materially affect the appearance. Carrots with several unhealed growth cracks or with very deep and long cracks sufficient to seriously affect the appearance would be scored against the U. S. No. 2 grade and the 5% tolerance for serious damage in the other grades.

Fresh Cracks. Fresh cracks are unhealed, fresh in appearance, narrow (42)
and deep and may occur as the result of jarring or bruising while the carrots are cool and brittle. They should be recorded separately from growth cracks, as additional fresh cracking, sufficient to affect the results of a later inspection, may occur.

Score as damage when: (43)

1. The crack exceeds $\frac{1}{5}$ (20%) the length of the carrot; or
2. The crack is more than $\frac{1}{8}$ inch wide; or,
3. The crack is more than $\frac{1}{4}$ inch deep.

- (44) Score as serious damage when:
1. The crack exceeds 1/2 (50%) the length of the carrot; or,
 2. The crack is more than 1/4 inch wide; or,
 3. The crack is more than 3/8 inch deep.
- (45) Seedstems. Seedstem growth materially **affects** the flavor and eating quality of the carrots and, when readily noticeable, the carrot should be scored against the U. S. No. 1 grade. Any carrot showing that the seedstem has been removed should be scored.
- (46) Pithiness. This is probably the result of unfavorable growing conditions or frost injury resulting in the texture of the roots being fibrous and spongy. In order to determine pithiness, the **roots that** show indications of sponginess should be cut or broken so that a cross section may be viewed. The crispness should also be observed while cutting or breaking. **Any roots that are definitely spongy and porous** should be scored.
- (47) Woodiness. Carrots which have been growing for a long time are apt to develop cores which are very tough and fibrous. A test for determining woody cores is to cut the carrot at right angles to its longitudinal axis with a sharp knife. If the core is woody to the extent that the knife will require appreciably more force to cut it than is required to cut the surrounding layer of flesh, it is usually woody enough to score.
- (48) Bacterial Blight. Bacterial **Blight** on the roots appears as constrictions where the infection has been earlier. Again, it may appear as narrow bands of brown or black, later to become raised or scabby and then coalesce. These types are scored on the basis of appearance or waste, but chiefly on appearance, under the general definition of damage. Describe as "blight scars".
- (49) Mixed Varieties. The U. S. Grades specify that the carrots shall have similar varietal characteristics. Mixing of two or more varieties of the half-long and long types which show a marked similarity, would not be particularly noticeable or objectionable. However, a mixture of short type carrots with a decidedly long type in the same container would be decidedly noticeable and such lots would not meet grade requirements. In such cases the smaller proportion should be scored as a grade defect.

Freezing Damage. Freezing injury affects the roots in two ways. The roots may grow, following a freeze, producing definitely constricted areas where the injury occurred, in which case the carrot would be scored on the basis of shape (see "Form"). In other cases, freezing injury may cause the roots to become "pithy". This fact make it necessary to cut a number of samples following a freeze, in order to determine if the roots have been damaged. (See "Pithiness") (50)

It is difficult to determine whether or not lack of firmness, such as shrivelling, pithiness or flabbiness, may have been the result of freezing damage or the result of some other cause; so in case of any reasonable doubt, it is advisable to describe the condition rather than attempt to state the cause. Small radiating cracks in the center of the carrot, accompanied by drying out, can be considered as quite definite evidence of freezing injury. A watersoaked appearance of the outer flesh does not necessarily indicate freezing damage. Reference should be made to the carrots being "frozen" only when there are ice crystals present. The term "ice crystals present" should not be used on the certificate as the word "frozen" indicates they are present. It will be the policy not to anticipate whether there will be damage after freezing. The condition should be fully described and the grade statement based on the condition found at time of inspection. (51)

Decay or Soft Rot. Bacterial Soft Rot, Watery Soft Rot, Gray Mold Rot, Rhizopus Rot and Fusarium Rot are the most important or common decays of carrots. The U. S. Extra No. 1 grade provides a tolerance of 1% for soft rot, while the U. S. No. 1 and U. S. No. 2 grades each provide a tolerance of 2% for soft rot. However, decay affecting the short-trimmed leafstem should be scored against the 5% tolerance for serious damage. (52)

Dry Rots such as Fusarium Rot or Black Rot should not be reported as soft rot. They should be scored on the basis of waste or appearance under the general definition of damage or serious damage as the case may be and scored against the tolerance for general defects. (53)

Soft Rot must be reported separately from other defects as the grades provide that carrots must be free from soft rot. If no soft rot is found, the certificate should state "no soft rot." (54)

GRADE

Under this heading a definite statement pertaining to the grade of the lot should be made. When the load consists of different lots, part of which are up to grade and part of which fail to meet the grade (55)

requirements, it will be necessary to make separate grade statements for the different lots. In all such cases great care should be exercised to indicate grade on each lot to avoid grade statements that are indefinite or that tend to contradict what has been reported under the previous headings in the certificate. Remember that the grade statement is an interpretation of the facts previously given. When a lot is certified to be below the requirements of some certain grade, it should be stated in just what respect the product fails to meet the requirements of the grade specified.

- (56) The standards for topped carrots contain four grades: U. S. Extra No. 1, U. S. No. 1, U. S. No. 1 Jumbo, and U. S. No. 2. Lots of carrots that fail to grade U. S. No. 1 may be reported on the basis of a percentage of U. S. No. 1 quality unless the percentage of U. S. No. 1 quality is less than 50% or unless the lot is out of grade on account of damage to the general appearance of the lot. It is our policy not to certify percentage of U. S. Extra No. 1 quality if the lot fails to meet U. S. No. 1 grade.
- (57) Method of Reporting Percentage of U. S. No. 1 Quality. If the percentage of U. S. No. 1 quality is to be reported, the total percentage of defects (including decay), undersize and oversize (if any) should be subtracted from 100% to determine the percentage of U. S. No. 1 quality. In reporting percentages of this nature, always use multiples of 5 except when the figures show 85% or more, in which case exact percentages should be reported.
- (58) Size in Connection with the Grade. When no minimum size is specified in connection with the grade, it is assumed that the minimum size is that stated in the grade. However, the applicant may specify a different minimum size. If undersize carrots exceed the tolerances, either a lower minimum size may be specified in connection with the grade or the lot may be reported as failing to grade account the excessive undersize stated under the Size heading. Usually the applicant should be consulted on this, as the size description used should be applicable to his basis of sale. Remember, when sizes other than those specified in the grade are reported, they must be stated in connection with the grade statement, thus: "U. S. No. 1, 7/8 inch minimum".

NOTESHEETS

- (59) Entries on the notesheet should be kept in a neat, systematic manner as the inspection progresses. Record each sample immediately after it

is examined. Never try to enter the results of two or three samples from memory. Notes should be so complete and legible that any inspector could write a complete certificate from them at a later date.

CERTIFICATES

The FV-184 handwritten certificate will vary from state to state in the information that will go on them. Following are some examples of different FV-184's from California, Texas and Arizona showing approved formats for those states. For any state other than these it will be necessary to check with your immediate supervisor for approved **format.** (60)

These instructions do not establish a new or revised substantive rule (U. S. Standards for Grades of Topped Carrots, 7 CFR §§51.2360-51.2384).

ART 12345

Car Initials and Number

Sample	Total	Rocks	Rack Damage	Rack Soft	Type of Rock	Fluorescence	Color	Class	Smoothness	Shape	Diameter	Length	
												under 3/4"	over 1 1/2"
50	4	1	0	0	MS	F	W	C	S	W	1	5-9	6-8
50	2	0	0	0	MS	F	FW	C	S-FS	W	0	5-10	6-9
50	6	3	1	1	MS	F	W	C	S	W	2	5-11	6-9
50	3	0	0	0	MS	F	W	C	S	W	1	5-9	6-8
50	3	1	0	0	MS	F	FW	C	S	W	0	5-9	6-8
50	5	2	1	1	MS	F	W	C	S-FS	W	1	5-10	6-8

Toppled
 1. 100%
 2. 100%
 3. 100%
 4. 100%
 5. 100%
 6. 100%
 7. 100%
 8. 100%
 9. 100%
 10. 100%

Check these Items

Car Number	ART 12345	Pack	
Condition of car	H.C. P. Dr. B.E.	Color	
Loading	How load technique Dr. Dr.	Maturity	
Stripping	Upper 18 in. crushed ice	Grade	See above notes
Bracing	over top of load	Car Marked	X 2-18-70
Labels - Marks	Survey P brand	Time started	3:45 PM 2-18-70
Sizes - Counts	56 @ 1/2" 44 @ 5/8"	Time completed	7:30 PM 2-18-70

UNITED STATES DEPARTMENT OF AGRICULTURE
STATE OF CALIFORNIA DEPARTMENT OF AGRICULTURE

INSPECTION CERTIFICATE

FEE \$

COPY

This certificate is issued in compliance with the regulations of the Secretary of the United States and of California. **WARNING:** Any person who knowingly shall falsely make, issue, alter, forge, or counterfeit this certificate, or participate in any such actions, is subject to a fine of not more than \$1,000 or imprisonment for not more than one year, or both.

INSPECTION POINT <i>Los Angeles</i>	TYPE OF CONVEYANCE <i>Lot Inspection</i>	CONVEYANCE NUMBER <i>Fed Slab # 212-110</i>
INSPECTION BEGUN (HOUR, DATE) <i>3:25 Pm February 12 1970</i>	INSPECTION COMPLETED (HOUR, DATE) <i>5:00 Pm February 12-1970</i>	
NAME OF APPLICANT <i>Deaton Packers</i>	ADDRESS OF APPLICANT <i>Los Angeles, California</i>	
NAME OF SHIPPER	ADDRESS OF SHIPPER	

PRODUCT	LOADER'S COUNT	CONTAINERS		DECAY	GRADE
		TYPE	MARKINGS		
<i>Topped Carrots</i>	<i>100</i>	<i>50 ctns</i>	<i>Taste Rite</i>	<i>none</i>	<i>Approx 80% SW Quality</i>
<i>Mostly well many fairly well colored</i>					
<i>Diameter gen 3/4 to 1 1/2 length gen 5 to 9 inches.</i>					
<i>Defects 3 to 27% averaging 19% including 12% fresh air cracks remainder mostly mishapen, sunburn or mechanical damage</i>					
<i>Meets Canadian Import Requirements</i>					

This certifies that I made personal inspection of samples believed by me to be representative of the lot of products herein described and that the quality and/or condition, at the time and date shown above, pertaining to such products as shown by said samples, were as stated herein.

PLEASE REFER TO THIS CERTIFICATE BY NUMBER

H. Chusker INSPECTOR

INSPECTION CERTIFICATE

FEE \$

CC. Y

This certificate is issued in compliance with the regulations of the Secretary of the United States and of California. **WARNING: Any person who knowingly shall falsify make, issue, alter, forge, or counterfeit this certificate, or participate in any such actions, is subject to a fine of not more than \$1,000 or imprisonment for not more than one year, or both.**

INSPECTION POINT El Centro TYPE OF CONVEYANCE Trailer CONVEYANCE NUMBER S.F.R.C. 1111
 INSPECTION BEGUN (HOUR, DATE) 8 AM February 2 1970 INSPECTION COMPLETED (HOUR, DATE) 12 noon February 2 1970
 NAME OF APPLICANT Big Packing Company ADDRESS OF APPLICANT El Centro, California
 NAME OF SHIPPER Same ADDRESS OF SHIPPER Same

PRODUCT	LOADER'S COUNT	CONTAINERS		MARKINGS	DECAY	GRADE
		TYPE				
Topped Carrots	520 MC	film bags		Snappy	None	U.S. No. 1
				Family well colored		
				Diameter approx. 3/4 to 1 1/2 inches length		
				Open 5 to 10 1/2 inches.		
				Defects		
				average within tolerance.		

This certifies that I made personal inspection of samples believed by me to be representative of the lot of products herein described and that the quality and/or condition, at the time and date shown above, pertaining to such products as shown by said samples, were as stated herein.

Joe Hopfky INSPECTOR

PLEASE REFER TO THIS CERTIFICATE BY NUMBER

UNITED STATES DEPARTMENT OF AGRICULTURE
STATE OF CALIFORNIA DEPARTMENT OF AGRICULTURE

INSPECTION CERTIFICATE

FEE \$

COPY

This certificate is issued in compliance with the regulations of the Secretary of the United States and of California. WARNING: Any person who knowingly shall falsely make, issue, alter, forge, or counterfeit this certificate, or participate in any such actions, is subject to a fine of not more than \$1,000 or, imprisonment for not more than one year, or both. *Inspected Containers*

INSPECTION POINT: *Delicias Calif.* TYPE OF CONVEYANCE: *Truck* CONTAINER NUMBER: *Stamped Fed Sub 001-111*

INSPECTION BEGUN (HOUR, DATE): *1:10 Pm February 3 1970* INSPECTION COMPLETED (HOUR, DATE): *2:30 Pm February 3 1970*

NAME OF APPLICANT: *Fastest Packing Company* ADDRESS OF APPLICANT: *Delicias Calif.*

NAME OF SHIPPER: _____ ADDRESS OF SHIPPER: _____

PRODUCT	LOADER'S COUNT	CONTAINERS		DECAY	GRADE
		TYPE	MARKINGS		
<i>Topped Carrots</i>	<i>350</i>	<i>9" dia sack</i>	<i>Handy</i>	<i>None</i>	<i>SS Selected No 1 Quality Jumbo.</i>
<i>Mostly well, some fairly well colored.</i>					
<i>Diameter gen. 1 to 2 1/2 inches</i>					
<i>gen. 5 to 10 1/2 inches</i>					
<i>Average 1% under size</i>					
<i>defects 5 to 25% averaging 11%</i>					
<i>over landing 7% minichips or growth cracks</i>					

This certifies that I made personal inspection of samples believed by me to be representative of the lot of products herein described and that the quality and/or condition, at the time and date shown above, pertaining to such products as shown by said samples, were as stated herein.

INSPECTOR: *Jane Blake*

PLEASE REFER TO THIS CERTIFICATE BY NUMBER

U. S. DEPARTMENT OF AGRICULTURE
CONSUMER AND MARKETING SERVICE

TEXAS DEPARTMENT OF AGRICULTURE
Cooperating

SHIPPING POINT INSPECTION SERVICE
INSPECTION CERTIFICATE

This certificate is issued in compliance with the regulations of the Secretary of Agriculture governing the inspection of various products pursuant to the Agricultural Marketing Act of 1946, as amended (7 U. S. C. 1621 et seq.), and the applicable statutes of the State of Texas, and is admissible as prima facie evidence in all courts of the United States.

APPLICANT: Paul Bros., Inc. ADDRESS OF APPLICANT: Waco, Texas INSPECTION POINT: Waco, Texas INITIAL AND NO.: ART 27180
 SHIPPER: Same ADDRESS OF SHIPPER: Same CARRIER: CAR TRUCK TRAILER

INSPECTION BEGUN: DATE Feb. 12, 1970 HOUR 8:00 PM INSPECTION COMPLETED: DATE Feb. 12, 1970
 AMOUNT OF ICE OR TYPE OF REFRIGERATION: atches closed, plugs in, bunkers empty.

LOADING: through lengthwise and crosswise load, 8 rows, 8 layers, 17 to 18 inches crushed ice over load.

PRODUCT	BRAND OR STAMPING	MANIFEST	TYPE AND SIZE OF CONTAINER	SIZE OR COUNT	DEFECTS AND DECAY	GRADE
<u>Topped Carrots</u>	<u>May brand</u>	<u>500</u>	<u>open mesh 5 lb mesh sacks 60 lbs.</u>	<u>Generally ranges from 1 to 2 inches in diameter, 5 to 11, mostly 6 to 9 inches in length.</u>	<u>Each lot fairly well colored. Grad defects within tolerances.</u>	<u>U.S. No. 1 Jumbo</u>
<u>Topped Carrots</u>	<u>May brand</u>	<u>300</u>	<u>1 lb. Eilon bags @ in M.C. sacks.</u>	<u>Generally ranges from 3/4 to 1 1/4 inches in diameter, 5 to 9, mostly 6 to 8 inches in length.</u>	<u>Average less than 1/2 of 1% soft rot.</u>	<u>U.S. No. 1, 3/4 to 1 3/4 inches in diameter.</u>
				<u>Each lot off size within tolerances for size or specified size.</u>		<u>Meets Canadian Import Requirements</u>

REMARKS: _____

FEE: \$ 15.00 Chgd.

EXPIRES: _____
 SIGNATURE: Joe Inspector (SIGNATURE)

I, the undersigned, a duly authorized inspector of the United States Department of Agriculture, do hereby certify that on the date indicated I personally inspected the above described products and that the quality and/or condition pertaining to said products were as herein stated.

FORM FV-291-1 (REVERSE)

CARROTS

Car Initials and Number PFE 4151324

Lbs. for No. Exam.	Rough	Missshapen	Sunburn	Growth Cracks	Secondary Rootlets	Broken	Decay	Texturing	Color	Rate	Mostly	Under 3/4 Inch	Root Length	Texture	Shape	
1	1											0	6-11/16	ST	NS	
2				1		3						0				
1	1			1			1					0				
2	3				1	3						1				
3				1	1							0				
3	1		1		2	1						2				
2				1		1	1					1				
3					1							1				
1	3				1	2	1					0				
1	1				1	3						1				
1	2	1				3						1				
3				1	1	2	1					1				
4					1	2						1				
1	3					3	1					0				
4				1	2	2						1				
2						1						1				
7	38	2	6	10	30		5					8				
						99%										
						98 = 12% defects							1%			
						1% under size										
						13%										
CHECK THESE ITEMS																
Car No., <u>PFE 4151324</u>																
Condition of car, <u>SN, R.</u>																
Loading, <u>T.L. Lengthwise 7 R. 8+9 L. DW. Diameter 5 R. 6+7 L.</u>																
Stripping,																
Bracing,																
Labels—Marks, <u>Tagged SHARPS NAME & ADDRESS</u>																
Sizes—Counts, <u>110-125 lb burlap 50-60</u>																
Pack,																
Color,																
Maturity,																
Grade, <u>97% U.S. No. 1 Quality</u>																
Car marked,																
Time commenced, <u>7:00 AM 1-11-70</u>																
Time completed, <u>5:15 PM 1-11-70</u>																
TOTAL,																
PERCENT,																

This is to certify that I notified _____

of _____ at _____ (HOUR) _____ (DATE)
that the above lot was *

(SIGNATURE)

*Show whether misbranded, violation of Marketing Order, or State regulatory acts.

Car Initials and Number _____

FORM FV-291-1 (REVERSE)

CARROTS Topper

Car Initials and Number PFF 300 451

Lbs. or No. Exam.	Rough	Missshapen	Sunburn	Growth Cracks	Secondary Rootlets	Broken	Decay	Texture	Color	Range	Mostly	Unfer 3/4 inch	Root Length	Texture	Shape
50	1	1				1		gw	gwc	4-12	-	0	6-10	95	Ⓢ
50		2				2		-	-	-	-	0	7-9	+	-
50		3			1			-	-	-	-	1	-	+	-
50	1	3				1		-	-	-	-	0	-	+	-
50	1	1			1	1		-	-	-	-	0	-	+	-
50		2				2		-	-	-	-	0	-	+	-
50		2						-	-	-	-	0	-	+	-
50	1	1			1	1		-	-	-	-	0	-	+	-
50		3			1	2		-	-	-	-	0	-	+	-
50		1						-	-	-	-	1	-	+	-
50	1				1	1		-	-	-	-	0	-	+	-
50		1				1		-	-	-	-	0	-	+	-
600	5	19			5	12	0					4			

41 = 7%

CHECK THESE ITEMS

Car No., PFF 300 451
 Condition of car, S.M.R.
 Loading, T.L. 200 + Cps 6-8 P. 7-8 L.
 Stripping,
 Bracing,
 Labels—Marks, ART'S BEST
 Sizes—Counts, 500-50 lb film lined mesh 20-25 mesh containing 48 126
 Pack, film bags brandch ART'S BEST.
 Color,
 Maturity,
 Grade, U.S. No 1
 Car marked,
 Time commenced, 9:30 AM 1-15-40
 Time completed, 6:30 PM 1-15-40
 TOTAL,
 PERCENT,

This is to certify that I notified _____ of _____ at _____ (HOUR) _____ (DATE) that the above lot was *

(SIGNATURE)

*Show whether misbranded, violation of Marketing Order, or State regulatory acts.

Car Initials and Number _____

January 15, 1979 BN-83-1(a)

Amendment I

INSTRUCTIONS FOR SCORING CUT OR
BROKEN TIPS OF CARROTS

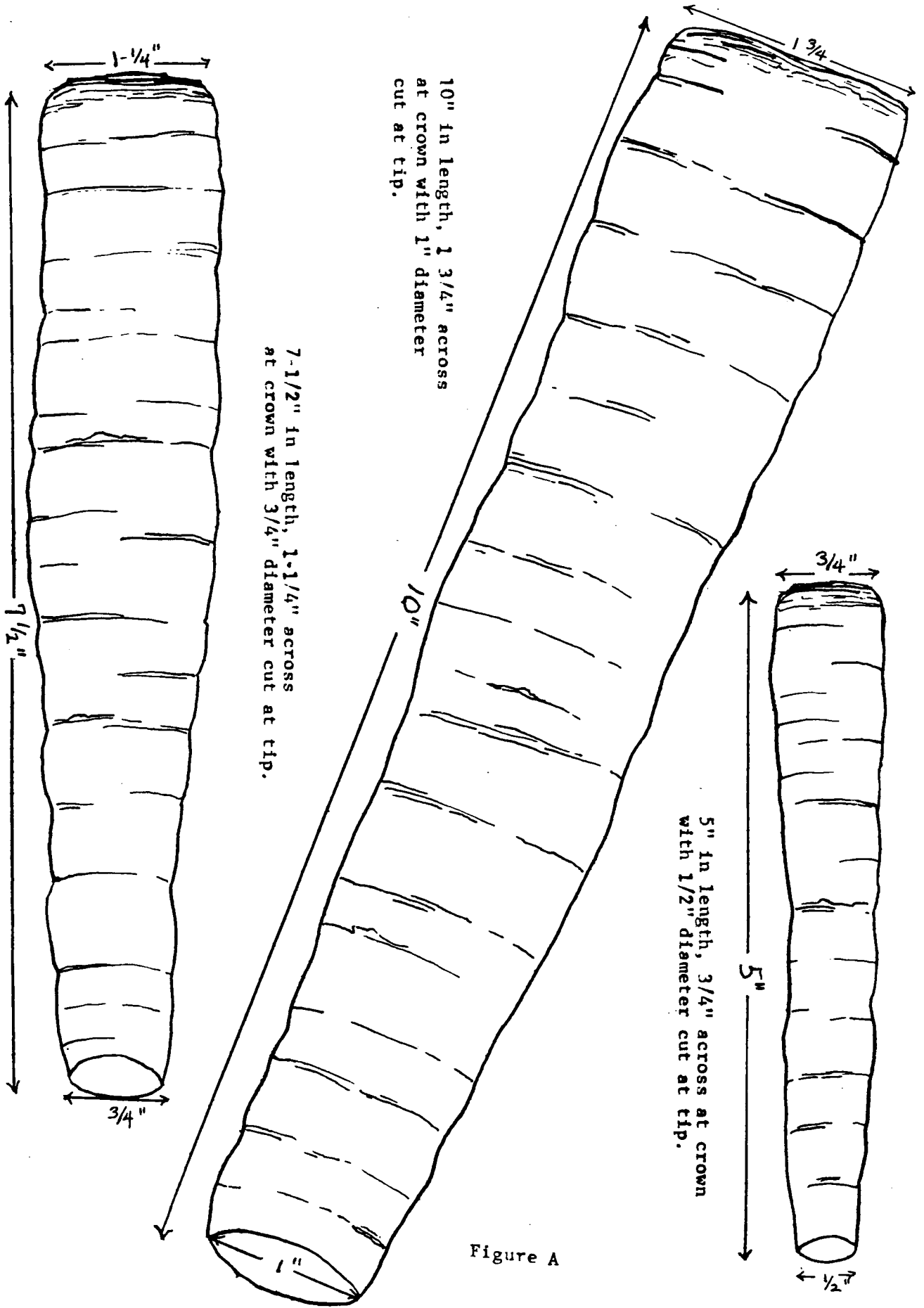
Cut or broken tips of carrots shall be scored on an appearance basis. Broken or cut tips shall be scored according to the type of carrot and the relationship of the diameter of the break or cut to the length of the remaining root.

Long and Half Long (Slender) Type Carrots: As a guide allow a fairly smooth cut or break $\frac{1}{2}$ inch in diameter for each 5 inches of root remaining. (See Figure A).

Short (Stocky) Type Carrots: As a guide allow a fairly smooth cut or break $\frac{5}{8}$ inch in diameter for each 5 inches of root remaining. (See Figure B).

Carrots having rough or jagged cuts or broken tips are permitted provided they do not detract from the appearance of the carrot to a greater extent than the allowance for fairly smooth broken or cut tips. (See figure C).

CARROTS: LONG OR HALF LONG:



10" in length, $1\frac{3}{4}$ " across at crown with 1" diameter cut at tip.

$7\frac{1}{2}$ " in length, $1\frac{1}{4}$ " across at crown with $\frac{3}{4}$ " diameter cut at tip.

5" in length, $\frac{3}{4}$ " across at crown with $\frac{1}{2}$ " diameter cut at tip.

Figure A

CARROTS

Stocky (blunt) types: (1) 7-1/2" in length, 2" across at crown with a 7/8" cut at tip.

(2) 5" in length, 1" across at crown with a 5/8" cut at tip.

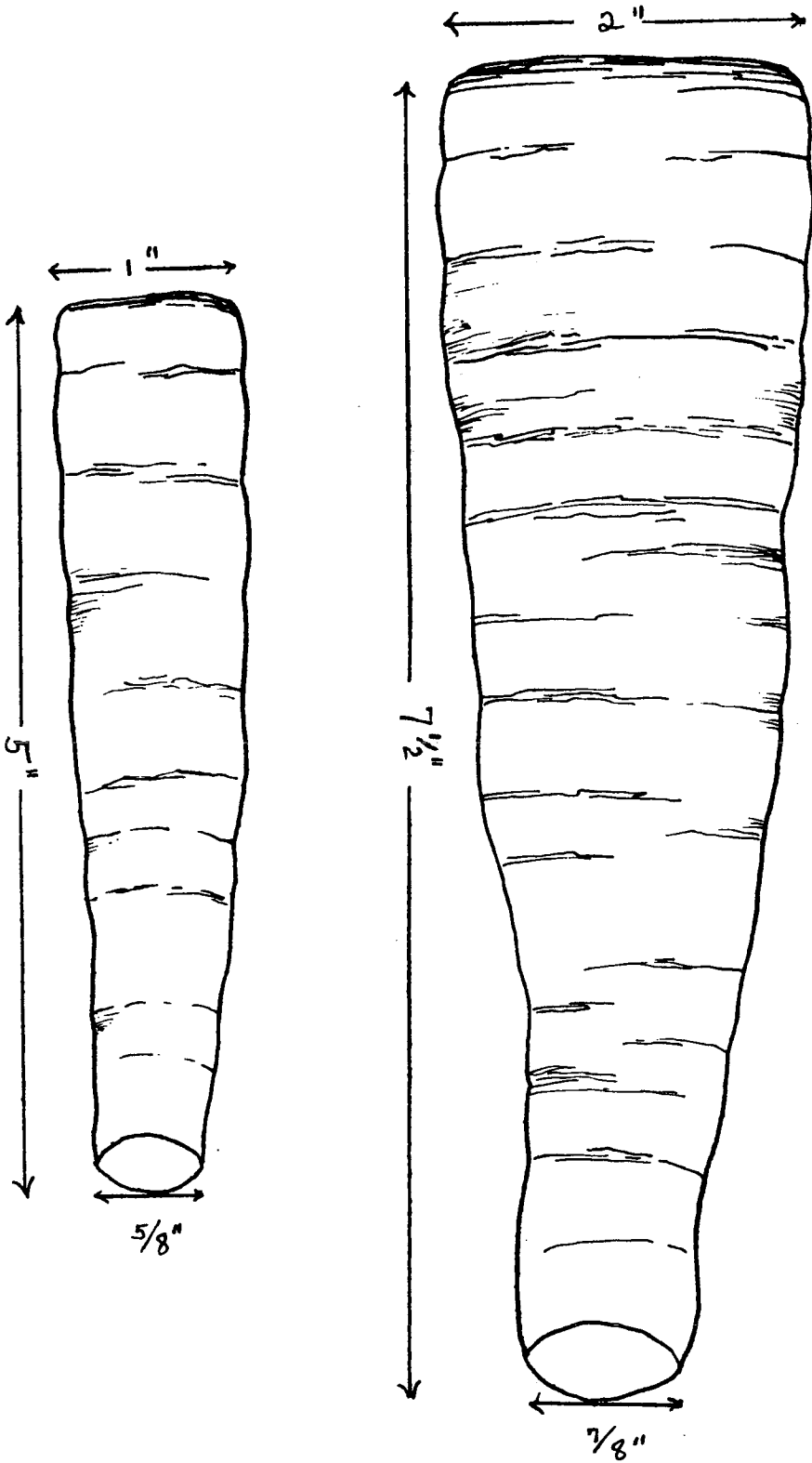


Figure B

CARROTS

Rough or Jagged Broken Tips

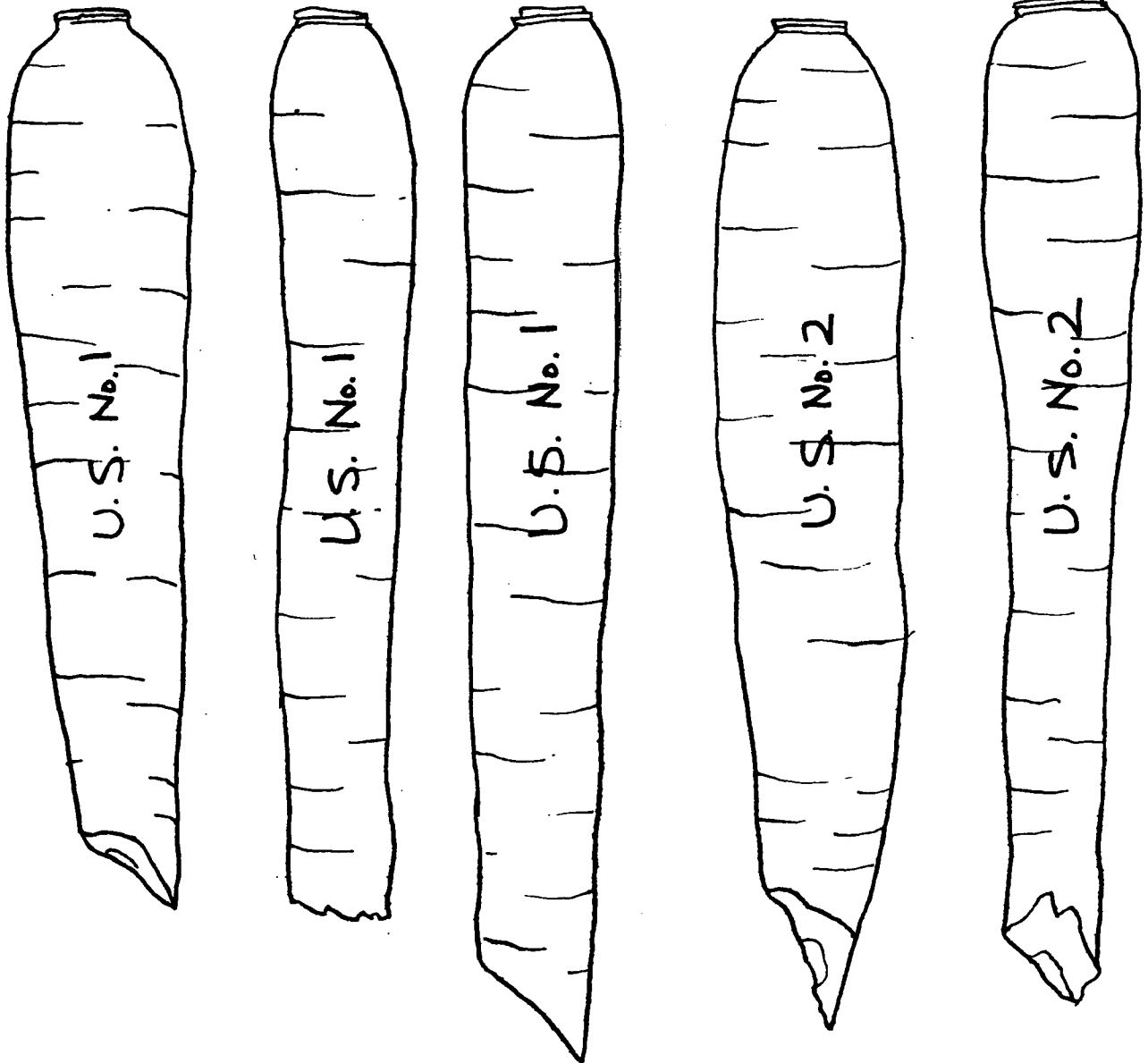


Figure C

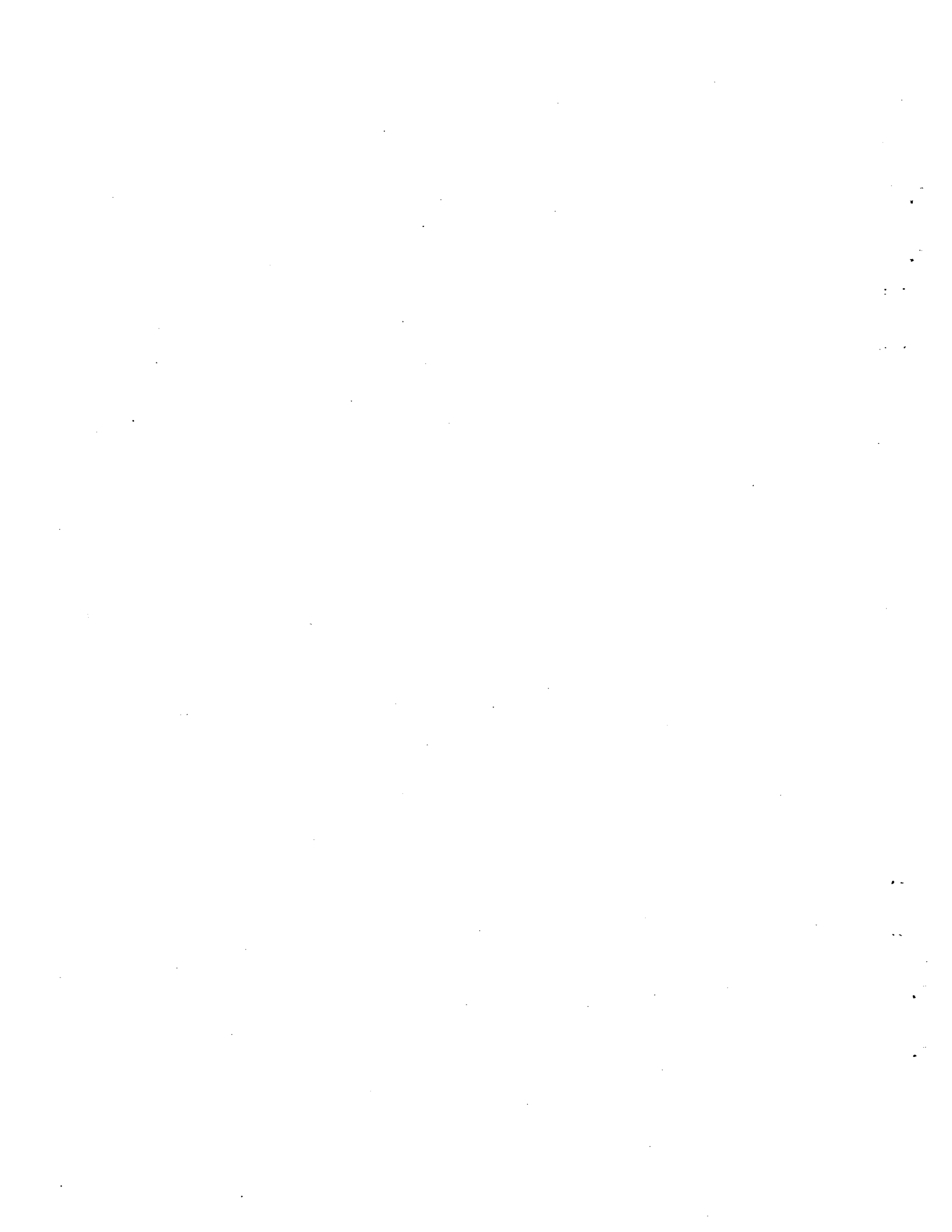


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BUNCHED CARROTS AND CARROTS WITH
SHORT TRIMMED TOPS

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UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
FRUIT AND VEGETABLE DIVISION
FRESH PRODUCTS BRANCH

Washington, D. C. 20250

SHIPPING POINT INSPECTION INSTRUCTIONS FOR BUNCHED CARROTS AND
CARROTS WITH SHORT TRIMMED TOPS

Although over 90% of the total U. S. Carrot production is now shipped topped, there is some business still being done in California and Texas in bunched carrots, but very little in carrots with short trimmed tops. (1)

SAMPLES FOR GRADE DETERMINATION

In the Topped Carrot standard the sample size is constant at 50 carrots. (2) However, this is not the case with Bunched Carrots or Carrots with Short Trimmed Tops.

With Bunched Carrots when scoring defects of the roots, the root is the unit, while in scoring defects of the tops the bunch is the unit. In other words, you might decide to examine 25, 50, or more roots from each sampled container, but all bunches from the sample container must be examined for defects of the tops. (3)

In the standard for Carrots with Short Trimmed Tops defects for both roots and tops are on the basis of the individual carrot and sample size can vary (25, 50, 75, etc.). (4)

TOLERANCES

	<u>Bunched Carrots</u>		<u>Carrots with short-trimmed tops</u>	
	U.S. No. 1	U.S. Commercial	U.S. No. 1	U.S. Commercial
A. Defects of Roots	10%	20%	10%	20%
1. Serious damage (included in "A")	5%	10%	5%	10%
(a) soft rot (included in serious damage)	1%	1%	1%	1%
B. Defects of Tops	10% <u>1/</u>	10% <u>1/</u>	10%	10%
1. Decay	5% <u>1/</u>	5% <u>1/</u>	5%	5%
C. Size				
1. Smaller than specified minimum diameter	5%	5%	5%	5%
2. Larger than specified maximum diameter	10%	10%	10%	10%
D. Tops				
1. For tops longer than specified maximum length	25% <u>1/</u>	25% <u>1/</u>	10%	10%

1/ Applied on a bunch basis

APPLICATION OF TOLERANCES

(6)

Bunched Carrots

Based on sample inspection, individual packages in the lot are subject to the following limitation: Provided, That the averages for the entire lot are within the tolerances specified for the grade:

- (1) For a tolerance of 10% or more, individual packages shall have not more than one and one-half times the tolerances specified, except at least one defective and one off-size specimen may be permitted in a package.
- (2) For tolerance of less than 10%, individual packages shall have not more than double the tolerance specified, except at least one defective and one off-size specimen may be permitted in a package.

Carrots With Short Trimmed Tops

(7)

Based on sample inspection, individual packages in the lot are subject to the following limitations: Provided, That the averages for the entire lot are within the tolerances specified for the grade:

- (1) Packages of more than 5 pounds and tolerance of:
 - (a) 10% - individual packages shall have not more than one and one-half times the tolerance specified;
 - (b) Less than 10% - individual packages shall have not more than double the tolerance specified;

Provided, That at least one defective specimen shall be permitted in a package.

- (2) For packages of 5 pounds or less:
Individual packages are not restricted as to the percentage of defects;

Provided, That not more than one carrot which is frozen or affected by soft rot may be permitted in any package.

(8)

SIZE

Bunched Carrots

1. Size of Roots. Each grade requires that, unless otherwise specified, the diameter be not less than 3/4 inch. There are no requirements for maximum diameter or for length.
 - (i) Length of Roots. Although the standards do not set requirements for length of roots, this factor should be reported to insure a more complete and detailed certificate.
 - (ii) Size Classification of Roots. There is no size classification in the Standards and the size of roots should be reported only in diameters and lengths.
 2. Length of Tops. Each grade requires that, unless otherwise specified, the bunches shall have full tops and the length of the tops shall not be more than 20 inches.
- (9) The length of tops may be designated as "short", "medium", "long", or "extra long" or a combination of these length designations may be used. If these terms are to be used, the inspector should refer to the definitions of these terms in the standards.
- (10) Most bunched carrots have full tops so this fact need not be stated. However, if the tops have been clipped, this fact should be reported with no reference to the length designations. For example: "Tops clipped to 16 inches."
- (11) In determining the length of leafstems and cut back tops, measurements should be made from the point of attachment of the stems to the roots.
3. Uniformity in Sizing When Standard Bunches Certified. Inspectors should not certify Standard Bunches unless specifically requested to do so by the applicant. In that event, the facts pertaining to Standard Bunches should be reported under the "Size" heading on the certificate, but the actual certification should be made under the "Grade" heading. The portion of bunches complying or failing to comply with the requirements of Standard Bunches may be reported under the "Size" heading.
- (12) Requirements for Standard Bunches. "Each bunch of carrots including tops, shall weigh not less than 1 pound and contain at least 4 carrots." "When the diameter of the smallest carrot in the bunch is less than 1-1/4 inches not over 1/4 inch variation in the size
- (13)
- (14)

of carrots in the bunch shall be permitted."

"When the diameter of the smallest carrot in the bunch is 1-1/4 to 1-3/4 inches, not over 3/8 inch variation in the size of carrots in the bunch shall be permitted." (15)

"When the diameter of the smallest carrot in the bunch is larger than 1-3/4 inches, not over 1/2 inch variation in the size of carrots in the bunch shall be permitted." (16)

"In order to allow for variations incident to proper bunching, not more than 10%, by count, of the bunches may fail to meet the requirements for Standard Bunches." (17)

If bunches do not meet the weight requirements, or are not within tolerance for ranges specified in the Standards, they must be reported as small or irregular as the case may be, followed by the usual size description. (18)

Most shippers want to put up bunches weighing not less than 1 to 1-1/4 pounds per bunch, also each bunch to have carrots of approximately the same length. Bunches should be tied tightly so they will not appear to be straggly or loose. (19)

4. Count Per Bunch. The number of carrots per bunch may be certified, along with other information of size, when specifically requested by the applicant. In reporting the count per bunch, the range in the number of carrots per bunch along with a "mostly" should be shown. Example: "Range from 4 to 9, mostly 5 to 7 carrots per bunch." (20)

5. Number of Bunches Per Crate. It is permissible to certify the number of bunches or the "dozen bunches count per crate" upon request of the applicant along with the other information of size, quality and grade. The entire contents of a sufficient number of crates should be examined to determine the accuracy of the statement "conforms to dozen count." (21)

Carrots with Short Trimmed Tops. (22)

1. Size of Roots. Each grade requires that, unless otherwise specified the diameter be not less than 3/4 inch. There are no requirements for maximum diameter or for length, however, to insure a more complete and detailed certificate, these factors should be reported.

(23) 2. Length of Tops. Each grade requires that the leafstems "shall be cut back to not more than 4 inches in length." A tolerance of 10% by count is provided for leafstems over 4 inches long. There is no requirement as to minimum length of leaf stem. Any carrot showing one or more leafstems identifiable as such meets grade requirements. Carrots with no leafstems should be scored against the 10% tolerance for defects of leafstems.

(24) Standard Sizing of Short Trimmed Carrots. Standard sizing may be certified in connection with the grades for Carrots with Short Trimmed Tops when the product is in packages weighing approximately 2 pounds or less. This classification requires that not more than 20% of the individual packages in a lot of Carrots with Short Trimmed Tops may contain carrots which vary more than 3/8 inch in diameter or 2-1/2 inches in length.

GRADE DEFECTS

(25) A major difference in scoring damage of roots on Topped Carrots and on Bunch Carrots and Carrots with Short Trimmed Tops is the amount of waste allowed. The Topped Carrot grade reads "..... or which cannot be removed without a loss of more than 5 percent, by weight, ect....." The other standards read "..... or causes a loss of more than 3 percent, by weight, etc....."

(26) The following factors should be recorded under the proper headings on the note sheet and may be reported on the certificate in accordance with instructions from your supervisor:

Firmness	Smoothness	Condition of Tops
Cleanness	Form (shape)	Defects
Color of Roots		Decay or Soft Rot

(27) Except for Condition of Tops, these headings are discussed in the first section of these instructions. However, the minimum requirement of each grade is shown.

Firmness - Firm	Smoothness - Fairly Smooth
Cleanness - Fairly Clean	Form (shape) - Well Formed
Color of Roots - Fairly Well Colored	

CONDITION OF TOPS

(28) Bunched Carrots. The bunch is the basis for scoring discoloration. Individual plants or carrots cannot be scored. To meet the requirements

of the Bunched Carrot grades, carrots must have tops which are fresh and free from decay and free from damage caused by freezing, seedstems, yellowing or other discoloration, disease, insects or mechanical or other means. "Fresh" means that the tops are not badly wilted.

Color of Tops. The color of the tops should be reported on the certificate. This refers to the color of the leaves and not that of the leafstems. In describing the color of tops, the following terms should be used: (29)

Good green color meaning that the leaves show a good bright shade of green color.

Light green color meaning that the leaves show a light shade of green color.

Discoloration of Tops. Yellowing, browning, or dark discoloration caused by bruised, water-soaked or frost damaged tops or other discoloration or injury to the tops that materially affect the appearance of the bunch should be scored as damage. The appearance of bunches having slight discoloration such as yellowing, browning, or other abnormal discoloration affecting a few leaflets are not damaged if the tops as a whole show a predominantly normal green color. Inspectors should use good judgment in scoring discoloration of the tops. While tops are not used for food, the market value of bunched carrots to a large extent is based upon the general appearance of the tops. The inspector should not become technical; on the other hand, bunches that show decidedly brown, black or yellow leaves in sufficient quantity to materially affect the appearance should be scored. (30)

"Bronze" or "Purple Colored Tops". Sometimes certain sections of carrot fields may have tops that are somewhat "bronze" or "purple" colored. These tops should not be considered damaged unless the general appearance of the bunch is materially affected. This color is a growing condition and is not considered as objectionable as brown discoloration, and inspectors should allow considerably more of this type of discoloration before scoring as damaged. (31)

Bacterial Blight. Bacterial Blight affects roots, leaves, flower stalks and flower heads of carrots in the field. On the leaves, it will appear as irregular necrotic spots and on the stems and petioles as brownish streaks. These types are scored on the basis of appearance, under the definition of damage. (32)

- (33) Excessively Straggly or Ragged Tops: Occasionally, in the bunching process, it is necessary to trim off so many brown, or otherwise discolored leaves and leafstems that it gives the bunch an excessively straggly or ragged appearance. On account of the wide variation in size, number of leaves, and length of tops, it is impossible to state a minimum number of leaves that each individual carrot must have before the appearance of the bunch is materially affected. If the tops have been trimmed to the extent that a number of bare leafstems, with very few full leaves remaining, results in the bunch having an excessively straggly or ragged appearance, the bunch should be scored against the grade. Unless an excessive number of leaves have been removed on account of freezing injury, blight, or other causes, there generally will be a sufficient number of leaves to consider the tops as satisfactory for the bunch as a whole. However, if only a relatively few leaves remain, the appearance of the bunch should be considered materially affected and scored as a defect against the 10% tolerance for defects of tops.
- (34) Differentiate Between Decay and Dead, Watersoaked or Bruised Leaves: Attention is called to discolored, dead, bruised or watersoaked leaves which might wrongly be classed as decay. Careful examination of these leaves may show no mold and that the tissues do not disintegrate easily when rubbed, as is common with Bacterial Soft Rot. Such leaves are not decayed as this term is used in the Inspection Service. "Decay will be used in the sense of being a deterioration or decline involving decomposition, which is induced by fungi, bacteria and the like and which is of a complete and progressive nature."
- (35) Carrots with Short Trimmed Tops have a separate 10% tolerance **for carrots with leafstems that materially injure their** appearance, including a 5% tolerance for leafstems affected by decay. Individual carrots with discolored, or otherwise damaged, leafstems should be scored individually (even though they are tied in bunches) against the tolerance for damaged leafstems.
- (36) Reporting Quality of Roots of Bunched Carrots When Tops are Damaged. When a lot of bunched carrots shows over 10% of the bunches with damage to tops by discoloration, or individual packages exceed one and one half times the tolerance (15%), the lot would fail to grade on account of damaged tops. As the 10% of the bunches permitted showing damaged tops is scored on the basis of the bunch, such percentages must not be added to the total defects, which are scored on the basis of the individual root, to arrive at a percentage of U. S. No. 1 quality.

If the bunches with damaged tops are more than 1% but less than 10%, (37) they should be reported by the use of the term "generally," either alone or in connection with a grade defects statement, thus: "Tops generally fresh and green" or "Tops generally fresh and green, damage by yellow leaves averages within tolerance ". Less than 1% damage may be disregarded.

If the percentage of damaged tops exceeds the tolerances, the range and (38) the average percentage of damaged bunches must be reported. If a lot is out of grade due to damage by tops, no percentage of U. S. No. 1 quality may be reported, however, a percentage of U. S. No. 1 quality or grade of the roots aside from the tops may be stated.

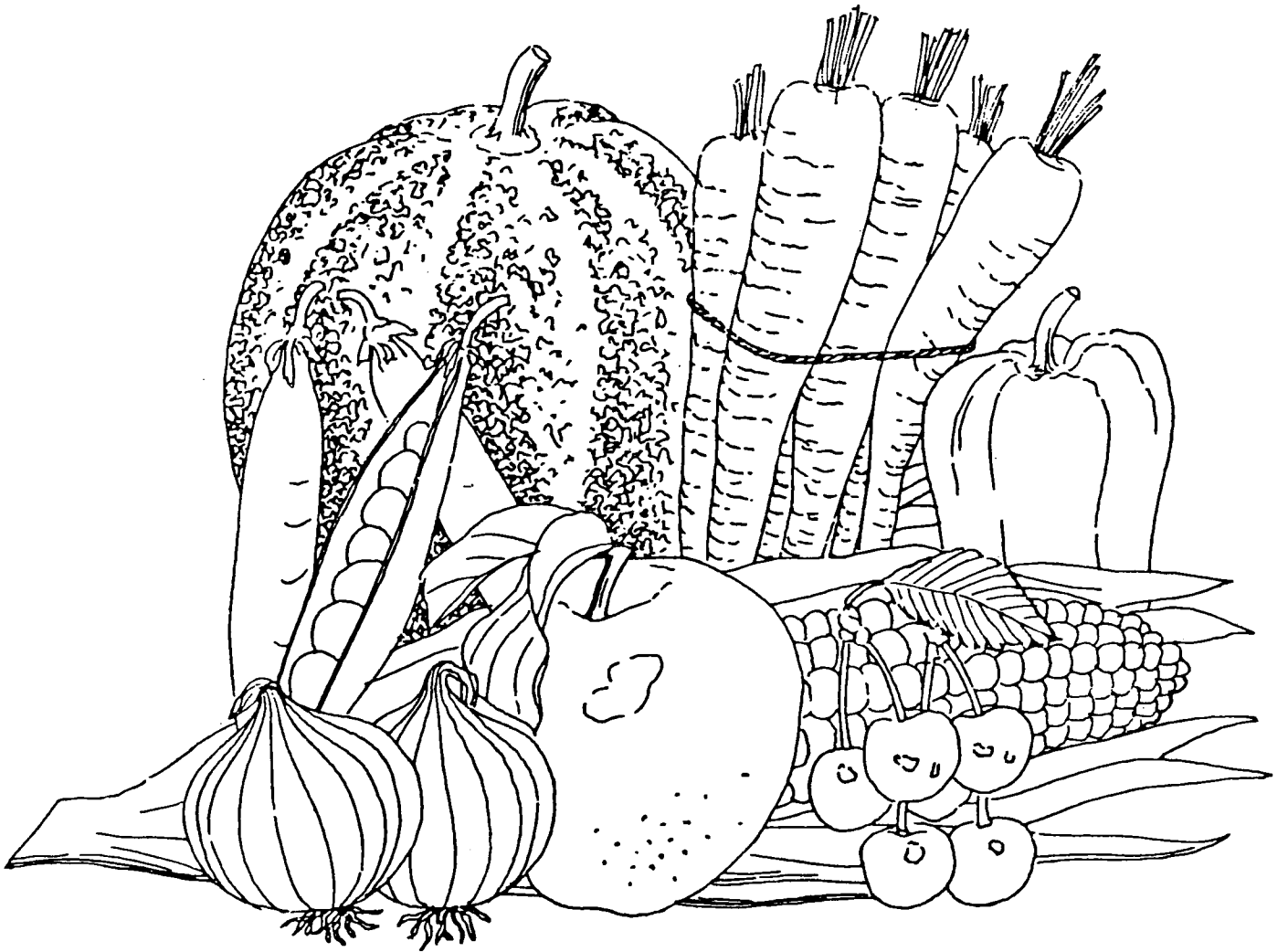
Example: Fails to grade U. S. No. 1 due to discoloration of tops and defective roots. Roots average 85% U. S. No. 1 quality.

Fails to grade U. S. No. 1 due to damaged tops but roots are of U. S. No. 1 quality.

These instructions do not establish a new or revised substantive rule (U. S. Standards for Bunched Carrots and U. S. Standards for Carrots with Short Trimmed Tops, 7 CFR §§51.2455-51.2471 and §§51.2485-51.2498).

Appendix I

United States Standards



UNITED STATES STANDARDS FOR GRADES OF
BUNCHED CARROTS¹

SOURCE: 19 FR 5202, Aug. 18, 1954, unless
otherwise noted. Redesignated at 42 FR
32514, June 27, 1977.

Effective September 18, 1954

Sec.	GRADES
2851.2455	U.S. No. 1.
2851.2456	U.S. Commercial.
	UNCLASSIFIED
2851.2457	Unclassified.
	APPLICATION OF TOLERANCES
2851.2458	Application of tolerances.
	LENGTH OF TOPS
2851.2459	Length of tops.
	STANDARD BUNCHES
2851.2460	Standard bunches.
	DEFINITIONS
2851.2461	Similar varietal characteristics.
2851.2462	Firm.
2851.2463	Fairly clean.
2851.2464	Fairly well colored.
2851.2465	Fairly smooth.
2851.2466	Well formed.
2851.2467	Damage.
2851.2468	Fresh.
2851.2469	Full tops.
2851.2470	Diameter.
2851.2471	Serious damage.

AUTHORITY: The provisions of this subpart issued under secs. 203, 205, 60 Stat. 1087, as amended, 1090 as amended; 7 U.S.C. 1622, 1624.

GRADES

§ 2851.2455 U.S. No. 1.

"U.S. No. 1" consists of carrots of similar varietal characteristics the roots of which are firm, fairly clean, fairly well colored, fairly smooth, well

formed, and which are free from soft rot, and free from damage caused by freezing, growth cracks, sunburn, pithiness, woodiness, internal discoloration, oil spray, dry rot, other disease, insects or mechanical or other means. Bunches shall have tops which are fresh and free from decay and free from damage caused by freezing, seed-stems, yellowing or other discoloration, disease, insects or mechanical or other means. Unless otherwise specified, the bunches shall have full tops and the length of tops shall be not more than 20 inches. (See § 2851.2459.)

(a) *Size.* Unless otherwise specified, the diameter of each carrot shall be not less than three-fourths inch.

(b) *Tolerances.* In order to allow for variations incident to proper grading and handling the following tolerances shall be permitted:

(1) *For defects of roots.* 10 percent, by count, for carrot roots in any lot which fail to meet the requirements of the grade, other than for size: *Provided*, That not more than one-half of this amount, or 5 percent, shall be allowed for defects causing serious damage, including therein not more than one percent for carrot roots affected by soft rot;

(2) *For defects of tops.* 10 percent, by count, for bunches in any lot which fail to meet the requirements of the grade, including therein not more than 5 percent for decay;

(3) *For off-length tops.* 25 percent, by count, for bunches in any lot which have tops longer than the specified length; and,

(4) *For off-size roots.* 5 percent, by count, for carrot roots in any lot which are smaller than the specified minimum diameter, and 10 percent, by

¹ Compliance with the provisions of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug and Cosmetic Act, or with applicable State laws and regulations.

count, for carrot roots which are larger than any specified maximum diameter.

§ 2851.2456 U.S. Commercial.

"U.S. Commercial" consists of carrots which meet the requirements of U.S. No. 1 except for the increased tolerance for defects of the roots specified below:

(a) *Tolerances.* In order to allow for variations incident to proper grading and handling the following tolerances shall be permitted:

(1) *For defects of roots.* 20 percent, by count, for carrot roots in any lot which fail to meet the requirements of the grade, other than for size: *Provided,* That not more than one-half of this amount, or 10 percent, shall be allowed for defects causing serious damage, including therein not more than 1 percent for carrot roots affected by soft rot;

(2) *For defects of tops.* 10 percent, by count, for bunches in any lot which fail to meet the requirements of the grade, including therein not more than 5 percent for decay;

(3) *For off-length tops.* 25 percent, by count, for bunches in any lot which have tops longer than the specified length; and,

(4) *For off-size roots.* 5 percent, by count, for carrot roots in any lot which are smaller than the specified minimum diameter, and 10 percent, by count, for carrot roots which are larger than any specified maximum diameter.

UNCLASSIFIED

§ 2851.2457 Unclassified.

"Unclassified" consists of carrots which have not been classified in accordance with either of the foregoing grades. The term "unclassified" is not a grade within the meaning of these standards, but is provided as a designation to show that no grade has been applied to the lot.

APPLICATION OF TOLERANCES

§ 2851.2458 Application of tolerances.

(a) The contents of individual packages in the lot, based on sample inspection, are subject to the following

limitations, provided the averages for the entire lot are within the tolerances specified for the grade:

(1) For a tolerance of 10 percent or more, individual packages in any lot shall have not more than one and one-half times the tolerance specified, except that at least one defective and one off-size specimen may be permitted in a package; and,

(2) For a tolerance of less than 10 percent, individual packages in any lot shall have not more than double the tolerance specified, except that at least one defective and one off-size specimen may be permitted in a package.

LENGTH OF TOPS

§ 2851.2459 Length of tops.

In addition to the statement of grade, the length of tops may be specified in accordance with the following length classifications:

Short	Medium	Long	Extra long
Under 12 inches.	12 to 16 inches, inclusive.	Over 16 to 20 inches, inclusive.	Over 20 in.

STANDARD BUNCHES

§ 2851.2460 Standard bunches.

(a) When specified as "standard bunches" the carrots shall meet the following requirements:

(1) Each bunch of carrots including tops, shall weigh not less than 1 pound and contain at least 4 carrots;

(2) When the diameter of the smallest carrot in the bunch is less than 1¼ inches, not over one-fourth inch variation in the size of carrots in the bunch shall be permitted;

(3) When the diameter of the smallest carrot in the bunch is 1¼ to 1½ inches, inclusive, not over three-eighths inch variation in the size of carrots in the bunch shall be permitted; and,

(4) When the diameter of the smallest carrot in the bunch is larger than 1½ inches, not over one-half inch variation in the size of carrots in the bunch shall be permitted.

(b) In order to allow for variations incident to proper bunching not more than 10 percent, by count, of the bunches may fail to meet the requirements for "standard bunches."

DEFINITIONS

§ 2851.2461 Similar varietal characteristics.

"Similar varietal characteristics" means that the carrots in any lot are of the same general type. For example, carrots with a short, but blunt growth, like the Oxheart variety, shall not be mixed with long or half-long carrots, like the Emperor or Danvers varieties.

§ 2851.2462 Firm.

"Firm" means that the carrot is not soft, flabby, or shriveled.

§ 2851.2463 Fairly clean.

"Fairly clean" means that the individual carrot is reasonably free from dirt, stain or other foreign matter and that the general appearance of the carrots in the lot is not more than slightly affected.

§ 2851.2464 Fairly well colored.

"Fairly well colored" means that the carrot has an orange, orange red, or orange scarlet color, but not a pale orange or distinct yellow color.

§ 2851.2465 Fairly smooth.

"Fairly smooth" means that the carrot is not rough, ridged, or covered with secondary rootlets to the extent that the appearance is materially affected.

§ 2851.2466 Well formed.

"Well formed" means that the carrot is not forked, or misshapen to the extent that the appearance is more than slightly affected.

§ 2851.2467 Damage.

"Damage" means any defect which materially affects the appearance, or

the edible or shipping quality of the individual carrot root, or the general appearance of the carrot roots in the container, or causes a loss of more than 3 percent, by weight, in the ordinary preparation for use, or which materially affects the appearance or shipping quality of the tops. Any one of the following defects, or any combination of defects, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(a) Growth cracks which are not shallow or not smooth, or which materially affect the appearance of the carrot;

(b) Sunburn which causes a loss of more than 3 percent, by weight, in the ordinary preparation for use, except that superficial light green color at the stem end which does not materially affect the appearance of the root shall be permitted; and,

(c) Yellowing or other discoloration or injury to the tops when the appearance of the bunch is materially affected. The appearance of the individual bunch shall be considered materially affected when the tops are trimmed to the extent that only a relatively few leaves remain. The appearance of bunches with tops having slight discoloration such as yellowing, browning or other abnormal color affecting a few leaflets shall not be considered materially affected if the tops as a whole show a predominantly normal green color.

§ 2851.2468 Fresh.

"Fresh" means that the tops are not badly wilted.

§ 2851.2469 Full tops.

"Full tops" means that the leafstems have not been cut back, but dried or damaged leaves or leafstems may have been removed.

§ 2851.2470 Diameter.

"Diameter" means the greatest dimension of the root measured at right angles to the longitudinal axis.

§ 2851.2471 Serious damage.

"Serious damage" means any defect which seriously affects the appearance, or the edible or shipping quality of the individual carrot or the general appearance of the carrots in the container, or causes a loss of more than 20 percent, by weight, in the ordinary preparation for use.

Dated August 12, 1954.

[SEAL] ROY W. LENNARTSON,
Deputy Administrator,
Marketing Services.

[F. R. Doc. 54-6407; Filed, Aug. 17, 1954;
8:53 a. m.]

**UNITED STATES STANDARDS FOR GRADES OF
CARROTS WITH SHORT TRIMMED TOPS¹**

SOURCE: 19 FR 5203, Aug. 18, 1954, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977, and at 46 FR 63203, Dec. 31, 1981.

Effective September 18, 1954

GRADES	
Sec.	
51.2485	U. S. No. 1.
51.2486	U. S. Commercial.
UNCLASSIFIED	
51.2487	Unclassified.
APPLICATION OF TOLERANCES	
51.2488	Application of tolerances.
STANDARD SIZING	
51.2489	Standard sizing.
DEFINITIONS	
Sec.	
51.2490	Similar varietal characteristics.
51.2491	Firm.
51.2492	Fairly clean.
51.2493	Fairly well colored.
51.2494	Fairly smooth.
51.2495	Well formed.
51.2496	Damage.
51.2497	Diameter.
51.2498	Serious damage.

AUTHORITY: §§ 51.2485 to 51.2498 issued under sec. 205, 60 Stat. 1090, 7 U. S. C. 1624.

GRADES

§ 51.2485 *U. S. No. 1*. "U. S. No. 1" consists of carrots of similar varietal characteristics the roots of which are firm, fairly clean, fairly well colored, fairly smooth, well formed, and which are free from soft rot and free from damage caused by freezing, growth cracks, sunburn, pithiness, woodiness, internal discoloration, oil spray, dry rot, other disease, insects or mechanical or other means. The carrots shall have leafstems which are free from decay and free from damage caused by freezing, seedstems, yellowing or other discoloration, disease, insects or mechanical or other means. The leafstems shall be cut back to not more than 4 inches in length.

(a) *Size*. Unless otherwise specified, the diameter of each carrot shall be not less than three-fourths inch.

(b) *Tolerances*. In order to allow for variations incident to proper grading and handling the following tolerances shall be permitted:

(1) *For defects of roots*. 10 percent, by count, for carrot roots in any lot which fail to meet the requirements of the grade, other than for size: *Provided*, That not more than one-half of this amount, or 5 percent, shall be allowed for defects causing serious damage, including therein not more than 1 percent for carrot roots affected by soft rot;

(2) *For defects of leafstems*. 10 percent, by count, for carrots in any lot which have leafstems which fail to meet the requirements of the grade, including therein not more than 5 percent for leafstems affected by decay;

(3) *For off-size roots*. 5 percent, by count, for carrot roots in any lot which are smaller than the specified minimum diameter, and 10 percent, by count, for carrot roots which are larger than any specified maximum diameter; and,

(4) *For off-length leafstems*. 10 percent, by count, for carrots in any lot which have leafstems longer than the specified maximum length.

§ 51.2486 *U. S. Commercial*. "U. S. Commercial" consists of carrots which meet the requirements of U. S. No. 1 except for the increased tolerance for defects of the roots specified below:

(a) *Tolerances*. In order to allow for variations incident to proper grading and handling the following tolerances shall be permitted:

(1) *For defects of roots*. 20 percent, by count, for carrot roots in any lot which fail to meet the requirements of the grade, other than for size: *Provided*, That not more than one-half of this amount, or 10 percent, shall be allowed for defects causing serious damage, including therein not more than 1 percent for carrot roots affected by soft rot;

(2) *For defects of leafstems*. 10 percent, by count, for carrots in any lot which have leafstems which fail to meet the requirements of the grade, including therein not more than 5 percent for leafstems affected by decay;

¹ Compliance with the provisions of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug and Cosmetic Act, or with applicable State laws and regulations.

(3) For off-size roots. 5 percent, by count, for carrot roots in any lot which are smaller than the specified minimum diameter and 10 percent, by count, for carrot roots which are larger than any specified maximum diameter; and,

(4) For off-length leafstems. 10 percent, by count, for carrots in any lot which have leafstems longer than the specified maximum length.

UNCLASSIFIED

§ 51.2487 *Unclassified*. "Unclassified" consists of carrots which have not been classified in accordance with either of the foregoing grades. The term "unclassified" is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

APPLICATION OF TOLERANCES

§ 51.2488 *Application of tolerances*. (a) The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations, provided the averages for the entire lot are within the tolerances specified for the grade:

(1) For packages which contain more than 5 pounds and a tolerance of 10 percent or more is provided, individual packages in any lot shall have not more than one and one-half times the tolerance specified. For packages which contain more than 5 pounds and a tolerance of less than 10 percent is provided, individual packages in any lot shall have not more than double the tolerance specified except that at least one defective specimen shall be permitted in a package; and,

(2) For packages which contain 5 pounds or less, individual packages in any lot are not restricted as to the percentage of defects: *Provided*, That not more than one carrot which is frozen or affected by soft rot may be permitted in any package.

STANDARD SIZING

§ 51.2489 *Standard sizing*. (a) Carrots in packages of 2 pounds or less may be certified as "Standard Sizing", provided the variation in diameter of the carrots in any individual package is not more than three-eighths inch and the variation in length is not more than 2½ inches.

(b) Not more than 20 percent of the packages in any lot may contain carrots which fail to meet the requirements for "Standard Sizing".

DEFINITIONS

§ 51.2490 *Similar varietal characteristics*. "Similar varietal characteristics" means that the carrots in any lot are of the same general type. For example, carrots with a short, but blunt growth, like the Oxheart variety, shall not be mixed with long or half-long carrots, like the Emperor or Danvers varieties.

§ 51.2491 *Firm*. "Firm" means that the carrot is not soft, flabby or shriveled.

§ 51.2492 *Fairly clean*. "Fairly clean" means that the individual carrot is reasonably free from dirt, stain or other foreign matter and that the general appearance of the carrots in the lot is not more than slightly affected.

§ 51.2493 *Fairly well colored*. "Fairly well colored" means that the carrot has an orange, orange red, or orange scarlet color, but not a pale orange or distinct yellow color.

§ 51.2494 *Fairly smooth*. "Fairly smooth" means that the carrot is not rough, ridged, or covered with secondary rootlets to the extent that the appearance is materially affected.

§ 51.2495 *Well formed*. "Well formed" means that the carrot is not forked, or misshapen to the extent that the appearance is more than slightly affected.

§ 51.2496 *Damage*. "Damage" means any defect which materially affects the appearance, or the edible or shipping quality of the individual carrot root or the general appearance of the carrot roots in the container, or causes a loss of more than 3 percent, by weight, in the ordinary preparation for use, or which materially affects the appearance or shipping quality of the leafstems. Any one of the following defects, or any combination of defects, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(a) Growth cracks which are not shallow or not smooth, or which materially affect the appearance of the carrot;

(b) Sunburn which causes a loss of more than 3 percent, by weight, in the ordinary preparation for use, except that superficial light green color at the stem end which does not materially affect the appearance of the root shall be permitted; and,

(c) Yellowing or other discoloration or injury to the leafstems when the appearance of the leafstems is materially affected.

§ 51.2497 *Diameter*. "Diameter" means the greatest dimension of the root measured at right angles to the longitudinal axis.

§ 51.2498 *Serious damage*. "Serious damage" means any defect which seriously affects the appearance, or the edible or shipping quality of the individual carrot or the general appearance of the carrots in the container, or causes a loss of more than 20 percent, by weight, in the ordinary preparation for use.

Dated: AUGUST 12, 1954.

[SEAL] ROY W. LENNARTSON,
Deputy Administrator,
Marketing Services.

[F. R. Doc. 54-6408; Filed, Aug. 17, 1954;
8:53 a. m.]

UNITED STATES STANDARDS FOR GRADES OF TOPPED CARROTS¹

SOURCE: 30 FR 14519, Nov. 20, 1965, unless otherwise noted. Redesignated at 42 FR 32514, June 27, 1977 and at 46 FR 63203, Dec. 31, 1981.

Effective December 20, 1965

Sec.	GRADES
51.2360	U.S. Extra No. 1.
51.2361	U.S. No. 1.
51.2362	U.S. No. 1 Jumbo.
51.2363	U.S. No. 2.
	UNCLASSIFIED
51.2364	Unclassified.
	TOLERANCES
51.2365	Tolerances.
	APPLICATION OF TOLERANCES
51.2366	Application of tolerances.
	SAMPLE FOR GRADE DETERMINATION
51.2367	Sample for grade determination.
	STANDARD SIZING
51.2368	Standard sizing.
	DEFINITIONS
51.2369	Similar varietal characteristics.
51.2370	Well trimmed.
51.2371	Firm.
51.2372	Clean.
51.2373	Fairly well colored.
51.2374	Fairly smooth.
51.2375	Well formed.
51.2376	Secondary new top growth.
51.2377	Damage.
51.2378	Diameter.
51.2379	Length.
51.2380	Fairly clean.
51.2381	Fairly well formed.
51.2382	Excessively rough.
51.2383	Seriously misshapen.
51.2384	Serious damage.

AUTHORITY: The provisions of this subpart issued under secs. 203, 205, 60 Stat. 1087, as amended, 1090 as amended; 7 U.S.C. 1622, 1624.

GRADES

§ 51.2360 U.S. Extra No. 1.

"U.S. Extra No. 1" consists of carrots of similar varietal characteristics which are well trimmed, firm, clean, fairly well colored, fairly smooth, well formed;

Compliance with the provisions of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug and Cosmetic Act, or with applicable State laws and regulations.

which are free from secondary new top growth and soft rot, and free from damage caused by freezing, growth cracks, sunburn, pithiness, woodiness, internal discoloration, oil spray, dry rot, other disease, insects or other means. (See § 51.2365.)

(a) *Size.* The diameter of each carrot is not less than $\frac{3}{4}$ inch or more than $1\frac{1}{2}$ inches, and the length is not less than 5 inches. (See § 51.2365.)

§ 51.2361 U.S. No. 1.

"U.S. No. 1" consists of carrots of similar varietal characteristics which are well trimmed, firm, fairly clean, fairly well colored, fairly smooth, fairly well formed; which are free from soft rot, and free from damage caused by freezing, growth cracks, sunburn, pithiness, woodiness, internal discoloration, oil spray, dry rot, other disease, insects or other means. (See § 51.2365.)

(a) *Size.* Unless otherwise specified, the diameter of each carrot is not less than $\frac{3}{4}$ inch or more than $1\frac{1}{2}$ inches, and the length is not less than 5 inches. (See § 51.2365.)

§ 51.2362 U.S. No. 1 Jumbo.

"U.S. No. 1 Jumbo" consists of carrots which meet all requirements of the U.S. No. 1 grade except for size. (See § 51.2365.)

(a) *Size.* The diameter of each carrot is not less than 1 inch or more than $2\frac{1}{2}$ inches, and the length is not less than 5 inches. (See § 51.2365.)

§ 51.2363 U.S. No. 2.

"U.S. No. 2" consists of carrots of similar varietal characteristics which are well trimmed, firm, not excessively rough, not seriously misshapen; which are free from soft rot, and free from serious damage caused by dirt, freezing, growth cracks, sunburn, pithiness, woodiness, internal discoloration, oil spray, dry rot, other disease, insects or other means. (See § 51.2365.)

(a) *Size.* Unless otherwise specified, the diameter of each carrot is not less than 1 inch or more than 3 inches, and the length is not less than 3 inches. (See § 51.2365.)

UNCLASSIFIED

§ 51.2364 Unclassified.

"Unclassified" consists of carrots which have not been classified in accordance with any of the foregoing grades. The term "unclassified" is not a grade within the meaning of these standards, but is provided as a designation to show that no grade has been applied to the lot.

TOLERANCES

§ 51.2365 Tolerances.

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, are provided as specified:

(a) *Defects*—(1) *U.S. Extra No. 1 grade.* Ten percent for carrots in any lot which fail to meet the requirements of this grade: *Provided*, That not more than one-half of this amount, or 5 percent, shall be allowed for defects causing serious damage, including therein not more than 1 percent for carrots affected by soft rot.

(2) *U.S. No. 1 and U.S. No. 1 Jumbo grades.* Ten percent for carrots in any lot which fail to meet the requirements of the grade: *Provided*, That not more than one-half of this amount, or 5 percent, shall be allowed for defects causing serious damage, including therein not more than 2 percent for carrots affected by soft rot.

(3) *U.S. No. 2 grade.* Ten percent for carrots which fail to meet the requirements of this grade, including therein not more than 2 percent for carrots affected by soft rot.

(b) *Off-size.* (1) Five percent for carrots in any lot which are larger than the specified maximum diameter; and

(2) Ten percent for carrots in any lot which are smaller than the specified minimum diameter or shorter than the specified minimum length.

APPLICATION OF TOLERANCES

§ 51.2366 Application of tolerances.

Individual samples shall not have more than double the tolerance specified: *Provided*, That not more than one carrot which is frozen or affected by soft rot may be permitted in any package weighing approximately 3 pounds or less: *And provided further*, That the averages for the entire lot are within the tolerances specified for the grade.

SAMPLE FOR GRADE DETERMINATION

§ 51.2367 Sample for grade determination.

Each sample shall consist of 50 carrots. When individual packages contain at least 50 carrots, the sample is drawn from one package; when individual packages contain less than 50 carrots, a sufficient number of adjoining packages are opened to form a 50 carrot sample.

STANDARD SIZING

§ 51.2368 Standard sizing.

(a) Packages of carrots containing 2 pounds or less may be certified as "standard sizing," provided the variation in diameter of the carrots in any individual package is not more than three-eighths inch and the variation in length is not more than 2½ inches.

(b) Not more than 10 percent of the packages in any lot may fail to meet the requirements for "standard sizing."

DEFINITIONS

§ 51.2369 Similar varietal characteristics.

"Similar varietal characteristics" means that the carrots in any lot are of the same general type. For example, carrots with a short, but blunt growth like the Oxheart variety, shall not be mixed with long or half-long carrots like the Emperor or Danvers varieties.

§ 51.2370 Well trimmed.

"Well trimmed" means that the tops are cut back to not more than 1 inch in length, except that new leaves developing within the original central cluster of leafstems, or occasional uncut leaves or leafstems, exceeding this length which do not materially affect the appearance of the individual carrot shall be permitted. Carrots may have tips of roots cut or broken off: *Provided*, That these cuts or breaks are small and fairly smooth and do not materially affect the appearance of the individual carrot.

§ 51.2371 Firm.

"Firm" means that the carrot is not soft, flabby or shriveled.

§ 51.2372 Clean.

"Clean" means that the individual carrot is practically free from dirt and other foreign matter.

§ 51.2373 Fairly well colored.

"Fairly well colored" means that the carrot has an orange, orange red, or orange scarlet color, but not a pale orange or distinct yellow color.

§ 51.2374 Fairly smooth.

"Fairly smooth" means that the individual carrot is not rough, ridged, or covered with secondary rootlets to the extent that the appearance is materially affected.

§ 51.2375 Well formed.

"Well formed" means that the individual carrot is not forked, or misshapen to the extent that the appearance is more than slightly affected.

§ 51.2376 Secondary new top growth.

"Secondary new top growth" means new leaves or clusters of leaves which have developed outside the original central cluster of leafstems.

§ 51.2377 Damage.

"Damage" means any specific defect described in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially

detracts from the appearance, or the edible or shipping quality of the individual carrot or the appearance of the sample as a whole, or which cannot be removed without a loss of more than 5 percent, by weight, in the ordinary preparation for use. The following specific defects shall be considered as damage:

(a) Growth cracks which are not shallow or not smooth, or which materially detract from the appearance of the individual carrot;

(b) Sunburn which causes a loss of more than 5 percent, by weight, in the ordinary preparation for use, except that superficial light green color at the stem end which does not materially detract from the appearance of the carrot shall be permitted.

§ 51.2378 Diameter.

"Diameter" means the greatest dimension of the carrot measured at right angles to the longitudinal axis:

§ 51.2379 Length.

"Length" means the greatest dimension of the carrot measured from the crown to the lowest point which is not less than one-fourth inch in diameter.

§ 51.2380 Fairly clean.

"Fairly clean" means that the individual carrot is reasonably free from dirt and other foreign matter.

§ 51.2381 Fairly well formed.

"Fairly well formed" means that the individual carrot is not forked, or misshapen to the extent that the appearance is materially affected.

§ 51.2382 Excessively rough.

"Excessively rough" means that the individual carrot is rough or ridged to the extent that the appearance is seriously affected.

§ 51.2383 Seriously misshapen.

"Seriously misshapen" means that the individual carrot is forked or misshapen to the extent that the appearance is seriously affected.

§ 51.2384 Serious damage.

"Serious damage" means any defect, or any combination of defects, which seriously detracts from the appearance, or the edible or shipping quality of the individual carrot or the appearance of the sample as a whole, or which cannot be removed without a loss of more than 20 percent, by weight, in the ordinary preparation for use.

The United States Standards for Grades of Topped Carrots contained in this subpart shall become effective December 20, 1965, and will thereupon supersede the United States Standards for Topped Carrots which have been in effect since July 17, 1954 (7 CFR 51.2360-51.2381).

Dated: November 17, 1965.

G. R. GRANGE,
Deputy Administrator,
Marketing Services.

[F.R. Doc. 65-12514; Filed, Nov. 19, 1965;
8:49 a.m.]

CONVERSION TABLE						
Inches		Millimeters (mm)		Inches		Millimeters (mm)
1/8	=	3.2		1	=	25.4
1/4	=	6.4		1-1/4	=	31.8
3/8	=	9.5		1-1/2	=	38.1
1/2	=	12.7		1-3/4	=	44.4
5/8	=	15.9		2	=	50.8
3/4	=	19.0		3	=	76.2
7/8	=	22.2		4	=	101.6