

Robertson and Robbins

Silage and Highly  
Nitrogenous Feed  
in Rations  
with Corn for Steers

Agriculture  
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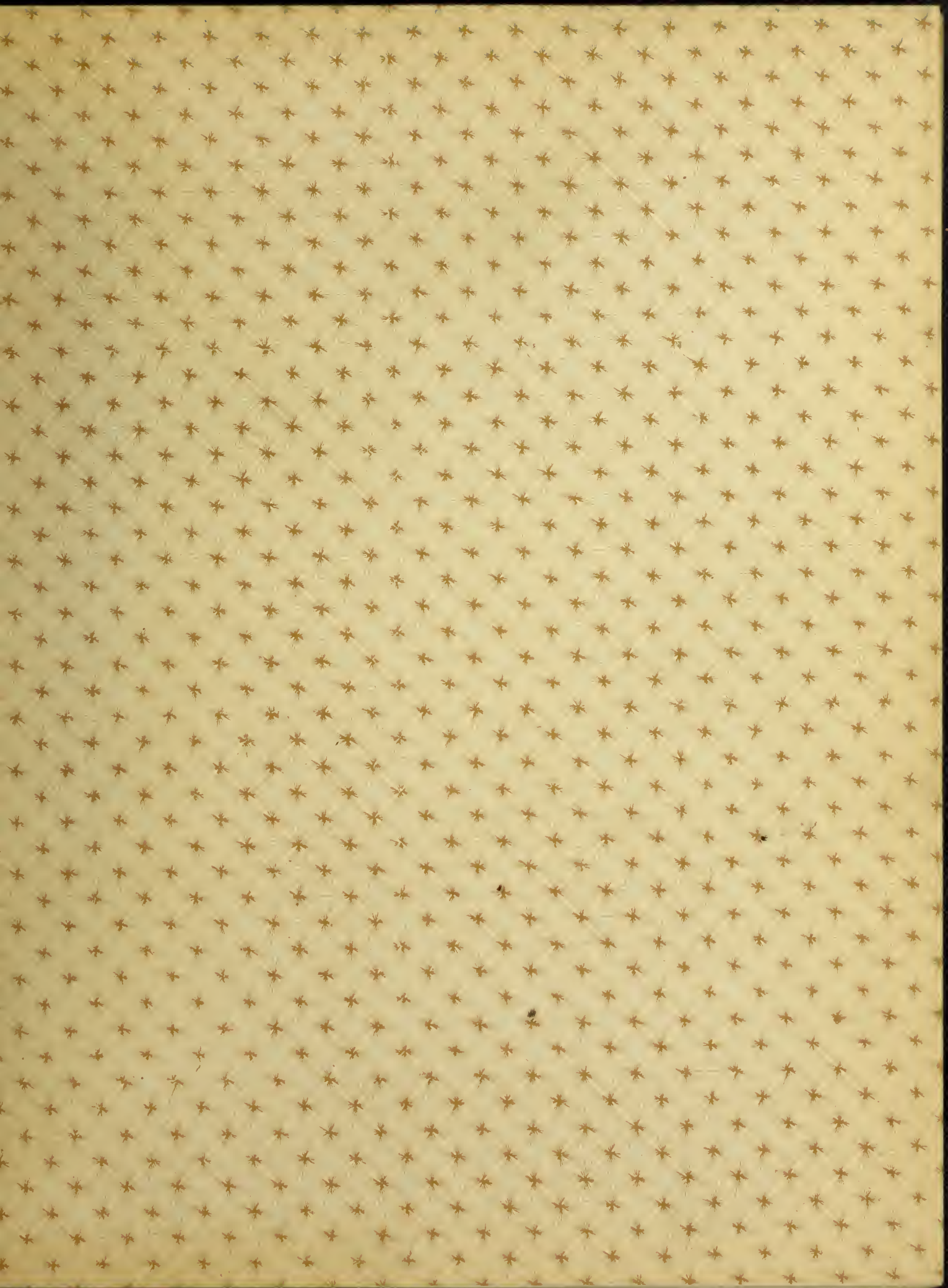
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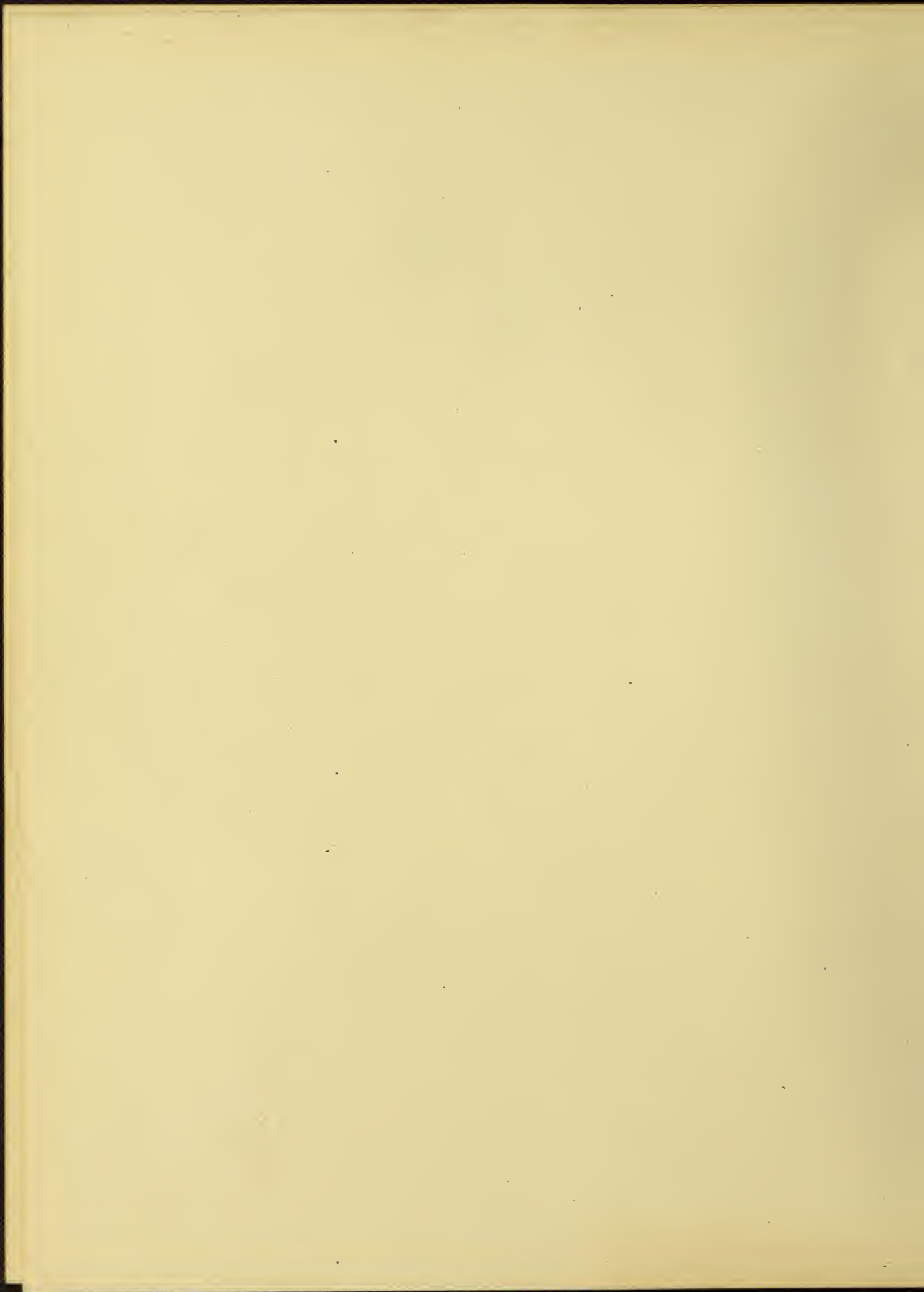
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Silage and Highly Nitrogenous Feed in  
Rations with Corn for Steers

... BY ...

L. S. ROBERTSON and E. T. ROBBINS

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THESIS

FOR THE DEGREE OF BACHELOR OF SCIENCE

IN AGRICULTURE

IN THE

UNIVERSITY OF ILLINOIS

---

PRESENTED JUNE, 1900

1870

UNIVERSITY OF ILLINOIS

June 4 1900

THIS IS TO CERTIFY THAT THE THESIS PREPARED UNDER MY SUPERVISION BY

Ernest Thompson Robbins and Lloyd Silas Robertson  
ENTITLED *Silage and Highly Nitrogenous Feeds*  
*in Rations with Corn for Steers*

IS APPROVED BY ME AS FULFILLING THIS PART OF THE REQUIREMENTS FOR THE DEGREE

OF *Bachelor of Science.*

E. Davenport  
HEAD OF DEPARTMENT OF *Animal Husbandry*





DETAILS OF THE EXPERIMENT.

Conditions suggesting the experiment. In Illinois, Indian corn gives larger returns of feed per acre than any other crop; but, as ordinarily grown and sold or fed simply for its grain, about one third of its feeding value, viz. that part in the stover, is wasted. Again, Illinois farmers quite generally regard corn as a sufficient grain feed for beef making, if not on the basis of gains for feed consumed, at least from the standpoint of financial returns. An experiment in steer feeding was accordingly undertaken with the following objects.

Objects. 1. To compare whole corn fodder and corn silage as rations for steers.

2. To compare ear corn and a more nitrogenous grain ration.

PLANS.

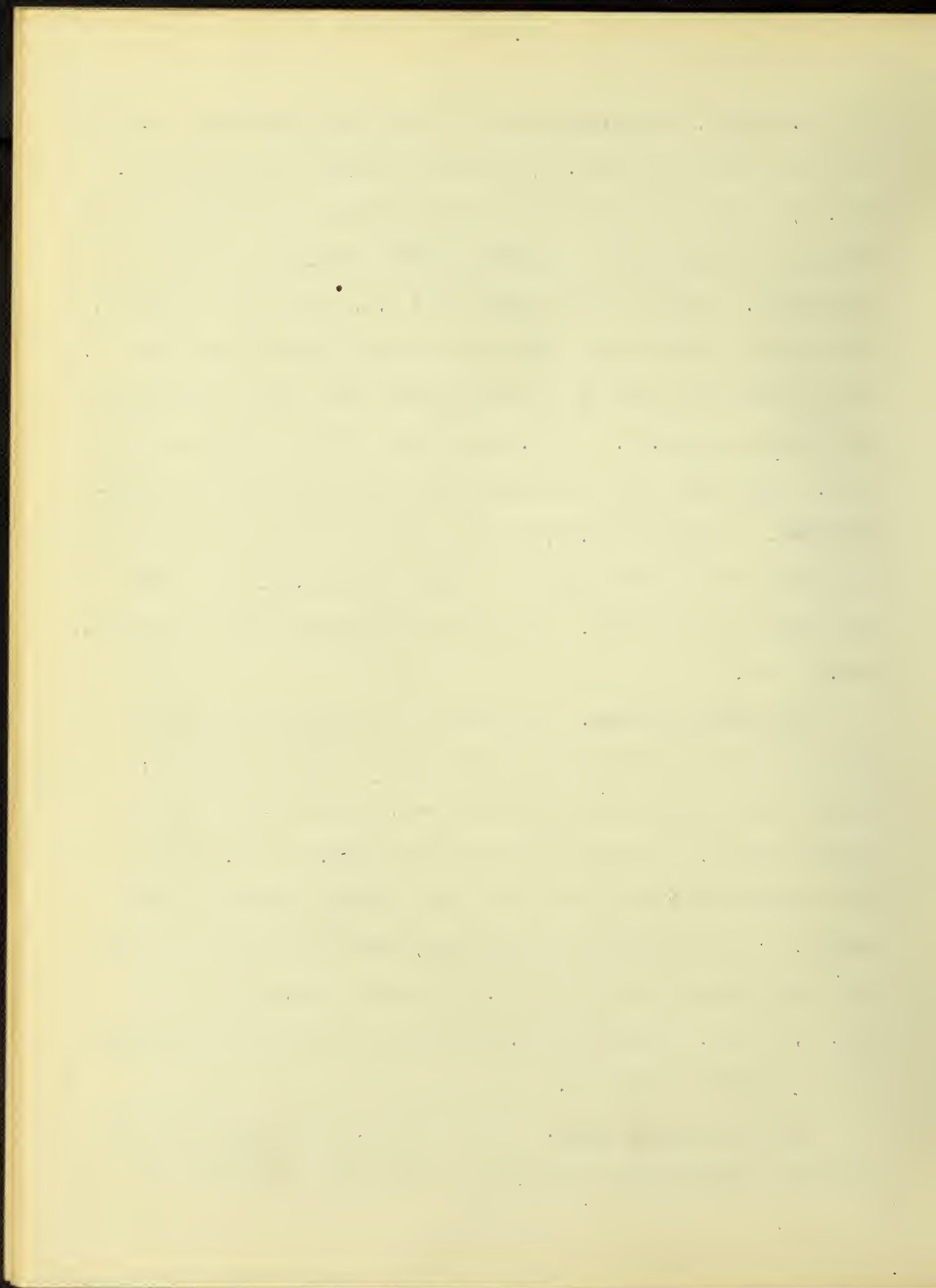
The steers used in the experiment were taken from a drove of 40, which were bred and raised by Robb. Thompson, Granger, Mo. They were all sired by the same bull—a registered Shorthorn—and were from very high grade Shorthorn cows. They were about 30 months old, and, judging from this small size, had not been continuously kept in thrifty condition. They had been in poor pasture the latter part of the last season and were getting hay, when bought, Nov. 6,



by O.H.Swigart. He shipped them to his farm in Champaign Co., Ill. and from that time to Nov.11, they had the run of a stalk field. Nov.11, 9 steers, as even in build and appearance as possible and of about the average size and quality of the drove, were selected for experiment. Their average weight at 4 P.M. that day was 1028 lbs. The average weight of the whole drove before shipment was 1055 lbs. The 9 steers were kept in a timothy meadow west of the Experiment Station during Nov.12. Nov.13, they were driven to the Station barn. They were wild and become much excited and ran away several times. One steer, No.29, got away from the rest and was found 14 miles south of Champaign and brought back Nov.16, very gaunt and with a poor appetite. The steers were marked with ear labels, Nos.26 - 34.

Preliminary feeding. The steers were immediately put in the stable in stanchions and all were fed at first as follows: Clover hay was fed ad libitum until Nov.16 when it was replaced by corn stover. A little oat hay was fed Nov.22 - 27. It was then discontinued since the steers were getting impatient of the stover. The grain given was ear corn, commencing with about 3 lbs. per head daily, increasing it Nov.16 to about 4 lbs., and again on Nov.22, to 5 lbs. Beginning Nov.30 the feed of each steer was weighed as recorded in Table IV.

Amount of stover eaten. Prior to Nov.30 the stover was fed whole, the stalks simply being broken into about 3 lengths so as



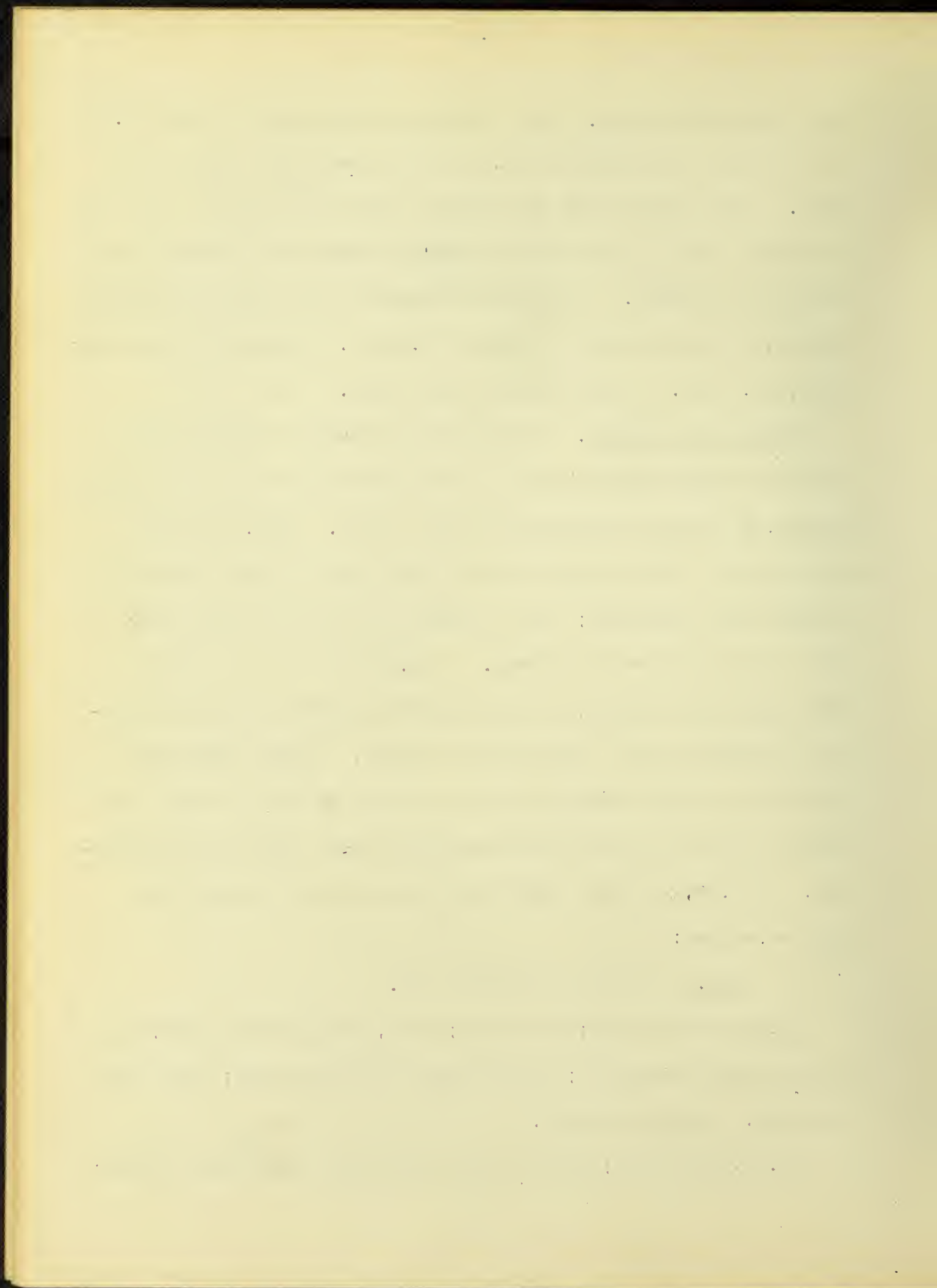
to go into the mangers. From weights of one load of 768 lbs. it was found that about 25 lbs. of stover was fed to each steer daily. The refused from the weighed stover was put in a pen in the stable until that from two days feeding had collected, and then it was weighed. Making no allowance for change in moisture content, it was calculated that of 25.9 lbs. of stover fed per steer daily, 16.2 lbs. - about 63% had been eaten.

Placing the steers. During the preliminary feeding there were no noticeable differences in the behavior of the steers, except that No. 29 ate less heartily than the others. Nos. 32 and 33 were affected with ophthalmia for a few days and this seemed to depress their appetites; but as soon as the disease was cured they ate as well as the others. No. 28 had from the first a soft lump on his throat, but this was subsequently entirely reduced by treatment with beniodide of mercury. Aside from these differences, there seemed to be very little on which to base the division of the steers into lots, except their <sup>i</sup>weight and conformation. Nov. 28, they were <sup>i</sup>weghed and the next day divided into lots as follows:

Lot. 1 average weght 913 lbs.

No. 26, Second best; fair width; crops, back and loin good; hips smooth; closely ribbed up; lower thigh and flank light; fair handling skin. Weight 1000 lbs.

No. 33. Sixth best; rather narrow; back and loin fairly filled;



loosely ribbed up; thighs thin; best handling skin; Weight 917 lbs.

No.29. Eighth best; narrowest; back and loin poor; loosely ribbed up; thighs and twist very thin and open; fair handling skin. Weight 822 lbs.

Lot 2. average weight 946 lbs.

No.28. Ninth best; good width; fair crops; back, and loin thin and sharp; hips rough; high pelvic arch; back drooping and rump sloping; head, neck and bone coarse; lower thighs light; rather poor handling skin. Weight 1002 lbs.

No.34. Fourth best; rather narrow, back, loin and thighs fairly good; twist open; loosely ribbed up, fairly good handling skin. Weight 946 lbs.

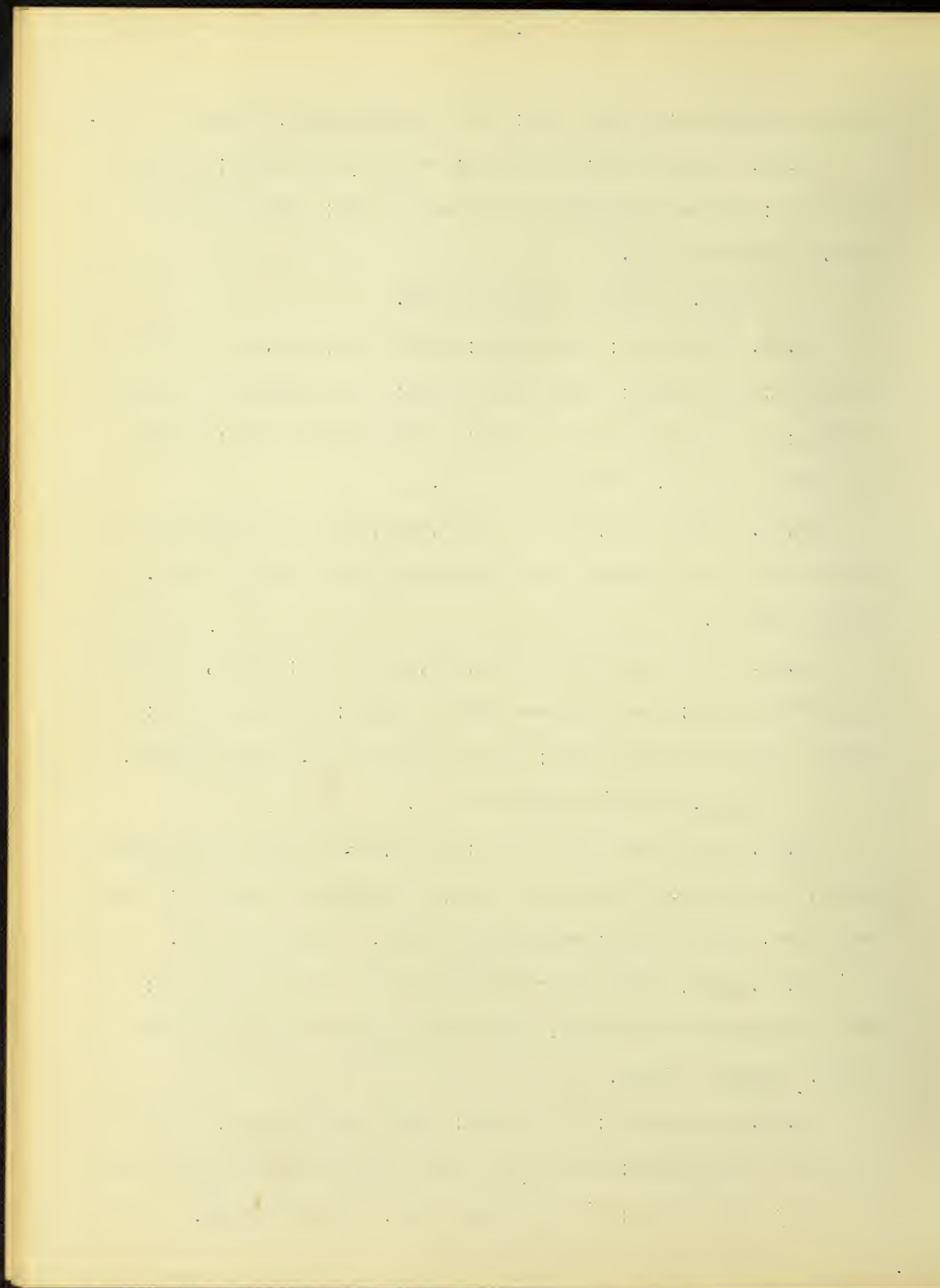
No.27. Third best; fair width, low, pony build; crops, back and loin fairly good; head and bone rather coarse; well ribbed up; lower thigh and twist light; fair handling skin. Weight 881 lbs.

Lot 3. average weight 931 lbs.

No.31. Fifth best; good width; square, well built, rather coarse frame, rather poorly meated all over; very poorly ribbed up; thighs and twist thin and open; skin rather tight. Weight 981 lbs.

No.30. Best; fair width; crops; back and loin fairly good; best twist, thighs and flank; fairly well ribbed up; skin rather tight. Weight 935 lbs.

No.32. Seventh best; fair width; fine head and bone; fair back, loin and quarter; body light, well ribbed up; and twist thin and open; flank light; fair handling skin. Weight 876 lbs.



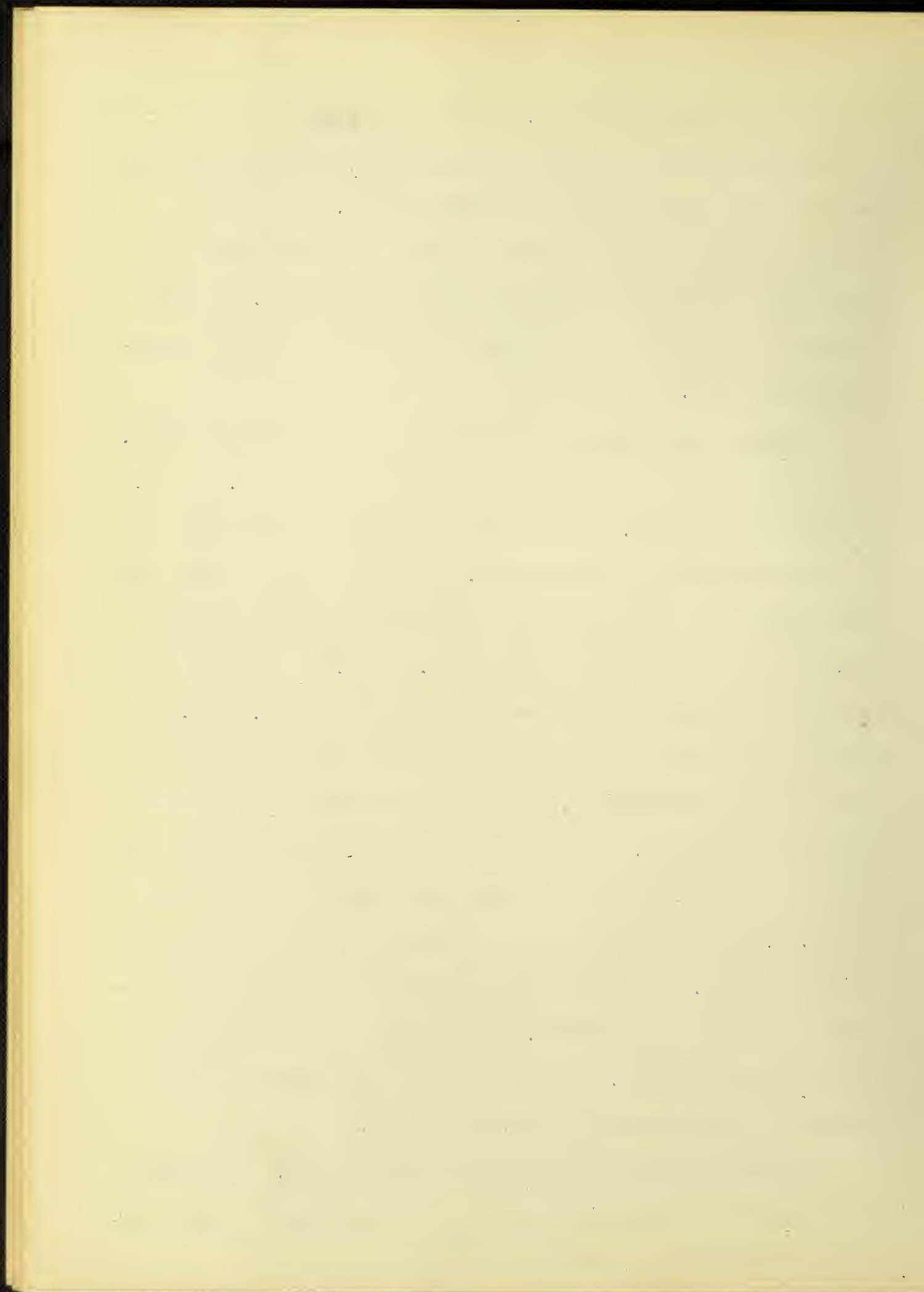


Note. As first placed, No. 27 was in lot 3 and 32 in lot 2; but it was decided that lot 2 was the poorer lot, by that arrangement as they were then placed as described above.

The position which each lot filled in the experiment was given with no reference to the quality of the steers. It was thought that the lots were as even in quality as it was possible to make them.

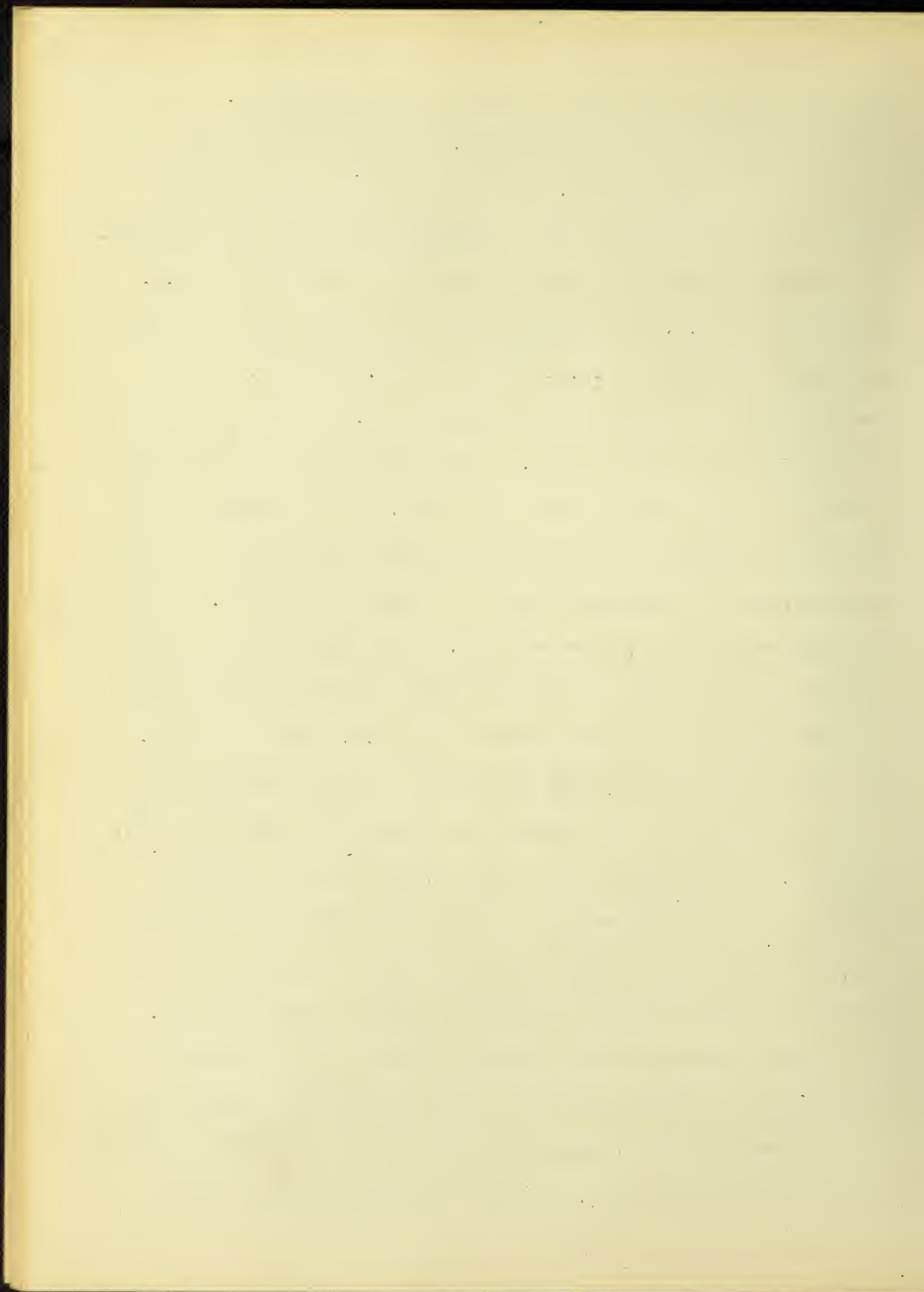
Weighing the steers was at first a very difficult matter. The steers had to be led about 200 yards to the scales. On Nov. 23 this was done by hand. But the steers were wild and stubborn and it took several men to handle them. Leading behind a wagon was tried and worked fairly well, so for the other weighings until Feb. 8 the steers were led in that way. Nos. 26 and 31 were very stubborn and bracing their feet slid most of the way. Feb. 8, as they had been going fairly well behind the wagon, they were led by hand with good success, and, as for the subsequent weighings they were led in that way. Previous to March the weights were taken on 3 ton wagon scales, but as these were broken in the latter part of February, the later weights were taken on 1 ton bullock scales in the cow barn. The steers were handled with almost no excitement for these later weights. Both scales were considered to be in good adjustment. The steers were always weighed in the following order, 29, 33, 26, 28, 34, 27, 31, 30, 32.

Weights were taken at intervals of four weeks. The steers were weighed on 3 successive days at the same hour and the aver-



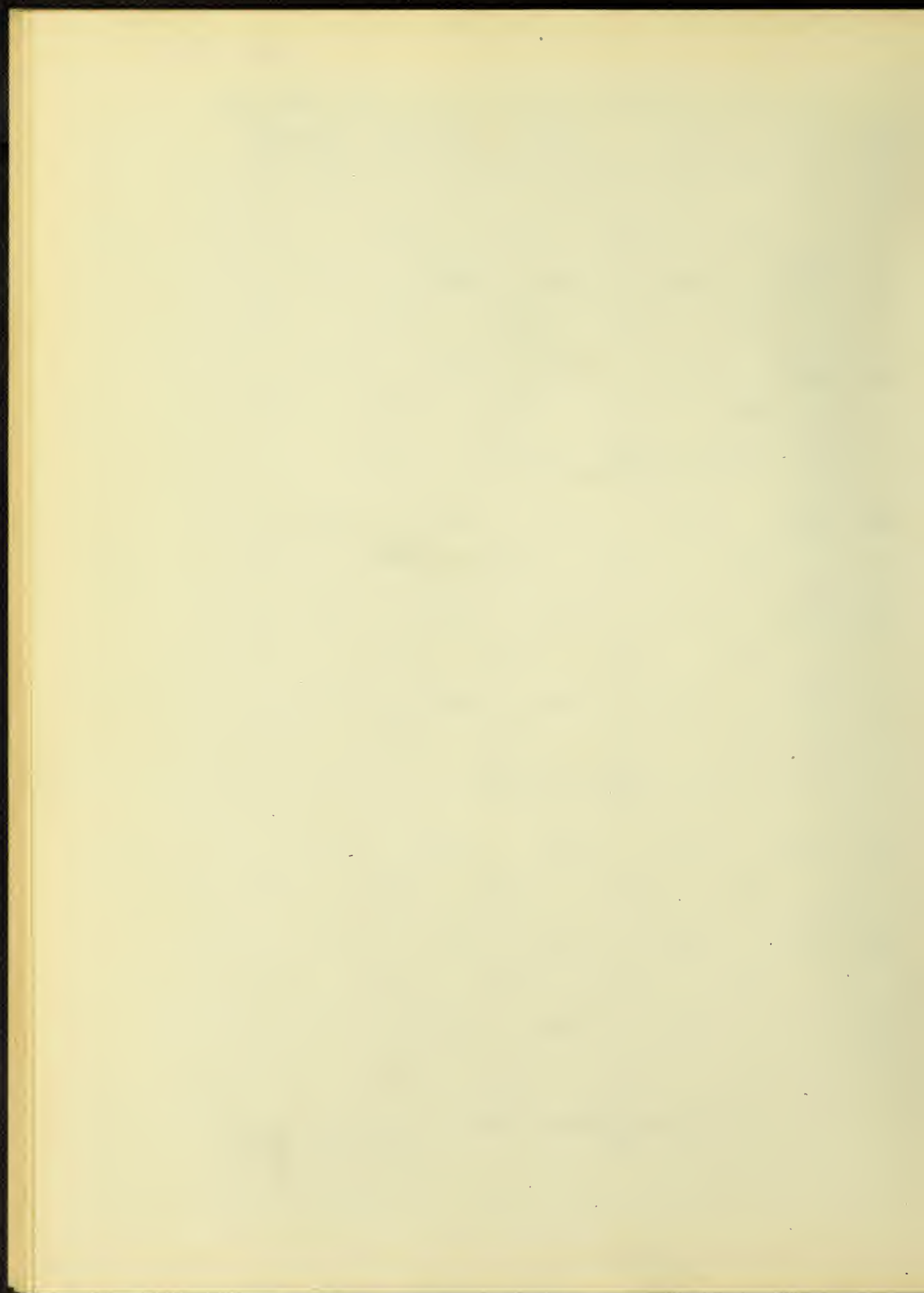
age was taken as the correct weight for the middle day. It was intended to start the experiment Nov.30, but the steers became so excited by the weighing Nov.28, that it was thought best to let them wait 2 weeks longer before trying to get 3 successive weights.

It was the original plan to water the steers about 10 A.M. and weigh at 3 P.M. but owing to negligence of an assistant they were not watered until 1 P.M. except on Dec.11 and 12. It was found necessary to start the weighing at 1 P.M. as it took 2 to 3 hours to weigh them at first. With this plan there was great variation in the weights from day to day. Trial weights of the Holstein bull, Manor's De Kol, on 5 successive days before and after watering, showed variations from day to day of 2 to 6 lbs. before watering and 5-28 lbs, after watering. This indicated that more accurate weights could be obtained before watering, so the weights in March and thereafter were taken at 10 A.M. before watering. The change from weights after watering to those before, was made by calculations based on weights both before and after, on March 6, 7, and 8. These weights (see Table I.) show practically no advantage of the morning weights as far as the amount of variation is concerned; but the change was made because the weights of the bull were so emphatically in favor of weights before watering. The apparent discrepancies between the bull and the steers, as to differences in weights before and after watering is probably due to difference in time between watering and weighing and to greater nervousness of the steers. The bull was quiet and was weighed



## Weights of Steers before and after Watering

Steer No	Mar 6		Mar 7		Mar 8		Average		Extreme Diff.	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
26	1165		1152		1182		1166		30	
		1173		1199		1174		1182		26
		<i>Dif.</i> 8		47		-8		16		
33	1085		1079		1092		1085		13	
		1098		1113		1113		1108		15
		<i>Dif.</i> 13		34		21		23		
29	1024		1007		1028		1020		21	
		1029		1049		1036		1038		20
		<i>Dif.</i> 5		42		8		18		
		Average difference Lot I						19		
28	1135		1161		1162		1153		27	
		1174		1149		1190		1171		41
		<i>Dif.</i> 39		-12		28		18		
34	1024		1023		1059		1035		36	
		1039		1052		1050		1047		13
		<i>Dif.</i> 15		29		-9		12		
27	983		996		1000		993		17	
		994		1007		1002		1001		13
		<i>Dif.</i> 11		11		2		8		
		Average difference Lot II						13		
31	1086		1078		1086		1083		8	
		1095		1108		1104		1102		13
		<i>Dif.</i> 9		30		18		19		
30	1104		1098		1104		1102		6	
		1123		1131		1120		1125		11
		<i>Dif.</i> 19		3		16		23		
32	942		935		958		945		23	
		958		967		981		969		23
		<i>Dif.</i> 16		32		23		24		
		Average difference Lot III						22		
								Totals	181	175



immediately after watering, while the steers were restless and were not weighed till 15 minutes to  $1\frac{1}{2}$  hrs. after watering.

All former weights of each steer were reduced by the average difference between his morning and afternoon weights on March 6, 7, and 8. These reduced weights are used in all tables and computations, so as to make all weights comparable.

Stable. The feeding was done in a building 14x44 feet, standing 30 yards east of the cow barn. It was already divided by partitions into 3 equal compartments. Stanchions and mangers for 3 steers were placed in each apartment. These were made of  $7\frac{1}{8}$  inch pine lumber, which proved strong enough for the purpose.

It was found necessary to make the sides and front of the mangers 3 ft. high, and put a 12 inch board horizontally on top along the front, to prevent the stover from being thrown out. In order to keep the steers from pushing the stover out of the mangers between the stanchions, a burlap apron 3 x 4 feet had one end tacked to the manger and stanchions and the other tied around the steers neck. These arrangements effectually prevented the waste of stover. Only for one steer, No. 32, was it found that the 3 ft. sides of the mangers were not high enough to prevent his dropping ears of corn outside, so the sides of his manger were made 4 ft. high.

There were 3 windows in the west side and one in the south end, which admitted plenty of light, and, with the doors, made ample provisions for ventilation. There was no floor in the building





but a fresh layer of cinders was put in every month. Oat straw and refused stalks were used for bedding. Adjoining each compartment of the stable on the east side was a lot 20 x 50 ft. for exercise. The stables and yards were protected somewhat on the north by a grove of evergreens and a solid, high board fence.

#### Feeds.

Corn. All corn was fed in the ear, broken in lengths of 3 or 4 inches.

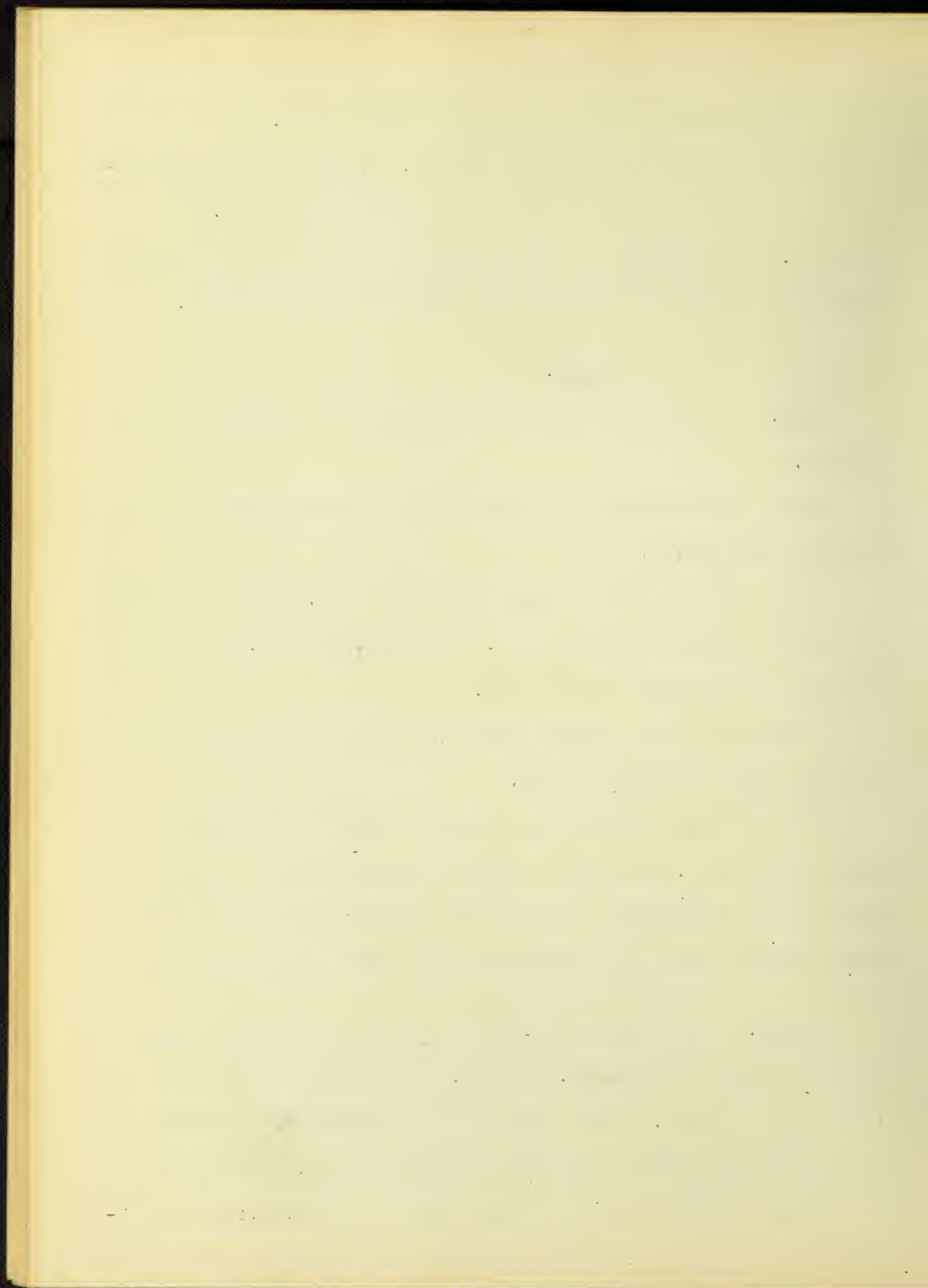
Burr's White corn, yielding 84% shelled corn, was fed in the morning until Feb. 14.

Yellow corn was fed at night only until Feb. 14, and afterwards it was fed entirely until May 17. In tests, made Jan. 27 and again May 12, it yielded 83% shelled corn.

A mixed white and yellow variety, yielding 82% shelled corn was fed from May 17 to the end.

The cobs were smallest in the Burr's White and largest in the mixed variety. Those of the yellow variety were the hardest and were the least freely eaten by the steers; while those of the mixed variety, were the softest and were eaten the most readily.

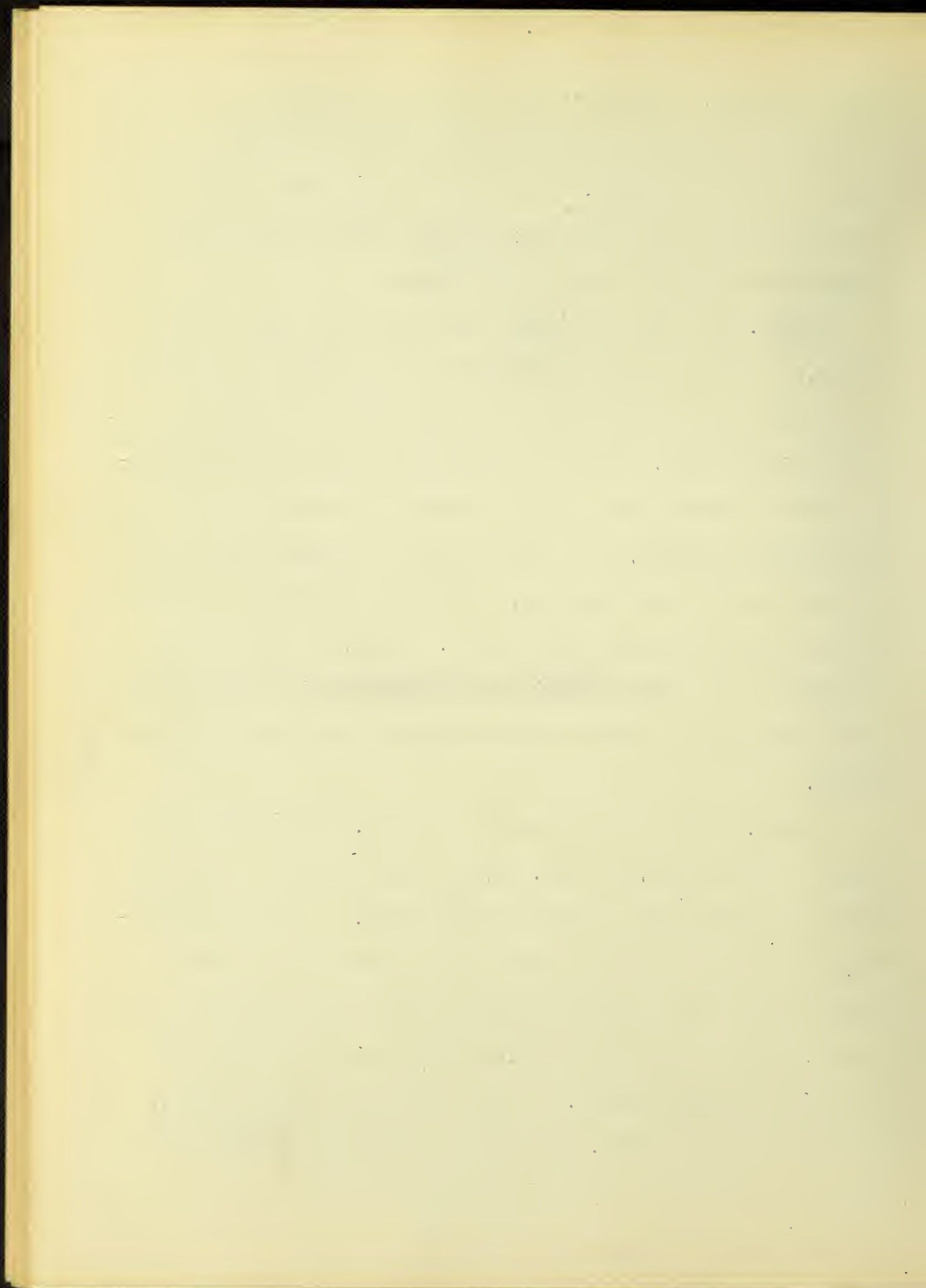
Stover. Beginning on Nov. 30, all stover was shredded except that fed in the morning, Jan. 25 - Feb. 7, which was cut into 1 to 1 1/2 inch lengths. Stover from several varieties, but mostly Burr's White, was fed in the morning until Feb. 14. Stover from the yellow variety was fed in night only, until Feb. 14.; and after-



wards entirely. The Burr's White stover was husked in the field by hand while the stover of the yellow corn was husked by a combined husker and shredder. The former had lost much of its finer parts during the extra handling; and owing also to its coarser stalks, was not so well eaten by the steers.

Fodder. The crop of yellow corn yielded 56  $\frac{1}{2}$  ears and 44  $\frac{1}{2}$  stover, so for the purpose of comparison with silage it was fed in this proportion at the night feed during the time silage was fed. It was shocked Sept. 5 and 6 and stood in the field until the latter part of November, when it was shredded and stored in the barn. It was husked because, if the whole fodder was simply cut and the ears and stalks stored together, it would be impossible to obtain an even quality of daily feed from it. Also, it could not be conveniently fed whole because of the difficulty of handling the whole stalks in the limited size of mangers which the stable afforded.

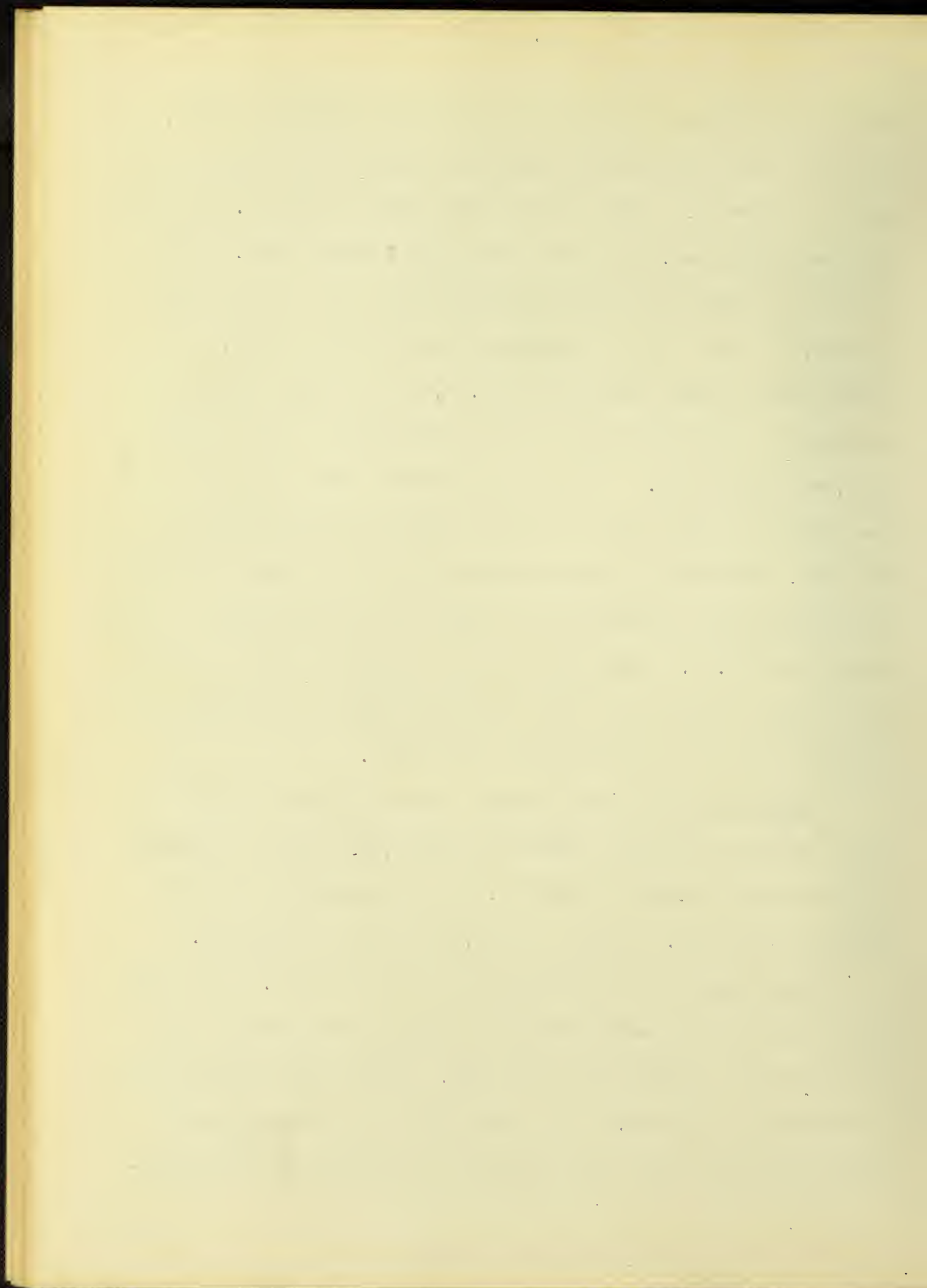
Silage. Two kinds of silage were used. That used at was from the yellow corn, cut Sept. 7, 8, and 9 from strips in the field alternating with equal strips cut for fodder. It was the intention to feed the 5 acres of this silage against the 5 acre of fodder to get direct yields of beef per acre from silage and from fodder. (This comparison, however, was made impossible since very much of the silage spoiled.) This silage was put in a round, new, stove silo 12 x 22ft. It was rather dry when put in, so when



the silo was filled it was wet down with 800 gallons of water, Oats were sown on top and no covering was put on until the latter part of December. Then a flat board cover was put on. When the silo was opened Nov. 29, the oats were 5 to 6 inches high. Only 1 1/3 to 4 inches was badly spoiled, but none of it was of first quality. It was very acid and had frequent mouldy spots. It became poorer lower down; and by Feb. 14, it was thought unfit for feeding, so silage from Burr's White corn, stored in the cow barn silo, was substituted. March 16, the Burr's White silage had all been fed out, so that from the yellow corn was used the rest of the time. This was of better quality than it had been previously as several feet in depth had been fed to the other stock or thrown away since Feb. 14. This layer of poor silage was at the level of the joint between the upper and lower length of staves, and was presumably due to air admitted at this joint.

Gluten meal was used to supply protein to lot 1 because it is an important corn by product and since, this year, it furnished the cheapest source of protein. It was purchased from the Chicago Glucose Co., at \$20 per ton, delivered at Champaign.

Gluten feed was used instead of gluten meal Mar. 20 -24 since the stock of gluten meal exhausted and it had been omitted from the Experiment Station order for feed. Gluten feed supplied the same amount of protein, as the same weight of the mixture of 3 parts gluten meal and 1 part corn and cob meal, so it was substi-



tuted in that proportion.

Corn and cob meal, from Burr's White corn, was fed to lot 1 mixed with gluten meal, only in sufficient quantity to induce the steers to eat the gluten meal readily.

"Mixture", except where otherwise explained in the tables, is two parts gluten meal and one part corn and cob meal.

Chemical analysis of feeds and refuse was made from samples taken Feb. 10, (See Table II.)

Dry matter in stover and its refuse was determined as follows: At intervals of 4 weeks the 2 days refuse in each sack was cut into inch lengths in a hand feed cutter. It was then carefully mixed and a 2 quart glass can filled with it and tightly covered. A sample of stover was taken in the same way. The dry matter determination for each sample was made from a 2 X 3 X 6 inch tin-panful dried in a water oven till the weight became constant. Silage samples were taken directly from the silo and dried in the same way.

Silage refuse was considered as having the same moisture content as the silage fed. From March 1 to April 5 the silage refuse was weighed when first taken from the mangers, and again as had previously been done, after 2 days refuse had accumulated. The total of each set of weights showed that the latter was 95% of the former. With such slight loss of moisture at this season.

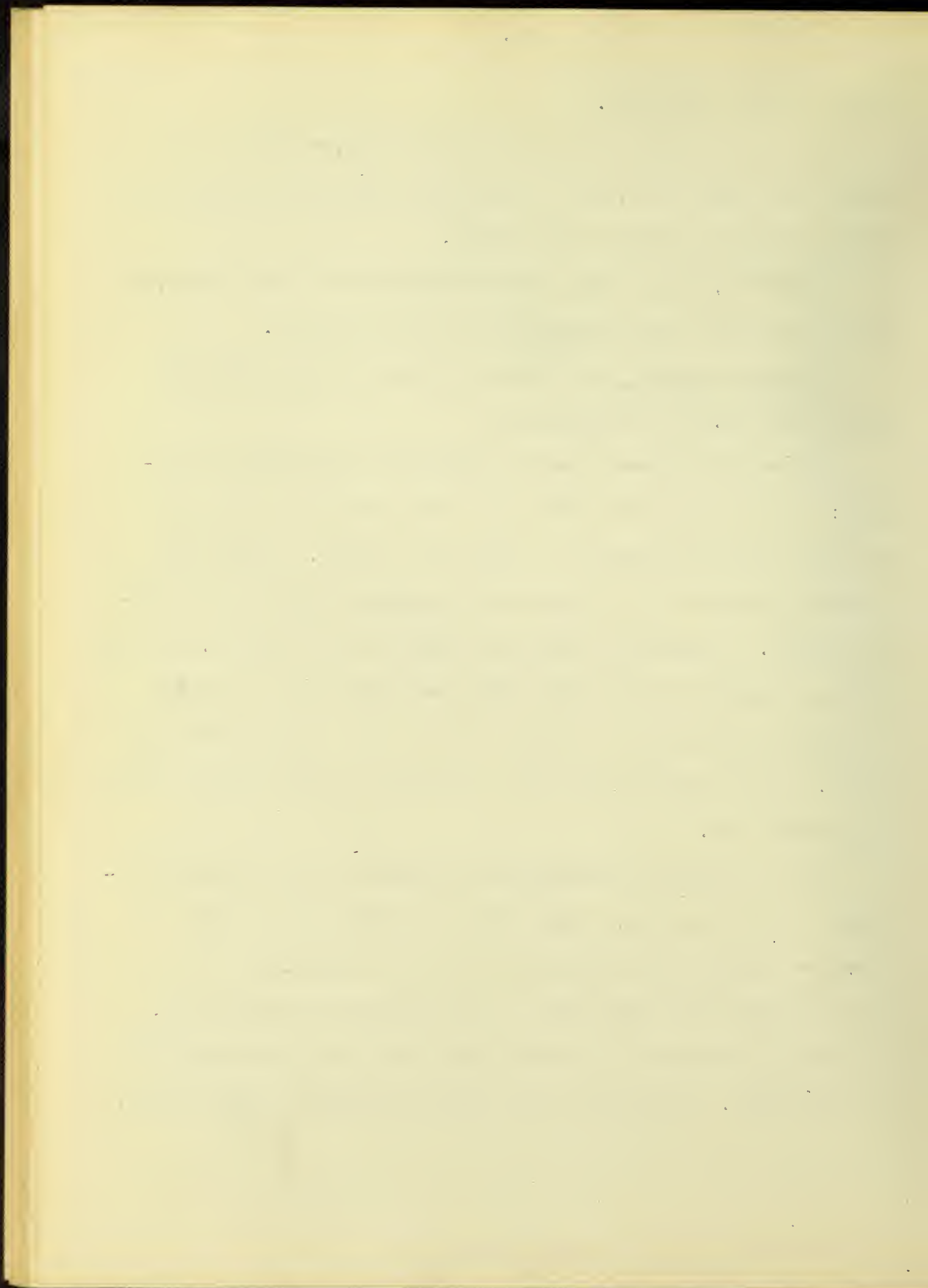




Table No II

Chemical Analysis - Samples taken Feb. 10, 1900.

	Dry Matter		Ash		Protein		Fat		Fiber		Carbohydrates	
	Fresh	Dry	Fresh	Dry	Fresh	Dry	Fresh	Dry	Fresh	Dry	Fresh	Dry
Gluten Meal	86.9	100.0	1.17	1.35	33.83	38.93	3.18	3.66	1.78	2.05	46.94	54.02
*Corn <sup>o</sup> Cook Meal	82.39	100.0	1.29	1.57	7.72	9.37	3.61	4.38	5.8	7.05	63.96	77.64
#Corn Fodder	78.51	100.0	6.8	8.66	4.66	5.94	1.27	1.62	25.16	32.05	40.62	51.74
Refuse from same °Corn	69.46	100.0	4.73	6.81	2.86	4.12	.94	1.36	26.03	37.47	34.9	50.24
Stover	81.0	100.0	5.95	7.35	4.37	5.39	1.03	1.27	27.62	34.1	42.04	51.9
Refuse from same	75.3	100.0	5.07	6.74	3.78	5.02	1.05	1.39	27.93	37.09	37.47	49.76
Silage <sup>o</sup> Square Silo-	33.66	100.0	1.86	5.53	2.99	8.89	1.03	3.05	5.94	17.65	21.84	64.88
Silage Round Silo-	23.22	100.0	1.31	5.64	1.8	7.73	.84	3.61	4.48	19.3	14.79	63.71

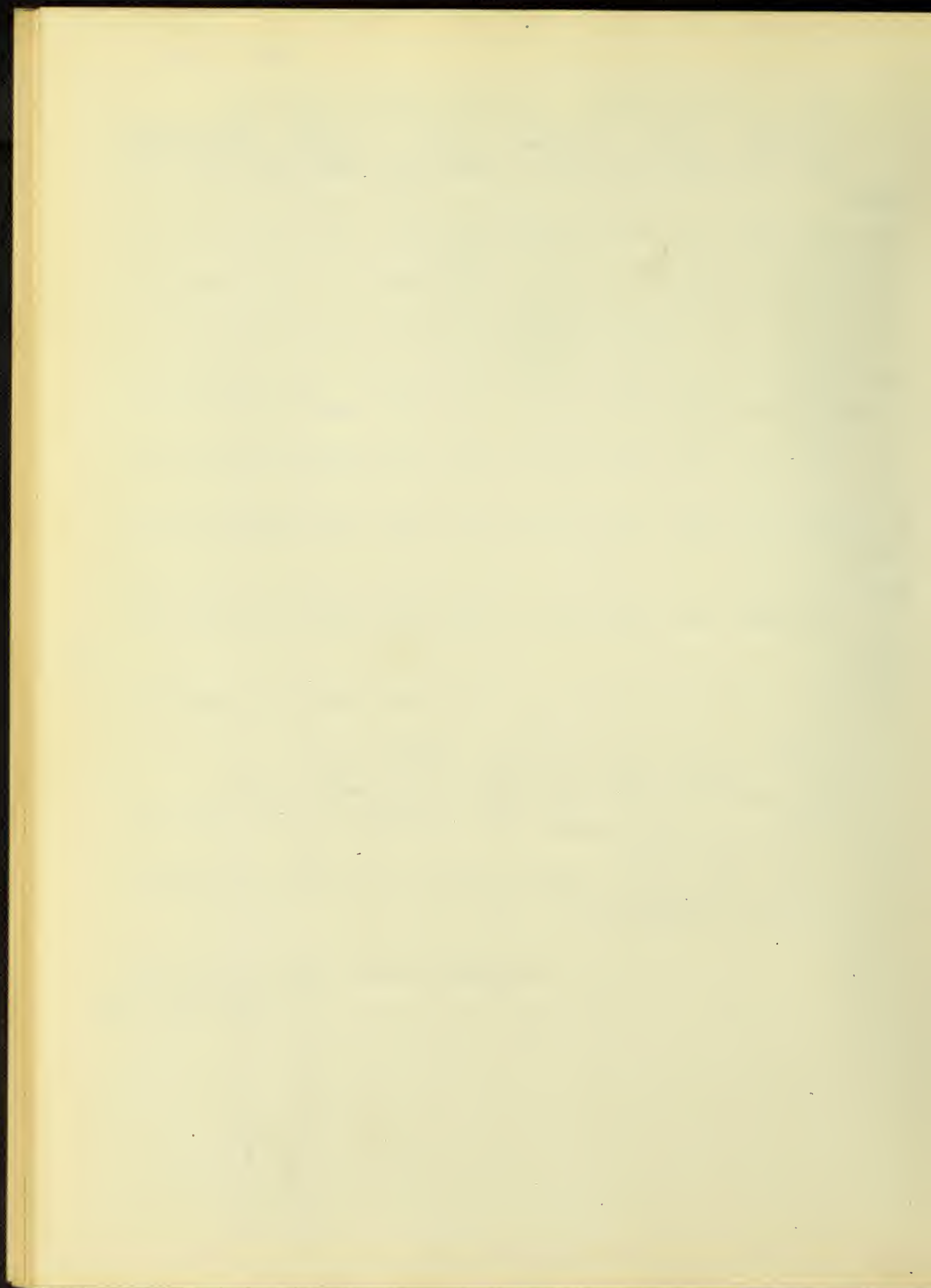
° Stover fed in the morning until Feb 14.

\* Sample taken from freshly ground yellow corn.

# Stover of same yellow corn, which was fed with corn to form fodder.

Sample of refuse taken from a mixture of refuse left by all stovers.

Analysis made by L. H. Smith  
Asst. Chemist, A.E.S.



it was assumed that the loss must have been even smaller during the cold winter weather, and not enough to need notice. Also, it is not likely that the silage absorbed an appreciable amount of water from the slobbering of the steers, it was already so nearly saturated. This conclusion is strengthened by the fact that the bottom of the manger became very damp from the slobbering of the steers during the night when refuse silage was in the manger, while with refuse stover the bottom of the manger was kept comparatively dry. Table III.

Table III gives the per cent of dry matter in feed and refuse as determined and the calculations based upon it. Since the dates of taking the samples did not correspond either with the ends or middle of the feeding periods, a weighted mean percent for each period was computed. For this calculation it was assumed that the changes between the per cents determined followed straight lines; and that the per cents before and after the determination were constant at the level of those determinations. This assumption involves errors, of course, as the amount of moisture depends on temperature, humidity and wind and on the steer, but as the meteorological conditions in the stable were so different from what they were outside no corrections can be made with any probable accuracy. It is probable that the errors in the calculation adopted, being compensating ones, will ultimately not materially affect results.

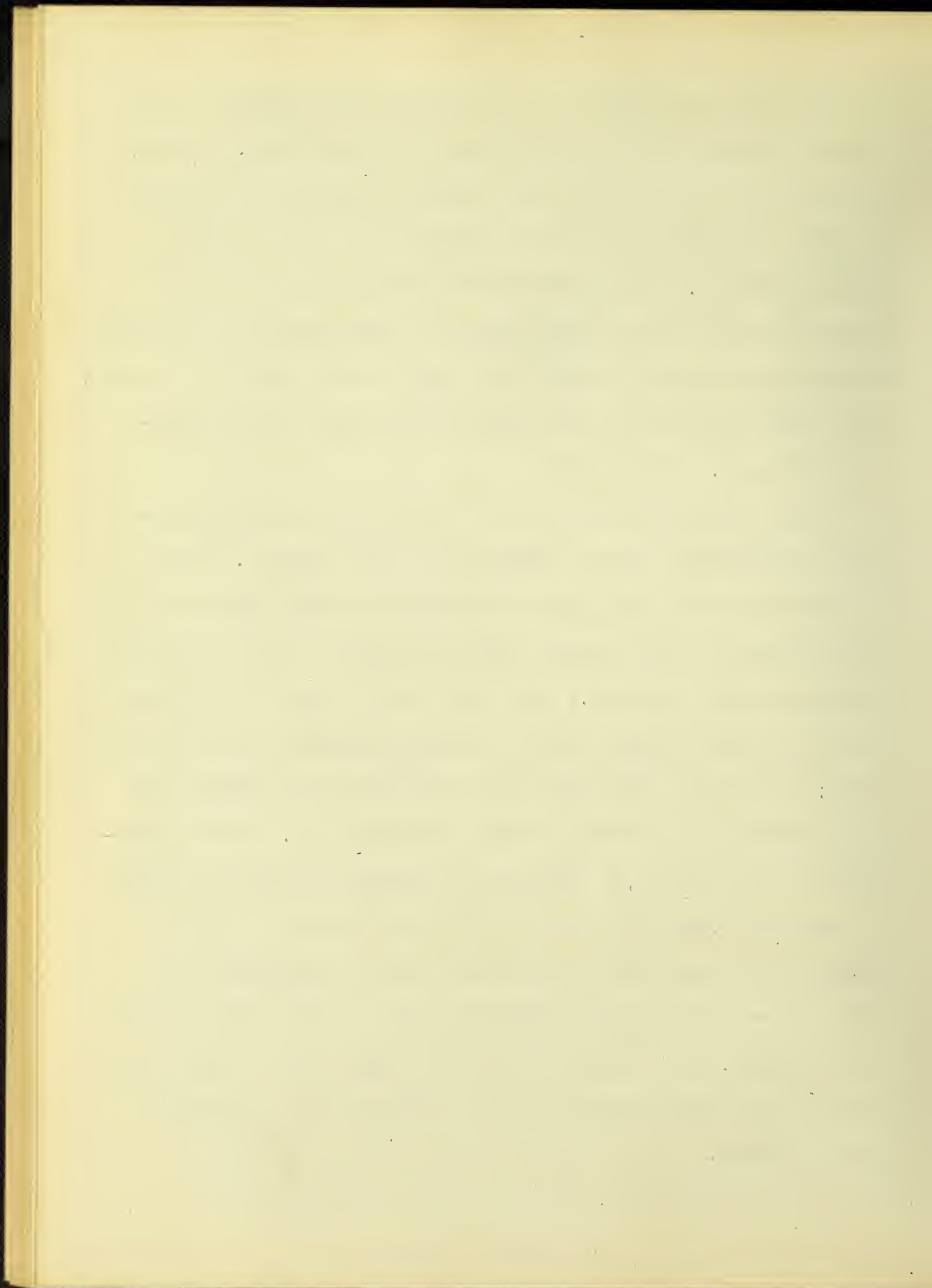


Table No. III.

Dry Matter in Feeds and Refusal. Per cents.

	Jan 23	Feb 28	Mar 28	Apr 25	May 21
* Stover	81.5				
* Stover	81.	79.9	83.3	84.2	88.5
Silage	31.7	31.7	40.1		
Refusal	AM PM	AM PM	AM PM	AM PM	AM PM
Steer 26	72.3	71.2	77.7	79.7	80.3
	69.3	68.	75.8	74.	72.7
33	77.6	76.2	80.4	85.3	85.1
	69.9	73.5	80.2	84.3	84.4
29	76.3	74.5	80.7	87.	83.
	70.3	71.2	74.7	82.8	81.2
28	75.7	71.7	81.6	83.8	85.
				82.5	84.
34	74.5	74.	79.4	84.1	84.
				81.9	81.9
27	75.1	70.8	81.2	83.4	83.2
				78.6	80.6
31	71.5	64.1	76.	82.7	76.3
	68.	58.1	64.3	76.1	74.6
30	76.5	74.4	81.1	83.8	82.3
	73.9	75.5	78.6	83.1	82.7
32	77.7	71.5	79.8	84.1	84.9
	73.1	68.3	76.7	82.6	82.2

\* Stover fed in morning until Feb. 14.

# Stover fed at night only until Feb. 14 and afterwards both night and morning.

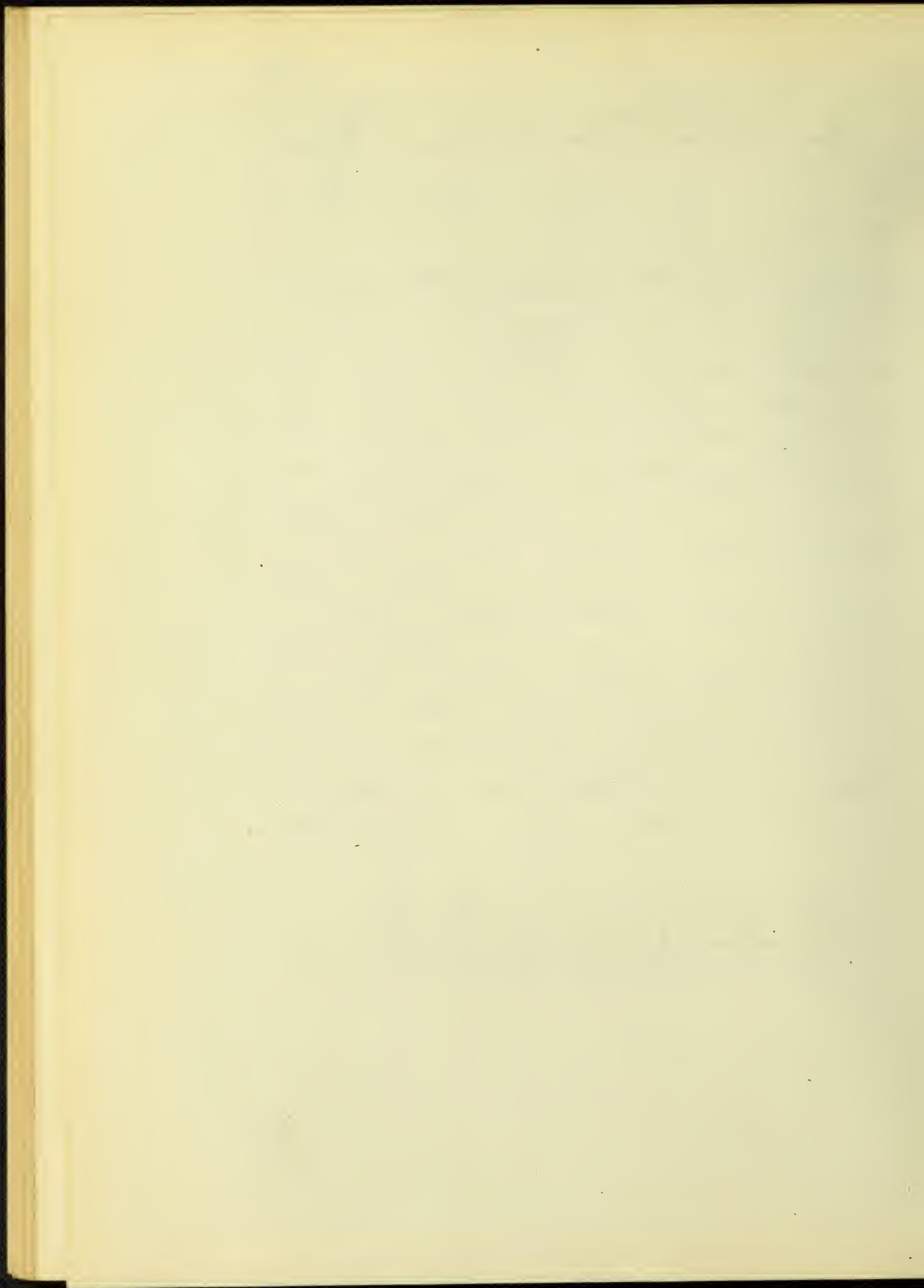


Table No III

## Mean Percents of Dry Matter in Feed and Refuse

	Dec 14 to Jan 10	Jan 11 to Feb 7	Feb 8 to Mar 7	Mar 8 to Apr 4	Apr 5 to May 2	May 3-30					
	AM	PM	AM	PM	AM	PM					
Stover	81.5	81.	81.5	80.9	80.2	82.4	84.1	87.4			
Silage		31.7		31.7		*40.1					
Refuse											
Steer 26	72.3		72.2		71.6		75.9		79.2	80.2	
		69.3		69.2		68.5		73.6		74.5	73.
33	77.6		77.4		76.6		79.4		83.9		85.1
		69.9		70.3		72.9		78.4		83.1	84.4
29	76.3		76.1		75.1		79.2		85.1		84.
		70.3		70.4		71.1		74.		80.5	81.6
28	75.7		75.2		72.9		78.9		83.2		84.7
							82.5		82.6		83.6
34	74.5		74.4		74.3		78.		82.8		84.
							81.9		81.9		81.9
27	75.1		74.6		72.1		78.3		82.8		83.2
							78.6		78.7		80.9
31	71.5		70.7		66.1		72.9		80.6		77.9
		68.		66.9		60.5		62.9		72.7	75.
30	76.5		76.3		75.1		79.3		83.		82.7
		73.9		74.1		75.2		77.9		81.8	82.8
32	77.7		77.		73.1		77.6		82.9		84.7
		73.1		72.6		69.6		74.5		80.9	82.3

\* This silage fed Mar 16 to Apr 4.

Note - Mean % of dry matter in Stover Mar 28 to Apr 4, the time stover was fed to Lot II at night is 83.

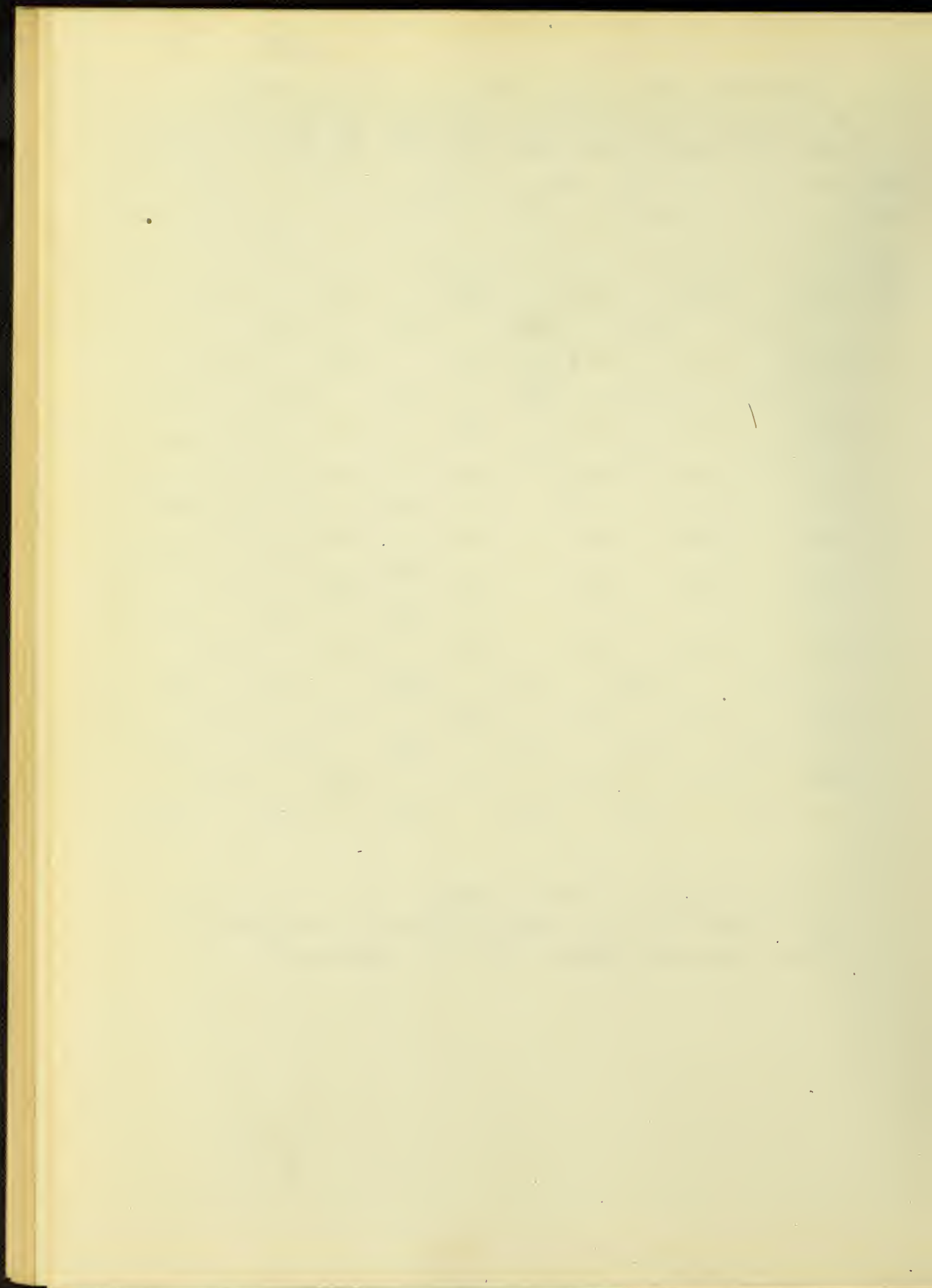


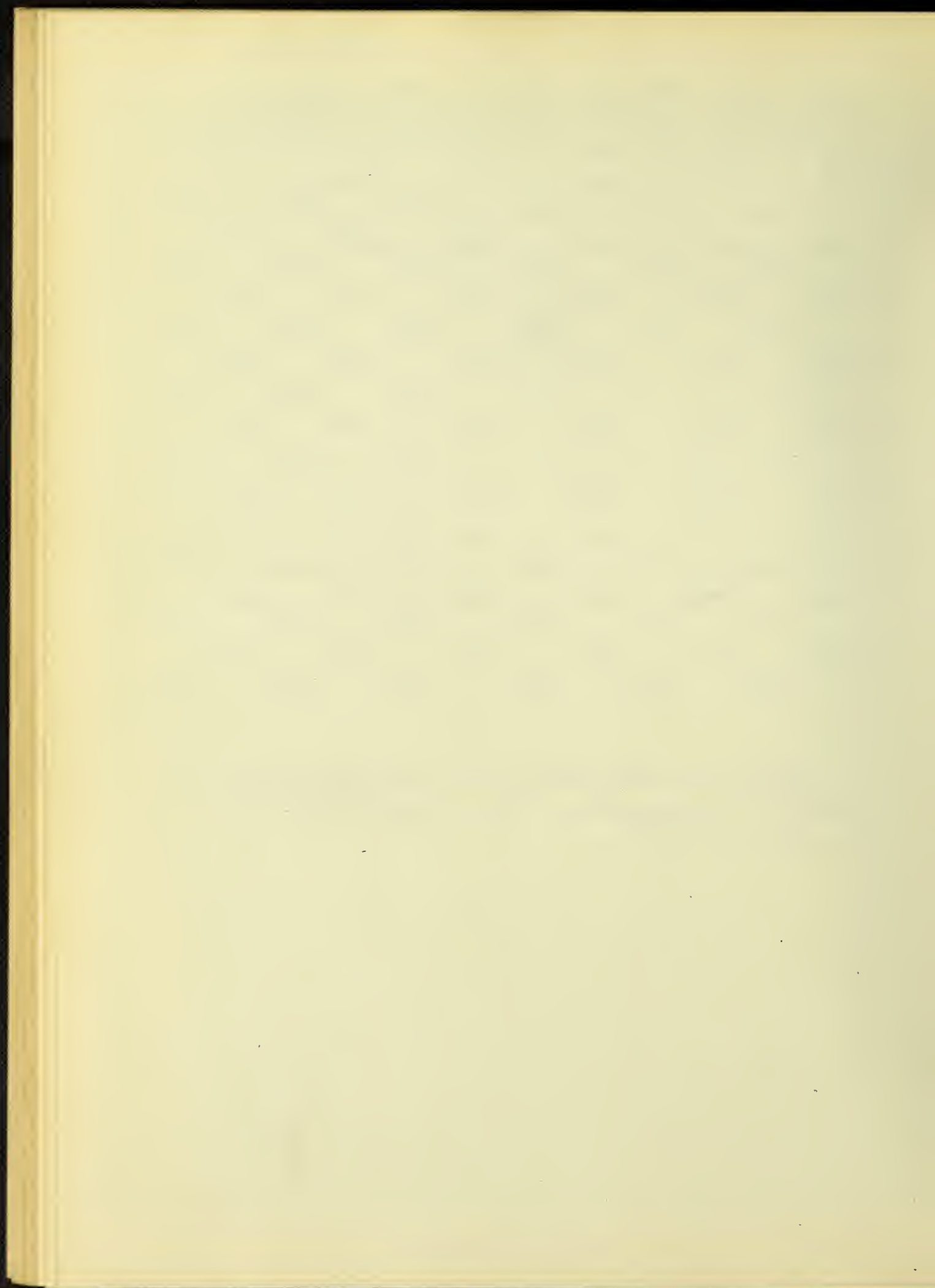


Table No III

Coefficients for Reducing Refuse to Stover Equivalent

Steer No	Dec 4 to Jan 10		Jan 11 to Feb 7		Feb 8 to Mar 7		Mar 8 to Apr 4		Apr 5 to May 2		May 3-30	
	am	pm	am	pm	am	pm	am	pm	am	pm	am	pm
26	.887		.886		.893		.921		.942		.918	
		.856		.855		.854		.893		.886		.835
33	.952		.950		.955		.964		.998		.974	
		.863		.869		.909		.951		.988		.966
29	.936		.934		.936		.961		1.012		.961	
		.868		.870		.887		.898		.957		.934
28	.929		.923		.909		.958		.989		.969	
								.994		.982		.957
34	.914		.913		.926		.947		.985		.961	
								.987		.974		.937
27	.921		.915		.899		.950		.985		.952	
								.947		.936		.916
31	.877		.867		.824		.885		.958		.891	
		.840		.827		.754		.763		.864		.858
30	.939		.936		.936		.962		.987		.946	
		.912		.916		.938		.945		.973		.947
32	.953		.945		.911		.942		.986		.969	
		.902		.897		.868		.904		.962		.942

Coefficient is the fraction obtained by dividing the percent of dry matter in Refuse by percent of Dry matter in Stover.



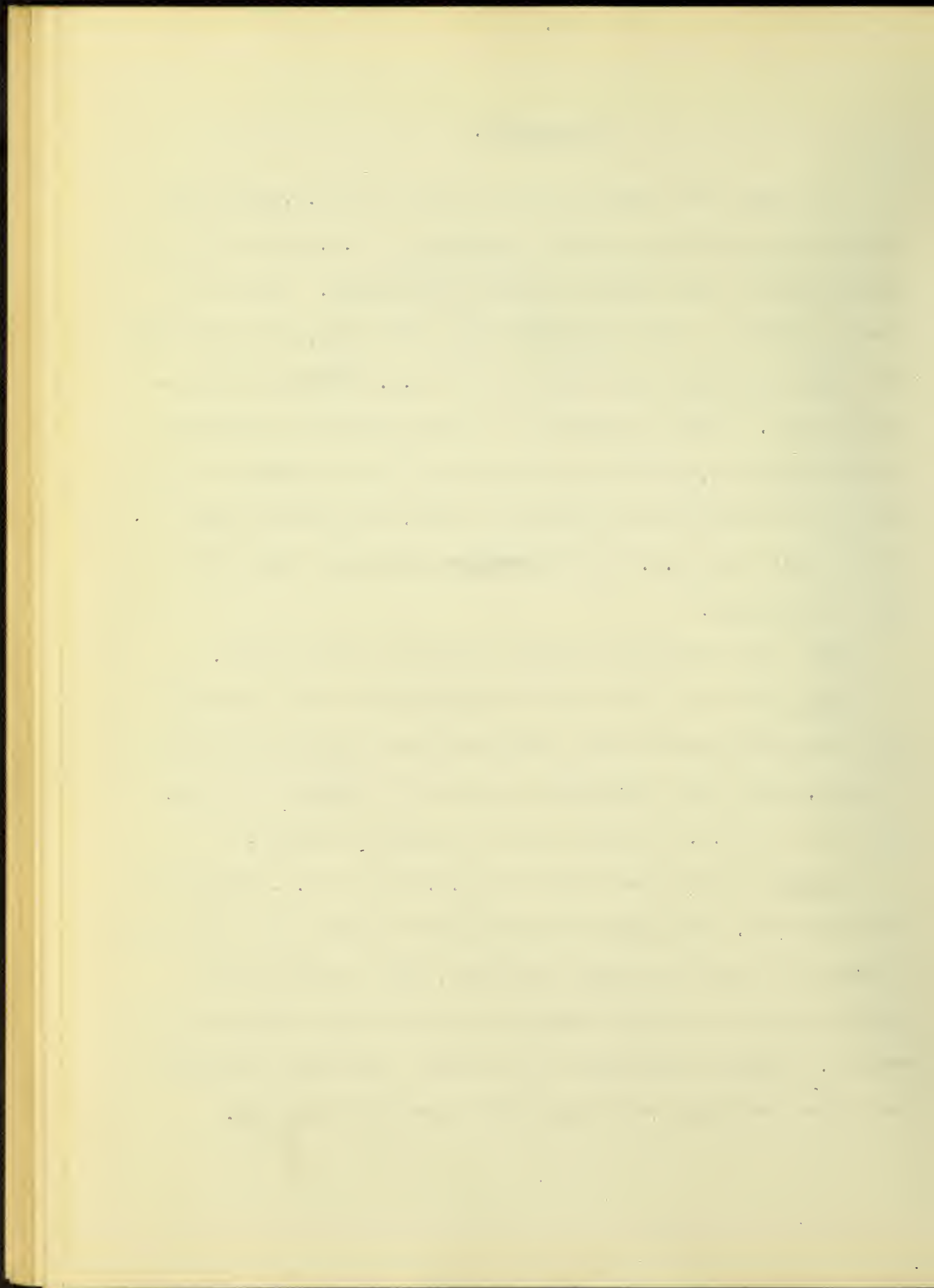
Management.

The steers were turned into the yards at 10 A.M. unless the weather was very severe and left there until 3 P.M., when they were watered and put back into the stable for feeding. They were always confined in the stanchions during the night, except May 14 when they were turned into the yard at 8 P.M. because of the excessive heat. They had access to no feed except when confined to the stanchions, then they could not get at the bedding nor any other feed except what was weighed to them. The stables were cleaned daily at 3 P.M. and the manure of each lot was thrown into its own yard.

Salt was constantly supplied in boxes in the yards..

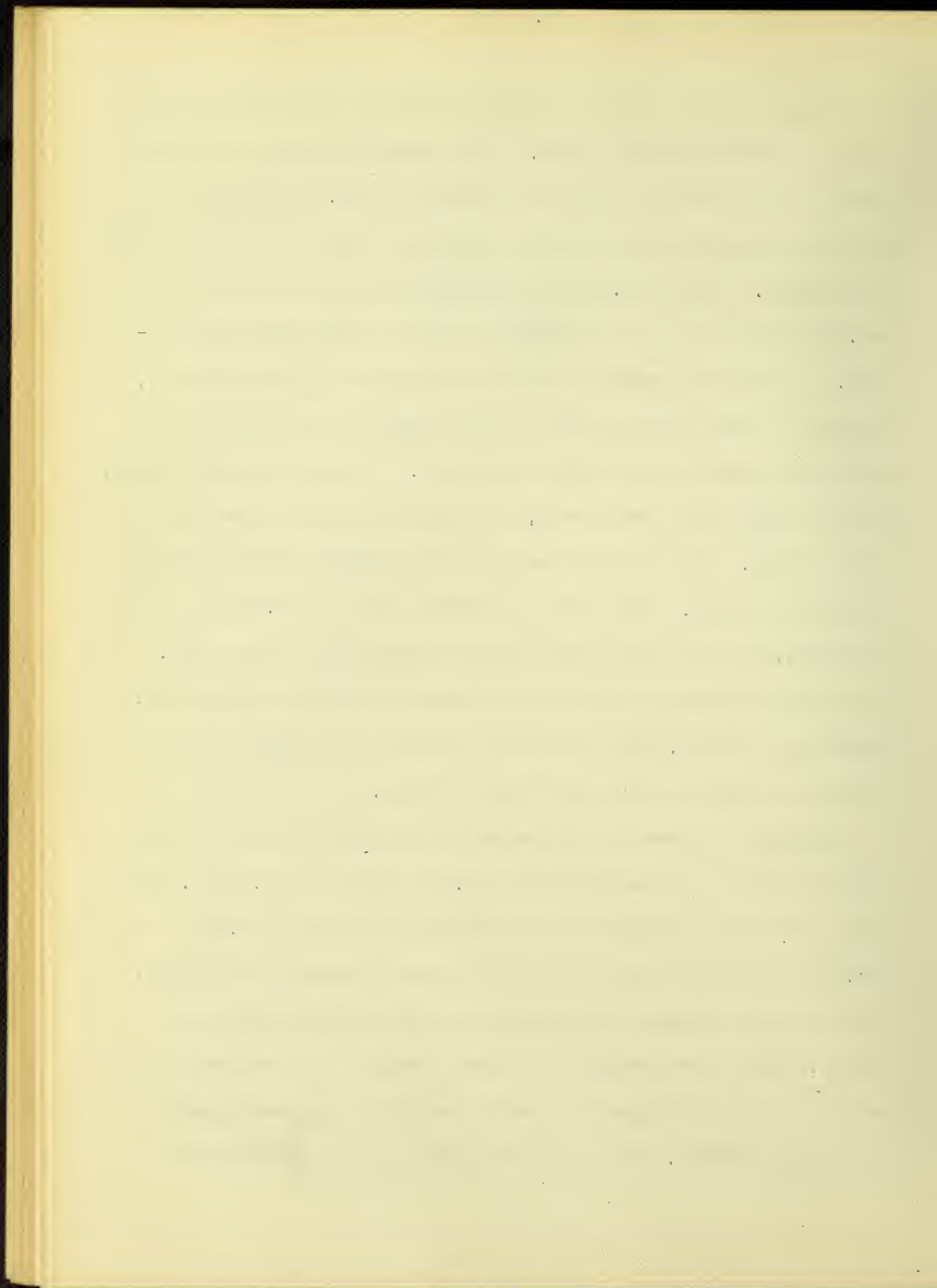
Water from the city water system, was given once a day in the yards, with exception that during May the tubs were left full at night, so that the steers had opportunity to drink at 10 A.M. and again at 3 P.M. The water was not warmed in winter.

Feeding was done regularly at 5 A.M. and at 3 P.M. throughout the experiment. The grain was given first and when that was entirely eaten the stover or silage was given. Lot 1 was given the gluten meal or the mixture first, and when that was cleaned up, corn was fed. This was necessary as the steers would not eat gluten meal after partially satisfying their appetites with corn.



Refuse stover from the previous feed was taken from the mangers just before feeding grain. That from the night and morning feed of each steer was put in a separate sack. The sacks were hung on the wall in front of the steers, and every 2 days the refuse was weighed. Until Feb. 22, silage refuse was treated in the same way, but after that it was weighed as soon as taken from the mangers. When any grain was left it was given at the next feed, as noted in the tables, or else it was dried in the open air and the weight deducted from the feed given. Except in warm weather, when the damp grain would sour, the steers ate this refuse again very readily. In warm weather an equal weight of fresh grain was given instead. Cobs were not weighed before Feb. 22, as up to that time, none were left except small amounts by 29, 27, and 32. The relative amounts which they left are recorded in the tables. Beginning with Feb. 22, the cobs left by each steer were put in a sack and weighed at the end of each 2 weeks.

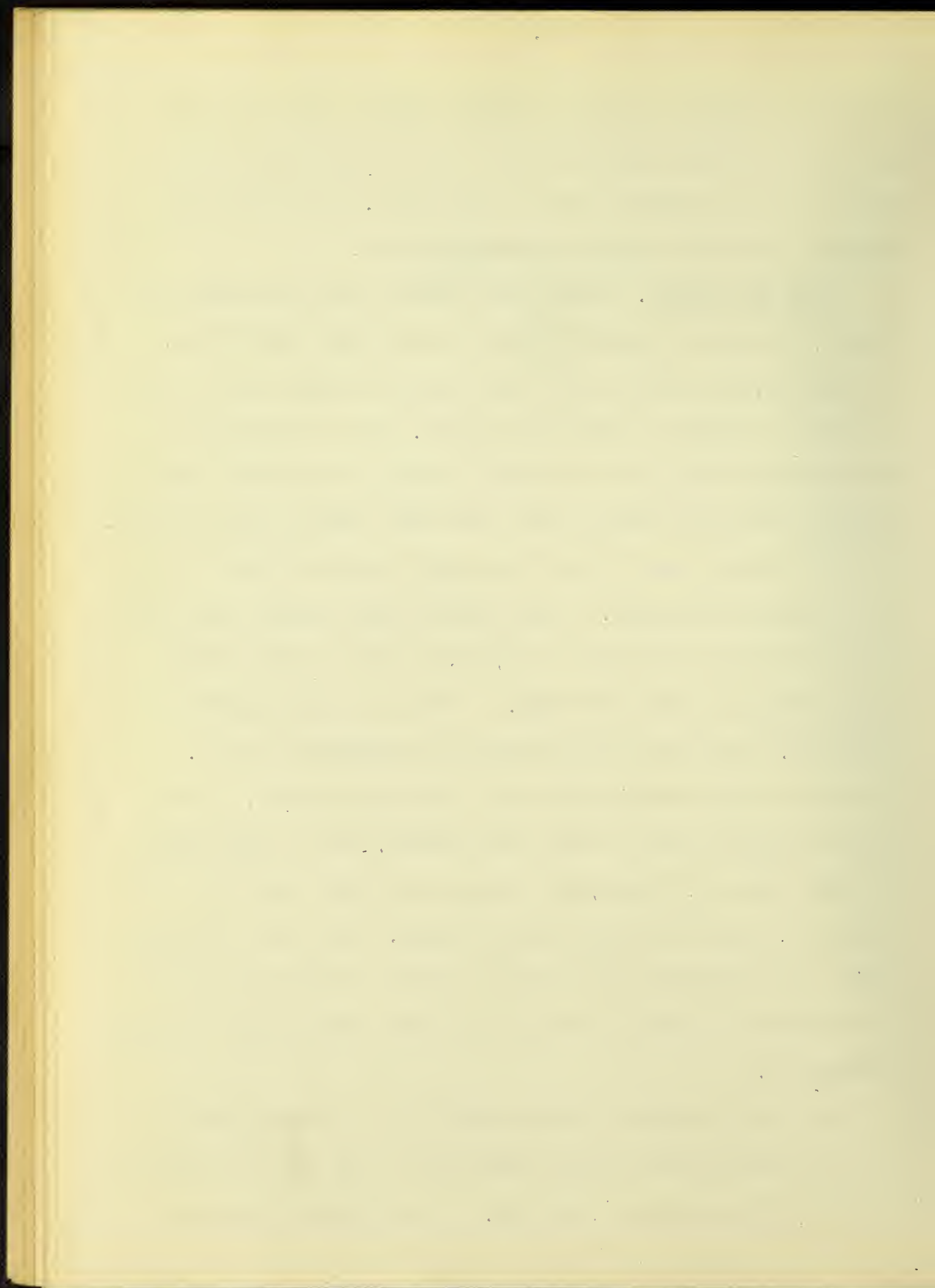
Weights of feed and refuse were taken on Forscher's spring balances, having a capacity of 30 lbs. and graduated to .05 lb. They were tested and found to be accurate except at 0-2 lbs. and 28 - 30 lbs. This difficulty was overcome by always using a tare weight. The grain was weighed in a pail and emptied directly into the manger. Stover was weighed in coarse sacks. The sack was just weighed and then filled with stover until the necessary total weight was reached. When the steers were again given separate



amounts of stover a separate sack was labeled for each steer so that no mistakes might be made when the sacks were carried several at a time, from the mow to the stable. The silage was weighed in an iron basket on platform scales.

Lots and feeding. Lots 2 and 3 during the time silage was fed received equal amounts of corn and stover per steer daily. In addition, each steer of lot 2 got silage, and each steer of lot 3 fodder in amounts to suit his appetite. Each steer of lot 1 was given the same amount of stover as each steer of the other lots, and the total fodder of lot 1 was kept equal to that of lot 3. In addition, each steer of lot 1 got grain - corn and gluten meal - as his appetite demanded. This left but one variable feed for lots 2 and 3, and for lots 1 and 3, viz. the feed on which comparison between the lots was based. This plan was modified after Apr. 11, when lot 2 was getting the same feeds as lot 3. Some steers were demanding much more grain than others, so each steer was given grain to suit his appetite; and all were given the same amount of stover, viz. slightly less than some would have taken, and slightly more than others wanted. This gave a constant stover feed throughout and a variable grain feed for comparisons. It was aimed in general to keep lots 1 and 3 nearly equal in grain consumption.

The ratio of corn to gluten meal in lot 1 was the same for all the steers, but was changed from time to time so as to keep the nutritive ratio between 1:7 and 1:8. It was assumed that this





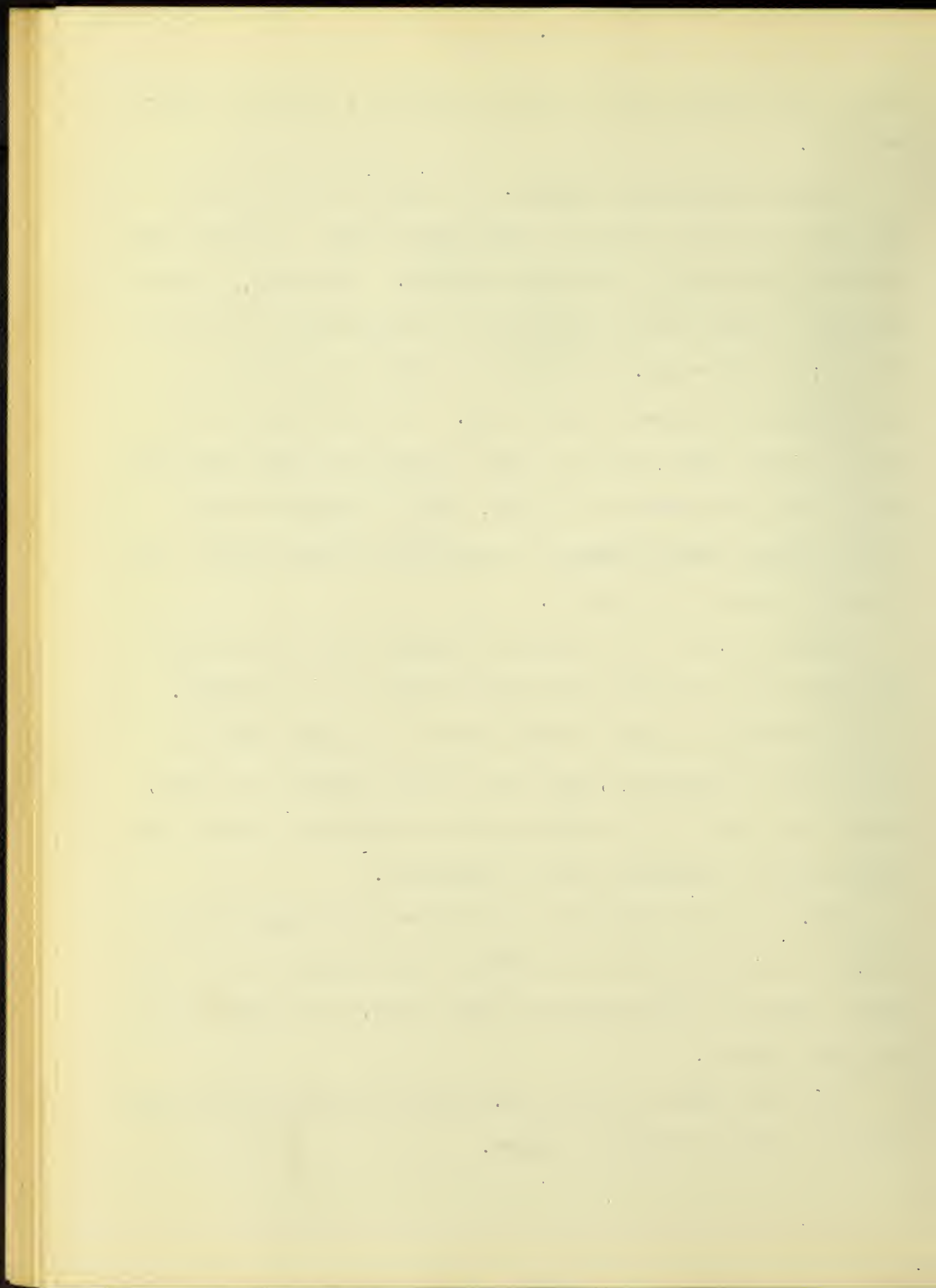
ratio would probably give the most economical , if not the largest gain.

General notes on the feeding. No reductions were made in the amount of feed unless the steer showed signs of marked diminution of appetite or a tendency to scorn. Similarly, a general increase in feed was made when all the steers seemed willing to take it; and after Apr. 11 each steer was given an increase in grain whenever he seemed ready for it. An exception to the above is that while silage was fed to lot 2, the total fodder of lots 1 and 2 were always kept equal. When a change was needed by one steer, a similar change was made in the other lot with the steer that could best stand it.

During Feb. lot 1 was increased in grain faster than lots 2 and 3, as lot 1 was eating stover much cleaner than the others. As this increase in grain did not appear to have much effect on their stover consumption, lots 2 and 3 were increased, in March, faster than lot 1 so as to keep no wider differences between the lots, in grain consumption, than was necessary.

Feb. 14 - 17 the stover for each day was all weighed at once to save time; but it was decided that it was better to keep separate weights of the morning and night feeds, so the former plan was again adopted.

About the middle of April Nos. 30 and 32 developed very strong appetites, both for grain and stover.



In eating grain, in general, 26, 28 and 34 were the quickest; 23, 29, 31, 30, 32 were of medium rapidity, and 27 was the slowest. No. 26 showed more of a liking for gluten meal than did 23 and 29.

Silage refuse of No. 34 was mostly pieces of stalks; that of 27 was mostly pieces of cobs.

There was usually a little shelled corn in the stover, and 29 and 30 as a rule left more of this corn in the refuse than did the others. This was not large enough in amount to make much effect on the weights of refuse.

No determinations were made of the amounts of whole corn kernels passing through the steers, but 28 seemed to have less, and 32 and 34 more than the others.

Table IV gives a complete, detailed record of the weights of feed, gross weights of refuse, and the weights and gain of each steer. Weights of refuse are recorded on the last day included in the weight, altho the weight was actually taken on the afternoon of the succeeding day. The preliminary period, Nov. 20-Dec. 13, is included in the table, but no further use is made of the figures for that period since only one weight was taken of the steers at its commencement.

The record is given chronologically for the successive period of 28 days each. In each period the steers are recorded in the following order: Lot 1: Nos. 26, 33, 29; lot 2: 28, 34, 27; lot 3: Nos. 31, 30, 32. This is the order from north to south in which they stood in the stable, and is also within the lots, the order of their weights Nov. 23, beginning with the highest.



## Table No IV

Steer No 26		Nov 30 - Dec 13						Loh No I	
Date	Stover		Refuse		Corn		o/c meal	Gluten meal	Remarks
Nov	AM	PM	AM	PM	AM	PM	AM	a.m.	
30	6	2				2	2	2	Dec. 8 - Eats Gluten meal well alone.
1	8	3				3	2	2	
2	8	3				3	2	2	Dec 10 - Stover not eaten well.
3	8	3	8.			3	2	2	
4	8	3		3.		3	2	2	
5	10	3				3	2	2	
6	10	3	4.	1.2		3	2	2	
7	10	3				3	2	2	
8	10	3	4.8	1.2	2	3		2	
9	10	3	2.2		2	3		2	
10	10	3	4.1	1.4	2	3		2	
11	8	3			2	3		2	
12	10	3			2	3		2	
13	10	3.5	6.1	2.2	2	4.5		2	
Totals	126	41.5	29.2	9.	12	42.5	16	28	

## Weights and Gain

Date	Weight	Average	Gain	Extreme Dif.
Nov 28	1000			
Dec 12	991			
13	990	988	-12	9
14	982			

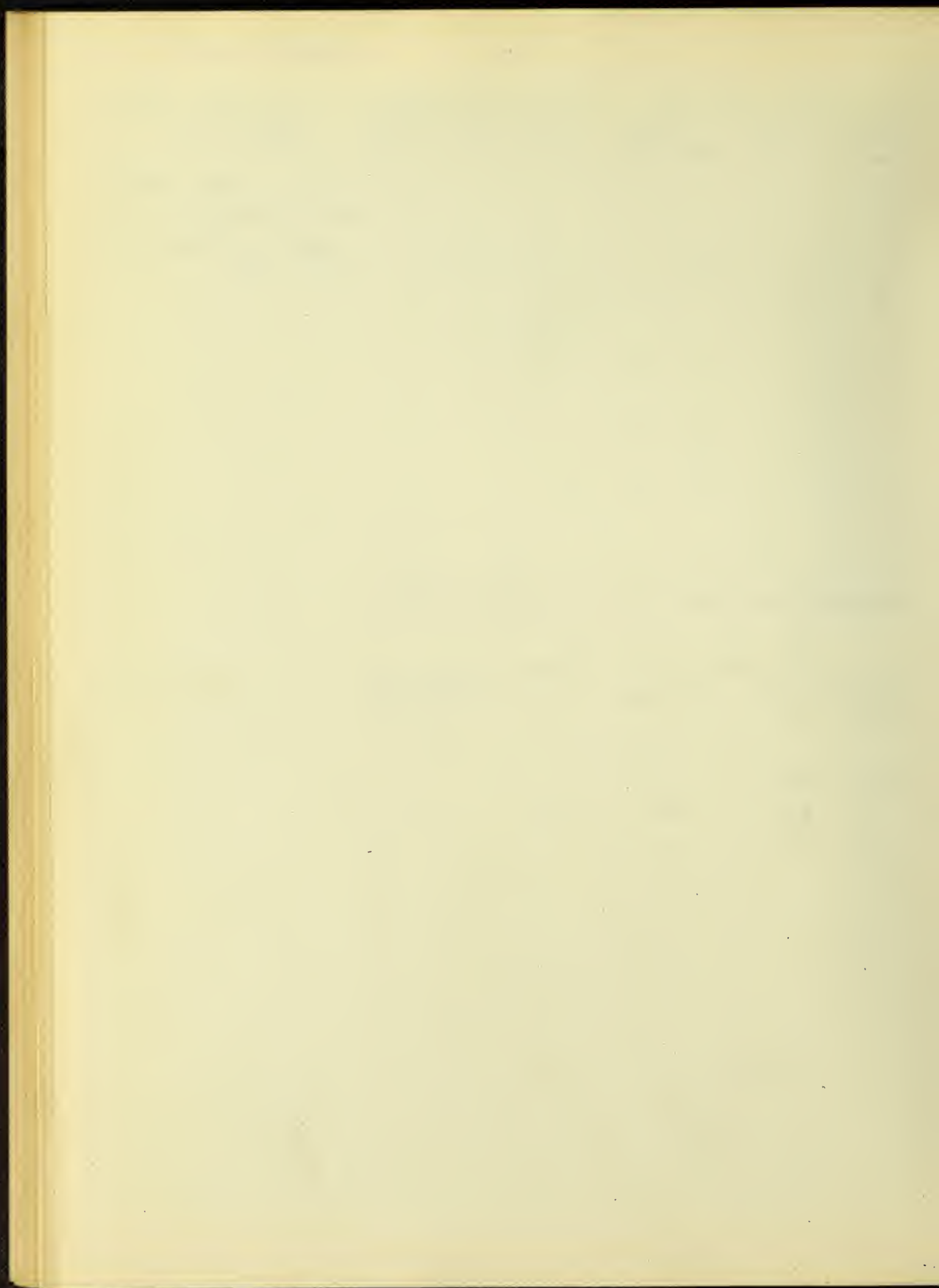
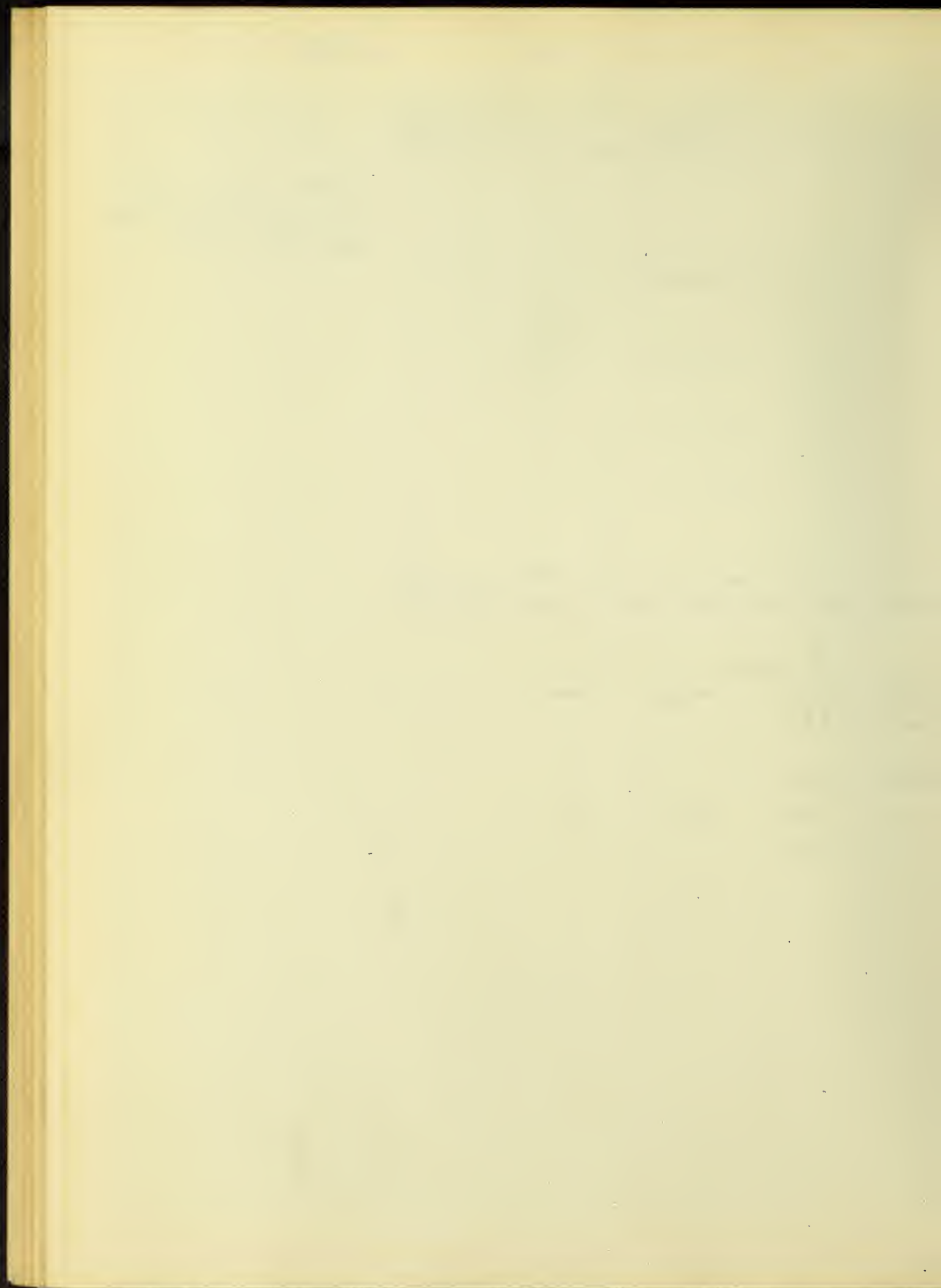


Table No IV

Date	Steer No 33		Refuse		Nov 30 - Dec 13		Corn		Lot No 1	Remarks
	Stover		AM	PM	AM	PM	AM	PM		
Nov 30	6	2					2	2	2	Dec. 8 - Eats gluten meal well alone. Stover not eaten well.
1	8	3					3	2	2	
2	8	3					3	2	1	
3	8	3	13.25	3.25			3	2	2	
4	8	3					3	2	2	
5	10	3					3	2	2	
6	10	3	6.8	2.2			3	2	2	
7	10	3					3	2	2	
8	10	3	9.7	1.3	2	3			2	
9	10	3			2	3			2	
10	10	3	6.9	1.8	2	3			2	
11	8	3			2	3			2	
12	10	3			2	3			2	
13	8	3.5	6.3	3.7	2	4.5			2	
Totals	124	41.5	42.95	12.25	12	42.5	16	28		

Weights and Gain

Date	Weight	Average	Gain
Nov 28	917		
Dec 12	933		
13	929	926	9
14	917		





Steer No 19		Nov 30 - Dec 13							Lot No 1
Date	Stover	Refuse		Corn		C+C meal	Gluten meal	Remarks	
Nov	AM	PM	AM	PM	AM	PM	AM	PM	
30	6	2				2	2	2	Dec 8 - Eats gluten meal slowly alone.
1	8	3				3	2	2	
2	8	3				3	2	2	Dec 12 - Off feed
3	8	3	11.25	2.		3	2	2	
4	8	3				3	2	2	
5	10	3				3	2	2	
6	10	3	8.	1.6		3	2	2	
7	10	3				3	2	2	
8	10	3	14.7	1.7	2	3		2	
9	10	3			2	3		2	
10	10	3		1.8	2	3		2	
11	8	3	8.6		2	3		2	
12	7	3			2	3		1.3	
13	9	3.5	7.35	3.1	2	4.5		.3	
Totals	122	41.5	49.9	10.2	12	42.5	16	25.6	

Weights and Gain

Date	Weight	average	Gain
Nov 28	822		
Dec 12	838		
13	848	837	15
14	826		

11

Steer No 28		Nov 30 - Dec 13			Lot No 2
Date	Stoves	Refuse	Corn	Silage	Refuse
Nov	A.M	A.M	A.M	P.M	A.M
30	6		4	11	
1	8		4	10	
2	8		5	11	
3	8	14.75	5	10	2.25
4	8		5	10	
5	10		5	12	
6	10	6.9	5	12	
7	10		5	13	
8	10	13.9	5	14	
9	10		5	15	
10	10	7.5	5	16	
11	8		5	17	
12	10		5	20	
13	10	8.2	5	20	1.25
Totals	126	51.25	68	191	3.5

## Weights and Gain

Nov 28	Height	Average	Gain
Nov 28	1002		
Dec 12	982		
13	982	977	-25
14	966		



## Table No IV

Steer No 34		Nov 30 - Dec 13			Loh No 2	
Date	Stoves	Refuse	Corn	Silage	Refuse	Remarks
Nov	A.M	A.M	A.M	P.M	A.M	
30	6		4	11		
1	8		4	10.25		
2	8		5	11.		
3	8	11.	5	8.	9.75	
4	8		5	8.		
5	10		5	10.		
6	10	7.	5	12.	.1	
7	10		5	13		
8	10	12.8	5	14	.2	
9	10		5	15.		
10	10	7.5	5	15	.9	
11	8		5	17.		
12	10		5	20.		
13	10	8.6	5	20.	1.9	
Totals	126	46.9	68	184.25	12.85	

## Weights and Gain

Date	Weight	Average	Gain
Nov 28	948		
Dec 12	948		
13	928	936	-12
14	932		



## Table No IV

Steer No 27		Nov 30 - Dec 13				Lot No 2		
Date	Stover	Refuse		Corn		Silage	Refuse	Remarks
Nov	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
30	6	2			4	2		
1	8	3		1.	4	3		Dec. 2 - Changed from Lot 3 to Lot 2
2	8				5		11	
3	8		7.		5		10	
4	8				5		10	
5	10				5		12	
6	10		3.1		5		12	
7	10				5		13	
8	10		9.7		5		14	
9	10				5		15	
10	10		4.5		5		16	
11	8				5		17	
12	10				5		20	
13	10		8.3		5		20	
<u>Totals</u>	<u>126</u>	<u>5</u>	<u>32.6</u>	<u>1.</u>	<u>68</u>	<u>5</u>	<u>170</u>	

Weights and Gain			
Date	Weight	Average	Gain
Nov 28	888		
Dec 12	896		
13	872	882	-6
14	878		





Steer No 31		Nov 30 Dec 13				Lot No 3		Remarks
Date	Stoves	Refuse		Corn				
Nov	AM	PM	AM	PM	AM	PM		
30	6	2			4	2		
1	8	3			4	3		
2	8	3			5	3		
3	8	3	5.75	1.25	5	3		
4	8	3			5	3		
5	10	3			5	3		
6	10	3	3.6	1.	5	3		
7	10	3			5	3		
8	10	3	7.5	1.1	5	3		
9	10	3			5	3		
10	10	3	4.1	1.1	5	3		
11	8	3			5	3		
12	10	3			5	3		
13	10	3.5	3.8	1.55	5	4.5		
Totals	126	41.5	24.75	6.	68.	42.5		

## Weights and Gain

Date	Weight	Average	Gain
Nov 28	981		
Dec 12	983		
13	985	980	-1
14	971		



Table No IV

Steer No 30		Non 30 - Dec 13		Loz No 3		
Date	Stover	Refuse	Corn	Remarks		
Nov	am	pm	am	pm		
30	6	2	4	2	Dec 13 - Got loose last night but did no damage.	
1	8	3	4	3		
2	8	3	5	3		
3	8	3	10.25	1		
4	8	3	5	3		
5	10	3	5	3		
6	10	3	4.4	.9		
7	10	3	5	3		
8	10	3	8.5	.9		
9	10	3	5	3		
10	10	3	4.3	1.1		
11	8	3	5	3		
12	10	3	5	3		
13	10	3.5	7.6	1.5	5	4.5
Totals	126	41.5	35.05	5.4	68	42.5

Weights and Gain

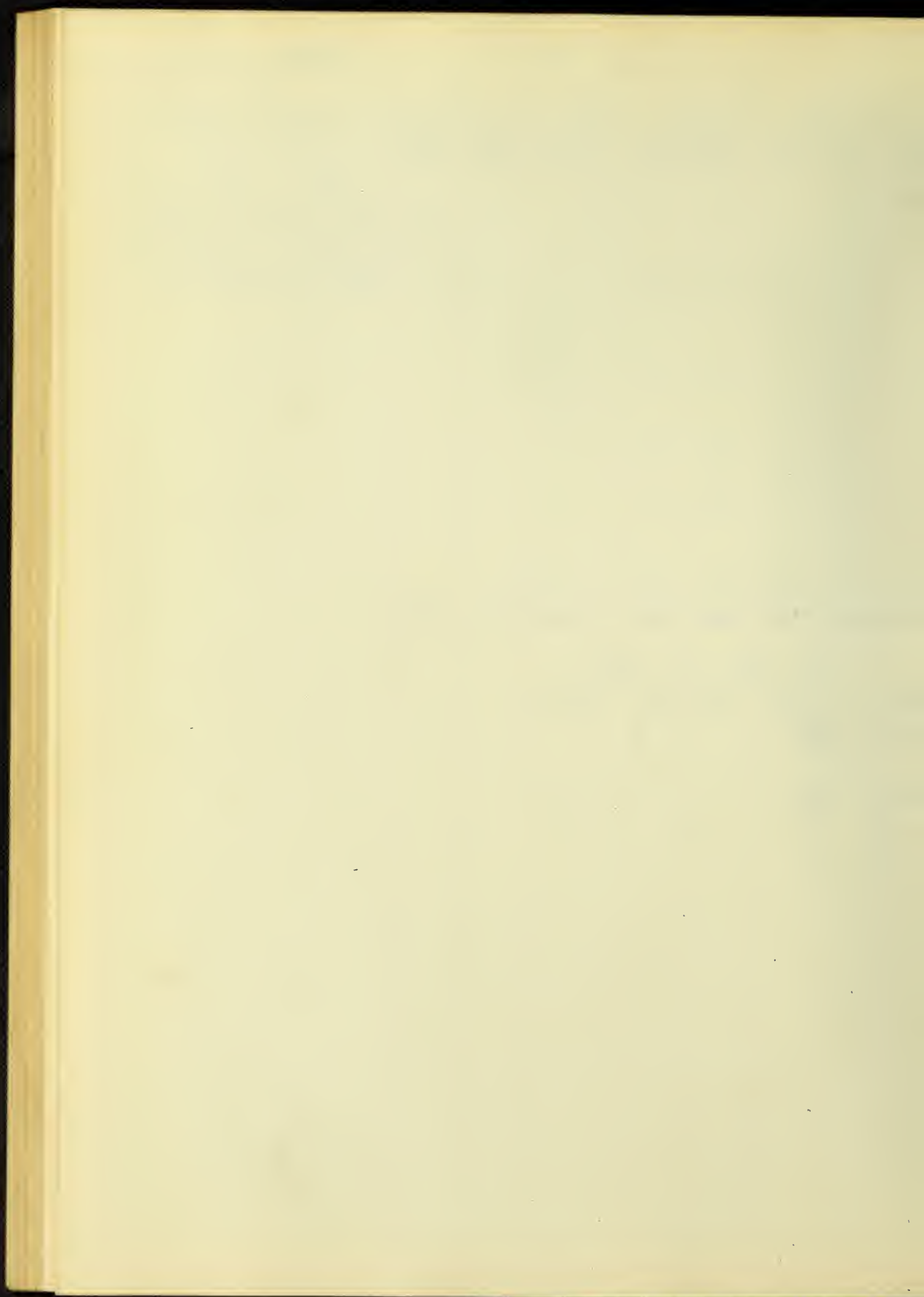
Date	Weight	Average	Gain
Nov 28	935		
Dec 12	973		
13	986	975	40
14	965		



Steer No 32		Nov 30 - Dec 13				Lot No 3		
Date	Stover	Refuse		Corn Silage		Refuse		Remarks
Nov	A.M	P.M	A.M	P.M.	A.M	P.M	P.M	
30	6				4		11	Dec 2 - changed from Lot 2 to Lot 3. Dec. 5 - Will eat barely 5 lbs corn.
1	8		8.5		4		10	
2	8	3			5	3		
3	8	3	6	1.75	5	3		
4	8	3			5	3		
5	10	3			5	3		
6	10	3	7.2	2.5	5	3		
7	10	3			5	3		
8	10	3	14.	2.5	5	3		
9	10	3			5	3		
10	10	3	6.45	1.3	5	3		
11	8	3			5	3		
12	10	3			5	3		
13	10	3.5	7.3	1.9	5	4.5		
<u>Totals</u>	<u>126</u>	<u>36.5</u>	<u>49.45</u>	<u>9.95</u>	<u>68</u>	<u>37.5</u>	<u>21</u>	<u>6.75</u>

## Weights and Gain

Date	Weight	Average	Gain
Nov 28	876		
Dec 12	848		
13	854	841	-35
14	820		



Steep No 26 - Dec 14 - Jan 10								Lot No 1	
Date	Stover		Refuse		Corn		Cr. meal	Gluten meal	Remarks
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
14	10	3.5			2	4.5		2	Dec 19 - Has stronger appetite than Nos. 33 & 29 Dec 22 - Fed corn and Cr. meal since it is necessary for No 29
15	10	3.5	7.5	1.8	2	4.5		2	
16	10	3.5			2	4.5		2	
17	10	3.5	6.7	2.15	2	4.5		2	
18	10	3.5			2	4.5		2	
19	10	4.4	6.6	2.1	2	5.5		2	
20	10	4.4			2	5.5		2	
21	10	5.3	6.55	2.65	2	6.7		2	
22	9	5.3			1	6.7	1	2	
23	9	5.3	7.85	4.	2	6.7	1	2	
24	10	5.3			2	6.7	1	2	
25	10	5.3	9.05	3.9	2	6.7	2	2	
26	9	5.3			2	6.7	1	2	
27	9	5.3	8.7	3.7	2	6.7	1	2	
28	9	5.3			2	6.7	1	2	
29	10	5.3	6.8	4.9	2	6.7	2	2	
30	10	5.3			2	6.7	2	2	
31	9	5.3	6.85	1.85	2	6.7	2	2	
1	9	5.3			2	6.7	2	2	
2	9	5.3	7.	3.55	2	6.7	2	2	
3	9	5.3			2	6.7	2	2	
4	9	5.3	8.6	3.6	2	6.7	2	2	
5	9	5.3			2	6.7	2	2	
6	5	5.3	7.85	3.15	2	6.7	2	2	
7	7	5.3			2	6.7	2	2	
8	7	5.3	5.9	3.45	2	6.7	2	2	
9	7	5.3			2	6.7	2	2	
10	7	5.3	6.35	3.9	2	6.7	2	2	
<b>Totals</b>	<b>252</b>	<b>137.6</b>	<b>102.3</b>	<b>44.7</b>	<b>55</b>	<b>174.2</b>	<b>34</b>	<b>56</b>	

## Weights and Gain

Date	Weight	Average	Gain
Jan 9	1030		
10	1070	1044	56
11	1032		

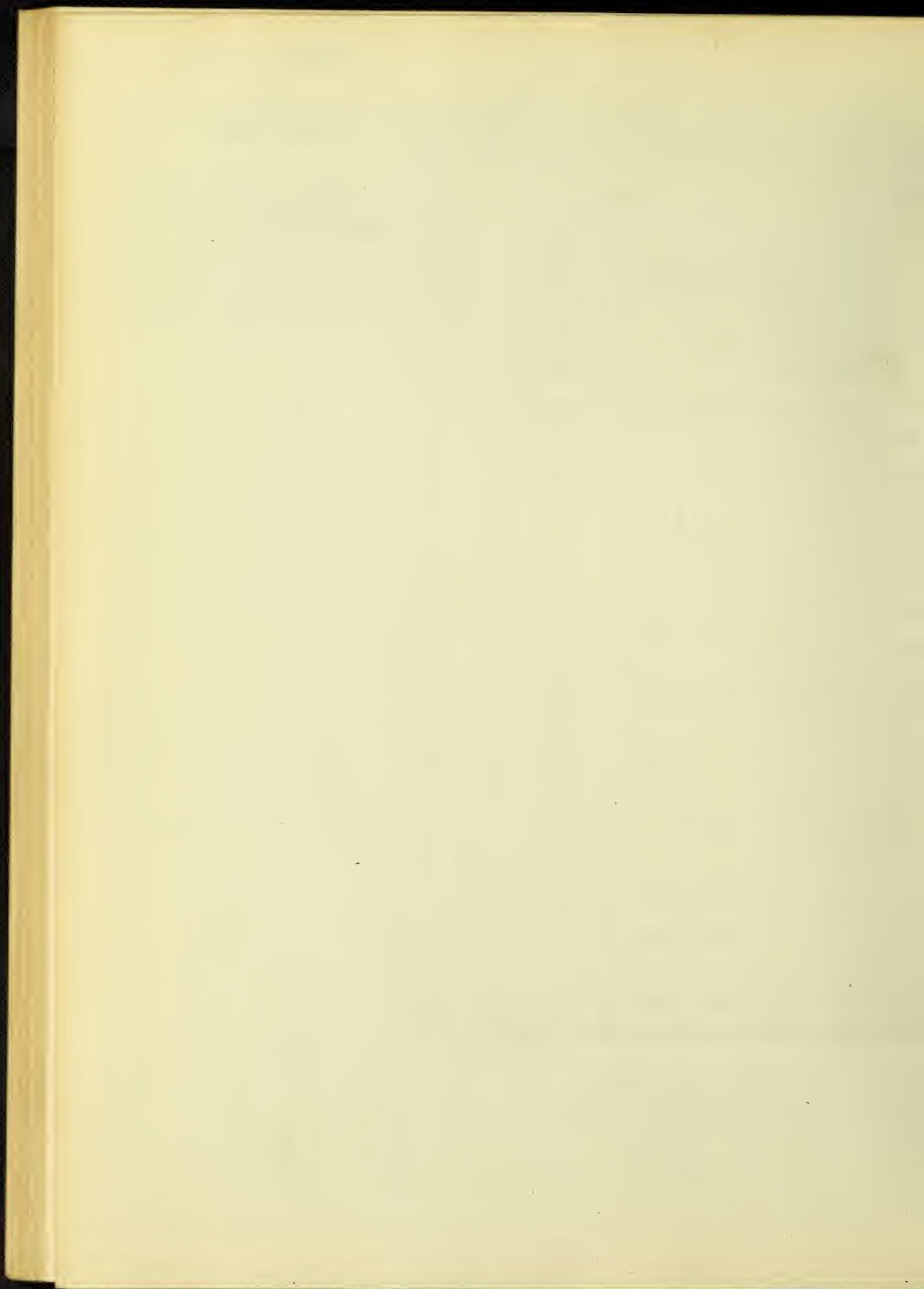




Table No IV

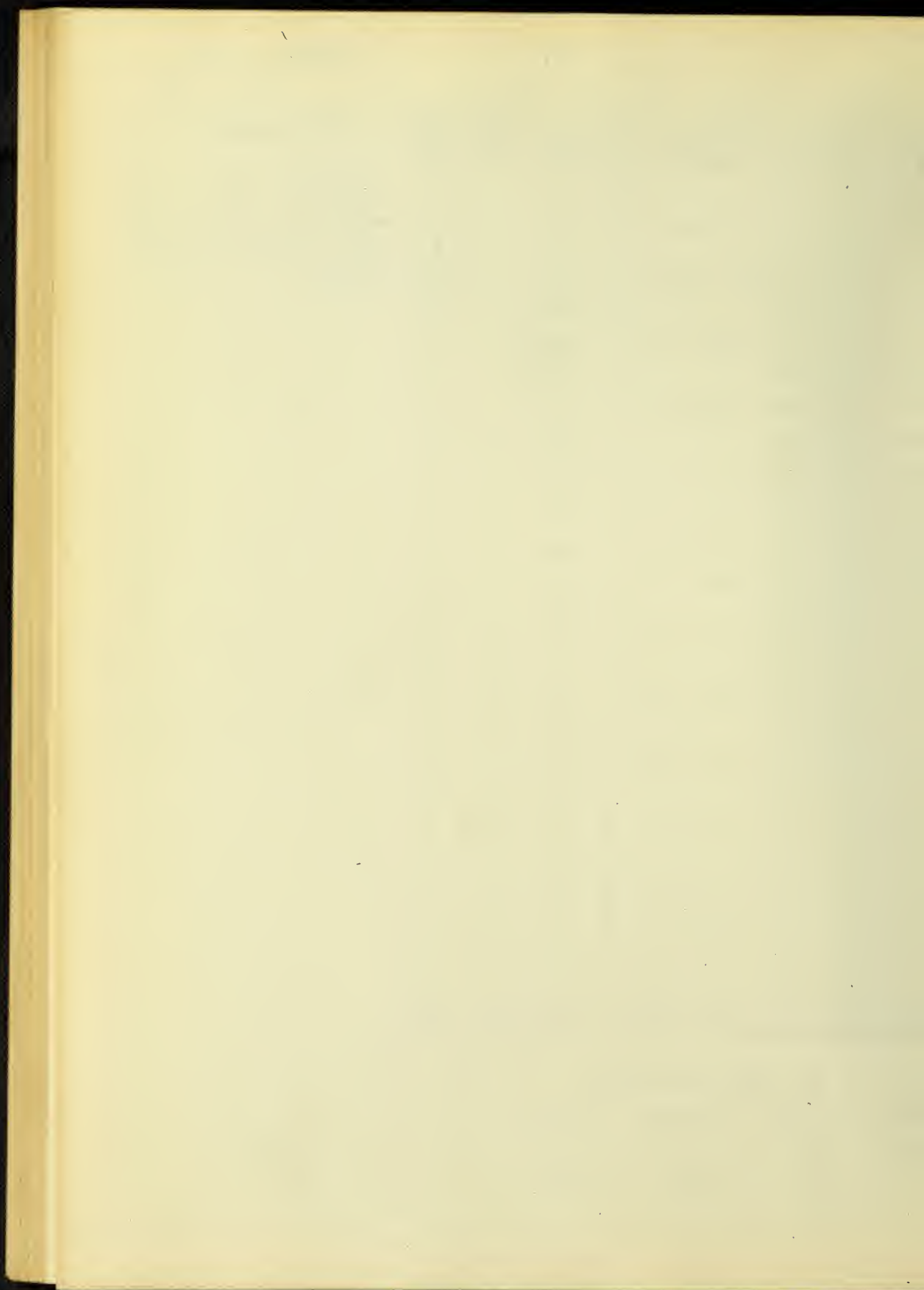
Loh No 1

Steer No 33 - Dec 14 - Jan 10

Date	Stover		Refuse		Corn		C+C	Gluten	Remarks
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Meal	Meal	
Dw	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	A.M.	
14	10	3.5			2	4.5		2	Dw 22 - Feed corn and cob meal since it is necessary for No 29.
15	10	3.5	8.6	2.1	2	4.5		2	
16	10	3.5			2	4.5		2	
17	10	3.5	8	2.5	2	4.5		2	
18	10	3.5			2	4.5		2	
19	10	3.5	8.95	2.35	2	4.5		2	
20	10	3.5			2	4.5		2	
21	10	4.4	6.85	2.7	2	5.6		2	
22	9	4.4			1	5.6	1	2	
23	9	4.4	7.8	3.2	2	5.6	1	2	
24	10	4.4			2	5.6	1	2	
25	10	4.4	8.6	3.7	2	5.6	2	2	
26	9	4.4			2	5.6	1	2	
27	9	4.4	11.25	2.3	2	5.6	1	2	
28	9	4.4			2	5.6	1	2	
29	10	4.4	9.7	7.7	2	5.6	2	2	
30	10	4.4			2	5.6	2	2	
31	9	4.4	11.5	1.2	2	5.6	2	2	
1	9	4.4			2	5.6	2	2	
2	9	4.4	10.5	4.2	2	5.6	2	2	
3	9	4.4			2	5.6	2	2	
4	9	4.4	11.	3.2	2	5.6	2	2	
5	9	4.4			2	5.6	2	2	
6	5	4.4	8.1	3.2	2	5.6	2	2	
7	7	4.4			2	5.6	2	2	
8	7	4.4	6.25	3.3	2	5.6	2	2	
9	7	4.4			2	5.6	2	2	
10	7	4.4	6.75	3.25	2	5.6	2	2	
Totals	252	116.9	123.85	44.9	55	149.1	34	56	

Weights and Gain

Date	Weight	Average	Gain
Jan 9	973		
10	973	974	48
11	975		

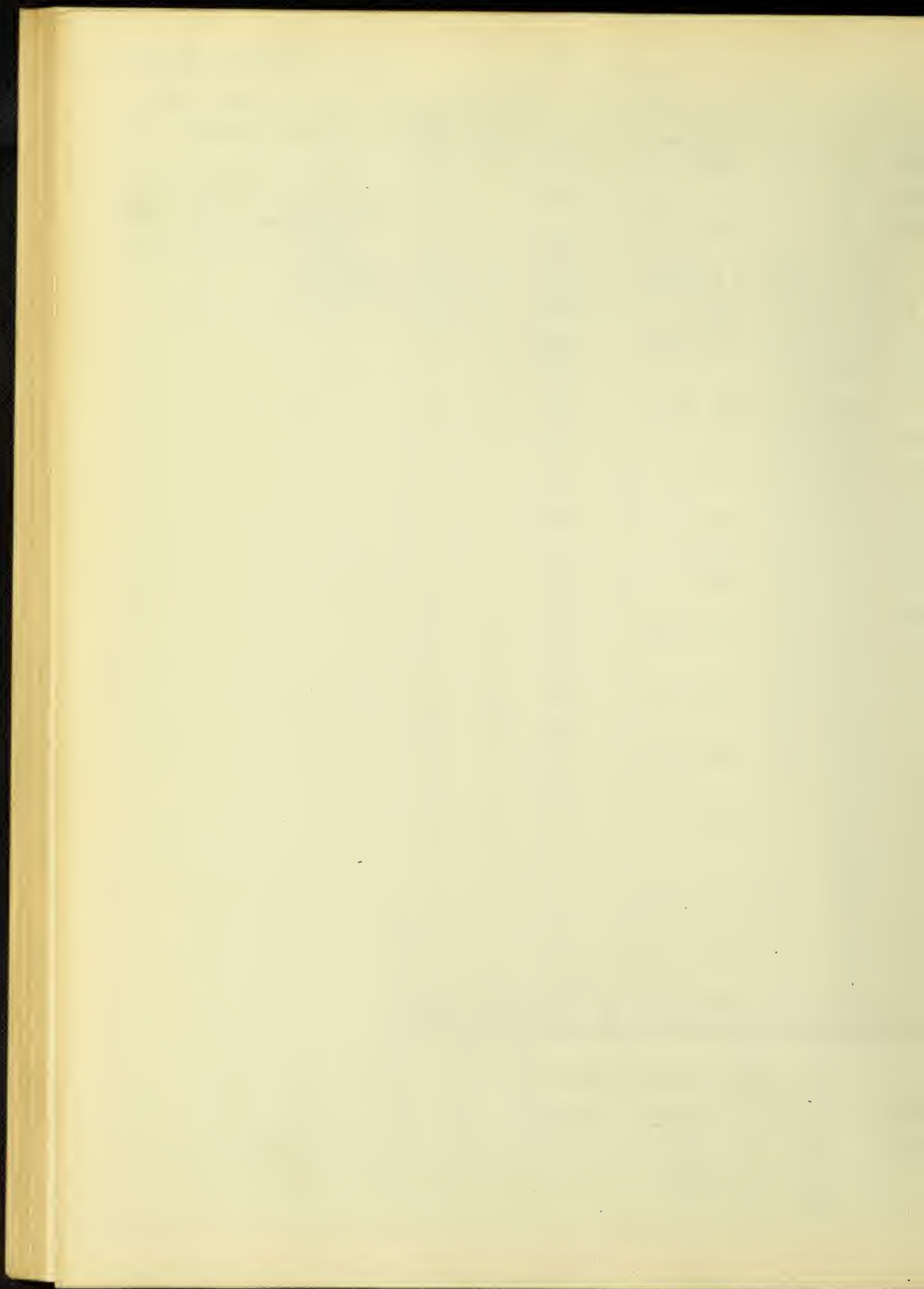


Steer No 29 - Dec 14 - Jan 10

Date	Stover		Refuse		Corn		CRC	Gluten	Remarks
	a.m	p.m	a.m	p.m	a.m	p.m	meal	meal	
14	8	3.5	6.55		4.5		2	2	Dec 14 - Will not eat gluten meal alone
15	8	0	5.7	1.75	0		2	2	
16	10	3.5			4.5		2	2	Dec 15 - Slightly off feed.
17	10	3.5	9.7	2.45	4.5		2	2	
18	10	3.5	4.95		4.5		2	2	Dec 23 - ditto
19	10	3.5	5.6	3.25	4.5		2	2	
20	8	3.5			4.5		2	2	
21	10	3.5	6.8	2.5	4.5		2	2	
22	9	3.5			1	4.6	1	2	
23	9	0	10.4	1.1	2	0	1	2	
24	8.8	3.5			2	4.6	1	2	
25	10.	3.5	6.75	1.9	2	4.6	2	2	
26	9.	3.5			2	4.6	1	2	
27	9.	3.5	12.15	2.7	2	4.6	1	2	
28	9.	3.5			2	4.6	1	2	
29	10.	3.5	9.1	4.4	2	4.6	2	2	
30	10.	3.5			2	4.6	2	2	
31	9	3.5	8.7	2.1	2	4.6	2	2	
1	9	3.5			2	4.6	2	2	
2	9	3.5	9.9	2.5	2	4.6	2	2	
3	9	3.5			2	4.6	2	2	
4	9	3.5	11.9	1.7	2	4.6	2	2	
5	9	3.5			2	4.6	2	2	
6	5.	3.5	7.3	2.2	2	4.6	2	2	
7	7.	3.5			2	4.6	2	2	
8	7	3.5	5.1	1.7	2	4.6	2	2	
9	7	3.5			2	4.6	2	2	
10	7	4.4	6.05	1.8	2	5.6	2	2	
Totals	244.8	91.9	126.65	32.05	39	119.9	50	56	

Heights and Gain

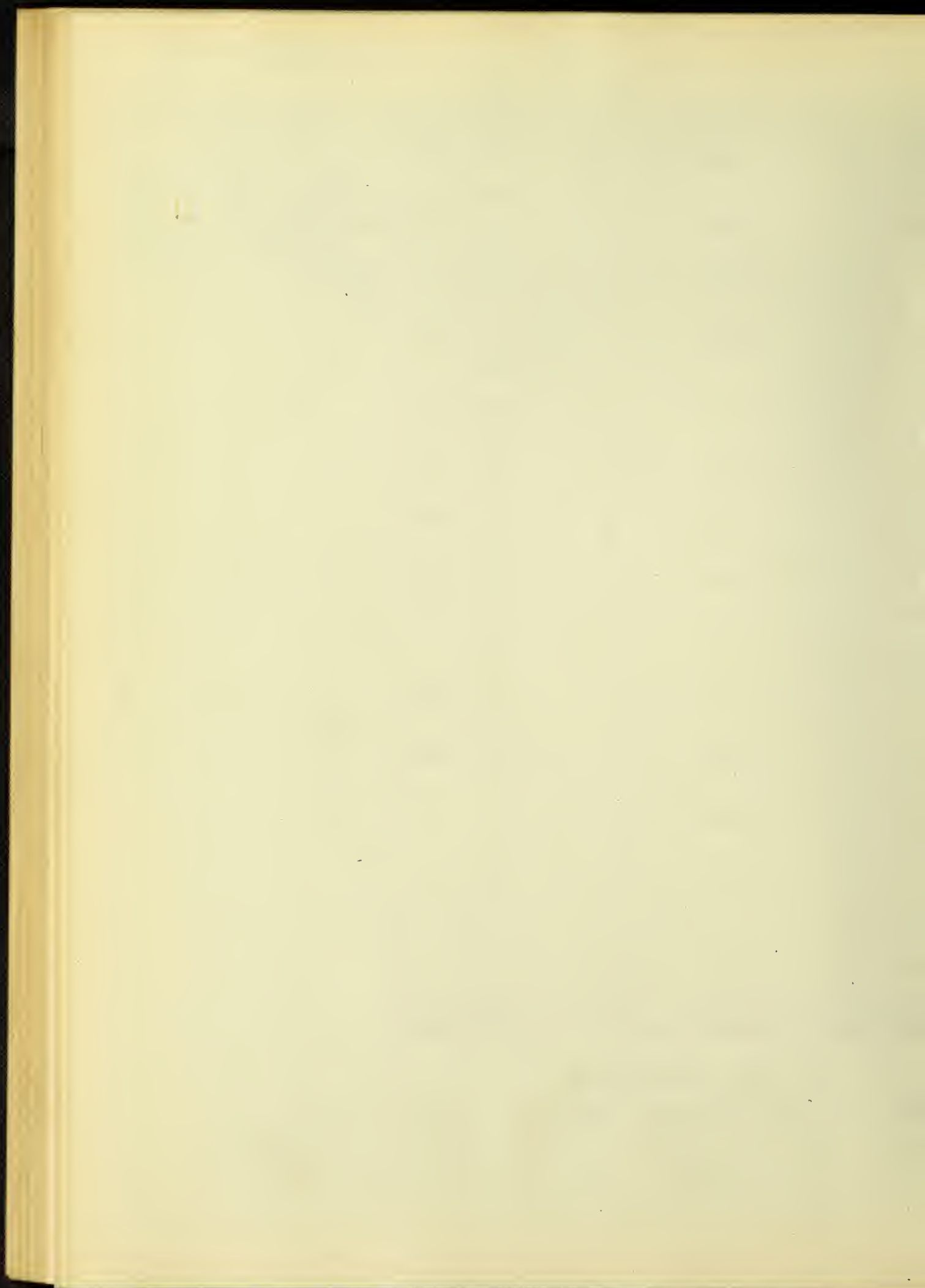
Date	Height	Average	Gain
Jan 9	870		
10	884	878	41
11	880		



Steer No 28		Dec 14 - Jan 10 -			Lot No 2		Remarks
Date	Stover	Refuse		Corn	Silage	Refuse	
Dw	A.M. P.M.	A.M.	P.M.	A.M.	P.M.	P.M.	
14	10			5	22		Dec. 26 - Jan 2 - Boys fed silage too heavily. No cobs in silage refuse.
15	10	9.55		5	22	.45	
16	10			5	24		
17	10	8.1		5	25		
18	10			5	26		
19	10	9.4		5	28	1.2	
20	10			5	28		
21	10	9.1		5	28	3.2	
22	9			5	26		
23	9	8.7		5	26	3.2	
24	10			5	28		
25	10	9.4		6	28	3.95	
26	9			5	28		
27	9	7.1		5	28	11.7	
28	9			5	28		
29	10	8.6		6	28		
30	10			6	28		
31	9	10.1		6	28	25.4	
1	9			6	25		
2	9	9.4		6	25	8.25	
3	9			6	28		
4	9	10.25		6	28	.2	
5	9			6	28		
6	5	11.7		6	30	3.1	
7	7			6	25		
8	7	7.5		6	25	.25	
9	7			6	25		
10	7	9.45		6	20	.45	
<b>Totals</b>	<b>252</b>	<b>128.35</b>		<b>154</b>	<b>738</b>	<b>61.35</b>	

## Weights and Gain

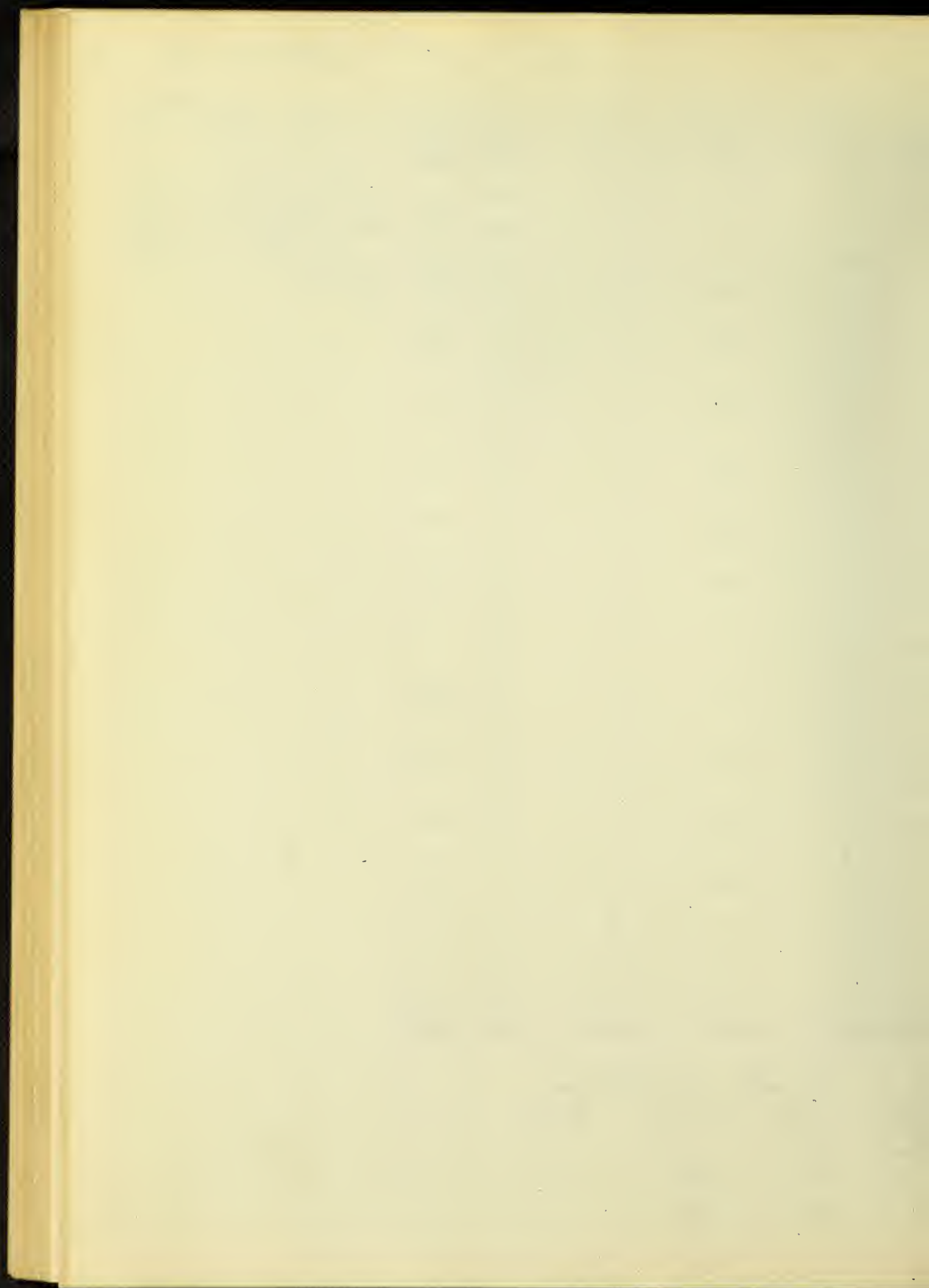
Date	Weight	Average	Gain
Jan 9	1068		
10	1022	1015	38
11	1014		



Date	S. tees No 34		Dec 14 - Jan 10			Lot No 2 Remarks
	Stover	Refuse	Corn	Silage	Refuse	
Dec	A.M	A.M	A.M	P.M	P.M	
14	10		5	22		Dec 28 - Jan 6 - Boys fed silage too heavily. No cobs in silage refuse.
15	10	8.55	5	20	15.1	
16	10		5	20		
17	10	7.15	5	20	6.75	
18	10		5	13		
19	10	6.9	5	15	.85	
20	10		5	18		
21	10	5.85	5	18	8.	
22	9		5	16		
23	9	5.35	5	16	1.1	
24	10		5	20		
25	10	6.5	6	20	5.8	
26	9		5	20		
27	9	9.45	5	25	2.1	
28	9		5	28		
29	10	9.	6	28		
30	10		6	25		
31	9	8.7	6	28	42.25	
1	9		6	25		
2	9	8.4	6	20	18.95	
3	9		6	25		
4	9	10.2	6	25	18.8	
5	9		6	20		
6	5	8.8	6	20	9.5	
7	7		6	20		
8	7	6.1	6	20	6.6	
9	7		6	15		
10	7	6.15	6	15	1.55	
Totals	252	107.1	154	577	137.35	

## Weights and Gain

Date	Weight	Average	Gain
Jan 9	940		
10	926	940	4
11	954		

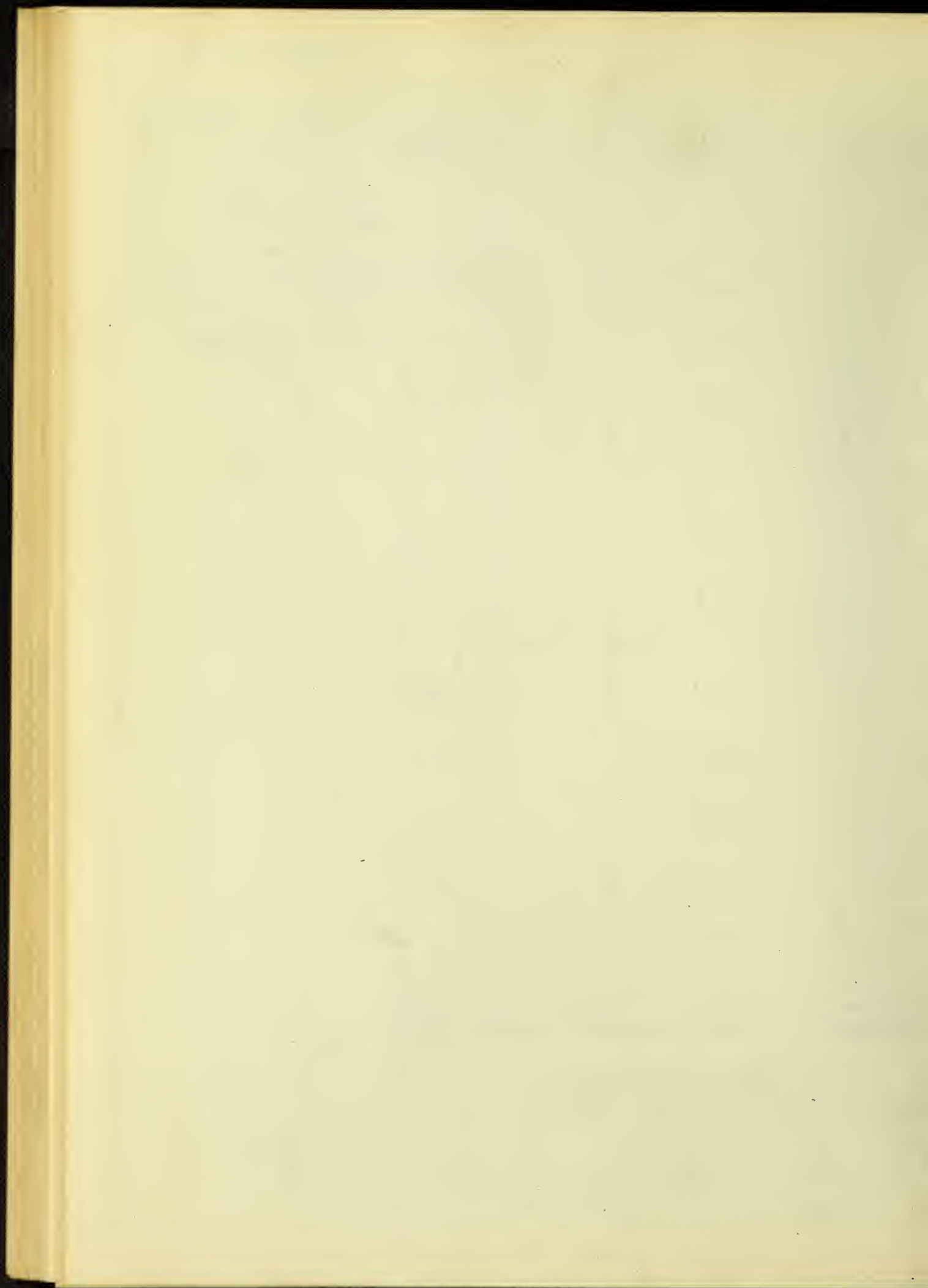




Steer No 27 Dec 14 - Jan 10					Lot No 2	
Date	Stover	Refuse	Corn	Silage	Refuse	Remarks
Dec	9.M.	9.M.	9.M.	P.M.	P.M.	
14	10		5	22		Dec 26 - Jan 8 - Boys fed silage too heavily. Jan 10. - Leaved a- bout of cobs. Silage refuse is mostly cobs & pieces of stalks.
15	10	8.	5	22	.3	
16	10		5	24		
17	10	8.2	5	25		
18	10		5	26		
19	10	9.8	5	28	1.2	
20	10		5	28		
21	10	9.4	5	28	7.5	
22	9		5	26		
23	9	9.	5	26	2.45	
24	10		5	28		
25	10	11.65	6	28	6.9	
26	9		5	28		
27	9	10.	5	28	10.55	
28	9		5	28		
29	10	11.7	6	28		
30	10		6	28		
31	9	11.6	6	28	17.45	
1	9		6	25		
2	9	11.25	6	25	10.1	
3	9		6	28		
4	9	13.6	6	28	14.2	
5	9		6	28		
6	5	13.2	6	25	7.8	
7	7		6	25		
8	7	8.5	6	25	10.9	
9	7		6	20		
10	7	8.6	6	20	1.6	
Totals	252	144.5	154	728	90.95	

## Weights and Gain

Date	Weight	Average	Gain
Jan 9	480		
10	916	912	30
11	919		



Date	Steep No 31		Refuse		Corn	
	Stover		A.M	P.M	A.M	P.M
14	10	3.5			5	4.5
15	10	3.5	7.25	1.45	5	4.5
16	10	3.5			5	4.5
17	10	3.5	3.3	1.75	5	4.5
18	10	3.5			5	4.5
19	10	4.4	4.5	1.9	5	5.5
20	10	4.4			5	5.5
21	10	5.3	5.25	2.9	5	6.7
22	9	5.3			5	6.7
23	9	5.3	6.6	3.7	5	6.7
24	10	5.3			5	6.7
25	10	5.3	8.6	1.95	6	6.7
26	9	5.3			5	6.7
27	9	5.3	7.1	4.35	5	6.7
28	9	5.3			5	6.7
29	10	5.3	8.4	5.6	6	6.7
30	10	5.3			6	6.7
31	9	5.3	8.3	3.	6	6.7
1	9	5.3			6	6.7
2	9	5.3	9.4	5.25	6	6.7
3	9	5.3			6	6.7
4	9	5.3	12.	4.1	6	6.7
5	9	5.3			6	6.7
6	5	5.3	11.3	5.1	6	6.7
7	7	5.3			6	6.7
8	7	5.3	6.5	4.6	6	6.7
9	7	5.3			6	6.7
10	7	4.4	6.45	4.9	6	5.6
Totals	252	136.7	104.95	50.55	154	173.1

Weights and Gain

Date	Weight	average	Gain
Jan 9	1007		
10	983	995	15
11	994		



Steer No 30

Dec. 14 - Jan 10

Lot No 3

Date	Stover		Refuse		Corn	
	A.M	P.M	A.M	P.M	A.M	P.M
14	8	3.5			5	4.5
15	10	3.5	6.25	1.45	5	4.5
16	10	3.5			5	4.5
17	10	3.5	5.85	1.3	5	4.5
18	10	3.5			5	4.5
19	10	3.5	5.65	1.	5	4.5
20	10	3.5			5	4.5
21	10	4.4	6.2	1.75	5	5.6
22	9	4.4			5	5.6
23	9	4.4	7.25	2.7	5	5.6
24	10	4.4			5	5.6
25	10	4.4	6.6	2.9	6	5.6
26	9	4.4			5	5.6
27	9	4.4	9.05	3.3	5	5.6
28	9	4.4			5	5.6
29	10	4.4	10.1	5.4	6	5.6
30	10	4.4			6	5.6
31	9	4.4	8.8	1.25	6	5.6
1	9	4.4			6	5.6
2	9	4.4	8.9	3.5	6	5.6
3	9	4.4			6	5.6
4	9	4.4	9.45	3.1	6	5.6
5	9	4.4			6	5.6
6	5	4.4	9.6	1.8	6	5.6
7	7	4.4			6	5.6
8	7	4.4	4.25	2.7	6	5.6
9	7	4.4			6	5.6
10	7	4.4	4.25	2.65	6	5.6
Totals	250	116.9	102.2	34.8	154	149.1

Weights and Gain

Date	Weight	Average	Gain
Jan 9	981		
10	991	985	10
11	983		



Steer No 32 Dec 14 - Jan 10

Date	Stover		Refuse		Corn	
	AM	PM	A.M	P.M	A.M	P.M.
14	10	3.5			5	4.5
15	10	3.5	10.1	2.	5	4.5
16	10	3.5			5	4.5
17	10	3.5	7.2	2.	5	4.5
18	10	3.5			5	4.5
19	10	3.5	6.85	1.75	5	4.5
20	10	3.5			5	4.5
21	10	4.4	6.35	2.85	5	5.6
22	9	4.4			5	5.6
23	9	4.4	6.65	2.3	5	5.6
24	10	4.4			5	5.6
25	10	4.4	7.45	3.9	6	5.6
26	9	4.4			5	5.6
27	9	4.4	7.55	3.2	5	5.6
28	9	4.4			5	5.6
29	10	4.4	7.7	6.2	6	5.6
30	10	4.4			6	5.6
31	9	4.4	7.2	1.85	6	5.6
1	9	4.4			6	5.6
2	9	4.4	7.45	3.75	6	5.6
3	9	4.4			6	5.6
4	9	4.4	7.9	3.5	6	5.6
5	9	4.4			6	5.6
6	5	4.4	7.5	2.75	6	5.6
7	7	4.4			6	5.6
8	7	4.4	3.9	1.8	6	5.6
9	7	4.4			6	5.6
10	7	5.3	4.5	2.95	6	6.7
<u>Total</u>	<u>252</u>	<u>117.8</u>	<u>98.3</u>	<u>40.8</u>	<u>154</u>	<u>150.2</u>

Weights and Gain

Date	Weight	average	Gain
Jan 9	880		
10	852	866	25
11	866		

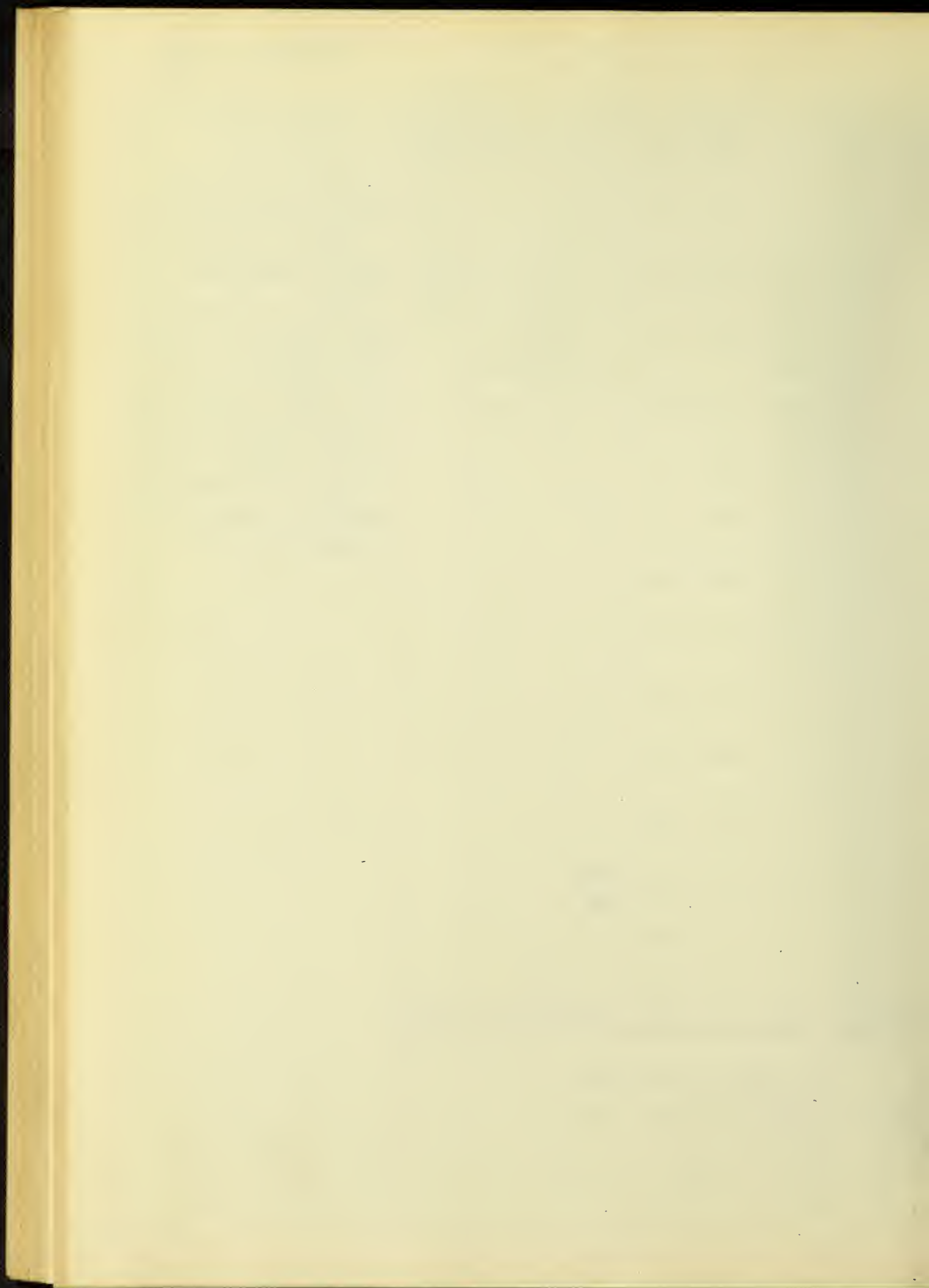




Steer No 26 - Jan 11 - Feb 7								Lot No 1	
Date	Stover		Refuse		Corn		Mixture	*Mixture	Remarks
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	A.M.	
11	7	5.3			2.5	6.7		5	Jan 11-24 - a.m.
12	7	5.3	7.9	3.7	2.5	6.7		5	stover cut-shredded
13	7	6.2			2.5	7.8		5	Jan 25 - Feb 7 - a.m.
14	7	6.2	7.7	4.2	2.	7.8		4	stover shredded-cut
15	7	6.2			2.	7.8		4	* Jan 11-15 inc. - mix-
16	7	6.2	6.35	4.7	3.	7.8	3		ture 1 part C+G meal to
17	7	6.2			2.25	7.8	2.25		1 part gluten meal. -
18	7	5.3	7.	3.65	2.25	6.7	2.25		hereafter mixture is
19	7	5.3			3.	6.7	3.		1 part C+G meal to
20	7	5.3	5.25	2.6	3.	6.7	3.		2 parts gluten meal.
21	7	5.3			3.75	6.7	3.75		Dec 18 - Fodder re-
22	7	6.2	5.25	3.05	3.75	7.8	3.75		duced to correspond
23	7	6.2			3.75	7.8	3.75		with No 32.
24	7	6.2	7.05	4.3	4.5	7.8	4.5		
25	7	6.2			4.5	7.8	4.5		
26	7	6.2	9.1	4.3	4.5	7.8	4.5		
27	7	6.2			4.5	7.8	4.5		
28	7	6.2	6.6	4.3	4.5	7.8	4.5		
29	7	6.2			4.5	7.8	4.5		
30	7	6.2	7.05	4.	4.5	7.8	4.5		
31	7	6.2			4.5	7.8	4.5		
1	7	6.2	6.85	4.85	4.5	7.8	4.5		
2	7	6.2			4.5	7.8	4.5		
3	7	6.2	7.4	4.45	4.8	7.8	4.8		
4	6	6.2			4.8	7.8	4.8		
5	6	6.2	6.5	4.75	4.8	7.8	4.8		
6	6	6.2			5.1	7.8	5.1		
7	6	6.2	7.1	5.3	5.1	7.8	5.1		
Totals	102	168.2	97.1	58.15	105.85	211.8	94.35	23	

## Weights and Gain

Date	Weight	Average	Gain
Feb 6	1141		
7	1126	1126	82
8	1112		



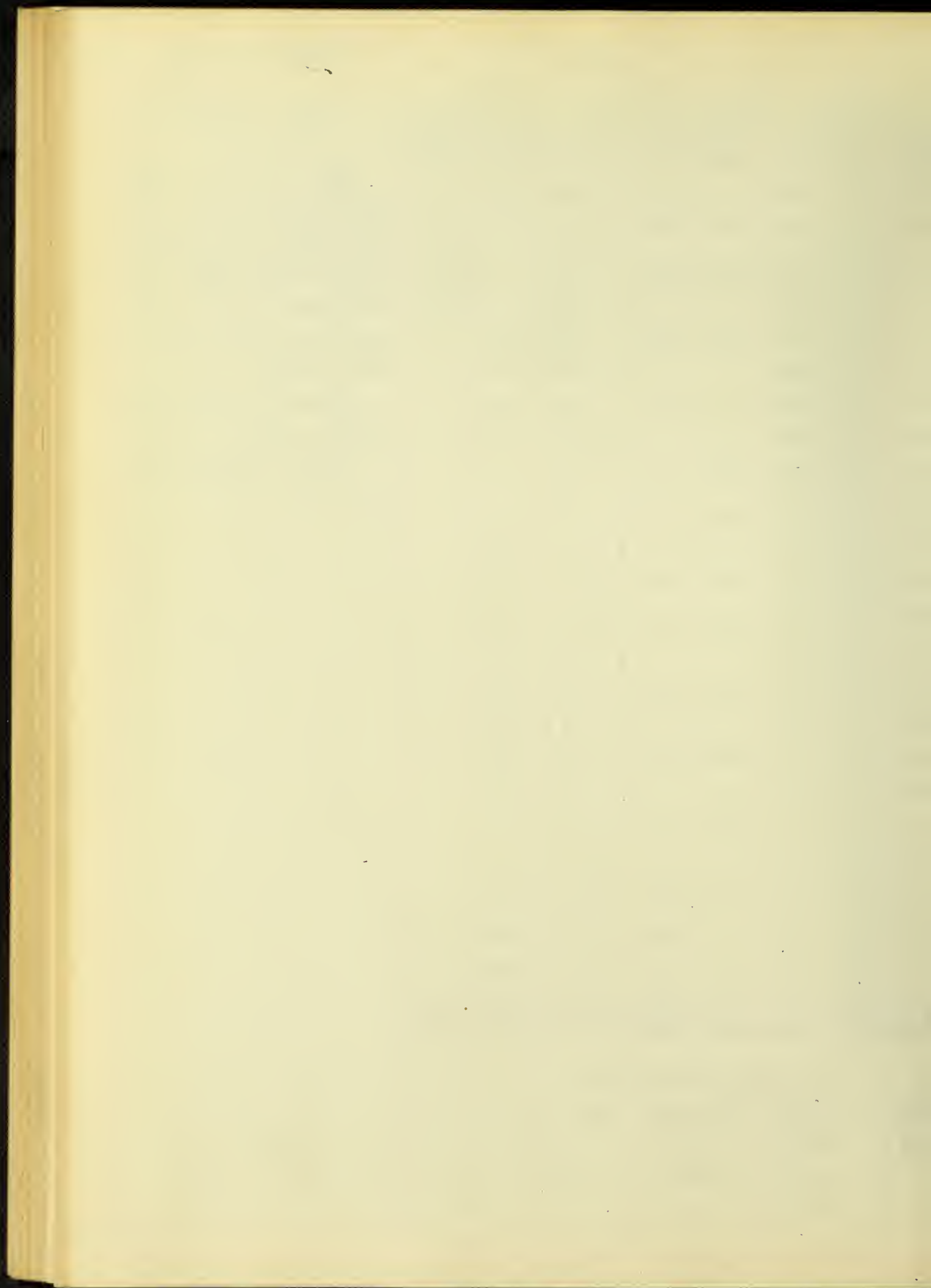
## Steer No 33 - Jan 11 - Feb 7

Lot No 1

Date	Stover		Refuse		Corn		Mixture	*Mixture	Remarks
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	A.M.	
11	7	4.4			2	5.6		4.	*Jan 11-15 inc. - Mixture 1 part corn & cob meal to 1 part gluten meal. - hereafter mixture 1 part corn & cob meal to 2 parts gluten meal. Jan 25 - Feb 7 - A.M. stover cub. Eats mixture slower than No 26
12	7	4.4	8.15	3.35	1.5	5.6		3.	
13	7	4.4			1.5	5.6		3.	
14	7	4.4	6.55	3.05	1.	5.6		2.	
15	7	4.4			1.	5.6		2.	
16	7	4.4	5.75	3.25	1.5	5.6	1.5		
17	7	4.4			1.5	5.6	1.5		
18	7	4.4	6.1	2.45	1.5	5.6	1.5		
19	7	4.4			2.25	5.6	2.25		
20	7	4.4	6.45	2.8	2.25	5.6	2.25		
21	7	4.4			3.	5.6	3.		
22	7	4.4	6.45	2.6	3.	5.6	3.		
23	7	4.4			3.75	5.6	3.75		
24	7	4.4	6.7	2.45	3.75	5.6	3.75		
25	7	4.4			3.75	5.6	3.75		
26	7	4.4	9.35	2.25	3.75	5.6	3.75		
27	7	4.4			3.6	5.6	3.6		
28	7	4.4	7.15	2.45	3.6	5.6	3.6		
29	7	4.4			3.6	5.6	3.6		
30	7	5.3	6.6	2.9	3.6	6.7	3.6		
31	7	5.3			3.6	6.7	3.6		
1	7	5.3	5.65	3.9	3.6	6.7	3.6		
2	7	5.3			3.6	6.7	3.6		
3	7	5.3	8.05	3.45	3.9	6.7	3.9		
4	6	5.3			3.9	6.7	3.9		
5	6	5.3	6.3	3.25	3.9	6.7	3.9		
6	6	5.3			4.2	6.7	4.2		
7	6	5.3	8.1	4.9	4.2	6.7	4.2		
Totals	192	131.3	97.35	43.05	82.3	166.7	75.3	14.	

## Weights and Gain

Date	Weight	Average	Gain
Feb 6	1026		
7	1029	1026	52
8	1022		



Steer No 29 - Jan 11 - Feb 7

Lot No 1

Date	Stover		Refuse		Corn		Mixture		*Mixture	Remarks
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
Jan 11	7.	4.4			1.	5.6			2.	* Jan 11-15 - Mixture 1 part corn & cob meal to 1 part gluten meal - hereafter mix- ture is 1 part corn & cob meal to 2 parts gluten meal. Jan 25 - Feb 7 - A.M. stover cub. Eats mixture very slowly. Feb 3 - Eats mixture better than formerly.
12	7.	4.4	5.55	2.25	1.5	5.6			3.	
13	7.	5.3			1.5	6.7			3.	
14	7.	5.3	5.35	3.6	1.	6.7			2.	
15	7.	5.3			1.	6.7			2.	
16	7.	5.3	4.75	3.5	1.5	6.7	1.5			
17	7.	6.2			1.5	7.8	1.5			
18	7.	6.2	5.45	3.4	1.5	7.8	1.5			
19	7.	6.2			2.25	7.8	2.25			
20	7.	6.2	5.9	4.4	2.25	7.8	2.25			
21	7.	6.2			3.	7.8	3.			
22	7.	6.2	6.45	4.95	3.	7.8	3.			
23	7.	5.3			3.	6.7	3.			
24	7.	5.3	8.1	3.65	3.75	6.7	3.75			
25	7.	5.3			3.75	6.7	3.75			
26	7.	5.3	8.45	2.8	3.75	6.7	3.75			
27	7.	5.3			3.6	6.7	3.6			
28	7.	5.3	6.2	2.6	3.6	6.7	3.6			
29	7.	5.3			3.6	6.7	3.6			
30	7.	5.3	7.35	3.7	3.6	6.7	3.6			
31	7.	5.3			3.9	6.7	3.9			
1	7.	5.3	8.2	3.65	3.9	6.7	3.9			
2	7.	5.3			3.9	6.7	3.9			
3	7.	5.3	7.95	3.15	4.2	6.7	4.2			
4	6.	5.3			4.2	6.7	4.2			
5	6.	5.3	5.6	3.1	4.2	6.7	4.2			
6	6.	5.3			4.5	6.7	4.5			
7	6.	5.3	6.05	3.35	4.5	6.7	4.5			
Totals	192	152	91.35	48.1	82.95	192.	76.95	12.		

Weights and Gain

Date	Weight	Average	Gain
Feb 6	984		
7	968	975	97
8	972		

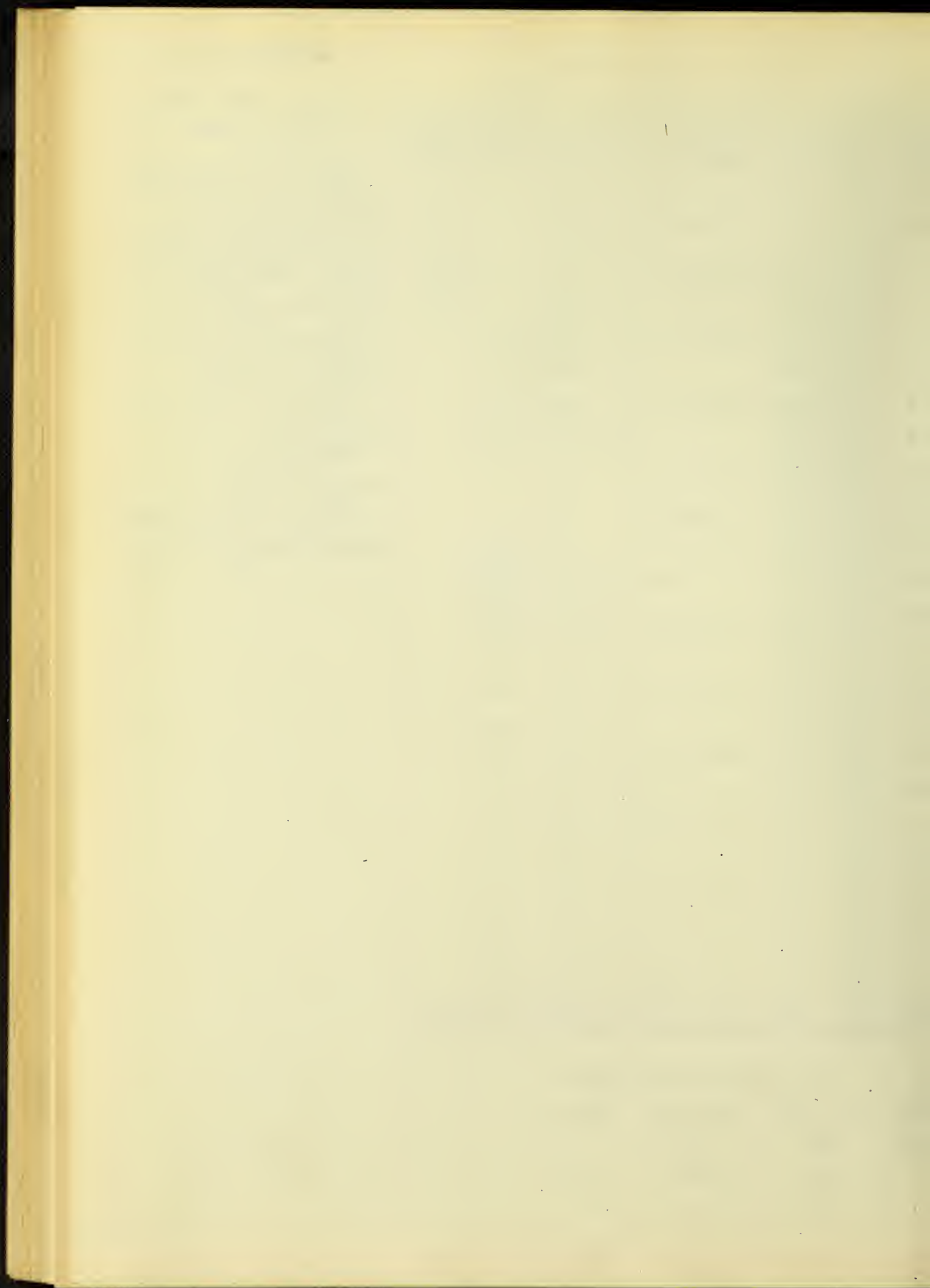


Table No IV

Jan 11 - Feb. 7

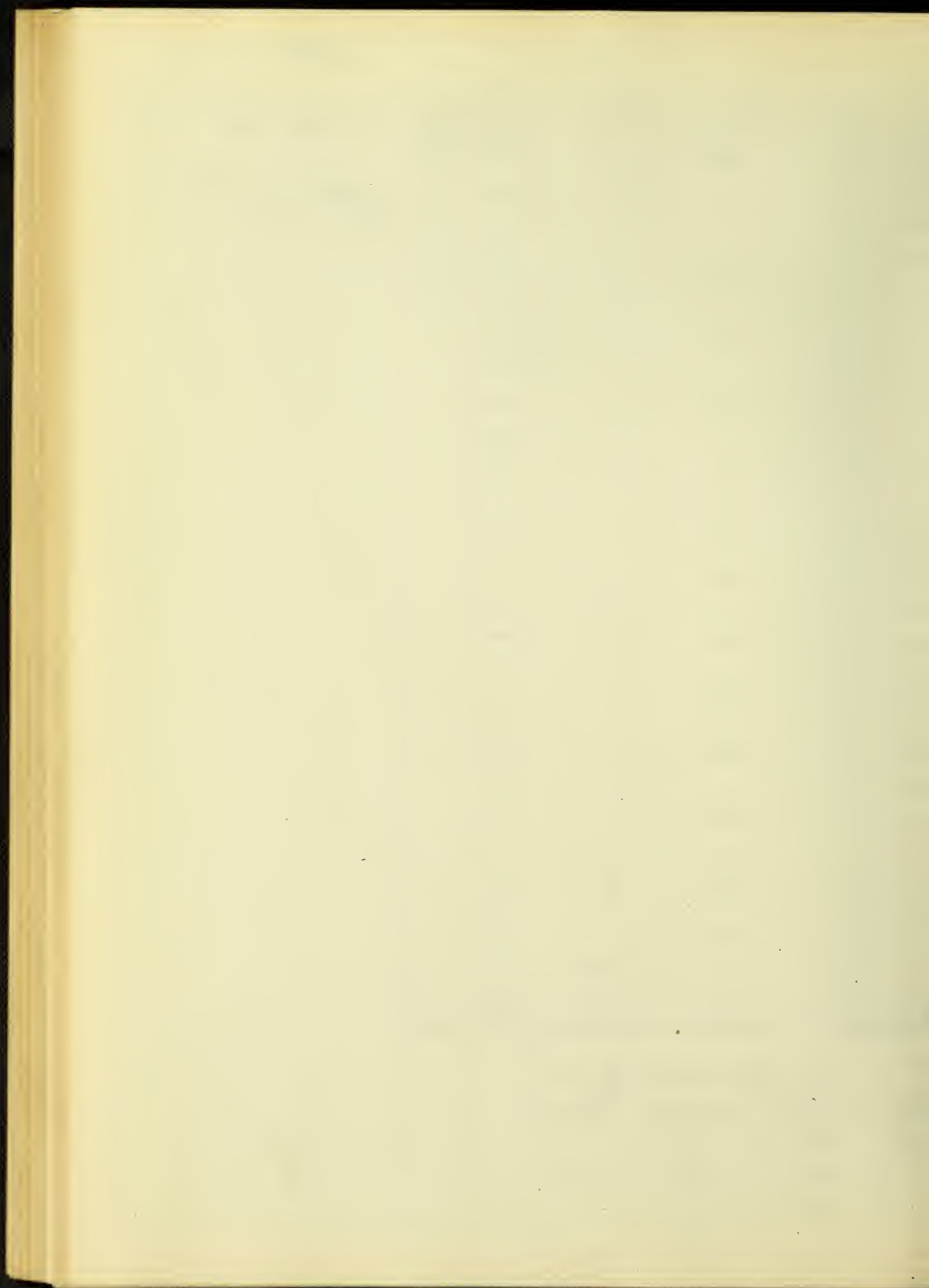
Lot No 2

Date	Steer No 28		Jan 11 - Feb. 7			Remarks
	Stover	Refuse	Corn	Silage	Refuse	
Jan	a.m	a.m	a.m	P.M	a.m	
11	7		6	20		
12	7	6.	6	20		
13	7		6	20		
14	7	5.95	6	20		
15	7		6	20		
16	7	5.2	7	20		
17	7		7	20		
18	7	6.45	7	20		
19	7		8	20		
20	7	6.4	8	20		
21	7		8	20		
22	7	6.35	8	20		
23	7		8	20		
24	7	6.15	8	20		
25	7		8	22		
26	7	4.6	8	24		
27	7		8	24		
28	7	5.15	8	24		
29	7		8	26		
30	7	6.55	8	26		
31	7		8	26		
1	7	7.35	8	26		
2	7		8	26		
3	7	6.95	8.6	26	.15	
4	6		8.6	26		
5	6	5.25	8.6	28	.7	
6	6		9.2	28		
7	6	5.7	9.2	28	.25	
Totals	192	84.05	215.2	640	1.1	

Jan 25 - Feb 7 -  
Stover cut.

Weights and Gain

Date	Weight	average	Gain
Feb 6	1066		
7	1078	1079	64
8	1094		





Date	Steer No 34		Jan 11 - Feb. 7			Remarks
	Stover	Refuse	Corn	Silage	Refuse	
	a.m	a.m	a.m	P.M	P.M	
11	7		6	15		Jan 25 - Feb 7 - Stover cut.
12	7	5.95	6	15		
13	7		6	18		
14	7	5.35	6	18		
15	7		6	20		
16	7	5.2	7	20		
17	7		7	20		
18	7	6.6	7	20	1.15	
19	7		8	18		
20	7	7.2	8	18	.45	
21	7		8	18		
22	7	5.8	8	18	.7	
23	7		8	20		
24	7	6.35	8	20	.4	
25	7		8	20		
26	7	7.05	8	20	2.4	
27	7		8	20		
28	7	5.05	8	20	5.3	
29	7		8	18		
30	7	5.8	8	18	4.6	
31	7		8	12		
1	7	5.05	8	15	.25	
2	7		8	15		
3	7	5.55	8.6	18	1.25	
4	6		8.6	18		
5	6	4.3	8.6	18	.9	
6	6		9.2	18		
7	6	4.95	9.2	18	.7	
Totals	192	80.2	215.2	506	18.1	

Weights and Gain

Date	Weight	average	Gain
Feb 6	936		
7	992	973	33
8	992		



Table No IV

Date	Steer No 27		Jan 11 - Feb. 7			Lot No 2	Remarks
	Stover	Refuse	Corn	Silage	Refuse		
Jan	a.m	a.m	a.m	P.M	P.M		
11	7		6	20			Leaves about 25% of cobs.
12	7	7.9	6	20	3.7		
13	7		6	20			Jan 25 - Feb 7 - Stover cub.
14	7	7.7	6	20	2.7		
15	7		6	15			
16	7	6.8	7	15	1.95		
17	7		7	15			
18	7	6.8	7	15	1.4		
19	7		8	18			
20	7	7.25	8	18	.6		
21	7		8	18			
22	7	7.35	8	18	.5		
23	7		8	18			
24	7	6.85	8	18	.25		
25	7		8	20			
26	7	8.5	8	18	.9		
27	7		8	18			
28	7	6.55	8	18	2.05		
29	7		8	18			
30	7	8.05	8	18	2.4		
31	7		8	18			
1	7	7.25	8	15	2.25		
2	7		8	15			
3	7	7.25	8.6	18	1.15		
4	6		8.6	18			
5	6	5.85	8.6	18	2.8		
6	6		9.2	18			Cobs refused estimated at 8.6 lb
7	6	7.25	9.2	18	2.2		
Totals	192	101.35	215.2	496	24.85		

## Weights and Gain

Date	Weight	Average	Gain
Feb 6	924		
7	936	924	12
8	912		



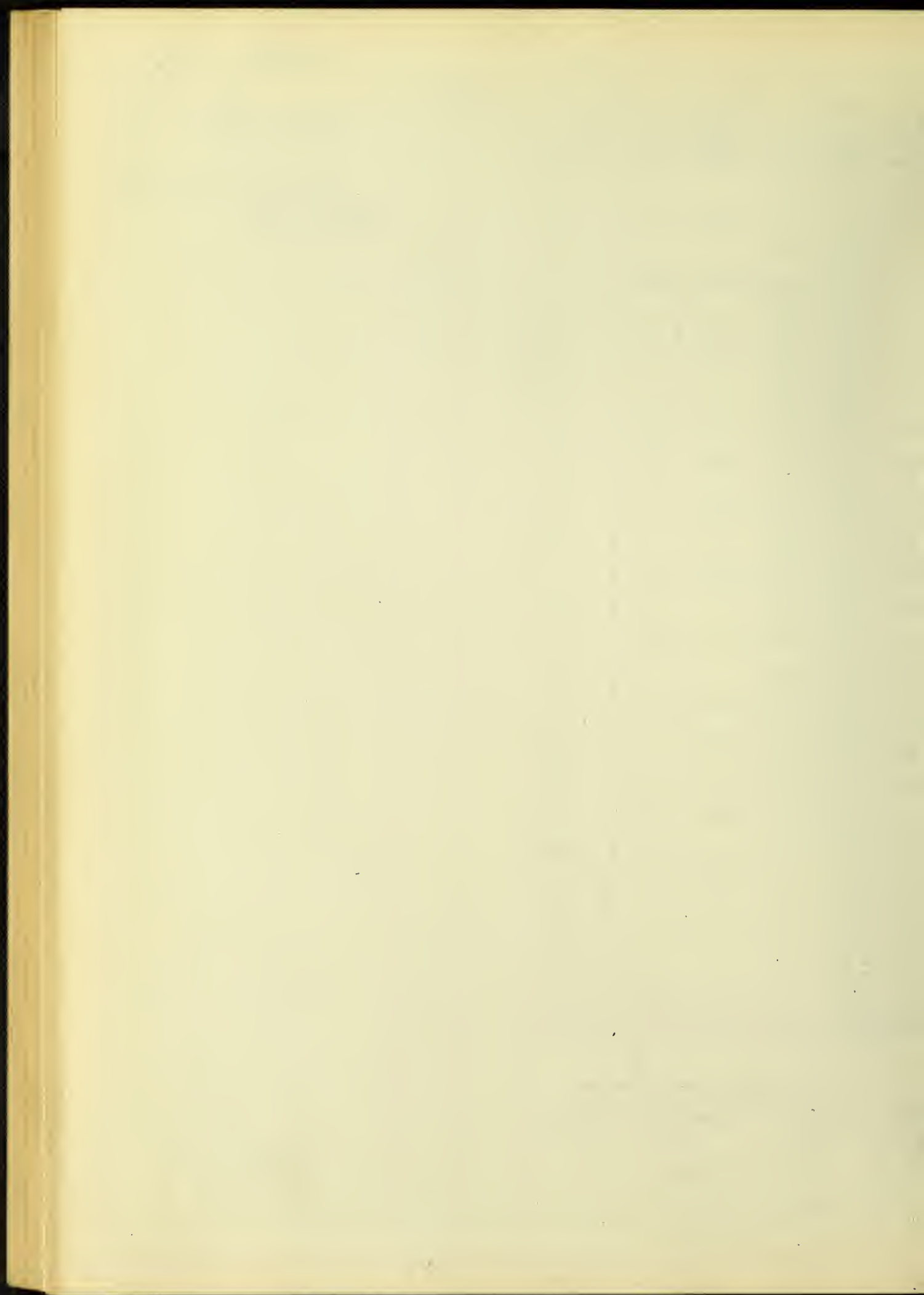
## Table No IV

Date	Steer No 31		Refusal		Corn		Remarks
	Stover		a.m.	p.m.	a.m.	p.m.	
Jan 11	7	4.4			6	5.6	
12	7	4.4	7.05	3.7	6	5.6	
13	7	4.4			6	5.6	
14	7	4.4	5.2	2.75	6	5.6	
15	7	4.4			6	5.6	
16	7	4.4	5.05	3.3	7	5.6	
17	7	5.3			7	6.7	
18	7	5.3	6.1	4.25	7	6.7	
19	7	5.3			8	6.7	
20	7	5.3	6.75	4.55	8	6.7	
21	7	5.3			8	6.7	
22	7	6.2	6.7	5.1	8	7.8	
23	7	5.3			8	6.7	
24	7	5.3	9.5	4.4	8	6.7	
25	7	5.3			8	6.7	
26	7	5.3	9.5	3.45	8	6.7	
27	7	5.3			8	6.7	
28	7	5.3	6.7	3.9	8	6.7	
29	7	5.3			8	6.7	
30	7	5.3	7.5	3.9	8	6.7	
31	7	5.3			8	6.7	
1	7	5.3	8.85	4.15	8	6.7	
2	7	5.3			8	6.7	
3	7	5.3	8.95	4.2	8.6	6.7	
4	6	5.3			8.6	6.7	
5	6	5.3	7.	4.	8.6	6.7	
6	6	5.3			9.2	6.7	
7	6	5.3	6.7	4.75	9.2	6.7	
Totals	192	143.9	101.55	56.4	215.2	182.1	

Jan 25 - Feb 7 - a.m.  
stover cut.

## Weights and Gain

Date	Weight	average	Gain
Feb 6	1649		
7	1015	1028	33
8	1021		



Date		Stover		Refuse		Corn		Remarks
Jan		a.m	p.m	a.m	a.m	a.m	p.m	
11	7		4.4			6	5.6	
12	7		4.4	4.85	2.6	6	5.6	
13	7		5.3			6	6.7	
14	7		5.3	5.9	2.75	6	6.7	
15	7		5.3			6	6.7	
16	7		5.3	5.5	3.75	7	6.7	
17	7		5.3			7	6.7	
18	7		5.3	7.15	3.8	7	6.7	
19	7		5.3			8	6.7	
20	7		5.3	7.45	4.2	8	6.7	
21	7		5.3			8	6.7	
22	7		5.3	7.1	3.5	8	6.7	
23	7		5.3			8	6.7	
24	7		5.3	7.	3.35	8	6.7	
25	7		5.3			8	6.7	
26	7		5.3	6.6	2.75	8	6.7	
27	7		5.3			8	6.7	
28	7		5.3	6.5	2.6	8	6.7	
29	7		5.3			8	6.7	
30	7		6.2	6.4	3.55	8	7.8	
31	7		6.2			8	7.8	
1	7		6.2	6.85	4.3	8	7.8	
2	7		6.2			8	7.8	
3	7		6.2	5.75	4.25	8.6	7.8	
4	6		6.2			8.6	7.8	
5	6		6.2	5.85	4.05	8.6	7.8	
6	6		6.2			9.2	7.8	
7	6		6.2	6.6	4.85	9.2	7.8	
Totals		192	154.7	89.5	50.3	215.2	195.3	

## Weights and Gain

Date	Weight	average	Gain
Feb 6	1038		
7	1059	1046	61
8	1041		

Lot No 3

Jan 25 - Feb 7 - a.m.  
stover cut.





## Table No IV

Steer No 32 Jan 11 - Feb. 7

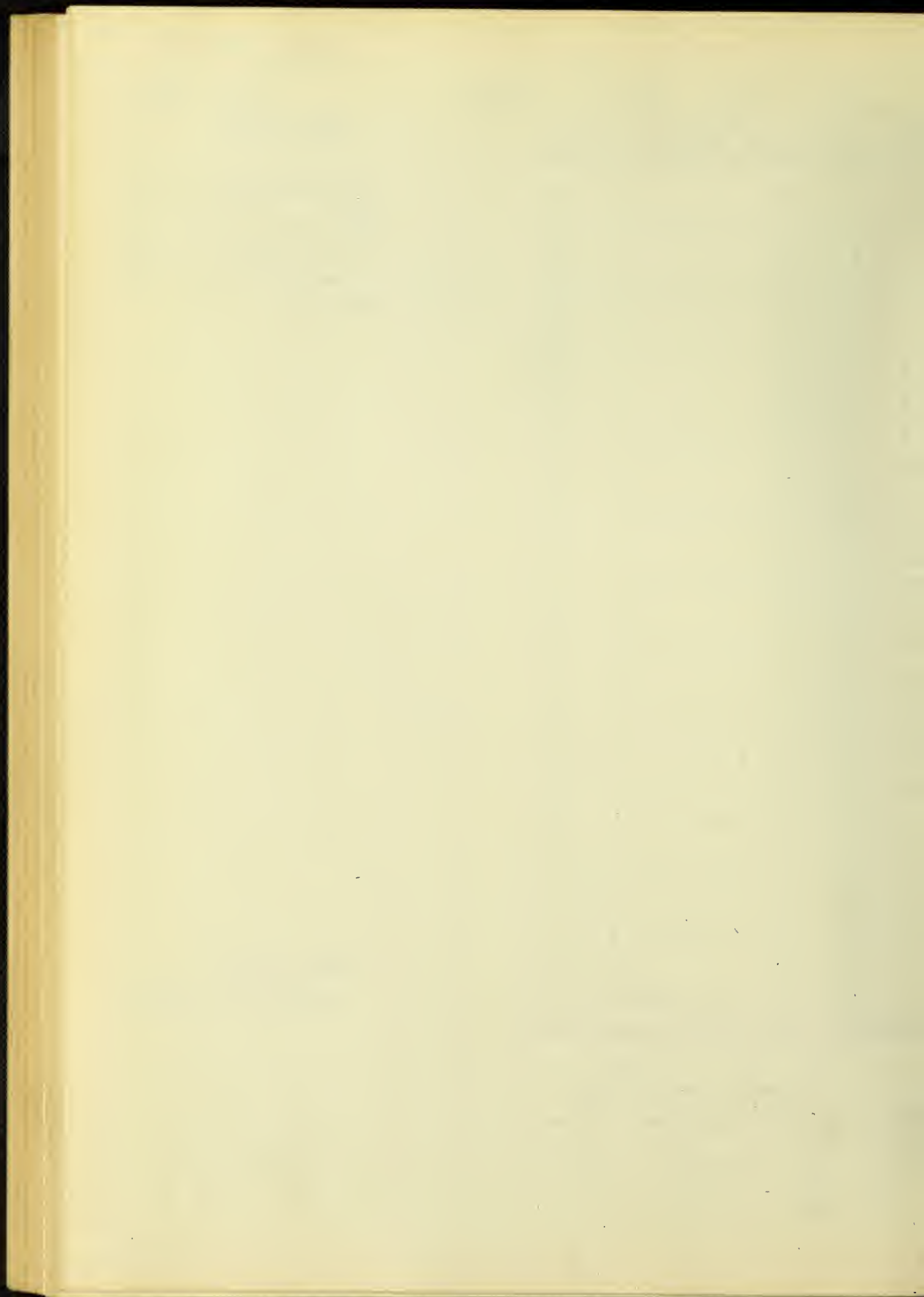
Lot No 3

Date	Stover		Refuel		Corn		Remarks
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
11	7	5.3			6	6.7	Leaves about 10% cobs in A.M. corn & occasionally one in P.M. Jan 25 - Feb 7 - A.M. stover cut.
12	7	5.3	5.2	2.95	6	6.7	
13	7	6.2			6	7.8	
14	7	6.2	5.5	3.7	6	7.8	
15	7	6.2			6	7.8	
16	7	6.2	6.15	5.15	7	7.8	
17	7	6.2			7	7.8	
18	7	5.3	7.7	4.9	7	6.7	
19	7	5.3			8	6.7	
20	7	5.3	7.9	4.35	8	6.7	
21	7	5.3			8	6.7	
22	7	5.3	8.1	4.25	8	6.7	
23	7	5.3			8	6.7	
24	7	5.3	6.7	3.75	8	6.7	
25	7	5.3			8	6.7	
26	7	5.3	8.5	3.25	8	6.7	
27	7	5.3			8	6.7	
28	7	5.3	7.3	3.4	8	6.7	
29	7	5.3			8	6.7	
30	7	5.3	6.65	3.8	8	6.7	
31	7	5.3			8	6.7	
1	7	5.3	7.15	4.1	8	6.7	
2	7	5.3			8	6.7	
3	7	5.3	6.95	2.85	8.6	6.7	
4	6	5.3			8.6	6.7	
5	6	5.3	6.	2.8	8.6	6.7	
6	6	5.3			9.2	6.7	
7	6	5.3	6.05	4.45	9.2	6.7	
Totals	192	152.9	95.85	53.7	215.2	193.1	

Cobs refused  
estimated at 3.4 lbs

## Weights and Gain

Date	Height	Average	Gain
Feb 6	915		
7	910	907	41
8	896		



## Table No IV

Steer No 26 - Feb 8 - Mar 7

Lot No 1

Date	Stover		Refuse		Corn		Mixture
	AM	PM	AM	PM	AM	PM	AM
8	6	6.2			5.1	7.8	5.1
9	6	6.2	8.55	5.25	5.1	7.8	5.1
10	6	5.3			5.1	6.7	5.1
11	6	5.3	7.25	3.55	5.1	6.7	5.1
12	6	6.2			5.1	7.8	5.1
13	6	6.2	5.9	3.85	5.1	7.8	5.1
14	12		3.65		5.6	8.	4.5
15	12		3.55		5.6	8.	4.5
16	12		3.8		5.6	8.	4.5
17	12				5.	9.	4.8
18	6	6.	4.05	3.75	5.	9.	4.8
19	6	6			5.	9.	4.8
20	6	6	3.7	3.7	5.	9.	4.8
21	6	6	1.85	1.95	5.4	9.	5.1
22	6	6	4.8	5.1	5.4	9.	5.1
23	0	4		.95	3.2	5.	2.4
24	6	6			4.6	9.	4.5
25	6	6	3.8	4.35	5.4	9.	5.1
26	6	6			5.8	9.	5.4
27	6	6	4.7	4.55	5.7	9.5	5.7
28	6	6			5.7	9.5	5.7
1	6	6	5.35	5.65	5.7	9.5	5.7
2	6	6			5.7	9.5	5.7
3	6	6	6.1	4.65	5.7	9.5	5.7
4	6	6			5.7	9.5	5.7
5	6	6	4.95	4.85	5.7	9.5	5.7
6	6	6			5.2	10.	5.7
7	6	0	8.7	4.5	5.2	2.5	5.7
Totals	186	135.4	80.7	56.65	147.5	233.6	142.2

Feb 14-17 - Stover  
for the day weighed  
up at one time.

Feb 14 - Hereafter  
morning stover is of  
the same kind as that  
fed at night.

## Weights and Gain

Date	Weight	Average	Gain
Mar 6	1165		
7	1152	1166	40
8	1182		



Steer No 33		Feb 8 - Mar 7					
Date	Stover		Refuse		Corn Mixture		
	AM	PM	AM	PM	AM	PM	A.M.
8	6	5.3			4.2	6.7	4.2
9	6	5.3	6.3	4.25	4.2	6.7	4.2
10	6	5.3			4.2	6.7	4.2
11	6	5.3	6.	3.8	4.2	6.7	4.2
12	6	5.3			4.2	6.7	4.2
13	6	5.3	5.85	3.8	4.2	6.7	4.2
14	11		3.5		4.6	7.	3.9
15	11		3.8		4.6	7.	3.9
16	11		3.2		4.6	7.	3.9
17	11				4.	8.	4.2
18	6	5.	4.2	4.1	4.	8.	4.2
19	6	5.			4.	8.	4.2
20	6	5.	4.25	3.65	4.	8.	4.2
21	6	5.	2.45	1.55	4.4	8.	4.5
22	6	5.			4.4	8.	4.5
23	6	5.	4.35	3.35	4.8	8.	4.8
24	6	5.			4.8	8.	4.8
25	6	5.	4.4	4.7	4.8	8.	4.8
26	6	5.			4.8	8.	4.8
27	6	5.	3.95	3.15	4.7	8.5	5.1
28	6	5.			4.7	8.5	5.1
1	6	5.	4.7	3.5	4.7	8.5	5.1
2	6	5.			4.7	8.5	5.1
3	6	5.	5.35	3.9	4.7	8.5	5.1
4	6	5.			4.7	8.5	5.1
5	6	5.	5.05	4.35	4.7	8.5	5.1
6	6	5.			4.2	9.	5.1
7	6	5.	6.35	4.8	4.2	9.	5.1
Totals	188	121.8	73.7	48.9	124.3	218.7	127.8

Loh No. 1

Remarks

Feb 14-17 - Stover  
for the day weighed  
up at one time

Feb 14 - Hereafter  
morning stover is of  
the same kind as  
that fed at night.

## Weights and Gain

Date	Height	Average	Gain
Mar 6	1085		
7	1079	1085	59
8	1092		



Steer No 29 Feb 8 - Mar 7

Lot No 1

Date	Stover		Refuse		Corn		Mixture	Remarks
	AM	PM	AM	PM	AM	PM	A.M	
8	6	5.3			4.5	6.7	4.5	
9	6	5.3	5.55	3.6	4.5	6.7	4.5	
10	6	6.2			4.5	7.8	4.5	
11	6	6.2	5.45	4.2	4.5	7.8	4.5	
12	6	6.2			4.8	7.8	4.8	
13	6	6.2	5.7	4.2	4.8	7.8	4.8	
14	12		4.4		5.2	8.	4.2	
15	12		4.05		5.2	8.	4.2	
16	12		3.8		5.2	8.	4.2	
17	12				4.6	9.	4.5	
18	6	6	3.95	3.85	4.6	9.	4.5	
19	6	6			4.6	9.	4.5	
20	6	6	4.	3.7	4.6	9.	4.5	
21	6	6	2.15	1.55	5.	9.	4.8	
22	6	6			5.	9.	4.8	
23	6	6	5.95	4.45	5.4	9.	5.1	
24	6	6			5.4	9.	5.1	
25	6	6	4.85	5.3	5.4	9.	5.1	
26	6	6			5.4	9.	5.1	
27	6	6	4.55	4.55	4.9	9.5	5.1	
28	6	6			4.9	9.5	5.1	
1	6	6	4.1	5.7	4.9	9.5	5.1	
2	6	6			4.9	9.5	5.1	
3	6	6	4.75	4.25	4.5	9.5	4.8	
4	6	6			4.5	9.5	4.8	
5	6	6	4.45	3.95	4.5	9.5	4.8	
6	6	6			4.	10.	4.8	
7	6	6	5.6	5.05	4.	10.	4.8	
Totals	192	143.4	73.3	54.35	134.3	245.3	132.6	

Feb 14-17 - Stover for the day weighed up at one time

Feb 14 - Hereafter morning stover is of the same kind as that fed at night.

Feb 15 - Has commenced to leave cobs

Mar 3 - Has been getting more grain than would eat up clean.

Cobs refused  
1st 2 weeks  
2nd 2 weeks 5.9 lbs

Weights and Gain

Date	Weight	Average	Gain
Mar 6	1024		
7	1007	1020	45
8	1028		





Table No IV

Steer No 28		Feb. 8 - Mar. 7-				Lot No 2
Date	Stoing	Refuse	Corn	Silage	Refuse	Remarks
Feb	A.M.	A.M.	A.M P.M	P.M	P.M	
8	6		9.2	30		Feb 9- commenced feeding silage from silo in the barn.
9	6	6.1	9.2	30	.4	
10	6		9.2	30		
11	6	7.4	9.2	30	.2	
12	6		9.2	30		
13	6	5.65	9.2	30		
14	6	3.1	10.	30		
15	6	2.8	10.	30	.55	
16	6	2.75	10.	30	.15	
17	6		10.	30		
18	6	5.75	10.	25	1.3	
19	6		10.	25		
20	6	5.3	10.	25		
21	6	2.6	9.	1.5	25	
22	6		9.	1.5	25	
23	6	4.5	9.	1.5	25	
24	6		9.	1.5	25	
25	6	3.65	9.	1.5	25	
26	6		9.	1.5	27	
27	6	4.65	9.	2.	27	
28	6		9.	2.	28	
1	6	5.25	9.	2.	28	
2	6		9.	2.	28	
3	6	6.	9.5	2.	28	
4	6		9.5	2.	28	
5	6	5.1	9.5	2.	28	
6	6		9.5	2.5	28	
7	6	5.8	9.5	2.5	28	
Totals	168	76.4	262.7	28.	778	2.6

Weights and Gain

Date	Weight	average	Gain
Mar 6	1135		
7	1161	1153	74
8	1162		

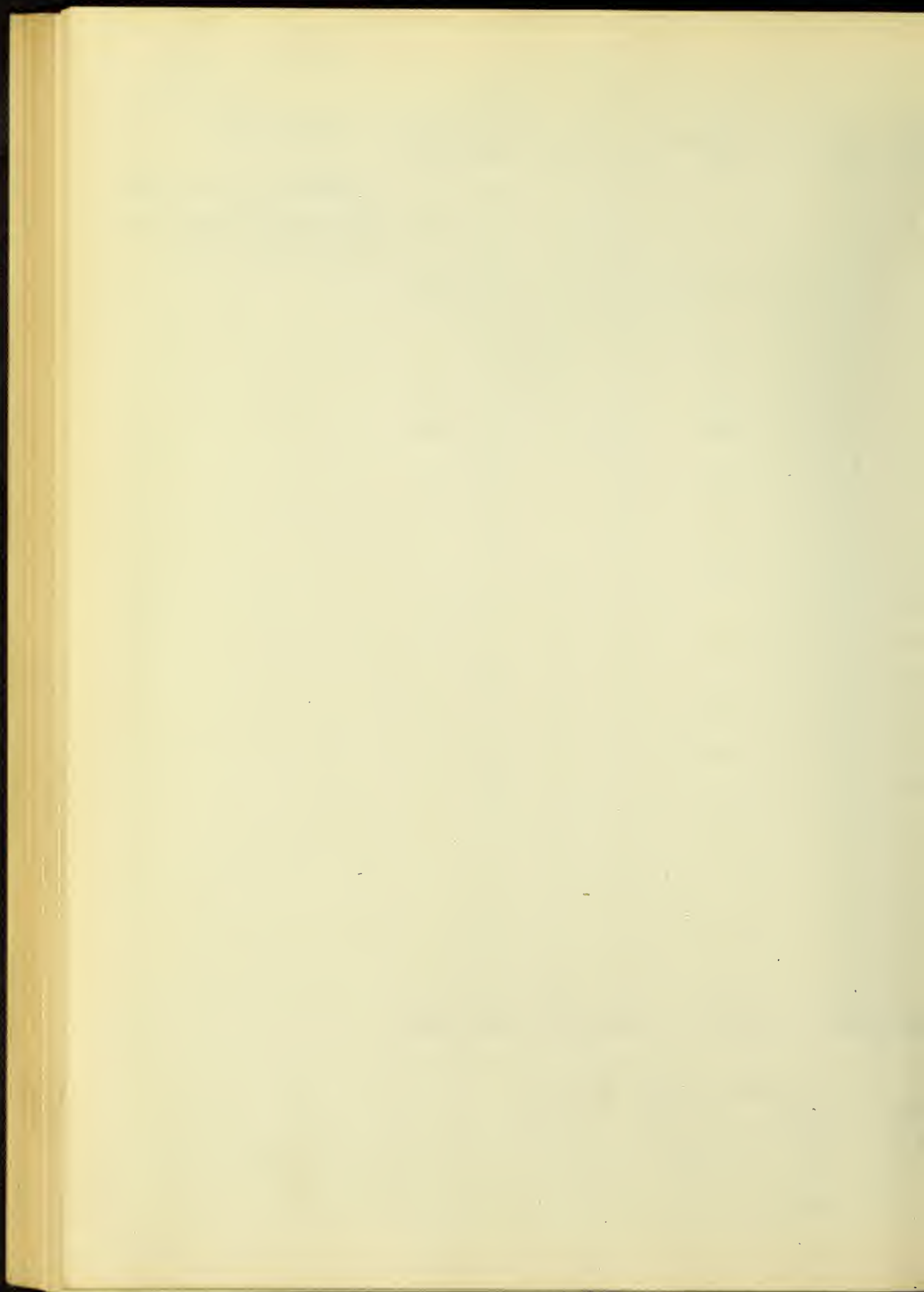


Table No IV

Steer No 34		Feb. 8 - Mar 7				Lot No 2
Date	Stover	Refuse	Corn	Silage	Refuse	Remarks
Feb	A.M.	A.M.	A.M.	P.M.	P.M.	
8	6		9.2	18		Feb 9 - Commenced feeding silage from silo in the barn.
9	6	5.45	9.2	18	1.75	
10	6		9.2	20		
11	6	5.55	9.2	20	.25	
12	6		9.2	20		
13	6	5.3	9.2	20	2.	
14	6	2.4	10.	18	2.65	
15	6	2.	10.	18	1.95	
16	6	2.85	10.	18	.65	
17	6		10.	18		
18	6	4.45	10.	16	1.25	
19	6		10.	16		
20	6	4.45	10.	16		
21	6	2.	9.	1.5	16	
22	6		9.	1.5	16	
23	6	4.4	9.	1.5	17	
24	6		9.	1.5	17	
25	6	3.95	9.	1.5	18	.1
26	6		9.	1.5	18	
27	6	4.25	9.	2.	18	
28	6		9.	2.	19	.25
1	6	3.75	9.	2.	19	.25
2	6		9.	2.	19	.15
3	6	6.	9.5	2.	19	
4	6		9.5	2.	19	.05
5	6	4.4	9.5	2.	19	.35
6	6		9.5	2.5	19	.35
7	6	4.75	9.5	2.5	19	.6
Totals	168	65.95	262.7	28.	508	12.6

Cobs refused  
1st 2 weeks  
2nd 2 weeks .1 lb.

Weights and Gain

Date	Weight	Average	Gain
Mar 6	1024		
7	1023	1035	62
8	1059		

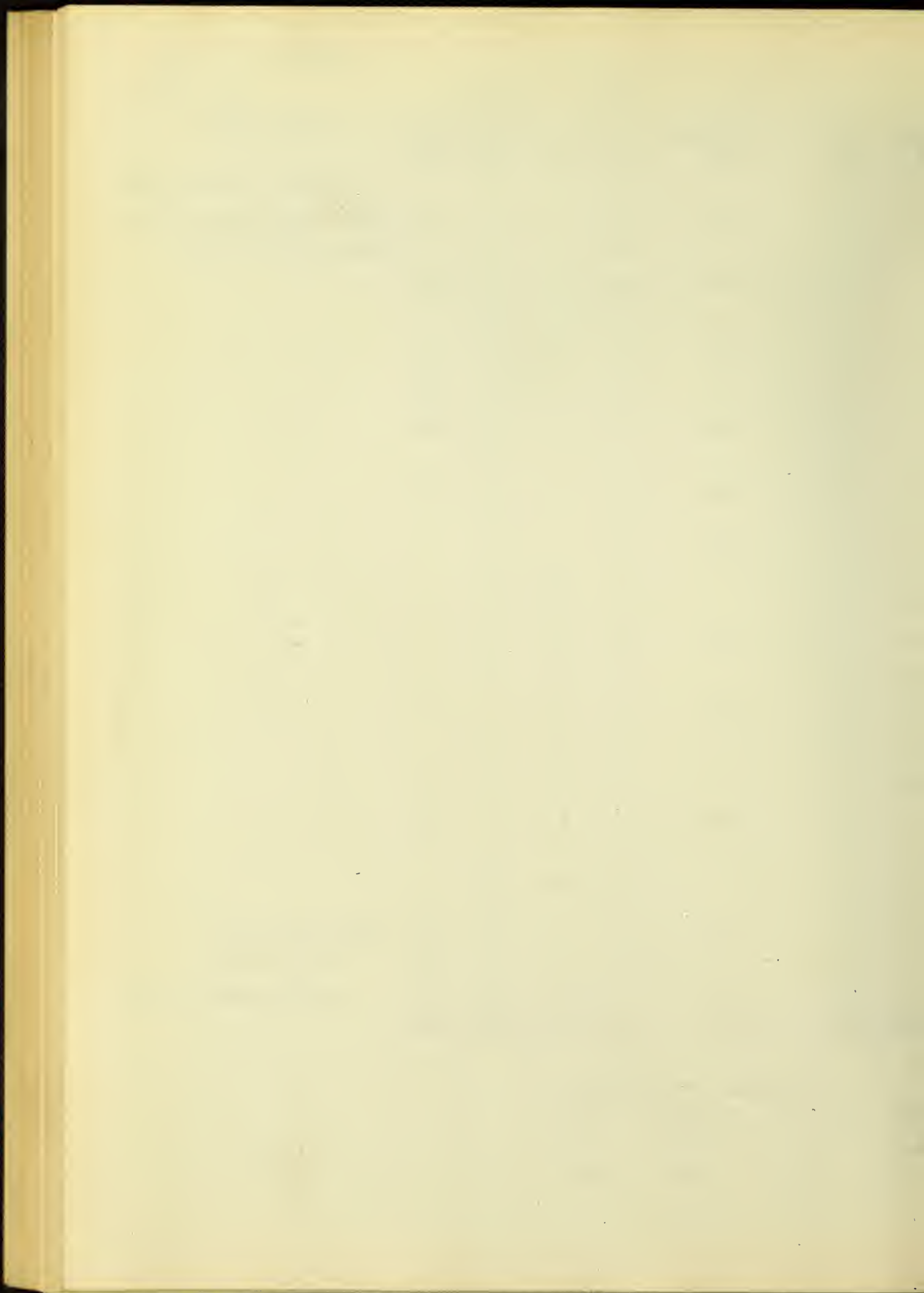


Table No. IV

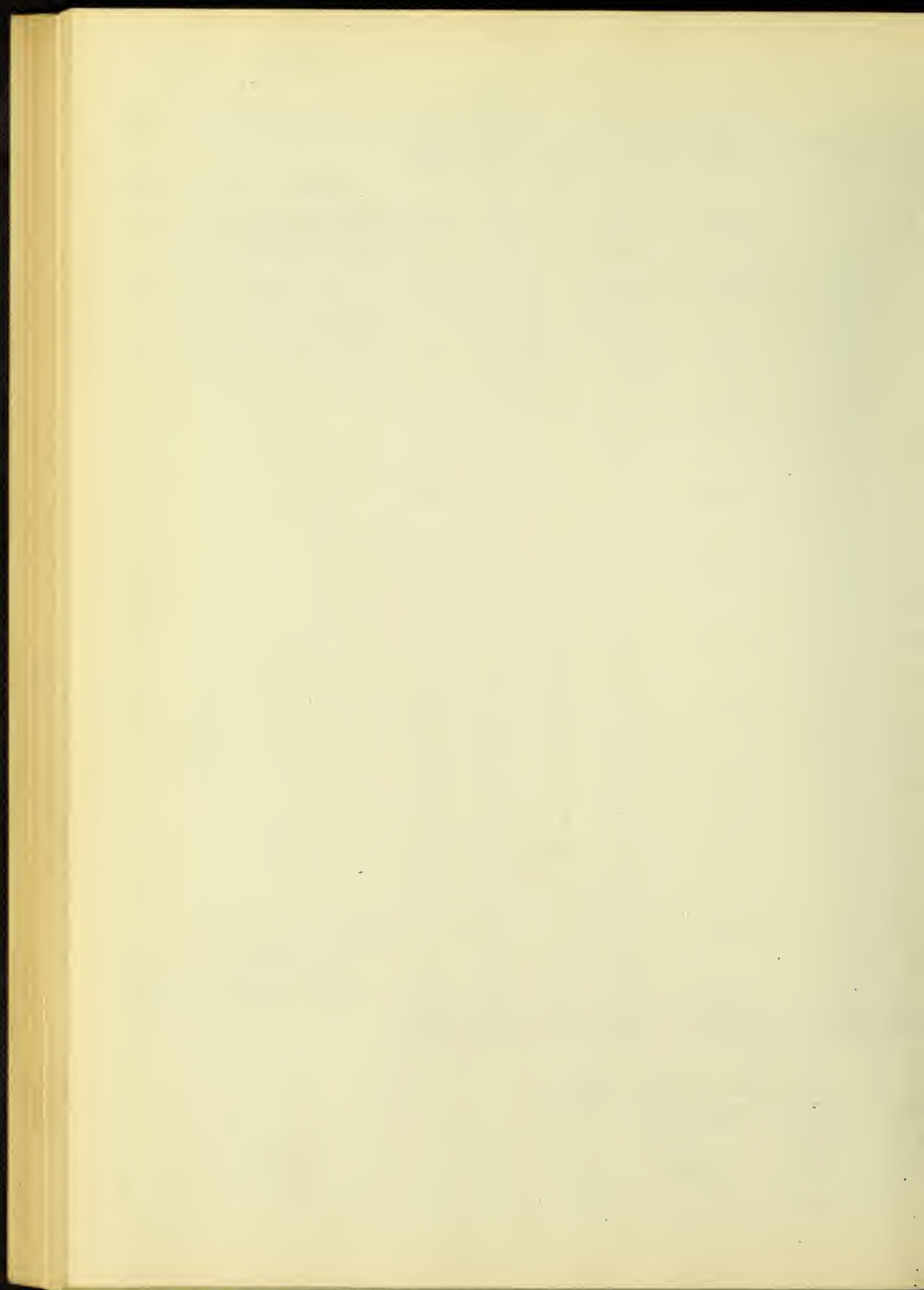
Steer No 27		Feb. 8 - Mar. 7				Lot No 2	
Date	Stover	Refuse	Corn	Silage	Refuse	Remarks.	
Feb	A.M	A.M.	A.M	P.M	P.M		
8	6		9.2	18		Feb 9 - Commenced feeding silage from silo in the barn.	
9	6	5.45	9.2	18	3.45		
10	6		9.2	18		During 1st 2 weeks refused about 25% cobs, estimated weight 6 lbs - see below.	
11	6	5.4	9.2	18	.45		
12	6		9.2	18			
13	6	5.3	9.2	20	.6		
14	6	2.8	10.	20	1.		
15	6	2.45	10.	20	1.		
16	6	2.5	10.	20	1.6		
17	6		10.	20			
18	6	5.05	10.	18	5.55		
19	6		10.	18			
20	6	5.	10.	18	1.8		
21	6	2.55	9.	1.5	18.	.35	
22	6		9.	1.5	18.	.5	
23	6	4.2	9.	1.5	18.	.2	
24	6		9.	1.5	18.	.8	
25	6	4.4	9.	1.5	19.	.95	
26	6		9.	1.5	19.	.7	
27	6	4.05	9.	2.	19.	.85	
28	6		9.	2.	20.	1.85	
1	6	4.5	9.	2.	20	2.85	
2	6		9.	2.	19.	1.8	
3	6	6.3	9.5	2.	19.	.85	
4	6		9.5	2.	19.	1.05	
5	6	4.95	9.5	2.	19.	1.1	
6	6		9.5	2.5	19.	1.3	
7	6	4.95	9.5	2.5	19.	.2	
Totals	168	69.85	262.7	28.	527.	30.8	

Feb 9 - Commenced feeding silage from silo in the barn.  
 During 1st 2 weeks refused about 25% cobs, estimated weight 6 lbs - see below.

Cobs refused  
 1st 2 weeks 6. lbs  
 2nd 2 weeks 13.2 lbs  
 19.2 "

Weights and Gain

Date	Weight	Average	Gain
Mar 6	983		
7	996	993	69
8	1000		



## Table No IV

Steer No 31 Feb. 8 - Mar 7

Lot No 3

Date	Stover		Refuse		Corn		Remarks
	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	
8	6	5.3			9.2	6.7	
9	6	5.3	7.	4.45	9.2	6.7	
10	6	5.3			9.2	6.7	
11	6	5.3	5.95	4.55	9.2	6.7	
12	6	5.3			9.2	6.7	
13	6	5.3	6.	3.85	9.2	6.7	
14	11		4.5		9.4	7.	
15	11		4.1		9.4	7.	
16	11		3.65		9.4	7.	
17	12				9.6	8.	
18	6	6	4.9	5.4	9.6	8.	
19	6	6			9.6	8.	
20	6	5	6.55	6.35	9.6	7.	
21	6	5	2.9	1.6	8.9	7.8	
22	6	5			8.9	8.	
23	6	5	5.6	4.85	8.9	8.	
24	6	5			8.9	8.	
25	6	5	4.3	4.45	8.9	8.	
26	6	5			8.9	8.	
27	6	5.5	4.65	4.55	9.	9.	
28	6	5.5			9.	9.	
1	6	5.5	4.25	4.95	9.	9.	
2	6	5.5			9.	9.	
3	6	5.5	5.8	6.	9.5	9.	
4	6	5.5			9.5	9.	
5	6	5.5	4.5	5.3	9.5	9.	
6	6	5.5			9.5	9.5	
7	6	5.5	6.4	6.5	9.5	9.5	
Totals	189	128.3	81.05	62.8	258.7	222.	

Feb 14-17 - Stover  
for the day weighed  
up at one time.

Corn refused  
1st 2 weeks  
2nd 2 weeks 1.35 lbs

## Weights and Gain

Date	Height	Average	Gain
Mar 6	1086		
7	1078	1083	55
8	1086		





Table No IV

Steer No 30

Feb 8 - Mar 7

Lot No 3

Date	Stover		Refuse		Corn		Remarks
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
8	6	6.2			9.2	7.8	
9	6	6.2	7.	5.7	9.2	7.8	
10	6	6.2			9.2	7.8	
11	6	6.2	6.5	5.2	9.2	7.8	
12	6	6.2			9.2	7.8	
13	6	6.2	5.85	4.85	9.2	7.8	
14	12		5.		9.6	8.	
15	12		5.25		8.9	8.7	
16	12		5.1		9.6	8.	
17	11				9.4	7.	
18	6	5	4.9	5.9	9.4	7.	
19	6	5			9.4	7.	
20	6	6	4.55	4.4	9.4	8	
21	6	6	2.45	2.9	9.1	9.2	
22	6	6			9.1	9.	
23	6	6	6.95	4.8	9.1	9.	
24	6	6			9.1	9.	
25	6	6	5.55	5.85	9.1	9.	
26	6	6			9.1	9.	
27	6	5.5	4.1	5.25	9.	9.	
28	6	5.5			9.	9.	
1	6	5.5	2.95	5.5	9.	9.	
2	6	5.5			9.	9.	
3	6	5.5	5.85	4.6	9.5	9.	
4	6	5.5			9.5	9.	
5	6	5.5	4.25	4.75	9.5	9.	
6	6	5.5			9.5	9.5	
7	6	5.5	6.	6.75	9.5	9.5	
Totals	191	138.7	81.55	66.45	259.	236.7	

Feb 14-17 - Stover  
for the day weighed  
up at one time.

Corn refused  
1st 2 weeks  
2nd 7 weeks 1.15 lbs

Weights and Gain

Date	Weight	Average	Gain
Mar 6	1104		
7	1098	1102	56
8	1104		



Table No IV

Lot No 3

Steer No 32 - Feb. 8 - Mar 7

Date	Stover		Refuse		Corn		Remarks
	a.m.	p.m.	a.m.	p.m.	a.m.	p.m.	
8	6	5.3			9.2	6.7	
9	6	5.3	6.	4.15	9.2	6.7	
10	6	5.3			9.2	6.7	
11	6	5.3	5.	4.35	9.2	6.7	
12	6	6.2			9.2	7.8	
13	6	6.2	4.6	4.7	9.2	7.8	
14	12		4.85		9.6	8.	
15	12		4.5		9.6	8.	
16	12		3.7		9.6	8.	
17	12				9.6	8.	
18	6	6	4.	4.15	9.6	8.	
19	6	6			9.6	8.	
20	6	6	3.45	3.85	9.6	8.	
21	6	6	2.15	2.5	9.1	9.	
22	6	6			9.1	9.	
23	6	6	3.85	4.55	9.1	9.	
24	6	6			9.1	9.	
25	6	6	4.85	4.85	9.1	9.	
26	6	6			9.1	9.	
27	6	6	4.85	4.6	9.1	9.5	
28	6	6			9.1	9.5	
1	6	6	4.55	4.8	9.1	9.5	
2	6	6			9.1	9.5	
3	6	6	4.65	5.	9.6	9.5	
4	6	6			9.6	9.5	
5	6	6	4.25	4.15	9.6	9.5	
6	6	6			9.6	10.	
7	6	6	4.75	4.15	9.6	10.	
Totals	192	141.6	70.	55.8	261.4	238.9	

Feb 14-17 - Stover  
for the day weighed  
up at one time.  
Leaves about 25%  
of cobs during 1st  
2 weeks - estimated  
weight 10.75 lbs. - see  
below.

Cobs refused  
1st 2 weeks 10.75 lb  
2nd 2 weeks 19.7 lb  
30.45..

Weights and Gain

Date	Weight	Average	Gain
May 6	942		
7	935	945	38
8	958		

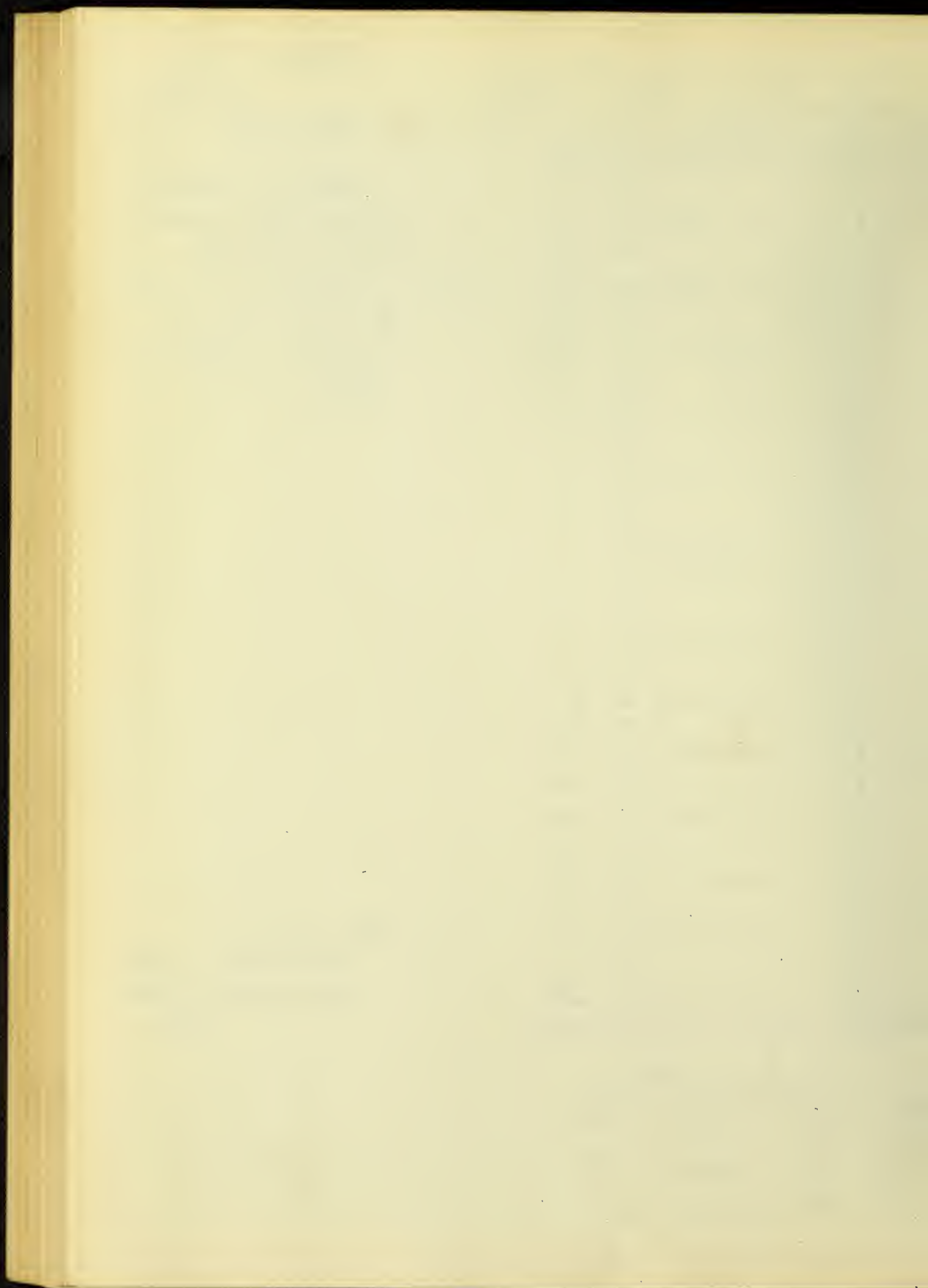


Table No IV

Steer No 26 - Mar 8 - Apr 4

Lot No 1

Date	Stover		Refuse		Corn		Mixture	*Mixture	Remarks
	AM	PM	AM	PM	AM	PM	AM	AM	
8	6	6			4.8	7.6	3.6		* Mar 20-24 - Mixture equals 3 parts Gluten Feed to 1 part corn and cob meal.
9	6	6	5.1	6.	4.8	10.	5.4		
10	6	6			4.8	10.	5.4		
11	6	6	6.	5.85	4.8	10.	5.4		
12	6	6			4.8	10.	5.4		
13	6	6	6.9	4.7	5.6	10.	4.8		
14	6	6			5.6	10.	4.8		
15	6	6	5.35	4.55	6.1	10.	5.1		
16	6	6			5.6	10.5	5.1		
17	6	6	4.5	4.65	5.6	10.5	5.1		
18	6	6			5.6	10.5	5.1		
19	6	6	5.55	4.6	6.1	10.5	5.4		
20	6	6			4.3	10.5		7.2	
21	6	6	4.5	3.9	4.3	10.5		7.2	
22	6	6			4.3	10.5		7.2	
23	6	6	5.5	4.7	4.3	10.5		7.2	
24	6	6			4.2	11.		7.6	
25	6	6	5.9	5.5	6.1	11.	5.7		
26	6	5.5			6.1	11.	5.7		
27	6	5.5	6.55	4.55	6.1	11.5	6.		
28	6	5.5			6.1	11.5	6.		
29	6	5.5	6.95	4.8	6.1	11.5	6.		
30	5	5.5			6.1	11.5	6.		
31	5	5.5	4.75	4.55	6.1	11.5	6.		
1	5	5.5			6.1	11.5	6.		
2	5	5.5	5.8	4.75	6.1	11.5	6.		Cobs refused 1st 2 weeks .3 lb 2nd 2 weeks .8 "
3	5	5.5			6.1	11.5	6.		
4	5	5.5	5.5	4.4	6.1	11.5	6.		
Totals	162	163	78.85	67.5	152.7	298.1	126	36.4	

Weights and Gain

Date	Weight	Average	Gain
Apr 3	1251		
4	1243	1248	82
5	1251		



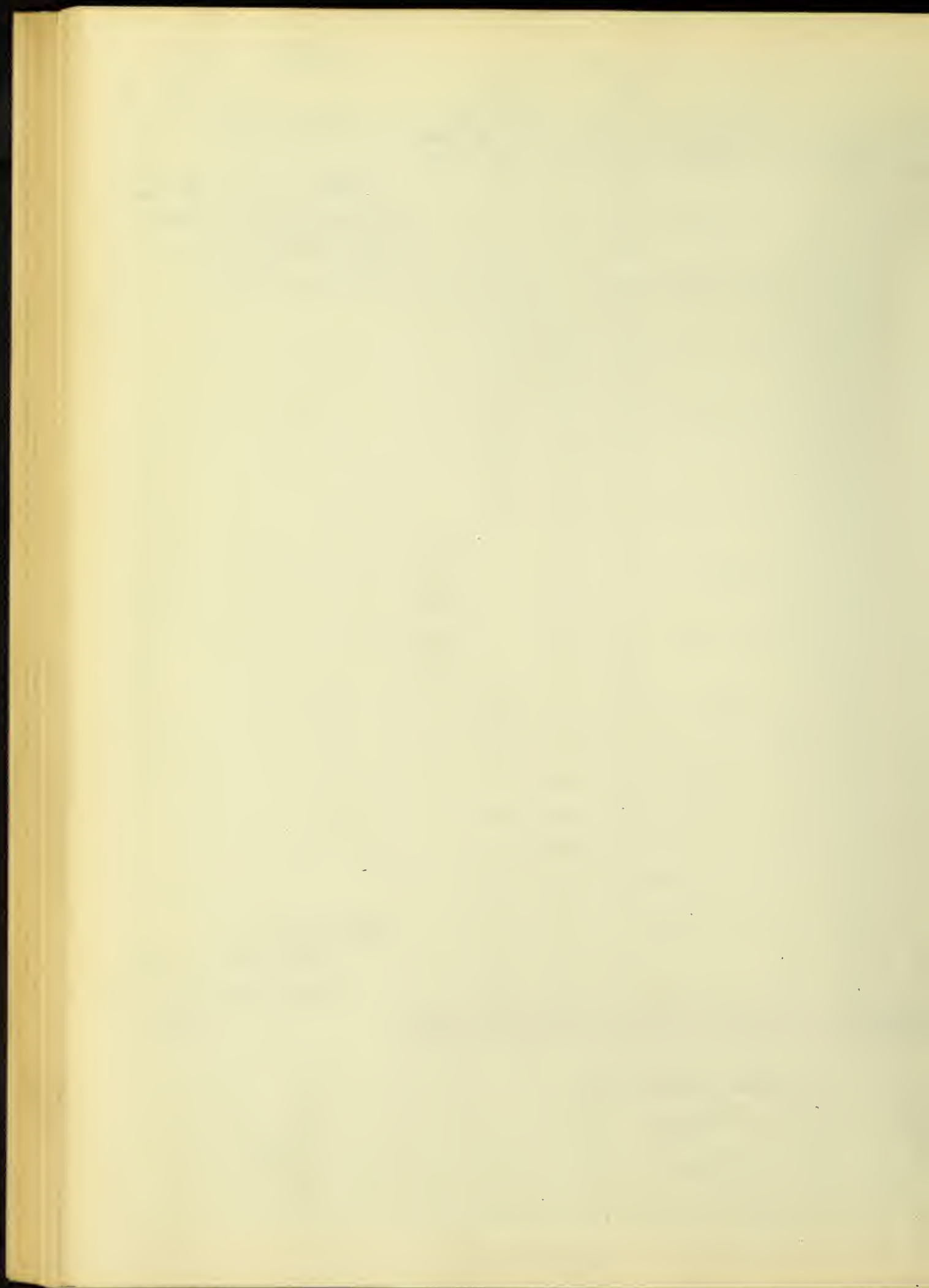
Steer No 33 - Mar 8 - Apr 4

Lot No 1

Date	Stover		Refuse		Corn		Mixture*	Mixture	Remarks
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
8	6	5			4.2	9	5.1		* Mar 20-24 - Mixture equals 3 parts gluten feed to 1 part corn and cob meal.
9	6	5	6.2	5.85	4.2	9	5.1		
10	6	5			4.2	9	5.1		
11	6	5	6.9	4.45	4.2	9	5.1		
12	6	5			4.2	9	5.1		
13	6	5	9.	5.55	4.9	9	4.5		
14	6	5			4.9	9	4.5		
15	6	5	6.25	4.3	5.4	9	4.8		
16	6	5			4.9	9.5	4.8		
17	6	5	4.45	4.9	4.9	9.5	4.8		
18	6	5			4.9	9.5	4.8		
19	6	5	6.2	4.75	4.9	9.5	4.8		
20	6	5			3.3	9.5		6.4	
21	6	5	5.55	5.7	3.3	9.5		6.4	
22	6	5			3.3	9.5		6.4	
23	6	5	6.4	4.7	3.3	9.5		6.4	
24	6	5			3.2	10.		6.8	
25	6	5	5.95	5.7	4.9	10.	5.1		
26	6	4.5			4.9	10.	5.1		
27	6	4.5	6.95	4.75	4.9	10.5	5.4		
28	6	4.5			4.9	10.5	5.4		
29	6	4.5	8.15	4.95	4.9	10.5	5.4		
30	5	4.5			4.9	10.5	5.4		
31	5	4.5	5.65	4.95	4.9	10.5	5.4		
1	5	4.5			4.9	10.5	5.4		
2	5	4.5	6.6	4.85	4.9	10.5	5.4	Cobs refused 1st 2 weeks .1 lb 2nd 2 weeks .15 ..	
3	5	4.5			4.9	10.5	5.4		
4	5	4.5	7.05	6.55	4.9	10.5	5.4		
Totals	162	135	91.3	71.95	126.1	272.5	117.3		32.4

Weights and Gain

Date	Weight	Average	Gain
Apr 3	1122		
4	1120	1121	36
5	1122		





Steer No 29 -		7 Mar 8 - Apr 4		Lot No 1		Remarks			
Date	Stover	Refuse	Coorn	Mixture	Mixture				
Mo	AM	PM	AM	PM	AM	PM			
8	6	6			3.6	10	4.5	* Mar 20-24 - Mixture equals 3 parts gluten feed to 1 part coorn and cob meal. Eaten very unwillingly.	
9	6	6	4.9	4.6	3.2	10.	4.2		
10	6	6			3.2	10.	4.2		
11	6	6	5.65	5.3	3.2	10.	4.2		
12	6	6			3.2	10	4.2		
13	6	6	5.85	5.4	4.1	10.	3.9		Apr 2-4 - Extra protein fed to balance deficiency Mar 20-24.
14	6	6			4.1	10	3.9		
15	6	6	4.95	4.95	4.6	10.	4.2		
16	6	6			4.1	10.5	4.2		
17	6	6	4.2	4.65	4.6	10.5	4.5		
18	6	6			4.6	10.5	4.5		
19	6	6	5.6	5.	5.1	10.5	4.8		
20	6	6			0.	7.6	0		
21	6	6	4.1	5.	4.2	7.6	4.2		
22	6	6			3.1	7.6	.5		
23	6	6	4.75	4.55	5.4	6.9	4.15		
24	6	6			5.35	8.3	5.35		
25	6	6	4.8	5.4	4.6	11.	4.8		
26	6	5.5			5.1	11.	5.1		
27	6	5.5	7.35	4.7	5.1	11.5	5.4		
28	6	5.5			5.1	11.5	5.4		
29	6	5.5	6.75	6.15	5.1	11.5	5.4		
30	5	5.5			5.1	11.5	5.4		
31	5	5.5	5.85	6.25	5.1	11.5	5.4		
1	5	5.5			5.1	11.5	5.4		
2	5	5.5	6.45	6.75	4.6	11.5	5.95	Cob refused 1st 2 weeks 5.3 lbs 2nd 2 weeks 10.75 ..	
3	5	5.5			4.6	11.5	6.		
4	5	5.5	6.75	6.4	4.6	11.5	5.7		
Totals	162	163	77.95	75.1	119.75	285.5	111.25		14.2

Weights and Gain

Date	Weight	Average	Gain
Apr 3	1035		
4	1042	1041	21
5	1045		



Table No IV

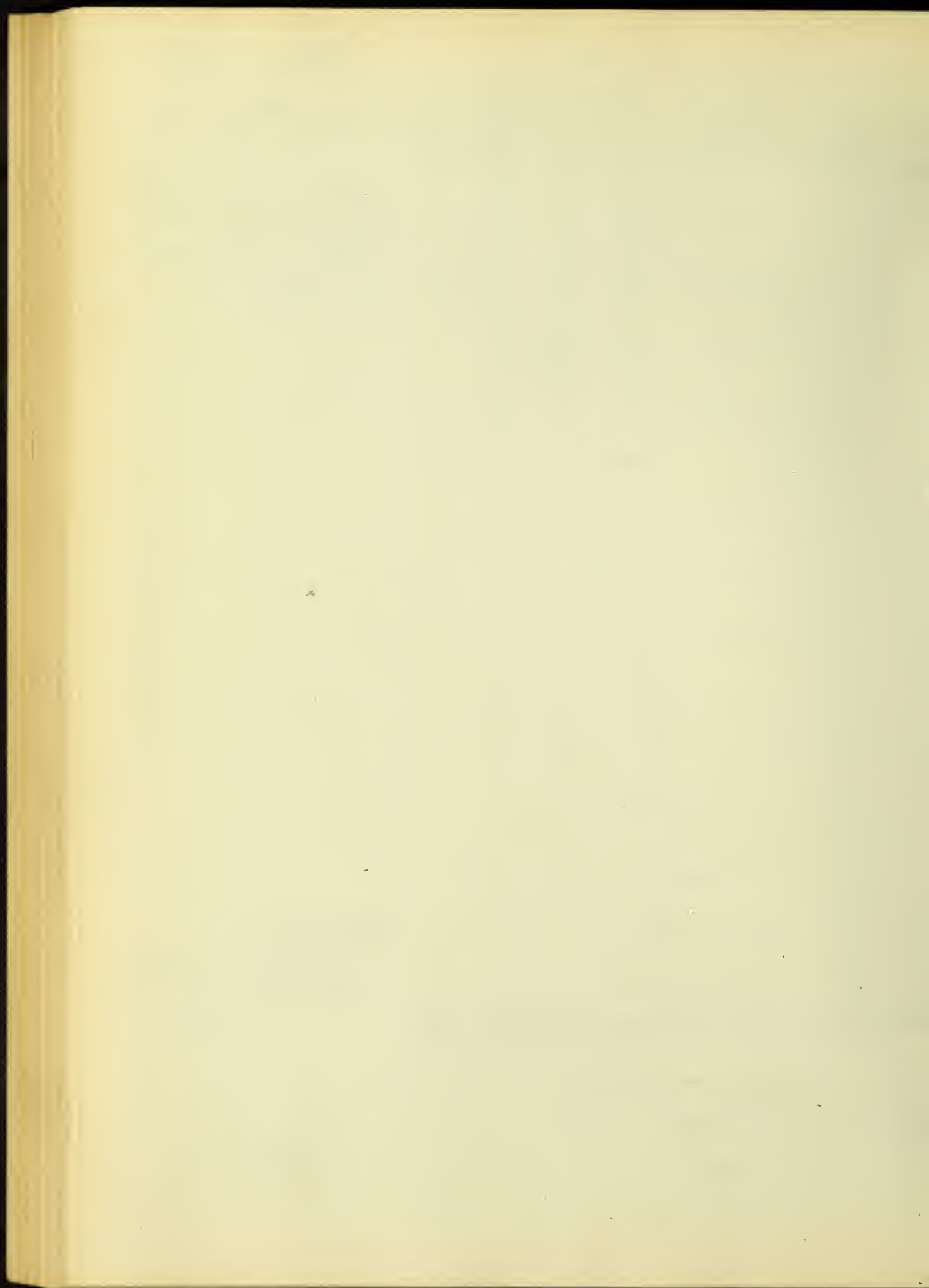
Date	Steer No 28		May 8 - Apr 4				Lot No 2	Remarks
	Stover	Refuse	Corn	Silage	Refuse			
May	A.M.	P.M.	A.M.	P.M.	P.M.	P.M.		
8	6		9.5	2.5	28			
9	6	5.55	9.5	2.5	28			
10	6		9.5	2.5	28			
11	6	6.2	9.5	2.5	28			
12	6		9.5	2.5	28			
13	6	6.75	9.5	2.5	28			
14	6		10.	2.5	28	.1		
15	6	7.25	10.	2.5	28	.2		
16	6		10.	3.	28	.25		
17	6	7.9	10.	3.	26	.1		
18	6		10.	3.	25			
19	6	7.3	10.5	3.	22			
20	6		10.5	3.	22			
21	6	7.3	10.5	3.	22			
22	6		10.5	3.	22	.15		
23	6	7.5	10.5	3.5	20	.1		
24	6		10.5	3.5	20			
25	6	7.7	11.	3.5	20			
26	6		11.	4.1	18			
27	6	8.	11.	4.6	16			
28	6	2.	11.	7.1	10			
29	6	2.	7.	2.	11.	7.1	10	
30	5	2.			11.	7.1	10	
31	5	2.	5.9	2.35	11.	7.1	10	
1	5	2.			11.	7.1	10	
2	5	2.	6.6	2.85	11.	7.1	10	
3	5	2.			11.	7.1	10	
4	5	2.	7.4	2.45	11.	7.1	6	
Totals	162	16.	98.35	9.65	291.	117.	561.	.9

May 13. - Left cote for the first time.  
 May 16. - Changed to silage from round silo.

Cote refused  
 1st 2 weeks .55 lb  
 2nd 2 weeks .85 ..  
1.40 ..

Weights and Gain

Date	Weight	Average	Gain
Apr 3	1208		
4	1203	1203	50
5	1198		



Steer No 34		Mar 8 - Apr 4						Lot No 2	
Date	Stover		Refuse		Corn		Silage	Refuse	Remarks
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	P.M.	P.M.	
8	6				9.5	2.5	19	2.05	Mar 16 - Changed to silage from round silo.
9	6		4.15		9.5	2.5	18	.5	
10	6				9.5	2.5	18	.1	
11	6		5.7		9.5	2.5	18	.1	
12	6				9.5	2.5	18	.3	
13	6		5.75		9.5	2.5	18	1.15	
14	6				10.	2.5	18	.75	
15	6		5.25		10.	2.5	18	1.3	
16	6				10.	3.	18	3.	
17	6		4.4		10.	3.	16	.4	
18	6				10.	3.	16	.9	
19	6		5.05		10.5	3.	16	.85	
20	6				10.5	3.	16	.6	
21	6		4.6		10.5	3.	16	.3	
22	6				10.5	3.	16	.6	
23	6		5.15		10.5	3.5	16	.3	
24	6				10.5	3.5	16	.1	
25	6		4.35		11.	3.5	16	1.25	
26	6				11.	4.1	15	.4	
27	6		5.25		11.	4.6	14	.15	
28	6	2			11.	7.1	8	2.	
29	6	2	5.35	1.4	11.	7.1	8	1.65	
30	5	2			11.	7.1	8	1.5	
31	5	2	3.85	1.45	11.	7.1	8	.6	
1	5	2			11.	7.1	8	1.	
2	5	2	4.7	1.9	11.	7.1	8	1.25	Cobs refused 1st 2 weeks 2 lb 2nd 2 weeks 0
3	5	2			11.	7.1	8	.65	
4	5	2	4.	1.95	11.	7.1	5	.55	
Totals	162	16	67.55	6.7	291	117.	397	24.3	.2

## Weights and Gain

Date	Weight	Average	Gain
Apr 3	1086		
4	1082	1082	47
5	1077		



Steer No 27 Mar 8 - Apr 4

Lot No 2

Date	Stover		Refuse		Corn		Silage		Refuse	Remarks
	A.M	P.M	A.M	P.M	A.M	P.M	P.M	P.M		
8	6				9.5	2.5	19	.25		Mar 16 - Changed
9	6		4.45		9.5	2.5	20	3.15		to silage from round
10	6				9.5	2.5	20	3.2		silos.
11	6		5.8		9.5	2.5	19	1.8		Mar 26 * 29 * 31 * 2 -
12	6				9.5	2.5	19	1.3		Left a little shelled
13	6		6.95		9.5	2.5	19	1.3		corn in morning which
14	6				10.	2.5	19	1.3		was fed at night.
15	6		6.25		10.	2.5	19	3.1		Eats grain very
16	6				10.	3.	19	3.2		slowly.
17	6		4.6		10.	3.	17	3.		
18	6				10.	3.	16	3.75		
19	6		5.9		10.5	3.	15	2.4		
20	6				10.5	3.	15	1.2		
21	6		5.3		10.5	3.	15	1.9		
22	6				10.5	3.	15	.8		
23	6		6.1		10.5	3.5	15	1.55		
24	6				10.5	3.5	15	1.4		
25	6		5.9		11.	3.5	15	2.2		
26	6				11.	4.1	12	.75		
27	6		6.85		11.	4.6	10	.65		
28	6	2.			11.	7.1	6	1.3		
29	6	2.	5.65	1.7	11.	7.1	6	1.5		
30	5	2			11.	7.1	6	.9		
31	5	2	5.15	1.55	11.	7.1	6	.8		
1	5	2			11.	7.1	6	.2		
2	5	2.	5.85	1.85	11.	7.1	6	.9		Corn refused
3	5	2			11.	7.1	6	.6		1st 2 weeks 17.6 lbs
4	5	2.	4.95	1.85	11.	7.1	4	.0		2nd 2 weeks 26.55 "
Totals	162	16.	79.7	6.95	291.	117.	379.	44.4		44.15 "

Weights and Gain

Date	Height	Average	Gain
Apr 3	1054		
4	1065	1058	65
5	1056		

12



Steer No 31 - Mar 8 - Apr 4

Lot No 3

Date	Stover		Refuse		Corn	
	AM	PM	AM	PM	AM	PM
8	6	5.5			9.5	9.5
9	6	5.5	5.95	5.85	9.5	9.5
10	6	5.5			9.5	9.5
11	6	5.5	5.65	6.	9.5	9.5
12	6	5.5			9.5	9.5
13	6	5.5	7.1	5.4	9.5	9.5
14	6	5.5			10.	9.5
15	6	5.5	5.9	5.6	10.	9.5
16	6	5.5			10.	10.
17	6	5.5	4.75	6.	10.	10.
18	6	5.5			10.	10.
19	6	5.5	6.	5.3	10.5	10.
20	6	5.5			10.5	10.
21	6	5.5	4.95	6.2	10.5	10.
22	6	5.5			10.5	10.
23	6	5.5	6.85	6.05	10.5	10.5
24	6	5.5			10.5	10.5
25	6	5.5	7.15	6.15	11.	10.5
26	6	5.			11.	10.5
27	6	5.	6.75	5.55	11.	11.
28	6	5.			11.	11.
29	6	5.	6.25	5.35	11.	11.
30	5	5.			11.	11.
31	5	5.	4.7	5.1	11.	11.
1	5	5.			11.	11.
2	5	5.	5.05	6.3	11.	11.
3	5	5.			11.	11.
4	5	5.	4.95	5.55	11.	11.
<u>Totals</u>	<u>162</u>	<u>149.</u>	<u>82.</u>	<u>80.4</u>	<u>291.</u>	<u>287.</u>

Cobs refused

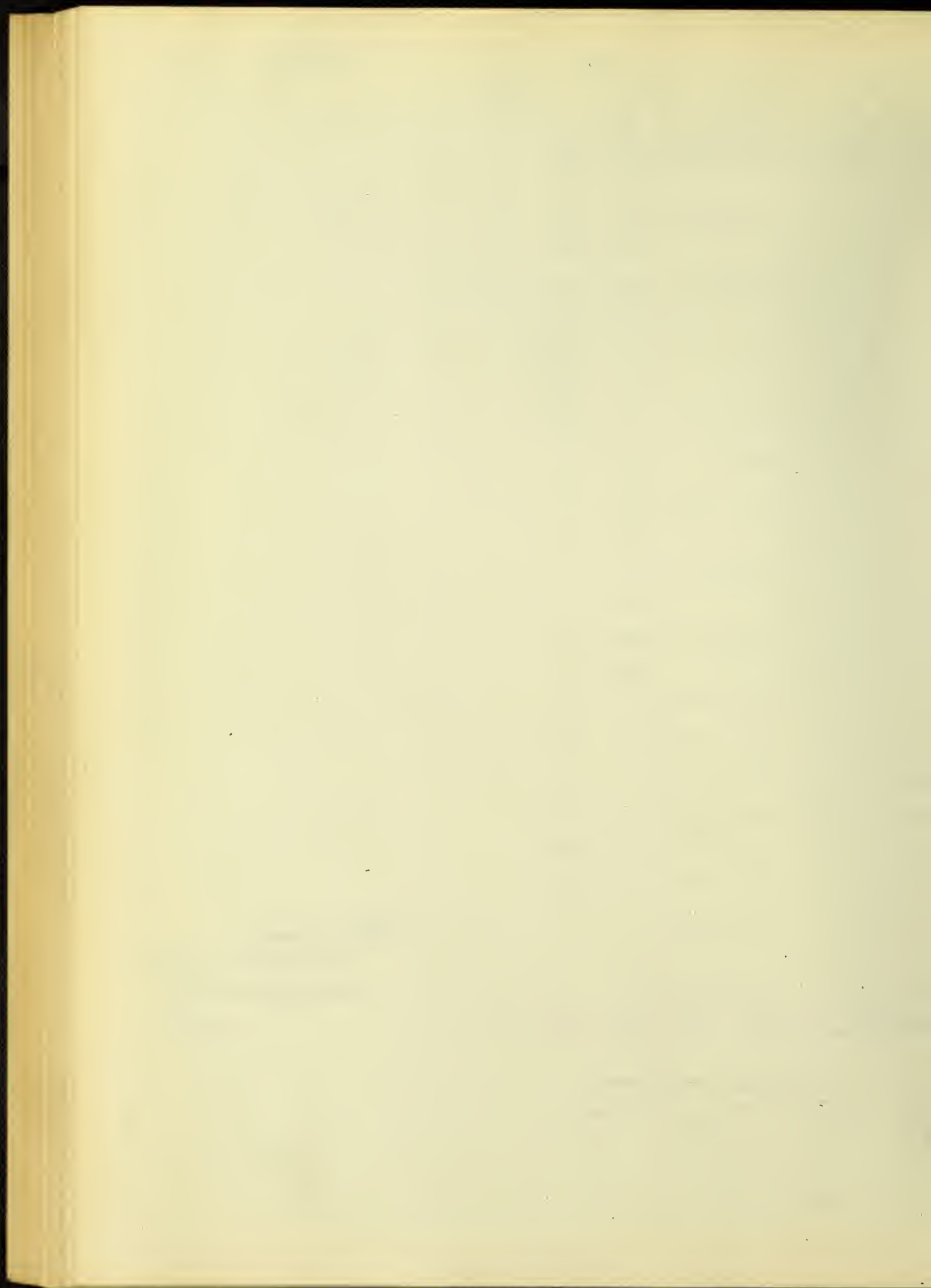
1st 2 weeks 4.8 lbs

2nd 2 weeks 8.65 ..

13.45 ..

## Weights and Gain

Date	Weight	Average	Gain
Apr 3	1121		
4	1145	1134	51
5	1135		



Steer No 30 - Mar 8 - Apr 4

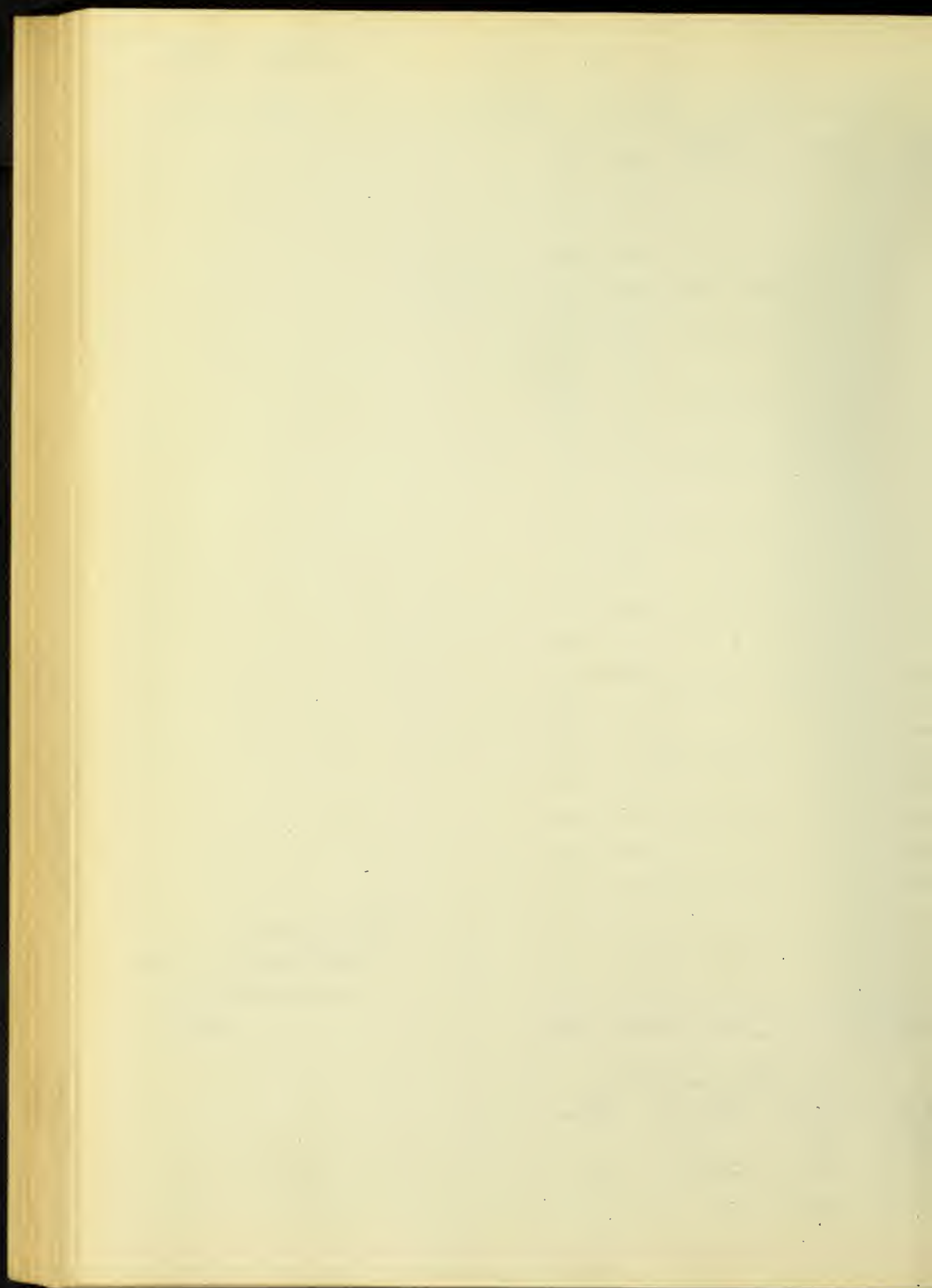
Lot No 3

Date	Stover		Refuse		Corn	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
8	6	5.5			9.5	9.5
9	6	5.5	5.5	8.15	9.5	9.5
10	6	5.5			9.5	9.5
11	6	5.5	5.2	4.65	9.5	9.5
12	6	5.5			9.5	9.5
13	6	5.5	6.05	5.	9.5	9.5
14	6	5.5			10.	9.5
15	6	5.5	6.4	5.6	10.	9.5
16	6	5.5			10.	10.
17	6	5.5	5.2	6.05	10.	10.
18	6	5.5			10.	10.
19	6	5.5	6.2	4.65	10.5	10.
20	6	5.5			10.5	10.
21	6	5.5	5.4	5.	10.5	10.
22	6	5.5			10.5	10.
23	6	5.5	6.8	5.	10.5	10.5
24	6	5.5			10.5	10.5
25	6	5.5	6.5	5.7	11.	10.5
26	6	5.			11.	10.5
27	6	5.	6.7	5.15	11.	11.
28	6	5.			11.	11.
29	6	5.	5.6	5.1	11.	11.
30	5.	5.			11.	11.
31	5.	5.	3.9	5.4	11.	11.
1	5	5.			11.	11.
2	5	5.	4.25	7.2	11.	11.
3	5	5.			11.	11.
4	5	5.	5.45	6.8	11.	11.
Totals	162	149.	79.15	79.45	291.	287.

Cobs refused  
 1st 2 weeks 1.6 lbs  
 2nd 2 weeks 9. " "  
10.6 "

## Weights and Gain

Date	Weight	Average	Gain
Apr 3	1148		
4	1144	1143	41
5	1136		



Steer No 32 - Mar 8 - Apr 4

Lot No 3

Date	Stover		Refuse		Corn	
	a.m.	P.M.	a.m.	P.M.	a.m.	P.M.
8	6	6			9.6	10.
9	6	6	5.65	4.95	9.6	10.
10	6	6			9.6	10.
11	6	6	5.1	5.1	9.6	10.
12	6	6			9.6	10.
13	6	6	6.1	5.4	9.6	10.
14	6	6			10.1	10.
15	6	6	4.9	5.35	10.1	10.
16	6	6			10.1	10.5
17	6	6	4.4	6.55	10.1	10.5
18	6	6			10.1	10.5
19	6	6	5.9	5.2	10.6	10.5
20	6	6			10.6	10.5
21	6	6	4.9	5.3	10.6	10.5
22	6	6			10.6	10.5
23	6	6	4.6	5.2	10.6	11.
24	6	6			10.6	11.
25	6	6	4.95	5.55	11.1	11.
26	6	5.5			11.1	11.
27	6	5.5	5.8	5.3	11.1	11.5
28	6	5.5			11.1	11.5
29	6	5.5	5.5	5.3	11.1	11.5
30	5	5.5			11.1	11.5
31	5	5.5	3.6	4.3	11.1	11.5
1	5	5.5			11.1	11.5
2	5	5.5	5.1	4.9	11.1	11.5
3	5	5.5			11.1	11.5
4	5	5.5	4.55	6.85	11.1	11.5
Totals	162.	163.	71.05	75.25	293.8	301.

Cobs refused  
 1st 2 weeks 17.25 lbs  
 2nd 2 weeks 16.85 ..  
34.10 ..

Weights and Gain

Date	Weight	Average	Gain
Apr 3	1027		
4	1002	1016	71
5	1019		



Steer No 26		Apr 5 - May 2				Lot No 1			
Date	Stover		Refuse		Corn		Mixture		Remarks
	AM	PM	AM	PM	AM	PM	AM	PM	
5	5	5.5			6.1	11.5	6		
6	5	5.5	4.75	4.3	6.1	11.5	6		
7	5	5.5			6.1	11.5	6		
8	4.5	5.5	5.4	4.25	6.1	11.5	6		
9	4.5	5.5			6.1	11.5	6		
10	4.5	5.5	4.65	3.95	6.1	11.5	6		
11	4.5	5			6.1	12	6		
12	4.5	5	4.1	4.35	6.1	12	6		
13	4.5	5			6	12	6		
14	4.5	5	4.7	4.5	9	9	3	3	
15	4.5	4.5			9	9	3	3	
16	4.5	4.5	4.3	4.35	9.3	9.3	3.1	3.1	
17	4.5	4.5			9.3	9.3	3.1	3.1	
18	4.5	4.5	4.6	4.25	9.3	9.3	3.1	3.1	
19	4.5	4.5			9.3	9.3	3.1	3.1	
20	4.5	4.5	5.4	4.2	9.3	9.6	3.1	3.2	
21	4.5	4.5			10	9.5	2.9	3	
22	4.5	4.5	5.8	4.55	10	10.2	3	3.1	
23	4.5	4.5			10	10.3	2.9	2.9	
24	4.5	4.5	5.5	4.25	10	10.3	2.9	2.9	
25	4.5	4.5			10	10.3	2.9	2.9	
26	4	4.5	5.1	4	10	10.3	2.9	2.9	
27	4	4.5			10	10.5	2.9	3	
28	4	4.5	3.35	3.6	10.5	10.5	3	3	
29	4	4.5			10.5	10.5	3	3	
30	4	4.5	3.8	3.5	10.5	10.5	3	3	Cobs refused
1	4	4.5			10.5	10.5	3	3	1st 2 weeks .1 lb
2	4	4.5	4.45	3.85	10.5	10.5	3	3	2nd 2 weeks .5 ..
Totals	124	134	65.9	57.9	241.8	293.7	110.9	57.3	.6 ..

Weights and Gain

Date	Weight	Average	Gain
May 1	1302		
2	1320	1307	59
3	1298		





Table No IV

Steer No 33

Apr 5 - May 2

Lot No 1

Date	Stover		Refuse		Corn		Mixture	
	A.M	P.M	A.M	P.M	A.M	P.M	A.M	P.M.
5	5	4.5			4.9	10.5	5.4	
6	5	4.5	6.65	6.25	4.9	10.5	5.4	
7	5	4.5			4.9	10.5	5.4	
8	4.5	4.5	7.3	5.55	4.9	10.5	5.4	
9	4.5	4.5			4.9	10.5	5.4	
10	4.5	4.5	6.8	5.35	4.9	10.5	5.4	
11	4.5	4.5			4.9	10.5	5.4	
12	4.5	0.	5.45	2.9	4.9	3.5	5.4	
13	4.5	0.			7.5	3.9	0.	
14	4.5	5.	6.7	3.85	6.	5.8	2.	2.
15	4.5	4.5			0	4.5	0.	1.5
16	4.5	4.5	6.45	4.9	6	6.	2.	2.
17	4.5	4.5			6	7.5	2.	2.5
18	4.5	4.5	6.45	5.1	7.5	7.5	2.5	2.5
19	4.5	4.5			7.5	7.5	2.5	2.5
20	4.5	4.5	6.65	6.45	7.8	7.8	2.6	2.6
21	4.5	4.5			8.5	8.	2.5	2.5
22	4.5	4.5	6.6	5.45	8.5	8.3	2.5	2.6
23	4.5	4.5			8.5	9.	2.5	2.5
24	4.5	4.5	6.9	7.3	8.5	9	2.5	2.5
25	4.5	4.5			8.5	9	2.5	2.5
26	4.	4.5	6.25	6.25	8.5	9.	2.5	2.5
27	4.	4.5			8.5	7.3	2.5	2.
28	4.	4.5	5.8	5.2	8.4	8.4	2.4	2.4
29	4.	4.5			8.4	8.4	2.4	2.4
30	4.	4.5	4.6	5.55	8.4	8.4	2.4	2.4
1	4.	4.5			8.4	8.4	2.4	2.4
2	4.	4.5	6.5	5.5	8.4	8.4	2.4	2.4
Totals	124	117.5	89.1	75.6	189.	229.1	86.3	44.7

Apr 12 - ate very well in morning but badly off feed at night.

Cobs refused

1st 2 weeks .3 lb

2nd 2 weeks .25 ..

.55 ..

Weights and Gain

Date	Weight	Average	Gain
May 1	1149		
2	1152	1149	28
3	1147		



Table No IV

Steer No 29 Apr 5 - May 2

Lot No 1

Date Stover Refuse Corn Mixture  
Apr A.M P.M A.M P.M A.M P.M A.M P.M

Remarks

5	5	5.5			5.1	11.5	5.4	
6	5	5.5	5.8	5.6	5.1	11.5	5.4	
7	5	5.5			5.1	11.5	5.4	
8	4.5	5.5	5.7	5.5	5.1	11.5	5.4	
9	4.5	5.5			5.1	11.5	5.4	
10	4.5	5.5	6	5.55	5.1	11.5	5.4	
11	4.5	5			5.1	12	5.4	
12	4.5	5	4.95	5.9	5.1	12	5.7	
13	4.5	5			5.1	12	5.7	
14	4.5	5	4.55	5.55	8.5	8.6	2.9	2.8
15	4.5	4.5			8.5	8.6	2.9	2.8
16	4.5	4.5	5.9	5.1	8.5	8.6	2.9	2.8
17	4.5	4.5			8.5	8.6	2.9	2.8
18	4.5	4.5	5.15	4.35	8.5	8.6	2.9	2.8
19	4.5	4.5			8.5	8.6	2.9	2.8
20	4.5	4.5	5.75	4.4	8.5	8.9	2.9	2.9
21	4.5	4.5			9	8.8	2.7	2.7
22	4.5	4.5	6.65	4.85	9	9.5	2.8	2.8
23	4.5	4.5			9.4	9.5	2.7	2.7
24	4.5	4.5	6.15	5.75	9.4	9.5	2.7	2.7
25	4.5	4.5			9.4	9.5	2.7	2.7
26	4	4.5	5.4	4.6	9.4	9.5	2.7	2.7
27	4	4.5			9.4	9.5	2.7	2.7
28	4	4.5	5.8	5.25	9.4	9.5	2.7	2.7
29	4	4.5			9.4	9.5	2.7	2.7
30	4	4.5	5.35	4.5	9.4	9.5	2.7	2.7
1	4	4.5			9.4	9.5	2.7	2.7
2	4	4.5	5.15	4.6	9.4	9.5	2.7	2.7
Totals	124	134	78.3	71.5	217.4	278.8	102	52.2

Apr 15 - Eats grain better now than at any time since latter part of February

Cobs refused  
1st 2 weeks 13.95 lbs  
2nd 2 weeks 12.65 ..  
26.6 ..

Weights and Gain

Date	Weight	Average	Gain
May 1	1090		
2	1101	1090	49
3	1080		



Steer No 28 Apr 5 - May 2

Lot No 2

Date Stoves Refused Corn Mixture  
 Apr AM PM AM PM AM PM AM PM

Remarks

5	5	4			11	9.6		
6	5	4	6.65	3.95	11	9.6		
7	5	4.5			11	10.2		
8	4.5	4.5	6.5	4.65	11	10.7		
9	4.5	4.5			11	10.7		
10	4.5	3.5	7.2	6	11	9.5		
11	4.5	0			11	4.4		
12	4.5	5	5.3	4.8	11	11		
13	4.5	5			11	10		
14	4.5	5	7.95	8.55	10	10		
15	4.5	4.5			10	0		
16	0	4.5	4.25	6.3	6	0		
17	4.5	4.5			0	6		
18	4.5	4.5	4.85	3.55	7	8		
19	4.5	4.5			9	10		
20	4.5	4.5	6.7	5	11	11		
21	4.5	4.5			11.5	11.5		
22	4.5	4.5	7.8	7.6	12	12		
23	4.5	4.5			12	12		
24	4.5	4.5	8.35	8.3	7	0		
25	4.5	4.5			5	10		
26	4	4.5	6.35	4.95	10	10		
27	4	4.5			10	10		
28	4	4.5	5.9	5.7	10	10		
29	4	4.5			10	10		
30	4	4.5	6.5	6.5	10	10		
1	4	4.5			10	10		
2	4	4.5	7.7	8.1	10	10		
Totals	119.5	121	92	83.95	269.5	246.2		

Apr 10 - Appetite poor to end of period.  
 Apr 16 - Gave dose of salts because he was scouring.

Corn refused  
 1st 2 weeks 1.35 lbs  
 2nd 2 weeks 2.4 ..  
 3.75 ..

Weights and Gain

Date	Weight	Average	Gain
May 1	1215		
2	1208	1212	9
3	1212		



Steer No 34 Apr 5 - May 2

Date	Stover		Refuse		Corn	
	AM	PM	AM	PM	AM	PM
5	5.	4.			11.	9.6
6	5.	4.	4.25	3.4	11.	9.6
7	5.	4.5			11.	10.2
8	4.5	4.5	4.95	3.75	11.	10.7
9	4.5	4.5			11.	10.7
10	4.5	5	4.55	4.25	11.	11.5
11	4.5	5			11.	11.5
12	4.5	5	4.5	6.6	11.5	11.5
13	4.5	5			11.5	11.5
14	4.5	5.	5.55	5.1	11.5	11.5
15	4.5	4.5			11.5	11.5
16	4.5	4.5	5.5	5.85	12.	11.5
17	4.5	4.5			12.	11.5
18	4.5	4.5	6.	5.45	12.	11.5
19	4.5	4.5			12.	11.5
20	4.5	4.5	5.75	4.75	12.	12.
21	4.5	4.5			12.	12.
22	4.5	4.5	5.7	4.8	12.5	12.5
23	4.5	4.5			12.5	12.5
24	4.5	4.5	5.8	5.15	12.5	12.5
25	4.5	4.5			12.5	12.5
26	4	4.5	5.35	5.2	12.5	12.5
27	4	4.5			12.5	12.5
28	4	4.5	5.75	6.15	5	8.
29	4	4.5			10.	12.5
30	4	4.5	4.9	4.7	12.5	12.5
1	4.	4.5			12.5	12.5
2	4	4.5	4.25	4.5	12.5	12.5
Totals	124.	127.5	72.8	69.65	322.5	322.8

Cobs refused

1st 2 weeks .25 lb

2nd 2 weeks 4.6 "

4.85 "

## Weights and Gain

Date	Weight	average	Gain
May 1	1108		
2	1112	1117	35
3	1122		





Lot No 2

Steer No 27 Apr 5 - May 2

Date	Stover		Refused		Corn	
	AM	PM	AM	PM	AM	PM
5	5	4			11.	9.6
6	5	4	3.9	3.1	11.	9.6
7	5	4.5			11.	10.2
8	4.5	4.5	4.7	4.05	11.	10.7
9	4.5	4.5			11.	10.7
10	4.5	4.5	5.55	4.4	11.	10.7
11	4.5	4.5			11.	11.
12	4.5	5.	4.95	4.75	11.	11.
13	4.5	5.			11.	11.
14	4.5	5.	5.7	4.95	11.	11.
15	4.5	4.5			11.	11.
16	4.5	4.5	6.3	4.9	11.	11.
17	4.5	4.5			11.	11.
18	4.5	4.5	6.	5.75	11.	11.
19	4.5	4.5			11.	11.
20	4.5	4.5	6.85	5.5	11.	11.
21	4.5	4.5			11.	11.
22	4.5	4.5	6.15	4.85	11.	11.
23	4.5	4.5			11.	11.5
24	4.5	4.5	5.55	4.8	11.5	11.5
25	4.5	4.5			11.5	11.5
26	4.	4.5	5.85	4.6	11.5	11.5
27	4.	4.5			11.5	11.5
28	4.	4.5	4.8	4.4	11.5	11.5
29	4.	4.5			11.5	11.5
30	4.	4.5	4.55	4.65	11.5	11.5
1	4.	4.5			11.5	11.5
2	4.	4.5	4.7	4.4	11.5	11.5
Totals	124.	126.5	75.55	65.1	312.5	308.5

Cobs refused  
 1st 2 weeks 32.7 lbs  
 2nd 2 weeks 40.9 "  
73.6 "

Weights and Gain

Date	Weight	Average	Gain
May 1	1100		
2	1117	1108	50
3	1106		



Steer No 31 Apr 5 - May 2

Date	Stover		Refuse		Corn	
	am	pm	am	pm	am	pm
5	5.	5.			11.	11.
6	5.	5.	5.15	5.7	11.	11.
7	5.	5.			11.	11.
8	4.5	5.	4.25	7.1	11.	11.5
9	4.5	5.			11.	11.5
10	4.5	5.	5.	6.35	11.	11.5
11	4.5	5.			11.	11.5
12	4.5	5.	4.55	6.	11.	11.5
13	4.5	5.			11.	11.5
14	4.5	5.	4.65	5.9	11.	11.5
15	4.5	4.5			11.	11.5
16	4.5	4.5	5.35	5.	11.	11.5
17	4.5	4.5			11.	11.5
18	4.5	4.5	4.5	6.45	11.	11.5
19	4.5	4.5			11.	11.5
20	4.5	4.5	5.5	6.15	11.	11.5
21	4.5	4.5			11.5	11.5
22	4.5	4.5	6.4	5.8	11.5	11.5
23	4.5	4.5			11.5	11.5
24	4.5	4.5	6.2	5.65	11.5	11.5
25	4.5	4.5			11.5	11.5
26	4.	4.5	5.1	4.95	11.5	11.5
27	4.	4.5			11.5	11.5
28	4.	4.5	4.15	4.4	11.5	11.5
29	4.	4.5			11.5	11.5
30	4.	4.5	4.05	3.9	11.5	11.5
1	4.	4.5			11.5	11.5
2	4.	4.5	4.65	5.	11.5	11.5
Totals	124.	131.	69.5	78.35	314.	320.5

Cobs refused

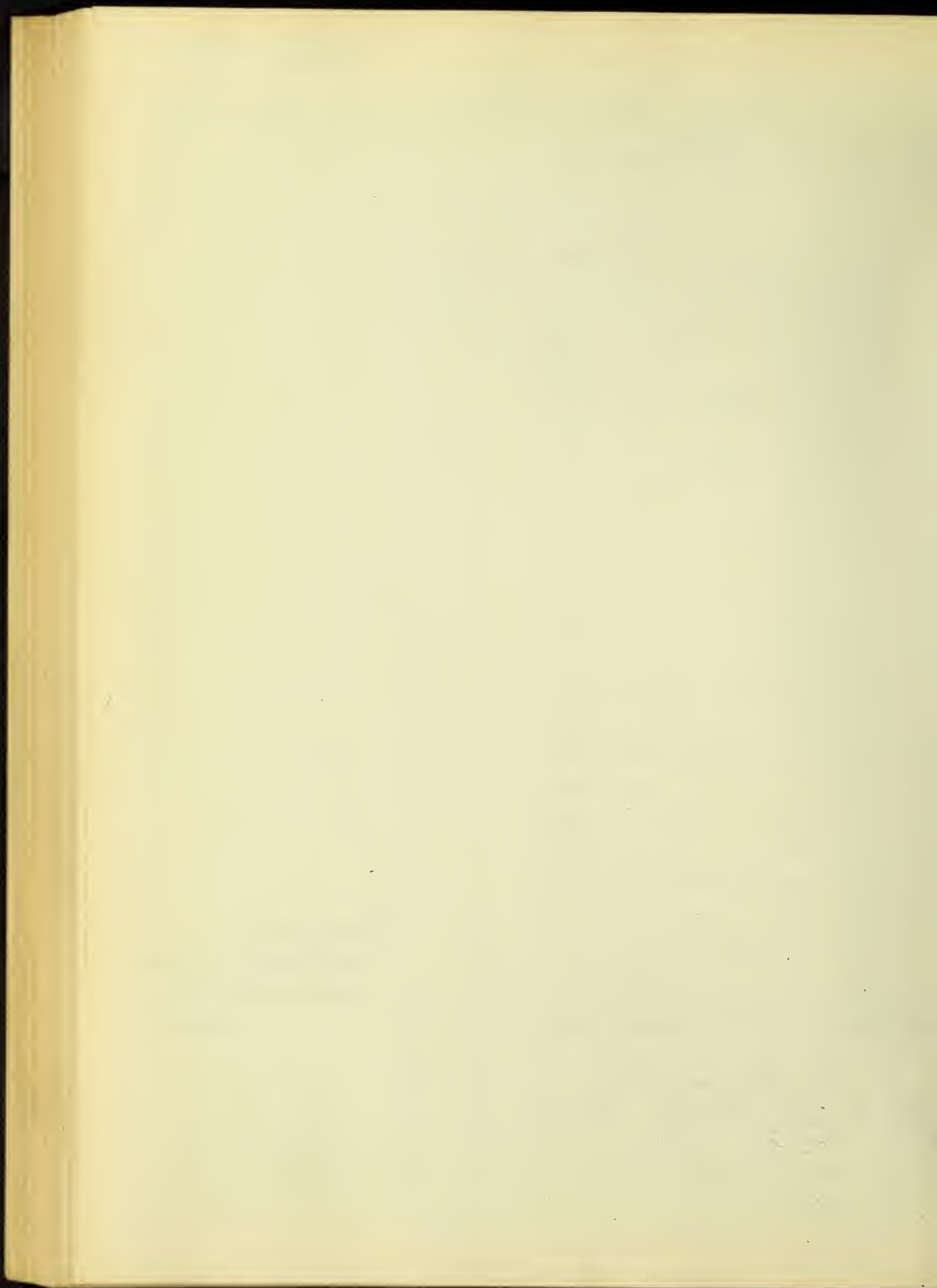
1st 2 weeks 21.45 lbs

2nd 2 weeks 23.65 "

45.10 "

## Weights and Gain

Date	Weight	Average	Gain
May 1	1154		
2	1143	1141	7
3	1126		



## Steer No 30 Apr 5 - May 2

Date	Stover		Refuse		Corn	
	AM	P.M.	AM	P.M.	AM	P.M.
5	5	5			11.	11.
6	5	5	4.25	4.4	11.	11.
7	5	5			11.	11.
8	4.5	5	6.4	4.65	11.	11.5
9	4.5	5			11.	11.5
10	4.5	5	4.5	4.95	11.	11.5
11	4.5	5			11.	12.
12	4.5	5	3.3	3.9	11.	12.
13	4.5	5			11.5	12.
14	4.5	5	4.05	5.	12.	12.
15	4.5	4.5			12.	12
16	4.5	4.5	4.6	4.1	12.	12.
17	4.5	4.5			12.	12.
18	4.5	4.5	4.9	4.1	12	12
19	4.5	4.5			12	12.
20	4.5	4.5	4.9	3.9	12	12.
21	4.5	4.5			12.	12.
22	4.5	4.5	5.1	4.65	12.5	12.5
23	4.5	4.5			12.5	12.5
24	4.5	4.5	4.6	5.	12.5	12.5
25	4.5	4.5			12.5	12.5
26	4.	4.5	4.9	5.	12.5	12.5
27	4.	4.5			12.5	13.
28	4.	4.5	4.2	3.95	13.	13.
29	4.	4.5			13.	13.
30	4.	4.5	4.15	4.	13.	13.
1	4.	4.5			13.	13.
2	4	4.5	4.4	4.7	13.	13
Totals	124.	131.	64.25	62.3	335.5	340.

Cobs refused

1st 2 weeks 6.25 lbs

2nd 2 weeks 10. "

16.25 lbs

## Weights and Gain

Date	Weight	Average	Gain
May 1	1193		
2	1205	1198	55
3	1197		



Lot No 3

Steer No 32 Apr 5 - May 2

Date	Stover		Refuse		Corn	
	am	pm	am	pm	am	pm
5	5	5.5			11.1	11.5
6	5	5.5	3.7	4.45	11.1	11.5
7	5	5.5			11.1	11.5
8	4.5	5.5	3.65	4.7	11.1	12
9	4.5	5.5			11.1	12
10	4.5	5.5	3	3.75	11.1	12
11	4.5	5			11.1	12
12	4.5	5	3.3	4.15	11.5	12
13	4.5	5			12	12
14	4.5	5	3.65	3.95	12	12
15	4.5	4.5			12.5	12
16	4.5	4.5	3.9	3.25	12.5	12.5
17	4.5	4.5			12.5	12.5
18	4.5	4.5	4.25	3.9	12.5	12.5
19	4.5	4.5			12.5	12.5
20	4.5	4.5	3.9	4.3	12.5	12.5
21	4.5	4.5			12.5	12.5
22	4.5	4.5	4.35	3.65	13	13
23	4.5	4.5			13	13.5
24	4.5	4.5	4.9	4.1	13.5	13.5
25	4.5	4.5			13.5	13.5
26	4	4.5	3.9	3.7	13.5	13.5
27	4	4.5			13.5	14
28	4	4.5	3.95	4.2	14	14
29	4	4.5			14	14
30	4	4.5	3.9	3.4	14	14
1	4	4.5			14	14
2	4	4.5	3.3	3.7	14	14
Totals	124	134	53.65	55.2	350.7	356.5

Cote refused

1st 2 weeks 22.15 lb

2nd 2 weeks 29.05 "

51.20 "

Weights and Gain

Date	Weight	Average	Gain
May 1	1053		
2	1044	1042	26
3	1028		





Steer No 26 - May 3 - May 30

Lot No 1

Date	Stover		Refuse		Corn		Mixture		Remarks	
	AM	PM	AM	PM	AM	PM	AM	PM		
3	4	4.5			10.5	10.5	3	3	May 3-7 left more cobs than usual.	
4	4	4.5	4.9	3.9	10.5	10.5	3	3		
5	4	4.5			10.5	10.5	3	3		
6	4	4.5	4.4	3.45	10.5	10.5	3	3		May 23 scouring badly & no appetite.
7	4	4.5			10.5	10.5	3	3		
8	4	4.5	4.25	3.55	10.5	10.5	3	3		
9	4	4.5			10.5	10.5	3	3		
10	4	4.5	4.25	3.	10.5	10.5	3	3		
11	4	4.5			10.5	10.5	3	3		
12	4	4.5	3.9	3.65	10.5	10.8	3	3.1		
13	4	4.5			10.7	11.	3.1	3.1		
14	4	4.5	4.3	4.45	10.7	11.	3.1	3.1		
15	4	4.5			10.7	11.	3.1	3.1		
16	4	4.5	4.9	5.5	10.7	11.	3.1	3.1		
17	4	4.5			10.7	11.	3.1	3.1		
18	4	4.5	5.55	5.35	10.7	11.	3.1	3.1		
19	4	4.5			10.7	11.	3.1	3.1		
20	4	4.5	4.2	4.95	10.7	11.	3.1	3.1		
21	4	4.5			10.7	11.	3.1	3.1		
22	4	4.5	5.25	4.9	10.7	6.	3.1	3.1		
23	4	4.5			2.	5.	1.4	0		
24	4	4.5	5.45	4.6	7.8	8.4	1.4	2.4		
25	4	4.5			9.4	9.5	2.7	2.7		
26	4	4.5	4.3	4.2	10.7	11.	3.1	3.1		
27	4	4.5			10.7	11.	3.1	3.1		
28	4	4.5	4.7	4.7	10.7	11.	3.1	3.1	Cobs refused 1st 2 weeks 4.05 lbs 2nd 2 weeks 1.45 "	
29	4	4.5			10.7	11.	3.1	3.1		
30	4	4.5	5.2	4.85	10.7	11.	3.1	3.1		
Totals	112	126	65.55	61.05	284.7	288.2	82.	81.7	5.5 "	

Weights and Gain

Date	Height	Average	Gain
May 29	1365		
30	1375	1368	61
31	1365		



Steer No 33 - May 3 - May 30								Lot No 1	
Date	Stover		Refuse		Corn		Mixture		
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
31	4	4.5			8.4	8.4	2.4	2.4	
4	4	4.5	6.25	5.	8.4	8.4	2.4	2.4	
5	4	4.5			8.4	8.4	2.4	2.4	
6	4	4.5	5.8	5.2	8.4	8.4	2.4	2.4	
7	4	4.5			8.4	8.4	2.4	2.4	
8	4	4.5	5.15	5.5	8.4	8.4	2.4	2.4	
9	4	4.5			8.4	8.4	2.4	2.4	
10	4	4.5	5.95	5.	8.4	8.4	2.4	2.4	
11	4	4.5			8.4	8.4	2.4	2.4	
12	4	4.5	5.4	5.4	8.4	8.4	2.4	2.4	
13	4	4.5			8.4	8.4	2.4	2.4	
14	4	4.5	5.4	6.8	8.4	8.4	2.4	2.4	
15	4	4.5			8.4	8.4	2.4	2.4	
16	4	4.5	5.95	5.85	8.4	8.4	2.4	2.4	
17	4	4.5			8.4	8.4	2.4	2.4	
18	4	4.5	5.75	6.8	8.4	8.4	2.4	2.4	
19	4	4.5			8.4	8.4	2.4	2.4	
20	4	4.5	4.15	5.8	8.4	8.4	2.4	2.4	
21	4	4.5			8.4	8.4	2.4	2.4	
22	4	4.5	4.9	5.05	8.4	8.4	2.4	2.4	
23	4	4.5			8.4	8.4	2.4	2.4	
24	4	4.5	5.85	5.9	8.4	8.4	2.4	2.4	
25	4	4.5			8.4	8.4	2.4	2.4	
26	4	4.5	6.7	7.85	8.4	8.4	2.4	2.4	
27	4	4.5			7.	7.	2.	2.	
28	4	4.5	7.5	7.75	8.4	8.4	2.4	2.4	Corn refused
29	4	4.5			8.4	8.4	2.4	2.4	1st 2 weeks 2 lbs
30	4	4.5	7.05	8.15	8.4	8.4	2.4	2.4	2nd 2 " 0 "
Totals	112	126	81.8	86.05	233.8	233.8	66.8	66.8	<u>.2</u> "

Weights and Gain

Date	Weight	Average	Gain
May 29	1206		
30	1196	1195	46
31	1183		

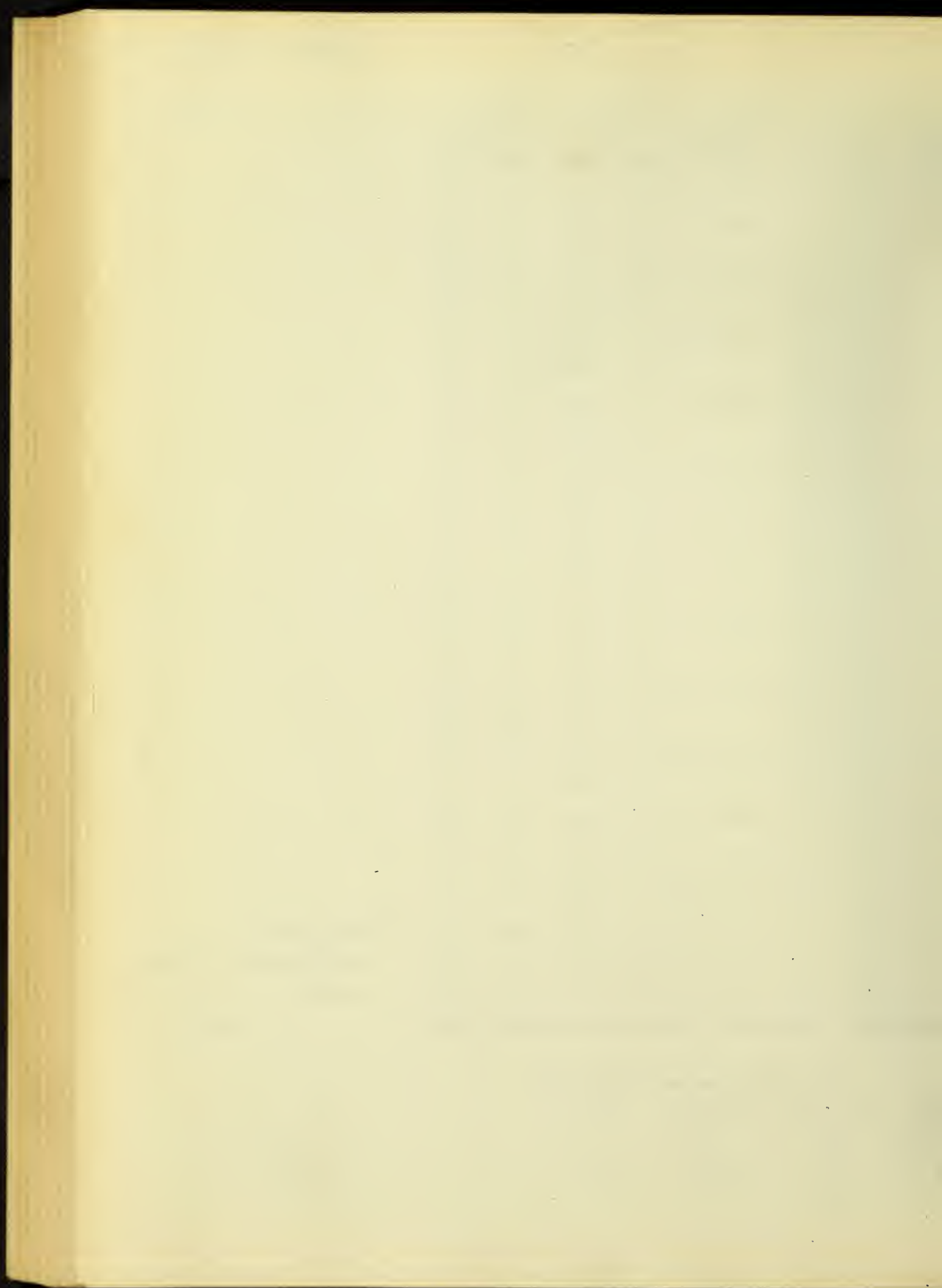


Table No IV

Steer No 29		May 3 - May 30								Lot No 1
Date	Stover		Refuse		Corn		Mixture		Remarks	
May	AM	PM	AM	PM	AM	PM	AM	PM		
3	4	4.5			9.4	9.5	2.7	2.7	May 14, 25, 27, 28 left about 1/2 lb. of shelled corn and it was fed the next morning in addition to regular feed.	
4	4	4.5	4.95	4.05	9.4	9.5	2.7	2.7		
5	4	4.5			9.4	9.5	2.7	2.7		
6	4	4.5	4.95	5.05	9.4	9.5	2.7	2.7		
7	4	4.5			9.4	9.5	2.7	2.7		
8	4	4.5	4.85	5.05	9.4	9.5	2.7	2.7		
9	4	4.5			9.4	9.5	2.7	2.7		
10	4	4.5	4.6	4.5	9.4	9.5	2.7	2.7		
11	4	4.5			9.4	9.5	2.7	2.7		
12	4	4.5	4.75	4.45	9.4	9.5	2.7	2.7		
13	4	4.5			9.4	9.5	2.7	2.7		
14	4	4.5	5.	5.5	9.4	9.5	2.7	2.7		
15	4	4.5	.		9.4	8.	2.7	2.3		
16	4	4.5	5.25	5.05	8.8	8.8	2.5	2.5		
17	4	4.5			9.4	9.5	2.7	2.7		
18	4	4.5	4.8	4.6	9.4	9.5	2.7	2.7		
19	4	4.5			9.4	9.5	2.7	2.7		
20	4	4.5	3.8	4.15	9.4	9.5	2.7	2.7		
21	4	4.5			9.4	9.5	2.7	2.7		
22	4	4.5	4.65	4.75	9.4	9.5	2.7	2.7		
23	4	4.5			9.4	9.5	2.7	2.7		
24	4	4.5	5.05	4.55	9.4	9.5	2.7	2.7		
25	4	4.5			9.4	9.5	2.7	2.7		
26	4	4.5	5.05	5.	9.4	9.5	2.7	2.7		
27	4	4.5			8.4	8.4	2.4	2.4		
28	4	4.5	6.1	5.4	8.4	7.	2.4	2.		Coke refused
29	4	4.5			9.4	9.5	2.7	2.7		1st 2 weeks 14.3 lbs
30	4	4.5	5.15	5.75	9.4	9.5	2.7	2.7		2nd 2 " 5.65 "
Totals	112	126	68.95	67.85	260.6	260.2	74.8	74.		19.95 "

## Weights and Gain

Date	Weights	Average	Gain
May 29	1146		
30	1142	1139	49
31	1128		



Table No IV

Steer No 28		May 3 - May 30						Lot No 2		Remarks
Date	Stover	Refuse		Corn		*Oats				
May	AM	PM	AM	PM	AM	PM	AM	PM		
3	4	4.5			10	10			*May 4 - Scouring and losing appetite so oats were fed as a remedy!	
4	4	4.5	5.65	4.65	0	0		6		
5	4	4.5			0	2	6	6		
6	4	4.5	4.05	3.9	3	5	5	3		
7	4	4.5			5.5	5.5	3	3		
8	4	4.5	3.95	4.15	6.	6.	3	3		
9	4	4.5			7.	7	2	2		
10	4	4.5	4.8	4.95	8.	8	1	1		
11	4	4.5			9.	9				
12	4	4.5	4.3	4.45	9.5	9.5				
13	4	4.5			10	10				
14	4	4.5	4.	4.1	10	10				
15	4	4.5			10.5	10.5				
16	4	4.5	5.15	5.25	11.	11.				
17	4	4.5			11.	11.				
18	4	4.5	6.65	7.05	11.	11.				
19	4	4.5			10	10				
20	4	4.5	6.4	7.05	10	0				
21	4	4.5			5	10				
22	4	4.5	5.2	5.	10	10				
23	4	4.5			10	10				
24	4	4.5	4.65	5.15	10	10				
25	4	4.5			10	10				
26	4	4.5	4.9	4.95	10	10				
27	4	4.5			10	10				
28	4	4.5	5.95	5.6	10	10				
29	4	4.5			10	10				
30	4	4.5	5.7	6.1	10	10				
<b>Totals</b>	<b>112</b>	<b>126</b>	<b>71.35</b>	<b>72.35</b>	<b>236.5</b>	<b>235.5</b>	<b>20</b>	<b>24</b>		<b>1.2</b>

Corn refused  
 1st 2 weeks .9 lb  
 2nd 2 weeks .3 "

Weights and Gain

Date	Height	Average	Gain
May 29	1254		
30	1230	1242	30
31	1243		





Steer No 34 May 3 - May 30

Lot No 2

Date	Stover		Refuse		Corn	
	AM	PM	AM	PM	AM	PM
3	4.	4.5			12.5	12.5
4	4.	4.5	4.4	3.8	12.5	12.5
5	4.	4.5			12.5	12.5
6	4.	4.5	4.8	4.8	12.5	12.5
7	4.	4.5			12.5	12.5
8	4.	4.5	4.8	4.85	12.5	12.5
9	4.	4.5			12.5	12.5
10	4.	4.5	4.5	3.85	12.5	12.5
11	4.	4.5			12.5	12.5
12	4.	4.5	4.1	4.75	12.5	12.5
13	4.	4.5			12.5	12.5
14	4.	4.5	5.6	5.75	12.5	12.5
15	4.	4.5			12.5	12.5
16	4.	4.5	6.55	6.35	12.5	12.5
17	4.	4.5			12.5	12.5
18	4.	4.5	4.75	4.8	12.5	12.5
19	4.	4.5			12.5	12.5
20	4.	4.5	3.5	3.9	12.5	12.5
21	4.	4.5			12.5	12.5
22	4.	4.5	3.85	3.75	12.5	12.5
23	4.	4.5			12.5	12.5
24	4.	4.5	4.45	4.2	12.5	12.5
25	4.	4.5			12.5	12.5
26	4.	4.5	4.45	5.2	12.5	12.5
27	4.	4.5			12.5	12.5
28	4.	4.5	5.45	5.45	12.5	12.5
29	4.	4.5			12.5	12.5
30	4.	4.5	4.9	5.3	12.5	12.5
Totals	112.	126.	66.1	66.75	350.	350.

Cobs refused

1st 2 weeks 14.55 lb

2nd 2 weeks 2.65 "

17.20 "

Weights and Gain

Date	Height	Average	Gain
May 29	1169		
30	1192	1177	60
31	1171		



Table No IV

Steer No 27 - May 3 - May 30							Lot No 3
Date	Stoves		Refuse		Corn		Remarks
May	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
3	4	4.5			11.5	11.5	
4	4	4.5	4.65	4.55	11.5	11.5	
5	4	4.5			11.5	11.5	
6	4	4.5	4.85	4.25	11.5	11.5	
7	4	4.5			11.5	11.5	
8	4	4.5	4.7	4.85	11.5	11.5	
9	4	4.5			2.8	3.5	May 9 - Scouring and as would not eat oats was fed lightly with corn.
10	4	4.5	5.	4.7	5.	6.5	May 20 - Left about 2 lb stelled corn in A.M. which was fed in P.M.
11	4	4.5			8.	10	
12	4	4.5	3.6	3.75	10.	11.	
13	4	4.5			11.	11.	
14	4	4.5	3.65	4.7	11.	11.	
15	4	4.5			11.5	11.5	
16	4	4.5	4.8	4.8	11.5	11.5	
17	4	4.5			11.5	11.5	
18	4	4.5	6.3	5.95	11.5	11.5	
19	4	4.5			11.5	10.	
20	4	4.5	5.5	5.3	11.5	10.	
21	4	4.5			10.	10.	
22	4	4.5	4.6	4.	11.	10	
23	4	4.5			11.	11.	
24	4	4.5	3.7	4.	11.	11.	
25	4	4.5			11.5	11.	
26	4	4.5	4.	4.25	11.	11.	
27	4	4.5			11.	11.	
28	4	4.5	5.1	5.	11.	11.	
29	4	4.5			11.	11.	
30	4	4.5	4.3	5.4	11.	11.	
Totals	112	126	64.75	65.5	295.3	296.	

Cobs refused

1st 2 weeks 33.15 lb

2nd 2 weeks 27.65 "

60.8 "

## Weights and Gain

Date	Weight	Average	Gain
May 29	1135		
30	1150	1140	32
31	1136		



## Table No IV

Lot No 3

Date	Steer No 31		Refuse		Cobw	
	Stover		AM	PM	AM	PM
May 3	4	4.5			11.5	11.5
4	4	4.5	4.55	4.2	11.5	11.5
5	4	4.5			11.5	11.5
6	4	4.5	4.5	5.35	11.5	11.5
7	4	4.5			11.5	11.5
8	4	4.5	4.55	5.25	11.5	11.5
9	4	4.5			11.5	11.5
10	4	4.5	3.95	5.45	11.5	11.5
11	4	4.5			11.5	11.5
12	4	4.5	4.2	4.2	11.5	11.5
13	4	4.5			11.5	11.5
14	4	4.5	4.25	5.05	11.5	11.5
15	4	4.5			11.5	11.5
16	4	4.5	4.45	5.2	11.5	11.5
17	4	4.5			11.5	11.5
18	4	4.5	4.8	5.15	11.5	11.5
19	4	4.5			11.5	11.5
20	4	4.5	4.05	3.95	11.5	11.5
21	4	4.5			11.5	11.5
22	4	4.5	4.25	4.65	11.5	11.5
23	4	4.5			11.5	11.5
24	4	4.5	4.7	4.55	11.5	11.5
25	4	4.5			11.5	11.5
26	4	4.5	4.8	4.9	11.5	11.5
27	4	4.5			11.5	11.5
28	4	4.5	5.	5.15	11.5	11.5
29	4	4.5			11.5	11.5
30	4	4.5	5.2	5.6	11.5	11.5
Total	112	126	63.25	68.65	322	322

Cobw refused

1st 2 weeks 25.25 lb

2nd 2 weeks 6.35 "

31.6 "

## Weights and Gain

Date	Weight	Average	Gain
May 29	1180		
30	1175	1179	38
31	1182		



Table No IV

Date	Steer No 30		Refuse		Cotton		Remarks	
	Stover		AM	PM	AM	PM		
May 3	4	4.5			13	13	Appetite irregular throughout period. May 27 - left about 6 lb shelled corn P.M. which was fed the next A.M.	
4	4	4.5	4.95	4.35	10	10		
5	4	4.5			10	13		
6	4	4.5	4.2	4.	13	13		
7	4	4.5			13	13		
8	4	4.5	3.9	4.	13	13		
9	4	4.5			13	13		
10	4	4.5	3.95	3.8	13	13		
11	4	4.5			13	13		
12	4	4.5	4.25	3.55	13	13		
13	4	4.5			13	13		
14	4	4.5	4.15	4.45	13	13		
15	4	4.5			13	12		
16	4	4.5	3.8	3.35	12	12		
17	4	4.5			13	13		
18	4	4.5	3.3	3.85	13	13		
19	4	4.5			13	13		
20	4	4.5	3.2	3.7	13	13		
21	4	4.5			13	13		
22	4	4.5	3.7	4.4	13	13		
23	4	4.5			13	13		
24	4	4.5	4.	3.65	13	13		
25	4	4.5			13	13		
26	4	4.5	4.2	4.25	13	13		
27	4	4.5			10	10		
28	4	4.5	3.95	3.85	13	13		
29	4	4.5			13	13		
30	4	4.5	4.55	4.3	13	13		
Totals	112	126	56.1	55.5	354	356		Cobs refused 1st 2 weeks 27.7 lb 2nd 2 weeks 16.05 .. 43.75 ..

Weights and Gain

Date	Weight	Average	Gain
May 29	1242		
30	1249	1242	44
31	1234		





Table No IV

Lot No 3

Date	Steer No 32		Refuse		Cotton	
	Stover		AM	P.M.	AM	PM
30	4	4.5			14	14
4	4	4.5	3.05	3.4	14	14
5	4	4.5			14	14
6	4	4.5	3.85	3.8	14	14
7	4	4.5			14	14
8	4	4.5	4.4	4.75	14	14
9	4	4.5			14	14
10	4	4.5	4.25	4.25	14	14
11	4	4.5			14	14
12	4	4.5	4.	4.3	14	14
13	4	4.5			14	14
14	4	4.5	3.8	4.4	14	14
15	4	4.5			14	14
16	4	4.5	4.2	3.5	14	14
17	4	4.5			14	14
18	4	4.5	3.15	3.95	14	14
19	4	4.5			14	14
20	4	4.5	3.8	4.3	14	14
21	4	4.5			14	14
22	4	4.5	3.9	4.2	14	14
23	4	4.5			14	14
24	4	4.5	3.35	3.75	14	14
25	4	4.5			14	14
26	4	4.5	3.25	3.65	14	14
27	4	4.5			14	14
28	4	4.5	4.	4.45	14	14
29	4	4.5			14	14
30	4	4.5	3.95	4.3	14	14
Totals	112	126	52.95	57.	392	392

Cotton refused

1st 2 weeks 31.6 lbs

2nd 2 weeks 37.75

69.35 lbs

## Heights and Gain

Date	Height	Average	Gain
May 29	1102		
30	1096	1087	45
31	1064		



Table No 5

Feed and Gains - Summary of Table IV Lot No 1

Period	S. tover			Refuse			Corn			Gluten Meal	Total Gram	Refuse Cobs	Gain
	AM	PM	Totals	AM	PM	Totals	AM	PM	*Totals				
Dec 14	252	137.6	389.6	102.3	44.7	147.	55	174.2	263.2	56	319.2		56
Jan 11	192	168.2	360.2	97.1	58.15	155.25	105.85	211.8	360.6	74.4	435.		82
Feb 8	186	135.4	321.4	80.7	56.65	137.35	147.5	233.6	428.5	94.8	523.3		40
Mar 8	162	163.	325.	78.85	67.5	146.35	152.7	298.1	511.	102.2	613.2	1.1	82
Apr 5	124	134	258.	65.9	57.9	123.8	241.8	293.7	591.6	112.1	703.7	.6	59
May 3	112	126	238.	65.55	61.05	126.6	284.7	288.2	627.5	109.1	736.6	5.5	61
Totals	1028	864.2	1892.2	490.4	240.5	736.5	187.5	1477.6	2122.4	541.6	3331.	7.2	300

Steep 33

Dec 14	252	116.9	368.9	123.85	44.9	168.75	55	149.1	238.1	56	294.1		48
Jan 11	192	131.3	323.3	97.35	43.05	140.4	82.3	166.7	281.1	57.2	338.3		52
Feb 8	188	121.8	309.8	73.7	48.9	122.6	124.3	218.7	385.6	85.2	470.8		59
Mar 8	162	135.	297.	91.3	71.95	163.25	126.1	272.5	453.9	94.4	548.3	.25	36
Apr 5	124	117.5	241.5	89.1	75.6	164.7	189.	229.1	461.75	87.35	549.1	.55	28
May 3	112	126.	238.	81.8	86.05	167.85	233.8	233.8	512.1	89.1	601.2	.2	46
Totals	1000	741.3	1,755.3	557.1	290.4	1227.5	810.5	1204.7	2322.5	467.25	2811.5	1.	269

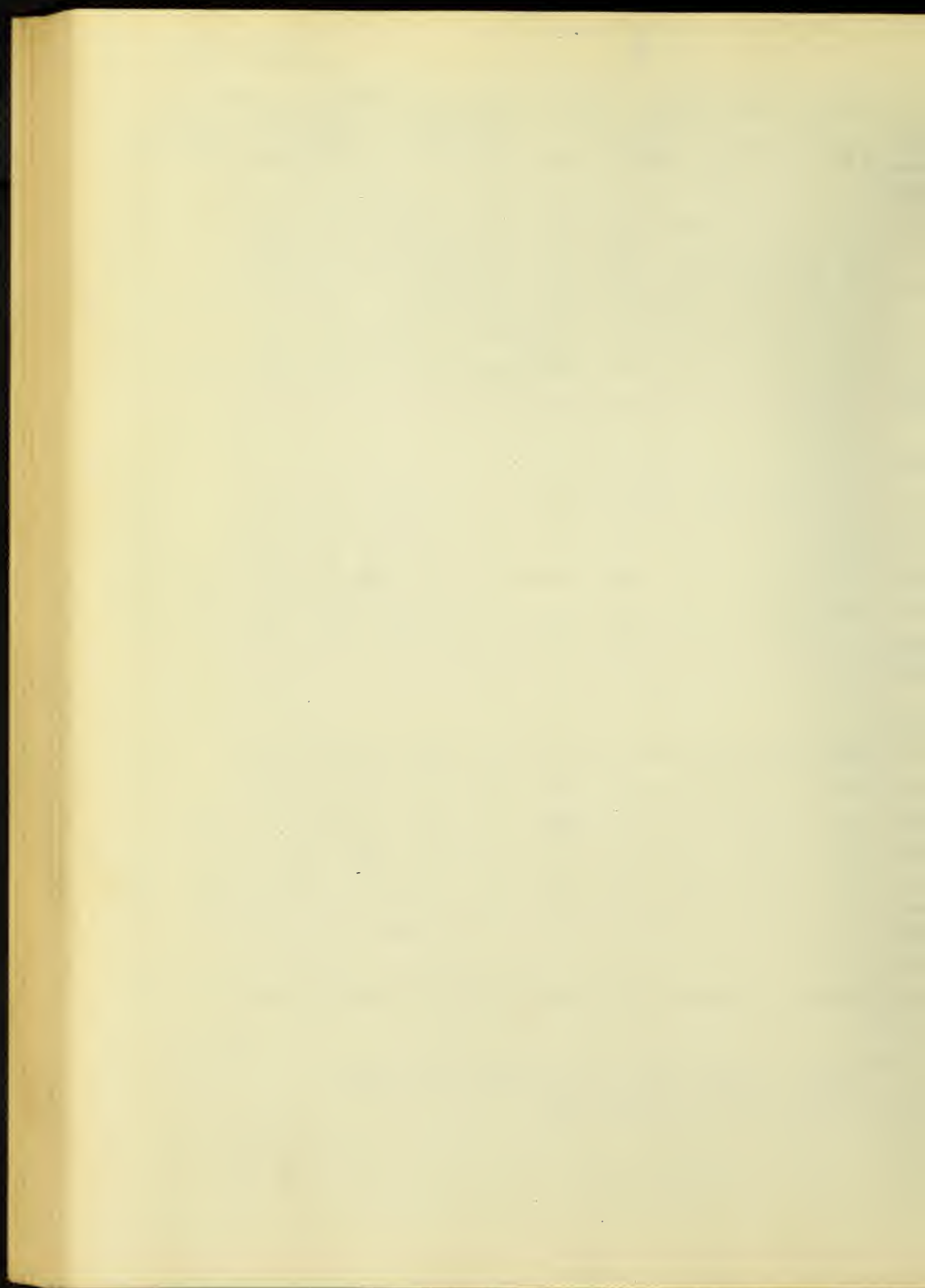
Steep 39

Dec 14	244.8	91.9	336.7	126.65	32.05	158.7	39	119.9	208.9	56	264.9		41
Jan 11	192	152.	344.	91.35	48.1	139.45	82.95	192.	306.6	57.3	363.9		47
Feb 8	192	143.4	335.4	73.3	54.35	127.65	134.3	245.3	423.8	88.4	512.2	5.9	45
Mar 8	162	163	325.	77.95	75.1	153.05	119.75	285.5	449.45	81.25	530.7	16.05	21
Apr 5	124	134	258.	78.3	71.5	149.8	217.4	278.8	547.6	102.8	650.4	26.6	49
May 3	112	126	238.	68.95	67.85	136.8	260.6	260.2	570.4	99.2	669.6	19.95	49
Totals	1000	810.3	1877.1	516.3	248.95	800.45	740	1081.7	2506.5	484.95	2401.5	68.5	255

Total

for Lot 1	3084.8	2423.	5507.8	1564.	1065.35	2629.35	2652.05	4151.2	7621.70	1502.8	9124.5	76.7	951
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\* Totals includes corn and cob meal of mixture.  
 # Total gram includes cobs.



Feed and Gains - Summary of Table IV Lot No 2

Period	Stover			Refuse			Corn			Silage	Refuse	Refuse	Gain	
	A.M	P.M	Totals	A.M	P.M	Totals	A.M	P.M	Totals					
Steer 28														
Dec 14	252		252	128.35		128.35	154		154	738		61.35	38	
Jan 11	192		192	84.05		84.05	215.2		215.2	640		1.1	64	
Feb 8	168		168	76.4		76.4	262.7	28	290.7	778		2.6	74	
Mar 8	162	16	178	98.35	9.65	108	291	117	408	561		.9	1.4	50
Apr 5	119.5	121	240.5	92	83.95	175.95	269.5	246.2	515.7				3.75	9
May 3	112	126	238	71.35	72.35	143.7	256.5	259.5	516				1.2	30
Totals	1203.5	267	1268.5	550.5	165.95	716.45	1448.9	650.7	2099.6	2717		65.95	6.35	263
Steer 34														
Dec 14	252		252	107.1		107.1	154		154	577		137.35	4	
Jan 11	192		192	80.2		80.2	215.2		215.2	506		18.1	33	
Feb 8	168		168	65.95		65.95	262.7	28	290.7	508		12.6	.1	62
Mar 8	162	16	178	67.55	6.7	74.25	291	117	408	397		24.3	.2	47
Apr 5	124	127.5	251.5	72.8	69.65	142.45	322.5	322.8	645.3				4.85	35
May 3	112	126	238	66.1	66.75	132.85	350	350	700				17.2	60
Totals	1010	267.5	1277.5	492.7	152.75	645.45	1595.4	897.8	2493.2	1988		192.35	22.35	241
Steer 27														
Dec 14	252		252	144.5		144.5	154		154	728		90.95	30	
Jan 11	192		192	101.35		101.35	215.2		215.2	496		24.85	8.6	12
Feb 8	168		168	69.85		69.85	262.7	28	290.7	527		30.8	19.2	69
Mar 8	162	16	178	79.7	6.95	86.65	291	117	408	379		44.4	44.15	65
Apr 5	124	126.5	250.5	75.55	65.1	140.65	312.5	308.5	621				73.6	50
May 3	112	126	238	64.75	65.5	130.25	295.3	296	591.3				60.8	32
Totals	1010	268.5	1278.5	535.7	137.55	673.25	1530.7	749.5	2280.2	2130		191	206.35	218
Total														
for Lot 2	3025.5	801	3826.5	1545.9	446.6	1992.5	4575	2218	6793	6835		449.3	235.05	764

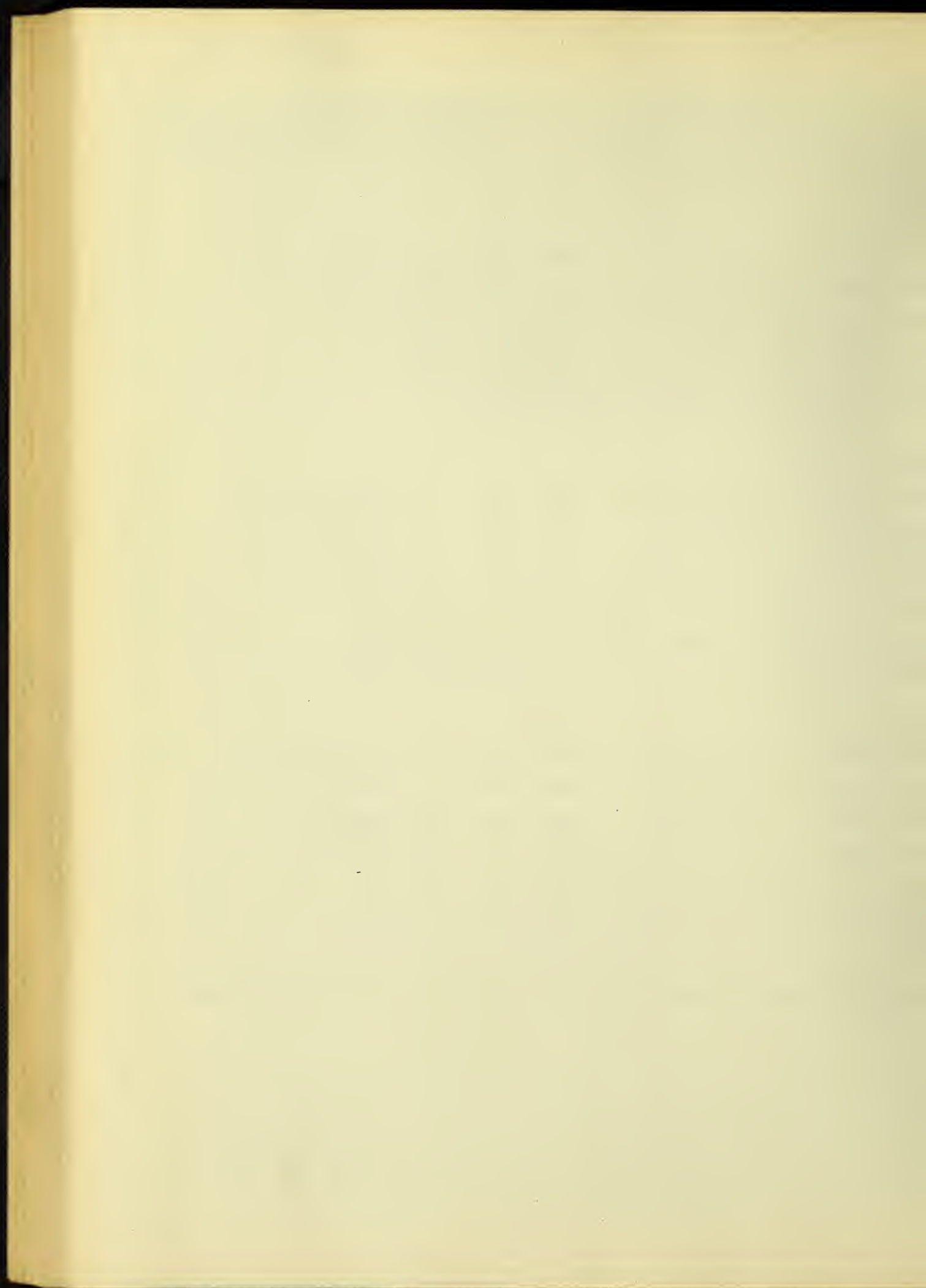


Table No IV

Feed and Gains - Summary of Table IV Lot No 3

Period	Stover			Refuse			Corn			Refuse	Gain
	AM	PM	Totals	AM	PM	Totals	AM	PM	Totals		
Steer 51											
Dec 14	252	136.7	388.7	104.95	50.55	155.5	154.	173.1	327.1		15
Jan 11	192	143.9	335.9	101.55	56.4	157.95	215.2	182.1	397.3		33
Feb 8	189	128.3	317.3	81.05	62.8	143.85	258.7	222.	480.7	1.35	55
Mar 8	162	149.	311.	82.	80.4	162.4	291.	287.	578.	13.45	51
Apr 5	124	131.	255.	69.5	78.35	147.85	314.	320.5	634.5	45.1	7
May 3	112	126.	238.	63.25	68.65	131.9	322.	322.	644.	31.6	38
Totals	1001	814.7	1715.9	502.3	349.15	851.45	1504.9	1067	3060.6	41.3	194

Steer 30											
Dec 14	250	116.9	366.9	102.2	34.8	137	154.	149.1	303.1		10
Jan 11	192	154.7	346.7	89.5	50.3	139.8	215.2	195.3	410.5		61
Feb 8	191	138.7	329.7	81.55	66.45	148.	259.	236.7	495.7	1.15	56
Mar 8	162	149.	311.	79.15	79.45	158.6	291.	287.	578.	10.6	41
Apr 5	124	131.	255.	64.25	62.3	126.55	335.5	340.	675.5	16.25	55
May 3	112	126.	238.	56.1	55.5	111.6	354.	356.	710.	43.75	44
Totals	1031	816.3	1847.3	472.75	248.8	721.55	1608.7	1064.1	3172	71.75	267

Steer 32											
Dec 14	252	117.8	369.8	98.3	40.8	139.1	154.	150.2	304.2		25
Jan 11	192	152.9	344.9	95.85	53.7	149.55	215.2	193.1	408.3	3.4	41
Feb 8	192	141.6	333.6	70.	55.8	125.8	261.4	238.9	500.3	30.45	38
Mar 8	162.	163.	325.	71.05	75.25	146.3	293.8	301.	594.8	34.1	71
Apr 5	124.	134.	258.	53.65	55.2	108.85	350.7	356.5	707.2	51.2	26
May 3	112.	126.	238.	52.95	57.	109.95	392.	392.	784.	69.35	45
Totals	1034	835.3	1693.3	441.3	327.75	719.35	1607.1	1651.7	3248.8	188.5	246

Total for lot 3	3096	2466.5	5562.5	1416.85	1083.7	2500.55	4830.7	4702.5	9533.2	351.75	712
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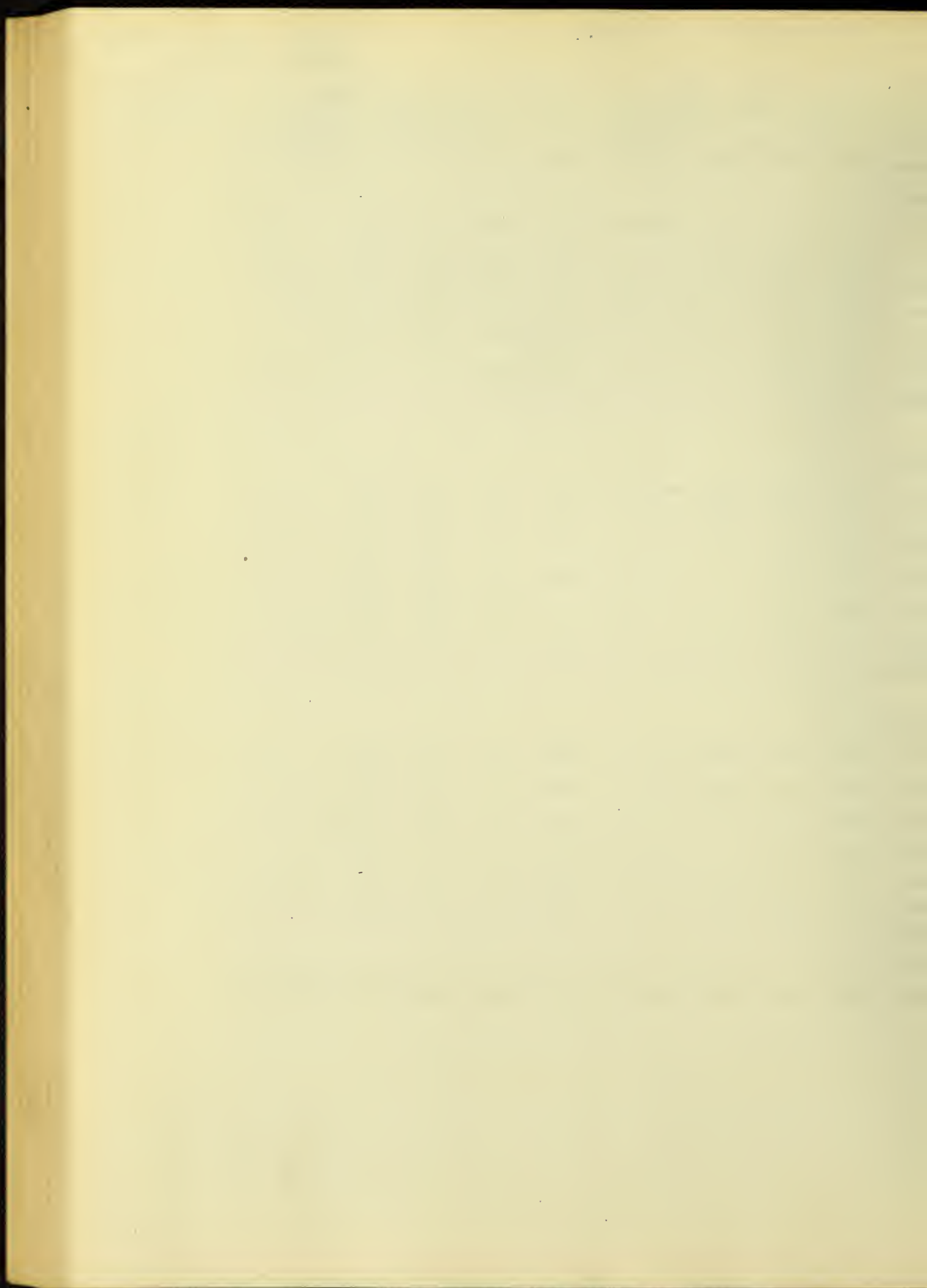




Table No VI

## Summary of Feeds Eaten

Lot No 1

Period	Stover (Refuse reduced)			Stover Eaten			Shelled Gluten Total			Total Cobs <sup>*</sup> Total			
	AM	PM	Totals	AM	PM	Totals	Corn	Meal	Strain	Cobs Eaten	Roughage	Strain	
Dec 14	90.75	38.25	129.	161.25	99.35	260.6	217.6	56	273.6	45.6	45.6	306.2	56
Jan 11	86.05	49.7	135.75	105.95	118.5	224.45	298.65	74.4	373.05	61.95	61.95	286.4	82
Feb 8	72.05	48.4	120.45	113.95	87.	200.95	351.35	94.8	446.15	77.15	77.15	278.1	40
Mar 8	72.6	60.3	132.9	89.4	102.7	192.1	419.	102.2	521.2	92.	90.9	283.0	82
Apr 5	62.1	51.3	113.4	61.9	82.7	144.6	485.1	112.1	597.2	106.5	105.9	250.5	59
May 3	60.15	51.	111.15	51.85	75.	126.85	514.55	109.1	623.65	112.95	107.45	234.3	61
Totals	442.7	298.5	742.65	584.3	565.25	1144.55	2286.2	548	2834.85	496.15	488.95	1638.	380

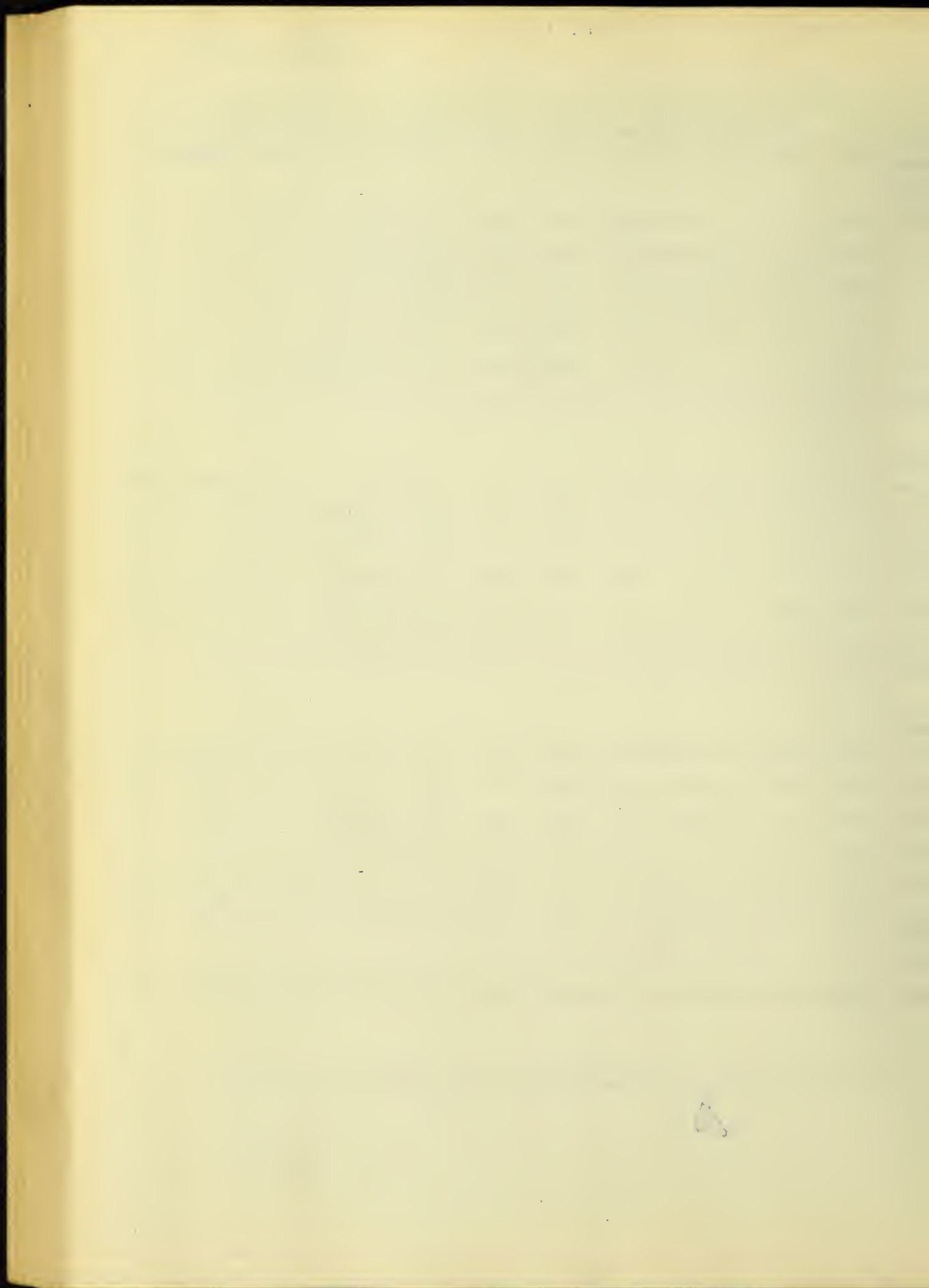
## Steer 33

Dec 14	117.9	38.75	156.65	134.1	78.15	212.25	197.	56	253.	41.1	41.1	253.35	48
Jan 11	92.5	37.4	129.9	99.5	93.9	193.4	232.75	57.2	289.95	48.35	48.35	241.75	52
Feb 8	70.4	44.45	114.85	117.6	77.35	194.95	316.2	85.2	401.4	69.4	69.4	264.35	59
Mar 8	88.	68.4	156.4	74.	66.6	140.6	372.2	94.4	466.6	81.7	81.45	222.05	36
Apr 5	88.9	74.7	163.6	35.1	42.8	77.9	378.65	87.35	466.0	83.1	82.55	160.45	28
May 3	79.65	83.1	162.75	32.35	42.9	75.25	409.9	89.1	509.0	92.2	92.	167.25	46
Totals	537.2	346.8	884.15	492.65	401.7	894.35	1916.7	469.25	2385.95	415.15	414.9	1507.2	269

## Steer 29

Dec 14	118.55	27.8	146.35	126.25	64.1	190.35	173.1	56.	229.1	35.8	35.8	226.15	41
Jan 11	85.3	41.85	127.15	106.7	110.15	216.85	253.7	57.3	311.0	52.9	52.9	269.75	97
Feb 8	68.6	48.2	116.8	123.4	95.2	218.6	347.5	88.4	435.9	76.3	70.4	289.0	45
Mar 8	74.9	67.45	142.35	87.1	95.55	182.65	368.55	81.25	449.8	80.9	64.85	247.5	21
Apr 5	79.25	68.45	147.7	44.75	65.55	110.3	449.05	102.8	551.85	98.55	71.95	182.25	49
May 3	66.25	63.35	129.6	45.75	62.65	108.4	467.75	99.2	566.95	102.65	82.7	191.1	49
Totals	492.85	317.1	809.95	533.95	493.2	1027.15	2059.65	484.95	2544.6	447.1	378.8	1400.75	3
Total	1473.9	962.85	2436.75	1610.9	1460.15	3071.05	6262.6	1502.8	7765.4	1359.1	1282.4	4353.45	951

\* Total Roughage is total stover eaten plus cobs eaten



## Table No VI

## Summary of Feeds Eaten

Lot No 2

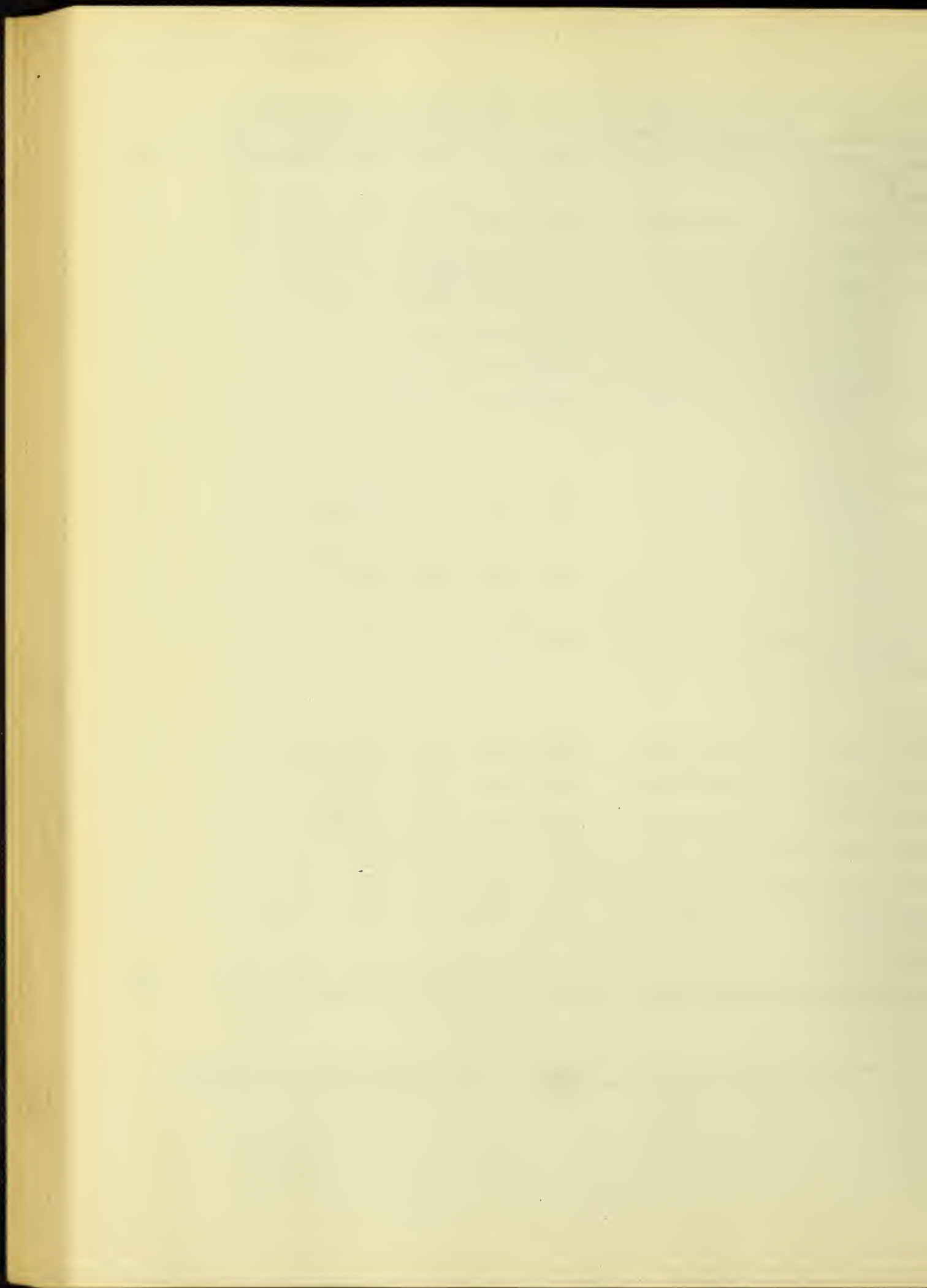
Period	Stover		Refuse (reduced)	Stover Eaten		Shelled Total	Coke	Silage	Total Dry	Gain		
	A.M.	P.M.		A.M.	P.M.						Corn	Coke Eaten
beginning												
Steer 28												
Dec 14	119.25		119.25	132.75		132.75	129.35	24.65	24.65	676.65	157.4	38
Jan 11	77.6		77.6	114.4		114.4	180.75	34.45	34.45	638.9	148.85	64
Feb 8	69.45		69.45	98.55		98.55	238.35	52.35	52.35	775.4	150.4	74
Mar 8	94.2	9.6	103.8	67.8	6.4	74.2	334.55	73.45	72.05	560.1	146.25	50
Apr 5	91.	82.45	173.45	28.5	38.55	67.05	422.85	92.85	89.1		156.15	9
May 3	69.15	69.25	138.4	42.85	56.75	99.6	423.1	93.9	91.7		191.3	30
Totals	520.65	161.3	681.95	484.85	101.7	586.55	1728.95	370.65	347.3	2651.05	940.85	265

Steer 34												
Dec 14	97.9		97.9	154.1		154.1	129.35	24.65	24.65	439.65	178.75	4
Jan 11	73.2		73.2	118.8		118.8	180.75	34.45	34.45	487.9	153.25	33
Feb 8	61.05		61.05	106.95		106.95	238.35	52.35	52.25	495.4	159.2	62
Mar 8	63.95	6.6	70.55	98.05	9.4	107.45	334.55	73.45	73.25	372.7	180.7	47
Apr 5	71.7	67.85	139.55	52.3	59.65	111.95	529.15	116.15	111.3		223.25	35
May 3	63.5	62.55	126.05	48.5	63.45	111.95	574.	126.	108.8		220.75	60
Totals	431.3	137	568.3	578.7	132.5	711.2	1986.15	427.05	408.8	1775.65	1115.4	228

Steer 27												
Dec 14	133.1		133.1	118.9		118.9	129.35	24.65	24.65	637.05	143.55	30
Jan 11	92.75		92.75	99.25		99.25	180.75	34.45	25.85	471.15	125.1	12
Feb 8	62.8		62.8	105.2		105.2	238.35	52.35	33.15	496.2	138.35	69
Mar 8	75.7	6.6	82.3	86.3	9.4	95.7	334.55	73.45	29.3	334.6	125.	65
Apr 5	74.4	60.95	135.35	49.6	65.55	115.15	509.2	111.8	38.2		153.35	50
May 3	61.65	60.	121.65	50.35	66.	116.35	484.85	106.45	45.65		162.	32
Totals	500.4	127.55	627.95	504.6	152.3	656.95	1877.05	423.15	196.8	1939	347.35	187

Total												
for Lot 2	1452.35	425.85	1878.2	1573.15	386.5	1948.3	5592.15	1200.85	965.8	6385.7	2914.1	764

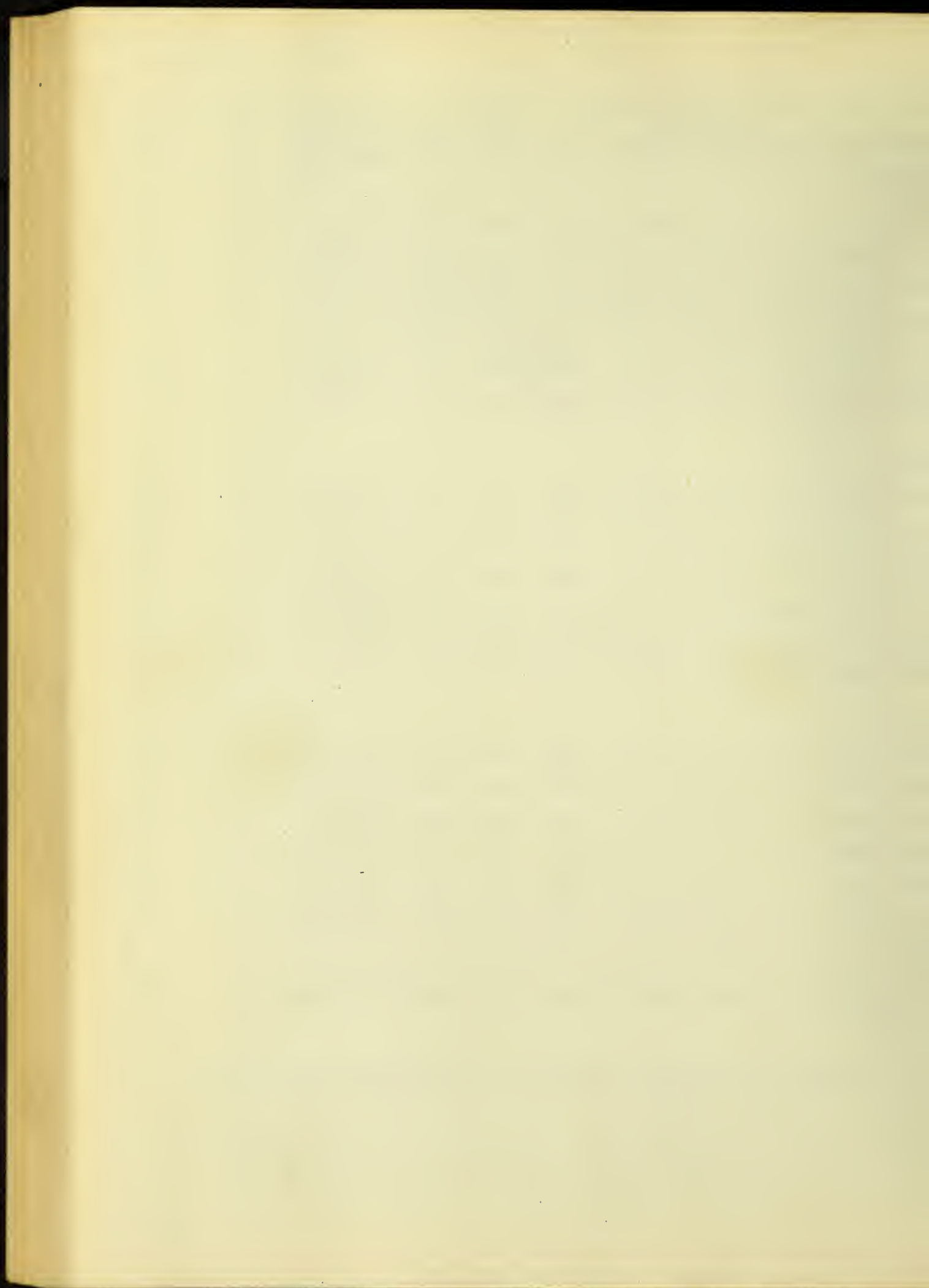
\* Total Dry Roughage is total stover eaten plus coke eaten



Summary of Feeds Eaten

Period	Stover	Refuse (redded)	Stover	Eaten	Shelled	Total	Coke*	Total Dry		Gain	
beginning	A.M.	P.M.	Totals	A.M.	P.M.	Totals	Corn	Coke	Eaten	Roughage	
<b>Steer 31</b>											
Dec 14	92.05	42.45	134.5	159.95	94.25	254.2	271.3	55.8	55.8	310.0	15
Jan 11	88.05	46.65	134.7	103.95	97.25	201.2	330.1	67.2	67.2	268.4	33
Feb 8	66.8	47.35	114.15	132.2	80.95	203.15	394.15	86.55	85.2	288.35	55
Mar 8	72.55	61.35	133.9	89.45	87.65	177.1	473.95	104.05	90.6	267.7	51
Apr 5	66.6	67.7	134.3	57.4	63.3	120.7	520.3	114.2	69.1	189.8	7
May 3	56.35	58.9	115.25	55.65	67.1	122.75	528.1	115.9	84.3	207.05	38
Totals	442.4	324.1	766.8	588.6	490.5	1079.1	2517.9	543.7	452.2	1531.3	199
<b>Steer 30</b>											
Dec 14	95.95	31.75	127.7	154.05	85.15	239.2	251.6	51.5	51.5	290.7	10
Jan 11	83.75	46.05	129.8	108.25	108.65	216.9	340.9	69.6	69.6	286.5	61
Feb 8	76.35	62.35	138.7	154.65	76.35	191.	406.45	89.25	88.1	279.1	56
Mar 8	76.15	75.1	151.25	85.85	73.9	159.75	473.95	104.05	93.45	253.2	41
Apr 5	63.4	60.6	124.	60.6	70.4	131.	553.9	121.6	105.35	236.35	55
May 3	53.05	52.55	105.6	58.95	73.45	132.4	582.2	127.8	84.05	216.45	44
Totals	448.65	328.4	777.05	582.35	487.7	1070.25	2609.	563.8	492.0	1562.5	207
<b>Steer 32</b>											
Dec 14	93.7	36.8	130.5	158.3	81.	239.3	252.5	51.7	51.7	291.0	25
Jan 11	90.6	48.15	138.75	101.4	104.75	206.15	339.1	69.2	65.8	271.95	41
Feb 8	63.75	48.45	112.2	128.25	93.15	221.4	410.25	90.05	59.6	281.0	38
Mar 8	66.95	68.05	135.0	95.05	94.95	190.	487.75	107.05	72.95	262.95	71
Apr 5	52.9	53.1	106.0	71.1	80.9	152.	579.9	127.3	76.1	228.1	26
May 3	51.3	53.7	105.0	60.7	72.3	133.	642.9	141.1	71.75	204.75	45
Totals	414.2	308.25	722.45	614.8	527.0	1141.85	2712.4	586.4	397.9	1539.75	207
<b>Total</b>											
for Lot 3	1310.25	961.05	2271.3	1785.75	1505.45	3291.2	7839.3	1693.9	1342.15	4633.35	712

\* Total Dry Roughage is total stover eaten plus coke eaten.



## Feed Eaten per 100 lbs Gain

Steer No	Gain	Stover	Silage <sup>#</sup>	Ear Corn	Gluten Meal	Ear Corn & Meal	* Grain alone	Cobs Eaten	Total Dry Roughage
Lot No 1									
26	380	302		732	144	877	746	129	431
33	269	332		867	174	1042	887	154	487
29	302	340		830	161	991	843	125	465
Total	951	323		801	158	959	817	135	458
Average	317	325		810	160	970	825	136	461
Lot No 2									
28	265	221	1000	792			652	137	359
34	241	295	745	1001			824	168	463
27	258	252	752	884			728	76	329
Total	764	256	836	889			732	126	381
Average	255	256	832	892			735	127	384
Lot No 3									
31	199	542		1538			1265	227	769
30	267	401		1188			977	184	585
32	246	464		1341			1103	162	626
Total	712	462		1339			1101	189	651
Average	237	469		1356			1115	191	660

\* Grain alone refers to corn as shelled corn  
 \* Ear Corn takes no account of cobs left.

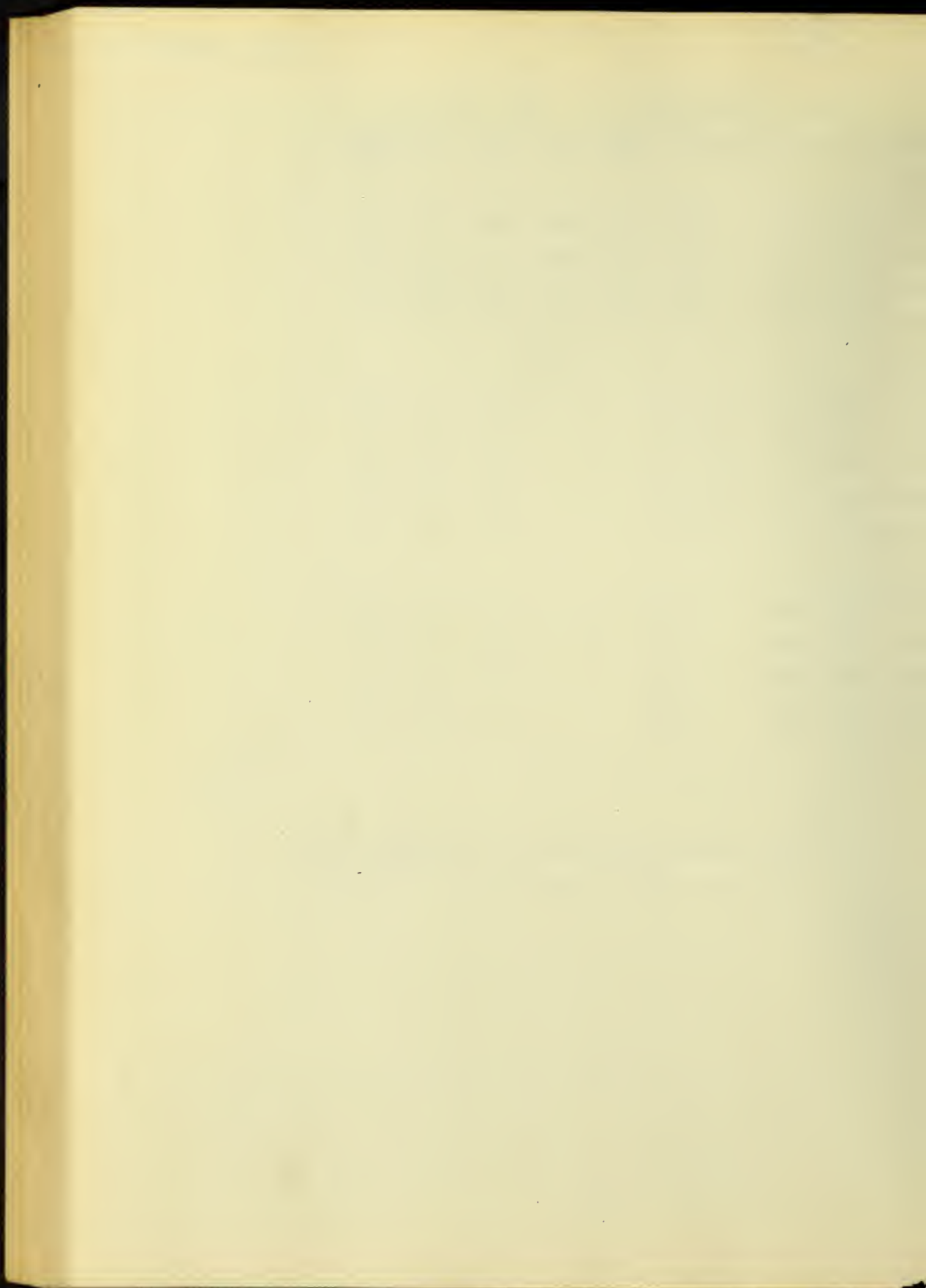




Table No VIII

Comparison of Fodder and Silage Lot No 2

Period	Stover		Corn Silage		Gain	Dry Matter Eaten			Total	per 100 lbs gain	
	Eaten	Refused	Fed	Eaten		Refused	Stover	Corn			Silage
Steer 28											
Dec 14	132.75	119.25	154.	676.65	61.35	38	108.2	126.9	214.5	449.6	1183
Jan 11	114.4	77.6	215.2	638.9	1.1	64	93.25	177.3	202.55	473.1	739
Feb 8	98.55	69.45	290.7	775.4	2.6	74	79.05	239.55	245.8	564.4	763
Mar 8	74.2	103.8	408.	560.1	.9	50	61.15	336.2	205.8	603.15	1206
Totals	419.9	370.	1067.9	2651.05	65.95	226	341.65	879.95	868.65	2090.25	925

Steer 34											
Dec 14	154.1	97.9	154.	439.65	137.35	4	125.6	126.9	139.35	391.85	9796
Jan 11	118.8	73.2	215.2	487.9	18.1	33	96.8	177.3	154.65	428.75	1299
Feb 8	106.95	61.05	290.7	495.4	12.6	62	85.75	239.55	157.05	482.35	778
Mar 8	107.45	70.55	408.	372.7	24.3	47	88.55	336.2	137.7	562.45	1197
Totals	487.3	302.7	1067.9	1795.65	192.35	146	396.7	879.95	588.75	1865.4	1278

Steer 27											
Dec 14	118.9	133.1	154	637.05	90.95	30	96.9	126.9	201.95	425.75	1419
Jan 11	99.25	92.75	215.2	471.15	24.85	12	80.9	177.3	149.35	407.55	3396
Feb 8	105.2	62.8	290.7	496.2	30.8	69	84.35	239.55	157.3	481.2	697
Mar 8	95.7	82.3	408.	334.6	44.4	65	78.85	336.2	122.55	537.6	827
Totals	419.05	370.95	1067.9	1939.	191.	176	341.	879.95	631.15	1852.1	1052

Total											
for Lot 2	1326.25	1043.75	3203.7	6385.7	449.3	548	1079.35	2639.85	2088.55	5807.75	1066

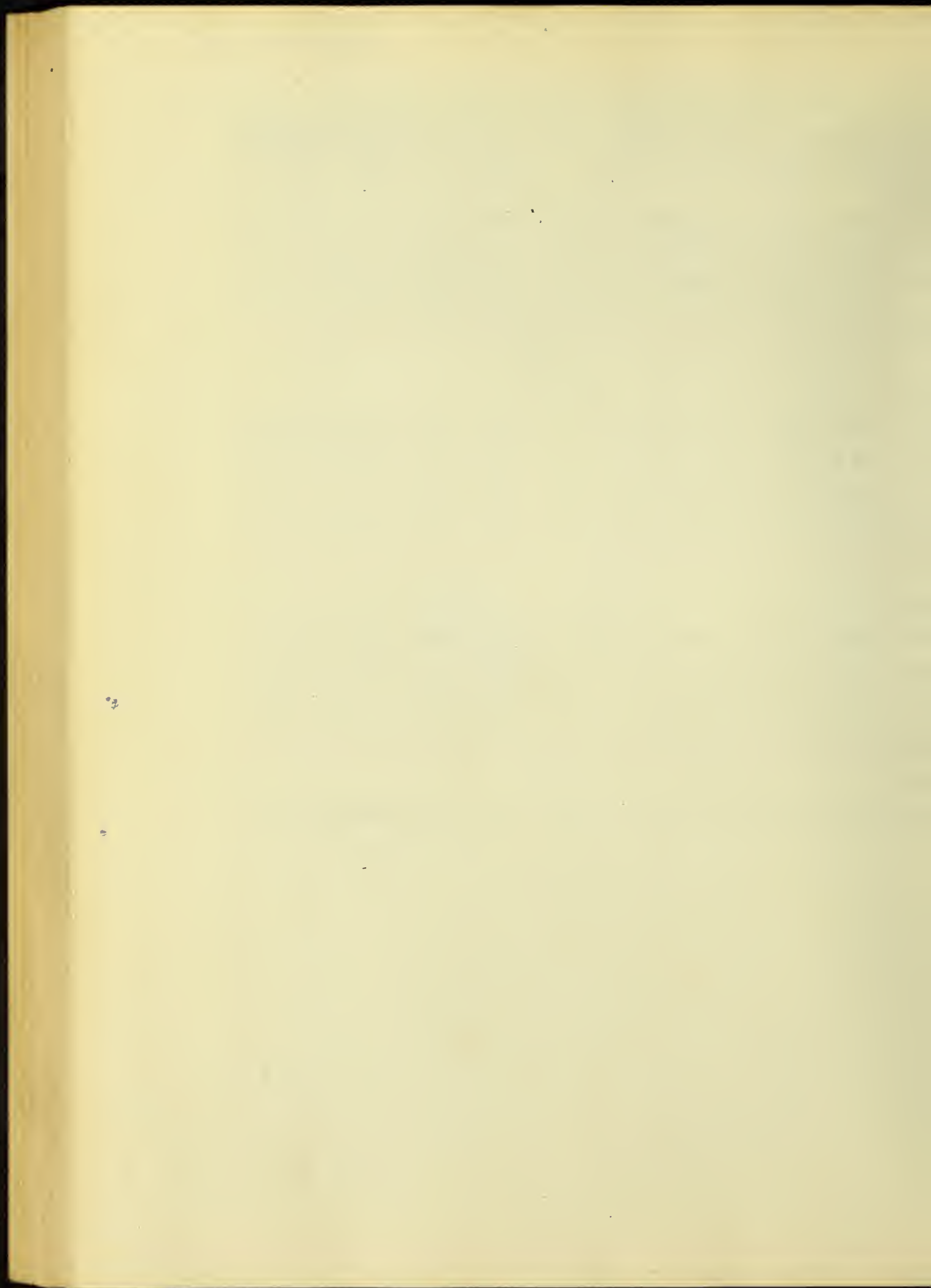


Table No VIII

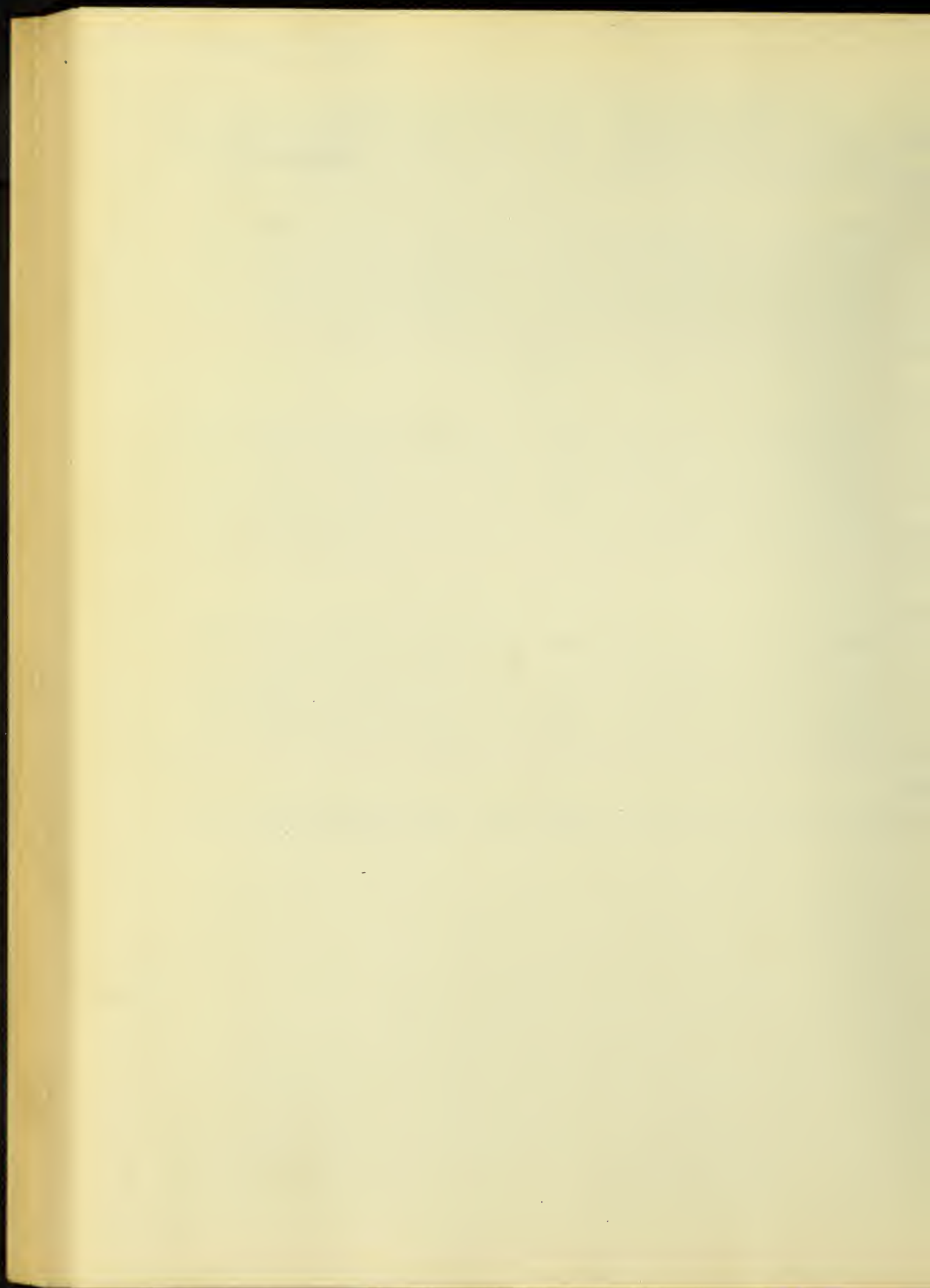
Comparison of Podder and Silage Lot No 3

Period	Stover		Corn		Podder		Gain	Dry Matter			Eaten per 100 lbs gain	
	Eaten	Refused	Pod	Feed	Eaten	Refused		Podder	Podder	Totals		
Steer 31												
Dec 14	159.95	92.05	154	267.35	42.45	309.8	15	130.35	126.9	219.	476.25	3175
Jan 11	103.95	88.05	215.2	279.35	46.65	326.	33	84.7	177.3	228.75	490.75	1487
Feb 8	108.65	59.4	290.7	284.5	54.75	339.25	55	87.15	239.55	232.35	559.05	1016
Mar 8	98.85	79.15	408.	248.25	54.75	303.	51	81.45	336.2	204.55	622.2	1220
Totals	471.4	318.65	1067.9	1070.25	198.6	1278.05	154	383.65	879.95	884.65	2148.25	1395

Steer 30												
Period	Stover		Corn		Podder		Gain	Dry Matter			Eaten per 100 lbs gain	
	Eaten	Refused	Pod	Feed	Eaten	Refused		Podder	Podder	Totals		
Dec 14	154.05	95.95	154.	234.25	31.75	266.	10	125.55	126.9	191.85	444.3	4443
Jan 11	108.25	83.75	215.2	303.95	46.05	350.	61	88.2	177.3	248.8	514.3	843
Feb 8	100.9	67.2	290.7	295.1	71.5	366.6	56	80.9	239.55	241.2	561.65	1003
Mar 8	93.8	84.2	408.	235.95	67.05	303.	41	77.3	336.2	194.4	607.9	1483
Totals	457.	331.1	1067.9	1069.25	216.35	1285.6	168	371.95	879.95	876.25	2128.15	1267

Steer 32												
Period	Stover		Corn		Podder		Gain	Dry Matter			Eaten per 100 lbs gain	
	Eaten	Refused	Pod	Feed	Eaten	Refused		Podder	Podder	Totals		
Dec 14	158.3	93.7	154.	231.2	36.8	268.	25	129	126.9	189.35	445.25	1781
Jan 11	101.4	90.6	215.2	297.85	48.15	346.	41	82.65	177.3	243.85	503.8	1229
Feb 8	112.2	55.8	290.7	318.8	56.4	375.2	38	90.	239.55	260.3	589.85	1552
Mar 8	104.35	73.6	408.	272.45	61.4	333.85	71	86.	336.2	224.5	646.7	911
Totals	476.25	313.7	1067.4	1120.3	202.75	1323.05	175	387.65	879.95	918.	2185.6	1249

Total												
for lot 3	1404.65	963.45	3203.7	3269.	617.7	3886.7	497	1143.25	2639.85	2678.9	6462.	1300



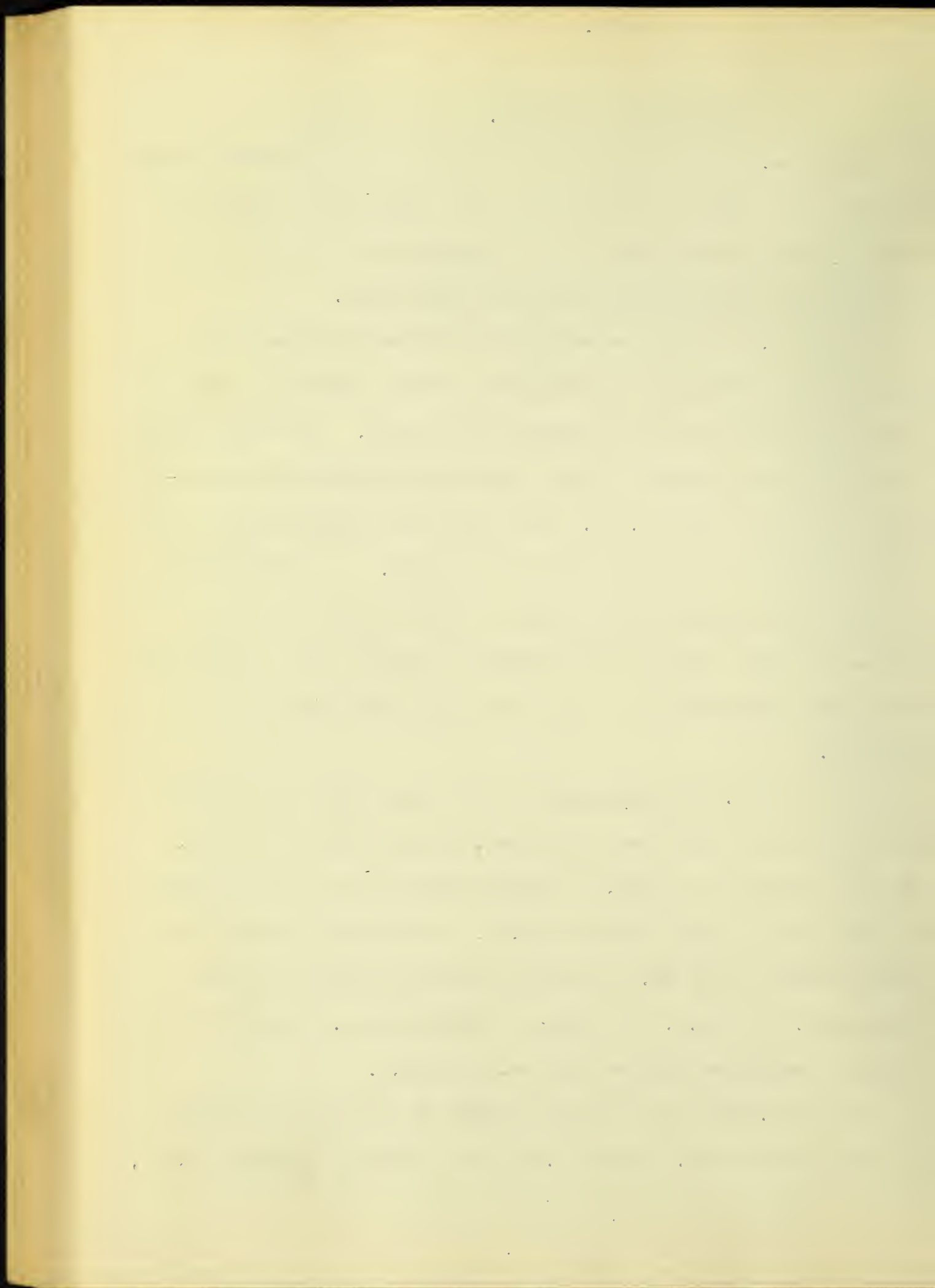
### Explanation of Tables.

Table No. V is a summary of the totals of the different sheets in Table IV. Here is presented the total feed and gain for each steer for the entire period of the experiment, and the grand total for each lot is given at the bottom of each sheet.

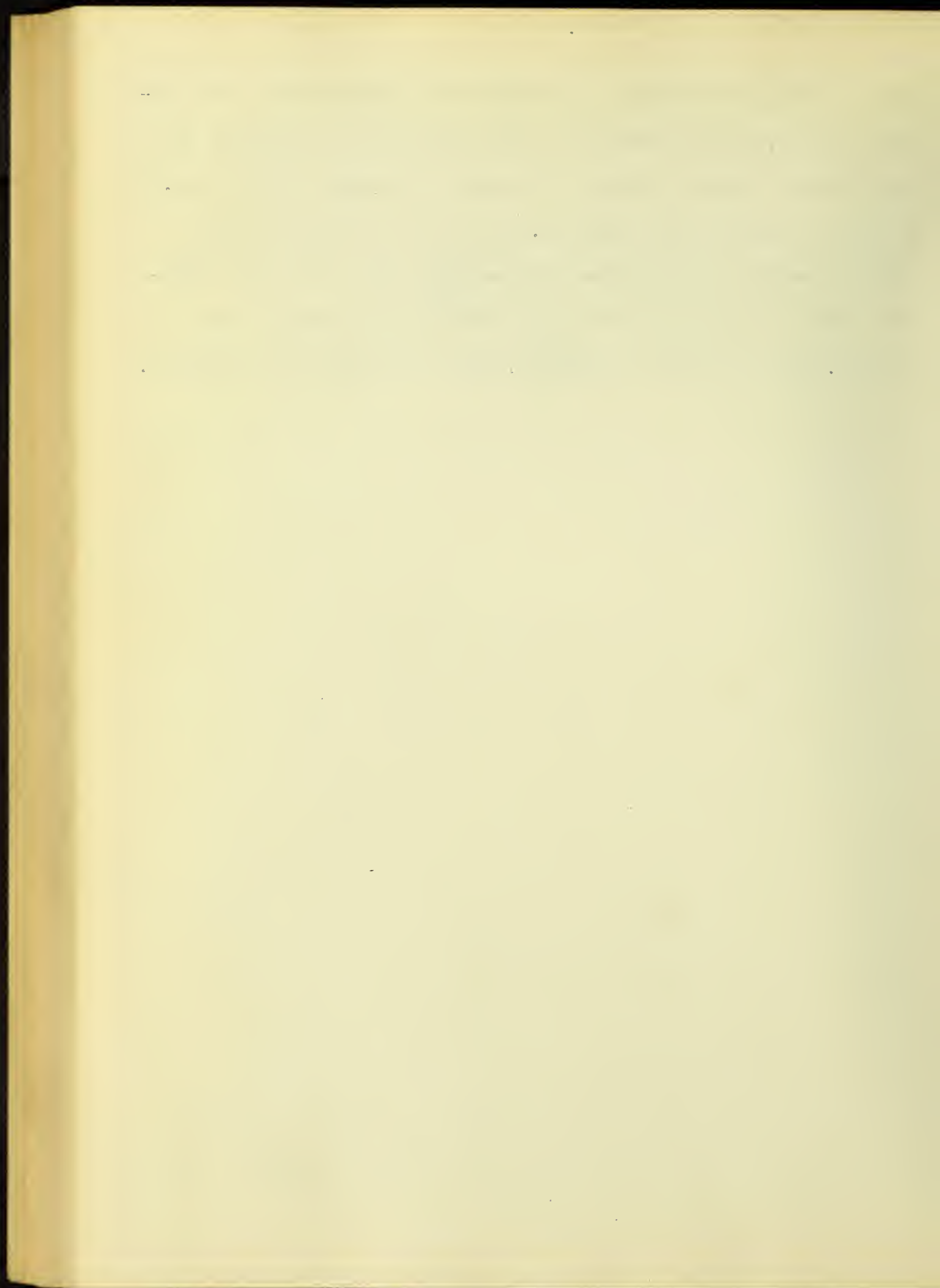
Table No. VI gives a summary of the different feeds eaten by each steer during the entire period of the experiment with the totals for the lots at the bottom of the sheet. Here the refuse stover has been reduced to stover equivalent by means of coefficients given in Table No. III. From this table comparisons of the feed eaten by the different Lots can be made. A column headed total dry roughage has been added which includes the cobs eaten. The corn here has been reduced to shelled corn though the use of the determined per cent of cob in the different kinds of corn fed.

In Table No. VII computations of the feeds eaten per 100 lbs. of gain have been made for each steer, and for each lot as also, for the average of the lot. Computations were made from amounts of feed eaten as given in Table No. VI. The column headed "Grain alone" refers in Lot No. 1 to shelled corn and Gluten meal, while in Lots No. 2 and No. 3. it refers to shelled corn. From the table a direct comparison between lots No. 1 and No. 3.

Table No. VIII was compiled to serve as a more direct means of comparing Lots No. 2 and No. 3. than was afforded in Table No. VII.



Here the feed eaten during the first four periods, during which silage was fed, has been reduced to dry matter, and by comparing the two lots the relative values of fodder and silage can be seen. It will be noticed that steer No. 38 of Lot II was the heaviest eater in regard to dry matter but was still less than the lightest eater of Lot III and then the amount of dry matter eaten per 100 lbs. gain is in Lot II 1060 lbs. while in Lot III it is 1300 lbs.

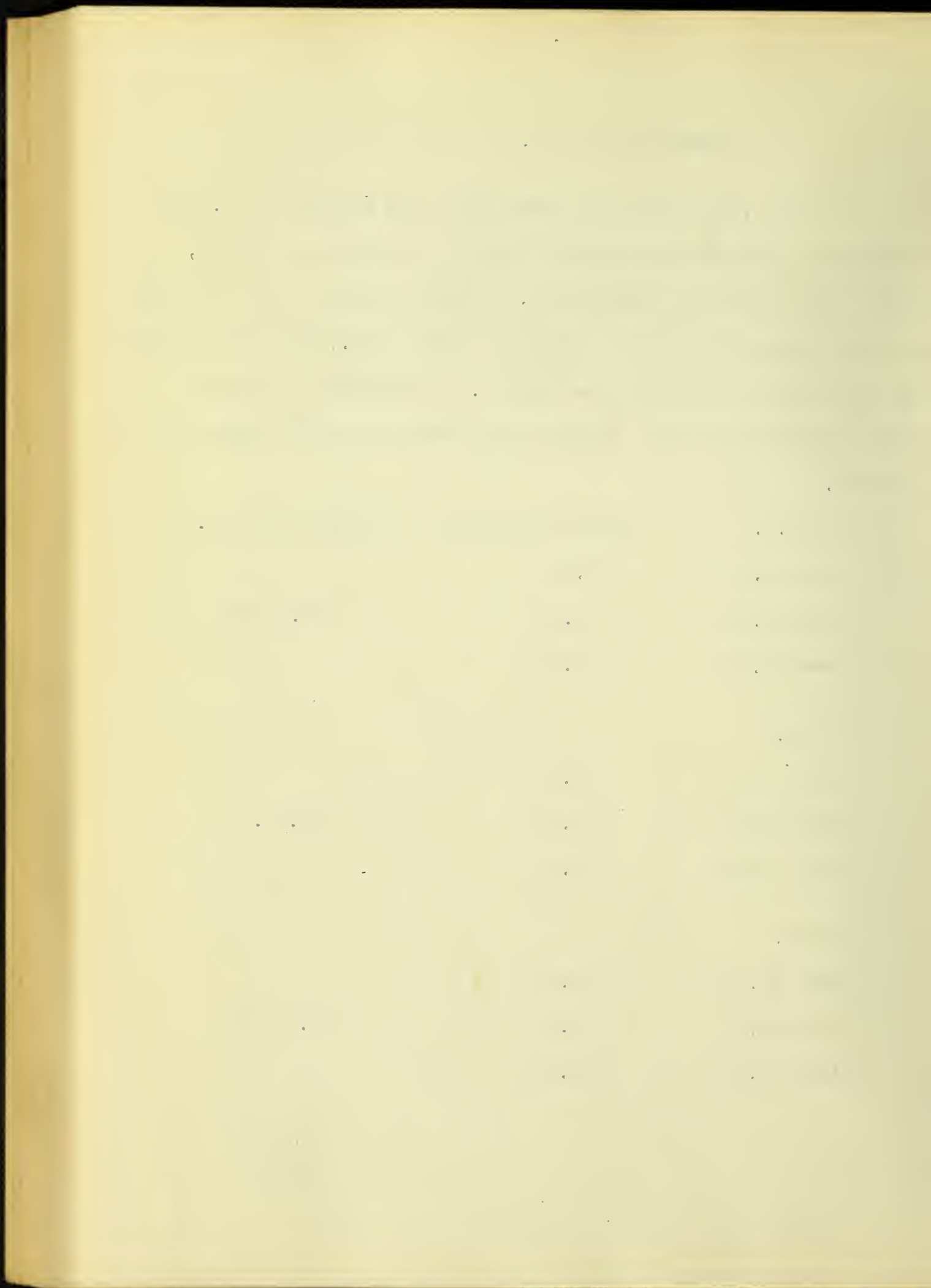




## Disposal of Steers.

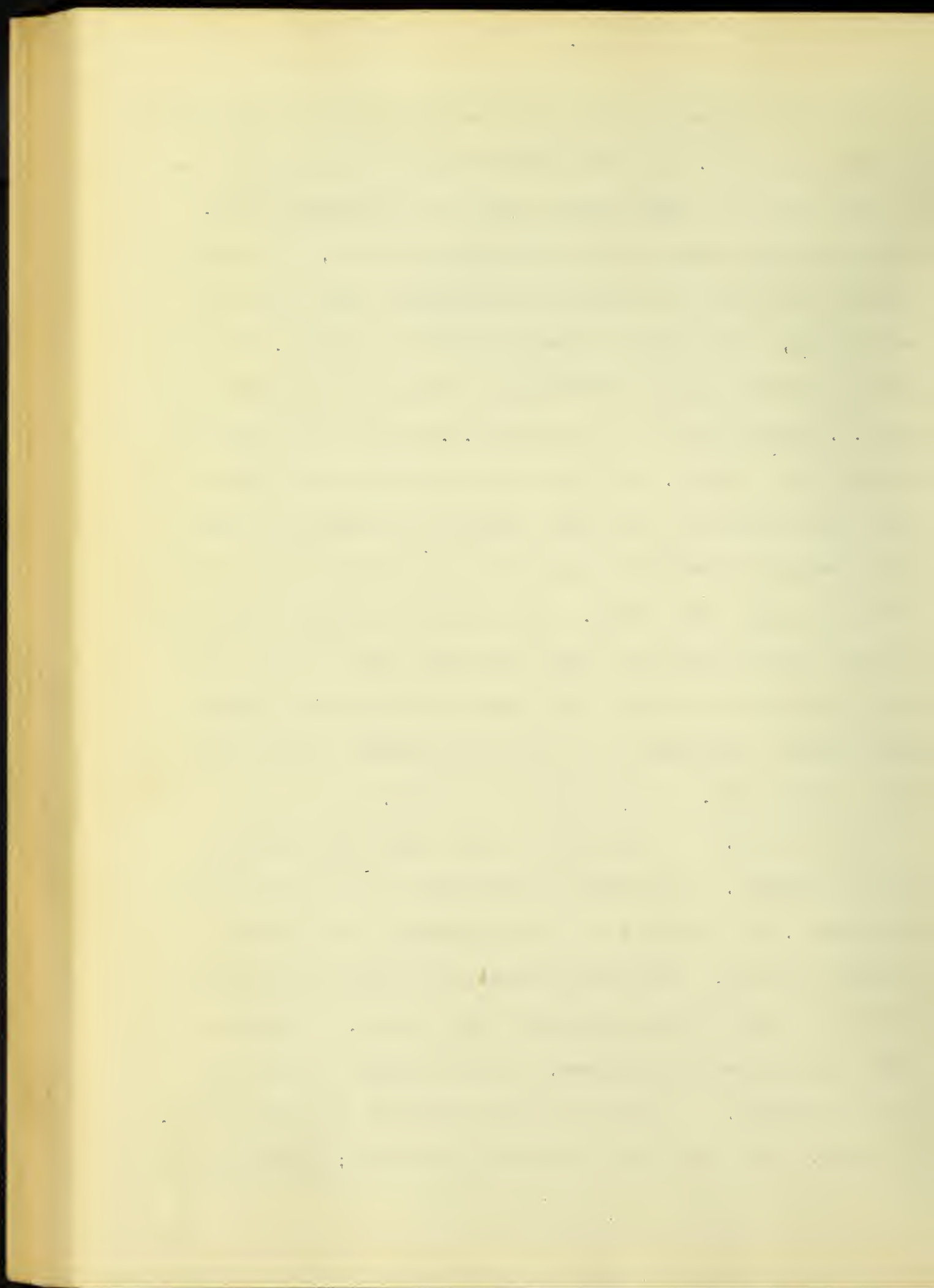
On June 1, 1900 the nine steers were sold to Swift & Co. of Chicago and arrangements were made for the collection of data, while they were being slaughtered. Prices were set upon the steers as they appeared to the head buyer of Swift & Co., when they arrived in the yards on the morning of June 1. He separated them into lots according to their quality and finish and priced them as follows.

Lot No.1.	Individual Price	Average for Lot.
Steer No.26	\$5.00	
Steer No.28	\$4.90	\$4.93 $\frac{1}{3}$
Steer No.29	\$4.90	
Lot No.2		
Steer No 28	\$4.85	
Steer No 34	\$4.85	\$4.85.
Steer No 27	\$4.85	
Lot No.3		
Steer No.31	\$4.65	
Steer No.30	\$5.00	\$4.76 $\frac{2}{3}$
Steer No.32	\$4.65	



The data collected during the slaughter test is recorded in Tables IX and X. The live weight taken at Champaign May 30, is the average of three weights taken on consecutive days. This is a weight taken before the steers had drunk, which doubtless accounts for some of the gain of the Chicago weight which was a full weight. On May 31 the steers were given no water. They were fed their regular grain ration in the morning and were driven to the I.C. Railroad yard at 1 o'clock P.M. and given all the timothy hay they wished. At about six o'clock they were loaded and upon being unloaded at the yards early on the morning of June 1 they were given timothy hay and watered at about 9 o'clock shortly before the buyer came around. They stood the journey fairly well but when seen in comparison with some other cattle at the yards they appeared to be in only fair flesh and would have probably have brought more money if it had been possible to have fed them a longer time. See Tables No IX and X.

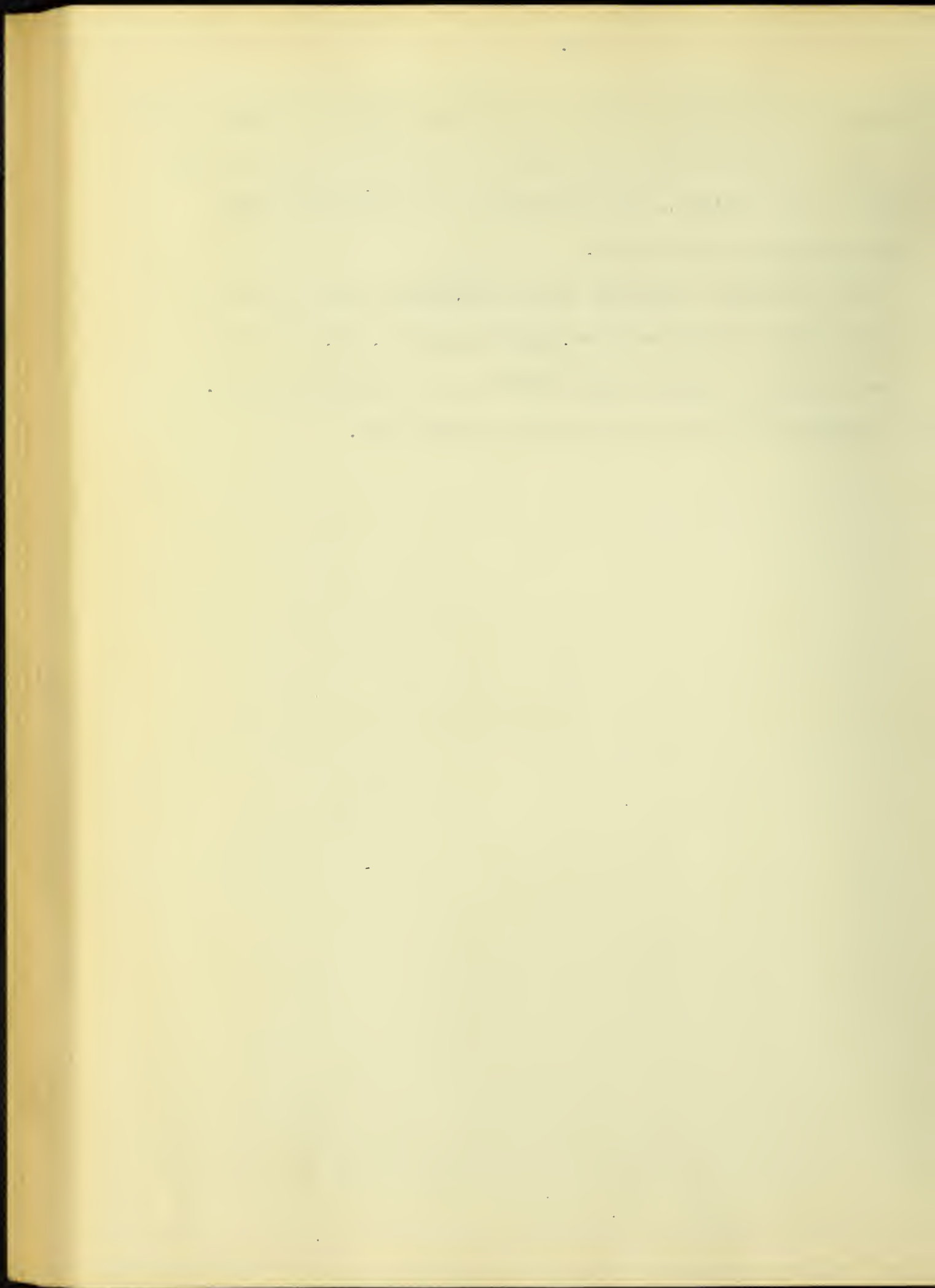
In Table No.X Tripe fat is that taken from around the smaller stomachs. Caul Ruffle & Peck Butter comes from around the pouch. Bed Picking Fat is the trimmings on the inside of the neck and back. Heart fat is that taken from the heart while Pluck fat is that obtained from the heart casing. Good Ends Fat comes from the small intestines. Gut Fat and Bum gut Fat are self explanatory. Machine Fat was estimated at about 1/2 lb. per steer. This fat is that taken out by machine; it contains too



much water and foreign matter to be weighed before running through.

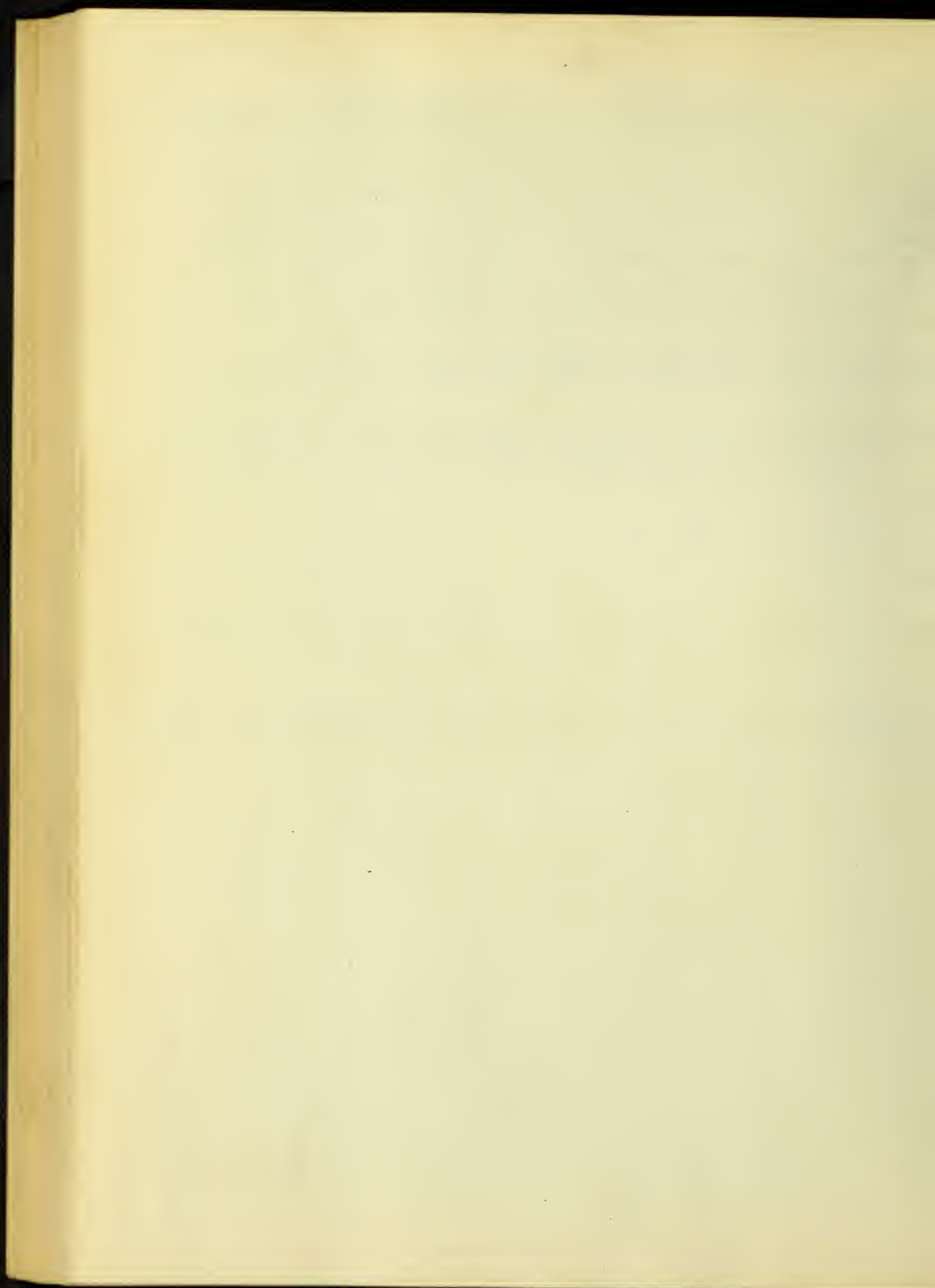
The fat of all the steers was of a good white color and was judged a good quality. No difference in the different lots could be made in this regard.

As to external covering of fat Nos. 28, 30, 33, and 29 were the best, while second were Nos. 26, 27, 31, and 34. No. 32 formed a class by himself being poorly covered on the flanks and back. No distinction of lots could hardly be made here.



Data Procured in Slaughter Test.

	No 26	33	29	Total Lot 1	28	34	27	Total Lot 2	31	30	32	Total Lot 3
Live Wt Champion Males	1368	1195	1139	3702	1242	1177	1140	3559	1179	1242	1087	3508
Live Wt Chicago Junk Gain	1360	1220	1140	3720	1250	1170	1140	3560	1160	1260	1080	3500
Shrink	8	25	1	18	8			1		18		
Dressed Weight	840	719	684	2243	743	655	680	2078	660	745	614	2019
% dressed Weight	61.76	58.93	60.	60.3	59.44	55.98	59.65	58.37	56.9	59.13	56.85	57.69
Weight of Hide	85	87	77	249-	87	81	78	246-	77-8	83-8	74	235-
Height of Heart	5-8	4-15	4-12	15-3	4-8	4-5	4-4	13-1	5-	4-15	4-11	14-10
Height of Liver	15-8	13-4	12-9	41-5	11-4	12-1	12-6	35-11	10-5	11-12	10-9	32-10
Height of Internal Fat table No 8	64-10	51-13	52-9	169-	42-	41-12	36-8	120-4	41-13	45-14	31-1	118-12





Summary of Internal Fat

	No 26	33	29	Total Lot 1	28	34	27	Total Lot 2	31	30	32	Total Lot 3
	lb-oz	lb-oz	lb-oz	lb-oz	lb-oz	lb-oz	lb-oz	lb-oz	lb-oz	lb-oz	lb-oz	lb-oz
Tripe Fat	4-8	3-6	3-8	11-6	3-5	2-6	2-12	8-7	3-	2-12	2-10	8-6
Caul, Ruffle & Cuck Buttons	41-4	32-11	33-4	107-3	25-8	25-12	20-14	72-2	23-13	27-7	18-10	69-14
Bed Pick- ing Fat	1-10	1-7	1-8	4-9	1-6	1-7	1-5	4-2	1-3	1-6	1-3	3-12
Heart- Fat	7	7	6	1-4	5	5	3	13	4	6	3	13
Pluck- Fat	3-6	2-14	3-	9-4	2-3	2-	1-8	5-11	2-5	2-11	1-3	6-3
Good Ends Fat	2-4	2-5	2-7	7	2-	2-	1-14	5-14	2-	2-2	1-4	5-6
Gut- Fat	9-13	6-14	7-2	23-13	6-4	6-8	6-12	19-8	7-15	7-12	4-14	20-9
Bone Gut Fat	14	1-5	14	3-1	9	14	12	2-3	13	14	10	2-5
Machine Fat (estimated)	8	8	8	1-8	8	8	8	1-8	8	8	8	1-8
Totals	64-10	51-13	52-9	169-	42-	41-12	36-8	120-4	41-13	45-14	31-1	118-12





*Steers at the Beginning of the Experiment.*





*Steer No 26 - taken Mar 31, 1900*



*Steer No 33 - taken Mar 31, 1900*



*Steer No 29 - taken Mar 31, 1900*





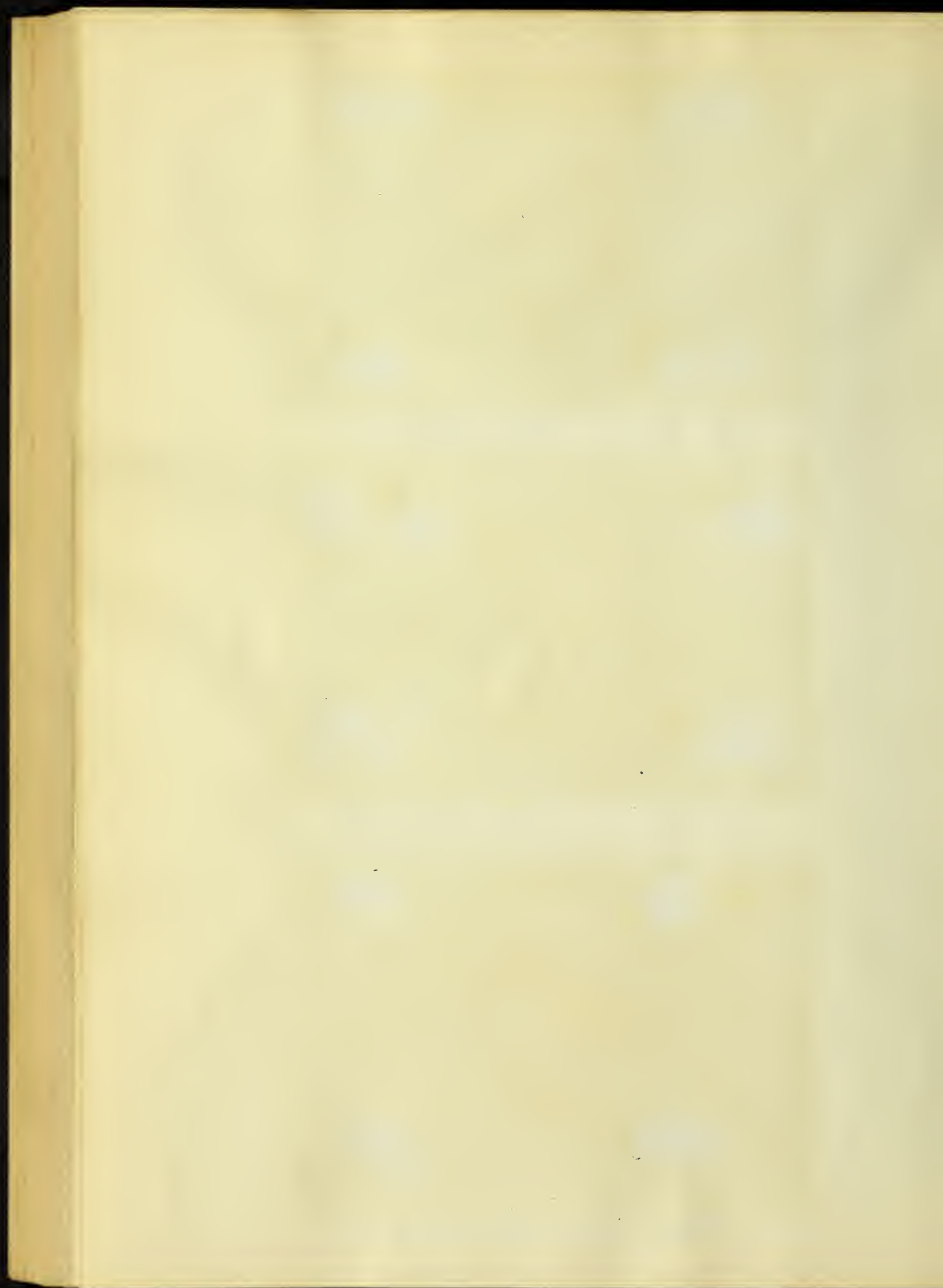
*Steer No 28 - taken Mar 31, 1900*



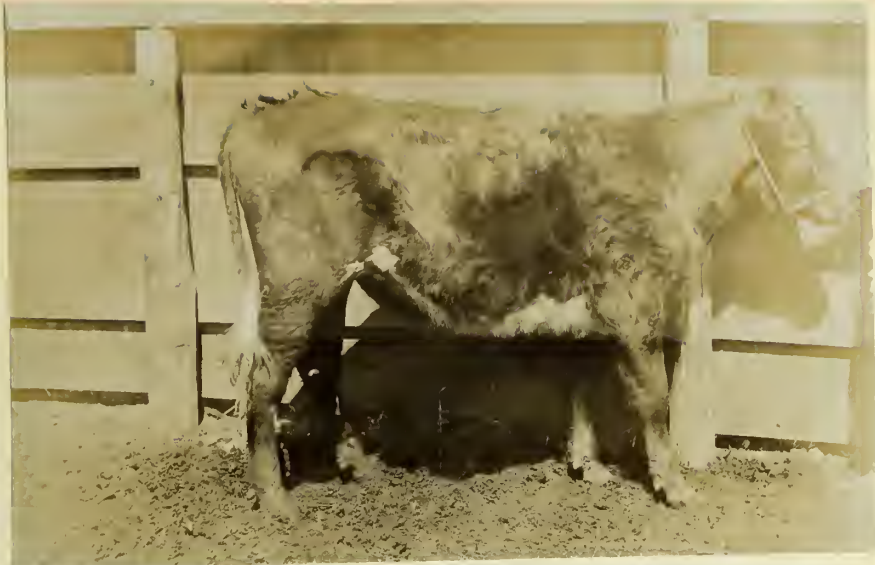
*Steer No 34 - taken Mar 31, 1900*



*Steer No 27. taken Mar 31, 1900*







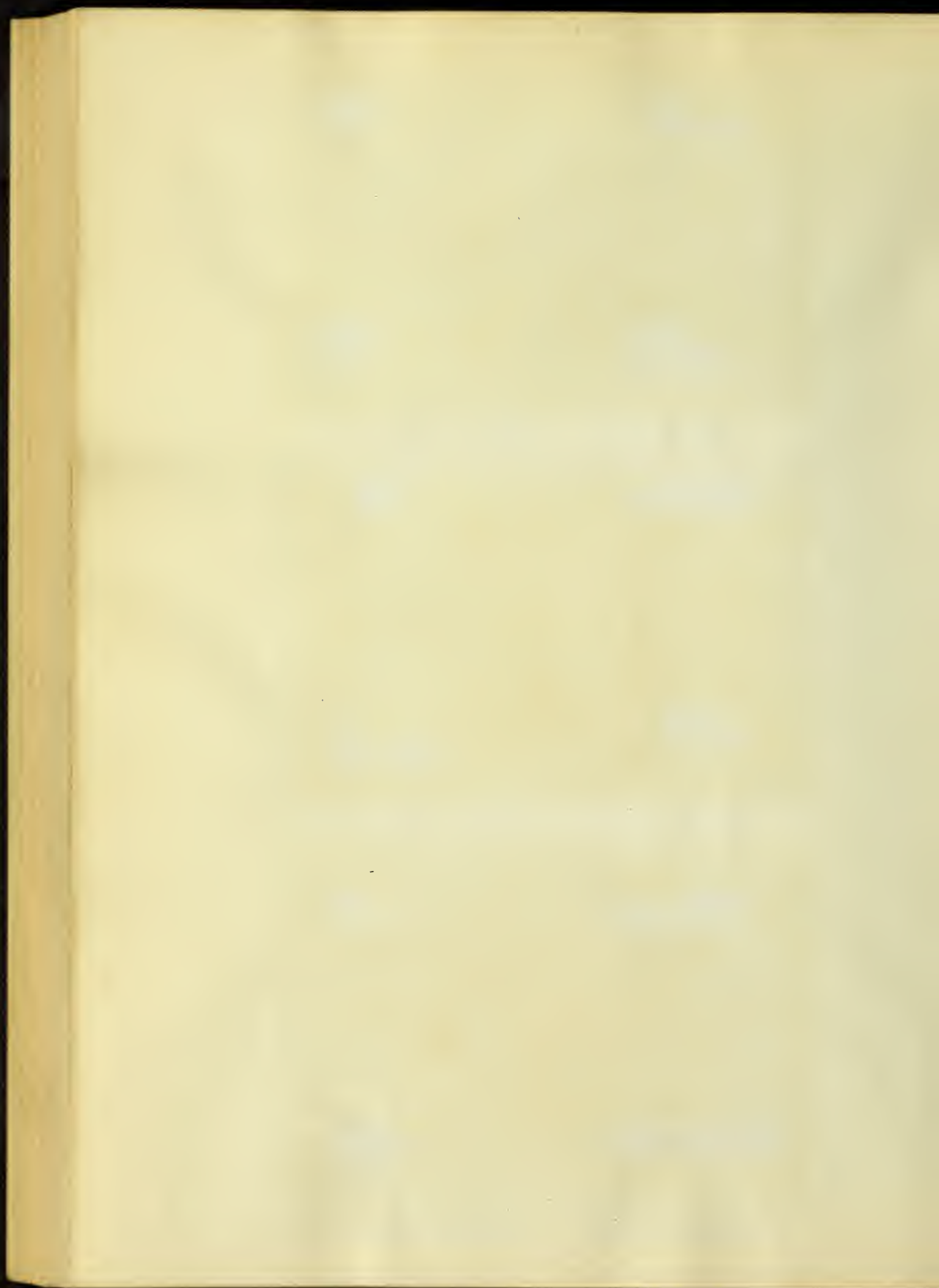
Steer No 31 - taken Mar 31, 1900



Steer No 30 - taken Mar 31, 1900



Steer No 32 - taken Mar 31, 1900

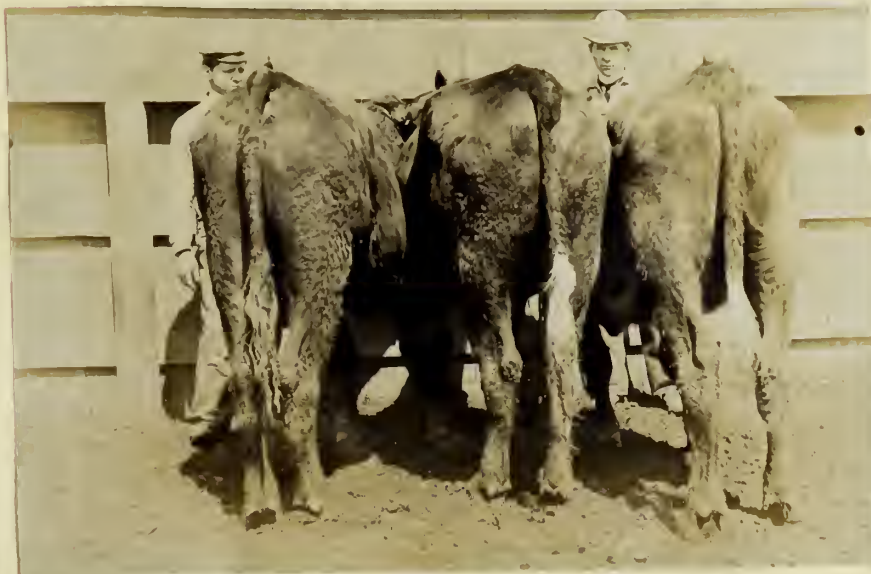




*Lot No 1 - taken Mar 31. 1900*

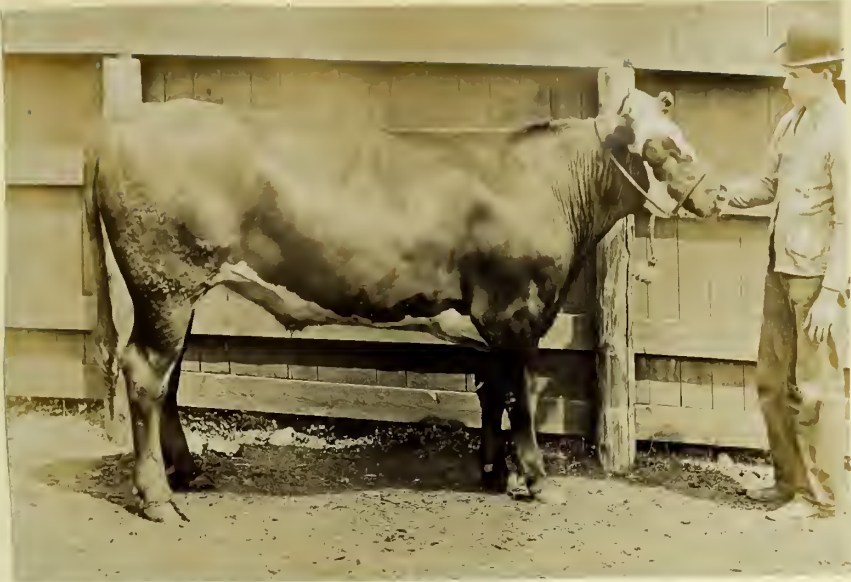


*Lot No 2 - taken Mar 31. 1900*

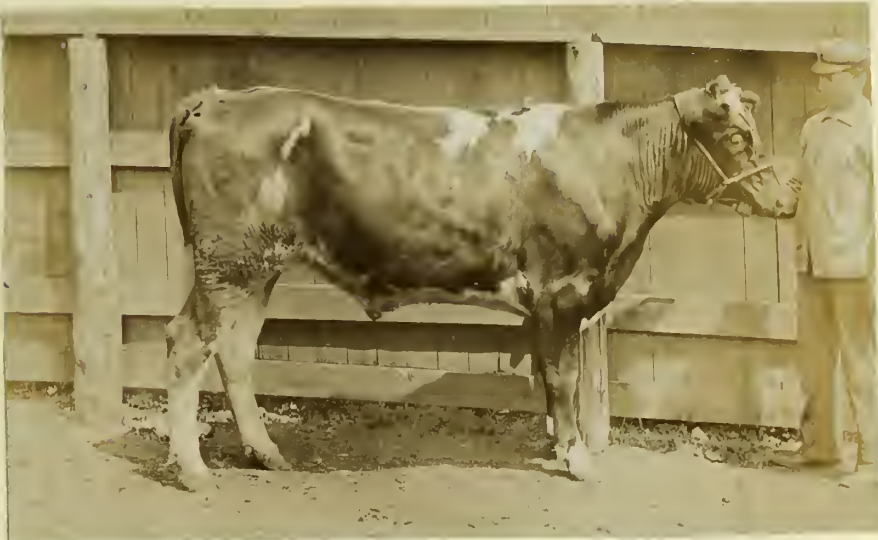


*Lot No 3 - taken Mar 31. 1900*





*Steer No 26 - taken May 24, 1900*



*Steer No 33 - taken May 24, 1900*



*Steer No 29, taken May 24, 1900*





*Steer No 28 - taken May 24, 1900*



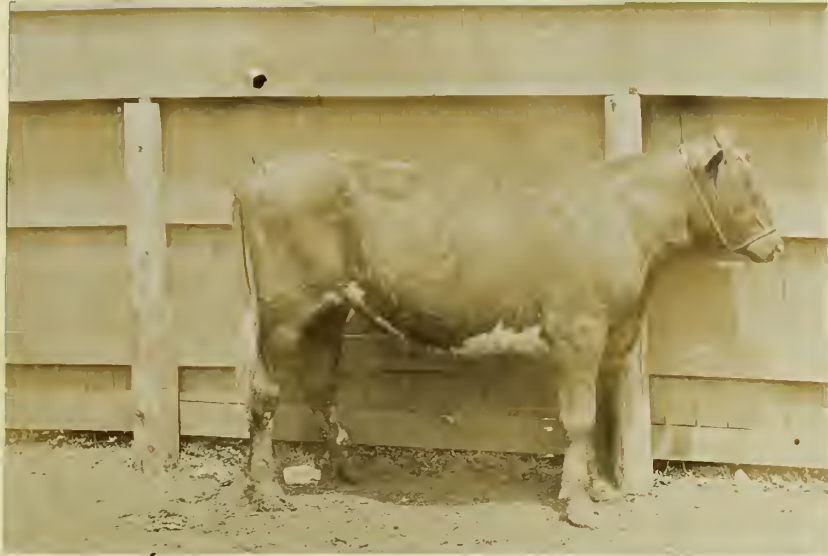
*Steer No 34. - taken May 24, 1900*



*Steer No 27 - taken May 24, 1900*







*Steer No 31 - taken May 24, 1900*



*Steer No 30 - taken May 24, 1900*



*Steer No 32 - taken May 24, 1900*





*Lot No 1 - taken May 24, 1900*



*Lot No 2 - taken May 24, 1900*



*Lot No 3 - taken May 24, 1900*



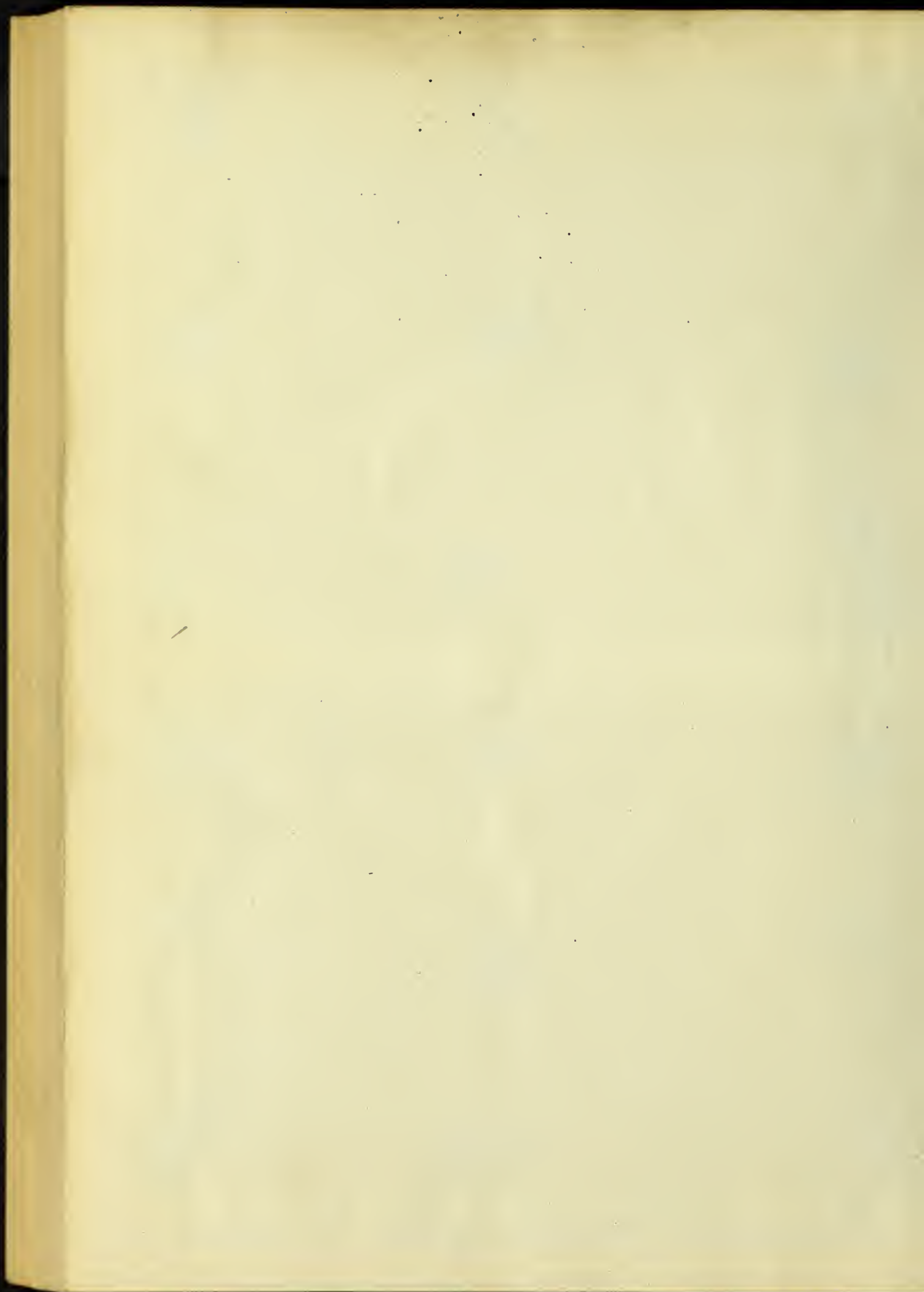


*Steers at the Conclusion of the Experiment*





*Steers at the Conclusion of the Experiment.*



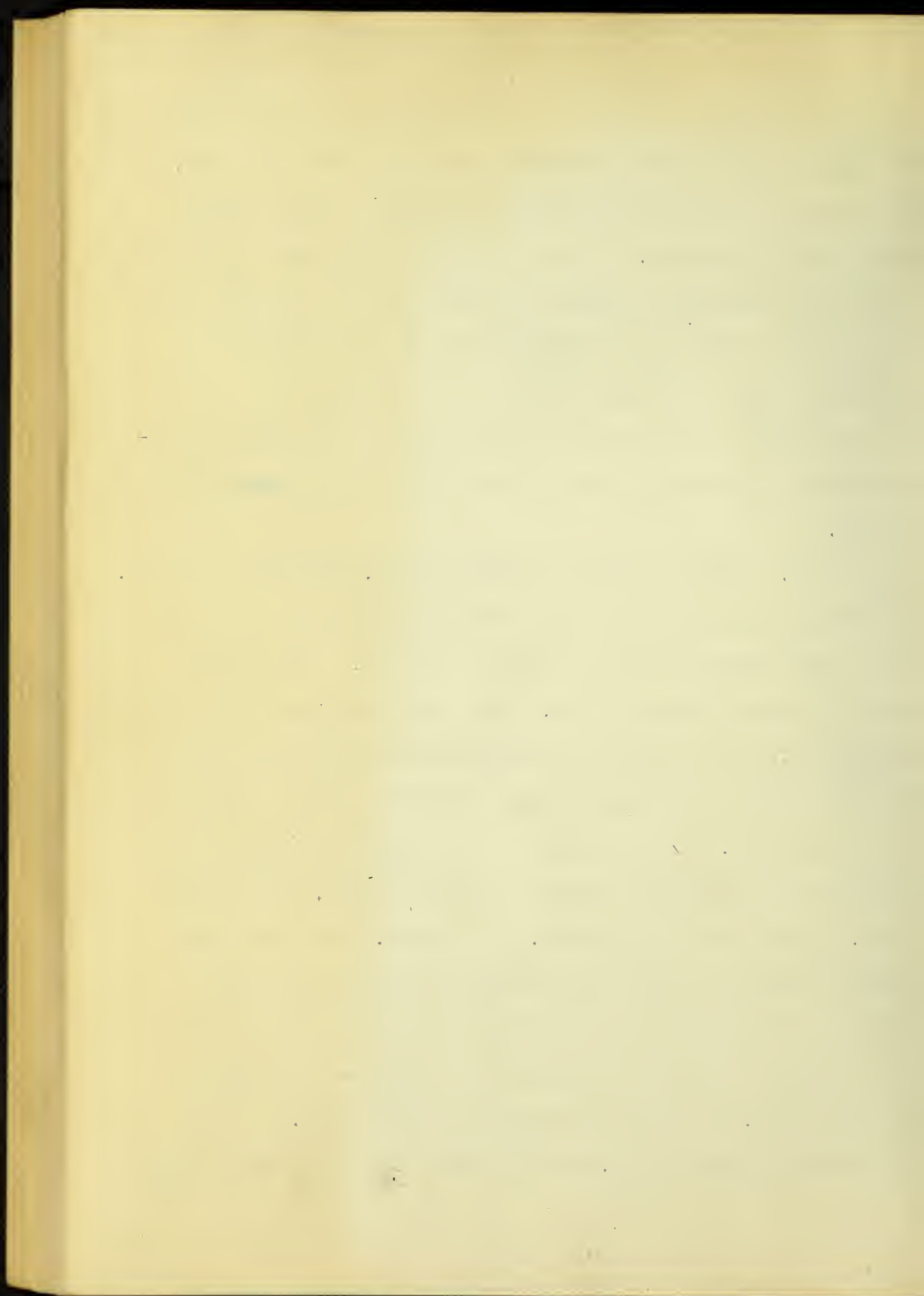


## Pig Experiment.

It is evident that, wherever an experiment is carried on for the purpose of comparing different feeds for beef production, the amounts of these feeds actually digested by the animals must be only considered. Knowing as we did that from 10 to 20 o/o of the corn fed passes through the steer whole it was decided that the best way to keep track of this waste was by following the steers with pigs and computing their gains and knowing how much corn was needed under the same conditions for such gain, a determination of the amount of corn obtained by the pigs manure could be made.

On Nov. 28 twelve pigs were bought from Mr. Chester of Champaign. Of these 7 were pure bred Poland China pigs, the other 5 were a cross from a duroc boar upon a Poland china sow. The average weight of these pigs was 68 lbs. They were considered a very good average lot. Only 11 of the pigs arrived safely at the barn on the date mentioned above, one having escaped but he was brought in a few days later. The pigs were all put into a box stall in the basement of the barn on a ration of corn and water, getting about 20 lb. of corn night and morning. On Dec. 12 the pigs were numbered from 22 to 33 by means of ear labels and were then weighed each separately as also were they on the 13th and 14th, the average of these three weights being taken as the weight of the pig on Dec. 13th when the experiment proper began.

After weighing on Dec. 14th the twelve pigs were divided into



4 lots with reference to their weights, sex and breeding. No distinction was made as to which lot of pigs was to follow a certain lot of steers. It happened that Lot I was the name given to the pigs which were placed after the steers getting Gluten Meal was made up as follows:

No. 22 black sow weight 64.3 lbs.

No. 24 red sow weight 54.6 lbs.

No. 29 black barrow weight 77.6 lbs.

Average weight of Lot I is 65.6 lbs.

Lot II was the lot following the steers getting silage and was made up as follows:

No. 27 black sow weight 74.5 lbs.

No. 23 red barrow weight 57.4 lbs.

No. 25 black barrow weight 53.1 lbs.

Average weight of Lot II is 61.7 lbs.

Lot III followed the steers getting corn alone and was made up as follows:

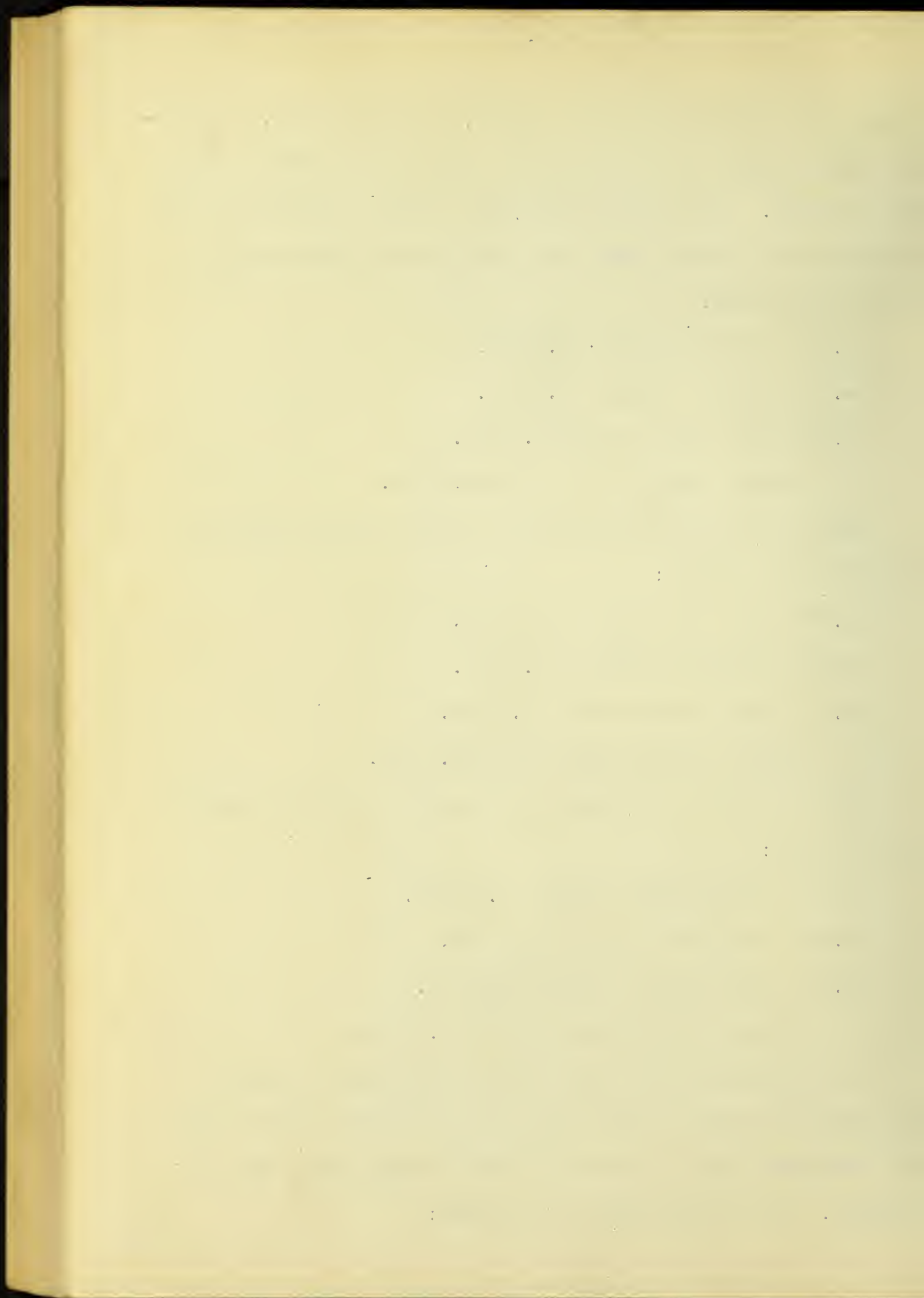
No. 22 black barrow weight 72.25 lbs.

No. 28 black sow weight 60 lbs.

No. 26 red barrow weight 56.1 lbs.

Average weight of Lot III is 62.8 lbs.

Lot IV was put into a pen in the south eastern corner of the stable and given a small lot to run in, the aim being to make the conditions here so nearly like those of the other pigs as possible. Lot IV was made up as follows:



No.31 black sow weight 70.9 lbs'

No.33 red barrow weight 59. lbs.

No.30 red barrow weight 45.5 lbs.

Note - on Jan.16th Pig No.25 of Lot II was found dead at 6 A.M. He was apparently well the night before. No.33 of Lot IV was put into his place, Lot IV to continue with pigs No.31 and 30, the only desire being to have here so near an average of the other pigs as possible.

Note - on March 30 it seemed best that a new division of the pigs should be made as the lots had come to be so uneven that no data of importance could be obtained; so pigs No.22 and 24 of Lot I and No.23 of Lot II were taken out and put into the basement of the barn as Lot V. They seemed to be the culls among the pigs, having made no respectable gains and were kept only to see if they made a change for the better. Table No. will show their feeds and gains. Pig No.23 was changed from Lot III to Lot I and six new Berkshire pigs were obtained and divided among Lots 1, 2 and 3 as follows.

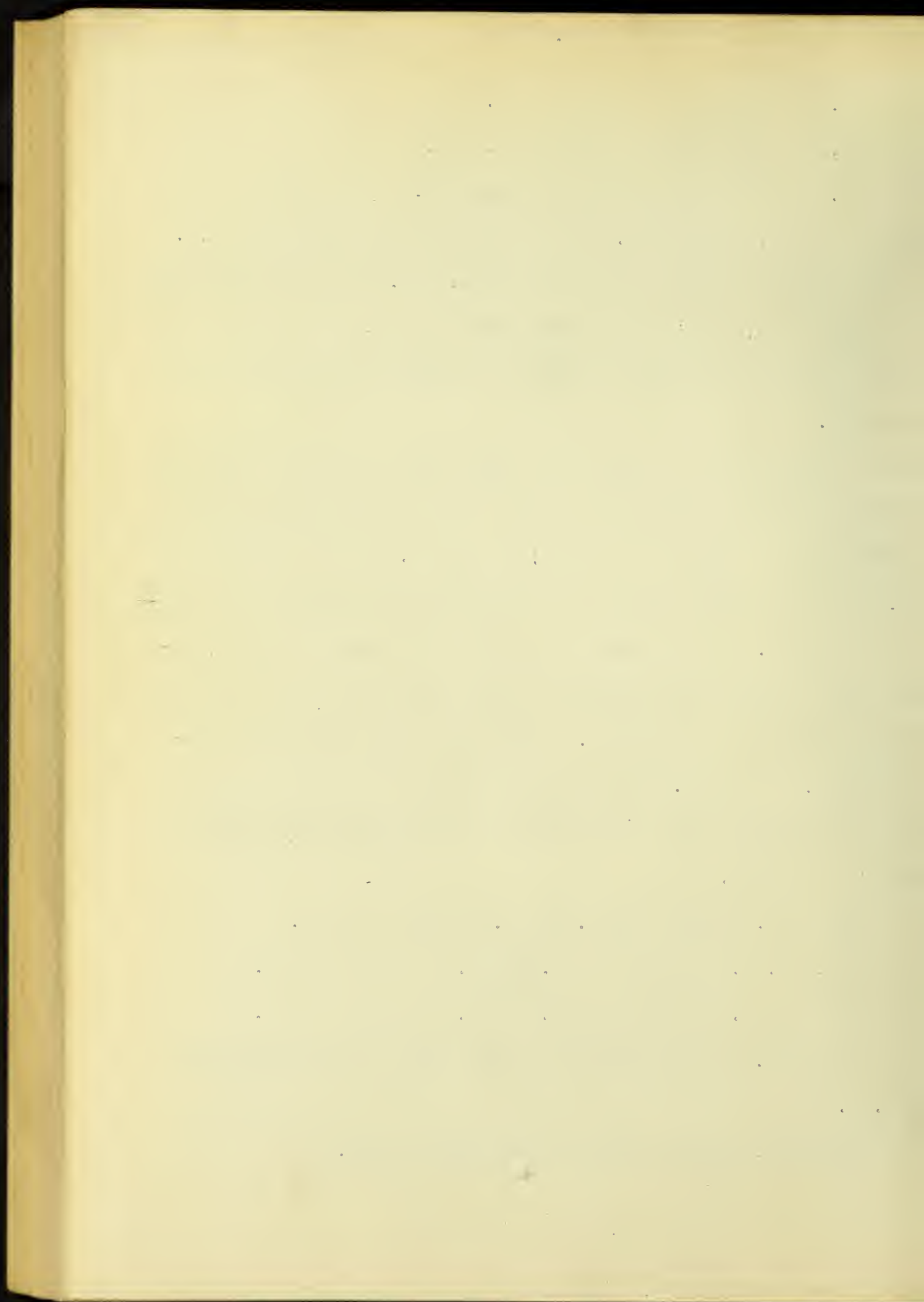
Lot I No.9 weight 43lbs. and No.11 weight 44 lbs.

Lot. II.No.7 weight 37 lbs. and No.12 weight 45 lbs.

Lot III No.3 weight 35 lbs. and No.13 weight 43 lbs.

Table No.11 gives weights of lots after new divisions on Mar.21.

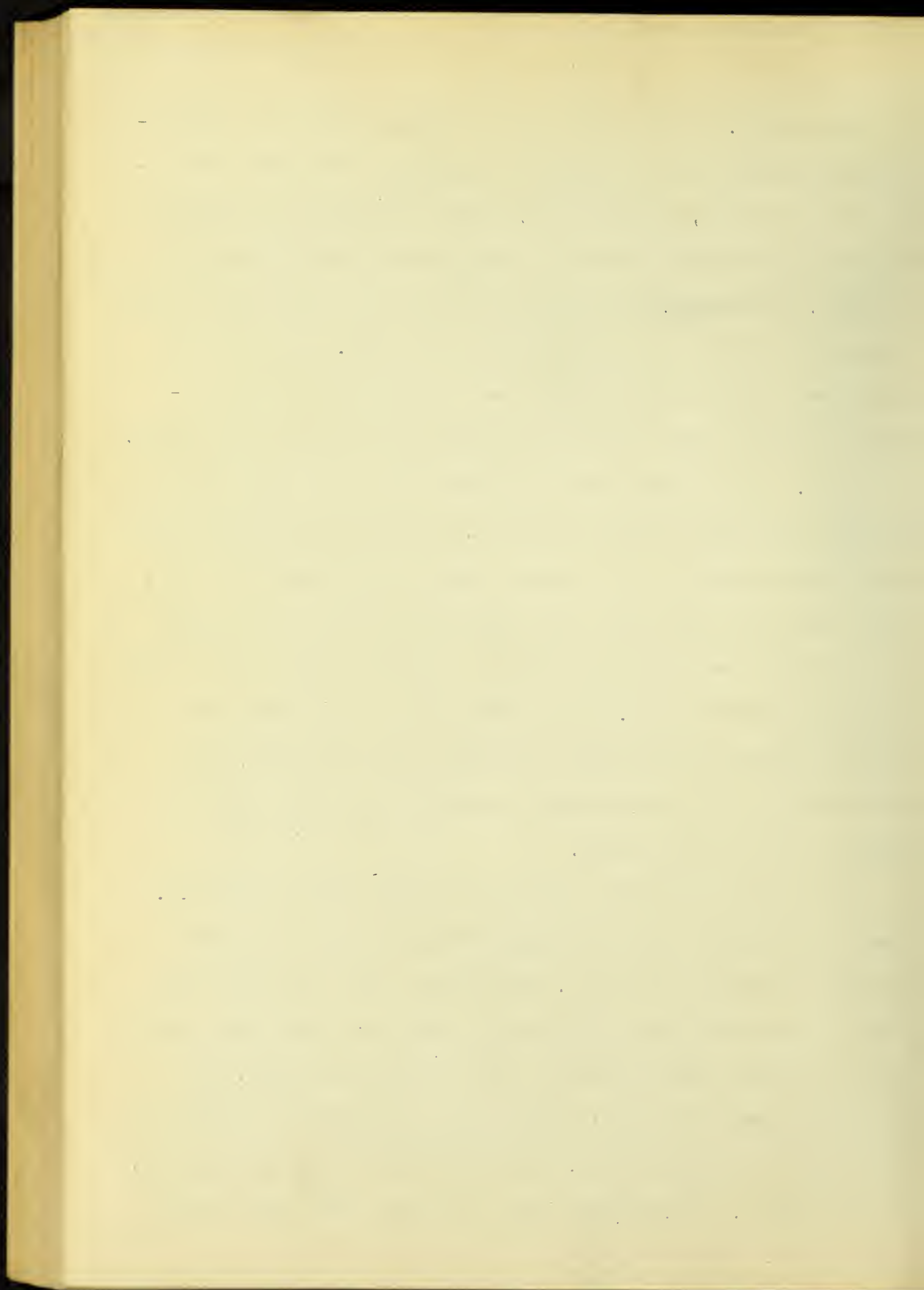
Table No.12 gives gains of new pigs by lots.



Management. The stable was so arranged that the pigs constituting Lots 1, 2 and 3 should be constantly with their respective lots of steers, following them in the lot during the middle of the day and having the chance to come into the stable with them at night. The manure from each lot of steers was also thrown back into their own lot to be worked over by the pigs. The pigs of Lot IV were to get only feed that was weighed out to them, serving as a sort of check lot for the gains of the other lots of pigs.

Feed. It was found that in order to keep the different lots of pigs in the same thrifty condition, that some extra corn besides what they obtained from the manure would be necessary, and also, after the first period that they needed some other feed besides corn to keep them in good condition, so shorts was made part of the ration and fed until Mar. 22 when Gluten feed was substituted for two periods, no meal being fed during the last period, as it was found that the pigs were not cleaning up the corn with the manure as well as they ought.

Burr's White Corn, the same as was to the steers at the A.M. feed in the early part of the experiment was fed to the pigs— it being weighed out in 20 lb. lots and put into a tin can from which it was fed as the pigs seemed to need it; close watch being kept to see that they cleaned up the corn in the manure. At the end of every two weeks' period the corn remaining in the can was weighed back and 20 lbs. were put in for the next period etc. Of the shorts .6 lbs. was made into a thin slop with water which

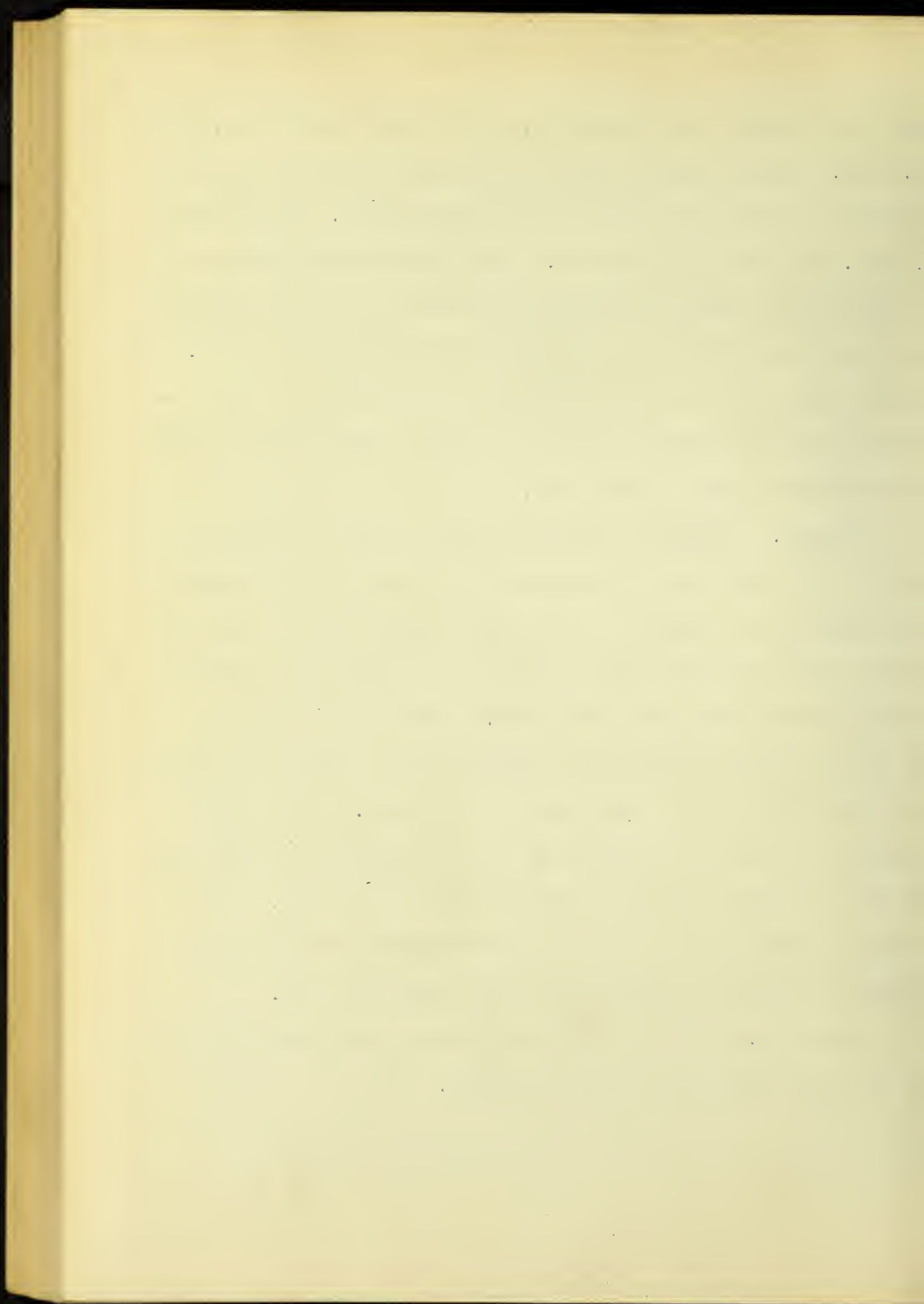




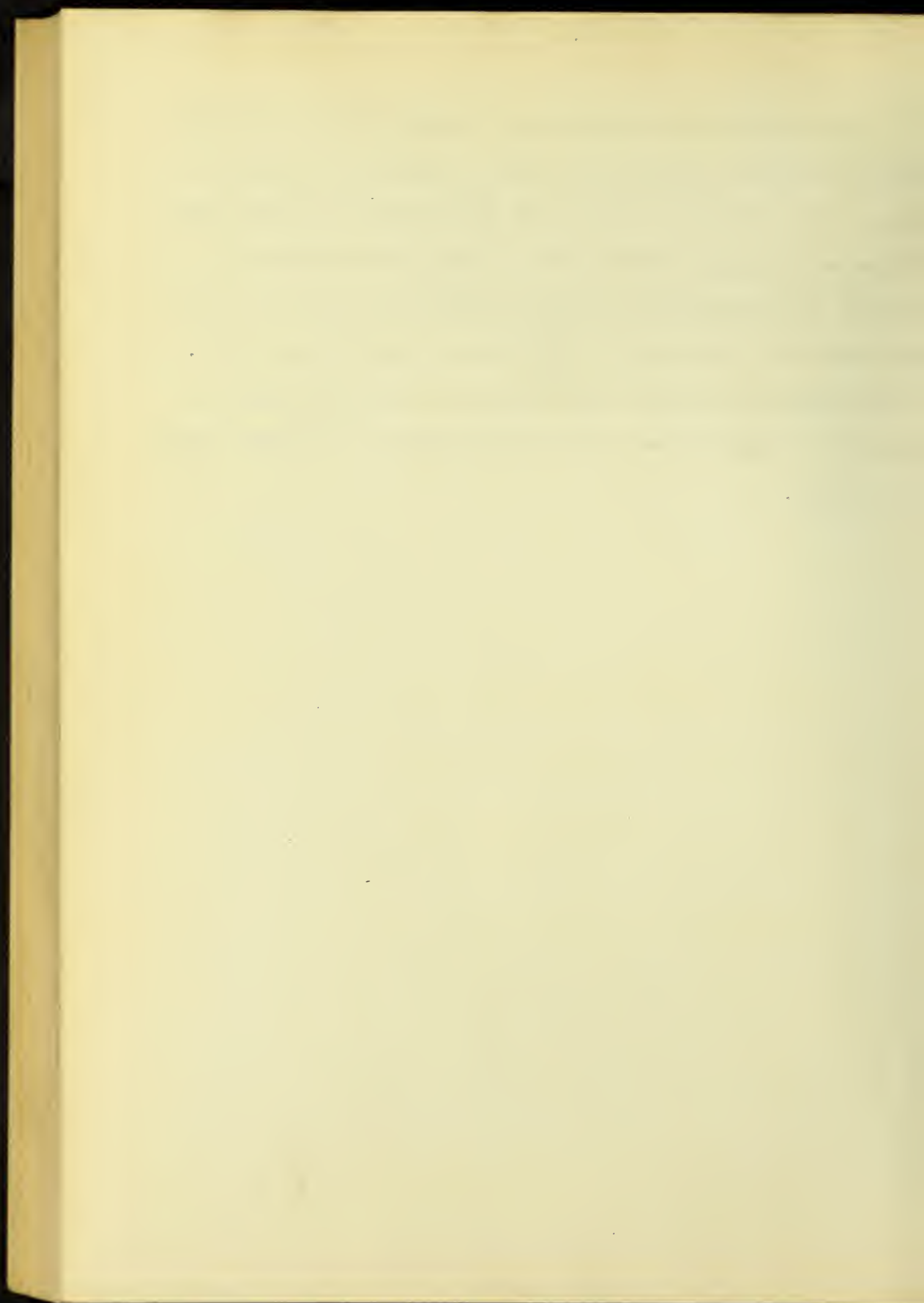
was warmed during the cold months, and fed night and morning, making 1.2 lbs. meal per day for each lot except Lot IV which consisting of only two pigs received but two thirds as much. Of the Gluten .8 lbs. was fed in the same way. Some difficulty was experienced in getting the pigs to clean this up as well as they ought, and they never ate it with the same relish as they did the shorts. The proper amount of meal to last 14 days was weighed out at the beginning of the period and put into a con the same as the corn only here there was none to weigh back.

Weights. Weights of pigs were made on three successive days at the end of each period, and the average of these weights was taken as the weight on the middle day, the same as with the steers, only here individual weights were not made; the weights being taken by lots, except after Mar. 21 where the new division of pigs was made; weights were taken so that a determination of the gains of the little pigs could be also made. The scales used were the same as used for the steers during the latter part of the experiment - the 1 ton stock scales in the barn. A weight of the pigs was also made in the middle of each period to serve as a guide in feeding corn to the different lots.

Tables No. XI gives a detailed account of the feed and gains of the pigs during the entire experiment.



Although the pig experiment was started with the intention herein outlined we found that it was so difficult to keep the pigs of the different lots in even approximately the same condition as to general thrift that we do not feel justified in drawing any conclusions from their gains that would in any way affect the conclusions drawn from the gains of the steers. We have however included here the table of feed and gains for pigs that a general idea of the tendency of the experiment might be obtained.



## Pigs - Feed and Weights Dec 14 - Jan 10

Date	Lot No 1 Corn Shorts	Lot No 2 Corn Shorts	Lot No 3 Corn Shorts	Lot No 4 Corn Shorts
Dec 14				
To Dec 27	29.05	28.2	27.3	110.
Dec 28				
To Jan 10	31.55	27.35	23.3	117.7
Totals	60.6	55.55	50.6	227.7

## Weights and Gains

Date	Wt	Ab.	Wt	Av.	Wt	Av.	Wt	Av.
Jan 9	206		177		234		201	
10	204.5	206	177.5	178	227	231	201.5	203
11	209		180.		232		207.5	
Gains		9		-7		43		28
Gain per pig		3		-2.3		14.3		9.3

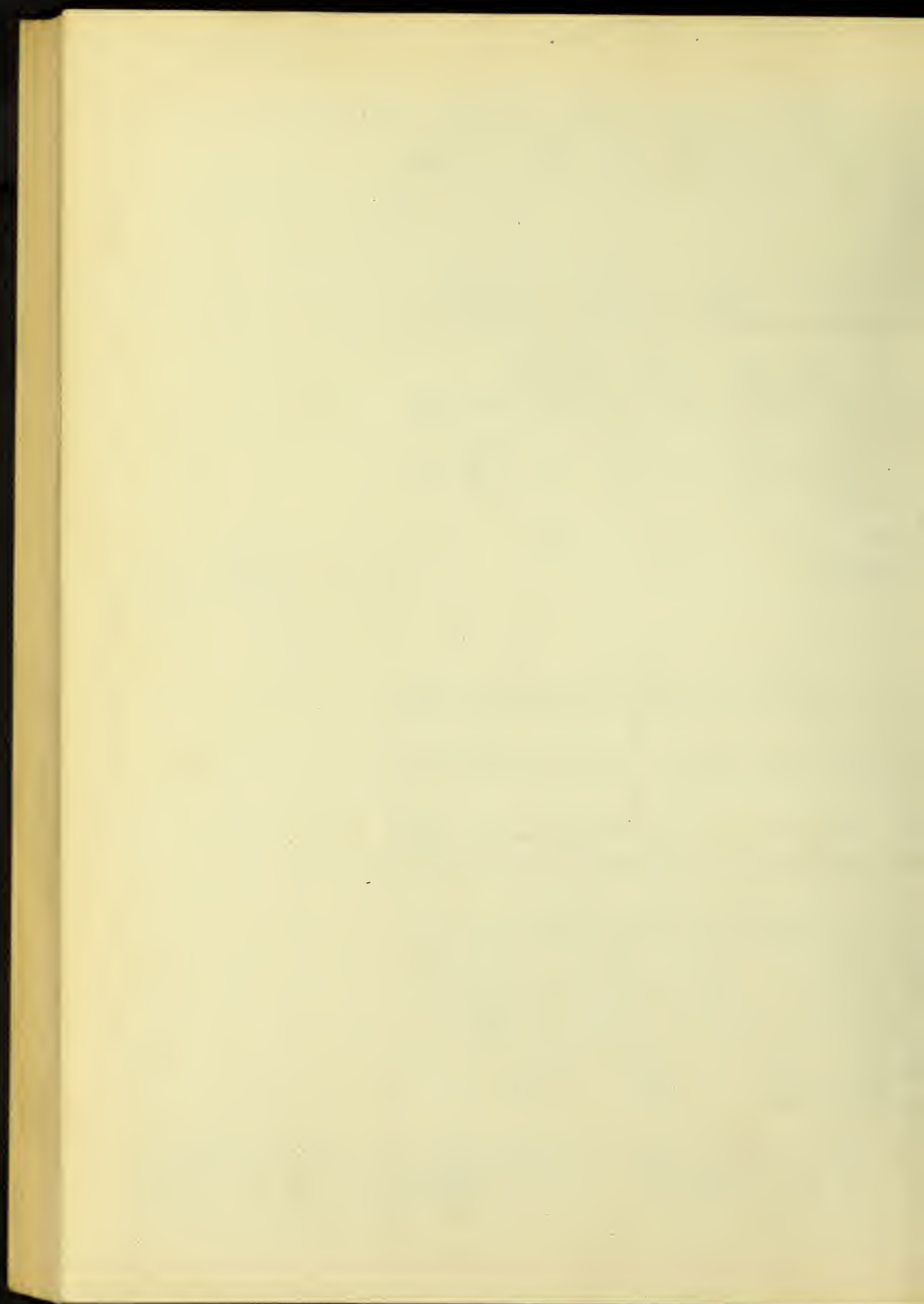
## Jan 11 - Feb 7

Date	Lot I Corn Shorts	Lot II Corn Shorts	Lot III Corn Shorts	Lot IV Corn Shorts
Jan 11				
To Jan 24	46.5	6.65	35.6	6. 14.25
Jan 25				
To Feb 7	33.85	15.	61.1	15.65 24.65 15. 73.4 10.55
Totals	80.35	21.65	96.7	21.65 38.9 21.65 164.95 15.3

## Weights and Gains

Date	Wt	Ab.	Wt	Av.	Wt	Av.	Wt	Av.
Feb 6	229		220.5		278		162.5	
7	232	232	218.	220	278	278	162.5	163
8	234		223.		279		164.	
Gains		26				47		
" per pig		8.6				16		

Note - On Jan 16 No 33 of Lot IV placed in Lot II in place of No 25 deceased.  
 Weight Lot II Jan 17 200 lb  
 " Lot IV Jan 18 143.5.



Pigs - Feed Feb 8 - Mar 7

	Lot No 1		Lot No 2		Lot No 3		Lot No 4		Lot No 5	
Date	Corn	Shorts	Corn	Shorts	Corn	Shorts	Corn	Shorts	Corn	Shorts
Feb 8										
to Feb 20	42.65	16.8	65.55	16.8	0	16.8	85.2	11.2		
Feb 22										
to Mar 7	53.4	16.8	69.9	16.8	0	16.8	80.5	11.2		
Totals	96.05	33.6	135.45	33.6		33.6	165.7	22.4		

Weights and Gains

Date	Wt	Av	Wt	Av	Wt	Av	Wt	Av
Mar 6	273		267		334		186	
7	276	274	269	269	334	334	191	189
8	274		272		333		190	
Gains		42		49		56		26
.. per pig	14		16.3		18.6		13	

Feed - Mar 8 to Mar 21

Date	Corn	Shorts	Corn	Shorts	Corn	Shorts	Corn	Shorts
Mar 8								
to Mar 21	56.6	16.8	60.	16.8	0	16.8	89.2	11.2

Weights and Gains

Date	Wt	Av	Wt	Av	Wt	Av	Wt	Av
Mar 20	294		294		367		203.5	
21	295.5	296	296.5	296	369.5	369	203.	204
22	298.7		297		370.		207.	
Gains		22		27		35		15
.. per pig	7.3		9		11.6		7.5	

Weights after New Division

Date	Wt	Av	Wt	Av	Wt	Av	Wt	Av	Wt	Av
Mar 20	330.5		302		339.25		203.5		226	
21	337	335	308.5	307	345	345	203.	204	225.5	226
22	338		310.		351		207.			

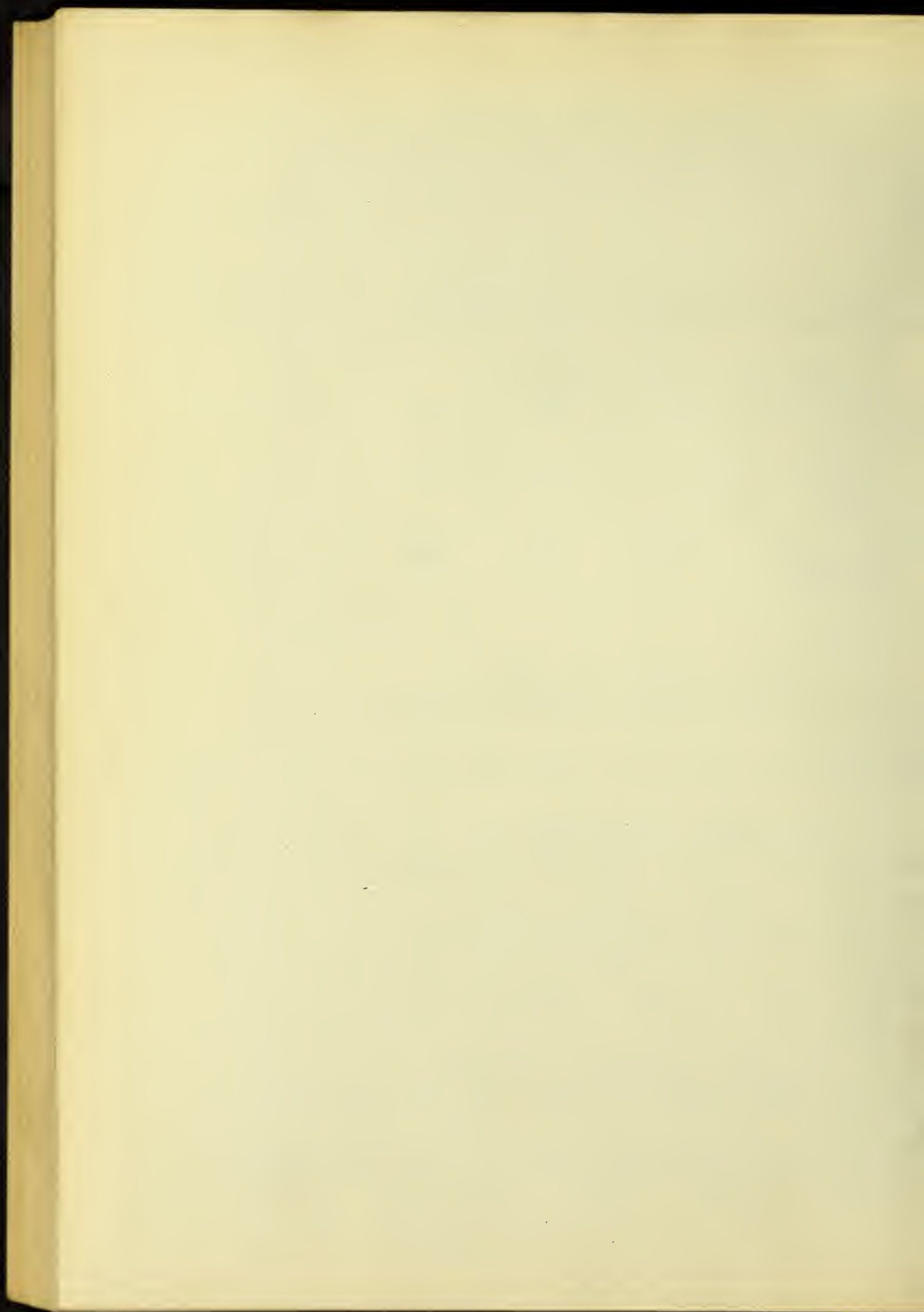




Table No XI

## Pigs - Feed - Mar 22 - Apr 4

Date	Lot No. 1		Lot No. 2		Lot No. 3		Lot No. 4		Lot No. 5	
	Ean Corn	Meal	Ean Corn	Meal	Ean Corn	Meal	Ean Corn	Meal	Ean Corn	Meal
Mar 22 to Apr 4	47.2	22.	44.85	22.	0	22.	93.	14.6	62.8	22.

## Weights and Gains

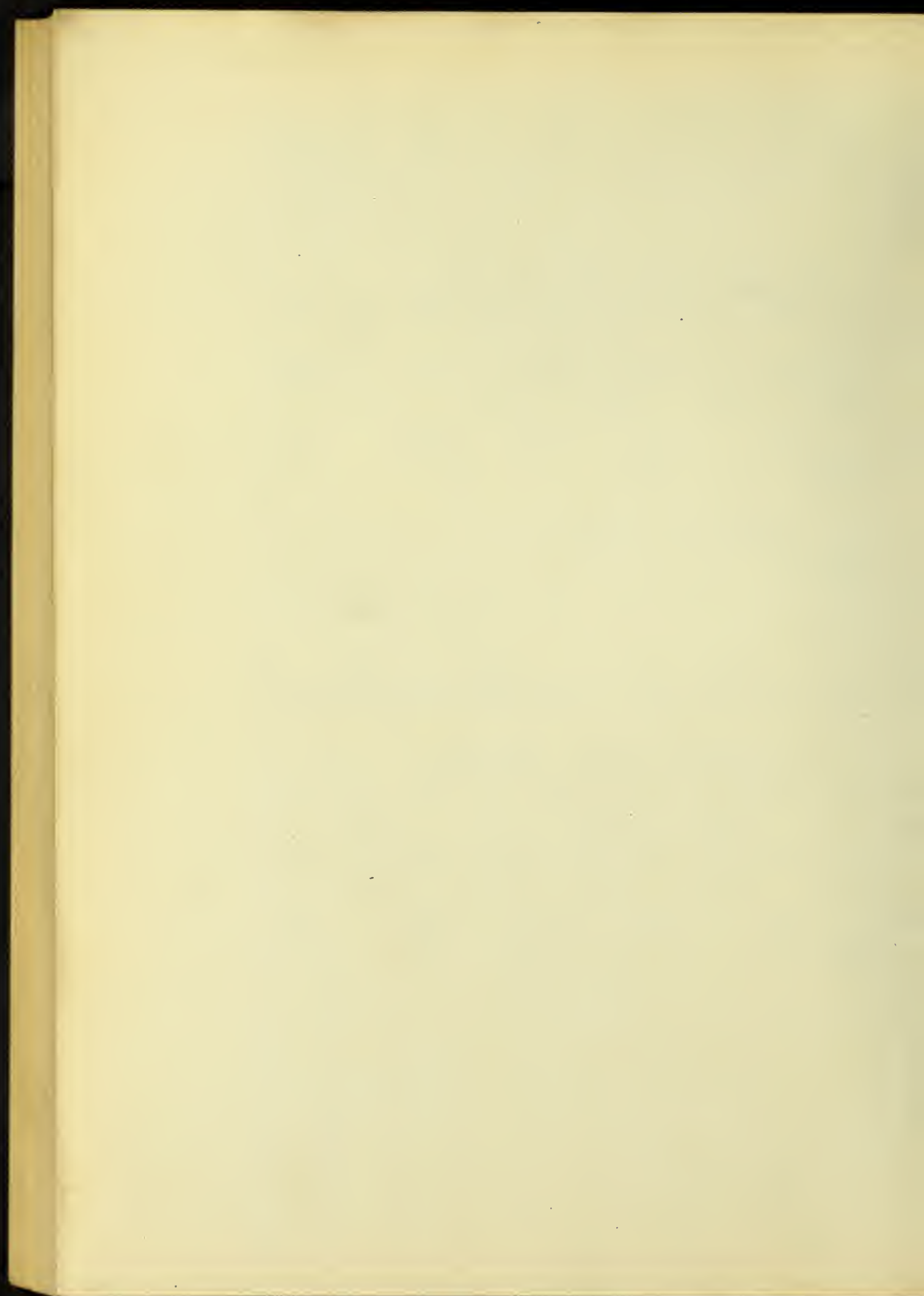
Date	Wt	Av	Wt	Av	Wt	Av	Wt	Av	Wt	Av
Apr 3	366		337		378		216		223	
4	371	369	339	338	383	381	220	219	231	228
5	371		339		383		221		230	
Gains		34		31		36		15		2
Gains per pig		8.5		7.75		9		7.5		.6

## April 5 to May 2

Date	Ean Corn	Meal	Ean Corn	Meal	Ean Corn	Meal	Ean Corn	Meal	Ean Corn	Meal
Apr 5 to Apr 18	44.7	19.2	58.	19.2		19.2	88.5	12.8	75.5	19.2
Apr 19 to May 2	54.		53.2			196		195		
Totals	98.7	19.2	111.2	19.2		19.2	284.5	12.8	270.5	19.2

## Weights and Gains

Date	Wt	Av	Wt	Av	Wt	Av	Wt	Av	Wt	Av
May 1	424		384		444		267		255	
2	425	424	384	383	443	442	267	267	258	257
3	424		381		440		266		257	
Gains		55		45		61		48		29
" per pig		13.75		11.25		15.35		24		9.6



## Pigs - Feed - May 3-30

Date	Lot No 1 Ears Corn	Lot No 2 Ears Corn	Lot No 3 Ears Corn	Lot No 4 Ears Corn	Lot No 5 Ears Corn
May 3					
To May 16	66.6	69.35		112.5	108.3
May 17					
To May 30	82.5	67.05		123.95	145.
Totals	149.1	136.4		236.45	253.3

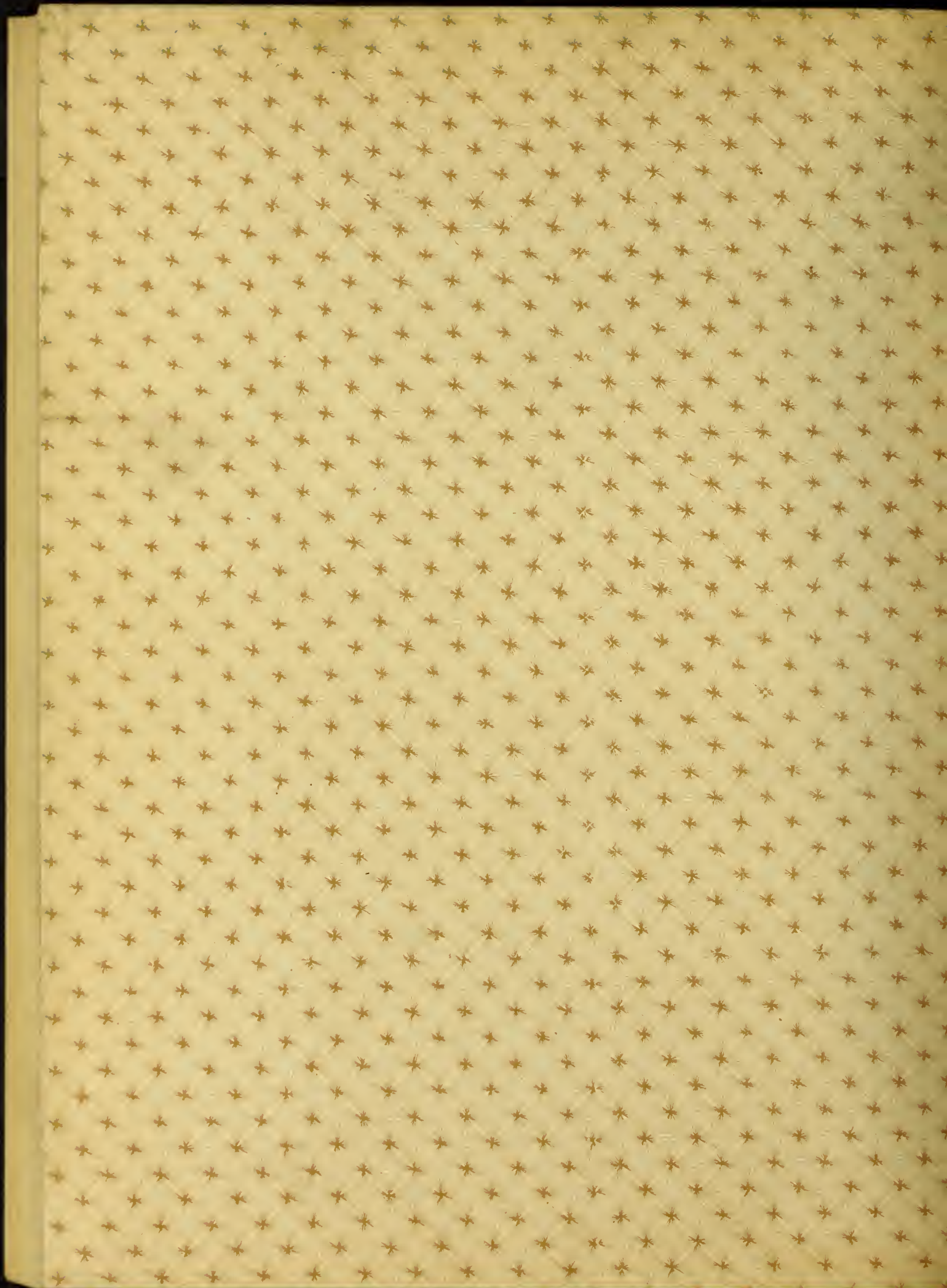
## Weights and Gains

Date	Wt	Av	Wt	Av	Wt	Av	Wt	Av	Wt	Av
May 29	490		420		505		292		299	
30	490	489	433	427	506	505	291	291	303	303
31	488		427		505		289		306	
Gain		65		44		63		24		46
" per pig		16.25		11		15.75		12		15.3

## Weights and Gains of Little Pigs

Date	Lot No 1 Wt	Gain	Lot No 2 Wt	Gain	Lot No 3 Wt	Gain
Mar 21	87		82		83	
May 2	134	47	111	29	103	20
May 30	171	37	129	18	119	16

Weights here are averages of weights made on three successive days.





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