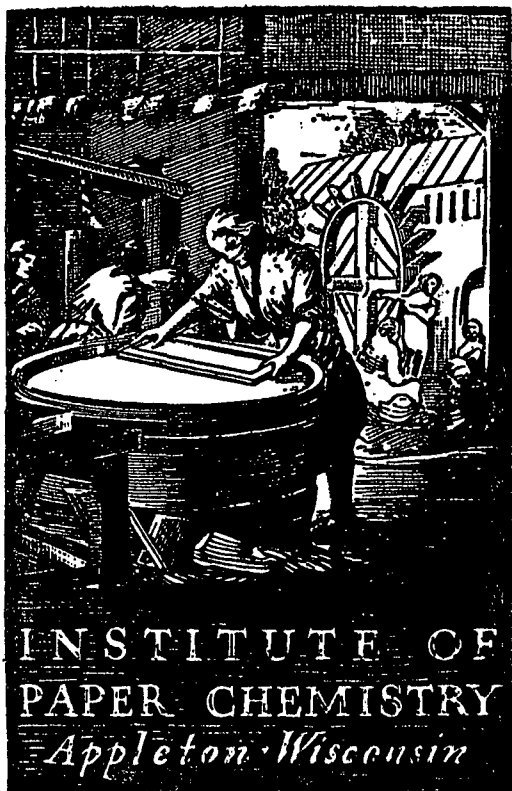


Institute of Paper Science and Technology
Central Files



PRODUCTION DATA REPORT

Project 1108-13

Report 33

A Supplementary Report

to

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

March 1, 1961

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

PRODUCTION DATA REPORT

Project 1108-13

Report 33

A Supplementary Report

to

FOURDRINIER KRAFT BOARD INSTITUTE, INC.

March 1, 1961

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

The production data contained herein represent the production of linerboard as reported by the following Fourdrinier Kraft Board Institute member mills for the fourth quarter of 1960.

The Chesapeake Corporation of Virginia

Continental Can Company, Inc.

Crown Zellerbach Corporation

Georgia Kraft Company

International Paper Company

North Carolina Pulp Company & Kieckhefer Container Co.

Olin Mathieson Chemical Corp., Forest Products Division

Owens-Illinois, Mill Division

St. Joe Paper Company

St. Regis Paper Company

Union Bag-Camp Paper Corporation

West Virginia Pulp and Paper Company

As in previous reports, the data have been tabulated according to (1) total production by quarters and (2) production by grades by quarters. The total production by quarters for 1960 is given in Table I together with, for purposes of comparison, the total production by quarters for 1957, 1958, and 1959. The total production by quarters for 1957 through 1960 is illustrated graphically in Figure 1.

Production data on a quarterly basis for 1959 and 1960 are shown in Table II for the major grades and in Table III for all grades. In Table IV

the percentage of total production which each grade represents is given on a quarterly basis for 1959 and 1960. These percentage figures for each grade are based on the total production per quarter computed separately with the miscellaneous figure included and with the miscellaneous figure excluded. The current tonnage data for the major grades--namely, 26 lb., 33 lb., 38 lb., 42 lb., 47 lb., 69 lb., 90 lb., and miscellaneous--are illustrated graphically in Figures 2 through 9, respectively, on a quarterly basis from 1957 through 1960. Also shown in Figures 2 through 9 is the percentage of total production which each major grade represents.

In order to give a better perspective of the above data, the tonnages for the major grades have been plotted on a semi-logarithmic scale (see Figure 10) for the purpose of comparing the change in production of these grades. A useful measure is the "percentage change" which is defined as the change in production in tons for the present quarter divided by the tonnage level of the previous quarter. The advantage of semi-log graphs in this case is that the "percentage change" may be compared readily even though the magnitude of the tonnage levels may be vastly different. When two lines are parallel (regardless of magnitude), the "percentage change" of these two items is the same. When two lines are not parallel, the one with the greater (steeper) slope has the higher "percentage change."

There are numerous comparisons which may be of interest, some of which are the following:

1. The total production of all grades for the fourth quarter of 1960 was 960,990 tons as shown in Table I. Total production for 1960 was 4,009,914

tons, which was slightly higher than the total production for 1959 and was the highest total production for any year since these reports were initiated in 1953.

2. Compared with the corresponding tonnages for the third quarter, tonnage of 47 lb. increased, whereas tonnages of the other major grades decreased.

TABLE I
TOTAL TONNAGE OF ALL GRADES

	1957	1958	1959	1960
1st Quarter	932,706	836,013	902,850	1,015,716
2nd Quarter	946,959	793,764	1,013,064	1,009,697
3rd Quarter	924,262	919,520	1,086,571	1,023,511
4th Quarter	<u>914,979</u>	<u>940,090</u>	<u>1,007,280</u>	<u>960,990</u>
Total	3,718,906	3,489,387	4,009,765	4,009,914

TABLE II

TONNAGE OF MAJOR GRADES BY QUARTERS FOR 1959 AND 1960

<u>1959</u>				
Grade	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
26 lb.	51,621	58,875	68,524	50,098
33 lb.	60,863	70,192	72,824	58,175
38 lb.	84,859	100,366	103,065	89,433
42 lb.	402,410	428,855	471,099	411,105
47 lb.	22,662	20,212	22,078	22,581
69 lb.	130,840	135,644	124,987	130,795
90 lb.	59,537	67,828	66,338	61,407
Misc.	66,738	110,483	136,277	149,606
<u>1960</u>				
26 lb.	52,104	55,878	50,266	45,803
33 lb.	74,129	65,515	64,584	56,657
38 lb.	95,317	96,794	102,117	95,597
42 lb.	430,543	416,719	447,422	412,183
47 lb.	21,640	20,940	19,383	20,914
69 lb.	136,422	130,918	125,518	121,360
90 lb.	68,688	60,892	56,467	52,521
Misc.	111,493	138,726	131,203	121,567

TABLE III
TONNAGE OF ALL GRADES BY QUARTERS

Grade	1959				1960			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
26 lb.	51,621	58,875	68,524	50,098	52,104	55,878	50,266	45,803
27 lb.	--	64	--	--	--	--	--	--
28 lb.	1,374	363	340	640	847	1,178	2,973	1,195
28.5 lb.	--	--	--	--	--	--	--	171
29 lb.	--	--	--	--	--	79	123	48
29 lb.	--	--	--	--	--	1,206	431	160
30 lb.	1,013	429	1,612	164	884	111	--	--
31 lb.	--	--	--	--	--	640	780	5,920
32 lb.	1,431	1,214	863	9,274	957	65,515	64,584	56,657
33 lb.	60,863	70,192	72,824	58,175	74,129	147	3,670	--
34 lb.	--	171	276	170	429	--	--	--
35 lb.	--	--	--	--	--	300	229	303
36 lb.	--	40	1,217	1,407	973	724	1,262	789
37 lb.	--	--	--	--	--	108	--	--
38 lb.	84,859	100,366	103,065	89,433	95,317	96,794	102,117	95,597
39 lb.	--	--	--	--	--	--	--	124
41 lb.	--	--	--	61	--	--	--	99
41.5 lb.	--	--	--	--	--	--	--	42
42 lb.	402,410	428,855	471,099	411,105	430,543	416,719	447,422	412,183
43.5 lb.	75	150	274	241	232	193	334	161
45 lb.	13,720	13,479	11,026	9,773	10,752	10,336	9,175	10,249
46 lb.	--	--	--	--	429	--	--	--
47 lb.	22,662	20,212	22,078	22,581	21,640	20,940	19,383	20,914
48 lb.	--	--	71	--	--	--	--	--
49 lb.	--	--	--	--	--	--	25	--
50 lb.	531	476	967	692	1,078	525	1,314	330
51 lb.	176	--	--	53	--	76	--	163
52 lb.	495	1,144	905	678	255	825	1,038	553
53 lb.	--	--	8	114	--	52	75	--
55 lb.	27	25	--	25	--	--	--	134
56 lb.	81	168	221	214	158	317	144	213
57 lb.	--	--	--	--	--	122	--	--
58 lb.	--	--	--	--	--	--	272	--

TABLE III--CONTINUED
TONNAGE OF ALL GRADES BY QUARTERS

Grade	1959				1960			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
60 lb.	--	--	--	101	30	--	183	71
61 lb.	--	--	37	33	87	--	--	--
62 lb.	92	113	626	1,456	702	859	1,073	556
63 lb.	--	--	--	--	32	--	--	--
64 lb.	3,338	2,395	2,177	8,514	6,627	4,919	2,623	5,263
65 lb.	56	45	28	49	27	35	50	--
69 lb.	130,840	135,644	124,987	130,795	136,422	130,918	125,518	121,360
70 lb.	--	--	--	--	--	--	--	6,611
72 lb.	--	--	19	--	--	--	--	--
75 lb.	--	--	351	--	--	--	--	--
76 lb.	199	--	--	102	449	--	610	742
82 lb.	--	--	--	159	228	286	--	--
84 lb.	--	--	--	--	--	--	--	33
85 lb.	712	568	283	160	204	287	167	458
90 lb.	59,537	67,828	66,338	61,407	68,688	60,892	56,467	52,521
Misc.	66,738	110,483	136,277	149,606	111,493	138,726	131,203	121,567

TABLE IV
PERCENTAGE OF TOTAL PRODUCTION REPRESENTED BY EACH GRADE

[illegible]

TABLE IV--CONTINUED
PERCENTAGE OF TOTAL PRODUCTION REPRESENTED BY EACH GRADE

Grade	1959				1960			
	1st Qtr. With ^a out ^b	2nd Qtr. With ^a out ^b	3rd Qtr. With ^a out ^b	4th Qtr. With ^a out ^b	1st Qtr. With ^a out ^b	2nd Qtr. With ^a out ^b	3rd Qtr. With ^a out ^b	4th Qtr. With ^a out ^b
59 lb.	--	--	--	--	c	--	--	--
60 lb.	--	--	--	c	--	--	--	c
61 lb.	--	--	--	c	c	--	--	--
62 lb.	c	c	0.1	0.2	0.1	0.1	0.1	0.1
63 lb.	--	--	--	--	c	--	0.3	--
64 lb.	0.4	0.2	0.2	0.8	0.7	0.5	0.3	0.6
65 lb.	c	c	c	c	c	c	c	--
69 lb.	14.5	15.6	11.5	13.0	13.4	13.0	12.3	14.5
70 lb.	--	--	--	--	--	--	--	0.9
72 lb.	--	--	c	--	--	--	--	--
75 lb.	--	--	c	--	--	--	--	--
76 lb.	c	--	--	c	c	--	0.1	0.1
82 lb.	--	--	--	c	c	c	--	--
84 lb.	--	--	--	--	--	--	--	c
85 lb.	0.1	0.1	c	c	c	c	c	0.1
90 lb.	6.6	7.1	6.1	6.1	6.8	6.0	5.5	6.3
Misc.	7.4	10.9	12.5	14.9	11.0	13.7	12.8	12.7

a Percentage based on the total production of all grades including miscellaneous.

b Percentage based on the total production of all grades excluding miscellaneous.

c Less than one-tenth of one per cent after being rounded off.

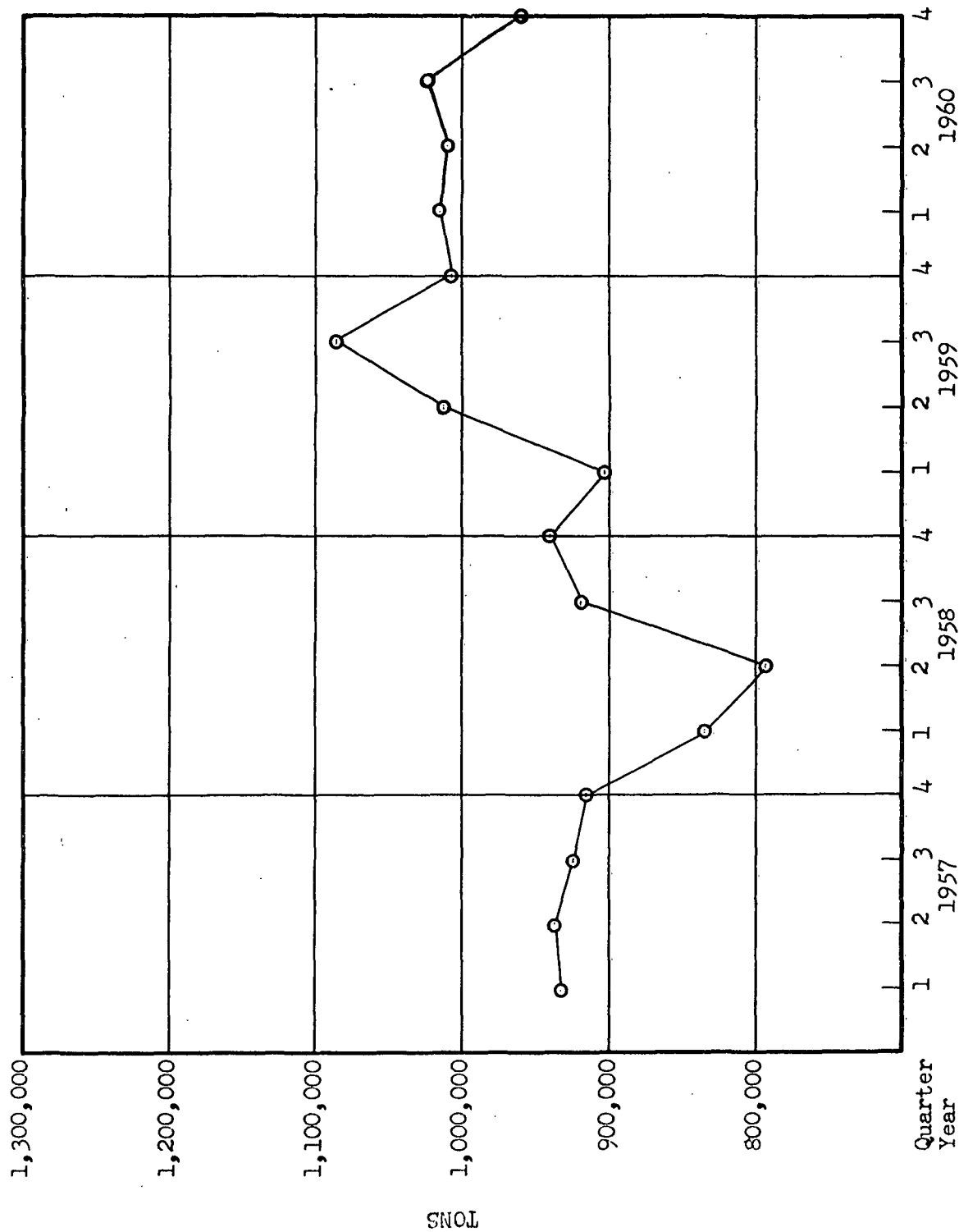


Figure 1. Total Production of All Grades

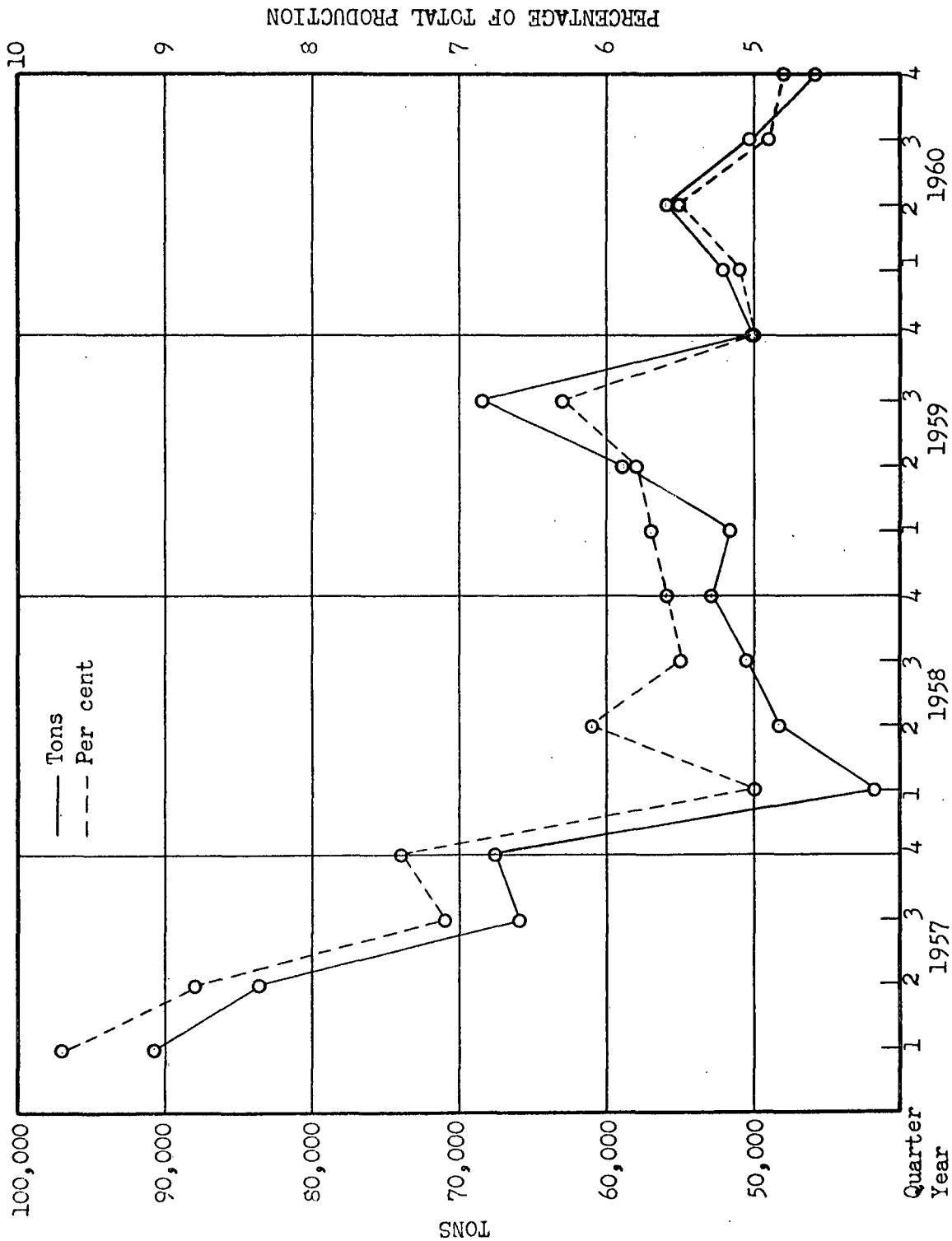


Figure 2. Production, 26 lb.

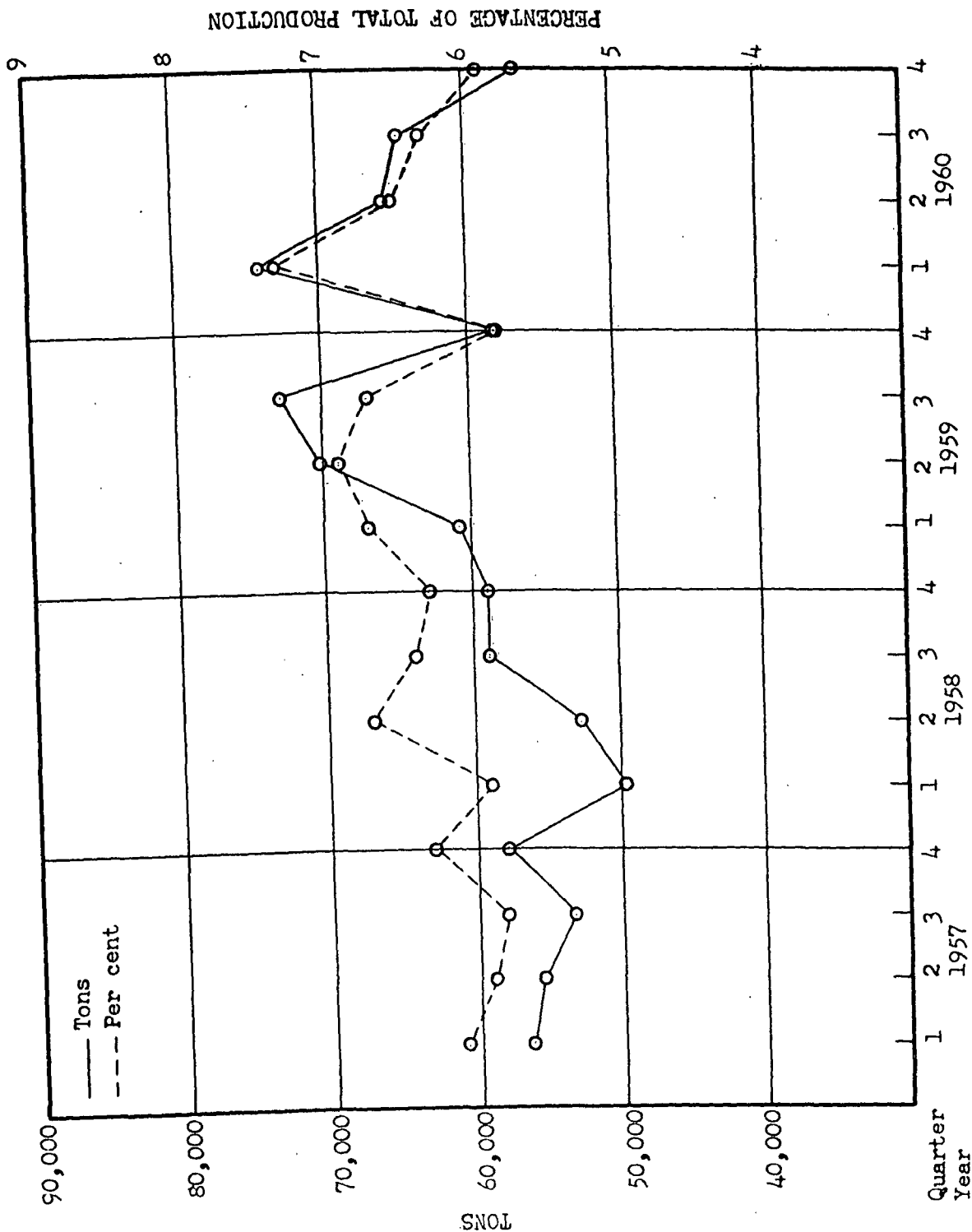


Figure 3. Production, 33 lb.

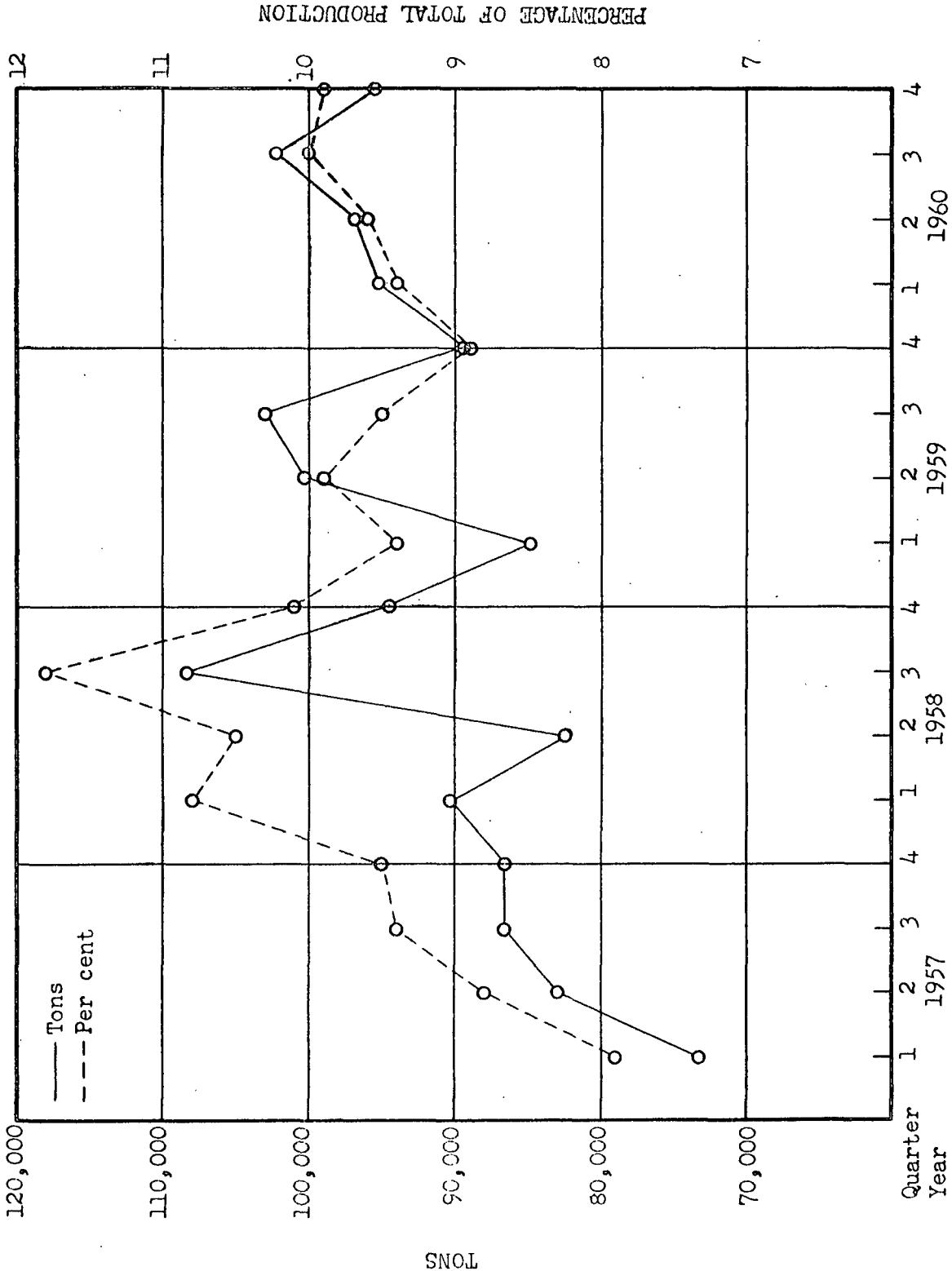


Figure 4. Production, 38 lb.

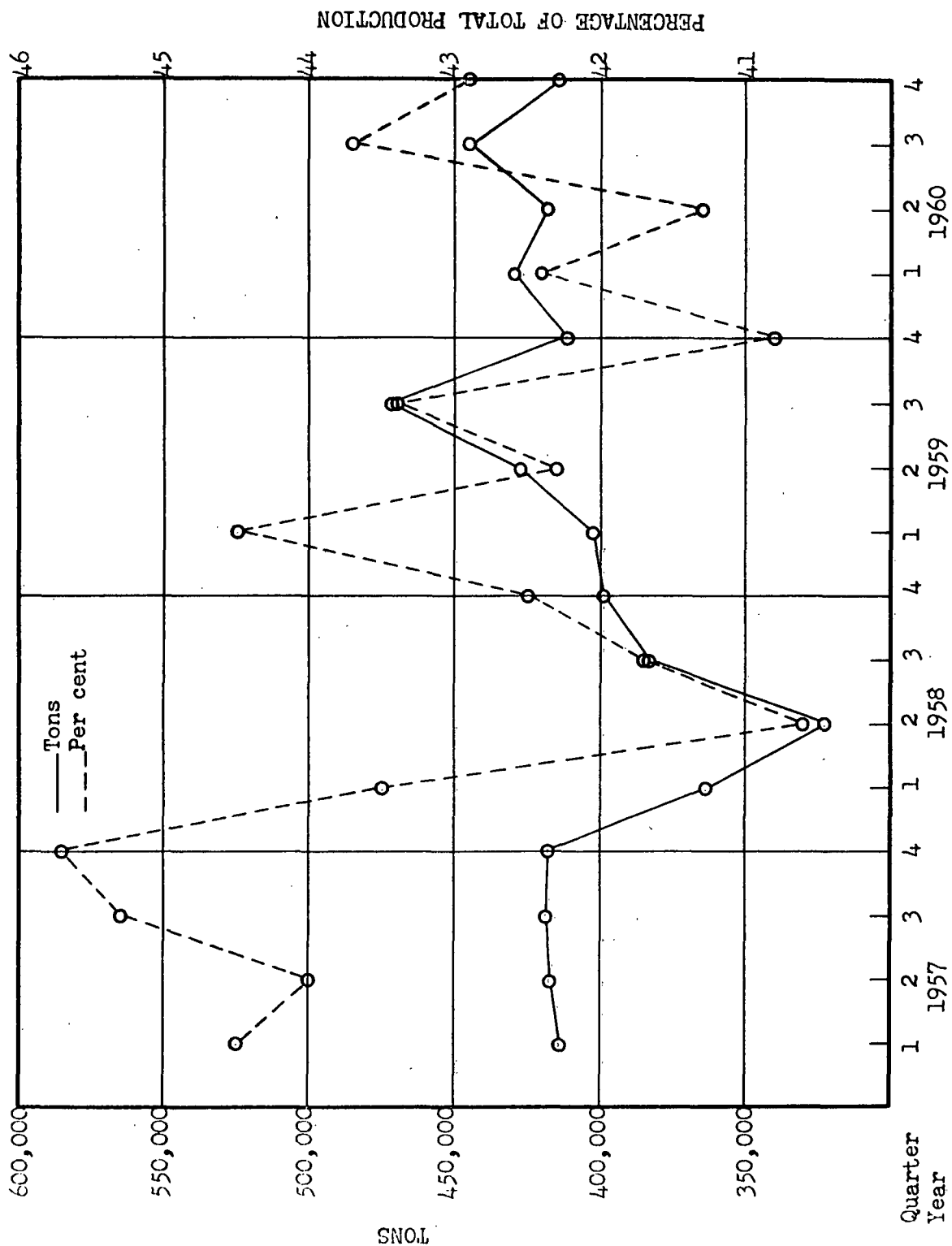


Figure 5. Production, 42 lb.

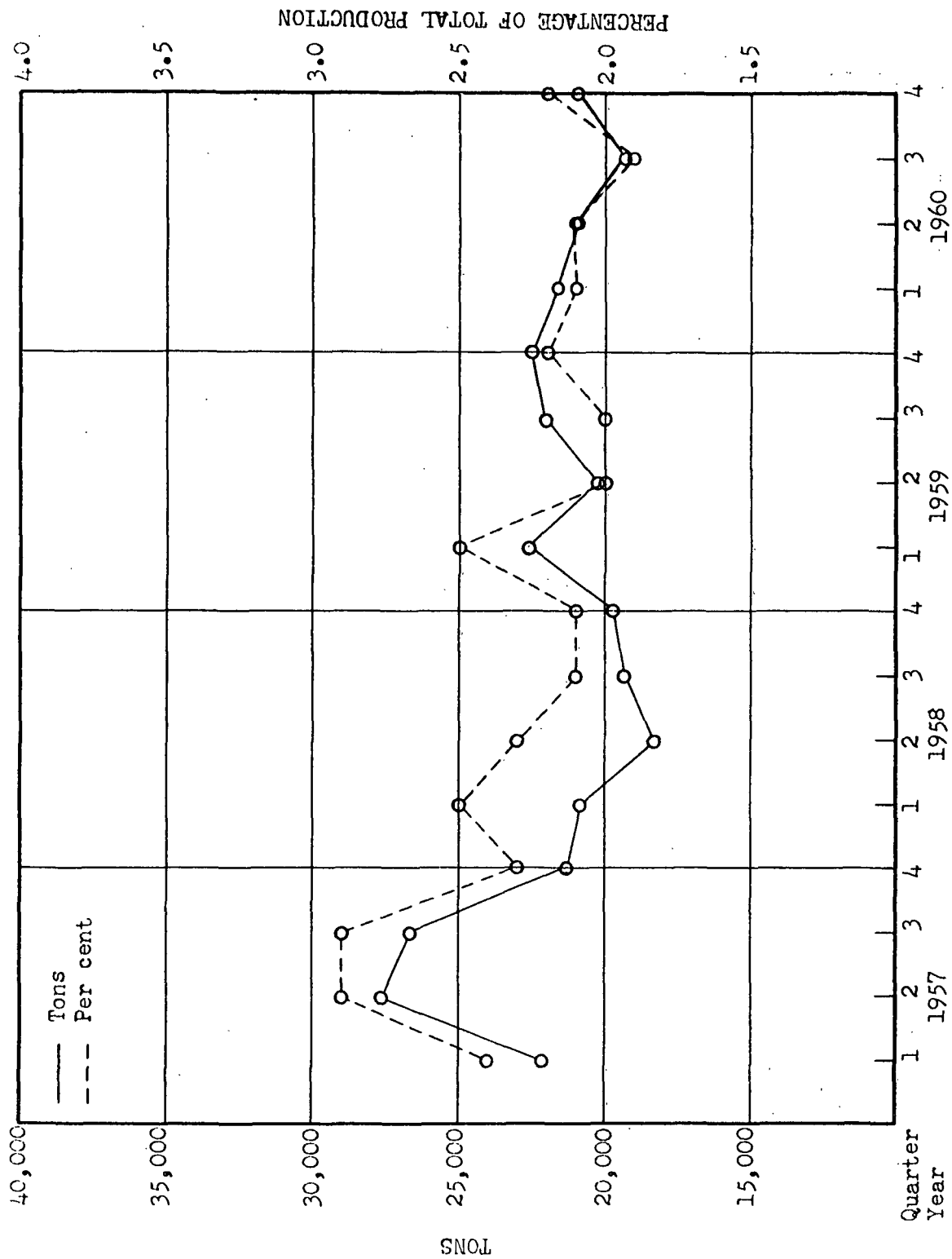


Figure 6. Production, 47 lb.

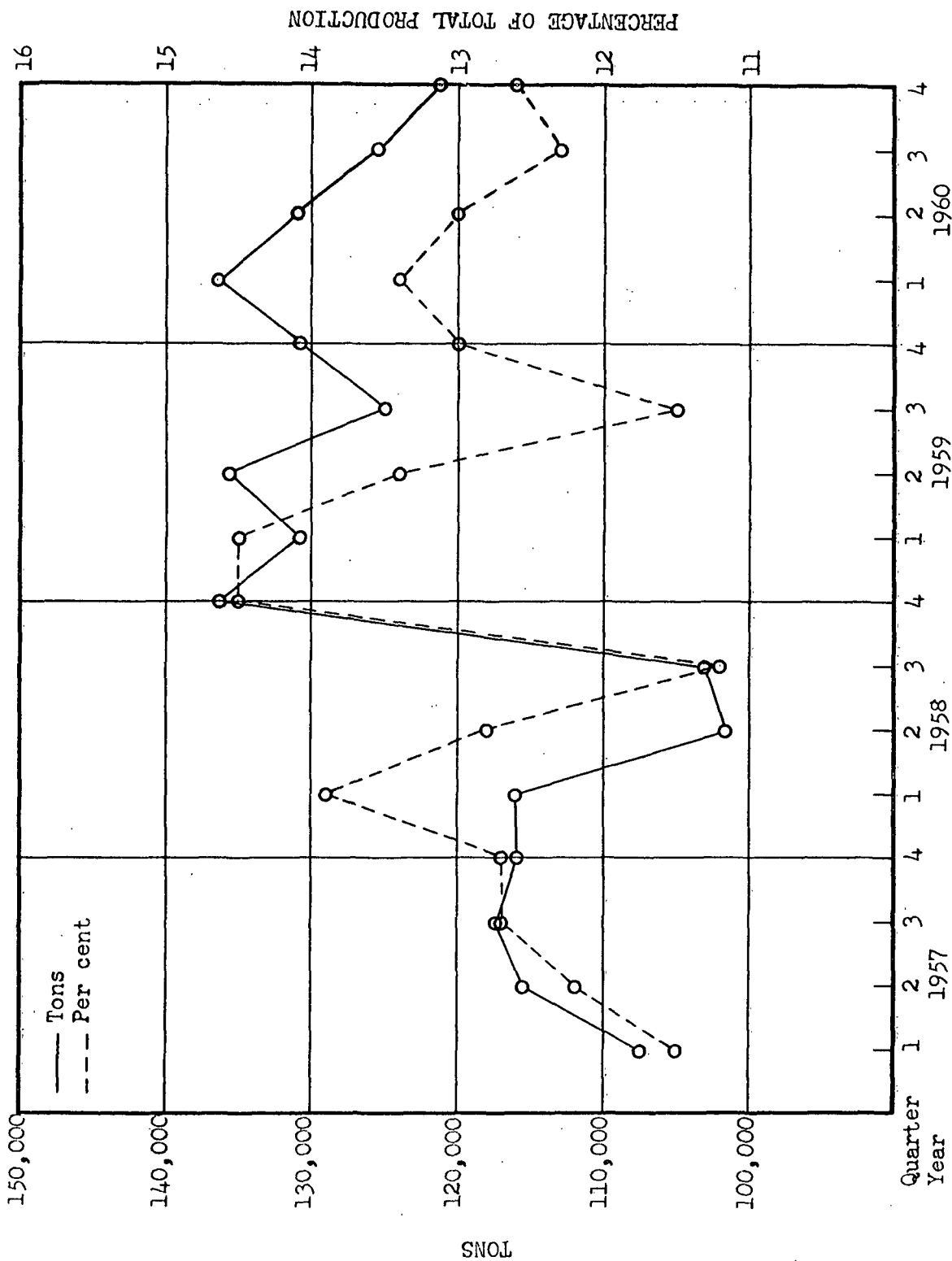


Figure 7. Production, 69 lb.

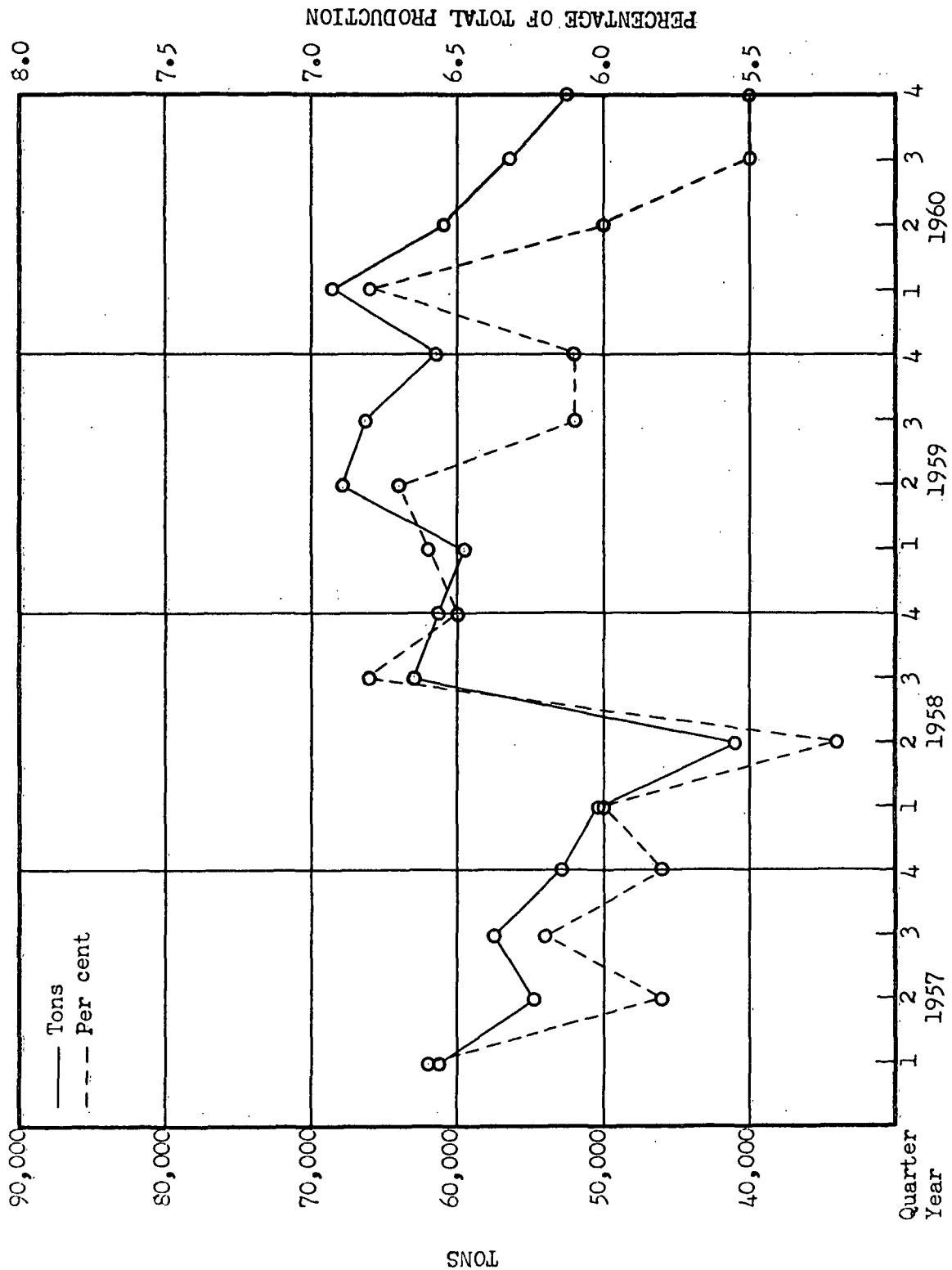


Figure 8. Production, 90 lb.

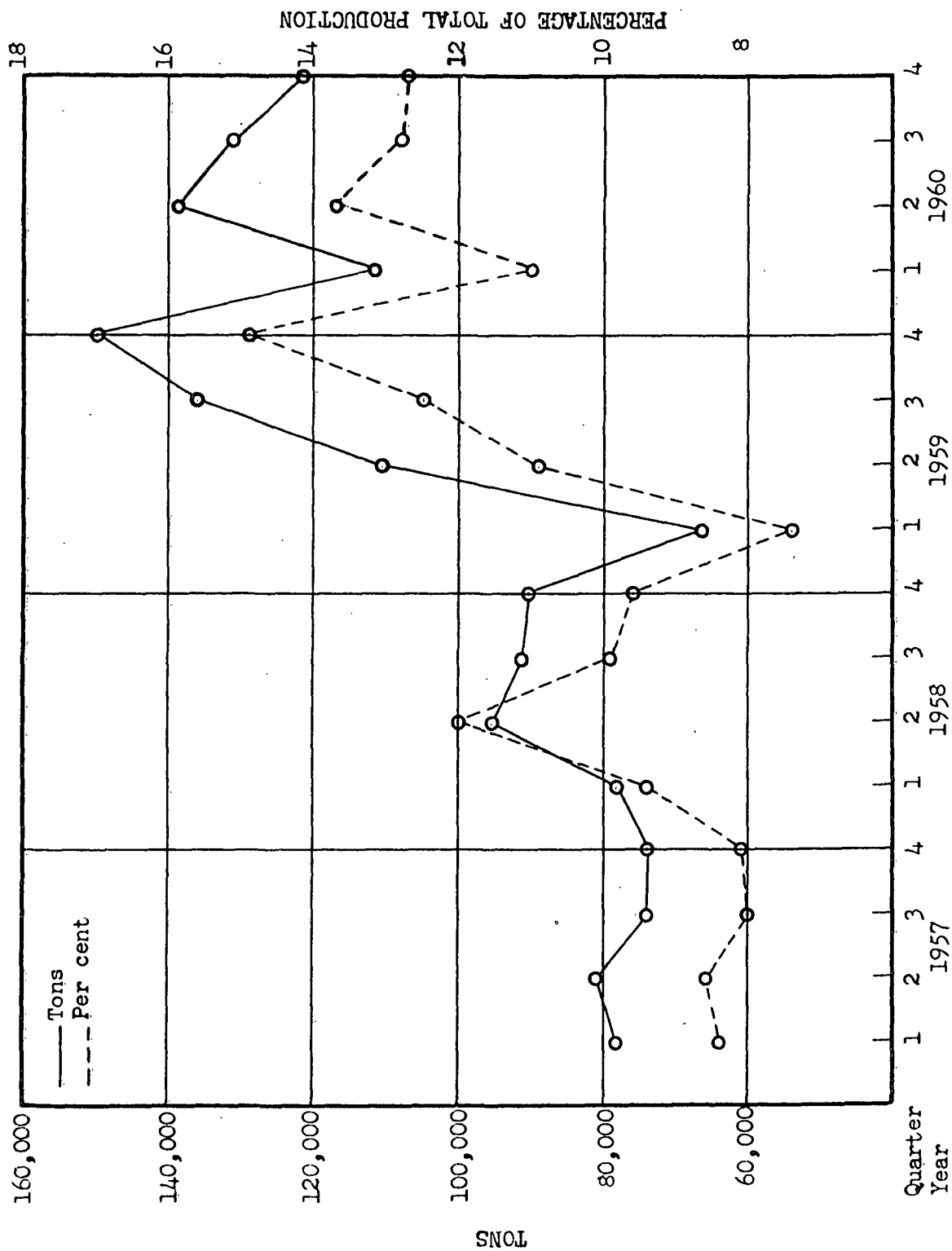


Figure 9, Production, Miscellaneous

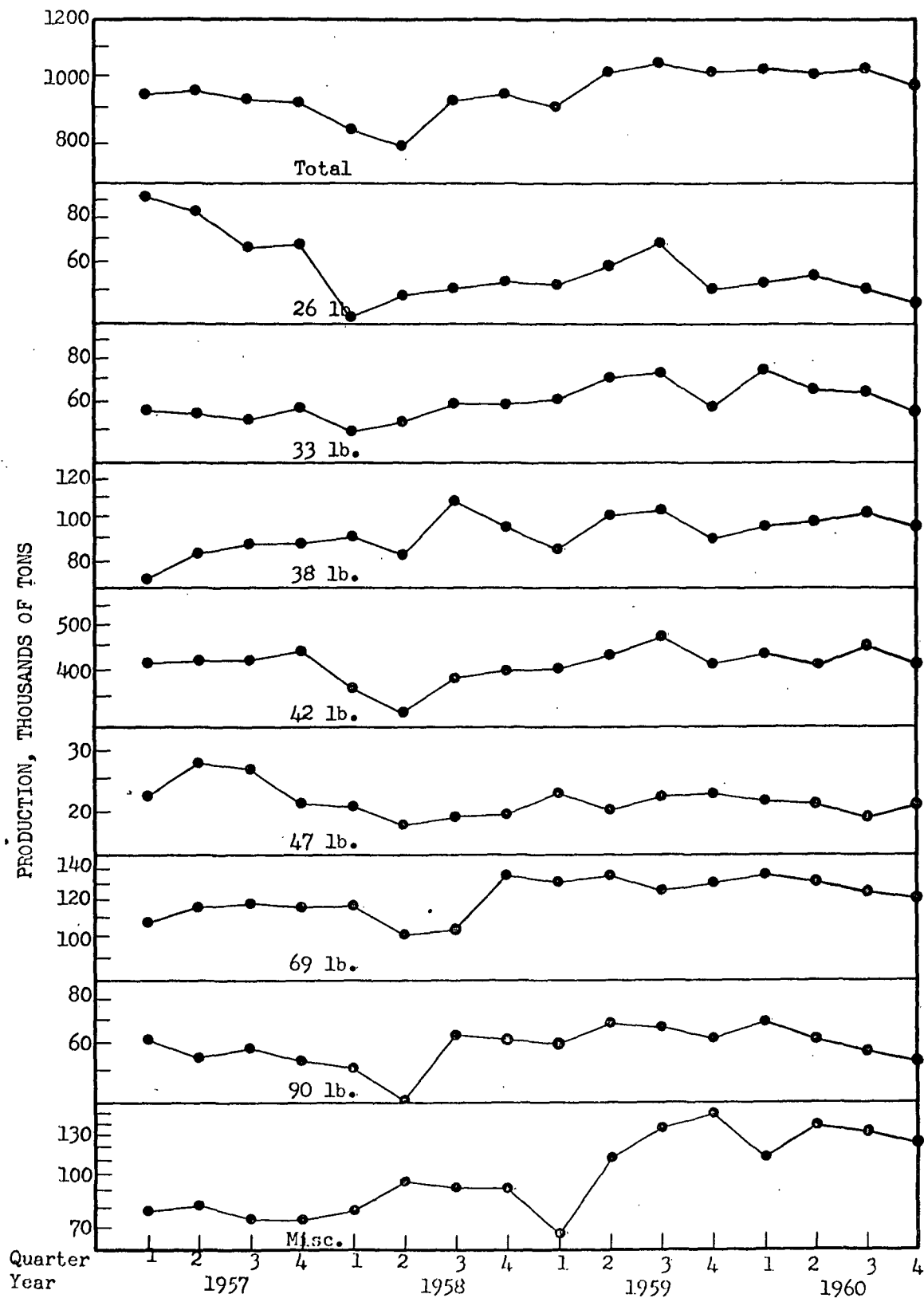
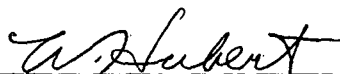


Figure 10. Comparison of Percentage Changes in Production for All Grades

THE INSTITUTE OF PAPER CHEMISTRY



W. N. Hubert, Research Aide



R. C. McKee, Chief
Container Section