f4c Conc., steel indy

Yolo Steel Iron Plant Gets DPA Approval

A Sacramento steel firm got the green light from the vernment to build a $44,000,000 pig iron plant yesterday. he Defense Production Administration granted a certifi- e of necessity to the Yolo Steel and Metal Co. which will nit five-year amortization of the investment, the Associ- l Press reported from Washington yesterday.

G. I. Dumond, Sacramento mining man and president of Yolo Steel, said the pig iron plant will be the first unit of an integrated steel mill. Work will be started, he said in about 60 days on a site yet to be selected on the banks of the Sacramento river.

Dumond said the plant will be able to turn out 1000 tons of pig iron a day .

IRON FROM SHASTA

Under the plan, iron ore will be brought 180 miles from the Iron Mountain region of Shasta county and coal will come from Wyoming. Yolo Steel has leases on iron ore deposits in Shasta as well as Madera county containing an estimated 16,000,000 tons of ore, or enough to operate the planned pig iron operation for 20 years.

Dumond said the iron ore deposits might possibly run as high as 30,000,000 tons.

Yolo Steel Co., a Nevada corporation, was formed last year by Dumond with other Sacramento and Nevada interests.

Company officials have been reluctant to discuss the financing necessary for an iron plant. Yesterday Dumond repeated earlier statements that the company does not plan to sell stock to the public and will not seek a Government loan.

SMALLER OPERATION

The company has $51,000,000 available for the plant, Dumond said.

Yolo Steel's plans have been somewhat trimmed in the past year. Last March the company sought Government clearance for a fully-integrated steel plant to turn out a variety of finished steel products. Dumond estimated it would cost $264,000,000.

This plan was turned down in January by Defense Mobilizer Charles E. Wilson.

An amended application, calling for the smaller operation, was granted on reconsideration, DPA officials said.

--COMPLETE LIST

Sls.	Stocks	High	Low	Close	N.ch.
15	Liquid Carb 1.40	19⅞	19¼	19⅞	+ ⅜
1	do pf 3.50	73	73	73	+ ¾
45	Lockh Airc .30e	21½	21⅛	21¼	+ ⅛
34	Loew's Inc 1.50	17⅛	16⅞	17⅛	+ ⅛
4	LoneStCem 1.40a	25	24⅝	24⅞	
3	Long Bell A 3.15g	40⅛	40	40	
59	Long Isl Lt .90	15⅛	15	15⅛	
120	do pf 5.25 as	106⅝	106¼	106¼	+ ⅛
8	Lorillard 1.20a	22⅜	22	22	— ¼
3	Louisv G&E 1.80	36¾	36¾	36¾	+ ½
18	Lou&Nash 4	56	55¼	55¾	+ ¾
10	Lowenstein 2	27	26½	27	+ ⅝
4	Lukens Stl 1a	41	41	41	+ ¾
	—M—				
1	M&M Wd Wk 1	15	15	15	
30	Mack Trucks 1	16⅝	16⅜	16⅜	+ ¼
6	Macy R H 1.10e	29⅝	30	30	+ ⅜
10	Mad Sq Gar .50g	9⅛	8¾	9	+ ⅛
1	Magic Chef	9⅛	9⅛	9⅛	
3	Magma Cop	35	34½	35	+1
15	Magnavox 1.50	17¾	17⅜	17½	
7	Marac Oil .30h	11¼	11⅛	11¼	+ ¼
29	Marathon .30h	26⅛	25⅞	26	+ ⅛
5	Marine Mid .60	12	11⅞	12	
3	do pf 2⅛	57	57	57	+ ⅝
10	Marsh Field 2	25¾	25⅜	25⅜	
45	Martin G L	12⅝	12¼	12¼	— ¼
21	Martin Par	11⅝	11½	11⅝	+ ⅜
10	Masonite 1a	29¾	29⅜	29⅜	+ ¼
28	Math Chem 2	44¼	44	44¼	— ⅛
5	do pf 4.25	110	109⅜	110	+1
6	May Dpt St 1.80	30½	30¼	30½	— ¼
10	do pfnew3.75as	91¼	91¼	91¼	— ½
11	Maytag 1.40a	15	15	15	
1	do pf 3	47	47	47	
2	McCall .30e	16½	16½	16½	— ¼
6	McCord 2a	25¾	25⅜	25½	+ ¼
1	do pf 2.50	42¾	42¾	42¾	+ ⅛
6	McCrory Str 1a	17¾	17¼	17¼	— ¼
13	McGraw El 3a	56	55½	56	
6	McGraw H .65e	43	40¾	43	+3
3	McIntyr P 2	74	74	74	— ¾
4	McKess&R 2.50b	41¼	41	41¼	+ ¾
2	McLell Str 1.50a	24½	24½	24½	
3	McQuay Nor 1	15	14⅞	15	
16	Mead Corp 1.60a	27	26	26½	+ ½
12	Melv Shoe 1.80	23⅝	23⅜	23⅜	— ¼
1	Mercant Str 1	17	17	17	— ⅛
34	Merck & Co .80a	32⅛	31¾	32	+ ¼
3	do cv pf 4	116¼	116	116¼	+ ¼
4	Mergen Lino 2	31¾	31¼	31¾	+ ¼
5	Merr Ch&S 2b	25	24⅞	24⅞	— ⅛
2	Mesta Mch 2.50a	49	48¾	49	
4	Miami Cop .75e	23	23	23	
9	Mid Cont Pet 3a	73¼	72¼	72¾	+ ½
22	Middle S Ut 1.20	22⅛	22	22⅛	— ⅛
10	Mid S P pf xdas	133¾	133¾	133¾	+2⅛
2	Midwest Oil .35e	26¼	25⅞	25⅞	— ⅛
9	Minn Hon 2a	48¾	48½	48½	
2	do pf 3.75 as	107½	107½	107½	
16	Minn Mol 1.60	20½	20⅛	20½	+ ½
50	do 1 pf 5.50 as	88⅝	88⅝	88⅝	
1	do 2 pf 1.50	28½	28½	28½	+ ½
10	Min&StLRy 1 xd	14⅞	14⅝	14¾	+ ¼
20	Min StP&SSM1e	18½	18¼	18⅜	+ ¼
22	Minn M & M 1	44½	43¼	43¼	+ ½
1	Minn P&L 2.20	35¼	35¼	35¼	
11	Mission Cp	34⅜	33⅝	33⅞	+ ¼
6	Mission Dv 1g	20¼	20⅛	20¼	+ ¼
19	Miss Riv F 2a	35⅞	35½	35½	
18	Mo Kan Tex	8⅛	7⅞	7⅞	— ⅛
24	do pf	56⅞	55⅞	55⅞	— ⅞
4	Mo Pac pf	24	23⅞	23⅞	
1	Mohawk Cpt .50e	29⅜	29⅜	29⅜	+ ⅛
50	Mosan Ch 2.50	95⅞	95¼	95⅜	
20	Mont Dak Ut .90	24⅝	24¼	24⅜	+ ⅛
9	Mont Pow 1.40a	29⅜	28⅞	29⅛	+ ⅛
20	Mont Ward 2a	62½	61¾	62¼	+ ¼
4	MooreMcCL 1.50b	16¾	16⅜	16⅜	+ ⅛
1	Morrell .50	13¾	13¾	13¾	
4	Motor Pd 2	23¾	23⅜	23¾	+ ¾
27	Motorola 2.50a	67¾	66½	66½	— ½
7	Mueller Br 1.20a	18¾	18½	18⅝	
11	Mullins Mf 1.60b	28	27¾	27¾	— ⅛
1	Murphy GC 1.50a	52¾	52¾	52¾	— ¼
9	Murray Cp 2a	19¼	19¼	19¼	+ ⅛
	—N—				
38	Nash Kelv 2	19¼	19⅛	19¼	+ ⅛
40	NshCh&StL3a as	64¾	64¼	64¼	
8	Nat Airlin .25e	14¾	14½	14¾	
2	Nat Auto F 2	19¼	19⅛	19⅛	— ¼
3	Nat Avia 2.40g	21½	21	21	+ ¼
28	Nat Bisc 2	31¾	31⅜	31⅜	— ¼
60	do pf 7 as	166¾	166¾	166¾	
9	Nat Can	10½	10½	10½	
2	Nat City Lin 1	9⅞	9⅞	9⅞	+ ⅛
14	Nat Cont 1	12⅝	12½	12½	
16	Nat Cyl G 1	17	16¾	16¾	
12	Nat Dairy 3	51½	51	51	— ¼
	Nat Dpt Str 1a	15¾	15¾	15¾	+ ¼
	Nat Distill 2	31⅜	31⅛	31⅛	+ ⅛
	[illegible] 1.25	106¼	105¾	106	

Sls.	Stocks	High	Low	Close	N.ch.
18	Rheem Mfg 2.40	31	30¾	31	— ⅛
7	Richfield O 3a	56	55¾	55⅞	+ ⅛
1	Ritter Co 2b	23⅝	23⅝	23⅝	— ⅜
4	RoanAnCop .25h	6¼	6¼	6¼	
108	RobbinsMills 1.50	26¾	26¼	26¼	— ½
5	do pf 2.25	46¾	46¼	46¼	— ½
8	Rob Fulton 1.50	17⅞	17⅜	17⅜	— ⅜
15	Roch G&E 2.24	36½	36¼	36¼	— ⅛
1	Roh&Hass 1.60b	137¼	137¼	137¼	+ ¼
10	RonsAMW 1.40a	17½	17½	17½	
7	Royal Type 2	22¾	22¾	22⅞	—
3	Ruberoid .50e	58½	58	58½	+
5	Ruppert	11¼	11	11	
	—S—				
42	Safeway St 2.40	32	31⅜	31⅞	
10	do pf 4 as	98¾	98¾	98¾	

Hexner, Ervin

Leg.^ The Internat. Steel Cartel. Chapel Hill. c. '44

p. 76 Largest Cement Co. is Universal Atlas; USS owns it.
p. 80 "..most of the dominant cement co.s began with good properties in the Lehigh Valley.."

5175

Hunter in Nixon

Carnegie shrewd customers' man, didn't bother with technical work at all, hired good managers, gave them fractional interests in co/. Scrapped old machinery rapidly, a new concept among conservative iron men. Carnegie's incentive system included rivalry among men & detailed personal reports to him. He lowered costs tremendously, made much.

Federal Steel had grown in Chicago greatly (not in Gary) & was as big as Carnegie Steel. 1901, Gary, its boss, & Schwab, Carnegie's lt., got J.P. Morgan to unite them in USS. Bought in Tennessee Coal, Iron & r.r. co. presently; and built Gary. Had 65% business at one time. Declined to 40% by 1929. Incidentally controlled shipping, ores, r.r.s, blast furnaces, iron works, etc.

Vertical integration

Bethlehem took over Cambria, Pa, Lackawanna & Midvale steel in w.w. 1, became dominant in east. 1930, 6 co.s, 75% nat. output.

Single Tax Review, July 1901, p 4 - 7

Pres. Schwab's testimony, by Byron W. Holt

~~Holt's~~ Before Senate Industrial Commission. - answers q.s by Holt

p. 6 S. testifies valuation all depends on value you put on raw material.

Its potential future the big thing.

s 449

U.S. Commissioner of Corp.s, ~~1907~~ 1911, "Rep't on the Steel Industry"

p. 372, shows USS as op'g co. declined, relatively, 1901-11.

p 373-82, its vast hold'gs in coking coal & ~~limestone~~, xpt'n, ind. sites.

But in none of these ~~is~~ has it such firm control as iron ore.

p 373 1901-10, % of USS in mfr dropped from 60% to c. 50%.
(i.e. they lost bus — brought vast lands together & underused)

p 378 ".. the great ore deposits of the country have almost invariably been greatly underestimated." (So USS holds much land just bec's ore might be found there.)

p. 378 USS, thru Oliver, has c. 77% ore reserves. (Cf. to 1952, share of ore has Δd, of mfr - Δ)

1952 rept, p. 133, USS has c. 86% reserves of highest grade ore.
(Not clear if figures directly comparable

USS as land spec.

Land spec. as cause of excess size.

369 USS earned c. 85% as much in its first 10 years as previous earnings of its constituent co.s Ftnte: "If, despite this, the Steel Corporation must be deemed a great financial success, this outcome must be because of other reasons than those given by its 'formers'. It has failed to display the superior technical efficiency that was prophesied for it, but it has undoubtedly exercised a strong power to enhance prices (about which nothing was said) . Perhaps its most marked success has been not as a manufacturing enterprise but as a land investment, holding enormous rich ore deposits for the rise of land values, which have gradually grown up to the heavily watered capitalization with which it began business. But such an appreciation of mine valuations is not the result of superior management in production; it would have occurred in any case, though doubtless somewhat enhanced by (partial) monopoly thru ownership by the Corporation of ore lands in certain localities."

USS land

76 USS owns "as much land as is contained in the 3 states of Mass., Vt., & R.I. Owns & operates r.r.s to reach from NY to Galveston. 19 "ports", & 100 large ore ships. Was Morgan, Rockefeller, Carnegie, united. The first billion $ corp., worth $1,400,000,000, 1st annual rpt.

From H. N. Casson, "The Romance of Steel, the Story of a thousand Millionaires, 1907, 218-225.

586

No techn. integ.

77 Before 1901, had been 12 combinations; a few yrs earlier, 200 independent plants & mgmts.

b) 117 Organizers of USS 'were apparently more concerned with the protection of property values than with the production of steel.' So USS, 118, became one of least efficient producers.

USS, to valorize, NOT produce

575

USS land items

146-7, landholdings of USS itemized somewhat. Ores, docksites, water co.s, nat. gas, limestone, coal 573

for future

146 Much of the ore & timber held for future use -- the mines not opened. Map, 144, shows its immense holdings of land, very roughly. 573

p. 34 Hermann Goering Reichswerke fuer Erzbergbau and Eisen hutten, was for marginal iron ore -- & it gave Na zis a weapon vs. stell strust. $150

p. 154: Gy had a "property tax" $150

p. 201 Valuation of properties.

1902. Schwab affidavit,

Plants, machinery	$300,000,000
Transportation properties	80 m
Coal & coke fields	100 m
Iron & bessemer ore props	700 m
Nat. gas, limestone, cash	170 m
	1,400 m

Land, as the 'water' in USS, & mnpy source & spec. element.

513

Justifying high stock prices.

Moody considers 380 m for 1st 2 'sense & conservative', but ores value 'the wildest of guesses'. May be worth 300 m, or 36. No one knows how much is there, or how much will be found elsewhere, determining price.

202 'It is this uncertainty as to the mnpy value of its sources of supply which necessarily makes any valuation of the Trust's properties little more than a guess.' Ownership of raw materials is the 'vital factor'.

Ch 8

S450

Report of the FTC on the Control of Iron Ore, for the Anti-Trust Subcommittee of the Comm. on the Judiciary, H.R. 1952. (Wonderful – read all sometime)

(p94. USS holds most thru subsid, Oliver & Mahoning)

p.132 Shows ore positions of 9 largest steel co.s. USS dominates. in local ores, Venezuela ores, domestic taconite ores. Superior financial resources.

p.133 Other 8 co.s use their reserves, danger of exhaustg; must soon shift to higher cost ore. USS, no danger.

8 Other co.s produced 27% open-pit direct-shipg ore, L. Superior district, but held only 14% reserves, '48-9.

~~Implication clear~~: other co.s resort to hi cost ore, they so state. mgnt land, while USS holds better land idle.

Ch. 3 ↓ More vble, more conc.

USS holds more ore, & it is better quality – 69% was o-p-d-s, cf. 19% for other 8 co.s, 1949

Best land idle, resort to worst.

1948, 83% USS's prdctn was o-p-d-s ore; 44% of other 8. (Shows others already resortg to worse ore) So USS will outlast others.

p. 134. Bethlehem & Republic weak on ore. National strong. ~~Jbf. too.~~ ~~Inland weak~~

In new ores, Venezuela, Labr., & Steep Rock Lake, if prove out, USS still way ahead. USS's Cerro Bolivar in Ven., esp. strong. – maybe 1b. gross tons of highest grade, outdoes all others.

New ores conc.

p. 135. USS's competitors in past have bought from Oliver Iron Mng Co., subsid. of USS, parts of supply. (no wonder they follow its lead!) Venezuela supply may be used some, somewhat. Amt of shipmts to be largely "will largely be det. by co. policy!"

Control via ore control

Taconite, USS also dominates.

p. 84 Reserves understated, bcs of tax policy. When proved, tax Δs, so they just explore a little ahead of game. (this wd encourage vast pre-emption of mineral rights, w/o immn. exploration. Even if surface separable, that wd. still obstruct mineral dev.mt)

Ore tax policy, ~~treats~~ encourages spec.

L. Superior area much better explored than any other, bcs close.

p. 100. Contracts of others with Oliver are short – a weapon vs them. Shrinkg reserves Δ USS's grip.

Ch.8

Chi. Tribune, Jan 1, 1903.

Steel Trust buying up steel co.s, "not so much to get their plants as to get the mines they owned".

Continues: "The mere purchase of the steel mills of independent concerns will not give the steel corporation that monopoly of a great industry which the men at the head of it would like to acquire. There will always be capital available for the construction of iron furnaces and steel mills, except in the contingency that a sufficient supply of ore cannot be obtained. If the steel corporation shall become the owner of the cream of the ore lands, it will have a natural monopoly and will occupy an impregnable position. The supply of iron ore is not so limited as is that of anthracite, but some ore beds are rich and are so near the surface that they c n be cheaply worked. Other deposits are of inferior quality and are not so easily worked. The independent company which had to depend on the inferior mines would find effective competition impossible."

cited, in George, Jr, "Menace of Privilege", p. 22, NY: Macmillan, 1905

What get out of iron ore &c. rep't? for ~~Wed. Next Week~~ Fri:

USS has c. 86% res.s of highest grade ore. (cf. 1911, had c. 77%)
Is using it slower than other co.s are usg their lower grade ores.

(Ricardo said use best first. Here, land mkt doesn't seem to work that way)

(MP of land wd be higher to other co.s. Yet USS keeps)

Other co.s buy from USS, ore, ~~th~~ sht tm contracts. No ore mkt, 1 big supplier. Lever of control. (Has been no end of mysterious gobbledygook about "P leadership", oligop; curves on board etc. Here is obvious reason others follow lead)

Go back to 1901, USS formed, 1st b.$ corp. $700,000,000 was what they imputed to ore. Wild guess. (Moody, 39-41, 144-7, 201-2) (opt)
(US Comm of Corps 1911 Rep't on Steel Ind., 372-8, opt.)

More land than 3 states. Value was all in future. Needed low i.r. to carry. USS, whole = 7 sum of pts. - i.e. had lower i.r. than components. (Promoters took shares worth $130m at par, 62m at mkt) (K&H, p 128)

Many said then USS was "over capitalized". On basis of current earnings certainly was. & on basis of value components had put on futures, also was. But USS had fncl power to carry those futures, put hi value on them. Over years, it gradually "grew up to its capitalization", as some put it. which just means antic. proved good.

Risk, too. USS cd take it. .... hvg almost all potential ore land, less risk. Like KCLC now.

Imp. thing: op'ns declined, but % of ore stayed same or grew.

As op'g co., notoriously ineff., behind times. Lost $ on current op'ns in '33-7 or so --- w 3 states.

Other industries, often same pattern. Strategic bottleneck land, basis of mnpy.

S.O., pipelines & r.r.s. & terminal sites & refin'g sites.

Alum, bauxite & dawsites.

Molybdenum, ore.

Sulfur.

"Nat. mnpies" — rights of way, franchise, etc.

Anthracite.

Timber.

Radio – TV

Then, besides that, havg a nucleus, spill out & acquire all kinds of odd assets. Koppers, Hearst, R.R.s.

still in progress. For example, during 1953 tinplate production in the West is expected to exceed 50 percent of local demand for the first time in history. The gain is due to the start of operation of a 38-inch electrolytic continuous tinning mill at Fontana and to a 10 percent expansion of capacity at Pittsburg, California. These increases in capacity will not be fully felt until late in the current year. As soon as new and expanded facilities reach full production, the District's mills will be able to produce about 70 percent of current local demand. To indicate further the nature of the process of conversion, in the years 1945-51 the following changes in finishing capacity may be cited: (1) sheared plate capacity, which manufactured the main product of wartime operations, was reduced about 25 percent; (2) pipe and tube capacity was increased almost seven times; (3) hot rolled strip capacity increased about ten times; (4) tin and terne plate capacity increased about six times.[1]

In recent years, the following major changes in rolling and finishing facilities have been reported by Twelfth District manufacturers:

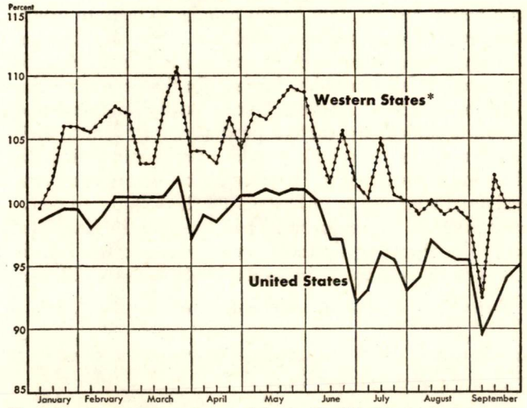
Year	Location	Facility	Explanation
1950	Fontana, California	86-inch[3] hot strip finishing mill	For production of light gauge flat-rolled products—pipe skelp, hot bands for tin plate, and light gauge plates for various uses. In conjunction with the 110-inch plate mill, Fontana now has annual capacity to produce 840,000 tons of this type of product.
1950	Pittsburg, California	21-inch[3] and 50-inch x 60-inch 4-stand 4-H[2] tandem mill	This mill is part of the 10 percent expansion of tinning capacity at Pittsburg, California.
1951	Provo, Utah	86-inch 2-H[2] temper mill	For metallurgical rolling.
		Conversion of 132-inch plate mill to 80-inch semi-continuous hot strip mill	Produces hot rolled coils for many light gauge products.
1952	Fontana, California	38-inch electrolytic continuous tinning mill	These additions give Fontana tinning facilities with annual capacity of 200,000 tons.
		7 hot dip pots	
		44-inch 4-H, 2-H temper mill and 44-inch 4-H 5-stand cold mill	
1952	Geneva, Utah	Shear line	This facility shears sheets from coils for ease in handling and for further processing.

[1] The dimension usually given in descriptions of rolling mills refers to the length of the rolls. In the case of the Pittsburg mill, the 21-inch refers to the distance between stands; 50-inch x 60-inch is the diameter and length of the rolls.
[2] "4-H" should be read "four-high." It indicates that the rolling stand contains four rolls. "2-H" indicates a stand of two rolls.

These additions represent near completion of a set of large conversion and modification plans that were only beginning to get under way in 1948. Further programs are in progress to increase finishing capacity and to improve the balance of the large integrated mills. This increased diversification is likely to give the District's steel industry greater flexibility than the capabilities of a more specialized industry might allow. In periods of falling demand, not all components of steel demand fall at the same rate. Diversified plants are able to change the relative proportions of various products and thereby retain greater stability in total output.

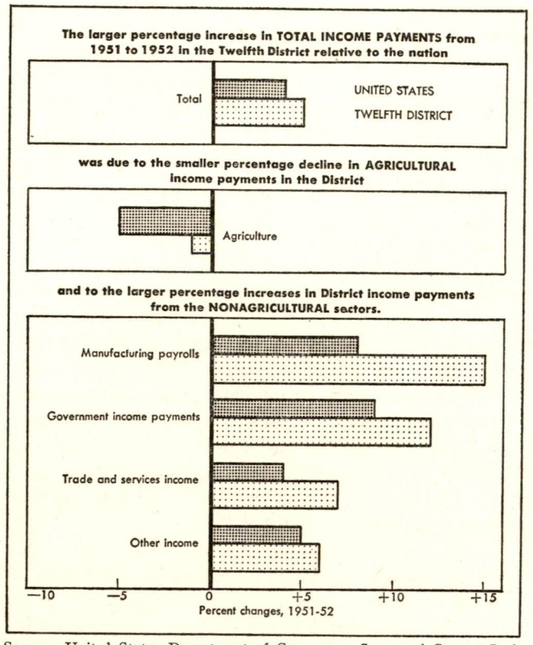
In general, the transition of western steel from a small, specialized industry to one that is adequate to provide the bulk of the steel mill products of the District has been accomplished. It is conceivable that when the sellers' market has given way to greater competition for orders, this development might mean steel prices in the area more nearly comparable to those charged to buyers in eastern markets. Thus far, 1953 has been a year of unsurpassed levels of production in the nation's steel industry. According to weekly estimates of production, the American steel industry has produced at or above 100 percent of rated capacity in 13 weeks of the year to the date of this writing and has produced below 90 percent of capacity in only one week (see Chart 2). Midyear estimates indicate that the nation will produce more than 110 million tons of steel ingots this year. The preceding high was 105.2 million tons produced in 1951. This high level of prosperity has been more than shared by Twelfth District producers. *Iron Age's* weekly series on steel operations by percent of capacity shows that the West as a district has produced at or above 100 percent of rated capacity in 31 of 39 weeks from the first of the year to the end of September. The lowest rate was 98.5 percent until the week of September 6, when it fell to 92.5 percent. On one occasion, the week of March 22, the rate of western production rose to 110.5 percent of rated capacity. Large quantities of orders are already reported for the fourth quarter, although the backlogs are said to be considerably smaller than the industry has become accustomed to in the past several years. The consensus in the industry is that the present high levels of operation will not continue into the last three months of the year. However, there seems to be little feeling that the decline will be sharp.

CHART 2
STEEL OPERATIONS: PERCENT OF CAPACITY—UNITED STATES AND WESTERN STATES
Weekly, January-September 1953



*Includes eleven western states, while the Twelfth District includes only seven. However, of the four states outside the District, only Colorado is of significance so far as steel operations are concerned.
Source: *Iron Age*, 1953 (weekly series).

[1] American Iron and Steel Institute, *Iron and Steel Works Directory of the United States and Canada*, 1945 and 1951. As was noted at the beginning of the article, reporting of capacity is quite arbitrary. Hence, anything more than approximate use of such statistics to indicate patterns of growth might imply more precision than is possible.



Source: United States Department of Commerce, *Survey of Current Business*, August 1953, pp. 7-15.

receipts from livestock marketings during the year accounted for 40 percent of total cash farm marketing receipts in the District compared with 57 percent in the nation, the declining livestock prices had a more pronounced effect upon national than upon District farm income receipts. This decline in cash receipts from livestock marketings combined with increased operating expenses to the farmers during the year resulted in a decline in agricultural net income.

Total income payments, 1946-51

Owing to the varied movements in both the farm and nonfarm sectors described above, total income payments rose relatively more in the District than in the nation in 1952. This contrasted to the postwar period 1946-51 in which income payments increased 41 percent in the District compared with 42 percent in the country as a whole. The relatively smaller percentage growth in the District during this longer period was due in large part to the decline in California's percentage of national income payments, which resulted primarily from an absolute decline in farm income in California during the years 1946-48. In this three-year period, agricultural income payments in California declined 11 percent compared with a 25 percent increase in the nation. They surged upward, however, from 1949 to 1951. During the postwar period, farm income from field crops in California became a larger percentage of total crop receipts whereas income from fruits, nuts, and truck farm crops underwent a relative decline. Along with California, Idaho and Washington also had a decline in their percentage of total national income payments in the period 1946-1951.

Arizona, on the other hand, had one of the larger percentage income increases in the nation during these postwar years, and consequently its share of national income payments increased. Income payments in the state rose from $644 million in 1946 to $1,145 million in 1951—an increase of 78 percent. As shown in Table 1, Nevada, Oregon, and Utah also had percentage increases in their total income payments during these years which were above the national 42 percent rise.

Changing sources of income, 1946-52

The changing importance of the various sources of income is one of the more interesting factors in observing income payments over time. Among the many social and economic consequences of these changing income sources is that geographic differences in economic structure often help to explain regional differences in per capita and total income payments. If, for example, there appears to be a decline in the relative importance of low earnings industries in favor of a relative increase in importance of high earnings industries, then we would anticipate a rise in total income payments to the area. A shift in sources of income payments is also an indicator of a changing market in which different types of goods and services can be sold.

Over the entire postwar period, 1946-52, the agricultural sector, as a source of income payments in the District, declined relative to the nonagricultural sectors. Table 2 indicates that the percentage of total income arising from agriculture declined from 11 percent in 1946 to 7.3 percent in 1952. This decline of 3.7 percentage points

TABLE 1
TOTAL INCOME PAYMENTS TO INDIVIDUALS, TWELFTH DISTRICT
1946, 1951, 1952
(in millions of dollars)

Area	Total income payments 1946	1951	1952	Percent change 1946-51	1951-52
Arizona	644	1,145	1,287	78	12
California	15,180	21,214	23,146	40	9
Idaho	608	808	874	33	8
Nevada	239	353	405	48	15
Oregon	1,779	2,595	2,763	46	6
Utah	694	1,019	1,069	47	5
Washington	3,139	4,217	4,466	34	6
Twelfth District	22,281	31,351	34,010	41	8
United States	170,962	242,529	255,367	42	5

PER CAPITA INCOME PAYMENTS, TWELFTH DISTRICT
1946-1952
(in dollars)

Area	Per capita income payments 1946	1951	1952	Percent change 1946-51	1951-
Arizona	985	1,421	1,498	45	5
California	1,504	1,915	2,032	27	6
Idaho	1,148	1,547	1,618	35	5
Nevada	1,626	2,064	2,250	27	9
Oregon	1,268	1,670	1,733	32	4
Utah	1,048	1,439	1,450	37	1
Washington	1,310	1,738	1,810	33	4
Twelfth District	1,403	1,819	1,914	30	5
United States	1,211	1,581	1,639	31	4

Note: The above figures supersede others previously published in this *Review*. State income statistics for 1950 and 1951 were revised by the Department of Commerce and the census estimates for 1946 were revised in light of the 1950 census.

TABLE 2

PERCENTAGE DISTRIBUTION OF TOTAL INCOME PAYMENTS BY MAJOR COMPONENTS
1946, 1951, 1952

Area	Agriculture			Manufacturing			Government			Trade and Services			Other		
	1946	1951	1952	1946	1951	1952	1946	1951	1952	1946	1951	1952	1946	1951	1952
Arizona	16.9	21.6	18.5	4.8	5.8	7.1	20.1	18.3	19.1	28.2	24.7	25.4	30.0	29.6	29.9
California	9.5	6.9	6.0	13.7	17.1	18.7	17.9	18.2	18.7	32.4	28.7	28.4	26.5	29.1	28.2
Idaho	30.0	20.7	22.5	7.2	11.0	10.9	16.0	15.3	15.9	24.6	23.7	22.5	22.2	29.3	28.2
Nevada	10.4	10.9	8.2	3.5	4.1	4.3	16.6	17.5	17.3	32.6	32.5	31.8	36.9	35.0	38.4
Oregon	13.5	8.0	8.7	18.5	22.5	22.0	15.0	14.1	16.2	28.9	27.4	26.5	24.1	28.0	26.6
Utah	12.1	9.2	7.4	7.2	10.5	10.5	25.5	22.2	23.1	26.5	24.6	24.5	28.7	33.5	34.5
Washington	11.8	6.6	6.7	15.4	18.5	18.6	21.9	20.8	21.1	28.1	26.5	26.3	22.8	27.6	27.3
Twelfth District	11.0	8.0	7.3	13.6	16.8	17.9	18.5	18.3	18.9	31.0	27.9	27.6	26.0	29.0	28.3
United States	9.8	7.6	6.7	21.3	23.9	24.5	17.0	15.3	15.9	26.6	25.9	25.6	25.3	27.3	27.3

Note: Figures may not add to 100 percent due to rounding. The above figures for 1951 supersede others previously published in this *Review* in accord with the revisions of the Department of Commerce state income statistics.

in the proportion of farm income to total income payments compares with a decline of 3.1 percentage points for the nation. All District states conformed to this pattern except Arizona where agricultural income became a larger proportion of its total income payments. California's farm income, which accounts for approximately 58 percent of the District's total, contributed 6 percent to total income payments in the state during 1952 compared with 9.5 percent in 1946.

While agriculture as a source of income in the District declined in relative importance, the proportion contributed by the manufacturing and government income sectors increased. Manufacturing payrolls as a source of income accounted for 17.9 percent of total income in 1952 compared with 13.6 percent in 1946. As Table 2 indicates, income payments from the government sector showed only a small increase in relative importance during these years, but it was and still remains a larger proportion of total income payments in the District than in the nation.

Trade and service payments, like agricultural income, have become a declining source of income to the District. However, unlike agricultural payments, none of the states in the District had an absolute decline in this source of income payments in the period 1946-1952.

Looking at a percentage breakdown of total income payments by type (Table 3) we have a further indication that the agricultural sector is a relatively declining income segment in the Twelfth District. Proprietors' in-

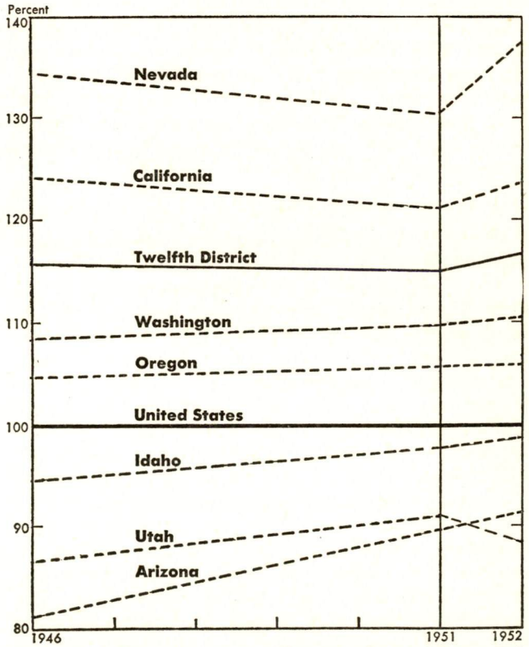
TABLE 3

PERCENTAGE DISTRIBUTION OF TOTAL INCOME PAYMENTS BY TYPE OF PAYMENT
1946, 1951, 1952

		Wages and salaries	Proprietors' income	Property income	Other income
Arizona	1946	58	25	8	8
	1951	58	27	9	6
	1952	62	23	9	6
California	1946	62	21	10	6
	1951	66	17	11	6
	1952	68	15	11	6
Idaho	1946	49	38	7	7
	1951	59	27	8	6
	1952	58	28	9	6
Nevada	1946	58	25	10	5
	1951	62	21	12	5
	1952	65	19	12	4
Oregon	1946	61	25	7	7
	1951	67	18	9	6
	1952	66	18	9	7
Utah	1946	60	24	7	9
	1951	68	20	7	6
	1952	69	16	8	6
Washington	1946	62	22	8	8
	1951	68	17	9	6
	1952	69	16	9	7
Twelfth District	1946	62	23	10	7
	1951	66	18	11	6
	1952	68	16	10	6
United States	1946	62	20	10	7
	1951	67	17	11	6
	1952	69	15	11	6

Note: The above figures supersede others previously published in this *Review*. State income statistics for 1951 were revised by the Department of Commerce.

PER CAPITA INCOME PAYMENTS OF TWELFTH DISTRICT AND STATE AS A PERCENTAGE OF NATIONAL AVERAGE
1946-1951 and 1951-1952



Source: United States Department of Commerce, *Survey of Current Business*, August 1953, pp. 7-15.

established.[1] The difference between the rate from Geneva to Los Angeles and San Francisco and the rate from Sparrows Point, Maryland, to Pacific Coast ports is $8.01 per ton. Geneva charges mill prices identical with those charged by the major Pittsburgh, Pennsylvania, producers; consequently, those products which Geneva supplies directly to buyers of mill products are sold at a delivered price substantially below those of products being shipped in from eastern mills. A considerable proportion of Geneva's product is intermediate product which is further processed at California mills owned by the same company. These mill products are then sold at what appears to be an approximation of "Geneva plus" (that is, the delivered price that would obtain if the products were completely processed in, and shipped from, Geneva).

However, about 40 percent of the mill products consumed in the District's markets are shipped in from the East. The bulk of this is delivered at the Sparrows Point, Maryland, price plus freight. A relatively small amount of these "imported" products has been shipped overland from inland producers and is delivered at prices that may exceed both "Geneva plus" and "Sparrows Point plus."

The "independent" producers usually follow the price leadership of the larger producers, but in some areas they have been able to charge prices above that range due to the extreme tightness of supply in the last several years. The importance of such premium-priced sales appears to be rather small in the total picture, however. The products of the Fontana mill are delivered in the various District markets at prices which meet the "lowest effective competition."

The producers located on the Pacific Coast are under a substantial freight "umbrella," for although they are located at or near the major market areas of Los Angeles, San Francisco, and Seattle, they charge the same prices as those producers who transport their wares over considerable distances. This means that some high cost producers have been able to operate at a profit and that others in a better cost position would be able to operate profitably even if steel prices should fall. Steel demand has already shown some decline, and, as is noted below, is expected to fall somewhat further. In the event that this decline should reduce the deficit of locally produced steel products sufficiently, eastern producers may reduce their prices and absorb freight in order to maintain their positions in the local market. Freight absorption would bring delivered steel prices in District markets closer to delivered prices in the major industrial areas of the East. But since the shipping distance from Geneva to the Pacific Coast ports is greater than such hauls as Gary, Illinois, to Detroit, Michigan, and Pittsburgh, Pennsylvania, to Cleveland, Ohio, the freight element in local prices is likely to remain high enough so that some East-West price differential will be maintained in the absence of any sharp break in the market.

[1] Selected freight rates on steel mill products, effective May 2, 1952 to date, are as follows:

From	To	Rate per ton
Geneva, Utah	Los Angeles and San Francisco	$14.49
Geneva, Utah	Seattle	16.10
Fontana, California	San Francisco	7.00
Fontana, California	Los Angeles	1.82
Fontana, California	Seattle	17.02
Chicago, Illinois	Los Angeles and San Francisco	34.04
Pittsburgh, Pa.	Los Angeles and San Francisco	38.41
Sparrows Point, Md.	Los Angeles and San Francisco	22.50

Diversification of District finishing capacity

It was often noted in the early postwar studies of the western steel industry that the war-built facilities were not designed for peacetime production, in that they were equipped to produce primarily heavy plate for shipbuilding. Since the end of the war, shipbuilding on the Pacific Coast has all but ceased. However, continued production of heavy plate has been in part supported by the large demand for pipe resulting from extensive pipeline construction. But still a major conversion to a diversified list of finished products more in line with the types of demand characteristic of the Twelfth District has been necessary. That conversion has been accomplished to the point that Twelfth District finishing facilities are now able to handle virtually all of the ingots and semi-finished steel products that can be produced in the area. Of the approximately 5.25 million tons of product from steel furnaces that will probably be produced in 1953, about 3.9 million tons should appear on the market as finished product. No adequate statistics are available which show the way in which those 3.9 millions will be divided. However, some indication of the structure of supply in the seven western states can be obtained from the following computations on receipts of steel mill products in 1951, a peak year:

Product group	1951 receipts (net tons)	Percent of total
Plates, sheared and universal	1,155,000	19.1
Structural shapes	468,000	7.8
Hot rolled bars and bar sized shapes	1,088,000	18.0
Sheets and strip	925,000	15.3
Standard and line pipe	453,000	7.5
Tin mill products	876,000	14.5
All other	1,075,000[1]	17.8
Total	6,040,000	100.0

[1] This group was estimated to be divided roughly as follows: 50 percent wire and wire products and rods for sale; 20 percent in the form of rails and rail accessories; 20 percent in tubular products other than standard and line pipe; 10 percent miscellaneous.
Source: Kaiser Steel Corporation, *A Report to Far Western Steel Purchasers*, 1952.

Somewhat less than two-thirds of total demand for mill products can be fulfilled by mills operating within the District. Nevertheless, these figures reflect a remarkable increase over potentialities of western steel finishing facilities in the prewar period, when probably no more than one-third of total demand for mill products could be so supplied. At the same time, figures from the source just cited indicate that the total of mill products purchased and received in the District increased from an annual average of 2.13 million net tons for the years 1936-1940 to 6.04 million net tons for 1951, an increase of 184 percent. In 1951 a number of products were still being supplied predominantly by mills outside the District. In some measure such deficits were reflections of economic factors which led western producers to prefer expansion in production of other products. Other deficits were in the process of being removed by expansion programs, some of which are

ures show that the rate of growth of the "independent" producers as a group has been slightly greater since 1945 than that of the western big three.[1]

In 1945 and 1946 there was a good deal of speculation about the meaning of the large, war-built steel facilities to the economy of the West.[2] Enthusiasts were quick to conclude that the West would at long last be able to obtain steel at prices comparable to those charged industrial users in the East. Other observers pointed to an imposing list of obstacles that might have left the Fontana, California, and Geneva, Utah, plants idle "white elephants" if the postwar market for steel had been weak. The most imposing obstacles appeared to be heavy fixed financial charges, lack of good coking coal, possible lack of an adequate supply of high quality ore, high intradistrict freight rates, and the need to adapt to a peacetime pattern of demand for products far different from those produced during the war. Those obstacles were met and conquered in various ways, as the following discussion illustrates.

Capital costs

The high cost of construction of facilities at Geneva was largely borne by the Federal Government. In 1946 the plant was sold for private operation at approximately 20 percent of its war-inflated cost of construction. Thus, capital charges against each ton of steel produced with the converted Geneva facilities have not been onerous. The plant at Fontana was privately built with the aid of funds from the Reconstruction Finance Corporation at an interest charge that was favorable at the time. It is conceivable, however, that the payment of the interest and principal might have become a heavy burden in a weak market. Fortunately, Fontana's capital problem was made much easier to cope with by the high sales and revenues of the last several years. The RFC loan was paid in full in 1950, a large portion of it being refinanced from private sources. Debt repayment on these private loans will begin next year, and the amount of repayment scheduled per ton of anticipated production is a large figure. However, very substantial amortization reserves have already been created, in part under fast amortization arrangements.

Raw materials

Although western steel producers in the pre-World War II period enjoyed a favorable scrap steel market which was adequate to meet their need for raw materials, the war-created plants were integrated to the blast furnace level and needed large supplies of coking coal and iron ore. Some concern was expressed over the availability of such supplies. Quality, rather than quantity, of the basic raw materials was the main concern in those early postwar years. Producers now assert that western supplies of coal and ore are not only of adequate quality, but very economical. Coal is blended in the coking furnaces and ore is beneficiated,[1] but only to improve performance which is already adequate, they report.

As to quantity of ore, studies made by the State of California Department of Natural Resources[2] indicate that ore deposits in California are adequate to support present blast furnace capacity well beyond a normal amortization period. Eagle Mountain ore bodies, located in western Riverside County, are believed to be capable of supporting Fontana's three blast furnaces at 75 percent of capacity for thirty-five years. Company estimates are even more optimistic.[3] Utah ores, which supply the Geneva plant, are reported to be more than adequate to support production beyond a normal amortization period of 20 years. Utah coal supplies, which supply both of the blast furnace operating plants in the District, are unquestionably adequate as to quantity, and early fears as to its quality as coking coal are reportedly allayed.

Freight rates and the price structure of the Far West

Since 1948 there have been several important changes in freight schedules. The most important single change from the point of view of Twelfth District producers and users of steel occurred in March 1947 when new rates were granted by the railroads for the Geneva-to-coast-ports haul. This change reduced the formal rates to levels based on revenues per car mile and per ton mile which the Interstate Commerce Commission judged to be comparable to such revenues elsewhere in the nation. The freight charges per ton of steel mill products from Geneva to Los Angeles and San Francisco thus became $9.60. The rates which had formally prevailed until that time were virtually the same per ton as those charged on the rail and water route from the East Coast through the Panama Canal—about $15.00 per ton. Those rates, if effective, would have eliminated the locational advantage of the Geneva plant compared with Atlantic seaboard producers.[4] Subsequent rate increases have brought the rates back virtually to the level of the prewar "paper rate," but in the meantime the cheapest rate from eastern mills has risen to $22.50 per ton. Consequently, considerable differences in freight charges from major producing mills to major far western consuming areas have been

[1] Capacity of "independent" steel producers as percentage of total Twelfth District capacity:

1945	6.7
1948	10.1
1951	13.6
1952	15.0
1953	15.5

There are 10 "independent" steel mills operating in the Twelfth District, all in California, Oregon, and Washington.
Sources: The American Iron and Steel Institute, *Iron and Steel Works Directory of the United States and Canada*, and *Iron Age*.

[2] See, e.g., E. T. Grether, *et al.*, *The Steel and Steel-Using Industries of California*, California State Reconstruction and Reemployment Commission, Sacramento, 1946. Also, *Fortune*, February, 1945.

[1] Beneficiation is the process of raising the percentage of iron content in ore or otherwise preparing it for blast furnace operation.

[2] J. B. Hadley, "Iron-Ore Deposits in the Eastern Part of the Eagle Mountains, Riverside County, California," *Iron Resources of California* Bulletin No. 129, Part A, issued by the State Division of Mines, June 1945.

[3] It appears doubtful, however, that any large expansion of the pig iron base of the Twelfth District could be supported by mineral raw materials within the area. The two groups of ore deposits capable of supplying an integrated mill for the time period required to amortize the investment in such a mill are already fully occupied.

[4] During the war, a special rate was granted for steel which the Government shipped from Geneva to the Pacific Coast shipyards. The postwar rates granted by the railroads in 1947 and approved by the Interstate Commerce Commission in 1949 were roughly comparable to that wartime rate. The formal rate was never an effective rate in the sense that it was never charged on any large quantities of steel shipments. For that reason, it has been referred to by the traffic manager of one of the steel companies as a "paper rate."

come which comprises the income of unincorporated enterprises (including farms) declined during the postwar years. On the national level, approximately 43 percent of proprietors' income is accounted for by farm proprietors' net returns. Assuming this breakdown to be approximately the same for the District, the decline in income from this source appears to conform to the change in agricultural income. During the 1946-52 period, both proprietors' income and agricultural income in the District declined as proportions of total income payments. All states in the District shared in the declining importance of proprietors' income during this postwar period. The outstanding change occurred in Idaho where proprietors' income as a proportion of total income payments declined from 38 percent in 1946 to 27 percent in 1952. This paralleled a decline of 7.5 percentage points in the proportion of agricultural income in the state.

Per capita income payments

The effect on total income payments of changes in income sources has been gradual and therefore overshadowed by the effect of the more dramatic population movements into the District. Between July 1, 1940 and July 1, 1952, population increased in the District at an average annual rate of 4.7 percent compared with a national rate of 1.5 percent. The larger annual percentage rate of increase in the District relative to the nation resulted primarily from the rapid growth in District population during the 1940-46 period. In the postwar period, the difference in the rates of population growth in the District and the nation has been significantly smaller.

The effect of these population movements on the relative economic welfare of the District is shown in part by the changes in per capita income payments to the District and its states. The differences in percentage changes in income and population movements in the District and nation has meant a nearly equal percentage change in per capita income payments in the two areas. During the 1946-52 period, per capita income payments for the District increased 36 percent compared with a national increase of 35 percent. In 1952, per capita income payments in the District rose 5 percent above 1951 compared with a 4 percent national increase. This relative increase in per capita income during 1952 is striking when we note that the District had a population percentage increase nearly double that of the United States. The nation's population increased by 1.6 percent between July 1, 1951 and July 1, 1952 compared with a 2.9 percent increase in the District. Just how the states in the District conformed to this pattern is shown in the accompanying chart in which state and District per capita income changes are compared with those of the United States for the postwar years.

BUSINESS INDEXES—TWELFTH DISTRICT[1]

(1947-49 average = 100)

Year and month	Industrial production (physical volume)[2]								Total nonagricultural employment	Total mf'g employment[4]	Carloadings (number)[2]	Dep't store sales (value)[2]	Retail food prices[5, 6]	Waterborne foreign trade[3, 6]	
	Lumber	Petroleum[3] Crude	Petroleum[3] Refined	Cement	Lead[3]	Copper[3]	Wheat flour[2]	Electric power						Exports	Imports
1929	97	87	78	54	165	105	90	29	....	....	102	30	64	190	124
1931	51	57	55	36	100	49	86	29	....	....	68	25	50	138	80
1933	41	52	50	27	72	17	75	26	....	....	52	18	42	110	72
1935	54	62	56	33	86	37	87	30	....	47	66	24	48	135	109
1936	70	64	61	58	96	64	81	34	....	54	77	28	48	131	116
1937	74	71	65	56	114	88	84	38	....	60	81	30	50	170	119
1938	58	75	64	45	92	58	81	36	....	51	72	28	48	164	87
1939	72	67	63	56	93	80	91	40	....	55	77	31	47	163	95
1940	79	67	63	61	108	94	87	43	....	63	82	33	47	132	101
1941	93	69	68	81	109	107	87	49	....	83	95	40	52	....	....
1942	93	74	71	96	114	123	88	60	....	121	102	49	63	....	....
1943	90	85	83	79	100	125	98	76	100*a*	164	99	59	69	....	....
1944	90	93	93	63	90	112	101	82	101*a*	158	105	65	68	....	....
1945	72	97	98	65	78	90	112	78	96*a*	122	100	72	70	....	....
1946	85	94	91	81	70	71	108	78	95*a*	97*a*	101	91	80	89	57
1947	97	100	98	96	94	106	113	90	99*a*	100*a*	106	99	96	129	81
1948	104	101	100	104	105	101	98	101	102*a*	102*a*	100	104	103	86	98
1949	99	99	103	100	101	93	88	108	99*a*	97*a*	94	98	100	85	121
1950	112	98	103	112	109	115	86	119	103*a*	105*a*	97	105	100	91	137
1951	114	106	112	128	89	115	95	136	112*a*	122*a*	100	109	113	186	157
1952	107	107	116	124	86	112	96	144	116*a*	130*a*	101	114	115	171	200
1952															
July	108	107	116	125	68	106	90	150	116*a*	130*a*	96	111*a*	114	144	187
August	106	107	122	131	81	105	103	153	118*a*	131*a*	101	116*a*	114	153	293
September	109	107	122	131	78	112	99	145	119*a*	131*a*	108	114*a*	114	142	253
October	116	107	117	142	80	115	96	146	119*a*	134*a*	98	118*a*	113	145	319
November	105	107	118	133	85	116	97	141	118*a*	134*a*	102	117*a*	114	135	194
December	99	108	114	126	78	111	96	138	118*a*	135*a*	100	117*a*	115	148	232
1953															
January	116	107	115	105	77	109	99	141	118*a*	136*a*	94	116*a*	114	151	195
February	117	108	117	131	85	113	92	154	119*a*	135*a*	102	116*a*	112	158	187
March	120	109	123	126	85	116	96	142	119*a*	136*a*	102	119*a*	113	179	336
April	120	108	122	132	83	114	96	165	119*a*	136*a*	104	116*a*	113	164	336
May	112	109	127	142	75	115	91	167	119*a*	137*a*	102	124*ar*	113	....	384
June	120	110	121	134	78*r*	105	99	179	120*ar*	137*a*	111	120*ar*	113	....	....
July	111	110	125	140	66	104	96	....	119*a*	138*a*	95	117*a*	113	....	....

BANKING AND CREDIT STATISTICS—TWELFTH DISTRICT

(amounts in millions of dollars)

Year and month	Condition items of all member banks[7] Loans and discounts	U.S. Gov't securities	Demand deposits adjusted[8]	Total time deposits	Bank rates on short-term business loans[9]	Member bank reserves and related items[10] Reserve bank credit[11]	Commercial operations[12]	Treasury operations[12]	Coin and currency in circulation[11]	Reserves	Bank debits Index 31 cities[3, 13] (1947-49 = 100)[2]
1929	2,239	495	1,234	1,790	.....	− 34	0	+ 23	− 6	175	42
1931	1,898	547	984	1,727	.....	+ 21	− 154	+ 154	+ 48	147	28
1933	1,486	720	951	1,609	.....	− 2	− 110	+ 150	− 18	185	18
1935	1,537	1,275	1,389	2,064	.....	+ 2	− 163	+ 219	+ 14	287	25
1936	1,682	1,334	1,791	2,101	.....	+ 6	− 227	+ 454	+ 38	479	30
1937	1,871	1,270	1,740	2,187	.....	− 1	− 90	+ 157	− 3	549	32
1938	1,869	1,323	1,781	2,221	.....	− 3	− 240	+ 276	+ 20	565	29
1939	1,967	1,450	1,983	2,267	.....	+ 2	− 192	+ 245	+ 31	584	30
1940	2,130	1,482	2,390	2,360	.....	+ 2	− 148	+ 420	+ 96	754	32
1941	2,451	1,738	2,893	2,425	.....	+ 4	− 596	+1,000	+ 227	930	39
1942	2,170	3,630	4,356	2,609	.....	+ 107	−1,980	+2,826	+ 643	1,232	48
1943	2,106	6,235	5,998	3,226	.....	+ 214	−3,751	+4,486	+ 708	1,462	60
1944	2,254	8,263	6,950	4,144	.....	+ 98	−3,534	+4,483	+ 789	1,706	66
1945	2,663	10,450	8,203	5,211	.....	− 76	−3,743	+4,682	+ 545	2,033	72
1946	4,068	8,426	8,821	5,797	.....	+ 9	−1,607	+1,329	− 326	2,094	86
1947	5,358	7,247	8,922	6,006	.....	− 302	− 510	+ 698	− 206	2,202	95
1948	6,032	6,366	8,655	6,087	.....	+ 17	+ 472	− 482	− 209	2,420	103
1949	5,925	7,016	8,536	6,255	3.20	+ 13	− 930	+ 378	− 65	1,924	102
1950	7,093	6,415	9,254	6,302	3.35	+ 39	−1,141	+1,198	− 14	2,026	115
1951	7,866	6,463	9,937	6,777	3.66	− 21	−1,582	+1,983	+ 189	2,269	132
1952	8,839	6,619	10,520	7,502	3.95	+ 7	−1,912	+2,265	+ 132	2,514	140
1952											
August	8,270	6,469	9,679	7,197	.....	+ 213	− 126	+ 163	+ 49	2,535	134
September	8,444	6,473	9,908	7,249	3.96	− 230	− 176*r*	+ 237*r*	+ 4	2,363	144
October	8,605	6,765	10,125	7,336	.....	+ 236	− 294	+ 267	+ 32	2,527	146
November	8,805	6,808	10,281	7,331	.....	+ 72	− 29	+ 79	+ 34	2,616	141
December	8,844	6,627	10,504	7,498	3.95	− 299	− 240	+ 422	− 12	2,514	157
1953											
January	8,816	6,633	10,390	7,490	.....	+ 138	− 263	+ 136	− 77	2,565	146
February	8,838	6,474	9,911	7,551	.....	+ 83	− 119	− 13	+ 22	2,491	150
March	8,983	6,299	9,937	7,560	4.01	− 220	− 147	+ 240	− 18	2,394	164
April	9,054	6,173	10,011	7,597	.....	+ 16	− 277*r*	+ 239*r*	+ 11	2,378	153
May	9,092	6,020	9,843	7,627	.....	− 12	− 174*r*	+ 294*r*	+ 22	2,463	150
June	9,156	5,997	9,899	7,703	4.18	− 39	− 531	+ 435	+ 39	2,275	155
July	9,167	6,675	10,005	7,729	.....	+ 75	− 184	+ 274	+ 3	2,450	148
August	9,229	6,589	9,950	7,749	.....	− 100	− 99	+ 177	+ 36	2,397	142

[1] Adjusted for seasonal variation, except where indicated. Except for department store statistics, all indexes are based upon data from outside sources, as follows: lumber, various lumber trade associations; petroleum, cement, copper, and lead, U.S. Bureau of Mines; wheat flour, U.S. Bureau of the Census; electric power, Federal Power Commission; nonagricultural and manufacturing employment, U.S. Bureau of Labor Statistics and cooperating state agencies; retail food prices, U.S. Bureau of Labor Statistics; carloadings, various railroads and railroad associations; and foreign trade, U.S. Bureau of the Census. [2] Daily average. [3] Not adjusted for seasonal variation. [4] Excludes fish, fruit, and vegetable canning. [5] Los Angeles, San Francisco, and Seattle indexes combined. [6] Commercial cargo only, in physical volume, for Los Angeles, San Francisco, San Diego, Oregon, and Washington customs districts; starting with July 1950, "special category" exports are excluded because of security reasons. [7] Annual figures are as of end of year, monthly figures as of last Wednesday in month or, where applicable, as of call report date. [8] Demand deposits, excluding interbank and U.S. Gov't deposits, less cash items in process of collection. Monthly data partly estimated. [9] Average rates on loans made in five major cities during the first 15 days of the month. [10] End of year and end of month figures. [11] Changes from end of previous month or year. [12] Minus sign indicates flow of funds out of the District in the case of commercial operations, and excess of receipts over disbursements in the case of Treasury operations. [13] Debits to total deposit accounts prior to 1942, debits to demand deposit accounts from 1942 on, excluding interbank deposits. *a*—New revised series. *r*—Revised.



MONTHLY REVIEW

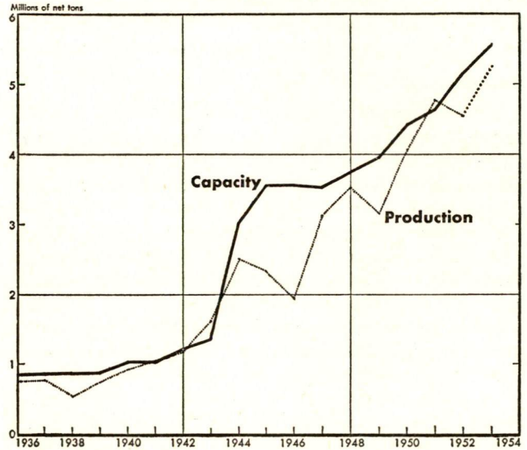
SEPTEMBER 1953 FEDERAL RESERVE BANK OF SAN FRANCISCO

TWELFTH DISTRICT STEEL: A "WAR BABY" GROWS UP

In the decade 1943-53, steel capacity in the Twelfth District has grown by more than 400 percent. The bulk of this remarkable growth took place as war investment during World War II, but substantial expansion has also occurred in the postwar period. Since the start of World War II, there have been two major growth periods, the second of which seems now to be at or near a tapering off point. The first growth period occurred in the years 1943-44, when the District's two major wholly integrated steel plants were established to supply plate and structural steel to the Pacific Coast shipbuilding industry. The second growth period has been from 1947 to the present. For two years following cessation of hostilities in 1945, little change took place in facilities for producing steel ingots in the District. That interval was a period of transition for the steel industry in the seven western states. Important financial and technological adjustments had to be made to permit the industry to produce for nondefense purposes and to grow in response to rising industrial demand. Since 1947 the District's capacity to produce steel has risen at a consistently high rate, usually exceeding the rate of growth of the nation's steel industry as a whole (see Chart 1).[1] Production has followed a pattern similar to that displayed by the growth in capacity, declining markedly during the transition phase (1945-47), but remaining high as a percentage of capacity in most of the years following. In 1951, as the diagram shows, production exceeded 100 percent of capacity[2] as it has in the first half of 1953.

Three producers dominate the Twelfth District steel market.[3] The rapid growth in facilities and in production is largely a reflection of their activities. However, the smaller firms, whose steel production is based mainly on scrap steel as a raw material, have also lived a healthy economic life for the most part. These mills, which were the backbone of the small prewar steel industry in the District, now find themselves more than ever in the position of the "competitive fringe" of an industry characterized by large-scale operations. Nevertheless, capacity fig-

CHART 1
ANNUAL STEEL PRODUCTION AND CAPACITY—TWELFTH DISTRICT, 1936-1953



Note: Although production in the first half of 1953 has been at or above capacity almost continuously, *Iron Age* has anticipated a decline in the latter half of the year of such magnitude that the annual rate is predicted as being about 94 percent of capacity. Since the chart is plotted in terms of annual rates, the connecting lines do not indicate any fluctuations within the year.

Sources: Production for the period 1936-1944 was estimated by the Federal Reserve Bank of San Francisco. The source for all capacity figures and for production figures for the period 1945-1952 is the Annual Statistical Reports of the American Iron and Steel Institute. The 1953 production estimate is from *Iron Age*, July 6, 1953.

[1] Percent changes in ingot capacity for 1947-53 are as follows:

	Twelfth District	U. S.		Twelfth District	U. S.
1946-47	—0.3	—0.5	1950-51	5.0	5.2
1947-48	6.4	3.3	1951-52	11.4	4.2
1948-49	5.3	1.8	1952-53	7.9	8.2
1949-50	11.5	3.5			

[2] Capacity, as reported by the steel companies to the American Iron and Steel Institute, is at best an estimate of maximum potential output. Rated capacity is the figure reported by the Institute at the *first* of each year. Hence, production can exceed capacity either because of underestimation of "true" capacity or because of the addition of new facilities during the year.

[3] The three producers are Bethlehem Pacific Coast Steel Corporation, Columbia-Geneva Division of United States Steel Corporation, and Kaiser Steel Corporation. Bethlehem operates steel mills at Los Angeles, San Francisco, and Seattle; Columbia operates mills at Geneva, Utah, Torrance, California, and Pittsburg, California; Kaiser's mill is located at Fontana, California.

Also in This Issue

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Income Payments in the Twelfth District, 1952 116

Entries under the category of losses and charge-offs may include not only actual losses and charge-offs but also transfers *to* valuation reserves created for future losses. Similarly, entries under recoveries and profits may include transfers *from* valuation reserves.

Since the bulk of the increase in total losses and charge-offs was accounted for by the fifteen largest banks in the District, detailed data were compiled for these banks, indicating their losses after adjustment for transfers to and from reserves. Similar data were not compiled for all District member banks. These data indicate that the "adjusted" losses on securities, after allowance for transfers to and from reserves, of the fifteen largest banks were $2 million during the first half of 1953, compared with "adjusted" recoveries of $1 million in the corresponding period a year ago. This marked difference reflects the fact that these banks sold substantial amounts of Government securities in the first half of 1953 when prices of such securities were falling, whereas a year ago the decline in their holdings of Governments was relatively small and occurred at a time when security prices were rising. In contrast, the experience with loans in the fifteen largest banks was more favorable this year than last. They had "adjusted" recoveries on loans amounting to $212 thousand this year compared with "adjusted" losses of $645 thousand in the first half of 1952.

Profits and dividends

As has already been indicated, net profits after taxes for District member banks fell below the first half of 1952 as a result of the substantial increase in the amount set aside for income taxes. Stockholders, however, received cash dividends that were 5 percent larger than in the first half of 1952. The upward trend in dividend payments that has prevailed since World War II was thus continued. The smaller banks increased their dividend payments relatively more than did the fifteen largest banks, which would be expected since the smaller banks fared much better with respect to net profits after taxes than did the fifteen largest.

INCOME PAYMENTS IN THE TWELFTH DISTRICT, 1952[1]

INCOME payments to individuals in the Twelfth District during 1952 rose 8 percent above the 1951 figure compared with 5 percent in the country as a whole. The increases in Nevada, 15 percent, and Arizona, 12 percent, were the second and third largest in the nation, while the other District states had gains ranging from 5 to 9 percent. The greater growth in the District's total income payments resulted from a relatively smaller decline in farm income and a larger percentage increase in nonfarm income payments than occurred nationally. Owing to a relatively larger population growth in the District, the rise in per capita income was only slightly larger in the District than in the country as a whole, 5 percent compared with 4 percent. In general, the percent changes in total, in per capita, and component sources of income payments during the year were in keeping with the over-all postwar pattern.

Nonfarm income rises more in District in 1952

The rise in income from the nonfarm sectors of the economy during 1952 was relatively greater in the District than in the country as a whole. Manufacturing payrolls in the District increased 15 percent compared with 8 percent nationally. Arizona had the largest relative increase, 38 percent, in this sector of any state in the nation, and although it is among the least industrialized states in the country, the gain was sizable, $25 million. The increase in manufacturing payrolls in California was in part the result of a continued upsurge of total wages and salaries in the aircraft industry. Wage payrolls in the aircraft and parts industries in California increased 49 percent above the 1951 figure. These payrolls alone accounted for approximately 21 percent of California's total manufacturing payrolls.

Among the other income increases in the nonfarm sector, government payments rose relatively more in the District than in the nation owing primarily to the greater than average rise in defense establishment expenditures in the West. However, Oregon's 20 percent increase in government payments during the year was in large part the result of a state bonus paid to veterans. Trade and service payrolls also showed a larger increase in the District than nationally. The highest percentage increase in this sector occurred in Nevada where trade and service income normally accounts for the largest proportion of income payments. Nevada also had an upsurge in construction payrolls, 63 percent, and in mining payrolls, 36 percent, which helps to explain why the state had a 15 percent increase in its total income payments despite an 11 percent decline in agricultural income.

Agricultural income declines in 1952

The smaller percentage increase in total income payments in the nation than in the District during 1952 resulted in considerable part from a greater decline nationally in agricultural income. Farm income payments in the District declined 1 percent below the previous year compared with 5 percent in the country as a whole. This percentage difference was largely due to the fall in livestock prices relative to crop prices during the year coupled with the fact that livestock provides a smaller proportion of farm income in the District than in the nation. During 1952 cash receipts from crop marketings rose by 12 percent in both the District and the nation, whereas the drop in receipts from livestock and livestock products was less in the District than in the country as a whole. Since cash

[1] This discussion is based primarily upon the estimates which appear in the United States Department of Commerce, *Survey of Current Business*, August 1953, pp. 7-15.

EARNINGS AND EXPENSES OF TWELFTH DISTRICT MEMBER BANKS FIRST HALF 1953

PROVISION for substantially larger income tax payments caused the net profits after taxes that Twelfth District member banks earned in the first half of 1953 to fall 4 percent below those of the corresponding period a year ago. This decline was confined, however, to the large banks in the District. The net profits after taxes of the fifteen largest banks as a group were 6 percent below a year ago. The remaining District member banks, on the other hand, earned 7 percent more after taxes than a year ago, which is larger than the gain of 5 percent for member banks in the country as a whole. The amount set aside for income taxes by member banks in the Twelfth District was 44 percent greater than in the corresponding period of 1952, compared with a national increase of only 17 percent. Both large and small banks in the Twelfth District made provision for substantial increases in their income tax payments.

Operating income and expenses

The much greater increase in provision for income taxes in the Twelfth District probably reflects primarily the fact that the earnings before taxes of member banks rose more in the Twelfth District than in the country as a whole. Profits before income taxes were 17 percent larger than in the first half of 1952 for District member banks compared with 10 percent for all member banks.

Total earnings before deduction of expenses of District member banks were 17 percent larger than in the first half of 1952. The major element in the rise in earnings was a 21 percent increase in interest and discounts on loans received by member banks in the District compared with 16 per cent nationally. This increase was due in part to higher interest rates charged by banks but probably the greater impetus came from the larger volume of loans outstanding. Especially significant were the increases in volume of consumer and real estate loans which carry higher interest rates than do business loans.

Although member banks in both the Twelfth District and the nation had larger average loan portfolios and smaller average holdings of Government securities than in the first half of 1952, they earned more interest on Government securities in the first half of this year than in the corresponding period a year ago. The increase was 14 percent in the District and 12 percent in the country as a whole. This growth in income reflects the higher yields on Government securities that have prevailed this year. Within the District, the decline in average holdings of Government securities was confined to the fifteen largest banks. The smaller member banks increased their average holdings with the result that their earnings from Governments were 28 percent larger than in the corresponding period of 1952. The fifteen largest banks decreased their holdings of Government securities and expanded their loans, while the smaller banks increased both their loans and their holdings of Governments.

"Other earnings," which include interest and dividends on securities other than United States Government, service charges on loans and deposits, income from trust departments, and other miscellaneous income, also showed greater gains in the Twelfth District than in the country as a whole. The fifteen largest banks accounted for the better performance of the District in this regard since the smaller District banks fell below the national increase in this category.

Expenses of Twelfth District member banks were 10.8 percent higher than in the first half of 1952, only slightly more than the increase for member banks in the country as a whole. The increase for the fifteen largest banks in the District, 9.6 percent, was substantially below the 15.7 percent increase for the other District banks. A breakdown of expenses of the fifteen largest banks indicates that their wage and salary payments were 11 percent higher than in the first half of 1952, and interest on time deposits was 10 percent higher. Similar data for the other District banks have not been compiled.

Net losses and charge-offs

In the first half of 1953 District member banks had smaller recoveries and profits on loans and securities than in the corresponding period a year ago. Their losses and charge-offs, on the other hand, were nearly twice as large as a year ago. Their net losses and charge-offs, after deduction of recoveries and profits, were seven times greater than a year ago.

SELECTED EARNINGS AND EXPENSE ITEMS OF MEMBER BANKS—TWELFTH DISTRICT AND UNITED STATES, JANUARY-JUNE, 1952 AND 1953

	Twelfth District					
	All banks		Percent change			U.S. percent change—all banks
	1st half 1953p	1st half 1952	All	Fifteen largest	Other	
	(in millions)					
Interest and discount on loans[1]	$238.3	$197.8	+20.5	+19.7	+23.6	+15.5
Interest on Government securities	63.4	55.8	+13.6	+ 9.5	+27.8	+12.0
Other earnings	74.0	68.1	+ 8.7	+ 9.7	+ 4.4	+ 6.7
Total earnings	375.7	321.7	+16.8	+15.9	+20.3	+12.8
Total expenses	229.2	206.8	+10.8	+ 9.6	+15.7	+10.6
Net current earnings	146.5	114.9	+27.5	+27.0	+29.6	+16.2
Total recoveries and profits	5.5	8.6	...	...	...	...
Total losses and charge-offs	20.5	10.8	...	...	...	...
Net losses and charge-offs	15.0	2.2	...	...	...	...
Profits before income taxes	131.5	112.7	+16.7	+15.6	+22.1	+10.4
Taxes on net income	68.7	47.6	+44.3	+45.0	+42.4	+16.6
Net profits after taxes	62.8	65.1	— 3.5	— 5.8	+ 7.0	+ 5.3
Cash dividends declared[2]	34.4	32.8	+ 4.9	+ 4.5	+ 7.3	+ 3.8
Undistributed profits	28.4	32.3	—12.1	—17.5	+ 6.8	+ 6.6

[1] United States loan earnings figures include service charges and other fees on loans; Twelfth District figures include interest and discount only. Service charges and fees on loans in Twelfth District included in "other earnings."
[2] Figures include common stock dividends only.
[p] Preliminary.

Steel Ind:

Cos that make from scrap are small. - no one problem.

Try W-s, s.e. dept., for man to discuss s.e. op-ns.

Ariz, state booming, apply for job.

Mason Gaffney

A map of the eastern U.S. showing the major iron & coal fields in relation to the steel industry

Two Harbors
Duluth
Superior
Ashland
Marquette
Escanaba
Milwaukee
Hamilton
Buffalo
Mohawk R.
Hudson R.
Ashtabula
Conneaught
S. Chicago
Detroit
Indianapolis
Gary
Toledo
Cleveland
Lorain
Youngstown
Pittsburgh
Johnstown
Susquehanna R.
Delaware R.
Bethlehem
Illinois R.
Wabash R.
Ohio R.
Potomac R.
James R.
Cumberland R.
Tennessee R.
Birmingham
Coosa R.
Tombigbee R.
Alabama R.

- Coal producing areas
- Iron-ore exporting harbors
- Steel mill cities
- Iron ore producing areas

EASTERN UNITED STATES

SCALE OF MILES
0 50 100 150 200

90 85 80 75 70
45 40 35 30 25
Longitude West 80 of Greenwich

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Refuse to Revive Higgins Contract For Shipyards

Maritime Commission Upholds Cancellation; 3 Inquiries to Open

Washington Bureau of The Chicago Sun.

Washington, July 22.—The Maritime Commission refused today to reopen the $559,000,000 Higgins shipyards contract, canceled Saturday because of lack of steel.

Despite extreme pressure from some members of Congress and Gulf Coast business interests, the commission, at a special meeting, decided not to rescind its cancellation order.

[War Production Board officials said the entire production picture is being studied with the certainty that orders similar to the Higgins cancellation will be issued throughout the country to keep the construction program within the limitations of available materials, the United Press reported.]

The Higgins yards were to have built 200 cargo ships for transportation of war materials.

The commission's action came as three Congressional committees announced special investigations into reasons for the cancellation.

Gices Three Reasons.

"There are three major reasons why we cannot allow the Higgins contract to go as originally awarded," a high official of the commission said.

"First, there simply is not enough steel. Second, other shipyards have so far exceeded all expectations in the speed which they have been building Liberty ships that our program must be balanced to meet the steel shortage. A third factor is that Higgins has never built any big boats, and with what steel we have we prefer to have experienced men handle the construction program."

New Orleans shipbuilding men estimated that 70,000 workers who would have worked on the Higgins boats will not get jobs.

At a press conference later in the day Andrew Jackson Higgins, head of the shipyard, said apparently nothing can be done about the commission's decision now, although he thought investigations by the three congressional committees would "wash a lot of dirty linen."

Asks Conversion to Dry Docks.

He suggested that his yards—on which he said $20,000,000 already had been spent—be converted to dry docks for repair of ships now "lying around waiting." Expenditure of another $10,000,000 would provide dry docks, he said, capable of handling 12 ships at a time.

Earlier Higgins had applied pressure wherever he could find anyone to listen. He tried in vain to carry his story to President Roosevelt, but spent an hour conferring with the President's secretary, Marvin McIntyre. Neither would comment afterward.

Chairman Harry S. Truman, (Dem., Mo.) of the Senate defense investigating committee, announced that Higgins and members of the Maritime Commission would be called at hearings to begin next Tuesday.

About the same time, a special subcommittee of the House merchant marine and fisheries committee, hea'ed by Representative Frank Boykin (Dem., Ala.), was named to investigate the entire steel shortage situation in relation to cancellation of the Higgins contract.

Plans Separate Inquiry.

Earlier, a special subcommittee of the same House group, headed by Represen' tive J. Hardin Peterson (Dem., Fla.), had been designated to investigate the cancellation.

Higgins and officials of the Maritime Commission will be followed before the Senate committee, Truman said, by Henry Kaiser, the West Coast shipbuilder, and Glenn L. Martin, Baltimore airship builder, to testify concerning their plan to build cargo-carrying airplanes in shipyards.

Labor Asks F.D.R. To Help Higgins

New Orleans, July 22.—(UP)—Thirteen southern labor organizations requested President Roosevelt today to order operations resumed at the unfinished Higgins shipyard here.

The request was made after 7,000 American Federation of Labor workers made idle by the cancellation held a protest parade and meeting at which Holt Ross, regional union representative, charged that "gross incompetence" in the War Production Board was responsible for the shutdown.

"Not many days ago," Ross said, "a representative of the Maritime Commission said that the Higgins shipyard might mean the difference between victory and defeat for the Allies. Now what has happened in the meantime to change this belief?"

142

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Capt. W. J. Grace Under Inquiry by U. S. Grand Jury

Federal Attorney Bares His Name In Sedition Quiz

The first official disclosure that Capt. William J. Grace, chairman of the former Citizens Keep America Out of War Committee, is under investigation by the federal grand jury looking into seditious activities, was made yesterday in a document filed with Federal Judge John P. Barnes.

The document is in the form of a motion, filed by United States District Attorney J. Albert Woll, to strike the petition recently filed by Capt. Grace asking that his name be expunged from a subpoena duces tecum.

That subpoena, issued July 9 by Federal Judge William H. Holly, directed Miss Frances L. Dusenberry, owner of the New Thought Book Shop at 17 North State street, to produce before the federal grand jury all correspondence with Capt. Grace and 33 other individuals and firms.

Plea to Protect Reputation.

On July 16 Capt. Grace, a past commander of the Veterans of Foreign Wars, appeared before Federal Judge Philip L. Sullivan with a plea for protection of his reputation. He said that the Keep America Out of War Committee had been changed to the Citizens U. S. A. Committee.

Woll's petition sets forth that Capt. Grace's petition "shows that the petitioner is under investigation by the very grand jury whose actions he seeks to control," and that the subpoena complained of was issued "without any intent to injure the alleged good name of the petitioner."

Woll's petition was accompanied by an affidavit signed by William J. Connor, first assistant United States district attorney, who, with Paul M. Plunkett, has been presenting evidence to the grand jury since it begun its investigations last April. The affidavit points out:

"That one of the persons concerning whose activities facts have been presented and are being presented to the grand jury is William J. Grace. . . .

Facts Forbid Disclosure.

"That the best interests of the United States and of the federal grand jury forbid the disclosure by this affiant of any results of the investigation by the grand jury at this time, or the reasons for the inclusion of the name of William J. Grace in the aforesaid subpoena, or such connections as have been established between the parties named in the subpoena, but this affiant does say that he caused the issuance of the said subpoena in the sincere discharge of his duty. . . .

"That the subpoena was not issued with any malice, or any attempt to malign, defame or injure the alleged good name and reputation of the petitioner or anyone else therein named, but was in truth and in fact issued solely in accordance with his duty . . ."

In support of his motion to throw out Capt. Grace's petition, Woll also filed a memorandum with the court. The memorandum points out that it was Capt. Grace himself who filed a petition in which he practically admitted he was under investigation.

In this petition, Capt. Grace asked that Victor E. Devereaux, editor of Foreign Service, the V. F. W. publication, be subjoenaed before the grand jury and be made to produce any evidence he might have of alleged seditious activity on the part of Capt. Grace and his committee.

Devereaux had written that Capt. Grace's committee was "no less seditious today than it was yesterday."

'Most Peculiar Situation.'

"In the light of the foregoing," Woll's memorandum states, "and further in the light of the admitted fact stated by the petitioner in his petition that all of the records of the Citizens Committee were subpoenaed before the grand jury, we think that it is a most peculiar situation in which he now places himself.

"We have the bizarre situation of an individual, whose activities, together with others, are receiving the attention of the grand jury, seeking to control where that grand jury investigation shall go. He makes the naive assertion that since certain of his books and records were turned over to the grand jury, that, therefore, the grand jury must be satisfied with what he has turned over and can look no farther for correspondence he may have had with other persons. It seems to us that the mere state-

8-30-56

Sidelights

Scrap Sets High, May Go Higher

One big steel producer yesterday paid a record price of $59 a gross ton for No. 1 heavy melting scrap, according to the Associated Press.

Scrap is a vital item in steel production. Steelmen feed it into their open hearth furnaces, where it comprises about 40 per cent of raw materials used. The other major ingredient is pig iron, made from iron ore.

Prices have soared since the steel strike. The $59 paid yesterday is nearly double the $30 rate in the Pittsburgh area just two years ago.

Scrap dealers predict even higher prices. First, they speak of pressing demand for steel in the wake of the strike. Second, there is an ore shortage developing, owing to a strike at the Pittsburgh Steamship Company, ore-transporting division of United States Steel Corporation. So far, sixty-three ships out of the Great Lakes iron ore fleet of 255 are immobilized. So, many steel makers are using more scrap steel so that they can stockpile ore for the winter, when the Lakes are frozen.

At the same time, export demand for steel scrap is heavy, with large orders from Japan and Canada.

One of the major sources of scrap is the automobile industry, which produces leftover steel as it stamps out car parts. But auto production slipped to 69,849 units last week — lowest rate this year — as compared with 129,599 produced in the similar 1955 week.

Conc: Corp. not a disembodied spirit.

Meanings of "watered stock" & "overcapn" - USS.

Eliot Jones, Trust Problem in U.S., 207-8

US Comm-n of Corps Rept on Steel Ind., Pt. I, pp 14-5.

Now we pass from theoretical to ~~practical~~ factual. I hope you will find 2 closely related.

Steel lands

p. 233. Statement of J. A. topping, chmn Republic Steel, 1922, discussing merger: .."& later on I called attention to the great wealth of our raw material in the Southern States"" 584

278 -80, lands owned by subsdiaries of USS. Suggestive, not precise. Ore, watersheds, natural gas, standing timber, docks, r.r. rights of way, big items. 584

295 ff. Properties owned or leased by subsidiary co.s of Bethlehem Steel. 584

Much land, of which current capaicity of ores is small % total estimated reserves. -- i.e., mostly future value. Industrial sites, r.r. , iron, coal, limestone quarries

298, Names of subsidiary co.s. Predominating are Iron Mines Co., Land & Improvement Corp, Land Co, Water Co., Iron Co, R.R. co., Collieries Co, -- many of each. 584

p. 303 Casually in cluded with other assets of various subsidiaries of Bethlehem: 6,387 acres of mfr site; 7,852 a of "other r.e.". These are not all, just urban holdings at specified locations, all city. Add, get over 14,000 acres urban land. --(probly as much as all industrial land in Chicago, check that)

5413 pp. 92-5 Rough data on iron ore, conc., 1923.

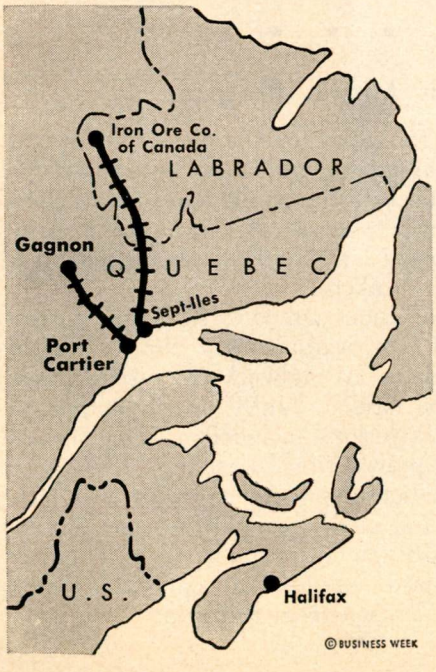
II.F 1952 1 Economic Commission for Asia and the Far East. Coal and iron ore resources of Asia and the Far East. 1952.

II.E 1953 6 Economic Commission for Europe. The European steel industry and the wide-strip mill. 1953.

338.25 C366 Chapman, H.H. The iron and steel industries of the South.
1953.

YEAR-ROUND harbor at Port Cartier (map), kept ice-free by air from pipes on harbor floor, gives U. S. Steel edge in ore shipments.

Big Steel Gets Jump in Canadian



Two hundred miles north of the St. Lawrence River in Quebec Province of Canada, a huge auger shaves particles from black cakes of material in a rotating vat. The particles, looking like coal dust and feeling like damp clay, are rich concentrate from Canada's newest iron ore development.

On either side of this settling vat are others, 12 in all. Each is the final stage of a separate concentrating or beneficiating line at the new project—the latest move in the steel industry's hunt for new and richer fodder for the blast furnaces of the U.S., and of Europe, too.

This plant and its accompanying mine (cover and pictures) have been built by Quebec Cartier Mining Co., a wholly owned subsidiary of U. S. Steel Corp.

To make the project possible in this remote Quebec area, a harbor is being blasted from nearly solid rock at Port Cartier on the St. Lawrence River. Two towns are being built. A power plant has been constructed. Two hundred miles of railroad have been laid through rugged terrain.

According to the official figures, $200-million has been spent on the project. But industry men on the outside think the total investment is probably piling up closer to $300-million.

• **Ace in the Hole**—Although this huge project was authorized by U. S. Steel before the recent decreases in the demand for iron ore, Quebec Cartier is virtually assured of economic success, for many reasons:

• At a time when steel companies have found that higher grade ores or ore concentrates can improve blast furnace operations, Quebec Cartier will produce one of the richest concentrates available anywhere in the world today. It will produce a concentrate with 66% to 67% iron. That's about 95% pure hematite (the particular chemical type iron ore that is found in this develop-

In Labor

• • •

California Carpenters to Demand Four-Day Week for Five-Day Pay

Southern California's 55,000 carpenters—members of 48 locals in 11 counties—have decided to reopen contracts to demand a four-day work week without any loss in present take-home pay. **They say "severe" unemployment makes a shortened week imperative.**

Negotiations are scheduled to begin about May 1. Contractors will oppose any cut in hours below the present five-day, 40-hour week. The carpenters' demand for a four-day week at present weekly pay would cost a "prohibitive" $1 more an hour, the employers say.

• • •

High Court Says "Trivial" Error In Ballot Can't Upset NLRB Election

"Trivial irregularities" in administrative procedures do not invalidate the results of a National Labor Relations Board representation election, the U. S. Supreme Court ruled this week.

The irregularity under review was an error in an NLRB ballot, which listed the Mattison Machine Works of Rockford, Ill., as the "Mattison Machine Mfg. Co." The United Auto Workers won the election 157 to 155, but an appeals court set aside its certification as bargaining agent. The ballot error was given as the reason.

In a unanimous decision reversing this ruling, the Supreme Court held that since the irregularity had not prejudiced the fairness of the election, it afforded no basis for invalidating the results.

• • •

Motor Freight Rate Boosts Feared As Teamsters Victory Ends Strike Peril

The threat of a major trucking strike the end of this month cleared away late last week—but **the result may be higher motor freight rates, perhaps increases totaling 7% over the next three years.**

The International Brotherhood of Teamsters and bargaining representatives of 600 major companies in 14 states agreed on a new three-year contract for pay and fringe increases estimated to cost 36½¢ to 42¢ an hour by the end of 1963. This will boost labor costs about 14% and shippers announced that half—or 7%—will have to be offset by rate increases.

Some 16,000 drivers will get a 7¢ raise Feb. 1 and another 3¢ on Aug. 1. They are due a 9¢ increase Feb. 1, 1962, and 10¢ Feb. 1, 1963. The carriers also agreed to boost contributions to health-welfare and pension funds by $3 a week for each employee during the three-year contract period.

The terms are expected to be a pattern for bargaining in other parts of the industry. In all, about a half-million drivers will be covered.

The motor carriers gave in on most of the noneconomic demands by IBT's Pres. James R. Hoffa (BW—Jan.14'61,p101), including the acceptance of the principle of national contracts and new guarantees to drivers on picketing and the handling of "struck" goods.

A carriers spokesman said Hoffa won on these controversial demands because he succeeded in "isolating" a group of companies for a separate agreement; the others couldn't hold out once the solid front was broken.

• • •

Meany Forces International Group To Step Up Organizing Plans

For some months, AFL-CIO Pres. George Meany has been critical of the "slow pace" of the International Confederation of Free Trades Unions in organizing in underdeveloped areas—particularly in Africa. **His disenchantment came out into the open when he held back a $221,000 AFL-CIO check earmarked for the ICFTU organizing fund.**

Last week, ICFTU leaders flew in from abroad to try to patch up the differences with Meany and other AFL-CIO officials, including Walter Reuther. They succeeded—at least temporarily—through some compromises.

The ICFTU promised that a "stepped-up" organizing campaign plan will be laid out in March. In turn, Meany released the AFL-CIO check and withdrew his reported insistence that an AFL-CIO international representative, Irving Brown, serve in a high post.

The patch-up meeting also eased some of the differences between Meany and Reuther on AFL-CIO programs abroad. The two U. S. leaders have tangled frequently over the ICFTU's role in fighting Communist unions. No final decisions were made on AFL-CIO's participation in this part of ICFTU's program, although the federation had intended to invest some $4-million in it. What AFL-CIO will do—if anything—will be settled at the executive council meeting next month.

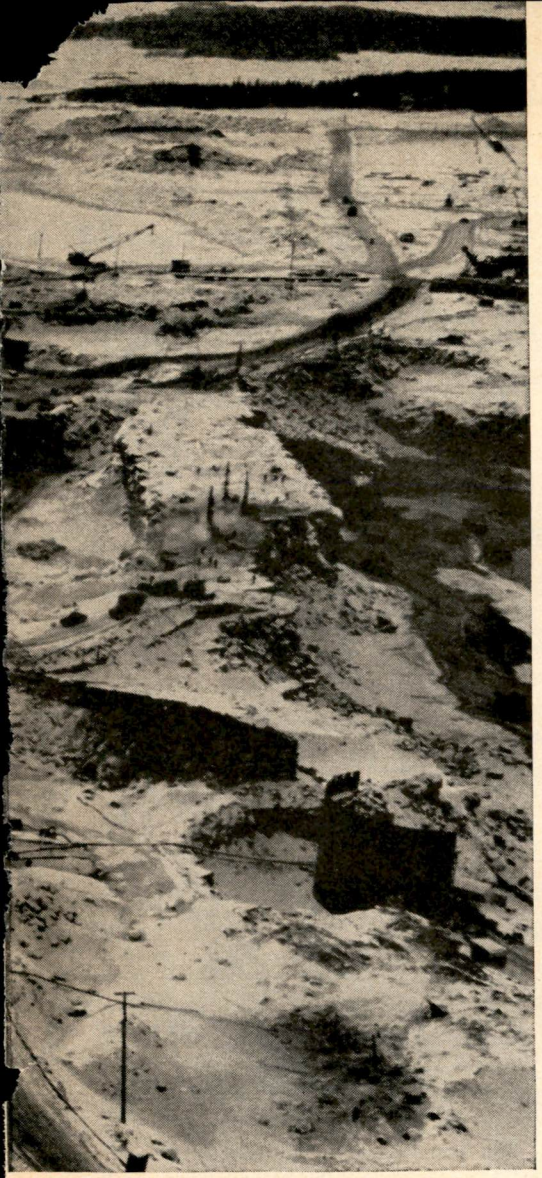
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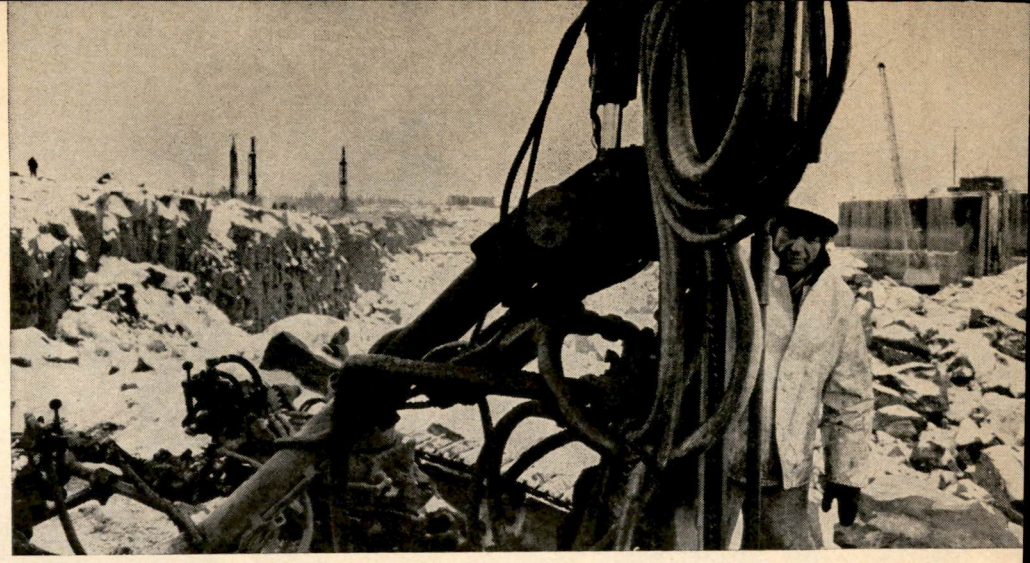
Labor Pact Aids Missile Program

Four years of labor peace in the development and production of an all-inertial guidance system for the Atlas intercontinental ballistic missile appeared likely as a result of agreement between the American Bosch Arma Corp. and three Long Island locals of the International Union of Electrical Workers.

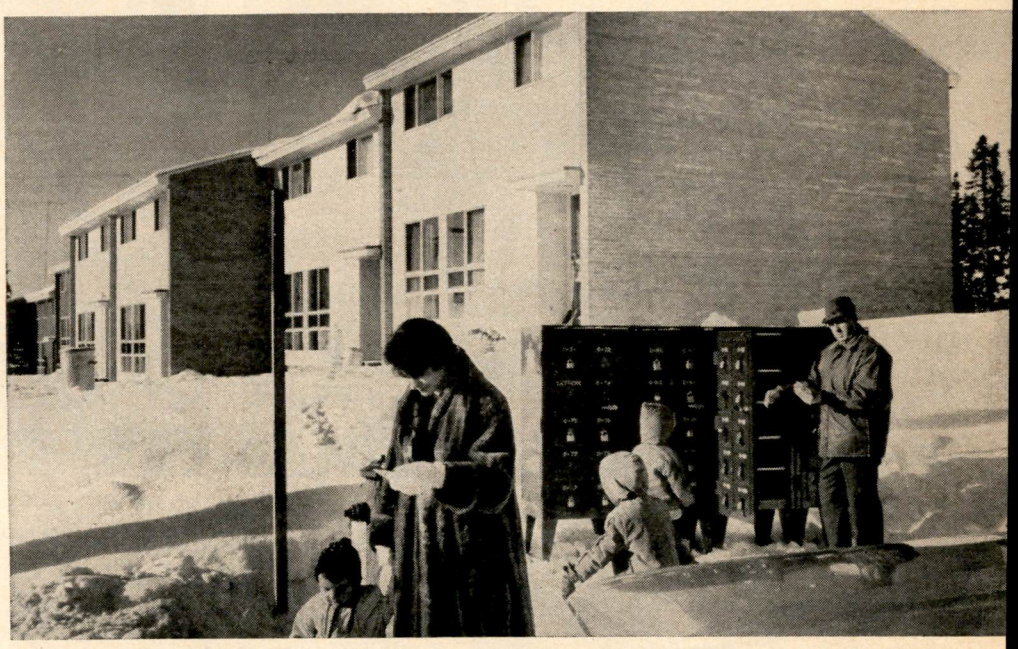
Negotiators for both sides agreed to renew the current contracts now, instead of waiting eight months for the Sept. 30 expiration date. At midweek, the new contracts were expected to be ratified shortly by the company's 5,000 employees. Provisions included a 2½% increase and substantially improved fringe benefits.

The three IUE unions represent engineers and technicians, draftsmen and clerical employees, and production workers at the Garden City plant. "It would gratify us to find our example a stimulus to speedy and amicable contract settlements elsewhere in this area," their presidents said.





HARBOR has been carved from nearly solid rock by construction crews working round the clock in cold as low as −50F; they drill tap holes, then use dynamite to blast rock.



TOWN of Port Cartier, built to support harbor and headquarters of U. S. Steel subsidiary, Quebec Cartier Mining Co., adjoins former small Canadian village of Shelter Bay.

Ore Race

ment), which means that the concentrate is 95% as pure as you could get it.

• In spite of high development expenses, the particular ore and the processes used at Quebec Cartier will give U. S. Steel a very low-cost concentrate, in terms of its iron content.

• Quebec Cartier will have the only year-round harbor for shipping rich Canadian ore or rich concentrates to world markets.

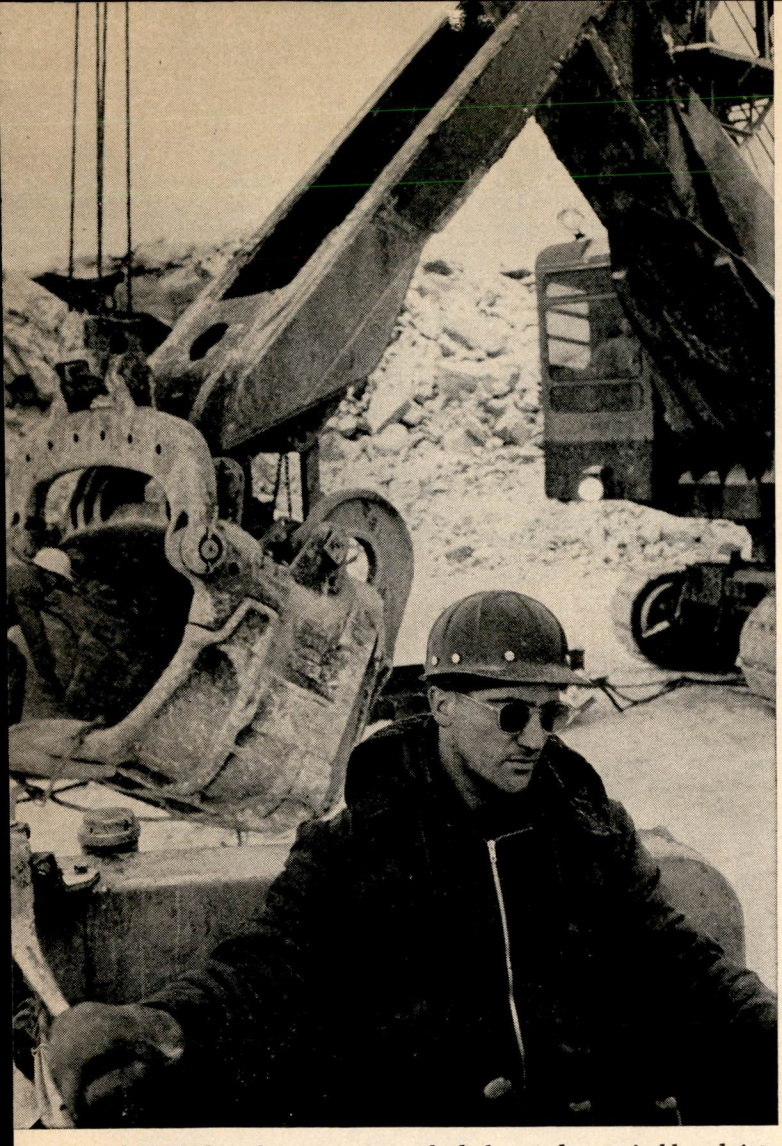
• Availability of the concentrate at least a year before other expected new Canadian projects get under way will permit U. S. Steel to capture from potential competitors large segments of the iron ore market for the growing European steel industry.

• Raw material availability will give U. S. Steel an ace in any hand it may be planning to play to win for itself a piece of the European steel business.

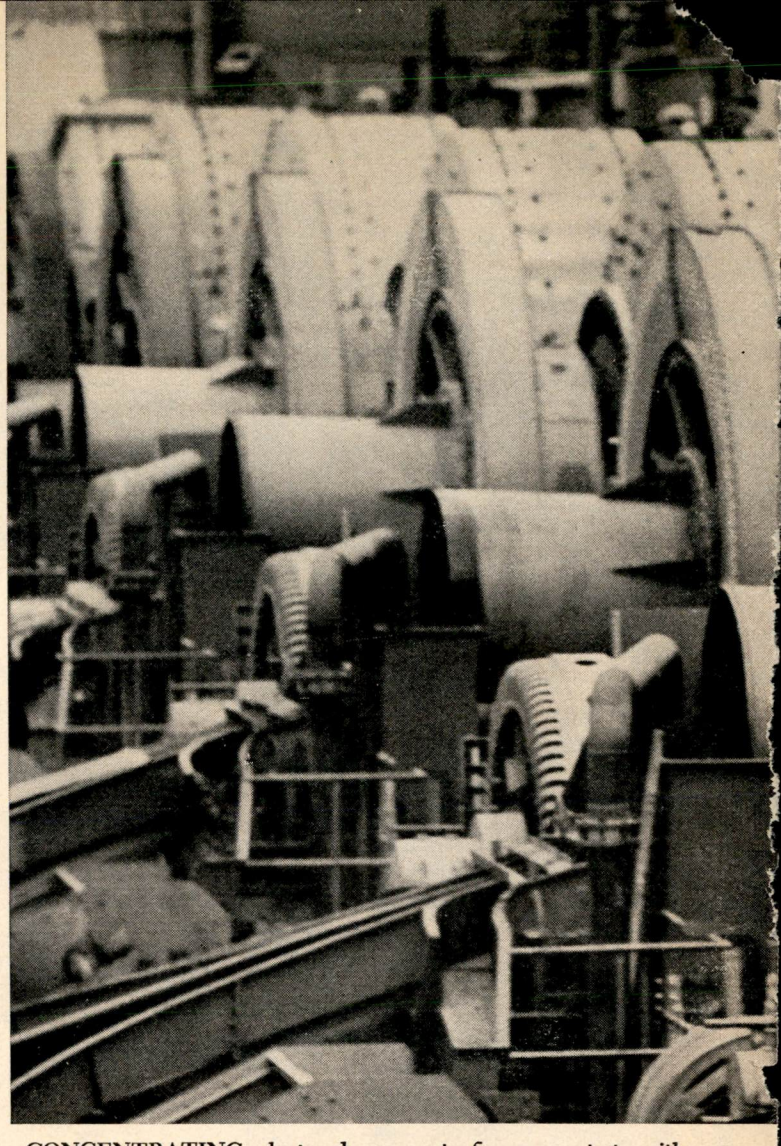
• There is a broad hint that the very rich concentrate may boost use of



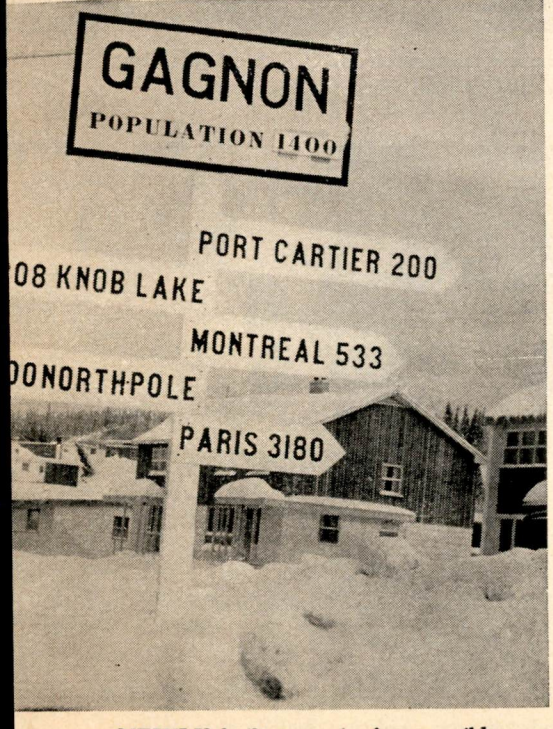
SPORTS facilities for construction workers and company employees include these curling rinks, hockey rinks, bowling alleys; town also has its own schools and churches.



MINING is by open pit method; low-grade ore is blasted into lumps at mine, loaded on trucks to go to concentrating plant.



CONCENTRATING plant reduces ore to fine concentrate with rich 67% iron content. Ore is ground by rolling it on itself



NEWLY built town in former wilderness, Gagnon will house miners, plant employees.

Mining center 200 miles deep in the Quebec wilds will give U. S. Steel one of world's richest ore concentrates.

direct reduction processes that will bypass the blast furnace—particularly in a wholly new installation, or where no blast furnace capacity now exists.

I. Why U. S. Steel Moved

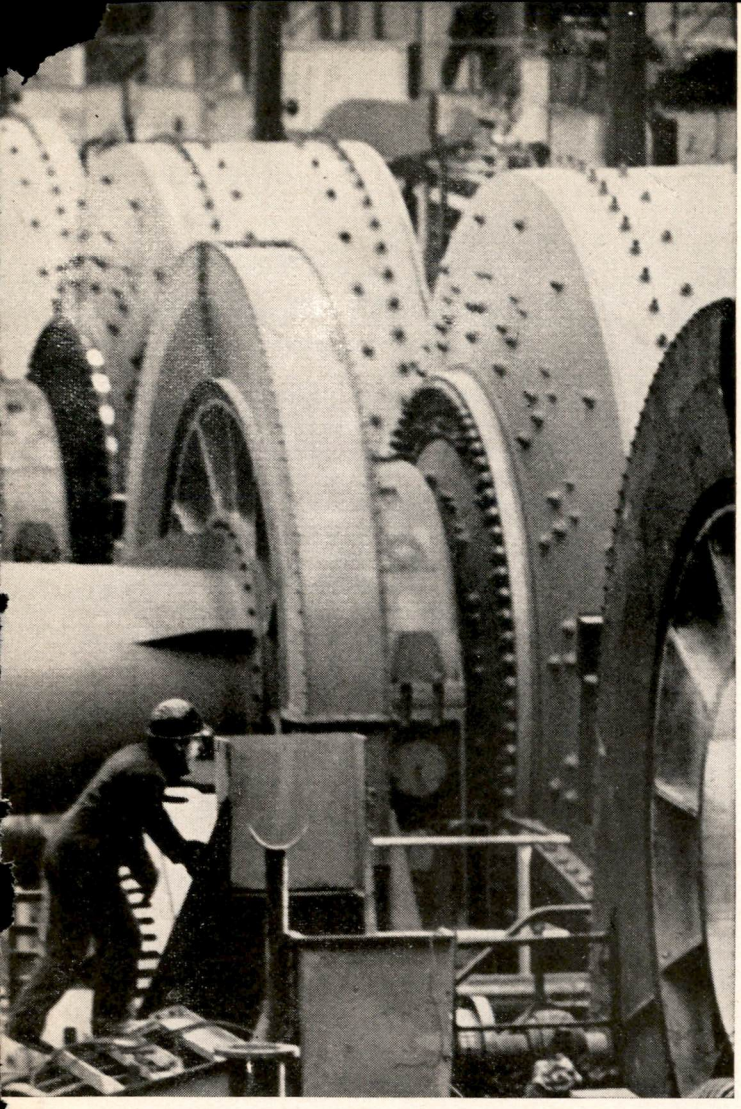
Growth of the steel industry in the U. S. can be attributed at least in part to the natural occurrence of iron deposits in this country. In 1866, the iron-rich Mesabi Range in Minnesota was discovered. The ore assayed better than 50% iron content. In addition, the ore was near the surface and could be shoveled right onto railroad cars, in lumps large enough to be put directly into blast furnaces.

Since 1892, about 2½-billion tons of ore have been shipped from Mesabi. But as World War II ended, the good Mesabi ore began running out. In 1940, Mesabi reserves already were down to an estimated 1-billion tons, while steel production was approaching the 70-million tons it reached in 1942. Thus, reserves were getting down to about a 12-year level.

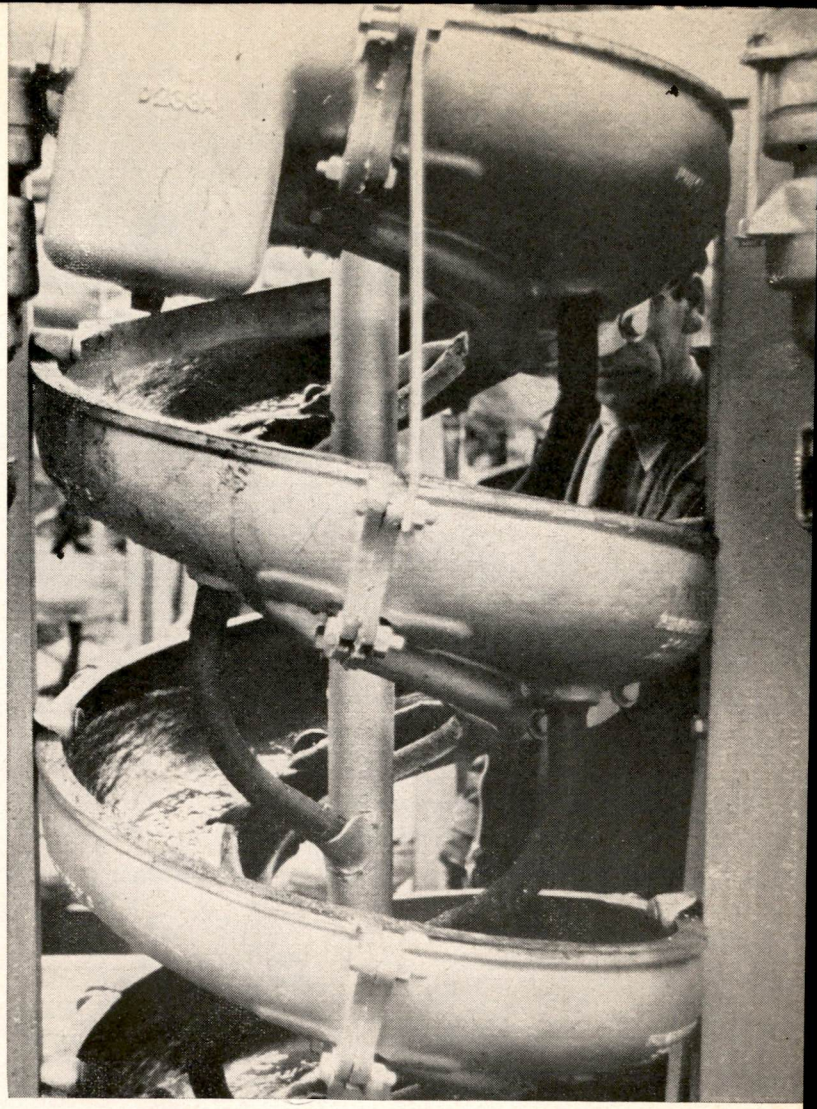
• **Choices**—The whole U. S. steel industry was faced with the question of where it was going to get iron ore in the future. It had several choices.

In 1950, Iron Ore Co. of Canada started construction on a huge project to develop a rich ore deposit in Labrador, about 300 miles north of the St. Lawrence River. And U. S. Steel Corp. and a subsidiary, Orinoco Mining Co., developed rich deposits in Venezuela, shipping its first ore in 1954. Other projects were started around the world.

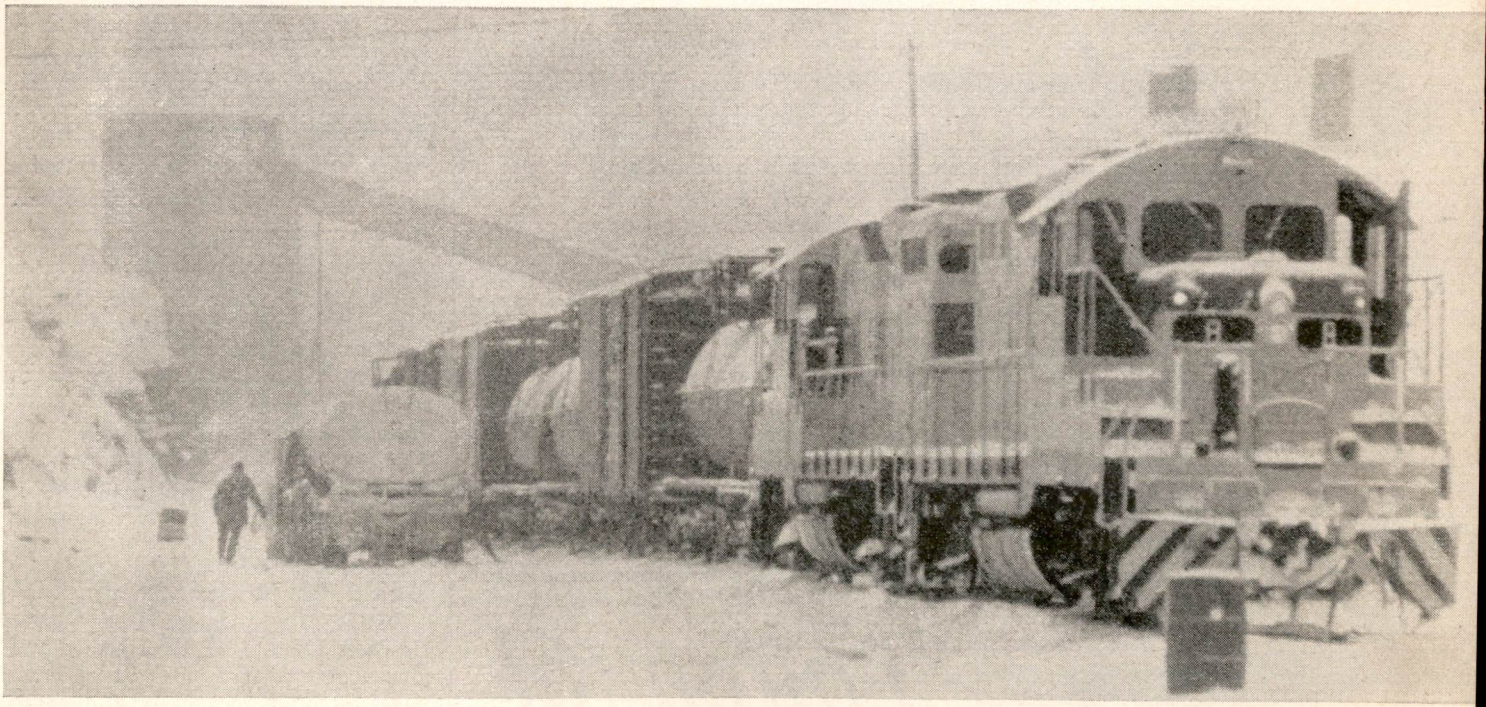
Reserve Mining Co. and Erie Mining Co. developed mammoth plants in Minnesota to extract a rich furnace feed from taconite, a low-grade, tough iron ore. Taconite is processed near the mine site to remove many of the impurities. The process is called beneficiating. The end product is a fine powder, which cannot be used directly in blast



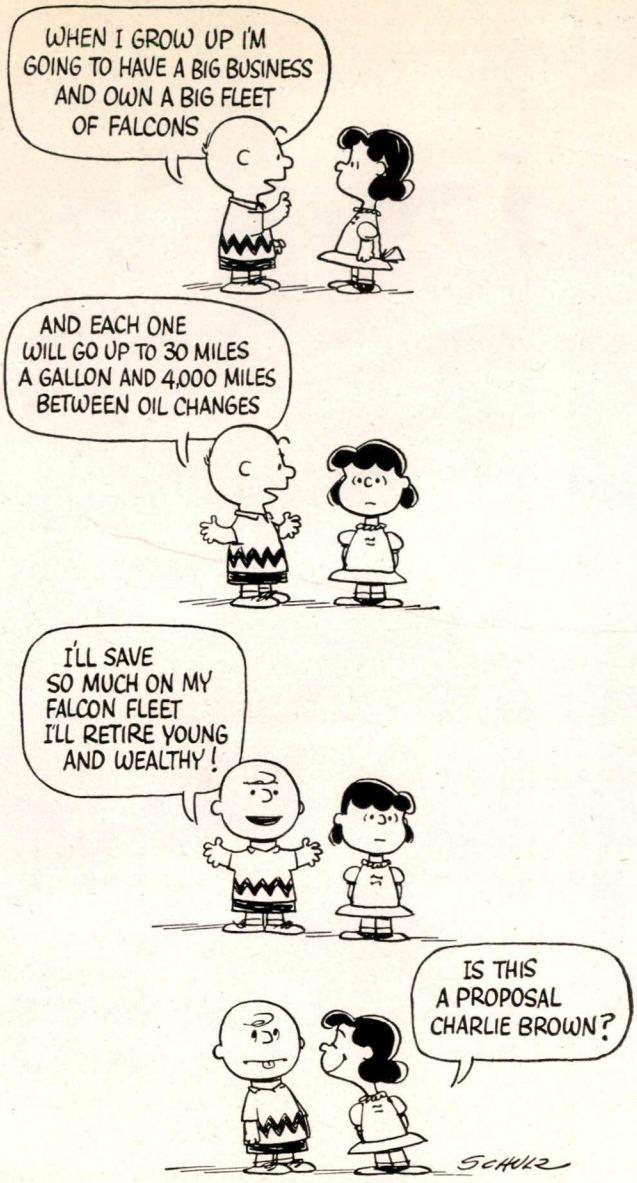
in revolving drums; it's soft enough to break into sand-sized crystals without adding grinding material. Oversize pieces go back in.



PURIFYING is done by means of spirals; as material flows in water around spirals, heavier iron settles, impurities float away.



RAILROAD, rushed into operation in December, is only all-year link between mine and port; dirt road, used to bring in materials and machinery for construction, is closed by snow in winter, mud in summer. Trains haul all supplies, even autos, into Gagnon.

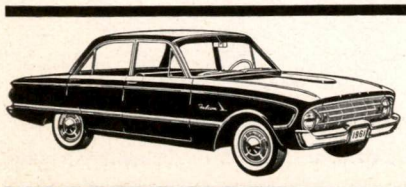


Peanuts Characters © 1950 United Feature Syndicate, Inc.

We like what you propose, Charlie Brown. As you mentioned, Falcon's gas and oil savings are terrific . . . up to 30 miles on a gallon and 4,000 miles between oil changes will gladden any fleet owner's heart! Then, too, tires, replacement parts, (and in most states) licensing and insurance also cost less! And, as any fleet owner who has shopped the field will tell you, Falcon is America's very lowest-priced 6-passenger car*. . . actually priced as much as $505† *less* than other comparably equipped compacts! So see your Ford Dealer. Even more important, take a drive in the new '61 Falcon and see why it's America's best-selling compact—by far! FORD DIVISION, *Ford Motor Company*.

**Based on a comparison of manufacturers' suggested retail delivered prices*
†Based on similar comparison of deluxe 4-door sedans equipped with radio, heater and automatic transmission

THE FLEET CAR THAT SAVES YOU MORE



FORD Falcon '61

. . . U.S. Steel, with its control of Mesabi, was less pushed than other companies . . .

(STORY on page 62)

furnaces because it would interfere with gas flow and would have excessive waste.

Some ores, and other beneficiated products besides taconite, have also been too fine for direct use in blast furnaces. So two processes have been alternatively used to prepare them for the blast furnaces.

One of these processes is called pelletizing, and consists of rolling the dust into little balls and fusing them to stay that way. The other is sintering—burning the ore with small amounts of coal to form clinkers, which can be fed into furnaces.

• **Richer**—As Canadian and Venezuelan ores and taconite pellets became available, steelmen learned some new lessons. Iron Ore Co. of Canada's ore was a percentage point or two higher in iron content than average Mesabi ores, and this increased the efficiency and output of blast furnaces. Orinoco Mining's Venezuelan ore averaged 59%; and when taconite pellets began to flow in 1956, these averaged 64% iron.

By raising the iron percentage in the furnace feed, the output of blast furnaces has been increased until today five furnaces can easily produce the iron formerly made by six furnaces. This is a direct capital saving.

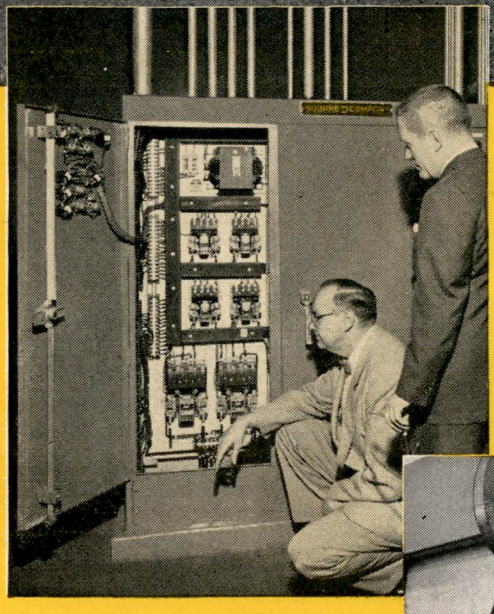
Even Mesabi ores began to be processed. U.S. Steel, which controls the largest proportion of the remaining Mesabi reserves (estimated today at a half-billion tons of ore), now processes virtually all its ore to some extent.

• **Looking North**—U.S. Steel, with its control of Mesabi, was less pushed than other companies. It tested taconite with a pilot plant in Minnesota, and explored Canada. Canadian explorations have been centered on the Quebec-Labrador trough, which is a belt of land running from the west shore of Ungava Bay in northern Quebec south about 500 miles through the Quebec-Labrador border, then bending southwest for another 300 miles. At Lake Jeannine, on the southern tip of the trough, U.S. Steel found a mountain of quartz-specular hematite mixture. The deposit was low-grade, but tests showed that it could be beneficiated easily and that a nearly pure hematite, assaying about 66% iron, could be produced at relatively low costs. Development of the project, however, would be costly.

So, U.S. Steel, a little later than th

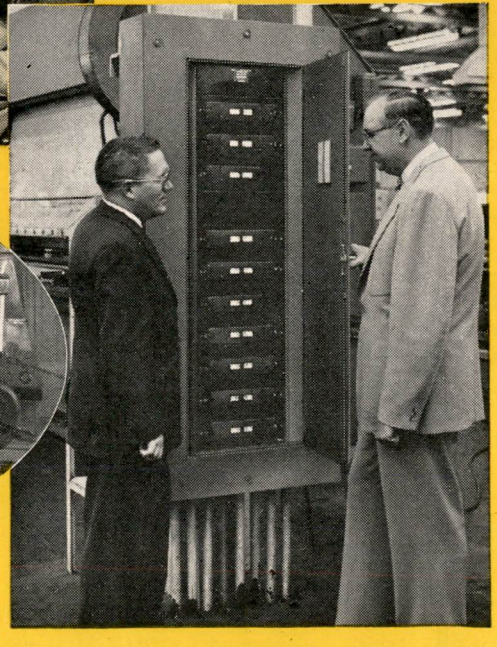
electricity is distributed and controlled

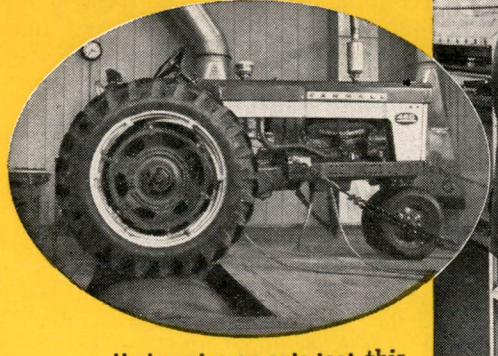




James Cousert, Plant Equipment Design Engineer, and Square D Field Engineer Bob Kunz inspect the panelboard which starts and operates, in sequence, the entire air-conditioning system.

The Center is equipped with more than 25 circuit breaker distribution panelboards like this one for feeding 3-phase motors. This panel controls the press in the background.





Undergoing an axle test, this Farmall Tractor #460 is secured on a Square D controlled treadmill.

SHAREHOLDERS RECEIVE 100th CONSECUTIVE DIVIDEND

Last month Square D paid to its more than 12,300 shareholders the 100th consecutive quarterly cash dividend on the common stock. Thus the company joins that select group of less than one-fourth of the companies whose common stock is listed on the New York Stock Exchange—those whose financial results have enabled them to reward their owners with an uninterrupted series of cash payments every three months during the past 25 years.

Unusual Growth Record

Square D made its only public stock offering in 1928. Since then our net worth, equal to the investment of our shareowners, has increased by more than 3,000%, while working capital is now about 4,500% larger than the total 32 years ago. An investor who bought Square D shares at that time has seen his holdings increase 28 times through stock splits and dividends. And the holder of an original 100 shares has received more than $37,000 in dividends.

Future Potential High

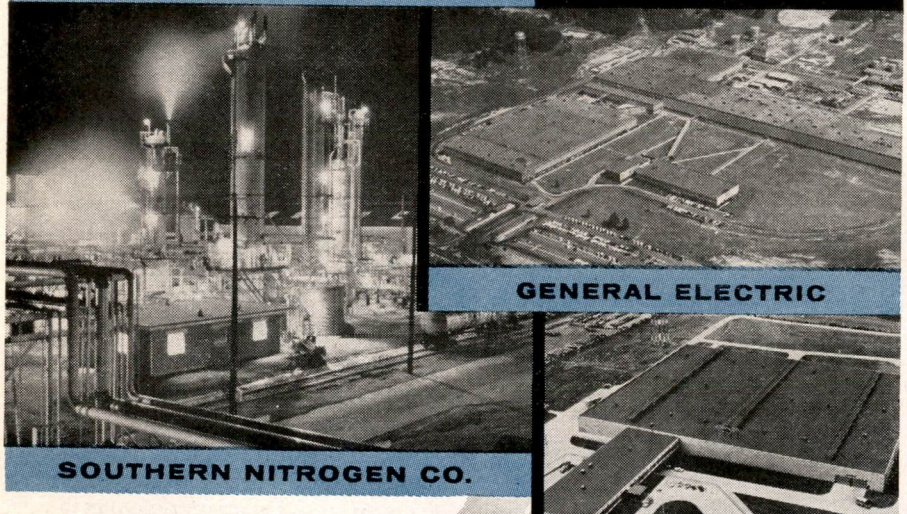
This performance sets a high target for the future—but not too high considering the tremendous potential for further growth in the electrical industry. In terms of facilities, products and manpower, Square D is in excellent condition to realize that potential to the fullest extent.

WE INVITE YOU TO JOIN THESE

Veterans of Industry



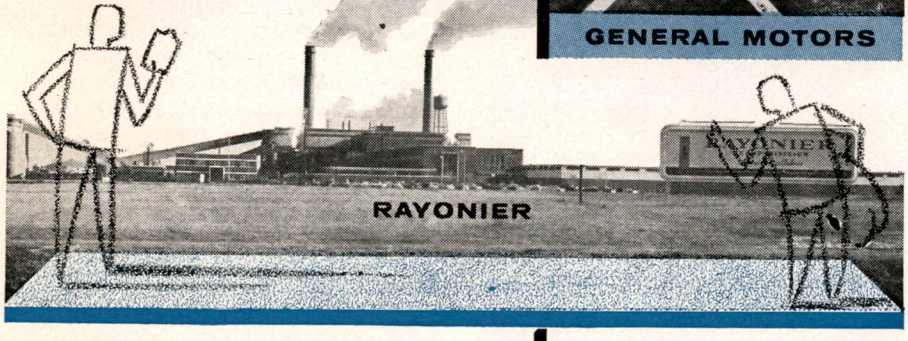
UNION BAG-CAMP PAPER



SOUTHERN NITROGEN CO.

GENERAL ELECTRIC

GENERAL MOTORS



vet'er-an *one who is long practiced in any service or art.*

Take the art of doing business, for instance. One of the secrets is being in the right place at the right time. That's why so many of America's biggest industrial names have picked sites in Georgia . . . where production and profits become an everyday affair. We'd like to show *you* why it's good business to produce in Georgia.

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COMPANY_____

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GEORGIA DEPARTMENT OF COMMERCE

. . . Canada has more lenient allowances than the U.S. for depreciation on property in new developments . . .

(STORY on page 62)

others, had to decide between Minnesota taconite or Canadian ores.

• **Decision**—No single factor settled the question. Taconite was tougher to process but is located near other U.S. Steel mines. Canadian hematite was easy to process, but would require a costly development project.

On the other hand, Port Cartier, at the shipping end of the railroad from the Lake Jeannine mine, is near the Gulf of St. Lawrence on the St. Lawrence River. With a deep-sea harbor, it would be within economical shipping distance of Europe and East Coast ports as well as the Great Lakes harbors.

Weight in favor of Canada was added by comparison of tax structures. U.S. Steel and iron ore mining companies feel that Minnesota taxes on iron ore are excessive and unfair, despite special tax concessions to encourage taconite developments. Canada has much more lenient allowances than the U.S. for depreciation on property in new developments.

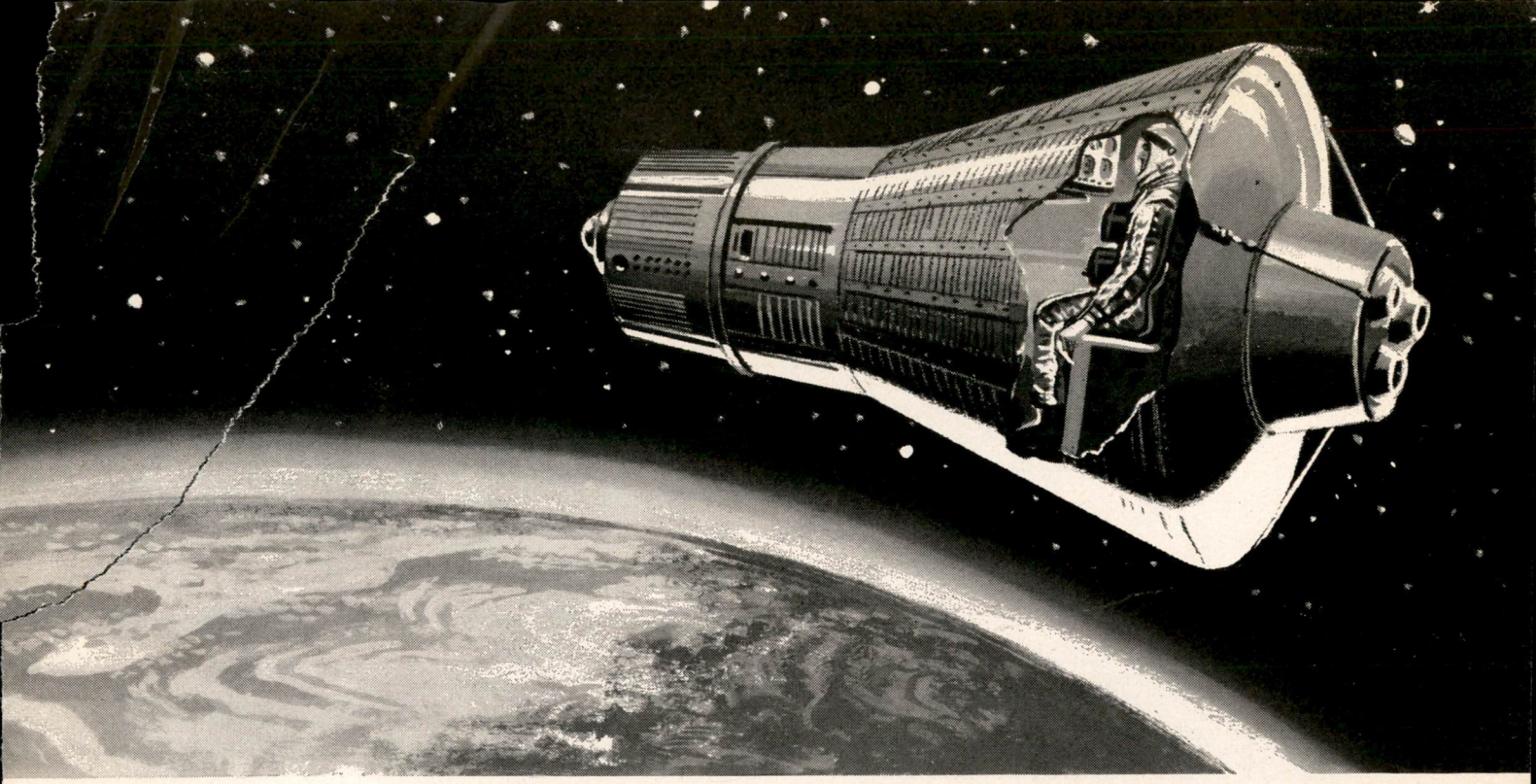
Location, processing, market, and tax advantages combined, and U.S. Steel gave the green light to forming of Quebec Cartier.

II. Construction Job

Once the decision was made to move into Canada, U.S. Steel went to work on the details of the project. Obviously, the problems involved in building a new plant 200 miles from a port are many and complicated. Although U.S. Steel would likely have gone ahead with its project even if Iron Ore Co. of Canada had not explored the area with its earlier development, undoubtedly Quebec Cartier learned some things from IOCC and avoided some of the mistakes that might have been made.

IOCC built its port at the natural harbor of Sept Iles. The port is well protected from heavy weather by islands off shore and by an inlet in the river. But the harbor freezes in winter and the islands keep the ice from flowing away from shore.

About 40 miles away, Quebec Cartier found a stretch of shore where water flow keeps the river free from ice, or the ice is so thin it can be easily broken. The spot had no natural protection for a harbor, so Quebec Cartier has been blasting a port and harbor from the shoreline of nearly solid rock. The main harbor is half a mile long and 450 ft. wide, with a depth of 50 ft. be-



Orbiting spacecraft of NASA's Project Mercury will be tracked by a global arrangement of 18 communications stations.

Keeping track of a man in orbit

One day this year, the first U.S. astronaut may be rocketed into a globe-circling orbit, some 120 miles in space. Although he will be a mere dot in the heavens, a vast world-wide network of eighteen tracking stations—including two operating from ships at sea—will provide monitoring of every phase of the high-flying astronaut's journey in his orbiting spacecraft.

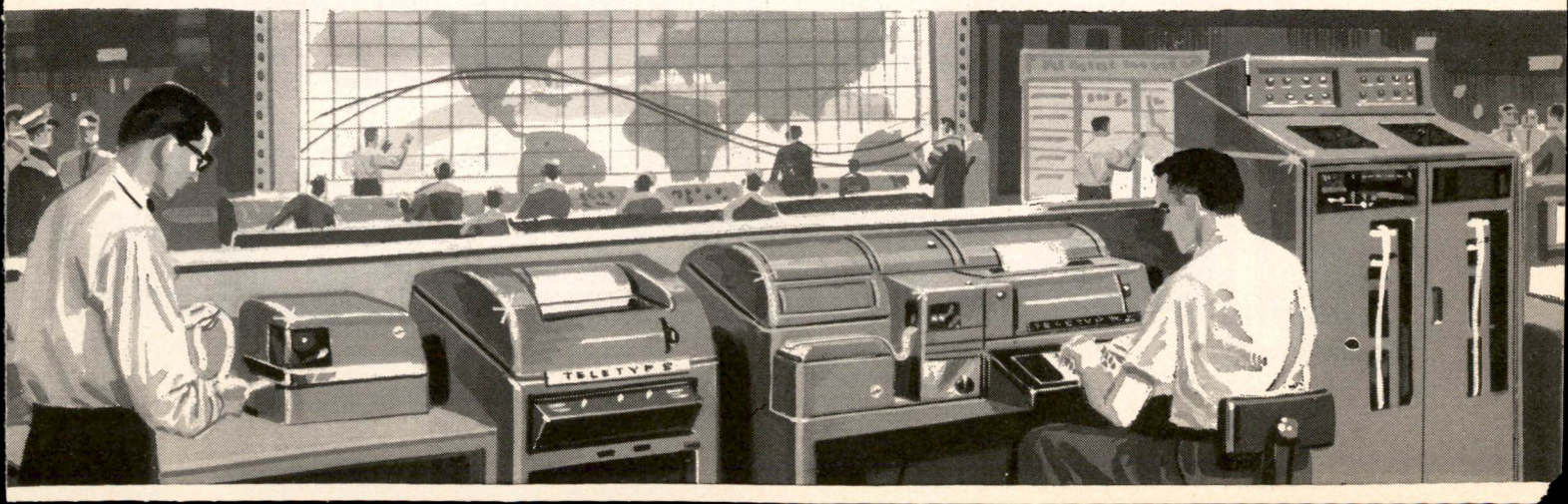
Linking each of the tracking stations with the project's Space Flight Center at Greenbelt, Maryland, and Mercury Control Center at Cape Canaveral, Florida, will be an array of Teletype equipment —Model 28 page printers, automatic send-receive sets and punched tape units. These Teletype communications devices will record and relay flight data collected by tracking and telemetering equipment from the spacecraft's instruments to the Flight Center, where an elaborate complex of data processing machines will coordinate and interpret flight data and provide directive information for the world-wide network of tracking stations.

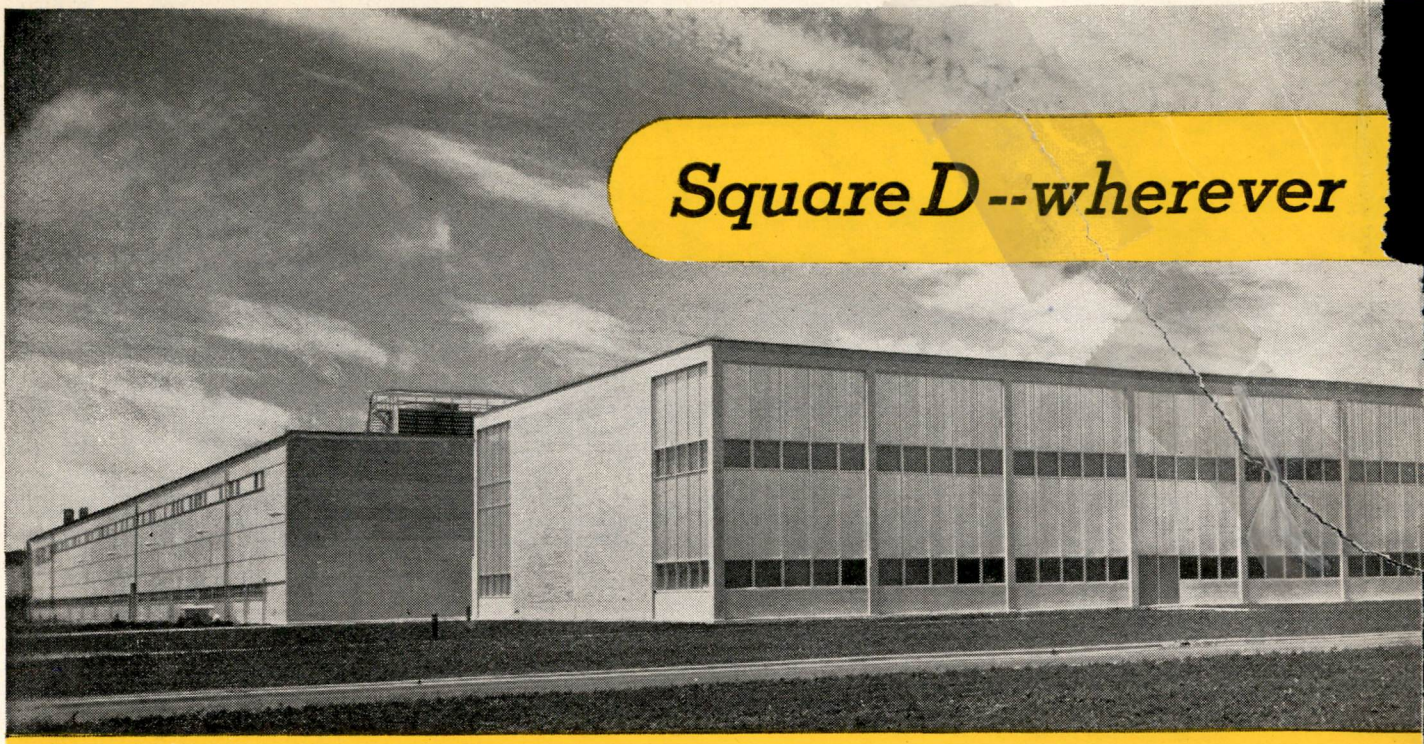
Teletype Corporation is indeed proud to be a part of the Western Electric industrial team selected by the National Aeronautics and Space Administration (NASA) to build the vast communications network so vital to Project Mercury.

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Teletype page printer, tape punch and reader units will be used throughout Project Mercury's global communications network to gather and relay flight data.





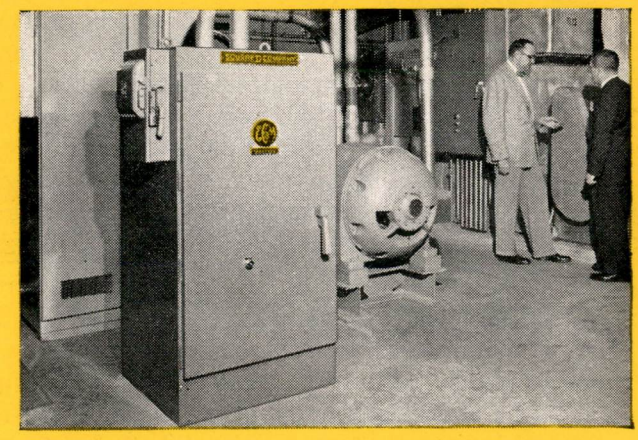
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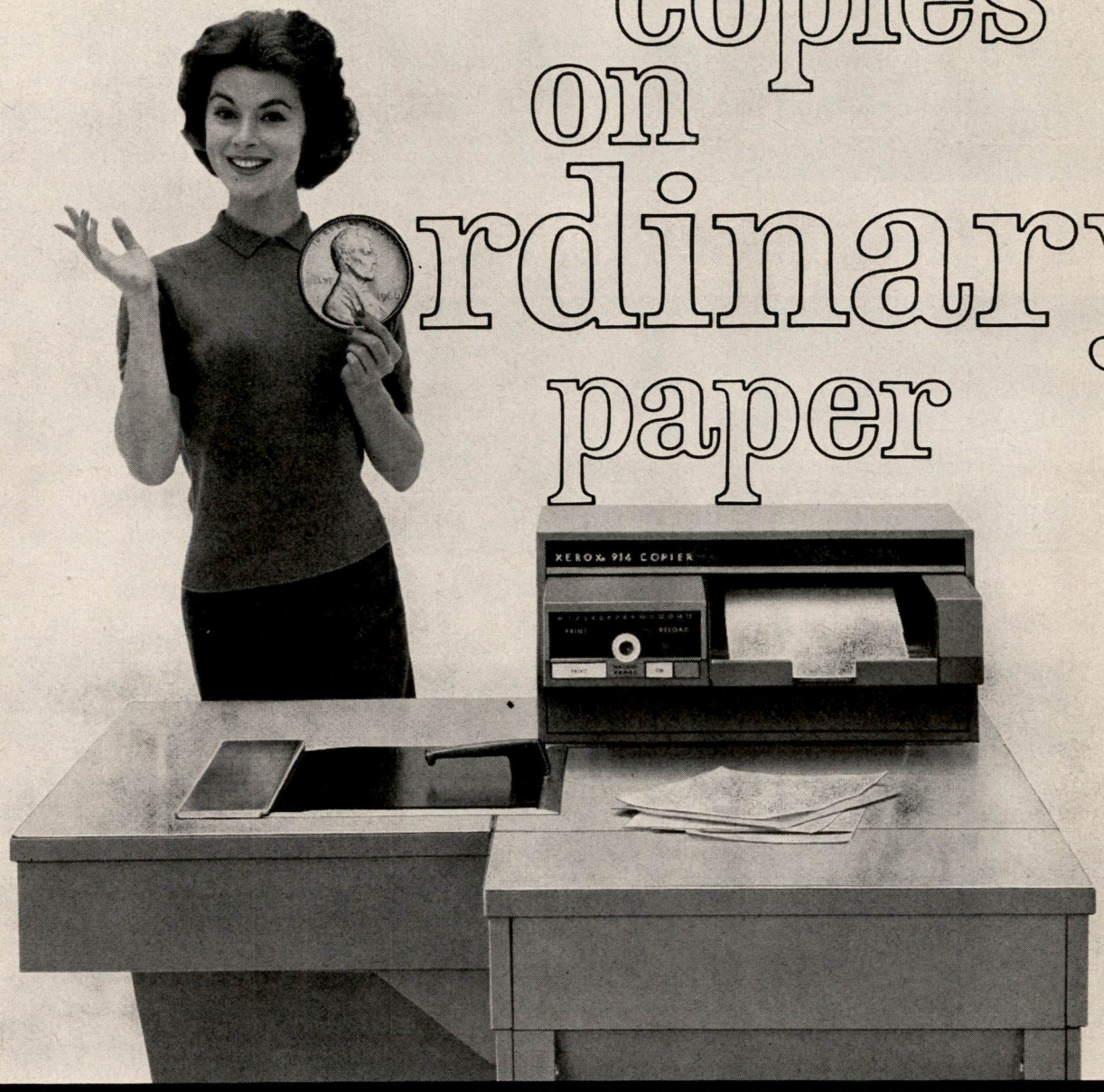
The EC&M Size 6 starter in the foreground controls a 250-hp MG set. In the right background is one of eighteen purge control panels which regulate the amount of air circulation and free the air of dangerous vapors before starting the electrical equipment in engine test cells.

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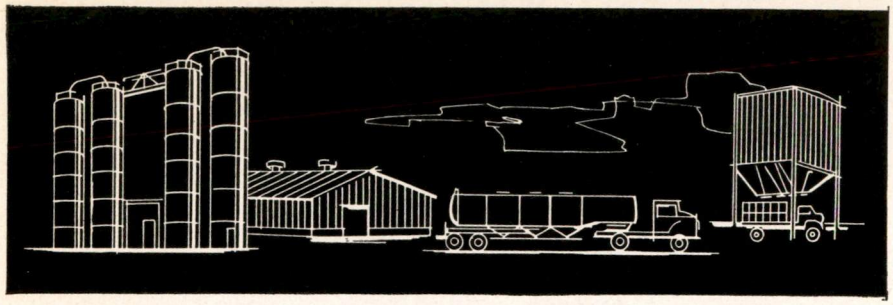
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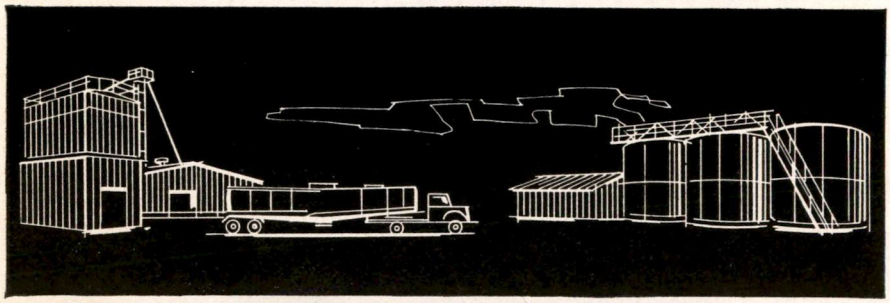
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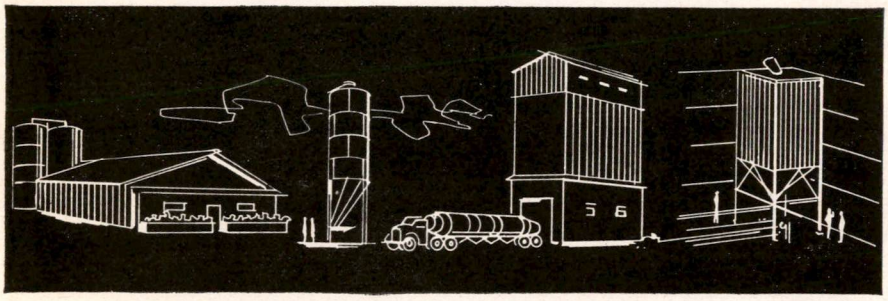
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. . . Quebec Cartier is looking toward the coming 100,000-ton carriers . . .

(STORY on page 62)

low low tide—all of it carved from the rock.

• **Built for the Future**—One of the most significant aspects of the harbor is that the 50-ft. depth is at least 10 ft. more than is needed for any currently existing bulk carriers. The largest ships—about 60,000-ton capacity—now plying the oceans require only a 40-ft. depth. Quebec Cartier is looking toward the coming 100,000-ton carriers that will increase the efficiency of ocean transportation, and has built the harbor to handle them.

At present a single loading line has been built on the north side of the harbor to handle the expected 8-million tons of concentrate now listed as capacity for the operation at the concentrator 200 miles to the north. But the south side of the harbor has been finished for use as a supply dock so that a second loading line could double the capacity of the harbor.

• **No Lingering**—When first contracts were let for the project in the spring of 1958, U. S. Steel had a philosophy different from that of others now building in Canada. Of the projects now under construction, most are still two or three years away from shipments, even though work has been progressing for a few years.

U. S. Steel felt that, once committed, the project should proceed as rapidly as possible. At the peak, it had 8,000 construction workers rushing the project, and still has about half of these working through the winter to complete the harbor and communications.

• **Progress Report**—First step was to push an access road through the rough terrain from Port Cartier to the mine. While work was getting under way on the railroad, convoys of as many as 50 huge trucks sped the 200 miles over dirt roads, hauling the steel, concrete, machinery, and other equipment to start construction of the power plant and concentrator. Every piece of the huge plant was hauled up the access road on these convoys.

The railroad began operation in December, although it still lacks some ballast in the tracks at the north end. The concentrator began experimental operations this month, and soon will be ready for full production.

The harbor was to be ready within a month or two from now, but a heavy storm just before Christmas swamped a cofferdam and flooded a portion of the construction project—setting back the schedule by approximately two

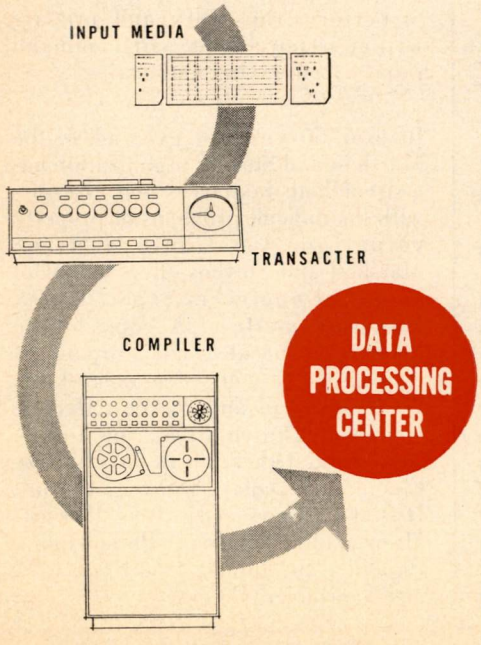
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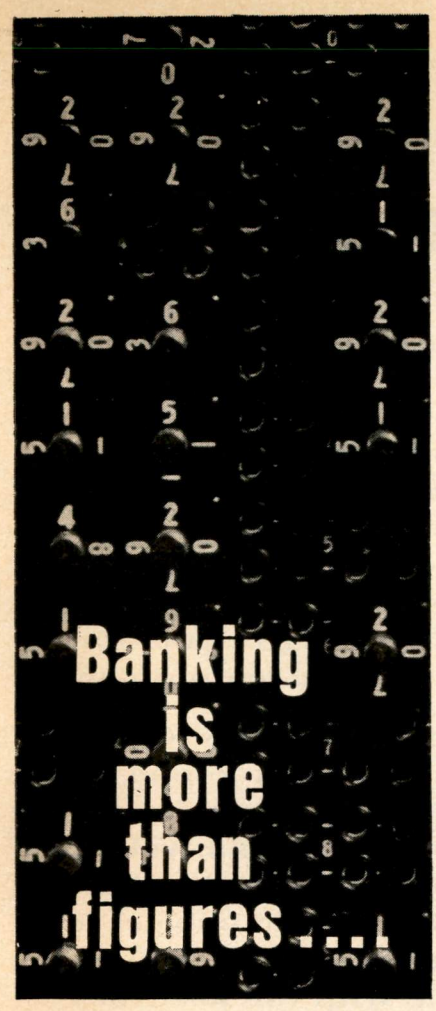
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. . . U.S. Steel obviously is including the world market in its thinking . . .

(STORY on page 62)

months. Now, shipments are expected to begin about June.

• **Competition**—This week U. S. Steel's project got some fresh competition. Wabush Iron Co., Ltd. (in which, as in IOCC, some U. S. companies have an interest) announced that it is ready to start this year construction work costing more than $20-million, in connection with the Wabush Lake iron ore project in Quebec. It will spend $15-million on construction of a harbor at Pointe Noire, Quebec—between Port Cartier and IOCC's port at Sept Iles.

Unlike Quebec Cartier, which rushed along all its construction work—harbor, railroad, mine-site plants—pretty much simultaneously, Wabush Iron Co. is proceeding by stages. It has already built a railroad spur to connect its ore project with the Quebec, North Shore & Labrador Ry., which runs down to Sept Iles. This year's program includes a start on the harbor, a rail spur to connect with it, and preliminary structures at the mine site. Further construction will come later.

III. Rich Prizes

Nobody at U. S. Steel or Quebec Cartier will say exactly where first shipments from Port Cartier are destined to go. Officially, Quebec Cartier says it "expects to sell its product on the world markets, particularly in Canada, Europe, and the U.S."

With the development of ore reserves in South America and the opening of IOCC, U. S. companies have had iron ore reserves available to deep-sea ships. Concurrently, the world's steel industry, particularly in Europe, has been growing in its output and in its demand for raw materials. The result has been a growing world market for iron ore and a profitable commodity trade is developing in its sale. U. S. Steel obviously is including the world market in its thinking.

No customers in Europe are known to have signed contracts, but U. S. Steel has had conversations abroad and is convinced it can get the contracts when production starts.

• **Possible Markets**—The concentrate produced by Quebec Cartier is like fine sand, and must be sintered or pelletized before it can be used as blast furnace feed. A site at Port Cartier has been designated for a pelletizing plant, if market conditions make it advisable to build one there.

Unless this is built, the concentrate

(Advertisement)

PROFIT PROBLEMS — 5

IF you believe that your property was assessed incorrectly and your taxes are unfairly high . . . how would you seek to have them reduced? You might protest to your tax assessor, but the burden of proof usually is on the taxpayer. Unless you can show a clear inequity, you are not likely to secure a reassessment. Most assessors have heavy work loads and must use their personnel only where there are substantial grounds for believing a correction is needed.

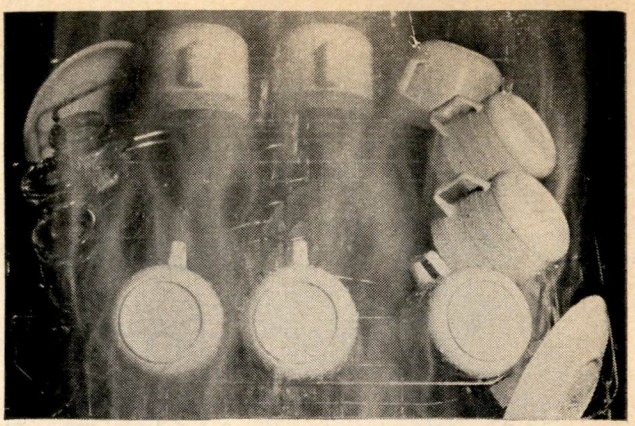
Proof of inequity usually requires a survey of assessments and taxes on property similar to yours. It may call for a study of assessment practices on classes of property to learn whether, for example, residential properties as a whole are bearing too light an assessment burden compared to industrial properties. Sometimes it is desirable to show ratio of assessed value to fair market value of various properties. Where the ratios differ widely, an apparent case of inequity may be made.

Such surveys and studies should be documented factually by reports of size, usage, construction characteristics, and sale prices, among other factors. Studies of this nature call for the experience and seasoned judgment of a valuation expert. Many businessmen have found that the best answer to this problem is to retain the services of appraisers having a staff qualified to perform this work and prepare written reports that will command respect from taxing authorities.

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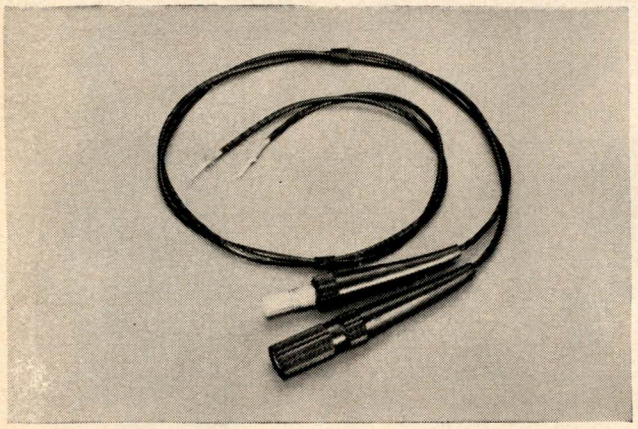
1 New cars are kept under thin polyethylene film because it
(a) costs so little *(b) protects from weather*
(c) displays the car



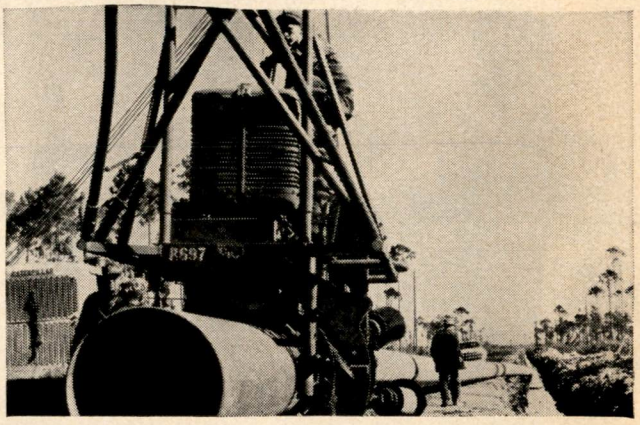
2 Used for insulated coffee cups, high-density polyethylene
(a) won't lose shape *(b) won't affect flavor*
(c) can be steam sterilized

Try this simple quiz on polyethylene plastics

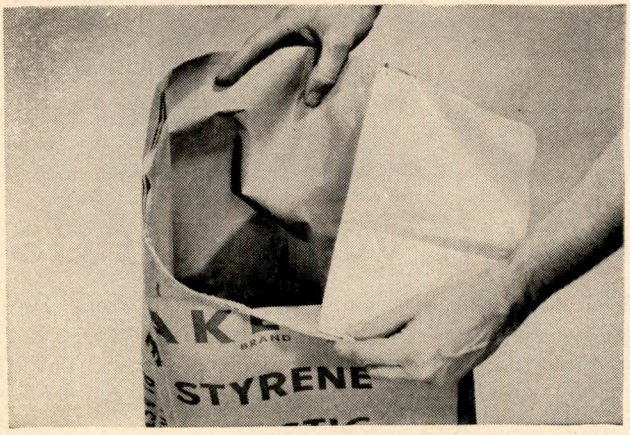
(You'll profit by knowing them better)



3 Military telephone cable with high-density polyethylene jacket
(a) has a smaller diameter *(b) can work under water*
(c) can be laid by helicopter



4 Pipelines are wrapped in polyethylene tape because it
(a) handles easily *(b) insulates against galvanic action*
(c) is waterproof



5 Multiwall bag paper is coated with high-density polyethylene for
(a) economy *(b) moisture resistance*
(c) abrasion resistance

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2. Check (a) (b) and (c). Steam sterilizing doesn't distort them.
3. Check them all – tough abrasion resistant high-density polyethylene meets military specifications for use in the field.
4. (b) and (c) are the chief reasons. They add up to superior protection from corrosion. Rapid application is another advantage.
5. (a) and (c). Moisture resistance (b) is a feature of all polyethylenes, but high-density can be used in thinner coats for equal all-round performance.

If you have questions—about plastics and their potential for your business—please ask us. We'll be glad to answer on the uses of polyethylenes, epoxies, phenolics, styrenes, and vinyls. Just write or call any of our offices or write Dept. **CZ-19,** Union Carbide Plastics Company, Division of Union Carbide Corporation, 270 Park Avenue, New York 17, New York. *In Canada:* Union Carbide Canada Limited, Toronto 12.

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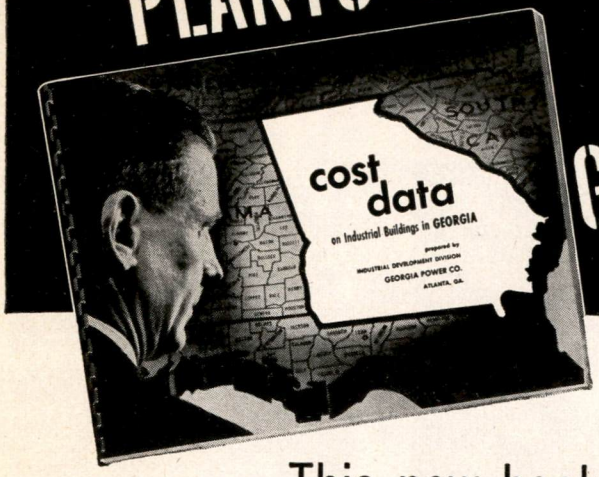
A Hertz sales engineer can tell you many more advantages that come with Hertz Truck Leasing—instead of many separate bills, you pay just one fixed amount per week. He will also fully explain the complete Hertz services available to you. Call your local Hertz Truck Lease office soon or, write for booklet—"How to Get Out of The Truck Business" —to HERTZ TRUCK LEASE, 660 Madison Ave., New York 21, N. Y. Dept. A-128.

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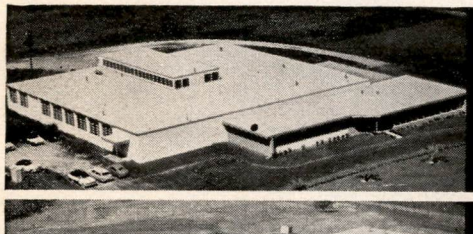
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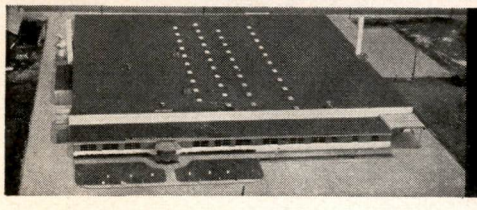
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must be shipped to a location where it can be processed. Some European steel companies are equipped to sinter, and these provide a possible immediate market.

Most logical destination for the concentrate among U. S. Steel installations is the huge Fairless works. Fairless now gets much of its ore from Venezuela, and it's probable that the rich Canadian concentrate could economically replace some of this.

As for hauling the concentrate, U. S. Steel owns, through Pittsburgh Steamship Div., the largest Great Lakes fleet of ore carriers. Several modifications would be needed, however, to make these ships efficient in runs up the St. Lawrence. With the largest under 25,000-ton capacity, none is really big enough to take full advantage of a port such as Port Cartier, which is equipped to handle 60,000-ton to 100,000-ton ships.

• **The Top Prize**—Nevertheless, Europe seems to be the rich prize in the picture. Each of the new projects in Canada has been looking longingly at that market. Iron Ore Co. of Canada shipped 1.6-million tons of iron ore to European ports last year. With its 66% concentrate, Quebec Cartier should make a further dent in that growing market.

At U. S. Steel headquarters in Pittsburgh, executives are putting a microscope on the European market. They are studying out what major role, if any, U. S. Steel will play in the European industry beyond the raw materials it hopes to sell there. Should the decision be made to enter the European market in any new way, the availability of Quebec Cartier concentrates for ocean shipping is sure to be a strengthening factor in the move.

• **Direct Reduction**—Hiding among the possibilities in Quebec Cartier's future is another consideration. The concentrate, at 66% iron and nearly pure iron oxide, looks like the most ideal product yet available for direct reduction processes that bypass the traditional blast furnace.

When first shipments are made by Quebec Cartier this summer, U. S. Steel will experiment widely with the new concentrate. It won't know until it gets the results of these experiments just how or where it will use the Quebec output. Direct reduction tests are almost certain to be included in the program.

If these tests are highly successful, and the Quebec Cartier concentrate finds a big market in direct reduction processes, there could be no need to sinter or pelletize much of the Quebec Cartier output. Then the area now reserved for a pelletizing plant at Port Cartier could be devoted to other expansions. **END**