

ANNUAL REPORT



FOR THE FISCAL YEAR
ENDING DECEMBER 31st
1943

IMPERIAL OIL LIMITED





A T R I B U T E

ALL the happy freedoms familiar to liberty-loving people from childhood have been in mortal jeopardy for five long years. Only by national and individual resistance, even unto death, have they been preserved so far, and will be preserved for our own and future generations.

In deep gratitude we look to the sailors, soldiers, airmen and auxiliary women's corps who have endured hardness on our behalf through these years of conflict, pouring out their youth as a libation. A large body of men and women who served this Company in peacetime with diligence and ardor are now serving on the battle-fronts of the world.

We claim no prestige for the Company because we were fortunate enough to have them on our pay-rolls. The prestige is for Canada and the countries that bred them and taught them the ways of right-thinking in a crooked world. We salute them as gentlefolk unafraid.

"And some there be who have no memorial, who are perished as though they had never been . . . Their bodies are buried in peace, but their name liveth for evermore." To all who wait and grieve in vain for their return we bring the good words of Laurence Binyon. "They shall not grow old as we who are left grow old . . . At the going down of the sun and in the morning we will remember them."

IMPERIAL OIL LIMITED

HEAD OFFICE, SARNIA, ONTARIO

OFFICERS

President

G. HARRISON SMITH

Vice-Presidents

C. A. EAMES

R. V. LeSUEUR

L. C. McCLOSKEY

H. H. HEWETSON

DIRECTORS

G. HARRISON SMITH

C. A. EAMES

R. V. LeSUEUR

L. C. McCLOSKEY

H. H. HEWETSON

A. E. HALVERSON

Comptroller

JAMES McGRATH

Secretary-Treasurer

W. J. WHITLING

Transfer Office

56 CHURCH STREET, TORONTO, CANADA

•
Crude Oil Resources

of Company and Subsidiary Companies in:

CANADA • COLOMBIA, S.A. • PERU, S.A. • VENEZUELA, S.A.

•
Refineries in Canada at:

LOCO, BRITISH COLUMBIA

CALGARY, ALBERTA

REGINA, SASKATCHEWAN

NORMAN WELLS, NORTH WEST TERRITORIES

SARNIA, ONTARIO

MONTREAL EAST, QUEBEC

IMPEROYAL, NOVA SCOTIA

•
Refineries Operated by Subsidiary Companies at:

BARRANCABERMEJA, COLOMBIA, S.A. • TALARA, PERU, S.A.

•
Divisional Marketing Head Offices in Canada and Newfoundland at:

VANCOUVER, BRITISH COLUMBIA

EDMONTON, ALBERTA

REGINA, SASKATCHEWAN

WINNIPEG, MANITOBA

TORONTO, ONTARIO

MONTREAL, QUEBEC

HALIFAX, NOVA SCOTIA

ST. JOHN'S, NEWFOUNDLAND

MARKETING BRANCHES THROUGHOUT CANADA AND NEWFOUNDLAND

•
Marketing Operations of Subsidiary Companies in:

COLOMBIA, S.A. • PERU, S.A.

1880-1943

IMPERIAL OIL LIMITED



SARNIA, ONT., APRIL 13TH, 1944.

*To the Shareholders
of Imperial Oil Limited:*

Your Board of Directors presents herewith the annual report of the operations of Imperial Oil Limited for the year 1943, the balance sheet as of December 31st, 1943, and the statements of surplus and of profit and loss for the past calendar year.

Since 1939 in submitting annual reports it has been necessary, in the national interest, to limit information on operating details. This policy is again being followed for certain operations of your Company during 1943 but it is now possible to acquaint the shareholders with the nature of some undertakings during the war years as it is believed that the contribution of your Company and its employees to the successful prosecution of the war has been effective and extensive. It has been felt advisable to make the presentation of some of these undertakings in graphic form.

Capital expenditures have been confined principally to equipment necessitated by war requirements. The plant construction resulting from your Company's expenditures has, as far as possible, been carried out so as to be useful for peacetime demands after the war and the task of adjusting your Company's operations to peacetime requirements should not be serious or lengthy. The normal civilian consumption of petroleum products is now drastically curtailed to provide for wartime necessities.

A sound liquid position is being maintained in the expectation of requirements after the conclusion of hostilities.

E A R N I N G S

During 1943 the quantity of crude oil processed through your Company's refineries and the volume of products sold were the highest on record.

After provision for all taxes on earnings the net income of your Company from all sources during 1943 was \$15,548,873.29 or 57.66¢ per share, as compared with \$14,663,097.00, or 54.38¢ per share in 1942.

An additional reserve for future shrinkage of inventory values from the present abnormally high costs caused by war conditions was provided out of 1943 earnings to the extent of \$1,543,809.35. The total reserve as of December 31st, 1943, for this purpose amounted to \$8,306,975.42, or 24.77% of the total crude oil and refined products inventory valued at \$33,532,754.85 as of that date.

The following table shows the comparable figures on earnings from your Company's various activities for 1943 and the preceding year:

	1943		1942	
	Earnings	Per Share	Earnings	Per Share
Canadian Refining and Marketing Operations, Transportation Department, and Canadian Producing Department (exclusive of Canadian producing subsidiaries)\$	9,362,369.43	34.72¢	\$ 8,217,412.27	30.48¢
Dividends from Subsidiary Companies and income from miscellaneous sources	6,186,503.86	22.94¢	6,445,684.73	23.90¢
Total Net Earnings (after providing for Depreciation and all Taxes) . .	\$15,548,873.29	57.66¢	\$14,663,097.00	54.38¢

The provisions made for depreciation and for Canadian taxes on earnings during 1943, as compared with 1942, were as follows:

	1943		1942	
	Amount	Per Share	Amount	Per Share
Provision for Depreciation	\$ 5,540,270.31	20.55¢	\$ 4,868,076.46	18.05¢
Provision for Taxes on Earnings . . .	\$10,389,484.29	38.53¢	\$ 9,518,348.86	35.30¢

During the year 1943 your Company paid a dividend of 25¢ per share on June 1st and a dividend of 25¢ per share on December 1st, making a total of 50¢ per share. The same amounts of dividends were paid during the previous year.

CANADIAN REFINING AND MARKETING OPERATIONS

Research and engineering problems of your Company included a further development in high temperature catalytic cracking, resulting in cracking units formerly operating under normal suspensoid catalytic cracking conditions being changed to operate under the supersuspensoid higher temperature catalytic cracking conditions. The primary reason for making this change was to produce larger quantities of petroleum base stocks at Sarnia to be supplied to Polymer Corporation Limited for use in the production of synthetic rubbers.

New products to be consumed under more severe conditions of service were developed, particularly aviation and motor fuels, lubricating oils and greases including requirements for the Armed Forces.

As a result of co-operative efforts of the scientific, manufacturing, marketing and transportation personnel of your Company, greatly increased requirements for the battle zones and for the home front of Canada at War have all been produced and delivered without delay and with minimum capital investment. The solution of these problems and knowledge gained by this rapid tempo of developments under war experience have not only been an important contribution to the necessities of war but will result in further improved products and services in the coming days of peace.

In the early part of 1943 a new plant, the first of its kind in Canada, constructed at Calgary Refinery to produce aviation alkylate of high octane blending value, was brought into operation, thus making large supplies of this product available for war requirements of aviation gasoline.

At Regina Refinery a new gasoline absorption and reforming unit and also a new non-selective polymerization unit, which indirectly resulted in making larger supplies of aviation gasoline available, were brought into successful operation in the first half of 1943, further contributing to the supplies of this product.

At Sarnia Refinery existing equipment was converted to produce considerable quantities of cumene, a blending agent necessary in the production of improved quality of aviation gasoline. In addition, as the result of formerly expanded capacities in lubricating oil and grease producing facilities, the production of these products at Sarnia was considerably increased to meet the growing requirements.

St. Clair Processing Corporation Limited, the wholly owned subsidiary of your Company incorporated to operate units of the new synthetic rubber plants at Sarnia and auxiliary plants such as steam generating, power

and water plants and mechanical shops, was actively engaged in the new undertaking of training personnel to operate the major part of this development which was financed and constructed by the Crown Company, Polymer Corporation Limited, on property adjoining your Company's refinery at Sarnia to the south. These synthetic rubber plants have been put in operation. In addition to conducting these synthetic rubber operations, for account of the Crown Company, your Company will sell to Polymer Corporation Limited certain selected petroleum gases representing the greater portion of the Buna S and Butyl synthetic rubber content.

Many of your Company's marketing bulk distributing plants in strategical locations were enlarged and their facilities modernized in so far as it was possible to obtain the necessary materials and manpower.

Realizing the importance of keeping the essential vehicles and machines of the country running, your Company's sales force, agents and retail dealers have given creditable performance, supplying technical service and the petroleum product requirements of industrial plants engaged in war work, vehicles licensed under the War Industry Transit regulations and the important petroleum needs of the Canadian farmer.

Your Company's marketing operations were extended into the northern part of British Columbia through which the Alaska Highway runs. Distribution facilities were also extended down the Mackenzie River to such points as Fort Smith, Fort Simpson — thus following your Company's long-established pioneering policy of providing petroleum supplies at remote points to aid in their development.

CANADIAN PRODUCTION

The total production of crude oil, separator naphtha and absorption plant product in Western Canada during 1943 by your Company and its subsidiaries amounted to 3,135,977 barrels, compared with 2,810,102 barrels in 1942. This production was obtained mainly from the Turner Valley and Norman Wells fields. In addition to this production your Company during 1943 purchased a total of 4,233,125 barrels of Canadian production.

In the Turner Valley your Company and its subsidiaries had a participating interest in 12 crude oil producing wells completed during the year. At the end of 1943 your Company and its subsidiaries had a participating interest in 89 limestone crude oil producing wells and 83 shallow crude oil and gas wells in the Turner Valley.

In the Norman Wells pool, your Company drilled 12 wells during 1943, 11 productive and 1 a dry hole. In this development, which

was undertaken for the purpose of supplying the crude oil needs of the Allied Nations in that area, your Company has been successful in obtaining ample oil to meet existing requirements.

In addition to the development of its proven properties in the Turner Valley and Norman Wells fields, your Company and its subsidiaries continued extensive exploratory activities in Canada by the drilling of 17 unsuccessful exploratory wells, 11 of which were in Alberta, 2 in Saskatchewan and 4 in the North West Territories.

SOUTH AMERICA

The total production of your Company's subsidiaries in South America, including the interest in Mene Grande's production in Venezuela, was 28,912,657 barrels in 1943 as compared with 25,994,378 barrels for the year 1942. The potential output of the producing properties was maintained during the year.

GENERAL

On December 18, 1918 Imperial Oil Limited was a pioneer in social security when it introduced the first of its employee benefit plans with the announcement on that occasion at Sarnia by the late Mr. W. J. Hanna who was then President of the Company. At a meeting of elected delegates at the Sarnia Refinery Mr. Hanna stated that the new plan was being introduced not in a spirit of philanthropy but in the knowledge that the minds of our people were free from the fear and worry of insecurity. For more than 25 years benefits have not only been in effect, but have also been enlarged and now include annuities at retirement, death benefits and group insurance.

The need for a hospitalization and surgical fee benefit plan was considered for some time past by your Company and the plan was finalized and became effective in January, 1944, thus enabling your Company to take another major step in our program of social security. It is a source of great satisfaction to know that this plan will relieve the financial worries attendant upon hospitalization and surgery.

The employees' response to the purchase of Victory Loan Bonds and appeals of the Red Cross and war service activities during the year has been particularly gratifying. Elsewhere in this report are detailed expressions of the deep appreciation which your Directors hold for those associated with them in the work of your Company.

By Order of the Board,

G. HARRISON SMITH,
President.

I M P E R I A L

B A L A N C E S H E E T

A S S E T S

CURRENT ASSETS:

Cash on hand and in banks	\$22,991,827.52	
Dominion of Canada and other bonds valued on the basis of market quotations which was less than cost—plus accrued interest	7,284,369.50	
Trade accounts and bills receivable (less reserves)	19,167,222.15	
Other accounts receivable, including accrued interest on miscellaneous investments	3,894,373.30	
Inventories, determined and certified as to quantities and condition by responsible officers of the company:		
Crude oil and refined products (on basis of cost of crude oil, which was approximately the same as replacement value)	\$33,532,754.85	
Materials and supplies (at cost)	3,845,884.80	
	<u>37,378,639.65</u>	\$90,716,432.12

DEFERRED ACCOUNTS RECEIVABLE, MORTGAGES AND MISCELLANEOUS LOANS AND ADVANCES (LESS RESERVES): . .	2,015,696.25
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MISCELLANEOUS INVESTMENTS:

Bonds and debentures of other companies	\$3,823,430.36	
Shares of other companies (quoted market value \$573,320.75)	384,985.51	
Shares of other companies (no quoted market value)	170,721.25	
	<u>4,379,137.12</u>	

INVESTMENT IN SUBSIDIARY COMPANIES:

Investment in shares (less reserves)	\$42,030,657.55	
Indebtedness of subsidiary companies	3,380,996.28	
	<u>45,411,653.83</u>	

DEFERRED AND PREPAID CHARGES	505,766.72
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GOODWILL, PATENTS, COPYRIGHTS, TRADE MARKS AND LICENCES:	274.00
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CAPITAL ASSETS:

Land, buildings, plant, transportation and other equipment (at cost)	\$128,819,832.82	
Less—Reserve for depreciation	88,364,019.31	
	<u>40,455,813.51</u>	
		<u>\$183,484,773.55</u>

NOTE (1)—The figure at which the investment in shares of subsidiary companies is carried in the above balance sheet (after giving effect to revaluations shown under Capital Surplus) is less than the aggregate of the cost thereof plus the proportion of the undistributed earnings of such subsidiary companies since acquisition applicable to such shares.

OIL LIMITED

DECEMBER 31, 1943

LIABILITIES

CURRENT LIABILITIES:

Accounts payable.....		\$10,995,185.11	
Amounts owing to subsidiary companies.....		4,059,188.76	
Reserve for taxes on earnings and other accrued taxes in Canada.....	\$10,707,343.49		
Less—Amount paid on account of 1943 taxes on earnings.....	4,650,007.26	6,057,336.23	
			\$21,111,710.10

RESERVES:

For fire, marine and other insurance.....		\$13,948,646.38	
For employees' annuities.....		5,797,172.80	
For future shrinkage of inventory values from present abnormally high costs caused by war conditions.....		8,306,975.42	
			28,052,794.60

CAPITAL AND SURPLUS:

Capital Stock:			
Authorized—32,000,000 shares of no par value			
Issued and outstanding—26,965,078 shares.....		\$77,974,960.36	
Capital Surplus:			
Arising from revaluations (in 1915 and 1920) of investment in subsi- diary company.....		15,264,192.26	
Earned Surplus, as per statement attached.....		41,081,116.23	
			134,320,268.85

Approved on behalf of the Board:

R. V. LESUEUR, *Director.*

L. C. McCLOSKEY, *Director.*

\$183,484,773.55

NOTE (2)—At December 31, 1943, the Company had outstanding contingent liabilities aggregating \$2,297,000.00

NOTE (3)—The auditors' report to the shareholders appears on page 12 hereof.

I M P E R I A L O I L L I M I T E D

STATEMENT OF SURPLUS FOR THE YEAR ENDING DECEMBER 31, 1943

<u>PARTICULARS</u>	<u>EARNED SURPLUS</u>	<u>CAPITAL SURPLUS</u>	<u>TOTAL</u>
Balances at January 1, 1943.....	\$38,757,016.45	\$15,264,192.26	\$54,021,208.71
Add—			
Adjustments affecting previous financial periods in respect of depreciation and taxes on earnings (net).	257,765.49	—————	257,765.49
	<u>39,014,781.94</u>	<u>15,264,192.26</u>	<u>54,278,974.20</u>
Add—			
Net Profit for the year ending December 31, 1943..	15,548,873.29	—————	15,548,873.29
	<u>54,563,655.23</u>	<u>15,264,192.26</u>	<u>69,827,847.49</u>
Deduct—			
Dividends paid.....	13,482,539.00	—————	13,482,539.00
Balances at December 31, 1943, carried to Balance Sheet.....	<u>\$41,081,116.23</u>	<u>\$15,264,192.26</u>	<u>\$56,345,308.49</u>

I M P E R I A L O I L L I M I T E D

STATEMENT OF PROFIT AND LOSS FOR THE YEAR ENDING DECEMBER 31, 1943

<u>PARTICULARS OF INCOME</u>	<u>BEFORE PROVIDING FOR CANADIAN TAXES ON EARNINGS</u>	<u>PROVISION FOR CANADIAN TAXES ON EARNINGS</u>	<u>NET INCOME</u>
FROM CANADIAN REFINING AND MARKETING OPERATIONS, TRANS- PORTATION DEPARTMENT, AND CANADIAN PRODUCING DEPART- MENT (EXCLUSIVE OF CANADIAN PRODUCING SUBSIDIARIES), after providing for all selling, adminis- trative and general expenses, and after adding \$1,543,809.35 to the reserve for future shrinkage of inventory values from present abnormally high costs caused by war conditions.	\$22,246,359.89		
Less — Provision for depre- ciation.	<u>5,540,270.31</u>	\$16,706,089.58	\$7,343,720.15
			\$9,362,369.43
<u>OTHER INCOME:</u>			
Dividends from subsidiary companies, including dividends from subsidiaries whose activities are carried on outside of Canada, less losses of sub- sidiary companies for 1943	9,506,725.70	3,142,145.52	6,364,580.18
Interest applied to annuity reserves, etc., less interest on bonds, loans and mortgages, and other miscel- laneous revenue.	256,971.53	96,381.38	160,590.15
Net loss on investment securities after adjusting reserves against Dominion of Canada and other bonds on hand to the basis of market quotations as at December 31, 1943.	17,486.17	—	17,486.17
	<u>\$25,938,357.58</u>	<u>\$10,389,484.29</u>	
NET PROFIT FOR THE YEAR, CARRIED TO EARNED SURPLUS.			<u>\$15,548,873.29</u>

NOTE (1)—The total amount deducted in the above statement in respect of counsel and solicitors' fees and salaries of executive officers, including all salaried directors, is \$255,801.87; in addition, solicitors' fees, totalling \$310.33 were charged to Capital Assets during the year 1943.

NOTE (2)—The Company's proportion of the aggregate net profits of subsidiary companies for the year 1943 exceeded the dividends received from subsidiary companies, included in the above statement, by \$1,234,302.23, after deducting from such excess the income taxes (at present rates) which would be payable by Imperial Oil Limited on distribution.

AUDITORS' REPORT TO THE SHAREHOLDERS

To the Shareholders

of Imperial Oil Limited:

We have examined the balance sheet of Imperial Oil Limited as at December 31, 1943, and the related statements of profit and loss and surplus for the fiscal year then ended, and have obtained all the information and explanations which we required. Whilst we did not make a detailed audit of the transactions for the year, our examination was carried out in accordance with generally accepted auditing standards applicable in the circumstances, and included such tests of the accounting records and of other supporting evidence and such other procedures as we considered necessary.

In accordance with section 114 of the Companies Act, we report that in the case of such subsidiary companies as incurred losses up to December 31, 1943, the parent Company's proportion of such losses has been fully provided for in the books of Imperial Oil Limited and in the attached balance sheet. In the case of all other subsidiary companies, profits have only been taken credit for in the accounts of Imperial Oil Limited, and in the attached balance sheet, to the extent of dividends received by the parent company from such subsidiary companies; the Company's proportion of the aggregate net profits of such subsidiary companies for the year 1943 exceeded the dividends received in 1943 by \$1,234,302.23 after deducting from such excess the income taxes (at present rates) which would be payable by Imperial Oil Limited on distribution.

In accordance with the Company's established practice, the inventories of crude oil and refined products have been valued in the attached balance sheet on the basis of cost of crude oil, which was approximately the same as replacement value at December 31, 1943. The earnings of the year 1943 have been charged with an amount of \$1,543,809.35 which has been set up as an addition to the reserve for future shrinkage of inventory values from present abnormally high costs caused by war conditions.

We report that, in our opinion, the attached balance sheet is properly drawn up so as to exhibit a true and correct view of the state of the affairs of Imperial Oil Limited as at December 31, 1943, according to the best of our information and the explanations given to us, and as shown by the books of the Company.

PRICE, WATERHOUSE & CO.

Chartered Accountants.

Toronto, Ont.

March 31, 1944.

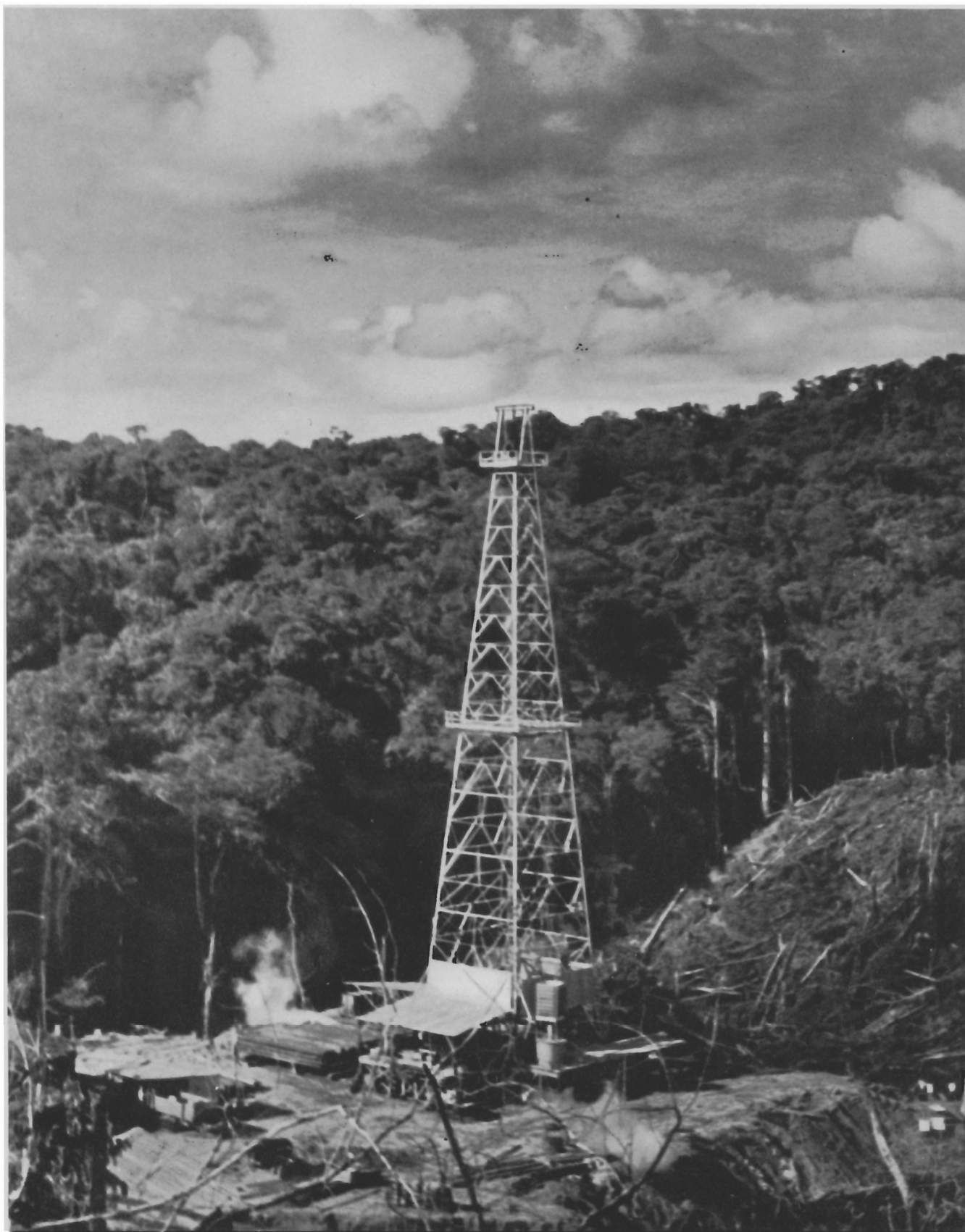


AROUND THE SEVEN SEAS

MEN who do business in great waters have always been a hardy folk. None of other kidney can face with casual glance and shrugged shoulders the white anger of a winter gale and all the other evils that sea-luck may hold in store. In the good old sailing days of peace they would come ashore, perhaps after a stretch of 105 days or more from around the Horn, take bearings on the solid and uninteresting earth, refresh themselves mightily and sign-on again for another hundred days or more of the fickle friend and the grumpy enemy of man.

But how much greater their perils in war-time! The tankers on which the victualling of ships, aeroplanes and artillery depend are the special quarry of submarines and raiders all the world around. One torpedo, even one shell, can set a fire furious beyond conception, destroy without trace the crew, leaving men dying in a sea of blazing oil. At best some survivors in open boats may drift for days and nights on an empty and hostile sea.

Yet such men when brought ashore, faint from hunger and thirst, are no sooner restored to their usual well-being but they grin, spit brown, and sign again on a tanker, travelling singly or in convoy to wherever, the world around, fighting men are clamorous for supplies. Like rugged, close-grained and indestructible teak-wood is the courage of these sailors with bearded lips who bring the life-stuff of victory to port, or die a-trying.



COLOMBIA, SOUTH AMERICA • Well being drilled for crude petroleum by rotary method in a tropical setting in Colombia by your Company's subsidiary, Tropical Oil Company. Due to the availability of an abundant supply of fresh water and natural gas the drilling is powered by steam.

THE year has been one of continual emergencies. New war-needs continued to appear calling for early fulfillment—and swift thinking. Production-scientists, engineers and drilling-crews from Arctic tundra to tropical jungles were more active, and diligent, than ever. Much new equipment has been demanded during the war, some of which is shown in the following engravings, for the evolution of our scientific processes is continuous. This put heavy burdens upon technical designers and construction men.

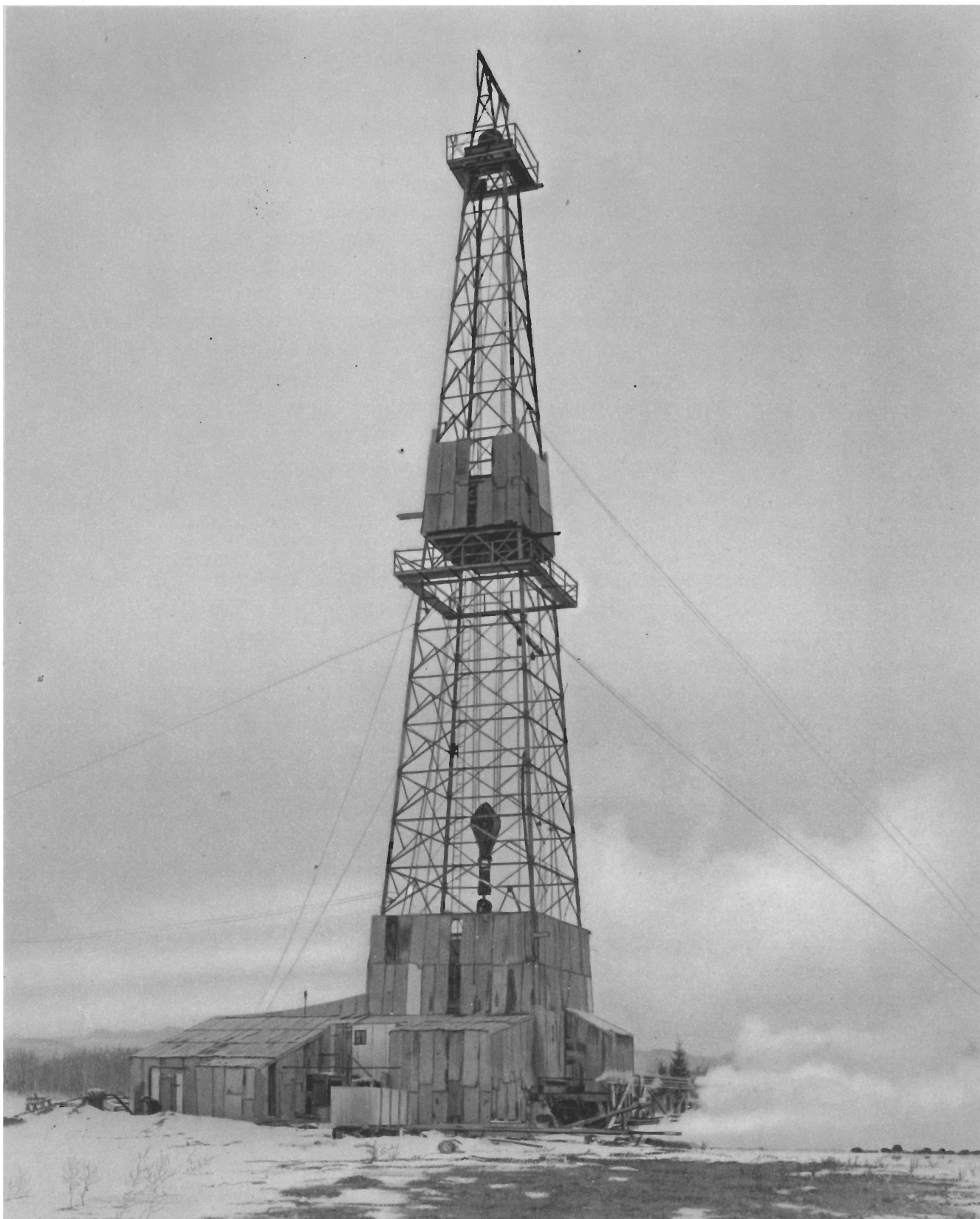
Yet we were not over-building. When necessary war-time restrictions come to an end, the demand for our products the world over will be more easily met and the quality of each more closely classified.

In the transportation division shortages of equipment and general crowding were sharply felt and intelligently overcome, and while normal marketing was restricted, the servicing of airfields and other war-outlets was a make-weight.

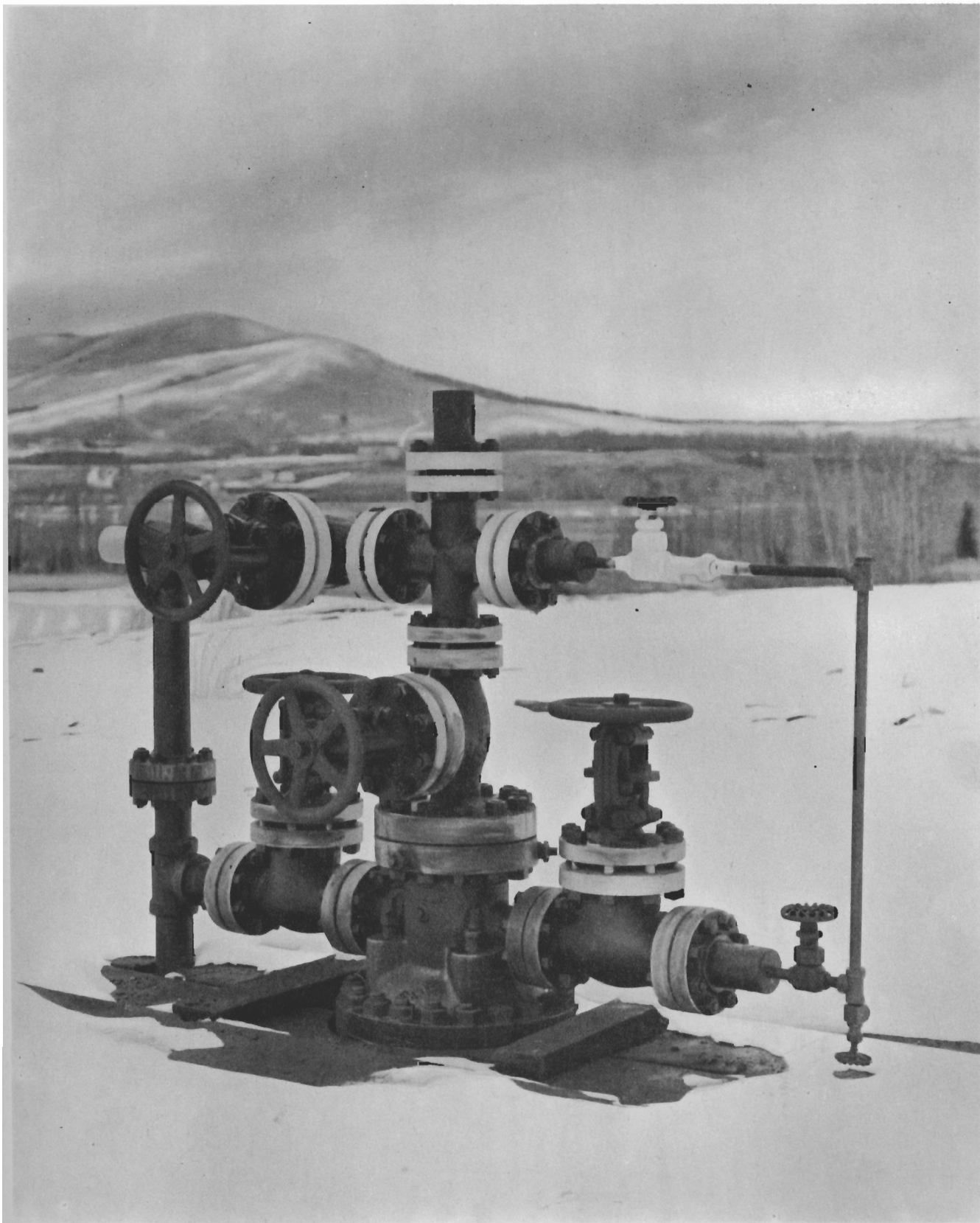
In the pressure and drive of every day, high talents of initiative and resource have been revealed by all those associated with the Company. Whatever emergencies have arisen requiring additional operations with a reduced staff, the means for dealing with them adequately and promptly appeared. And it must be understood that all the thinking was not done by the top-men of any division. Suggestions came often from unexpected quarters. Some, naturally, were more valuable than others, but all were gratifying. Such evidence of intelligent team-work is the mark of soundness in any industry or common enterprise.

So, at the end of a year filled with unusual problems and extreme demands upon intelligence, diligence and energy, your Directors desire formally to acknowledge the mounting evidence of loyalty and co-operation revealed in all departments of the company. Geologists, drillers, technicians and chain men, workers who use main strength of hand as well as of brain, engineers of every special skill, scientists, mechanics and construction men, pipe line operators, process operators, bulk plant operators, agents, tank wagon and truck drivers, financial men, administrators, clerks, foremen, accountants, the fine "old-timers," the juniors, and as well, the many service station operators and dealers who sell the Company's products, all come under the general classification of willing and valuable associates.

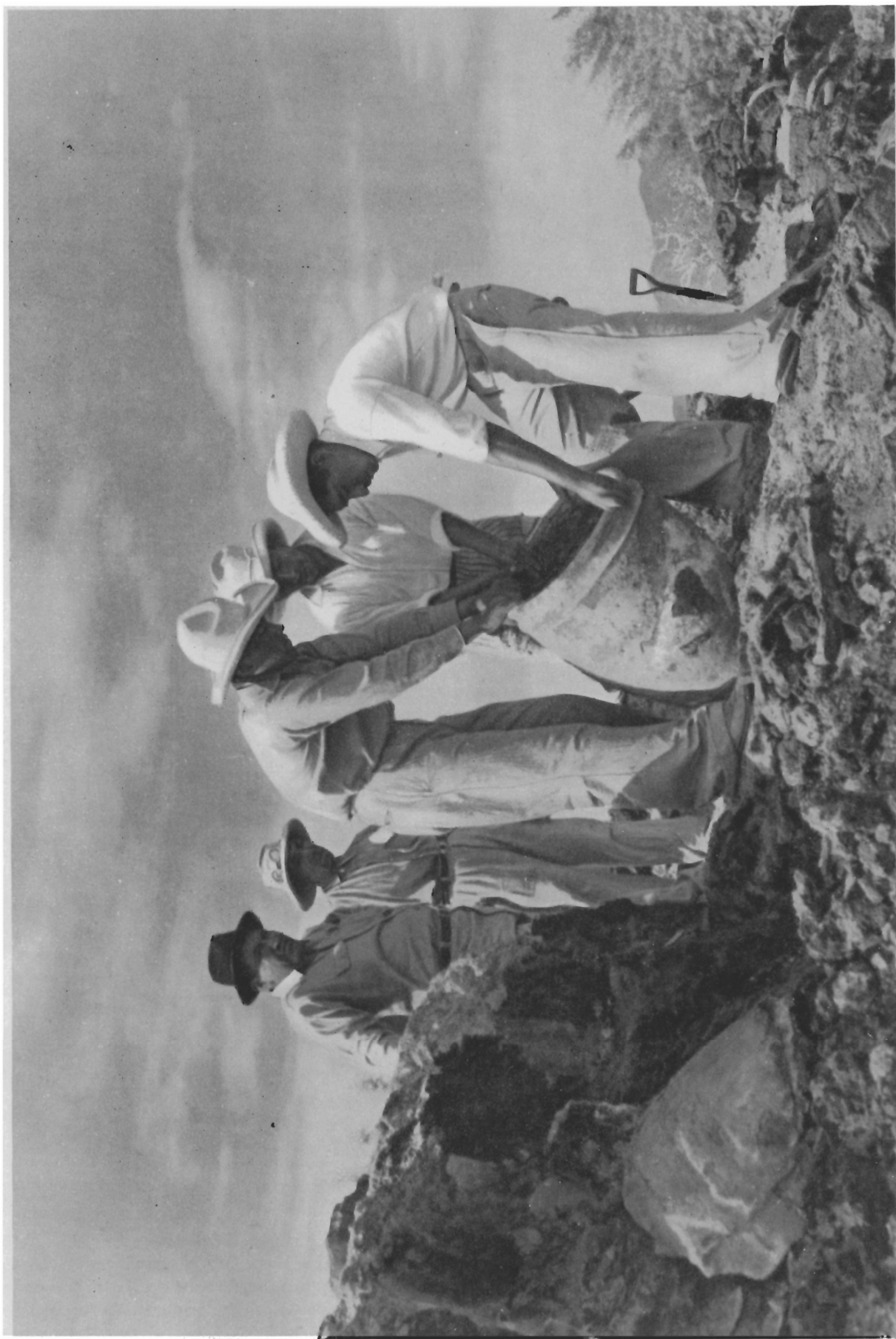
Years ago a famous Canadian merchant said abruptly, "Don't call them employees; they're our people." So to "our people" of Imperial Oil goes our sincere appreciation of good work well done.



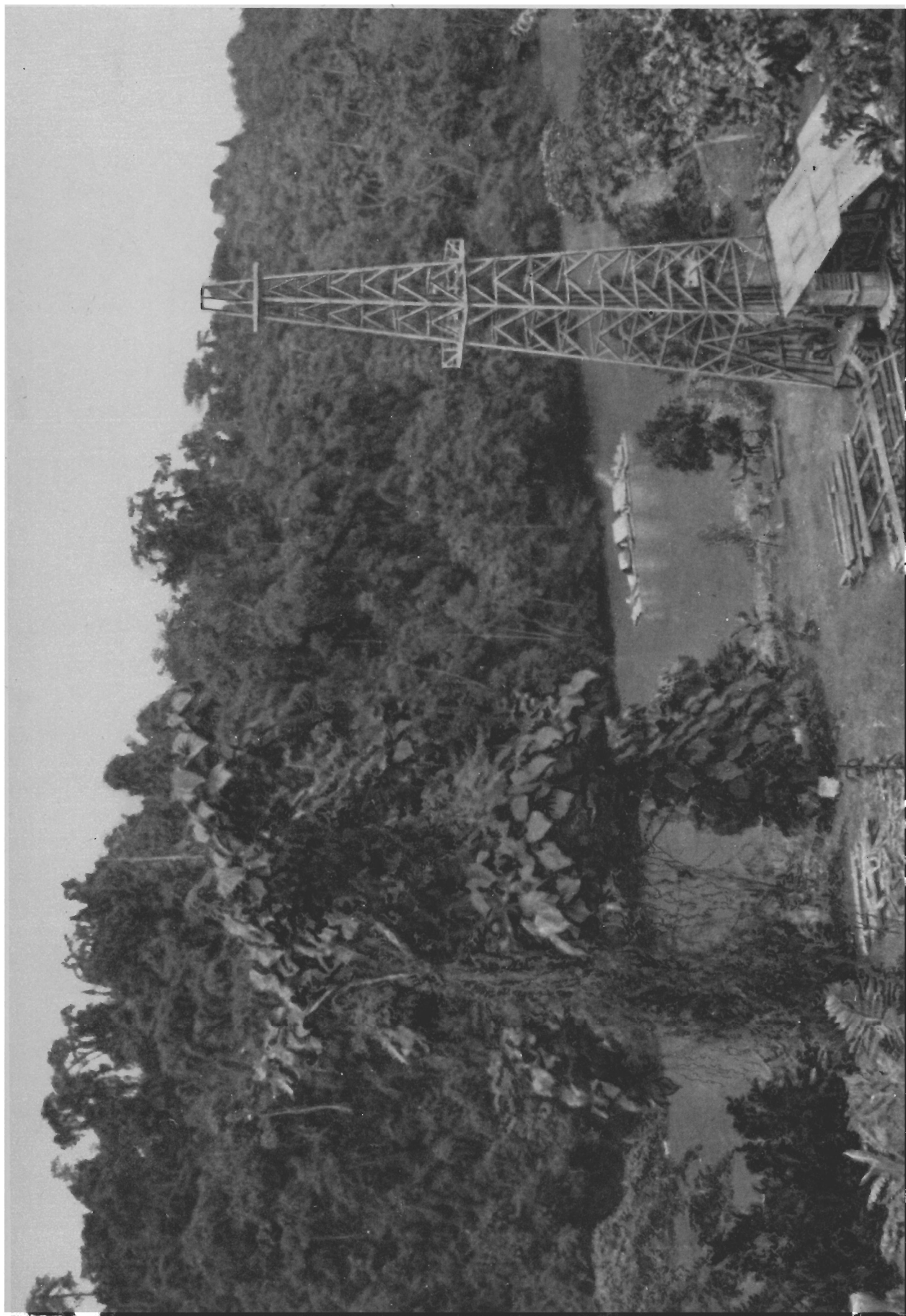
TURNER VALLEY FIELD, ALBERTA • One of the 69 crude oil producing wells drilled by Imperial Oil Limited, its subsidiaries or affiliated interests in the Turner Valley field during the years 1939 to 1943 inclusive. These wells are drilled to a depth of from 7,200 to 9,500 feet by rotary method. Since well drilling is an all-season activity, provision must be made to protect the operating personnel and equipment against severe weather conditions.



TURNER VALLEY FIELD, ALBERTA • A completed well in the producing stage. When drilling has been completed the derrick and all drilling equipment is removed to another location. All that remains above the surface is the well-head control equipment as shown above. As a result of conservation measures all wells in this field are so far producing by means of natural pressure flow.



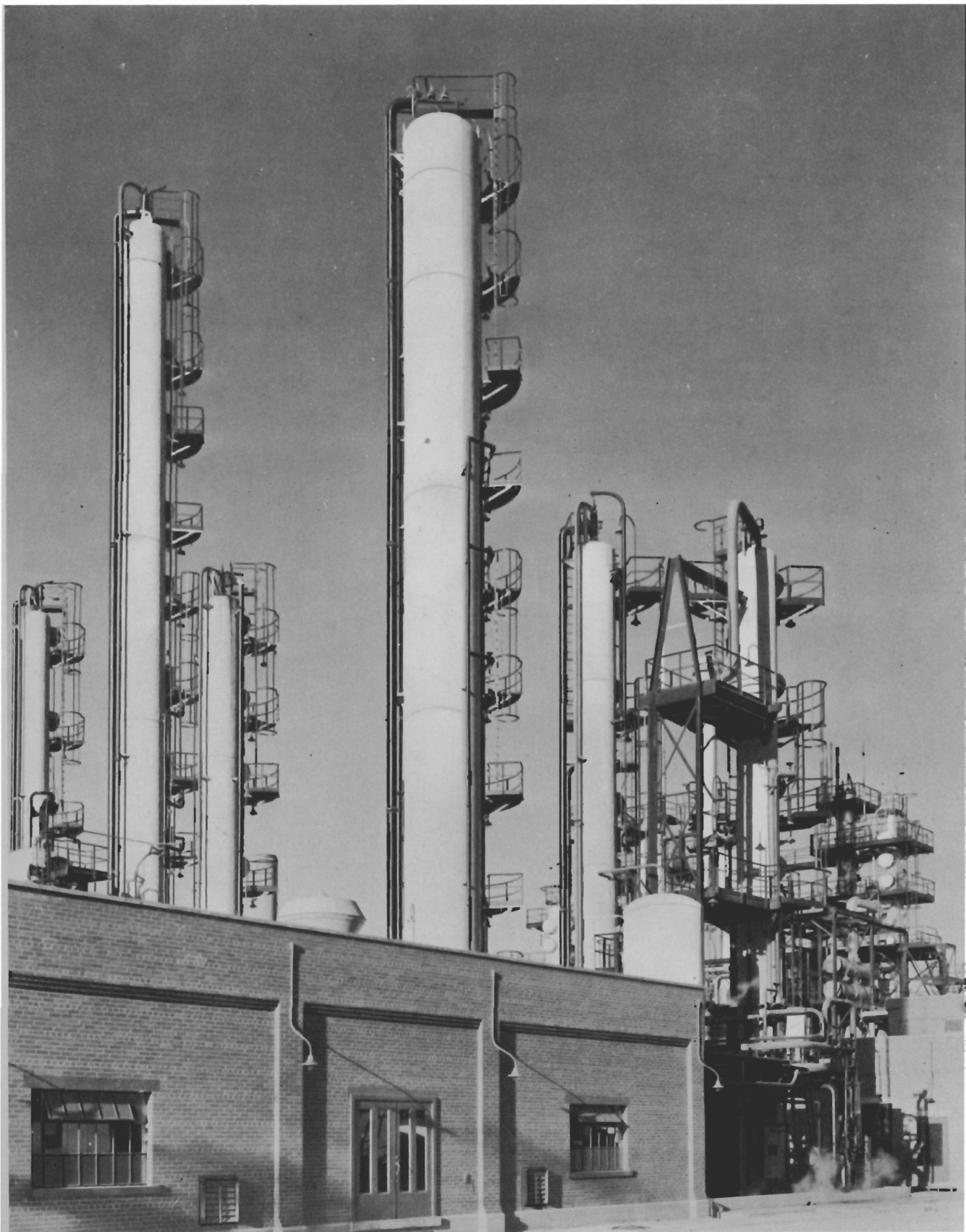
PERU, SOUTH AMERICA • A cauldron remaining from an early refinery on the property of your Company's subsidiary, International Petroleum Company, Limited. These clay cauldrons, moulded by the Incas were used to melt petroleum pitch collected from seepages on the desert. The heated pitch was used for cementing building stones together. The pits from which the seepage was obtained were known as "Mina Brea", meaning "Mine of Pitch" and now known as La Brea. These primitive methods of producing and refining are of interest in comparison with the scientific methods followed today in Peru and elsewhere.



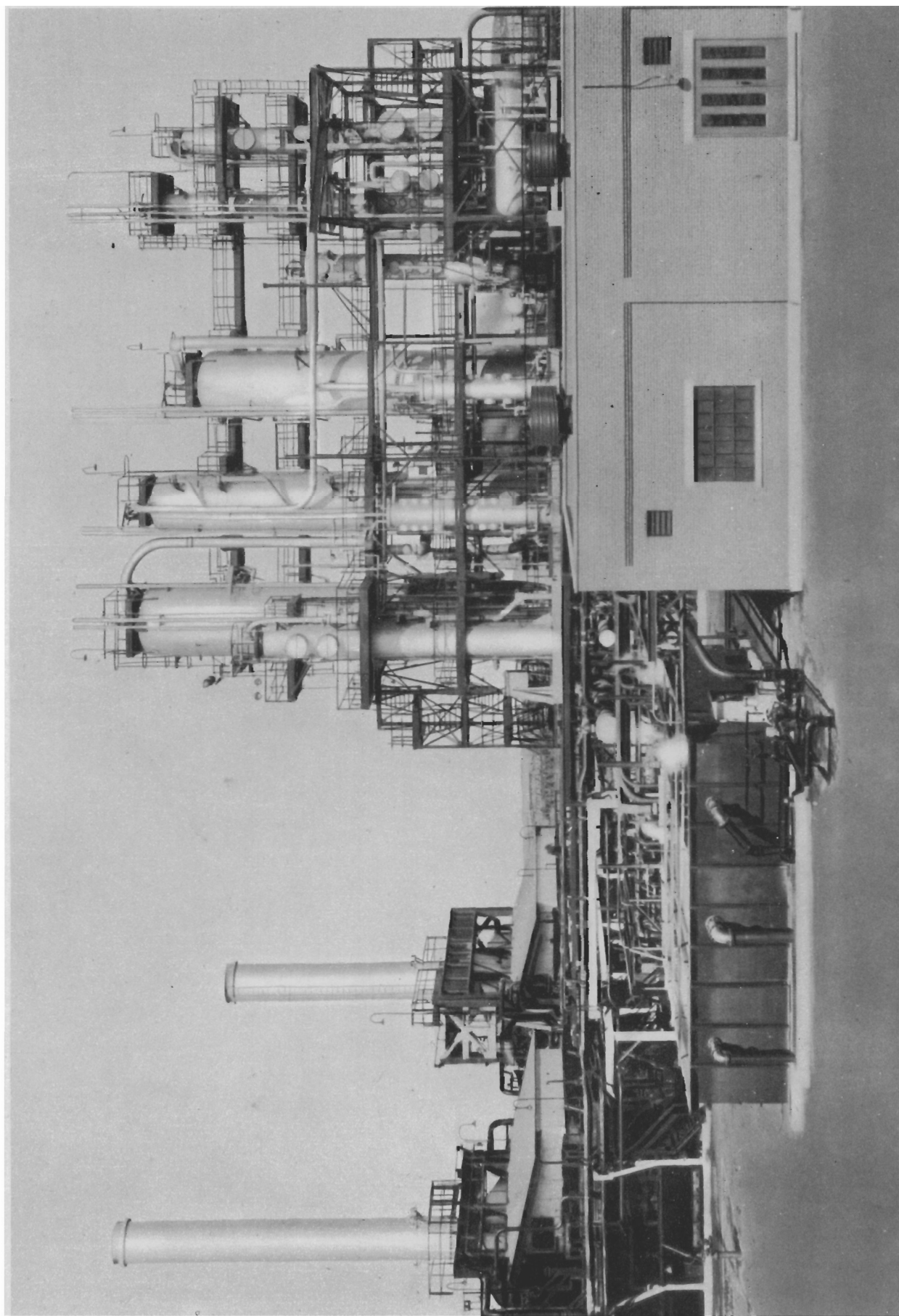
ECUADOR; SOUTH AMERICA • Exploratory well being drilled for crude petroleum on one of the large concessions of your Company's subsidiary, International Petroleum Company, Limited. The rotary drilling rig in this case is driven by diesel fuel oil engines on account of the long distance from other fuel supply.



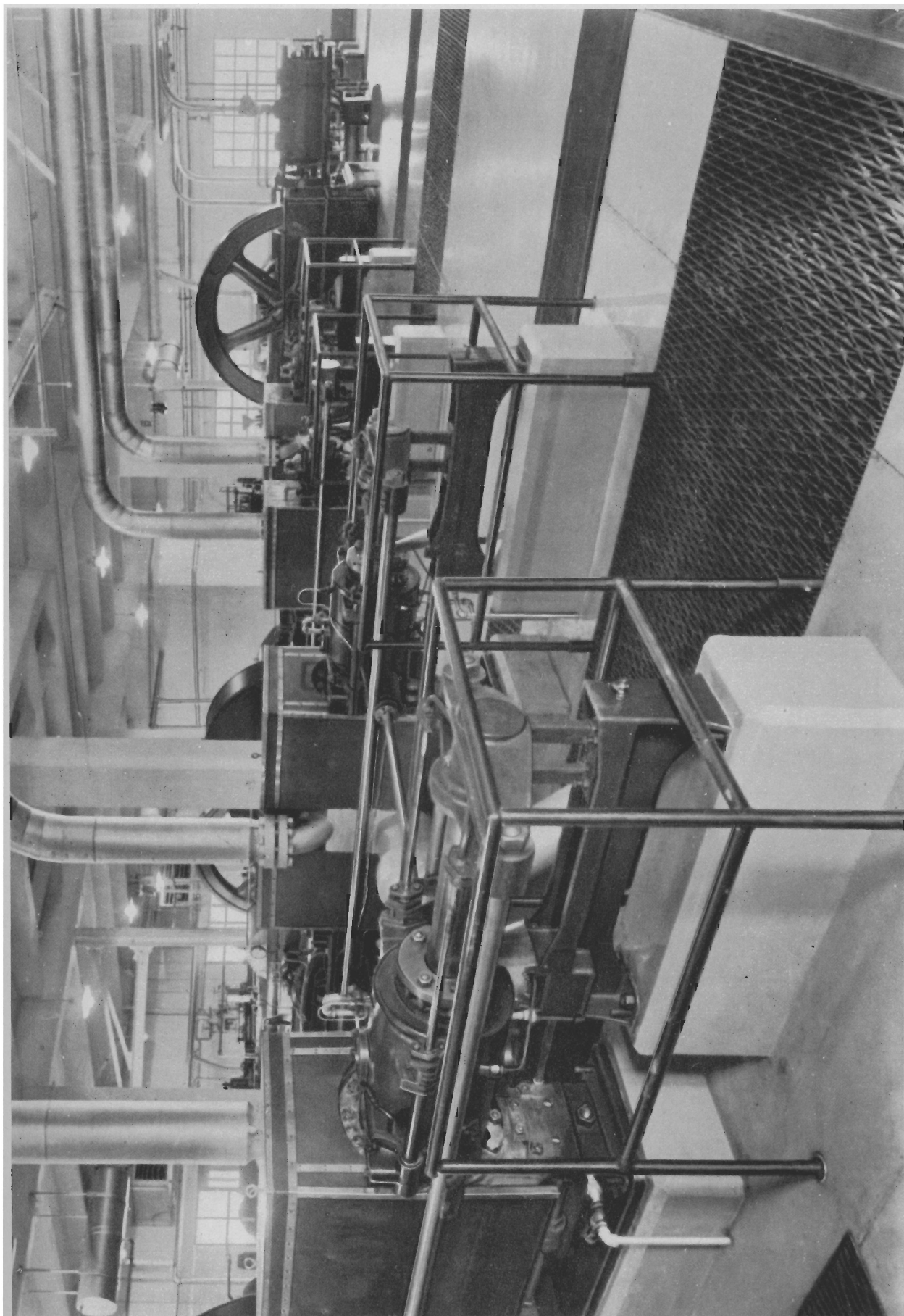
VENEZUELA, SOUTH AMERICA • Typical of the modern crude oil loading facilities is this ocean terminal of a pipe line from the producing fields in which International Petroleum Company, Limited is interested in Venezuela.



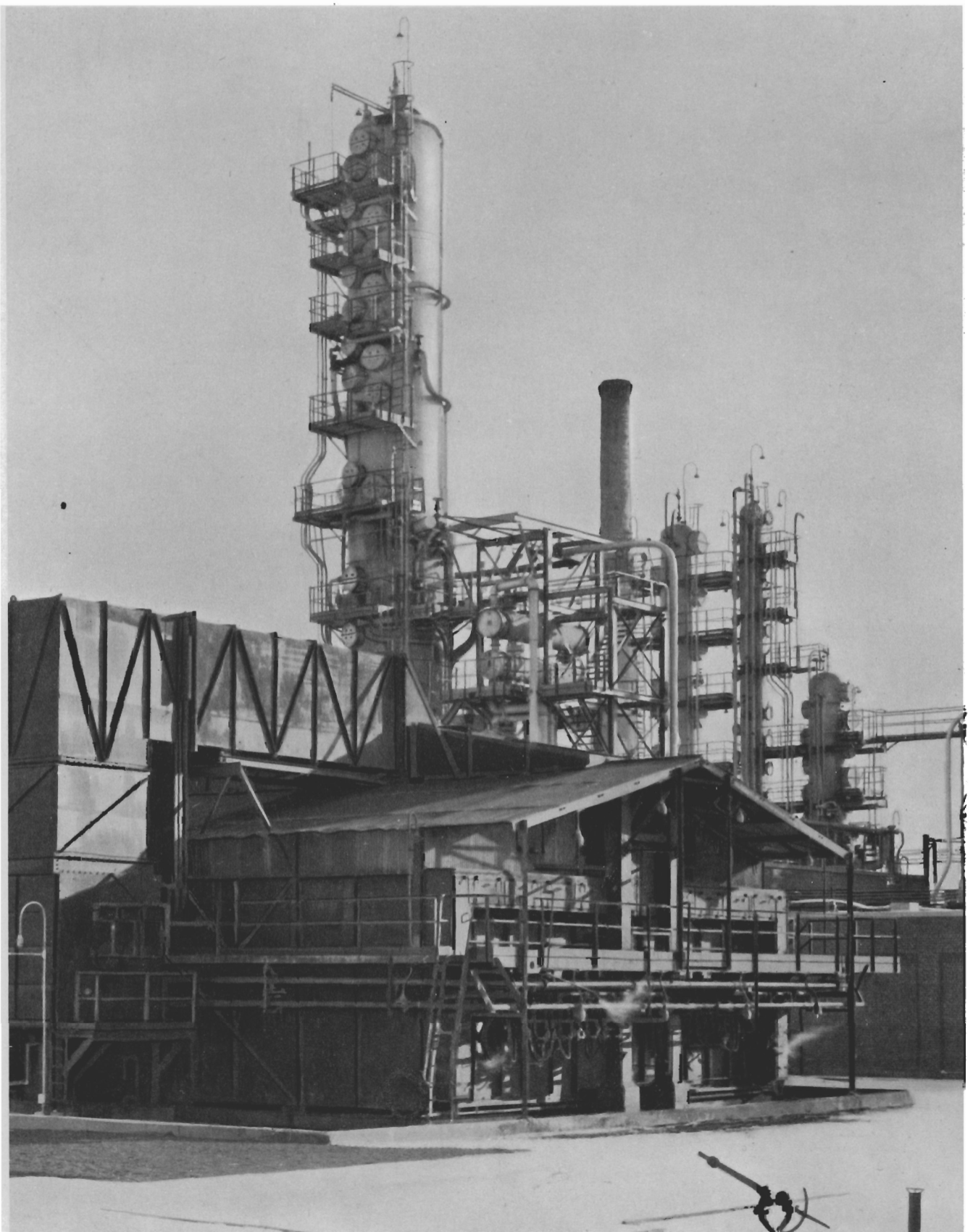
CALGARY REFINERY • New alkylation plant completed early in 1943, the first of its kind in Canada, to produce high octane alkylate blending agent for fighting-grade aviation gasoline from refinery gas and Turner Valley gas.



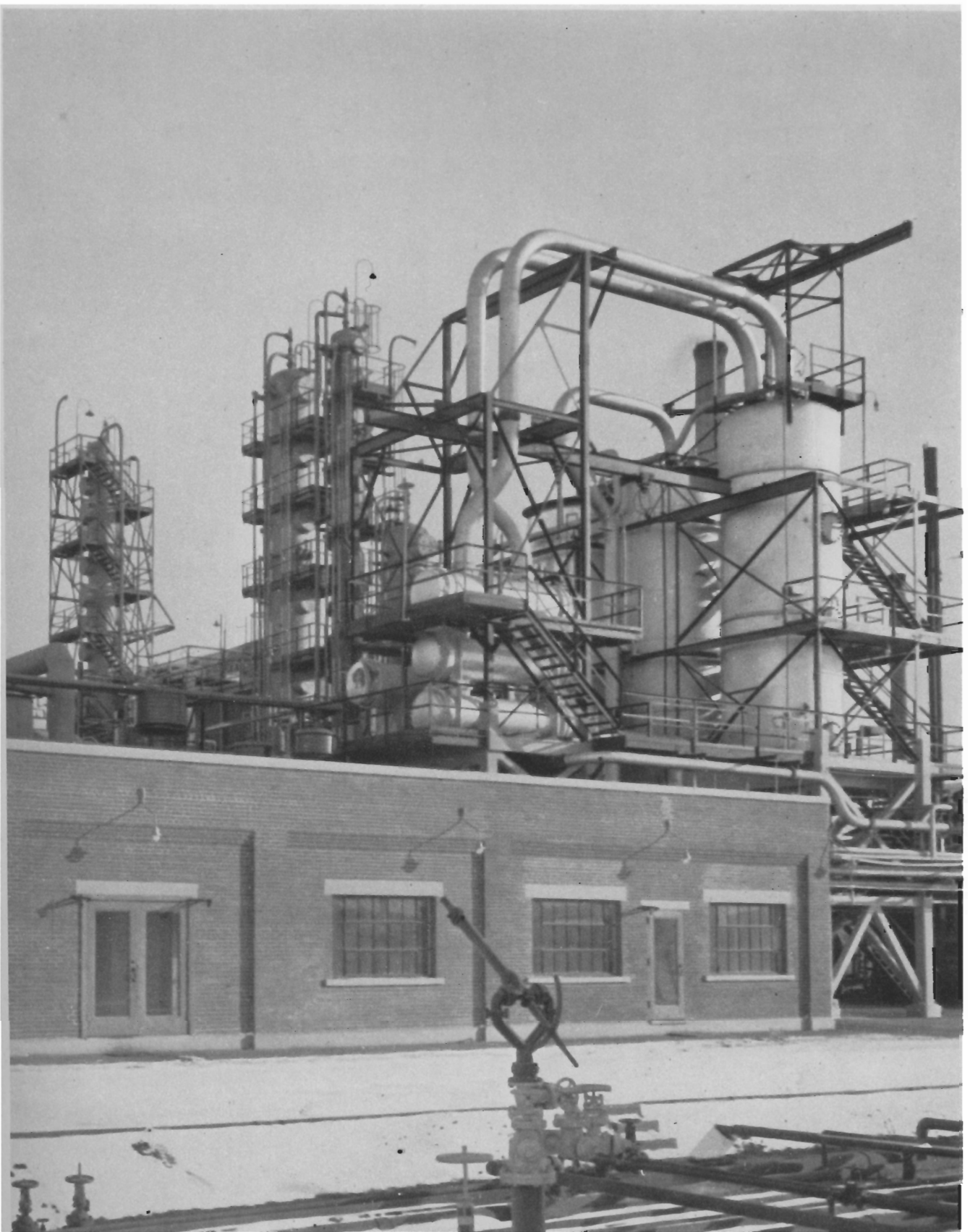
CALGARY REFINERY • Combination unit completed in 1940 for processing increased quantities of Turner Valley crude oil through continuous combined atmospheric distillation, fractionation, pressure cracking and treating processes, resulting in increased yields, improved qualities and reduced manufacturing losses.



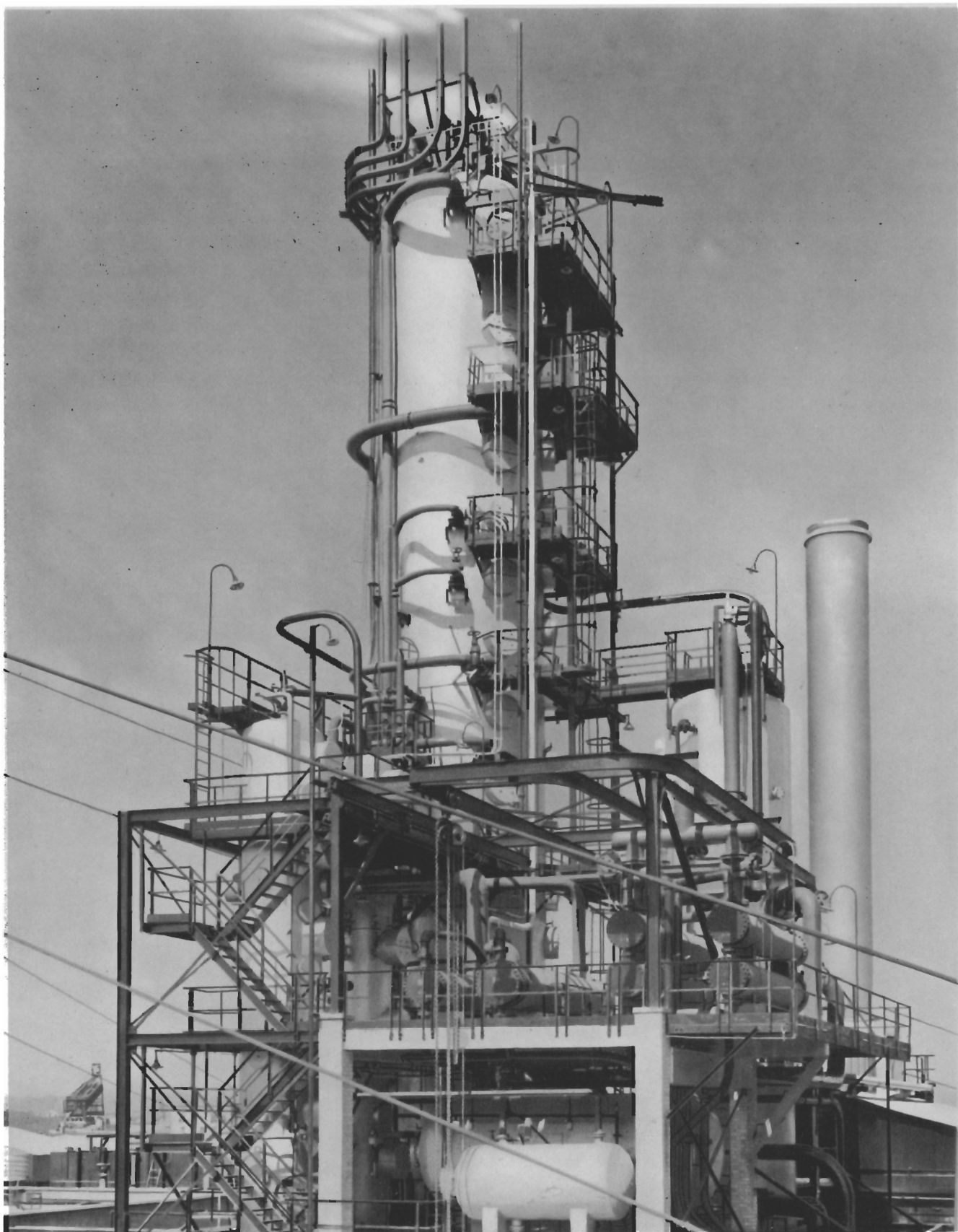
CALGARY REFINERY • Charging pumps at the Calgary continuous combination unit shown on preceding page. This equipment is typical of charging equipment at other Imperial refineries and is the heart of the circulating system of the continuous operating units.



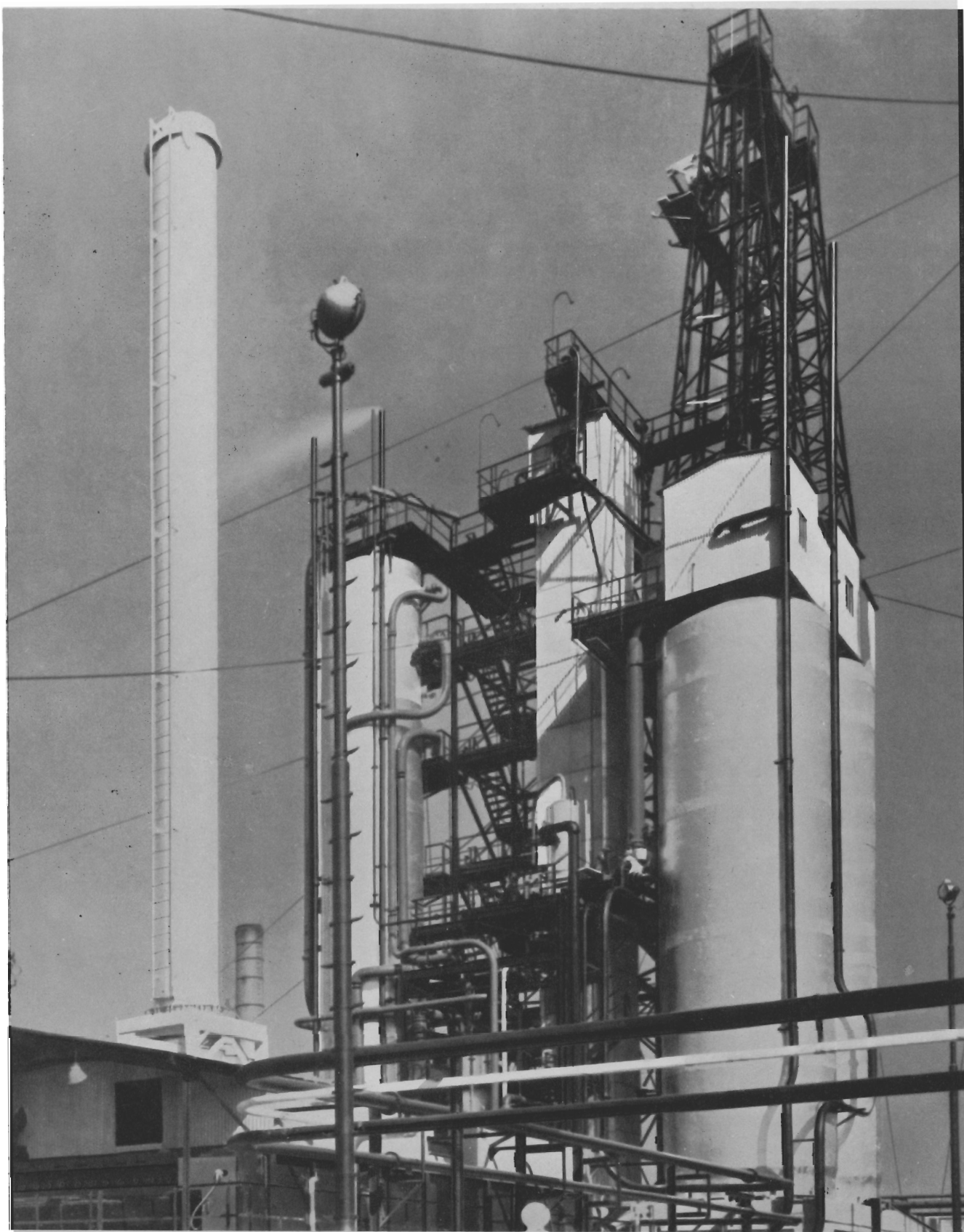
REGINA REFINERY • Unit completed early in 1943 to absorb the last traces of gasoline from refinery gases and for pressure cracking of petroleum fractions to gasoline, indirectly resulting in making additional aviation gasoline available.



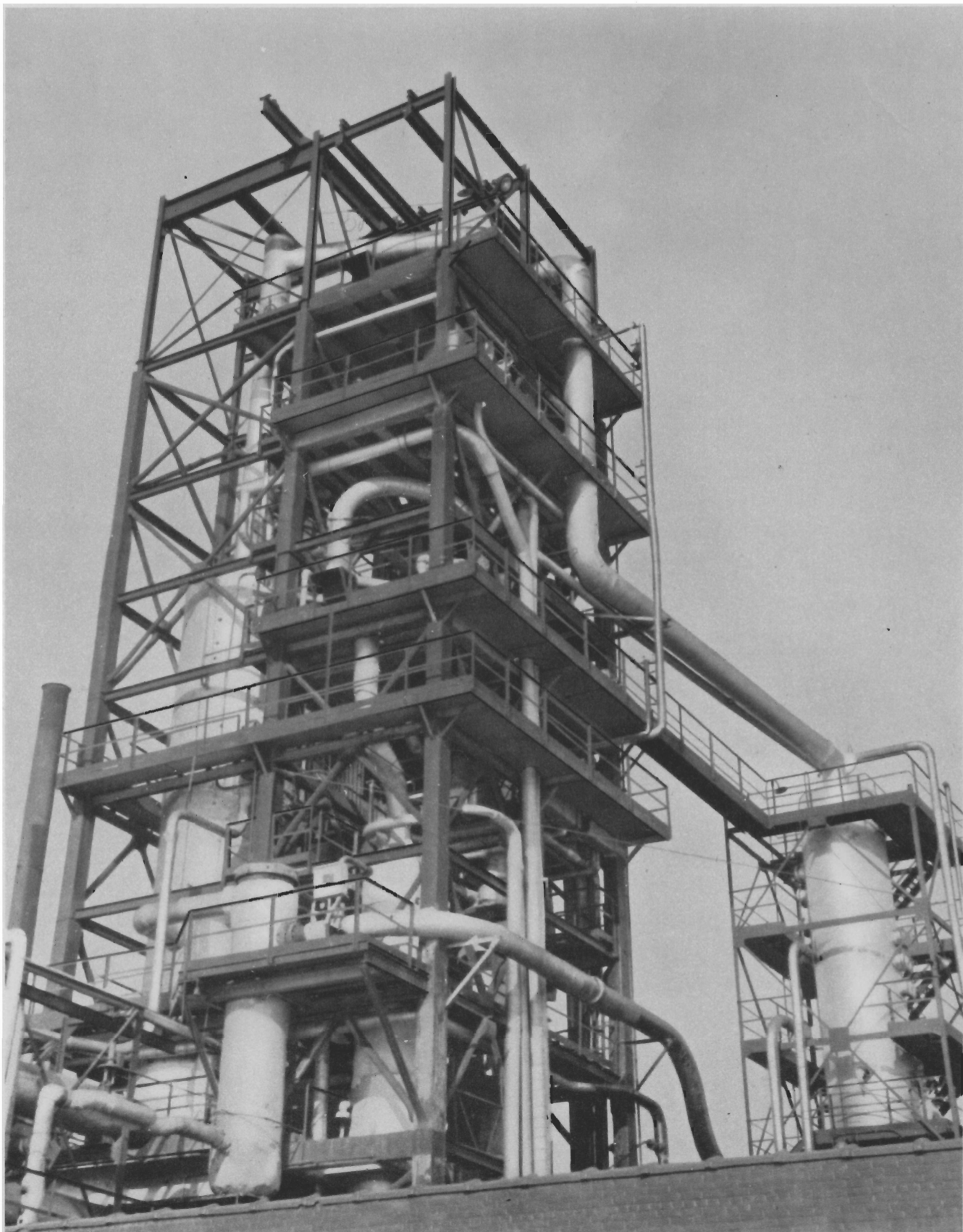
REGINA REFINERY • New non-selective polymerization and bauxite treating plants where high grade motor gasoline blending agent is made from refinery gases in the very essential step of conservation of petroleum gases and where treatment of natural gasolines with bauxite makes it possible to produce larger quantities of aviation gasoline for the Fighting Forces.



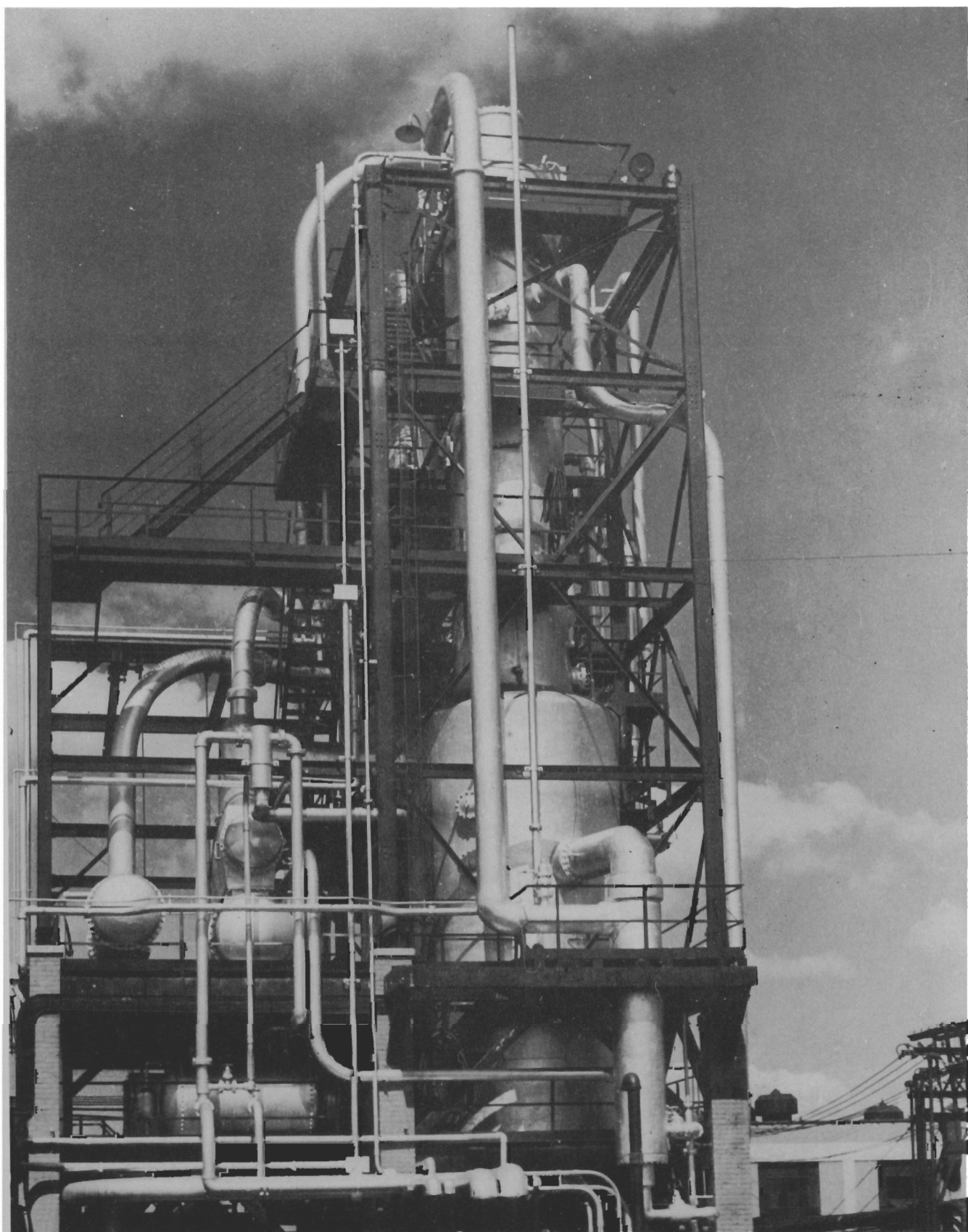
SARNIA REFINERY • Superstructure of the combination unit completed in 1941 for processing part of the Sarnia crude oil running to coke. This unit has a capacity of approximately 26,000 barrels a day of crude oil. Shown above are towers for fractionating gasolines, kerosenes, and other products.



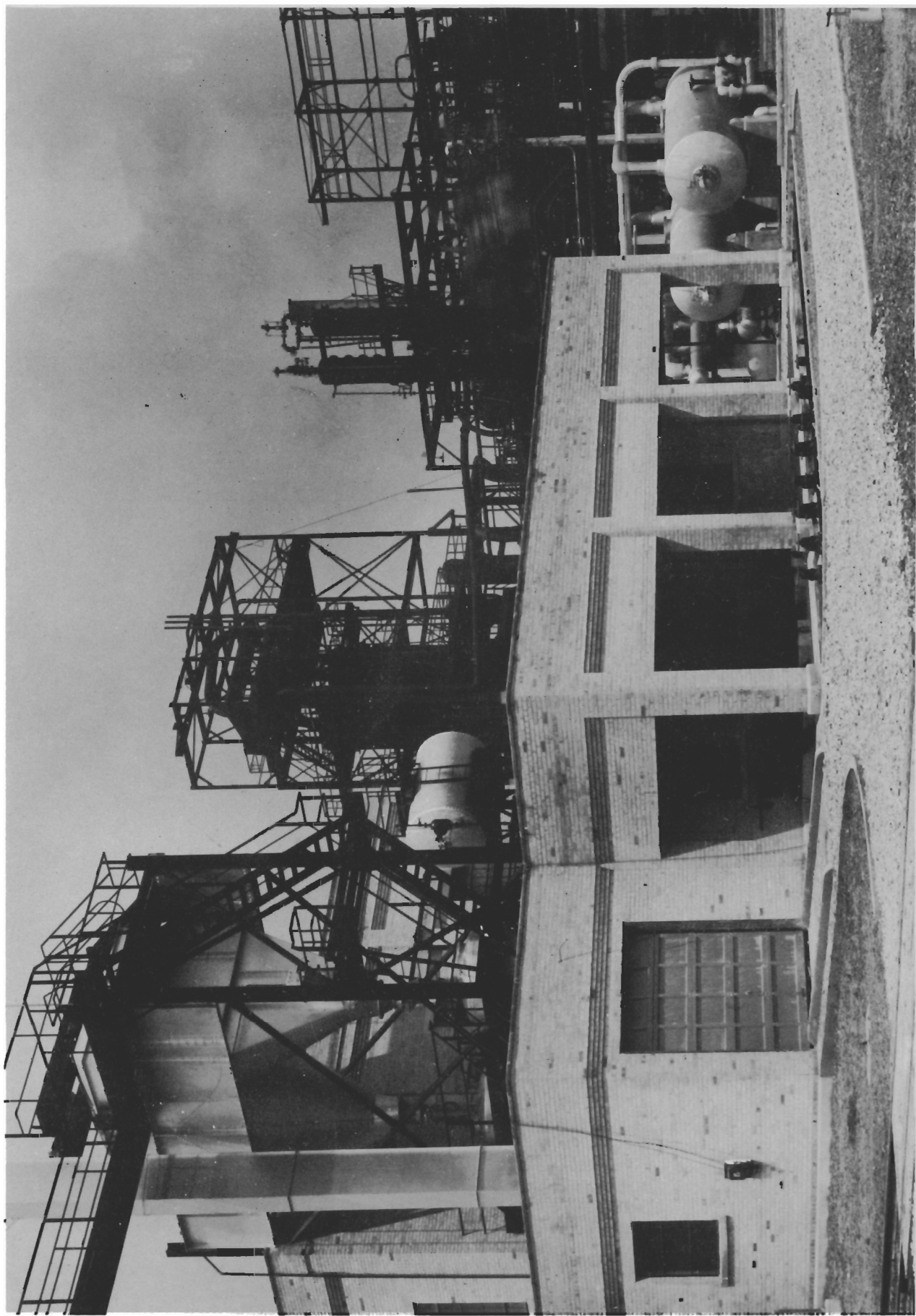
SARNIA REFINERY • A view of another section of the Sarnia combination unit shown on the preceding page for processing crude oil to coke, showing the coking drums for producing coke continuously which is hydraulically pumped from these drums to storage piles.



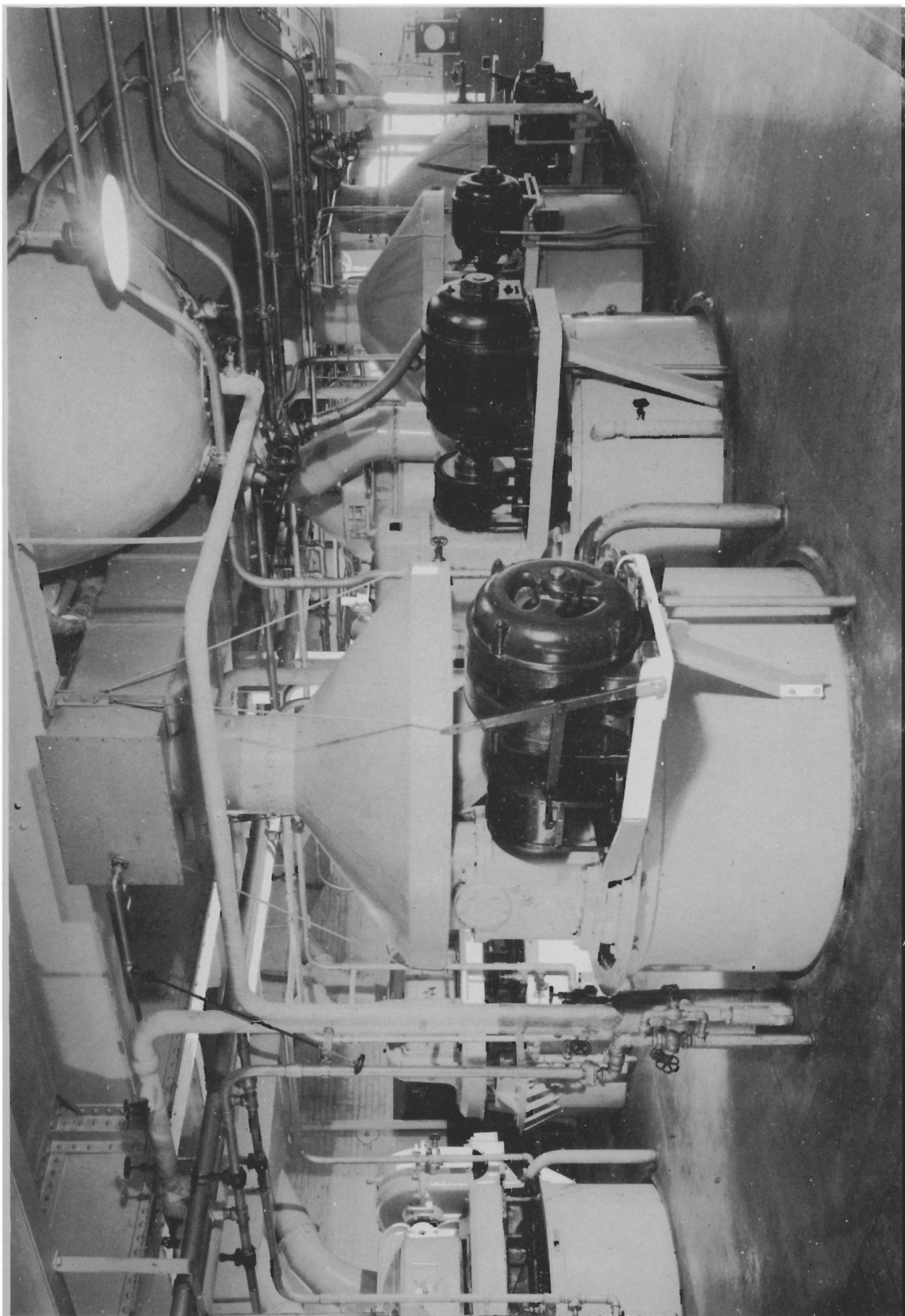
SARNIA REFINERY • New expansion to phenol lubricating oil plant showing on left fractionating towers and on right towers for purifying lubricating oils by counter current flow with phenol. This process, an important contribution to the science of petroleum refining, is a development of Imperial Oil Limited Research and Engineering organizations.



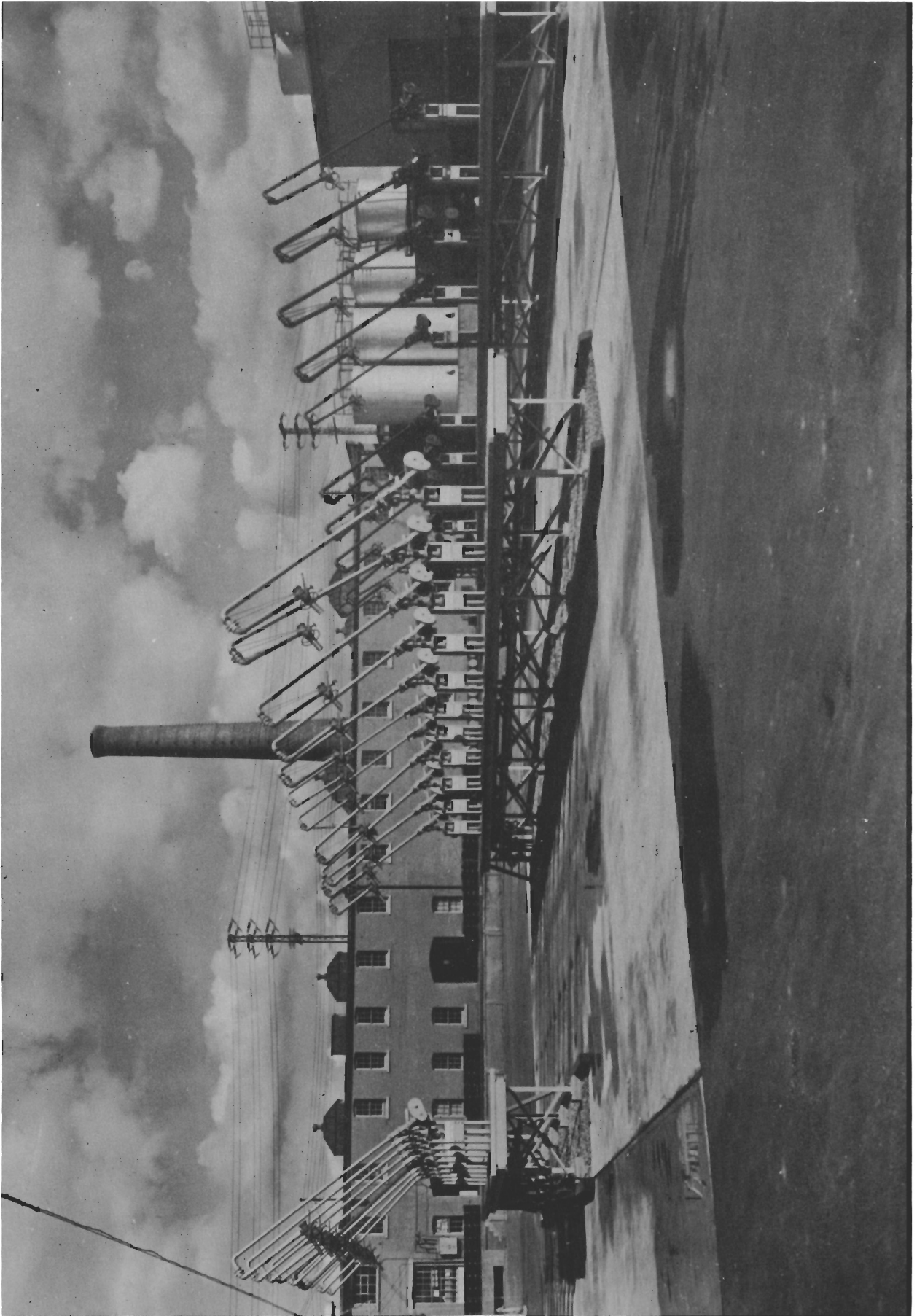
SARNIA REFINERY • At the outbreak of war Imperial Oil Limited expanded the capacity of lubricating units at Sarnia, by about 100%. Illustration shows a small section of the dewaxing and lubricating oil plant consisting of fractionating towers. The process is another development of the Research and Engineering divisions of Imperial Oil Limited.



SARNIA REFINERY • An outstanding development in the science of petroleum refining by the Research and Engineering divisions of Imperial Oil Limited is that of "high temperature suspensoid catalytic cracking". Above shows section of auxiliary equipment added to existing cracking equipment in 1940 to produce higher octane motor gasoline, thereby diverting to aviation gasoline, high octane gasoline from other operations. In 1943 the operation was changed from "suspensoid" to "high temperature supersuspensoid cracking" to increase production of gases required by the Crown Company, Polymer Corporation Limited, for the manufacture of synthetic rubbers



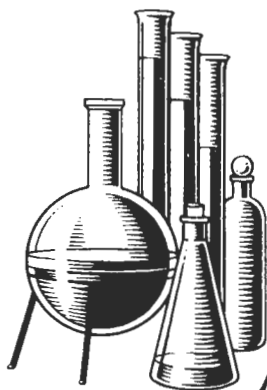
SARNIA REFINERY • A small section of one of the world's most modern grease plants where various types of greases are manufactured to meet severe conditions of heavy service and extreme variations of operating temperatures, including greases for the Armed Forces.



COTE ST. PAUL MARKETING PLANT, MONTREAL, QUEBEC • Illustrating the modern tank truck loading racks installed at Canada's largest centre of population for the prompt dispatch of Imperial products.



MONTREAL REFINERY • Spheroid pressure type tankage of 100,000 barrels capacity typical of new construction for storage of volatile products where the minimizing of losses is important from the standpoint of both conservation of quantity and quality.



SCIENCE REPLACES ART

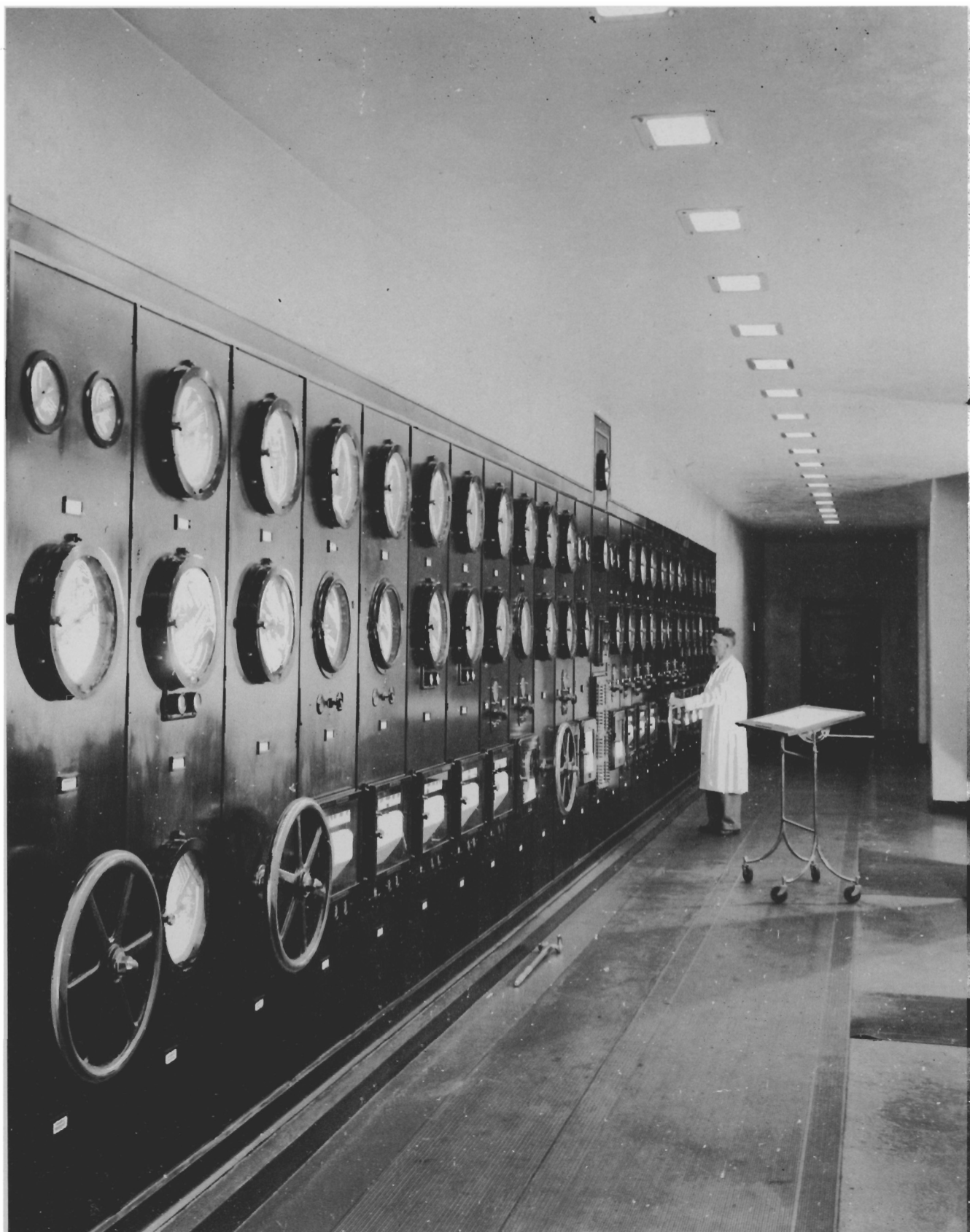
AS industrial practice continually improves, scientific methods replace the art of production in all details.

In the old days the quality of gasoline was judged almost entirely by its weight, known as "gravity". Now it is determined with unfailing accuracy by physical and chemical examination.

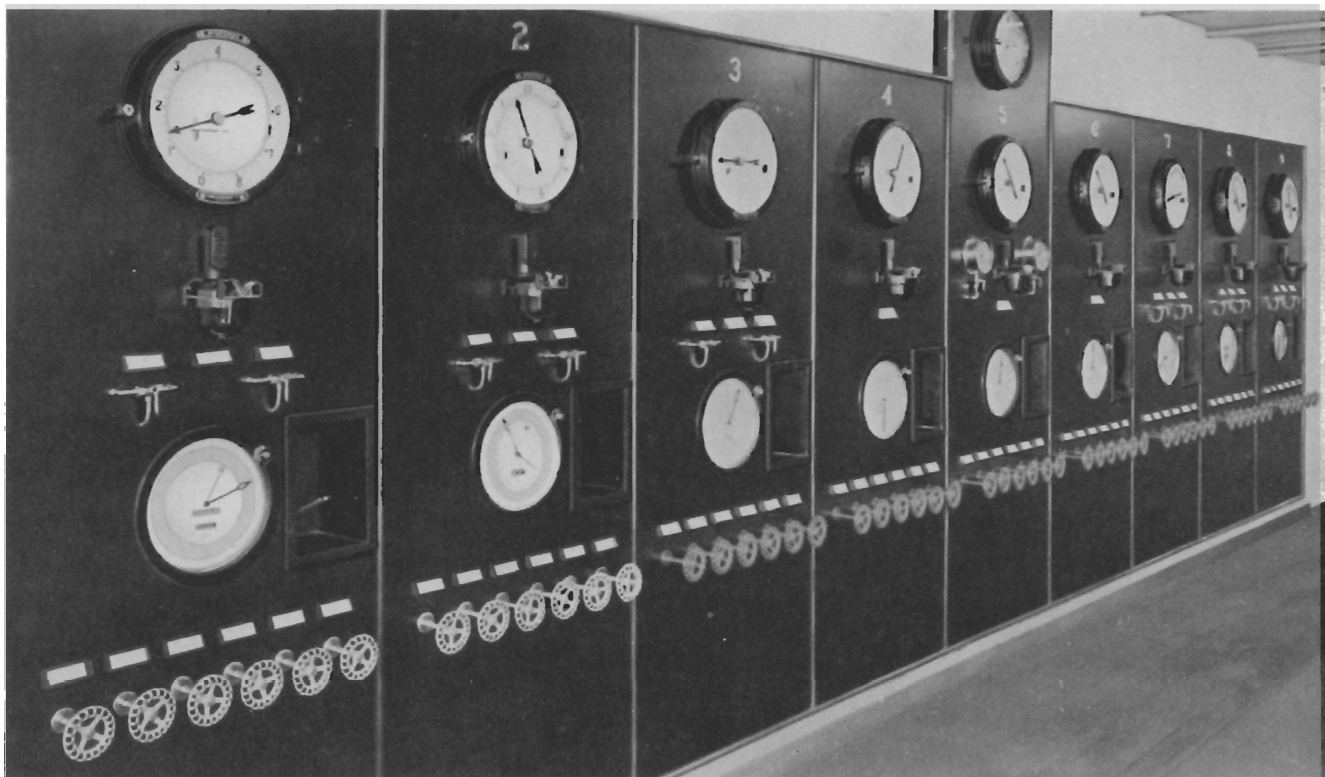
Grease was classified for years on the intuitive judgment of some wise old-timer. He would touch the finished grease with his finger, wipe it on a handful of waste, and announce the grade with almost unerring judgment. Today the use of scientific instruments, which are more accurate and reproducible, has superseded the rule of thumb or finger method.

So in every detail your Company's petroleum operations are scientifically controlled to meet the severe and rigid standards of the present day. Automatic machinery supplants manual control; science replaces art.

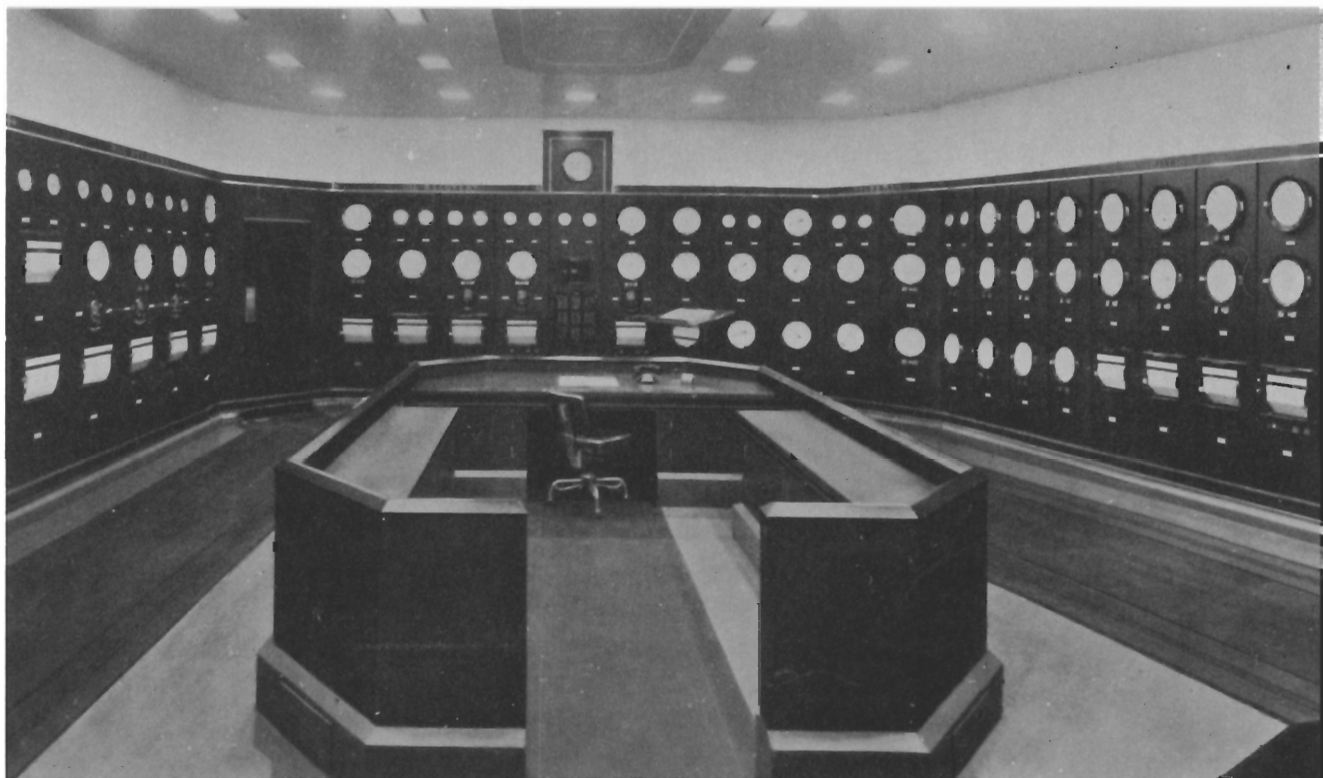
On the following pages are shown a few of the many typical control-rooms in your Company's refineries where the manufacture is controlled and recorded to ensure uniformity and excellence of quality of the hundreds of products made.



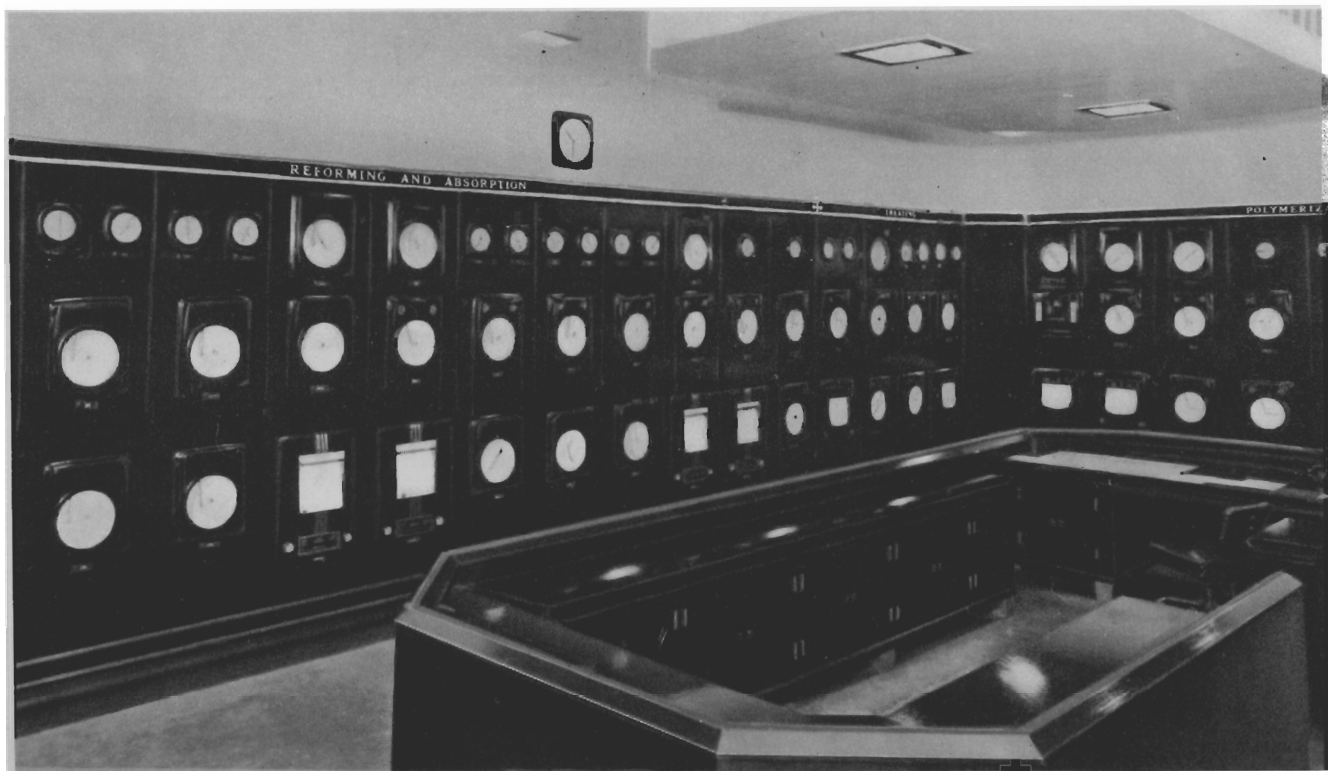
HALIFAX REFINERY • Centralized instrument control room at continuous combination crude oil distillation, pressure cracking and treating plant.



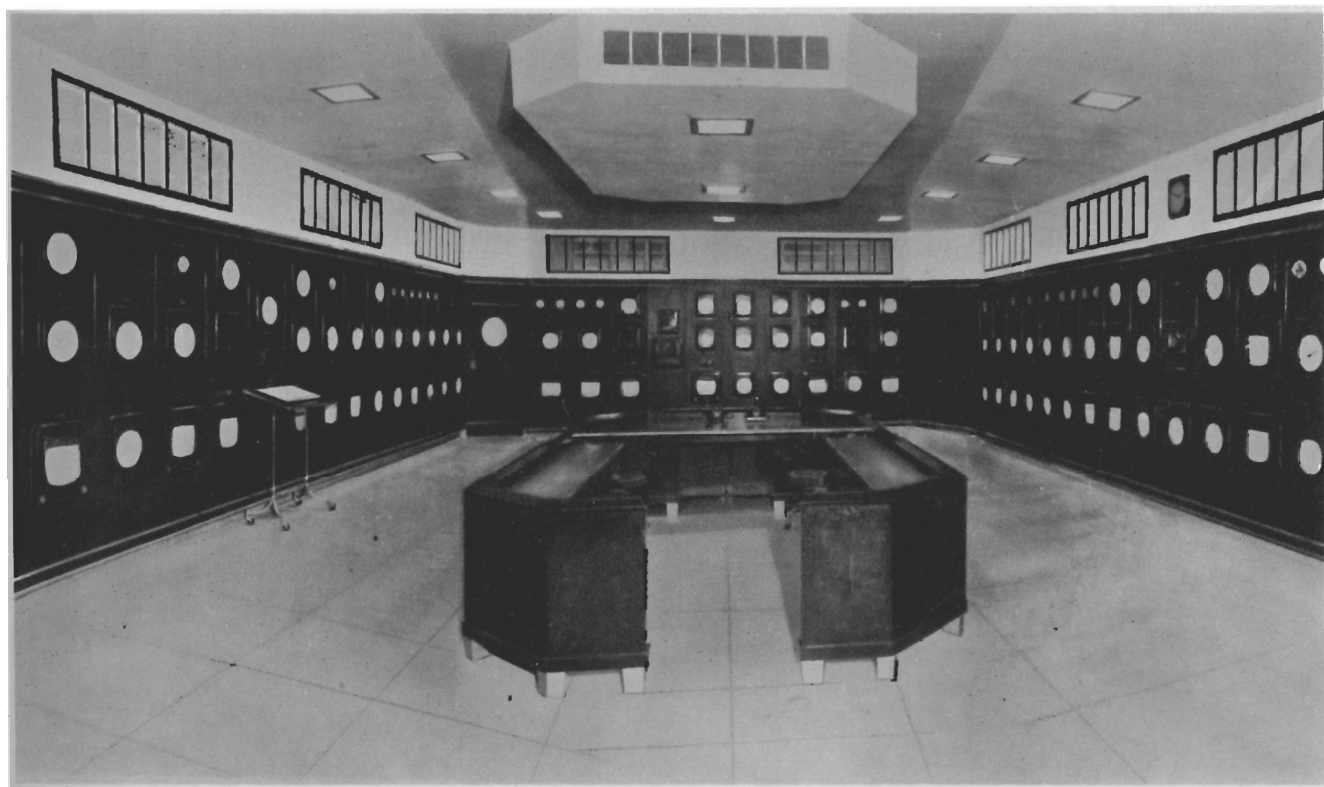
SARNIA REFINERY • Instrument board at grease plant from where remote control is maintained over the quantities of oil and other ingredients used and where time and temperature of the grease manufacturing is automatically controlled and recorded, ensuring uniformity in quality of greases.



SARNIA REFINERY • Centralized instrument control room at Sarnia dewaxing and lubricating oil plant where automatic control and recording of operations are important features of the plant.



REGINA REFINERY • A view of part of the centralized control room at the reforming, absorption, treating and polymerization plants where all operations of these plants are automatically controlled and recorded.



CALGARY REFINERY • At Calgary, like other Imperial refineries, automatic control and recording are important parts of the operations. Above is a partial view of the instrument room controlling the combination continuous crude distillation, pressure cracking, treating, and alkylation units shown on pages 21 and 22.

INDUSTRIAL REPRESENTATION AND TRAINING

AS a result of the inauguration of an employee-management representation plan in the latter part of 1918 a means was provided by which employees, through duly elected delegates to joint industrial councils, bargain collectively with the management of the Company on all questions of common interest including wages, hours and working conditions. This was done in order to further to the fullest extent possible the welfare and safety of employees, the quality and quantity of output, the economy of operations, cleanliness of plant and protection of property for the general benefit of the Company and those interested in its products, whether as employees, shareholders, or customers.

Realizing that the success of any undertaking is measured by the knowledge of its problems possessed by those engaged in such enterprise, the viewpoint of employees in all matters in which they are engaged is valuable and therefore invited. Suggestions made from time to time by employees of the Company, especially for improvement in operations or products, are encouraged and suitable awards made for such ideas when found practical and put into effect.

As the nature of the Company's business is one of constantly changing conditions necessitating progress in all departments, the advancement in knowledge and skill throughout the organization must keep pace with such changes. Accordingly, the Company provides industrial training courses free to employees so that those otherwise entitled to promotion by virtue of seniority and desirous of availing themselves on their own time of the opportunity for advancement may, if they have the capacity, become qualified to accept positions of greater responsibility.



Employees attending one of the regular evening courses of industrial training on petroleum refining in a class room of Imperial Oil Limited at Sarnia Refinery. The participation of the employees generally in these courses has made it necessary to conduct classes for several evenings in each week, not only justifying the faith of the management of the Company in the value of the plan to the employees but also indicating the interest of the employees in the Company's continued progress and development.

IMPERIAL OIL LIMITED

Manufacturer and Marketer of more than

570

Individual Petroleum Necessities, Consisting of the Following:

GASES

Domestic Fuel Gas Industrial Fuel Gas

LIGHT HYDROCARBONS

For synthetic rubber production

AVIATION GASOLINE BLENDING AGENTS

GASOLINES AND MOTOR FUELS

Aviation Gasolines Motor Gasolines Tractor Fuels

SOLVENTS AND NAPHTHAS

for

Dry Cleaning Floor Polishes Lacquers Paints
Varnishes Rubber Cements and Miscellaneous

ILLUMINATING OILS

INCUBATOR OILS

HEATING OILS

Domestic Heating Oils Industrial Heating Oils

FUEL OILS

Diesel Fuel Oils Industrial Fuel Oils
Marine and Naval Fuel Oils

GAS OILS

for

Production of lighting gas Production of heating gas

PETROLEUM WAXES

Refined Waxes Semi-refined Waxes
Crude Scale Waxes

AVIATION LUBRICATING OILS AND GREASES

AUTOMOTIVE LUBRICATING OILS AND GREASES

MARINE LUBRICATING OILS AND GREASES

RAILROAD LUBRICATING OILS AND GREASES

INDUSTRIAL LUBRICATING OILS AND GREASES

for

Canneries Ceramic Industry Chemical Industries
Construction Equipment Dairies
Distilleries and Breweries Farm Machinery
Gas Factories Lumber Industry Machinery Industry
Meat Packing Industry Mining Industry
Milling, Grain Elevators, Bakeries and Cereal Plants
Metal Industries and Foundries
Metal Cutting and Grinding
Prime Movers and General Machinery
Pulp and Paper Industry Refrigerating Equipment
Shipbuilding Yards Steel Mills Sugar Refineries
Specialties Textile Industry Tobacco Industry
Miscellaneous Purposes

ELECTRICAL INSULATING OILS

PROCESS OILS

Cordage Oils Cosmetic Bases Coal Treating Oils
Glass Moulding Oils Leather Treating Oils
Printing Ink Oils Rust Preventives Textile Oils
Wood Preserving Oils

CANDLES

ASPHALT

Liquid Paving Asphalts Solid Paving Asphalts
Powdered Asphalts Insulating Asphalts
Roofing Asphalts Industrial Asphalts

PETROLEUM COKE

Coke Fuel Metallurgical Coke Electrode Coke
Coke for Abrasives

MISCELLANEOUS

Fruit Spray Oils Tree Spray Oils
Cattle Spray Oils Insecticide Oils
Naphthenic Acid

