

# Howard Smith Paper Mills Limited

HEAD OFFICE: 407 McGill Street, Montreal

### Officers

HAROLD CRABTREE, C.B.E., Chairman of the Board
E. HOWARD SMITH, President
E. K. ROBINSON, Executive Vice-President
GEO. H. TOMLINSON, Vice-President
KENNETH G. PENDOCK, Secretary and Treasurer
J. R. LESLIE, M.B.E., Controller

### Directors

W. A. ARBUCKLE

DE GASPE BEAUBIEN, C.B.E.

CHAS. L. BURTON, C.B.E.

HAROLD CRABTREE, C.B.E.

A. E. H. FAIR

J. H. GUNDY, C.B.E.

COL. R. D. HARKNESS, D.S.O., M.C.

W. H. HOWARD, K.C., C.B.E.

J. D. JOHNSON

HOWARD MURRAY, O.B.E.

E. K. ROBINSON

E. HOWARD SMITH

GEO. H. TOMLINSON

ARTHUR B. WOOD

### Auditors

The shares of the Company are dealt in on the following exchanges

MESSRS. P. S. ROSS & SONS

Montreal Stock Exchange Toronto Stock Exchange New York Curb Exchange

## Two score and more years ago at

### Windsor Mills



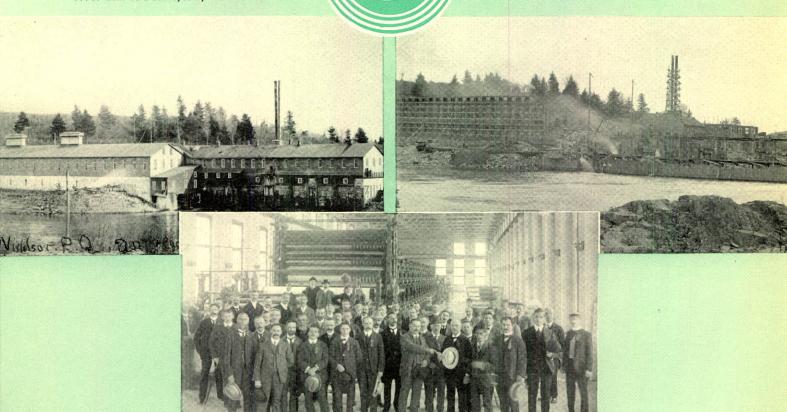
The original Springvale Mill built in 1882 and destroyed by fire in 1886.

The original St. Francis Mill. The right side is the Groundwood Mill built in 1896. The left side is the Paper Mill built in 1898. Both were destroyed by fire in 1901.



Windsor Mills in 1895, taken from same viewpoint as illustration on front cover. St. Francis Mill had not been built.

Rebuilding St. Francis Mill July 1902. Some of the old mill's foundations are visible behind the coffer dam.



Grand opening of new St. Francis Paper Mill — September 1903. This was by far the largest newsprint machine in Canada, making paper 156 inches wide.

A WHOLLY OWNED SUBSIDIARY OF

# Howard Smith Paper Mills Limited

CANADA PAPER COMPANY was acquired by Howard Smith Paper Mills Limited in 1929 from the St. Maurice Valley Corporation. From every standpoint this has proven to be a very important step, and has contributed, in a material way, to the growth of the Howard Smith Organization, whose activities up to this time had been devoted chiefly to the manufacture of Fine Papers. With the acquisition of Canada Paper Company, the management's scope had to be broadened to embrace a knowledge of the manufacture and marketing techniques of the Coarse Paper business and its related Converted Products. Up to this time the products of Canada Paper Company were a somewhat confused and complex mixture of Coarse Papers, and Book and Writing grades.

Its past history had been replete with successes and failures, and, having passed through periods of prosperity and of depression, it had, at one time, been the largest papermaker in Canada, but had lost this position to others who had far outgrown it. Now, however, as it approaches its 100th anniversary it has become revitalized, and in its present healthy state we feel confident it will prosper and grow, and contribute much to the economic life of its own community and the country at large.

The history of Canada Paper Company is far too long to detail here, and all we propose to do is to present a few of its interesting highlights.

The story rightfully begins in 1859 when William Angus and Thomas Logan formed a partnership as agents for a small paper mill located in Sherbrooke. Angus had come over from Scotland in 1850 and eventually found employment with William Miller & Company, who had just built a paper mill at the south-east end of Lake St. Francis, giving the area the name of "Valleyfield." This mill later was taken over by Alexander Buntin, who was the founder of both Buntin, Gillies of Hamilton, now owned by

Howard Smith Paper Mills, and Buntin Reid Company, large wholesale fine paper merchants of Toronto.

In the meantime Logan, who had worked in a paper mill at Chambly, Quebec, gave up the paper business to run a grocery store, but after five years he returned to paper, and opened a small wholesale paper house. When the two joined hands in 1859 they took the entire output of the Sherbrooke Paper Mill, which seems to have been built as early as 1850 by, or for, the British American Land Company which had very extensive holdings in the district. It was run by William Brooks, who was engaged in a number of other activities at the time, and, perhaps due to inattention on his part, he failed in 1860 and the mill was taken over by Angus and Logan with the latter moving to Sherbrooke to manage it.

Soon after, the mill was completely destroyed by fire, and a new brick building was erected to house the rebuilt fourdrinier machine. The output of the new mill was such, however, that it could not all be absorbed in the domestic market. It therefore became necessary to seek other outlets, preferably in the United States. This task was assigned to John F. McFarlane, who was engaged by the partners after having previously worked for Alexander Buntin. The result was that, with the situation created by the American Civil War and the scarcity of paper below the Border, the firm made spectacular profits when the price of ordinary newsprint soared to thirty cents (30c.) a pound.

During these prosperous times the firm was joined by John Thompson, who had come to America with his father, a papermaker. He had finished his apprenticeship in the paper trade, and had learned the process of making soda pulp from wood from its inventor, Hugh Burgess of England, who was then installing it at the Royer's Ford Mill in Pennsylvania. In 1860 he had moved with his father to Saint John,

N.B. where he began a series of experiments to improve Burgess' chemical process. After two years of effort he set out for Ottawa to secure a patent. Passing through Montreal he met Angus and Logan who prevailed upon him to forget all about a patent application and to join them. He was to go out to Sherbrooke and confine his process and methods to the exclusive use of their mill.

Thompson was so successful in this project that Angus and Logan offered him a full partnership which he accepted. While thus engaged his thoughts were still on the soda pulp process, so much so that in 1864 it was decided to build a mill to make this type of pulp, as other papermaking fibres were both scarce and expensive. The site chosen was at Windsor, Quebec, at the confluence of the Watopeka and St. Francis Rivers, some 15 miles below Sherbrooke. By 1865 this, the first chemical pulp mill in Canada, came into operation, the output being shipped in bags by barges up the river to the paper mill.

To find a market for its surplus capacity John McFarlane was sent to England, but the English papermakers could not be convinced that woodpulp would make good paper. To utilize this surplus then, and also to avoid the necessity of shipping the pulp by water, a new paper mill was built alongside the pulp mill at Windsor. This came into operation in 1867, and was equipped with two paper machines, having a capacity of from two to three tons of paper a day.

In May 1873 the firm of Angus, Logan & Company was incorporated as a joint stock company under the name of Canada Paper Company. William Angus became president, Thomas Logan vice-president, and John McFarlane assistant managing director. In addition to the two fourdrinier machines at Windsor Mills, the Company was also operating the original mill at Sherbrooke, and a second mill there, built by D. P. Squier & Company in 1863, which it is thought was acquired by Angus, Logan & Company in 1872.

It might be interjected here that the records are cloudy about the second mill in Sherbrooke. It seems to have been operating up to 1872, but disappears after that date — doubtless it was closed down.

Some time previously Angus, Logan & Company had made a loan to Ford and Logan (no relation), who were operating two mills at Portneuf, near Quebec City. In 1872 Ford and Logan went into bankruptcy, and Angus, Logan & Company took over. Thus it was that in 1875 an historian of the day reported that Canada Paper Company was the largest concern making paper in Canada, having five paper machines making some 2,000 tons a year, two in Windsor Mills, two in Portneuf, and one in Sherbrooke. The capital invested totalled \$300,000, the mills having 200 employees, and using 9,000 cords of wood a year. (As a contrast the Company now uses some 150,000 cords annually).

For the next seven years the Company prospered and grew. Its markets expanded to include most of Canada, and in Ontario, business had reached a point that required the opening of a warehouse in Toronto. There was, however, a restless undercurrent stirring the management. In 1882 William Angus resigned to run his own chemical pulp mill at East Angus, Ouebec, which in several stages eventually became the Brompton Pulp and Paper Company. Thomas Logan moved up to the presidency, and John McFarlane became vice-president and managing director. The new executive decided to dismantle the old Sherbrooke mill and build an additional one at Windsor Mills, to which they gave the name of Springvale. Here they moved the old 62-inch fourdrinier from Sherbrooke, and installed a new 90-inch machine. Four years later on October 21, 1886, this mill was totally destroyed by fire, but, undaunted, the management began the construction of a new Springvale Mill early in 1887, completing it in 1888. The old machines were replaced with new ones of 72-inch, and 92-inch widths.

On the death of Thomas Logan in 1893, John McFarlane became president, and under his able direction expansion was rapid. To ensure its own supply of groundwood pulp for the production of newsprint, a groundwood pulp mill was built in 1896 at a point half a mile up the St. Francis River. Here a dam was built to develop water power for the use of the groundwood mill. Two years later a newsprint mill was added, housing a 120-inch fourdrinier machine. These were known as the St. Francis Mills.

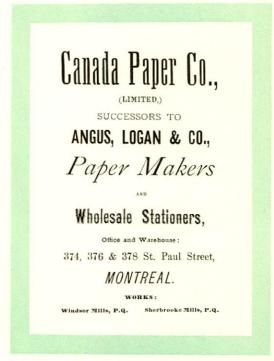
In 1901 disaster in the form of fire struck again, and both the St. Francis groundwood mill and paper mill were totally destroyed. New preferred shares were issued and with this extra capital preparations were made for rebuilding, which was completed in

September 1903. The new installations consisted of 10 grinders with a capacity of 40 tons a day, and a 156-inch wide paper machine, capable of operating at 600 feet per minute, and by far the largest in Canada at that time. It was questioned if such a wide machine would be practicable, but so it proved to be. Newsprint machines are now built double that width, and are being operated successfully at 1700 feet per minute.

For some time the Company had been making special bagging papers for Joseph Kilgour, of Kilgour Brothers, Toronto, who was one of the first in Canada to install machines for making paper bags and sacks. As his business expanded Mr. Kilgour took an increasing interest in his main source of supply, and by 1908 he had acquired control of the Company. In the meantime John McFarlane had resigned to take over the St. Raymond Paper Company and Sir Montague Allan had taken his place. Under Joseph Kilgour's direction the Springvale Mill was dismantled, and the Windsor Mill rebuilt and enlarged.

Up until this time Canada Paper had been making its papers from its own soda pulp and groundwood pulps, with some purchases of strong sulphite pulp to give the paper additional strength, just as they once used rag and rope stocks. Since Mr. Kilgour was vitally interested in strong papers for his paper bag business he was ever on the lookout for ways and means of getting better papers for that purpose. While probably aware of the superior qualities of sulphate or kraft papers, their dark brown colour was not looked on favourably by papermakers. At about this time Brompton Pulp and Paper Company converted its soda mill to kraft pulp, becoming the first kraft mill in Canada. The greater strength of this new pulp soon outweighed its unsightly colour. In 1909 Canada Paper Company followed suit and also converted to kraft.

Under the heavy demand and high prices occasioned by World War I the Company prospered financially until 1920 when business collapsed and for some years it suffered reverses. In 1926 Mr. Kilgour died and the Company was reorganized. The old firm of Kilgour Brothers was then absorbed by Canada Paper Company, although it still operated under the name of Kilgour's Limited.



From Lovell's Directory of Sherbrooke, Coaticook, Richmond, Lennoxville and Melbourne published 1876.

After this reorganization the control of Canada Paper Company passed into the hands of the St. Maurice Valley Corporation, who planned to convert the mills to the manufacture of Fine Papers, a field in which St. Maurice had no previous experience. Following negotiations, Howard Smith Paper Mills acquired controlling interest in the Company, and then took over the active direction of its affairs.

While this venture enlarged the horizon of Howard Smith Paper Mills it placed a heavy drain on the Company's management and finances, and created many difficult problems, inasmuch as the condition of the plant and equipment was such that major reconstruction changes had to be made. In newsprint, for instance, which formed a large portion of the mills' production, the Company could not compete favourably with the new, bigger and lower-cost newsprint mills, but the problem of replacing this tonnage with other grades in that day and age was a most discouraging task, and, adding to these troubles, there came the depression of the 1930's.

The immediate outlook suggested that the mills should be abandoned, but having the long-term

objective in mind, and with confidence in the future, the decision was made to rebuild the plant by stages, and to streamline operations in order to make better and more diversified products at a cost that would permit of profitable operations for the Company, and, what was of equal importance, to maintain the employment and the livelihood of the townspeople of Windsor Mills who were dependent on the operation of the mills.

These plans called for major changes in both pulp and paper divisions, involving large expenditures and commitments, but the die was cast and the programme was put under way. For some time progress was slow and discouraging, but little by little headway was made, which began to reflect favourably the money that was being spent to lower operating costs. Here and there profits began to show up where losses had previously been sustained, and this trend continued as time went on, in spite of the depression.

When in 1939 the Second World War broke out the demand for the Company's products had surpassed its ability to produce, so another paper machine 130 inches wide was installed, increasing the output from 95 tons to 135 tons a day, while kraft pulp capacity was also stepped up proportionately.

Throughout the war period the demand for pulp and paper was very heavy, and further improvements to both pulp and paper mills resulted in a further stepping up in the production of pulp and paper to 150 tons a day.

With the cessation of hostilities a further broad programme of expansion was embarked upon, involving large expenditures, and while this programme is still incomplete, many improvements, additions and changes to the mills have already been made, which have brought the production of pulp up to 260 tons per day, while the production of paper is now in excess of 200 tons per day.

It may be interesting to note that one of the main changes made to the Kraft Mill in 1930, and which contributed much to its production and efficiency, was the installation of the Tomlinson-Babcock-Wilcox Waste Liquor Recovery Furnace, which proved to be such a marked advance over the then conventional practice for the recovery of chemicals from waste sulphate liquors that it became the subject of intense interest to the Kraft pulp industry, and has now been adopted as standard practice throughout the World. This development was protected by patents, in the licensing of which Canada Paper has profited handsomely for many years.

While the rebuilding of the mills has been going on attention has also been paid to the human side of the operations. In a one-industry town it is natural that public improvements, even in part, become the responsibility of that industry. Among other things, a hockey and sports arena and curling rink have been provided, which together with a good nine-hole golf course, give the employees opportunities for relaxation during their off hours. These things have done much in the development of an esprit-de-corps which has contributed to the cementing of Company-Employee relations. Also in the mills themselves, working conditions and house-keeping facilities have been greatly improved. A comprehensive staff training programme has been inaugurated to enable the workers to improve their knowledge and acquire skills that will equip them for later promotion. These courses and other Safety and Welfare programmes have aided materially in developing a sense of responsibility on the part of the employees.

Hourly rated employees are represented by the National Syndicate of Pulp and Paper Workers, between which body and the Company a relationship of harmony and mutual confidence has been established.

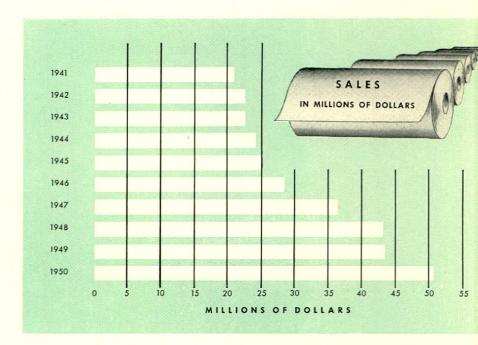
Such is the brief story of Canada Paper Company from its origin in 1859, and an epitome of its activities during the twenty-one years it has belonged to the Howard Smith family. Since its adoption the road that has been travelled has been long and rough. With the many hurdles and handicaps that had to to be overcome, it is with a sense of something accomplished that we look back upon the journey so far completed. But more will remain to be told in the future since we look forward with confidence to the fulfilment of a vision that has guided us throughout the years.

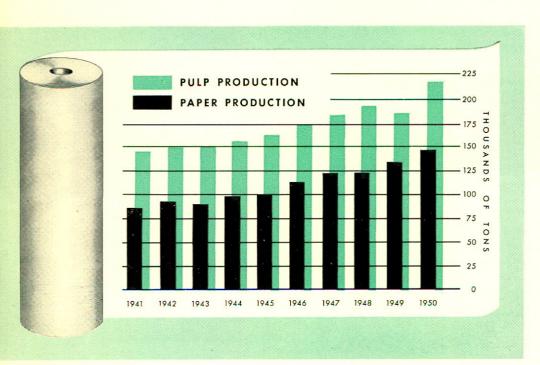
# Production and Sales

# Howard Smith Paper Mills Limited

AND WHOLLY OWNED SUBSIDIARY COMPANIES

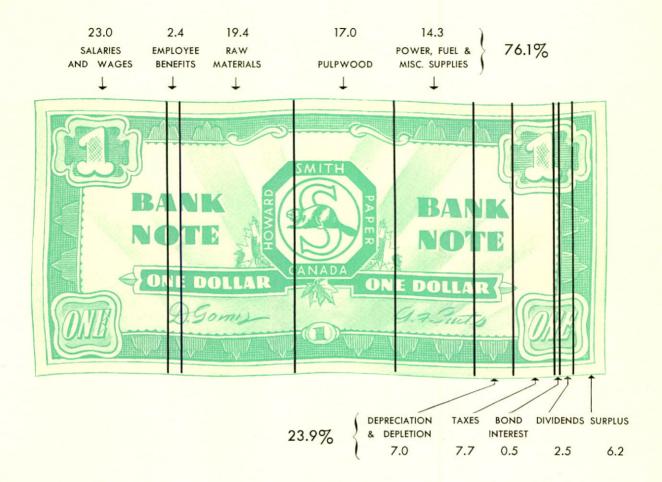
Total sales of pulp, paper, chemicals and laminates were \$51,656,671.00, an advance of 19.6% over 1949. Pulp production was 16.7% over the previous year, and paper tonnages showed a 8.5% increase. These production records are, in the main, the fruits of recent capital expenditures at the various mills, while dollar value increased sharply due in part to price increases on most products during the year.





Demand for our products in the first half of the year continued at reasonably high levels. From the third quarter on, orders increased and soon outstripped capacity. By the end of the year backlogs had mounted to serious levels but it is hoped anticipated new capacities will ameliorate this condition towards the end of 1951.

# Distributing the income dollar



The illustration above gives a quick but comprehensive picture of what happens to each dollar of income. Unfortunately too much emphasis is often placed on sales and earnings figures without analysing the elements from which they are constituted. The breakdown of the income dollar is interesting because it shows so clearly what is immediately returned to the country's economy.

Salaries and Wages paid to employees amounted to 23.0c. out of each income dollar with a further 2.4c in Pension and Welfare. Raw Materials took 19.4c. and Pulpwood 17.0c., while Power, Fuel and Miscellaneous Supplies accounted for 14.3c. The total direct payments from income was therefore

76.1c. in the form of wages, or to suppliers of goods and services who also expended a considerable portion of their income on wages. Because buildings and machinery wear out and depreciate in value, and forest lands are subject to depletion we set aside 7.0c. for those accounts. Taxes paid to Federal, Provincial and Municipal Governments took 7.7c., and interest on Bonds 0.5c.

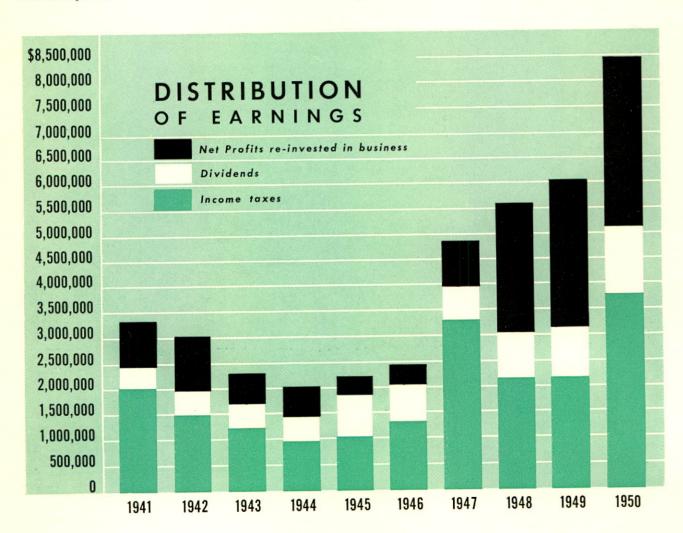
Net profits then amounted to 8.7c. Of this 6.2c. were used to provide new equipment, or replace obsolete machinery so as to achieve more efficient production. Only 2.5c. were paid out to shareholders in the form of dividends, a very modest amount in times of exceptionally good business.

# 10 year Distribution of earnings

For some time it has been standard corporation practice, when conditions permitted, to re-invest a portion of earnings in the business. These funds are usually employed for modernization and expansion programmes, and to supplement the depreciation account which under rising building and machinery costs does not begin to cover replacement charges. If the reinvestment is directed wisely and well, theoretically at least, the earnings should increase from year to year because of the extra return from the new investment. However in actual practice this is not always so because there is no guarantee that the improvements will yield a return commensurate with their cost.

Earnings figures, then, not only reflect the immediate operations of a business but also the cumulative effect of the funds put back into it in past years. What may have been considered a good dollar profit ten years ago can no longer be considered adequate today because investment in plant and equipment has been increased. Thus a company which shows higher earnings in 1950 than it did in 1941 is not necessarily profiteering, in fact it may even be showing a lower yield on its total capital investment.

In our case, in addition to substantial new money we have reinvested over 19 million dollars of earnings in our properties over the past ten years. Where these expenditures have resulted in increased production or improved operating efficiencies they have helped to increase total dollar earnings, even though profit margins are still below the pre-war level.



# Rising costs and paper prices

WHETHER WE LIKE IT or not we are living in an era of constantly rising costs and prices. This condition is not peculiar to Canada alone, or even to this continent — it is world-wide thus many of the upward pressures have been created in foreign countries. When world prices rise we Canadians must pay more for our necessary imports, and when other people offer higher prices for our own goods domestic prices for those goods advance. As one example we all know how the price of beef advanced when buyers from below the border entered our market.

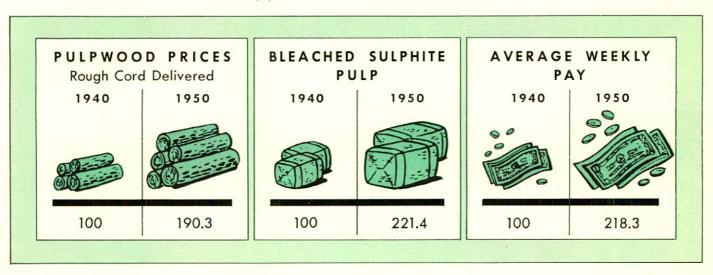
The same trends affect the pulp and paper industry. We must import much of our coal, chemicals, and specialized machinery, while many of our Canadian-made goods are made from imported materials. World prices then, are definite factors in our increased costs.

During the two years May 1948 to May 1950 prices for Fine Paper in Canada were steady not-withstanding numerous increases in costs. In our case some of these extras were offset by increased production and improved operating efficiencies which followed recent capital expenditures, but

reluctantly in May new price schedules had to be announced.

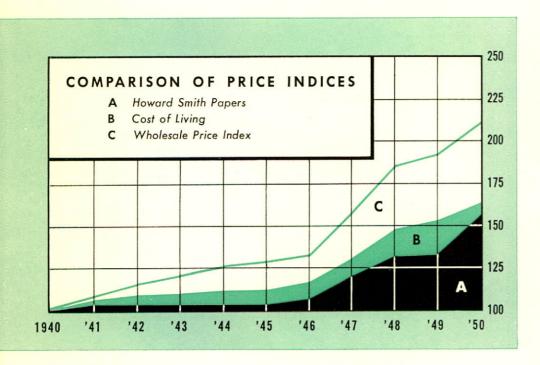
Beginning with the third quarter world prices surged upwards which resulted in a price advance for pulp. This was in part brought about by higher woods labour and transportation costs, and partly by keen competitive bidding for supplies of both pulp and pulpwood. We were therefore forced to increase paper prices in October, and following a general industry-wide wage increase of 5% to 6% in November, and a further increase in pulp prices we again had to announce new prices effective December 26, 1950. We realize these recurring increases are upsetting, but they stem from pressures beyond our control. We believe we have followed a conservative pricing policy. In many cases Canadians are getting paper at prices below the American or world markets. Our policy is not to get "all the traffic will bear," nor to make unnecessary or unwarranted price increases. The charts on the next page speak for themselves. We still believe that fair prices based on costs, yielding a normal margin of profit, are in the best interests of both our customers and ourselves.

### What's happened to our major purchases



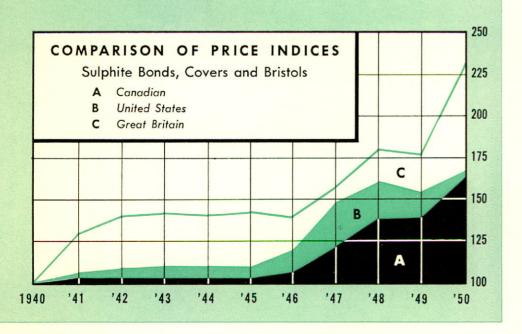
For the past six months pulpwood prices have been advancing rapidly. Predictions are that the index may well reach 260 in six months. The domestic price for pulp is well below the world market but is rising. Successive wage increases have been necessary to keep "real" wages at satisfactory levels.

### Rising costs and paper prices



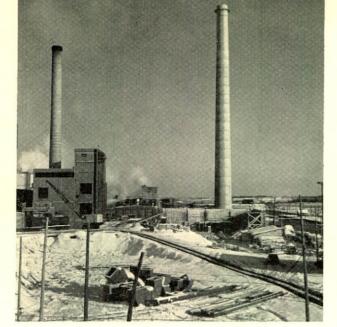
## Here are prices in general

- A. Average price indices for 29 representative grades including increase of December 26, 1950 June 1940 = 100.
- **B.** D. B. S. for October based on June 1940 = 100.
- C. D. B. S. for October based on June 1940 = 100.

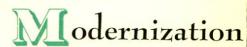


### How we stack up in world markets

This chart shows that the rate of price increase has not been as steep as in other countries. Information to hand indicates that prices elsewhere are likely to advance again at any time. The indices do not show actual prices but in many grades Canadian fine paper prices are as low or lower than in other countries where large populations permit mass production methods not possible here.







THE YEAR 1950 saw a number of major projects reach the production stage, and, as they are run in and their operators become familiar with them they can be counted on to augment production still further in the future. In addition starts have been made on several other projects, and a multitude of minor rehabilitation and modification chores were completed. The following may be of particular interest:

#### HOWARD SMITH PAPER MILLS

#### **Beauharnois Division**

While no major items were scheduled at this mill there were a few auxiliary pieces of equipment installed, and a general overhaul of the Electrical System was undertaken. This programme will be completed some time in 1951.

#### Crabtree Mills Division

Preparations are underway here towards a major alteration to increase the capacity of one of the Paper Machines. During the year the Electrical System received considerable attention and several rehabilitation projects were completed.

#### Cornwall Division

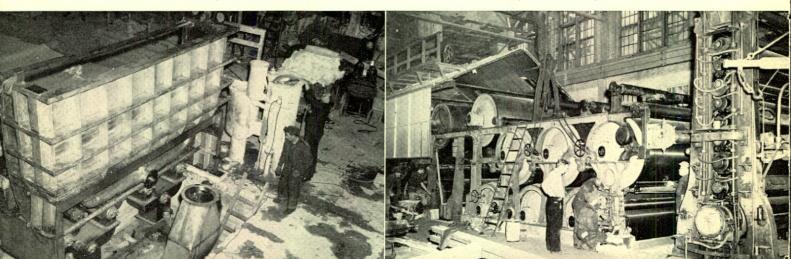
In the Paper Mill considerable work was done on No. 5 Paper Machine. The Wet End was lengthened and provided with new Screens, and a new type stainless steel Headbox. Eight additional Dryers were installed towards the end of the year, and the drive pulleys and gears were altered to increase maximum operating speeds. Other features of the alterations on No. 5 include the installation of a forced air system at the Dryers and an Economizer in the hood to retrieve waste heat.

In the Pulp Mills certain improvements were made in wood handling and chipping, and the diaphragm Screens were completely rebuilt with stainless steel troughs replacing the old wooden types. Both production and quality were increased.

In preparation for future installations and further production increases a new Steam Plant was started during the year. The 250-foot Stack is completed and work well advanced on the boiler house. The programme for the expansion and rationalization of the Electrical Distribution System continued with work on transformer stations, circuit breakers, and feeder lines.

Stainless Steel Headbox for No. 5 Paper Machine, Cornwall

Additional Dryers for No. 5 Paper Machine, Cornwall



CONSOLIDATED

### ANNUAL REPORT

DECEMBER THIRTY-FIRST

1950



Howard Smith Paper Mills Limited

### THE TWENTY-THIRD ANNUAL REPORT

### of the Directors of

### HOWARD SMITH PAPER MILLS, LIMITED

# To the Shareholders:

Your Directors have pleasure in presenting herewith the Twenty-third Consolidated Annual Report of your Company and its wholly owned subsidiaries for the year ended December 31st, 1950, comprising Balance Sheet, Profit and Loss and Surplus Accounts and Auditors' Report.

Earnings from all sources, after providing for the charges detailed in the Profit and Loss Account, including regular depreciation and depletion of \$2,531,055, amounted to \$9,635,734.

Net profit for the year was \$4,546,007 after all charges, including a special appropriation of \$1,000,000 for additional depreciation, and provision of \$3,710,000 for Income Taxes.

Regular quarterly dividends of 50c per share (\$2.00 per share for the year) were paid on both the Preferred and Common shares and, in addition, in December, an extra dividend of \$1.00 per share was paid on the Common shares.

Total dividend appropriations for the year were \$1,318,508.

Company payments on account of the Contributory Pension Plan during the year amounted to \$452,915 and, in addition, the sum of \$55,154 was paid to retired employees who do not come under the Plan.

In order to maintain your Company's position in the industry and to satisfy the demands of its customers, it has become necessary to take steps to increase still further the productive capacities of the mills. After a careful review of the situation, your Directors decided that a long term programme of extension and rehabilitation of the various mills should be proceeded with and carried out in two or three stages. The first stage is now under way and is expected to extend over the next two years, involving a cost of approximately \$12,000,000. The main items include, among other things, the installation of two new paper machines, one at Cornwall and the other at Merritton; new steam plants at both places; and an extension to the soda pulp mill at Cornwall, which is expected to add 75 tons or more per day to its present output. To provide a part of the funds for this programme, all your Company's outstanding First Mortgage Bonds, aggregating \$7,800,000, were redeemed on December 15th, 1950, and a new Issue of \$11,995,000—234% and 3% First Mortgage Bonds was sold. The sum of \$4,000,000 which will be received upon the delivery of the unissued

balance of the new bonds, is to be set aside towards the costs of this programme. The total sum thus ear-marked to meet these costs aggregates \$6,199,375. The balance of such costs will be payable from future earnings.

During the year, actual expenditures on capital account amounted to \$3,545,168, and at the year end forward commitments in respect of the above mentioned programme aggregated approximately \$3,550,000.

Additional shares of Donnacona no par value Common stock were purchased during the year at a cost of \$834,378, bringing your Company's holdings of this stock at the year end to 231,747 shares.

Earned Surplus showed an increase for the year of \$3,310,211 all of which is needed for corporate purposes, notably capital expenditures, and must, therefore, be retained in the business.

At the year end Working Capital stood at \$8,723,247.

Your Company's operations produced \$9,956,055 of revenue in U.S. Funds.

During the early part of the year the demand for your Company's products, while good, was not excessive; however, after midyear the demand for practically all products increased tremendously and in spite of moderate increases in production, it was impossible to fill all requests for tonnage.

The demand for paper from export markets showed marked improvement during the last half of the year and appears to be continuing. However, until the new paper machines come into production, your Company will have only a small amount of tonnage to sell in these markets.

Your wholly owned subsidiary, The Arborite Company Limited, had a very successful year. In order to satisfy the demand for its products, the capacity of the plant was increased substantially during the year.

Your Directors wish to express their appreciation of the efficient services rendered by the Officers, Staff and Employees during the year.

Submitted on behalf of the Board,

Moward fruit

President.

Montreal, March 15, 1951.

### HOWARD SMITH PA

and Wholly Owned

CONSOLIDATED BALANCE SH

#### **ASSETS**

Current Assets:		
Cash in Banks and on Hand	\$ 1,053,419 6,321,767 318,404	
Operating Supplies valued at lower of cost or market and advances on Wood Purchases—less reserve	7,637,354	\$15,330,944
Other Assets:		
Amounts ear-marked for Capital Expenditures— Government of Canada Bonds— par value \$1,500,000	2,199,375 99,130 5,044,431 174,316 106,707 64,903	7,688,862 378,554 179,026
Fixed Assets at or below cost:		
Land, Buildings, Plant, Equipment, etc	43,239,864 2,892,578	44 122 442
		46,132,442

\$69,709,828

Signed on behalf of the Board:

HAROLD CRABTREE, Director.
E. HOWARD SMITH, Director.

### ER MILLS, LIMITED

### Subsidiary Companies

ET AS AT 31st DECEMBER 1950

#### LIABILITIES

Current Liabilities:		
Accounts Payable and Accrued Liabilities.  Dividends Payable.  First Mortgage Bonds due 1st December 1951.  Provision for Income and other Taxes.  Provision for payments on Capital Expenditure Commitments.	\$ 2,900,592 246,418 595,000 2,165,687 700,000	\$ 6,607,697
First Mortgage Bonds, 1950 Series:		
Outstanding— 2¾% Bonds due 1st December 1952-1954	1,400,000 6,000,000	7,400,000
subscribed for at par—to be issued on or before 15th June 1951)		7,400,000
Reserves:		
Depreciation and Depletion. Inventories. Contingencies	25,552,965 1,500,000 479,300	27 522 275
Refundable Portion of Excess Profits Tax per contra		27,532,265 64,903
Capital:		
\$2. Cumulative Preferred Stock (redeemable on thirty days' notice at \$52.50 plus accrued dividends)— Authorized—200,000 shares of \$50. each \$10,000,000		
Issued —160,000 shares	8,000,000	
Authorized—400,000 shares of no par value Issued —332,836 shares	1,013,459	0.010.450
Capital Surplus.		9,013,459 2,359,758 16,731,746
		\$69,709,828

This is the Balance Sheet referred to in our report of even date.
P. S. ROSS & SONS, Chartered Accountants.

# HOWARD SMITH PAPER MILLS, LIMITED and Wholly Owned Subsidiary Companies

3

#### CONSOLIDATED STATEMENT OF PROFIT AND LOSS ACCOUNT

for the Year ended 31st December 1950

Contributory Pension Plan \$452,915, Legal Fees \$7,276 and Directors' Fee Dividends from Subsidiary Company—not consolidated		\$9,050,485 210,482 34,116 340,651
Result		9,635,734
Interest on Bonds  Appropriation for additional Depreciation  Amount written off Patent and Research Expenditures  Provision for Income Taxes	1,000,000 143,683	5,089,727
Balance for the year ended 31st December 1950 transferred to Earned Surpl	us	\$4,546,007
Earned Surplus, being income retained in the business as at 31st December 19 Refundable Portion of Excess Profits Tax received	\$ 22,151	47,534
Reserve for Depreciation.	144,410	
Reserve for Depreciation.	278,836	
	278,836	
Inventory	278,836	254,216
Inventory  DEDUCT:	278,836	
Inventory  DEDUCT: Provision for Income Tax thereon  Balance from Profit and Loss Account for the year ended 31st December 1950	278,836	4,546,007
DEDUCT: Provision for Income Tax thereon  Balance from Profit and Loss Account for the year ended 31st December 1950  DEDUCT: Premium paid on redemption of 1947 and 1948 Series Bonds and Discount on sale of 1950 Series Bonds and expenses in connection therewith	278,836	254,216 4,546,007 18,269,292
Inventory  DEDUCT: Provision for Income Tax thereon  Balance from Profit and Loss Account for the year ended 31st December 1950  DEDUCT: Premium paid on redemption of 1947 and 1948 Series Bonds and Discount on sale of 1950 Series Bonds and expenses in connection therewith  Dividends on— Preferred Shares \$320,00	278,836 445,397 191,181 219,038	4,546,007
DEDUCT: Provision for Income Tax thereon  Balance from Profit and Loss Account for the year ended 31st December 1950  DEDUCT: Premium paid on redemption of 1947 and 1948 Series Bonds and Discount on sale of 1950 Series Bonds and expenses in connection therewith Dividends on—	278,836 445,397 191,181 219,038	4,546,007

# HOWARD SMITH PAPER MILLS, LIMITED and Wholly Owned Subsidiary Companies

SW

#### CONSOLIDATED STATEMENT OF CAPITAL SURPLUS ACCOUNT

as at 31st December 1950

Balance at 31st December 1949	\$2,335,379
Proceeds from sale of Patents and Profit on sale of Fixed Assets	24,379
Balance at 31st December 1950	\$2,359,758

#### **AUDITORS' REPORT**

Montreal 1, Que., 23rd February 1951.

TO THE SHAREHOLDERS,
HOWARD SMITH PAPER MILLS, LIMITED,
MONTREAL.

We have made an examination of the Consolidated Balance Sheet of Howard Smith Paper Mills, Limited and wholly owned Subsidiary Companies as at 31st December 1950 and the related Consolidated Statements of Surplus and Profit and Loss for the year ended that date. In connection therewith we have examined or tested accounting records and other supporting evidence of the Howard Smith Paper Mills, Limited and two of its Subsidiary Companies, but we did not make a detailed audit of the transactions. We have been supplied with certified statements, as of the same date, of all other wholly owned Subsidiary Companies. We have received all the information and explanations we have required.

In accordance with Section 114 of the Companies Act (1934) we report that the profits for the fiscal year ended 31st December 1950 of the Subsidiary Company—not consolidated—have been included in the attached statements only to the extent of dividends received.

We report that, in our opinion, the accompanying Consolidated Balance Sheet and related Consolidated Statements of Surplus and Profit and Loss are properly drawn up so as to exhibit a true and correct view of the affairs of the Company and its wholly owned Subsidiary Companies at 31st December 1950 and the result of their operations for the year ended that date, according to the best of our information and the explanations given to us and as shown by the books of the Companies examined by us and the certified statements furnished to us.

P. S. ROSS & SONS, Chartered Accountants.

This Section of the Annual Report is printed letterpress on Royal Record Ledger, Azure, Basis 17 x 22—64(M).

## and expansion

#### CANADA PAPER COMPANY

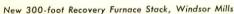
Of major importance at Windsor Mills was the bringing into operation of the four new Kraft Digesters. These have increased the supplies of pulp considerably and will enable greater tonnages of Kraft to be made in the future. To make room for other future projects the old No. 1 Furnace with its evaporators and tanks were removed. One imposing structure is the new 300-foot Recovery Furnace Stack which towers over the surrounding countryside.

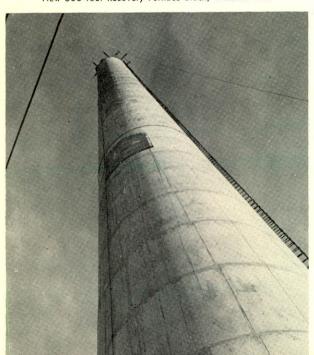
Heavy demand for converted paper products resulted in modifications and additions to this equipment to step up production of certain lines. The Electrical System was rehabilitated by the provision of new Transformers, Switchgear, and Feeder Lines.

#### ALLIANCE PAPER MILLS

#### Merritton Division

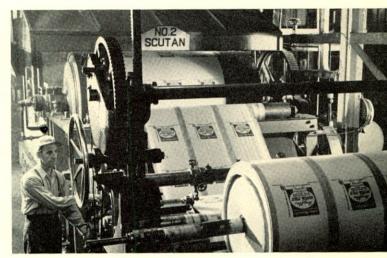
To improve further the sulphite pulp being made in the Lincoln Mill a "Chlorination" System was added to the Bleaching Plant. Due to numerous factors including the major problem of converting the present 25 cycle to 60 cycle, electric power generation by waterpower was discontinued, and is being replaced by purchased power.







Evening view of Recovery Furnace and Stack, Windsor Mills



No. 2 Scutan Machine making backing for insulation batts

#### DON VALLEY PAPER COMPANY

The major project here was the conversion to 60 cycle power. This meant that all the electric motors from the smallest to the largest had to be replaced with as little interference to production as possible.

#### THE ARBORITE COMPANY

The phenomenal growth of this company's production required the installation of a second Impregnator which was housed in an addition to the north side of the main plant. Another similar addition was made to the south side which provided a new stock and shipping area, and, at the same time enabled extension of the general offices. In the plant itself there were numerous additions and modifications and the installation of a High Voltage Testing Laboratory to ensure the electrical qualities of the industrial grades of Arborite.



# Forest management

at

Windsor Mills

Lumberjack felling spruce tree in winter.

FOREST MANAGEMENT is the art and practice of applying sound business methods and correct technical forestry principles to the operation of a forest property. Its basic aim is to achieve a balance between growth and cutting which will result in a sustained yield. Other objectives are to increase the allowable cut by silvicultural practices which tend to accelerate the annual growth, to foster the propagation of wanted species of trees, or those Nature prefers to grow, and to eliminate or reduce waste, fires and disease. To this end the major forest-using industries in conjunction with the various governments and research organizations are constantly studying and experimenting with the various phases and practices of good forest management. Unfortunately the time which elapses between the start of an experiment until it reaches a point at which definite conclusions can be drawn is usually in excess of 30 years, and sometimes much longer. This is further complicated by the fact that what seems to be good practice in one area or kind of forest is unsuitable in others. We know, or at least think we know, many of the basic facts now, but we need to know much more before all woodlands can be operated under optimum conditions.

One of the more interesting operations is the Windsor Mills woodlot of Canada Paper Company. This has an area of some 50 square miles, lying only 7 miles east of the mill property, and the Company has full title to the land and its forest cover. Its proximity to the mill and its accessibility by good roads have always made it a source of a limited supply of reasonably priced wood. Right from

the outset, however, it was realized that the area would have to be treated most carefully if it was to be productive in future years. Accordingly a very early start was made to get it on a sustained yield basis. To understand the aims and effects of these early efforts, and the methods and experiments of today requires some knowledge of how forests and trees live and grow.

Left to itself a forest grows the kind of trees that do best under the existing conditions. There is an almost continuous cycle of old trees dying and new ones growing up to replace them, and it is definitely a case of the survival of the fittest. It is seldom, though, that a forest is left to itself. Fires, pestilence and high winds may destroy all the trees, or certain species of them. The predominant species before the disaster might be replaced by a hardier or faster growing species afterwards. Thus over a period of centuries there is a constant shift from one predominant species to another in those areas where conditions are suitable for more than one kind of tree.

In some areas, such as swampy land, or the far north, the black spruce seems to thrive best, and we often find the whole forest composed of that species. Other areas to the south grow mixed stands of the soft and hardwood varieties in which case there is a continual battle between the species for light, moisture and root space. The big trees shade the ground, and often prevent new seedlings from surviving, or at least they suppress the growth of the younger trees until the older trees die or are removed.

## Forest management

When fire sweeps through a forest it not only kills off the trees and saplings, but it oftens burns the top soil and the seeds in it. If the destruction is complete, then the land may stay barren for years, but usually there are a few seeds or saplings left, and these, plus infiltration of weeds, grasses, bushes and the quick growing poplar, cherry and birch take over. From year to year these die off, and their decomposition begins to add humus to the top soil. Unless they smother the original seedlings and saplings these, too, grow to seeding age and add to their number. Eventually they cast so much shade that the quick-growing, but shade intolerant species, are suppressed, and the forest begins to revert to somewhat its old characteristics, but perhaps with a different predominant species. Unfortunately the time it takes to go through this cycle is considerable, and may vary from 50 to 100 years, which is one good reason why forest fires must, and someday will, be prevented or extinguished before any serious damage is caused.

Blow-downs, unless salvaged, cause the loss of the merchantable timber, but the seeds and saplings can start growing so that the forest grows back again quicker than after a fire. As for insects and disease, they seldom attack all species at once. Thus while pestilence can almost wipe out single specie stands, it simply alters the incidence of species in a mixed stand. It should be noted though that pestilence may, and often does, attack the wanted species, leaving the less valuable trees.

From the foregoing it is apparent that Nature has her own system of checks and balances, and she usually gives all available species an opportunity, but it is up to the trees themselves or other vegetation to fight it out under the existing conditions of moisture, heat, light and soil. That is why Man has to be careful of what he does because when he upsets the balance by one series of operations, he may well have to carry on another set of operations to counteract Nature's reply to the unbalance he has caused. This is also the prime reason why it takes so long to obtain the final results of any forest experimentation. What looks good or bad today may prove entirely otherwise fifty or a hundred years hence. As a case in point certain experiments at Windsor Mills were abandoned as failures over 40 years ago, yet today these same areas exhibit better regeneration

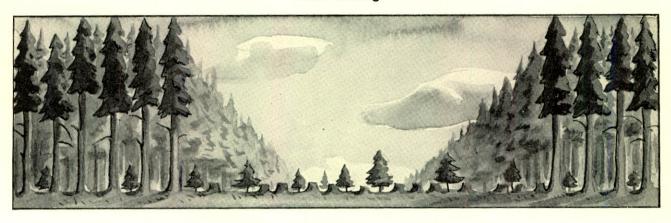
than other areas cut by what was then adopted as a better method.

In pioneer days we were extremely careless of what we did with our forests. Our forefathers took off all the wanted species of pine, spruce and cedar, and oftentimes set fire to the rest in order to clear the land. Later on much of the cleared land proved unsuitable for farming, and it was allowed to run wild. In some cases the grass and shrubs have so taken over that few trees, especially the wanted varieties, will ever come back without planting. Other areas have grown successive crops of hardwoods to the exclusion of the, to date, more valuable soft woods. Where the areas have been heavily lumbered, but not cleared, and where only one or two species have been removed the remaining trees have taken over and now predominate. This is so obvious in the land adjacent to farmlands, and in heavily cut-over areas that it serves as an example of what not to do in the future. Of particular importance is the effect of cattle grazing. They not only eat the vegetation from the lower branches but many of the saplings and seedlings, and this in combination with constant trampling effectively retards regeneration. When the old stand is removed or dies off there is little to take its place.

The main cutting methods used today can be broken down into four categories. 1. Clear-cutting removes all the trees of merchantable size. It is an acceptable method in dense stands of single species or type where there is a good incidence of seedlings already started, and where the mature trees are of approximately the same age. If any trees are left standing it is quite likely they will be blown down or else die of over-exposure, so they might as well be harvested. 2. Seed-tree Cutting removes all but selected trees which are expected to reseed the cutover areas. This is useful for areas where at the time of cutting few new saplings are growing under the parent trees. The seeds which fall after the cutting period get more heat and light, and thus the regeneration is improved. The trees that are left, though, must be rooted firmly otherwise they fall prey to the wind. Apart from the seed trees the forest tends to be of the same general age. 3. Shelterwood Cutting removes only the bigger or mature trees in several cuttings to give more light and space to younger trees growing under them. This method is employed

#### FOUR NEW CUTTING METHODS

### **Clear Cutting**



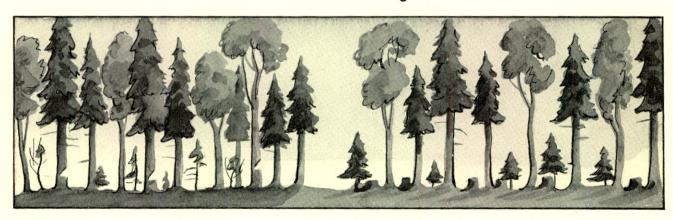
Clear Cutting, and its companion Strip Cutting, takes all the trees from the entire area, or in strips or blocks. Good for single species, even-aged forest. Release of ground to sun and air causes seeds and saplings to grow rapidly.

### Seed Tree Cutting



In areas where young growth is sparse, or regeneration doubtful, one or more superior trees per acre are left to cast seed. These must be strong, healthy and deep rooted to withstand windthrow.

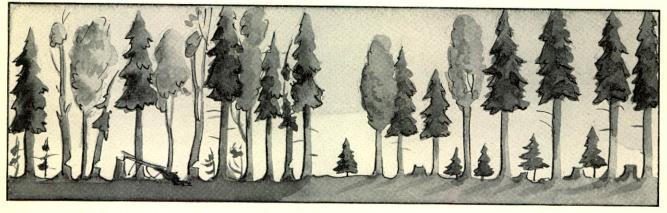
### **Shelterwood Cutting**



In even-aged mixed stands, where shade must be provided to suppress weeds and grasses, or to keep the soil moist, the forester removes the dominant trees to open up the forest, and create better growing conditions for the remaining trees. Notches indicate trees to be cut.

### Forest management

#### Selective Cutting



This method is useful for uneven-aged mixed stands. The forester removes the mature trees and those that are unwanted, sick, diseased, or interfering with the growth of other trees. Selective cutting improves yield, and the forest makeup. Notches indicate trees to be cut.

to protect the seedlings in areas where opening the forest might allow herbaceous growths to choke them, and further to so maintain shade conditions that moisture does not evaporate too rapidly from the soil. This too results in a more or less even-aged stand. 4. Selective Cutting means that only certain selected trees are cut at any one time. It usually requires the whole area to be accessible at all times, and an integrated cutting plan whereby mature or overpowering trees of all species can be removed economically. It is of greatest value in uneven-aged mixed stands, but requires heavy capital outlays for permanent roads and camps, and for the extra supervision. While first costs are considerable it is expected that, barring disaster, the long term costs will be as reasonable as by any other method, and will certainly lead to increased annual yield of wanted species.

The Windsor Mills woodlot has long been cut on a selective basis. About 40 years ago the method used was Strip-Cutting, a variant combining some of the features of clear, seed-tree, and shelterwood cutting. In effect the forest was clear-cut in narrow strips and seeding took place from the trees at the sides of the strip, but the sudden release to sun and wind caused many blow-downs and some "sunburning," which resulted in the scheme's abandonment. Later cuttings were made on the basis of taking out only the large trees and windfalls, but no definite plan was formulated, and few records kept of details of the operation.

Following the rebuilding of the Kraft Mills in 1930-31 the new demand for pulpwood at low cost made efficient operation mandatory. Accordingly in 1931, after making a growth survey, it was decided to put the limits on a sustained yield basis using the latest silvicultural methods consistant with the conditions then existing and likely to be encountered. The plan envisioned the use of an advanced form of selective cutting aimed at producing a greater yield and various forest improvements.

In the first two years of the plan permanent gravel roads were constructed with branch-haul winter truck roads stemming from them. Permanent camps were also erected so that every point of the limits is readily accessible and available to the forest crews. Next, swamp areas were given more adequate drainage and natural water courses cleared of obstructions.

The actual cutting of the wood is carried out on a year-round schedule, the amount of any one species being limited to its annual growth as revealed by increment surveys. To insure correct procedure no tree may be cut until it has been examined and marked by a competent forester at breast height, and again low on the stump which is to be left. Cutters were annoyed at this rule in the beginning, but an educational campaign designed to show them just why it was being done eventually gained their interest and co-operation.

The first project, as it is today, is to harvest trees that have blown down, are sick or dying, and those

### Forest management

over-mature, and therefore beginning to decelerate in their growth. In areas where semi-mature and mature trees are shading new and more vigorous younger trees the bigger ones are removed. Where there are dense stands of young trees they are thinned from time to time to avoid over-crowding just as a gardener does with his vegetable rows. In some cases young trees liberated from older ones have tripled their normal growth.

On several occasions in the past the value of ready accessibility has been proven. Fires can be reached and extinguished before they can do much damage. This is aided to a great extent by selective-cutting, because the ever-present shade retains soil moisture, and the branches and tops quickly decompose and enrich the humus. In the Fall of 1938 a terrific hurricane swept up through the New England States, and blew down over half a million trees in this area alone. Due to the accessibility these were almost all salvaged in the following years.

A new growth study was undertaken in 1948 which resulted in some highly significant findings. It proved beyond doubt that the original annual cutting allowance could be increased almost 50% due in part to better growth induced by the cutting policies. It further disclosed that as had been expected the balsam fir tended to regenerate faster than spruce, but this may be an advantage as balsam grows twice as rapidly as spruce, and although it contains less wood fibre per cubic foot the annual yield will still be greater.

Another aspect which is being watched with great interest by operators of mixed stand woodlands is the effect of hardwood removal. For some time various lots of hardwood have been logged, but in recent years a serious attempt has been made to integrate the entire cut. Large, clean and straight softwoods are harvested in sawlog form with the best qualities sold for piano and veneer manufacturing. Smaller trees, and the tops of the big ones are cut to the familiar four-foot pulpwood lengths. Hardwoods, too, receive the same selective treatment so that each felled tree is earmarked for a definite end-use before it is even cut into logs, and thus commands a good market price. Culls that an ordi-

nary saw-logging operation might leave behind are used for pulpwood, while prime spruce and hardwood go to the sawmills.

It is perhaps too early yet to draw definite conclusions on the economic value of hardwood removal, but it is expected that the tight control exercised over present growth will enable an increase in the number of softwoods which can be grown. To some extent this is complicated by the increasing use of hardwoods for pulping which may require some reorientation of thinking and methods to determine the economics of softwoods versus hardwoods. This is one more example of the problems a woodlot owner must face in managing his forest along sound economic lines.

The findings so far at the Windsor Mills limits have been very successful — so much so that they have been written up in the technical literature of the pulp and paper industry on several occasions. This not only brings a warm feeling of satisfaction to the members of the Woodlands Department who nurse it, and guard its destinies so jealously, but it has been the means of enriching every forester's knowledge. Unfortunately, without special means of financing or state subsidies, the capital costs of the road systems involved are so high that they do not lend themselves to large scale selective cutting operations on Crown-owned lands. While the ideal of perpetual yield is fully subscribed to by the pulp and paper industry and is a basic tenet of its forest policy it cannot affort to build and maintain protective and "accessibility" roads on lands on which its rights are strictly limited, and where its tenure depends on the renewal of an annual lease. In the meantime the methods outlined here are ideal for the smaller woodlot owner. There are many thousands of these in Canada, plus many hundreds of thousands of acres of marginal farm land which would give much greater returns if reforested. We hope that someday our findings, plus the contributions of other investigators, will help to improve forest management methods and increase the yield of wood products which mean so much to the Canadian economy that our forests are often called "the green gold of our country."

# The eastern townships

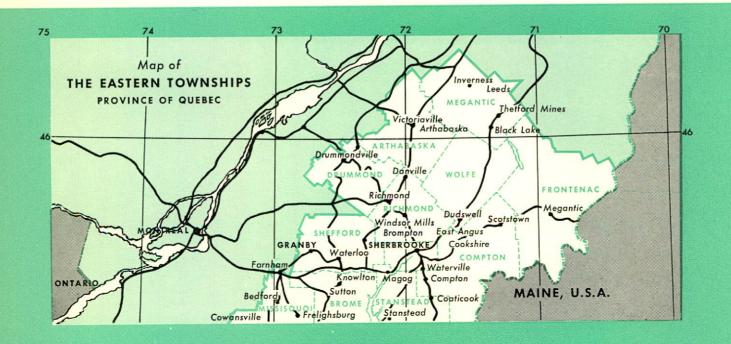
CAPITAL SEEKS INVESTMENT in ventures that have the earmarks of soundness, where opportunities for future growth appear to be economically favourable, with the hope of receiving a good and safe return on its investment. In establishing any industry all factors that are expected to play a part in its operations must be carefully considered and appraised, such as the communities in which its plants may be located, or to which they may be adjacent. While industry supplies the mills, the tools and the management, the community may provide either the raw materials, the power and the labour, or all three. When these highly important elements are favourable they contribute in large measure, not only to the economic stability and success of the enterprise, but also to that of the community.

In the forepart of this Report we have traced the origins of Canada Paper Company back to its early days in Sherbrooke and its subsequent removal to Windsor Mills. It is, perhaps, fitting then to outline some of the salient features of the territory in which both these towns are situated, and which is known as the Eastern Townships. These comprise twelve counties south of the St. Lawrence River between the Richelieu and Chaudiere Rivers. Bounded on the north by the old seigniories which occupied a narrow strip of land along the south shore of the St. Lawrence

River and on the south by the International Boundary, the district contains some 4,600,000 acres of mixed woodlands, farmlands and mining territory, and has ample transportation facilities and considerable water power. For many years it has been the world's largest source of asbestos.

During the French Regime the district was entirely neglected except for the occasional trapper, or military foray against the Indians or the colonies of New England. Since there were no roads, the usual routes of travel were up the Richelieu, the St. Francis and other rivers into Lake Champlain, and down to Lake George. Apart from the South Shore seigniories the territory was uninhabited by white men.

Even after the British took over Canada in 1760 there was little settlement except a few squatters from New England until the United Empire Loyalists began moving to Canada. Many of these passed through to settle in Upper Canada, but a few stayed in the southern part. Actually the first real attempts to exploit the district did not get under way until the passage of the Constitutional Act of 1791 changed the old French system of land tenure to the English system of Freehold tenure, and introduced the Township to replace the old seigniory. Unfortunately there was one grave imperfection in the set-up of these Townships, in that two-



### The eastern townships

sevenths of the area had to be set aside for the use of the Crown and the non-Roman Catholic clergy. This offended the French Roman Catholics and they refused to move into the new Townships until the 1840's when the Church reserves were secularized and the Crown Lands vacated.

The Act, however, started a rush of applicants for large tracts of land by officers of Loyalist and other regiments, and by government and leading merchants. The War of 1812 saw many Americans drift back to the States, but their ranks were soon filled by Canadian veterans of the war, and by newcomers from Britain upon the conclusion of the Napoleonic Wars.

Another heavy influx of people from the British Isles began in 1830 due to large scale famines in Scotland and Ireland. Their transportation and settlement was considerably aided by the formation in 1834 of the British-American Land Company by a group of English capitalists. The Canadian head-quarters were in Sherbrooke, which is perhaps one reason why it has outgrown other towns in the district. Just how selective this immigration was is difficult to assess now, but the records show that many must have had technical skills, as they lost no time in harnessing the water powers, and setting up woollen, flour and grist mills, sawmills, papermills, potash factories and the like, so common to those pioneering days.

During and after the 1840's the influx of French Canadians was accelerated and they gradually outnumbered the original inhabitants. Mostly they were farmers' sons looking for new land away from the congestion of their ancestors' holdings, where subdivision by inheritance had reduced the lots to small acreages. They tilled the land in summer and worked in the forests in the winter, but increasing numbers learned the skills of manufacturing and were absorbed by Industry. Thus it is that all through the Eastern Townships there are a great number of place names of British origin, but the population today is predominantly, but not wholly, French Canadian. This happy mixture of origins and culture results in a population of diversified skills and outlook, with a remarkable stability of character, so necessary to economic progress.

Although the Eastern Townships got off to a late start industrially, it has made great strides in the past fifty years. A network of railways and highways serves all parts. Cheap hydro-electric power has been developed on the numerous rivers and further large supplies are available through the immense power developments on the St. Lawrence and to the immediate north. These power supplies have long served as attractions to industry, and in every one of the twenty-five major towns there are from one to thirty good-sized plants. Cotton and woollen textiles, furniture, rubber, lumber, pulp and paper, machinery manufacture and asbestos mining are the main industries, but there are many other large converting plants founded on the availability of power, raw materials and a stable labour force.

Of particular importance to Windsor Mills is the City of Sherbrooke some 14 miles to the southeast. This was originally settled as Hyat's Mills in 1800, where the Magog River joins the St. Francis, the primary attraction being the excellent water powers. These eventually passed into the hands of the British American Land Company who leased them to the industries it brought to the area. Later, when the railroads were built, still more plants were founded, but development was relatively slow until the early 1900's. During World War I there was a considerable increase in plant capacities, and in munitions the City's production exceeded that of any city in Canada of comparable size.

Today Sherbrooke is the shopping and manufacturing metropolis of the Eastern Townships, having a population of over 51,000, and sixty-one industries, with payrolls of over \$17,000,000 annually. If the past be any guide, the industrial prospects of Sherbrooke and its sister towns are due for a bright future. The people have a quiet air of optimism and an intense loyalty to their district. Confident in what the future holds for them, their very origins result, perhaps, in a characteristically rational and cautious approach to it.

We are proud of the many skills of the workmen who make the products of Canada Paper Company, and together we are confident that we will contribute much further to the economic life of the Eastern Townships and to the development of this great country.

# Kraft paper and its uses

THE CANADA PAPER COMPANY is primarily a manufacturer of Kraft Paper and converted paper products. Most people know Kraft paper as the familiar brown wrapping paper, but it also has many other uses. Its main characteristics are its relative cheapness and strength. It has a dark brown colour, but it can be bleached although this operation is expensive and destroys some of its strength.

Kraft pulp is reputed to have been discovered by accident. Just before the turn of the century a Swedish pulpmaker discharged the contents of an alkaline cook digester before its normal time. Rather than waste the pulp it was made up into paper, and, much to everyone's surprise, it proved to be exceptionally strong. At first there was little demand for it, but it soon caught on as a good material for wrappings and bags of all kinds, being much stronger than the whiter sulphite pulps and much cheaper than the rope, jute and manilla fibre papers.

Today Kraft is the universal wrapping paper. It is available in M.F., or rough finish; M.G. or shiny, smooth on one side, finish; or it may have fancy patterns inherent in its surface. If desired it may be plain brown or coloured, and is usually sold in counter rolls of 9-inch diameter, and from a few inches to several feet in width. In thickness it may vary from a light tissue up to a light cardboard.

Vast quantities of Kraft are used by the corrugated carton industries, and further large amounts go into grocery bags, shopping bags, laundry bags, garment bags, multi-wall bags for cement and other powdered or loose material, and even bags which hold a complete double-bed mattress. Business, too, makes good use of Kraft for its special and large size envelopes, and filing folders.

The specialty uses of Kraft are legion because so many things can be done with it to give it desired characteristics. It can be waxed to make it water proof, the addition of a special resin makes it strong when wet, it can be made into a sandwich consisting of two sheets of paper with a layer of asphalt between for use as a clean waterproof wrapper. A krinkling machine can give it a two-way stretch so that it can be used as a barrel liner, or conform to irregular shapes. It can be coated with various coatings to make it waterproof and useful as a building paper, or it can be waxed and coated for use as a moisture vapourproof barrier backing for insulating batts. Large quantities are used every year under newly poured concrete highways to prevent the cement grout from entering the stone or gravel fill. Some waxed Krafts are used for insulating electric wires and cables.

One of the more spectacular uses of Kraft is in the manufacture of paper string or cloth. In this a thin narrow ribbon of Kraft paper is dampened with a suitable binding liquid, and then spun into a cord or thread. This twine is much used for shopping bag handles, wrapping parcels, and as a strengthener for some types of multiple wire cables. If made into thread it can be woven into a fabric, and made up into mesh bags, or when plasticized, into auto seat covers, or even sport shoes.

Space does not permit detailing here all the uses of Kraft paper. In general it finds its use when the requirements are cheapness and strength. It can and does perform a great many useful functions, and our modern life would miss it sorely if it was not available. It has no beauty of its own but as a wrapper, or container, or protective material, it delivers the goods.

Windsor Duotowls, a Canada Paper Company specialty.

Illustrating smallest and largest bag made at Windsor Mills.

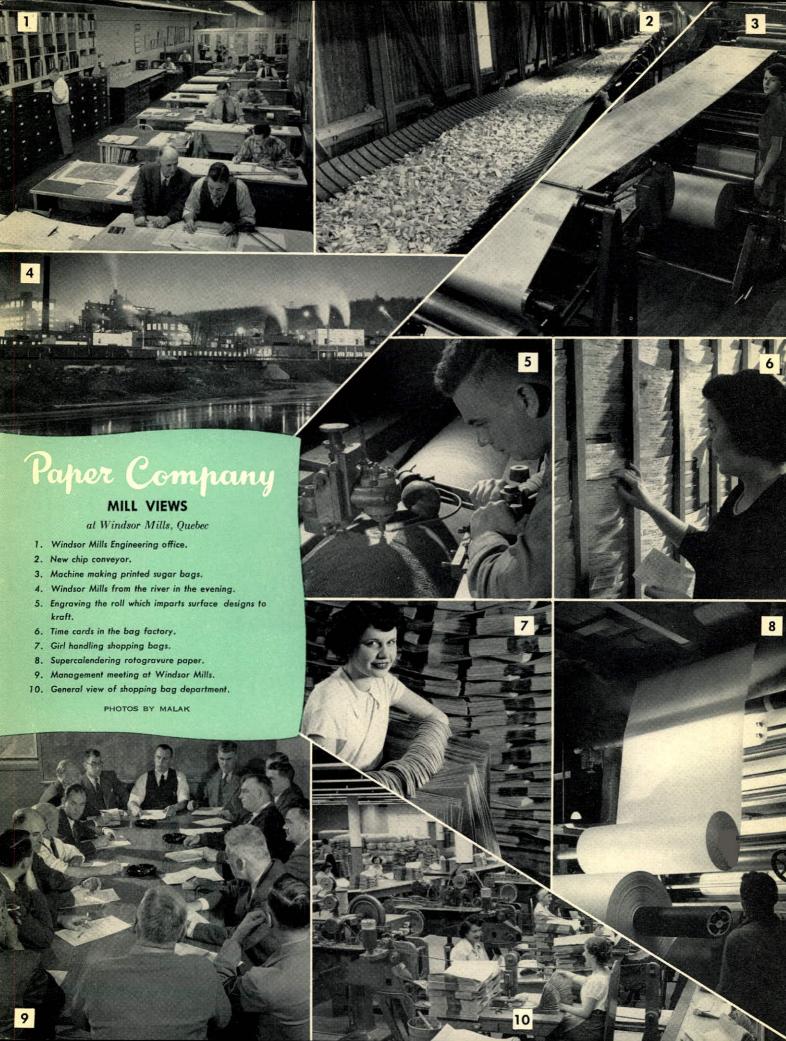
Windsor Window Shades made from kraft pulp at Windsor Mills.











### LOCATION OF

# Howard Smith Paper Mills Limited

### MILLS, OFFICES AND WOODLANDS

### MONTREAL, Quebec

Alliance Paper Mills Limited, Sales Office Arborite Co. Limited, Offices and Plant Canada Paper Company, Executive Offices Canada Paper "Wholesale" Ltd., Branch Don Valley Paper Co. Ltd., Sales Office Federal Paper Co. Limited, Head Office Howard Smith Paper Mills Ltd., Executive Offices Kilgour's Limited, Branch

### 2 BEAUHARNOIS, Quebec

Howard Smith Paper Mills, Beauharnois

### 3 CRABTREE MILLS, Quebec

Howard Smith Paper Mills, Crabtree Mills Division

### 4 WINDSOR MILLS, Quebec

Canada Paper Company:
Converted Paper Products Division
St. Francis Mill, Kraft and Specials
Timber Limits
Windsor Mill, Kraft and Specials
Windsor Mills Woodlands Office

### 5 LYSTER, Quebec

Pulpwood Buying Office

### 6 SAINT JOHN, N.B.

Schofield Paper Co. Limited, Head Office

### 7 HALIFAX, N.S.

Schofield Paper Co. Limited, Branch

### 8 NEW CARLISLE, Quebec

Pulpwood Buying Office Timber Limits

#### 9 GASPE, Quebec

Timber Limits Woods Operations Office

### 10 OTTAWA, Ontario

Buntin Gillies & Co. Limited, Branch Federal Paper Co. Limited, Branch Kilgour's Limited, Branch

### CORNWALL, Ontario

Howard Smith Paper Mills, Cornwall Division Pulpwood Buying Office

### 12 TORONTO, Ontario

Alliance Paper Mills Limited, Sales Office Arborite Co. Limited, Sales Office Canada Paper Company, Sales Office Canada Paper "Wholesale" Ltd., Head Office Don Valley Paper Co. Ltd, Head Office and Plant Fred W. Halls Paper Co. Limited, Head Office Howard Smith Paper Mills Ltd., Sales Office Kilgour's Limited, Head Office

### 13 HAMILTON, Ontario

Buntin Gillies & Co. Limited, Head Office Kilgour's Limited, Branch

### 14 MERRITTON, Ontario

Alliance Paper Mills Limited, Head Office Alliance, Lincoln Mill Alliance, Lybster Mill

### 15 LONDON, Ontario

Fred W. Halls Paper Co. Ltd., Branch Kilgour's Limited, Branch

### 16 GEORGETOWN, Ontario

Alliance Paper Mills Limited, Coating Mill

### 17 MATTAWA, Ontario

**Timber Limits** 

### 18 NORTH BAY, Ontario

Pulpwood Buying Office

### 19 SUDBURY, Ontario

Timber Limits

### 20 OSKELANEO, Quebec

Woods Operations Office Timber Limits

### 21 CEDAR RAPIDS, Abitibi Territory, Quebec

Timber Limits Woods Operations Office

### 22 AMOS, Quebec

Pulpwood Buying Office

### 23 COCHRANE, Ontario

Timber Limits

### 24 WINNIPEG, Manitoba

Alliance Paper Mills Limited, Sales Office Canada Paper Company, Sales Office Don Valley Paper Co. Ltd., Sales Office Howard Smith Paper Mills Ltd., Flax Plant Howard Smith Paper Mills Ltd., Sales Office Kilgour's Limited, Branch

#### COVER

Lithographed from 7-colour process plates on Mayfair Cover Linen, White, 20 x 26 - 130 (M) made at the Cornwall Division. This Cover is a reproduction of an oil painting by Mary Grey Robinson of Montreal. Types for the front and back covers are Bernhard Modern Bold, Roman and Italic. Twentieth Century Bold and Medium and Condensed Gothic types are used for the map.

#### INSIDE

### PAGES

Printed letterpress in two colours on Alliance Luxafold, White,  $25 \times 38 - 200$  (M). Types used are Bodoni No. 175, 10 pt. leaded 2 pts. with Bernhard Modern Bold for headings. Occasional sub-headings in Twentieth Century Bold with Twentieth Century Medium on this page and on charts.

# Howard Smith Paper Mills Limited

AND SUBSIDIARY COMPANIES

# Main Products

### Howard Smith Papers

Rag and Sulphite Bond and Ledger;
Papeterie; Writing; Duplicating; Envelope;
Exercise; Book; Litho and Offset; Text; Cover;
Blotting; Index and Printing Bristol; Boxboard;
Blanks; Tissue; Blue Print and Drawing;
Cigarette Paper and Specialties.

### Pulps and By-products

Bleached Sulphite, Bleached Soda, and Groundwood Pulp; Vanillin—a flavouring material; Tomlinite—a synthetic resin.

### Alliance and Don Valley Papers

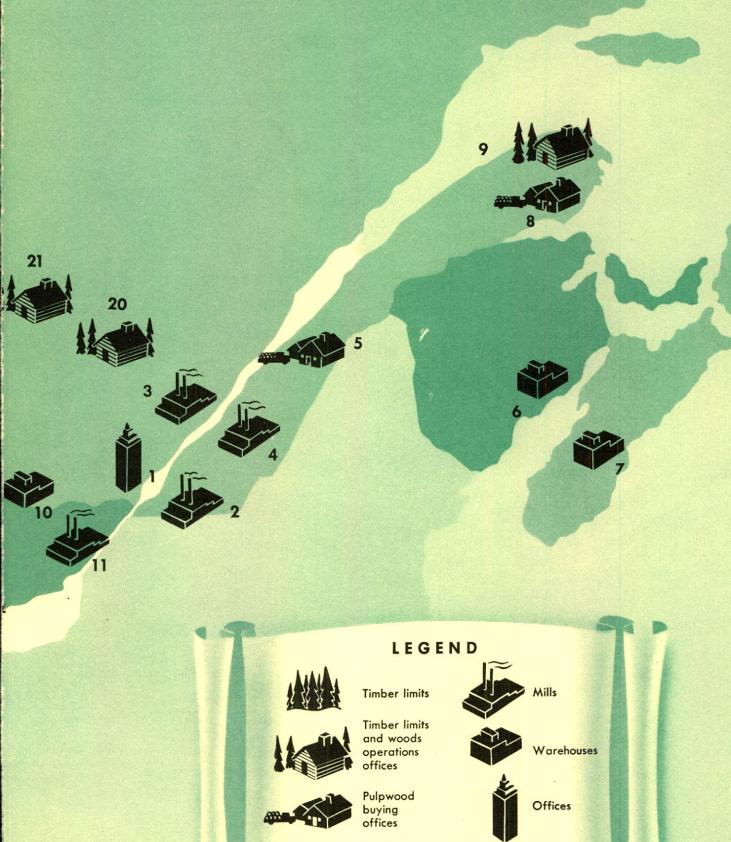
Glassine; Greaseproof; Onionskin; Waxing; Carbonizing; Coated Book; Coated Litho; Coated Bristol; Tag; Cover; Blotting; Bristol; Flour Sack; Potato and Flour Bags, Specialties.

### Canada Paper Company Papers

Kraft Wrapping;
Grocery, Multiwall and Specialty Bags;
Toilet Tissue; Towelling; Envelope; Rotogravure;
Book Paper; Waxed, Krinkled and Infused Kraft;
Tag; Wrapping Tissue and Specialties.

### The Arborite Company Limited

Decorative Paperbase Laminates for Decorative Wallboard and Table or Countertop Application. Complete range of paper and cloth laminates for electrical and other industrial uses.



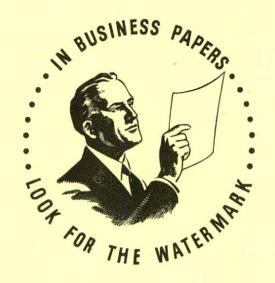
ERTIES

NOTE — In cases where more than one type of operation is carried on we have only shown the major one.

Refer to list on page 20 for full details



LOCATION OF Howard Smith PRO MILLS, OFFICES and WOODLAND



Howard Smith

is your guarantee of quality