PART TWO

C H A P T E R T W O

The Paper Mill

When Fisher arrived at Port Jackson a year of his servitude had elapsed and no mark of official displeasure, so easily incurred, marked his record. It appears from the fact that there is no allusion in surviving documents to his having been assigned to a private employer, that his first year in the colony was spent in the service of the government, in which, no doubt, his clerical ability would have been put to advantage.

Under the prevailing conditions, which allowed industrious convicts to take gainful employment privately on Saturday afternoons, Fisher would have directed himself to improve his position thereby. He was capable of hard work and was methodical and conscientious, undismayed by unfamiliar tasks. His inclination was primarily towards intellectual pursuits, or where his special skills could have obtained exercise. Above all, he was a business man and an opportunist. Thus no opportunity to earn money would have been neglected merely because of preference. Acquaintance with penury in London had sown in him a keenness to amass the only recognisable material criteria of affluence and respectability. Of course, he was at a disadvantage in being at the bottom of the social scale of the colony; but he had faculties which took no heed, in the life of a virtually primitive settlement, of social distinctions -- they were keenness of intelligence, an air of mastery; a certain self-possession that went well with a native and conscious charm. He had the perception to know that where the guiding hand was the genial and ambitious Macquarie, adaptability and stamina could translate natural acumen into a capital asset.

All around him in Sydney town were to be seen examples of what convict industry could achieve, although these achievements were not known by vulgar ostentation. One of the most progressive and richest citizens, Simeon Lord, persona grata with the Governor to an extent which infuriated the anti-emancipists, had first been transported as a convict, to become merchant and shipowner.

P A G E S

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The wily Samuel Terry, who himself had been transported in his earlier years and who was destined to gain notoriety as the land's first presumptive millionaire, was piling up wealth by usury, merchandising and land ownership. Indeed, there was no section of the settlement's activities which did not exhibit the spectacle of natural enterprise and ability reaping substantial gains. Opportunity abounded where as yet the genius of the common man had not fallen under the blight of an entrenched 'nobility' perpetuating the pernicious concepts of fuedalism. On the muck-heap of the New South Wales convict settlement the seeds of talent could be fruitfully sown although the convicts were expected to spend their time suffering.

For about eighteen months after his arrival, Frederick scraped and pinched, accepting the frugal ration of the convict as sufficient. His regulation allowance of £10 annually he surely saved, adding thereto such earnings as otherwise came to him. To his industrious temperament, opportunities for work and profit gave savor to living. Better still, exile became bearable in so far as constant employment distracted his passionate mind from preoccupation with speculations about the well-being of his parents and Betsey.

It was too soon yet to have established secure or regular means of communication with them. One needed acquaintance with persons who, voyaging to England, and who were trustworthy, would convey precious letters. By the same token, Frederick's parents would be fortunate indeed to find someone who would be Sydney-bound and willing to carry to the exile a letter.

The anxiety and uncertainty of these passing months were best buried in toil. Many another might have squandered the meagre weekly allowance of a pierced Spanish dollar, then equivalent to 3s9d on a stint of luxury: rank tobacco or a few tots of fiery rum, for the

sake of forgetfulness or as a recompence for what had been lost. But Frederick Fisher seems not to have yielded to these dubious pleasures, rather cleaving to a strict regimen bordering upon privation. From folly he hoped to attain to material consequence and respectability.

In those days it was plain to see to what extent the greed and inhumanity of the ruling classes of Britain were responsible for the incidence of social crime. Few of those who had been transported to the colony where they found work to do and had assurance of the necessities of life ever again resorted to the type of offence for which they had been transported. With the terrible economic pressures relieved, they pursued honest and industrious lives and in many instances became eminent in commerce, culture and charity.

Macquarie followed a sound and humane course, it was admitted throughout the colony except among those in whom primitive rapacity ruled. In 1813, the Governor had felt constrained to inform the Secretary of State in London:

> . . . Free people should consider they are coming to a convict country, and if they are too proud or too delicate in their feelings to associate with the population of the country they should consider it in time and bend their course to some other country. Free settlers . . . sent out from England, are by far the most discontented persons in the country . . .

Emancipated convicts, Macquarie had found, made the best settlers in many instances. Consciousness of opportunity to rehabilitate himself at least materially, and possibly socially under such rule made Fisher determined to forego all personal comfort to gain that end. His first objective, he realized, must be to gain a greater measure of physical liberty than he enjoyed under government supervision. He could hardly hope to receive favorable consideration for an application of Ticket of Leave after so brief a servitude; nevertheless, he applied for that indulgence. He had heard of many surprising acts of encouragement towards convicts by Lachlan Macquarie.

Before 1817 came to its end, Frederick made the acquaintance of one George Duncan, who had been a paper-maker by trade in England. The stimulus under which Fisher conceived the idea of manufacturing paper for the colony must have been the serious scarcity of that commodity from time to time. Supplies had to be brought from the home country, and voluminous documentation of all official events in the settlement for the benefit of Whitehall made great demands upon available supplies. Consumption of paper often exceeded supply. At times the semi-official Sydney Gazette and the Australian, with circulations of a few hundred copies per issue were forced to resort to extraordinary measures to eke out their newsprint. Failure of a cargo to reach port was full of awkward possibilities. These, Fisher saw, were conditions favorable to the creation of a paper manufacturing industry, profit from which one hardly dared conjecture.

By background and training, Frederick Fisher was ideal to instigate such an undertaking. Generations of his family had been printers, engravers, booksellers and so on - not to say, literati - so that he understood the various qualities of paper and the purposes for which they were suitable. However, he was no practitioner in the actual making of paper, but his association with Duncan seems to have fired him with an ambition to add that particular skill to his repertoire. The dream possessed him; the pain of exile from those he loved lost its poignancy in the vision which outshone all the prospects of his former life. Then, he had to meekly follow the traditions of dead generations; he was the apprentice under the watchful eye of the master; for however benevolent his father had always been, strictness was sometimes irksome and conformity to craft traditions inclined to be stifling. Now came the promise which the economic conditions in London, the industrial stringency and change had frustrated.

Duncan's willingness to play his part in the scheme, his evident grasp of the mechanical aspects of production, as well as his professed accomplishment in the supreme art of the feat of paper-making, no doubt raised Fisher to a point of exultation. On Duncan's knowledge the enterprise would be founded; but for himself would be the tasks of organization and selling. Above all, were the practical

realities of financing the manufactory. Firstly, he was restricted by his being under government control, which negatived a need to move at will for the organization of the undertaking. The cost of launching the industry would be for him, formidable, since his own savings and earnings he shuddered to disperse, and Duncan, whatever his likely merits as a paper maker was improvident and quite without capital.

In the face of these major facts, Frederick could only sink from his first exaltation to doubt that the dream could be made true. The streak of native doggedness in him won the day. If there was to be a paper-making industry his little hoard would have to be risked. Even so, Duncan and Fisher could doubt together if those means would suffice to meet all contingencies. Not only would a commodious structure be required with bountiful supply of pure water for the processing, but mill stones, cog wheels, felts, frames, racks and a host of other gear would have to be purchased. Could they find a brass founder, to start with, competent to make the necessary wheels?

The magnitude of the gamble brought Frederick to minute consideration of the personal attributes of his proposed partner. Could Duncan be depended upon when the money had been committed, to carry the enterprise through the difficulties it must necessarily face in the early stages? Perhaps it was a question he found impossible to answer - one of the imponderables of life.

Close to the end of the year (1817), Fisher had surrendered to the magic of the paper-making prospect. He felt compelled to seize the opportunity of establishing a monopolistic enterprise which might solve all his material problems and confer distinction upon him as a member of society. He, at least had no illusions as to the great pecuniary struggle he would have to live with, but he was confident.

As though Destiny had a special interest in the affair, Fisher and Duncan came to hear almost immediately upon their mutual resolve, of the existence of a small disused "mill" on the outskirts of Sydney Town. This mill was to prove initially suitable for their purpose.

All paper of that era was handmade and required abundance of water for its manufacture, as indeed it does nowadays. Sydney itself was poorly supplied with streams, but a watercourse emerging from [redacted]

the sand hills adjacent to Botany Bay, and in an area newly opened up by a road over the ridge running from Sydney Town towards the South Head of Port Jackson, was sufficiently distant from the population centre to render it safe for industrial use. All this had been perceived already by the proprietor of the mill, who, however, had designed it for other, experimental purposes then in abeyance.

The method of making paper, Duncan would show Frederick, was actually simple in the hands of a skilled operative. The process called for reduction of waste cotton and linen rags to extreme fineness by grinding in water.[1] The crucial 'feat' as the trade called it, was that of skimming the solution in which the lint (particles of fibre) was suspended, so as to leave a layer of it in the gauze frame or mould employed. The layer of substance thus collected had to be evenly spread and calculated with regard to the class of paper to be made.

As the frame was lifted from the tank into which it had been dipped, the surplus water passed through the homogeneous deposit, after which the deposit was covered with a thick felt. A similar felt was placed on the exposed side after the frame was turned over, so that the lint formed a thin sheet between two thick felts. The whole was then placed in a press to remove all possible moisture. The resulting sheet of material when toughened, dried and glazed in the process, was the paper.

Frederick Fisher may have been attracted to the notion of paper manufacture as much by the simplicity of the equipment involved as by the desperate need in the colony of the product. Motive power had to be water wheel, which if not somehow available with the mill as an integral property, would make the enterprise prohibitively costly.

On George Duncan's estimate, backed by experience in the English industry, the mechanical parts - supplementary to the necessary water-wheel would cost in excess of £69. In fact, Frederick costed it in detail, reaching a total of £69.13.0, for cog wheel, pinion, three-stone engine (a very modest plant to be sure), moulds, felts, press, cedar planks and blocks, copper for feat tank and heating of size, and other items. It seems that the estimate at first exceeded Fisher's resources; but the march of events overshadowed any thought of dismissing

the plans as impracticable.

With the discovery that a small mill was in existence at a water source, they were deterred only by the possibility that they would be unable to obtain its use. In trepidation, Fisher and Duncan approached the owner, John Hutchinson about November, 1817, hard upon their first inspiration to make paper. Hutchinson was a man of some prominence, a convicted forger who had come to the colony in 1812. He had received sentence of death, but having a measure of renown in York as an amateur chemist and member of a scientific circle, escaped the gallows through the efforts of patrons.

Macquarie's partiality for men of ability and invention further favored Hutchinson, for he arrived at Port Jackson with commendations to the Governor. Macquarie thought best to second Hutchinson to ex-convict, the shrewd Simeon Lord, who had established the first woollen mill in the colony and was ever alert to explore new avenues of profit.

Lord gave Hutchinson a generous patronage and provided him with materials and instruments with which to experiment, as well as a laboratory. Simeon Lord soon discovered that Hutchinson's scientific pretensions outstripped his talents. However, the amateur chemist did produce a carding machine and a wire-drawing contraption. Thus, he returned something of use to the Manchester man even above the advantages gained from his production of dyestuffs compatible with cotton and wool, derived from the native casuarina stricta.

Hutchinson was a difficult personality by any standards - vain, envious, moody, arrogant and crafty. These failings were aggravated by his addiction to alcohol. His waning popularity with so choice a patron as Simeon Lord did not improve his general temper.

The site of Hutchinson's mill, where he probably ground a variety of substances for use in experiments, had been granted to the chemist by Macquarie, and was an asset of great value. In all likelihood, it was Fisher who directly negotiated with Hutchinson for use of the mill. Consciousness of the slenderness of his resources, and perhaps using that circumstance adroitly with Hutchinson, the outcome of the interview was that Fisher and Duncan received permission to use the

mill for six months - free of charge! At the end of that term the parties were to meet and determine a rental for the future occupancy.

The way was now open for the vital preliminaries in the great pioneering effort. It would be necessary to obtain permission from the government - through the magistracy - to embark upon the project, and then to have the requisite machinery built under Duncan's supervision. [redacted] As a first economy, the two men took up residence in the mill itself, known already as Bank Mill, and doubtless constructed of hewn timber, wattle and daub, on a stone foundation.

Personal comfort could hardly be expected, but for men who had lost acquaintance with it since their transportation - even if they had known it even previously - such a matter was of small concern in the thralldom of the new adventure. Frederick Fisher, perforce, had to respond to duty under the government each usual working day, and therefore could give only limited time to the important initial installation in preparation for the completion of the milling and associated plant. Duncan took charge of these activities. Frederick undoubtedly paid the tradesmen from his personal funds for each piece of equipment fashioned. It was necessary to victual Duncan, who, being free of government control could not carry on any other occupation and at the same time effectively engineer erection of the mill plant.

What work Fisher performed for the government has not been ascertained; but it is reasonable to suppose that as Macquarie always sought to place his charges in trades or crafts in which they were trained, it is likely that Fisher was given clerical work to do. The strain on his funds could have made him apprehensive, since it is on record that he sought and obtained some financial assistance from one John Walker, resident of Sydney Town, in consideration of which it was proposed Walker should become a partner with the others. To that end, the following proposed agreement was drawn up, possibly by Frederick himself:+

> Memorandum of Agreement entered into - - - - 1818 between Frederick Fisher of Bank Mill, near Botany, George Duncan of

+Redundant phrases have been omitted.

the same place and John Walker, of Sydney.
Whereas
the abovenamed parties are about to commence the business of paper manufacturing at Bank Mill aforesaid. And it is agreed by and between the said parties that the business is to be carried on in the sole name of the said Frederick Fisher whose name alone is to appear in the Water Mark of the paper and that the said Fredk. Fisher is to pay and receive all monies for paper and other articles at the said mill, and that the said F.Fisher shall have sole charge and management, selling the paper, and that in consideration of the said F.Fisher having procured the Articles for making the machinery - paid the carpenter and other workmen - found provision during the time the machinery was making and rendered all other assistance in his power to promote the concern, it is further agreed . . . that the whole of the machinery (excepting the Water Wheel, Feat Mill and Sluices) used and prepared for Manufacturing of paper, shall be and remain the whole and sole property of the said F. Fisher (alone). And it is likewise agreed . . . that the said George Duncan is to have one half the neat /nett/ and clear profits of the business after paying the Expences of the Articles &c. used to make paper and attending the manufacture of paper in consideration for his work and instruction and planning of the machinery and it is further agreed that the said John Walker is to have one half of the said George Duncan's share of the business in consideration for provisions &c. furnished by the said Jno. Walker to . . . George Duncan and to secure the said J. Walker it is further agreed . . . that the Water Wheel, Feat Mill and Sluices are to be . . . the sole property of the said John Walker to the end that the said F.Fisher and J. Walker may be secured and to prevent the said George Duncan from quitting his co-partnership after they have been at the Expence of completing the Machinery &c.

And it is further agreed that each party shall give and devote the whole of their time knowledge and interest for the good

> of the business, and it is agreed that the said George Duncan shall instruct the said F. Fisher and John Walker in the art or mistery of making paper . . .

The agreement proceeds to treat more precisely the division of the prospective profits. Duncan and Walker are to receive one share each of the four shares; the third share is "to the man [unnamed] who is to be employed with George Duncan and who is likewise a paper manufacturer by trade for his knowledge and giving the whole of his time to promote the trade or business . . . the remaining quarter or fourth share is to be the property of the said F. Fisher."

The document then binds the parties to be diligent in discharging all debts and demands then and thereafter as may become due, and

> . . . it is agreed that all parties shall use all economy in living untill such said debts amounting to between £15 and £20 are paid and it is further agreed that at the expiration of three months from the date of this Instrument in writing, the said George Duncan's name is to appear in the water mark of the paper with the said F. Fisher's, and for the true performance of this agreement each bindeth himself to the others as witness our hand the day and year before written. (SA)

Whether or not George Duncan felt himself insufficiently rewarded by the terms, or was temperamentally unable to enter into an undertaking which portended a period of austerity perhaps of longer duration than he could endure, or for some now unfathomable reason on the part of any other of the participants to that point, the surviving document was neither dated nor signed. John Walker disappeared from the picture and in due course, Fisher and Duncan together formed the ensuing partnership.

It has to be conjectured that Walker would have been paid for what support he had already given, if indeed Fisher had not deemed it wiser to placate Duncan by liquidating his indebtedness to Walker for 'provisions'. If Fisher felt some financial strain from this adjustment, he seems to have overcome it.

The assent of the magistracy to the setting up of the manufactory

was obtained. Preparations moved apace during the early months of 1818. In March of that year, Fisher had the satisfaction of being granted Ticket of Leave. This meant he was now free to employ himself in any lawful way he chose - to enter commerce or other employment for which he had aptitude; but henceforward he would be responsible for his own food and lodging. Removal of restrictions upon his movements was a great advantage during the crucial stages of the paper project. But it also imposed additional strain upon his finances. All haste had to be made to get the manufacture of paper under way.

Sufficient progree had been made by mid-April for the following advertisement to appear in the Sydney Gazette of the 18th:

> PAPER MANUFACTORY
>
> Warren and Duncan respectfully beg leave to inform the public that having, by permission, erected a Paper Mill at a short distance East of the New Road to Botany Bay; they solicit the support of a Public who are always willing to aid exertion, and to promote the interest of the Colony by favouring its own especial Manufactures. The articles they will most stand in need of will be Linen and Cotton rags, for which a satisfactory price will be given; and it is hoped that quantities which have been hitherto thrown away as unserviceable, will be taken care of, to be applied to the Manufacture of a Paper which will be made fit for all purposes, and at as cheap a rate as in Great Britain.
>
> In the next Gazette places will be named whereat Rags will be received and paid for.

The name Warren was mentioned in the advertisement in error. In each of the three succeeding weekly issues of the Gazette it was replaced by that of Fisher and the townspeople were requested to dispose of their rags through Mr. Vickers at 29 Clarence Street and at Olivers', 22 Phillip Street, Sydney.

John Hutchinson who had himself nurtured hopes of achieving success as a manufacturer, and who later was credited on uncertain authority with having produced white paper, glass and soap in his many experiments, observed the partners' progress from his nearby dwelling, not without

some envy in concluding that the implication of Fisher and Duncan's advertisement was that the experimental stage had been passed successfully and the production phase was imminent.

With his envy was a tinge of malicious pleasure in the thought that in their success would lie - well, whatever benefit he might choose to squeeze from it. Water-driven mills were a rarity, he would have to remind himself, because streams were few. Fisher and his partner had no real tenure of his Bank Mill and their period of grace was almost at an end. Surely the terms of future occupancy should be substantial.

Hutchinson waited a few weeks and then wrote a letter.

N O T E

1. Pulping of wood for paper-making was as yet unknown. Many vegetable substances were tried as alternatives to the orthodox cotton and flax fibres reduced from discarded rags. One specimen of paper made from maize husks was exhibited as a curiosity in a Sydney newspaper office during the 1820s.